ANTITRUST AND REGULATORY ASPECTS
OF
AIRLINE COMPUTER RESERVATION SYSTEMS

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Abstract

The influence of *laissez-faire* ideology on economic policy in recent years has been profound. Proponents of this form of economic liberalisation rely heavily on antitrust, also known as competition law, to fill the void left by dismantled regulatory regimes. In most situations, antitrust law provides a mechanism which ensures that markets operate on a competitive basis and thus maximise the welfare of society. However, in some industries, antitrust law is not sufficient to promote and foster workable competition. This is of particular concern where the uncompetitive industry has the potential to adversely affect a neighbouring or related industry. This research analyses the computer reservation system industry in Europe, North America and Australasia. It looks closely at the competitive difficulties of the CRS industry and explains how these difficulties affect two related industries—air transportation and travel agencies. A number of conclusions and policy recommendations emerge. The triangular relationship of inter-dependence between the CRS, air transportation and travel agency industries makes CRS vendors unusually resistant to conventional regulation. Neither antitrust law nor direct industry regulation are completely effective at preventing airlines which own CRSs from exploiting their competitive advantage in one industry in ways which anti-competitively affect trade in other industries. The research concludes that for the Australian and New Zealand markets, a blend of competition law and light-handed regulation is appropriate. For the United States market, increased antitrust enforcement by the correct agencies combined with active regulatory threats is required to create a fair air transportation market. The thesis recommends a consistent world-wide code of conduct to promote global airline competition. Such a code could then be adopted by individual states and complemented by their competition law legislation.
Part I

Introduction
Introduction

1. Background

Information technology is often an important source of competitive advantage. A great deal of academic and practical knowledge is devoted to developing information technology so it can be used to enhance a company’s competitive position. Information technology has increased in prominence to the extent that more often than not, an information system is essential to a successful business. Good information systems have allowed companies to establish stronger links with customers and suppliers, provide better sales service, increase sales, improve financial and personnel management, enhance training, market intelligence and marketing, and produce new and better products.\(^1\)

To gain competitive advantages over rival firms, many companies utilise information technology. In some instances, control over information technology has consequences for an entire industry. The travel industry, like all businesses, is in an electronic revolution which is literally changing how business is conducted on a daily basis.\(^2\) Airline computer reservation systems (CRSs) provide an example of how information technology may be essential to survival in an industry. The Australian Trade Practices Commission recently said:\(^3\)

"The technological development and strategic importance of CRSs as marketing tools for the airline industry has increased markedly since the United States initiated airline


deregulation in 1978. The continuing world-wide trend towards airline deregulation resulted in a proliferation of rapidly changing fares and flight schedules and CRSs provided the most cost-effective means of marketing the dynamic nature of airline services. This expansion of CRSs was accompanied by a growing reliance by airlines on travel agents to make reservations and issue tickets on their behalf."

The transition from a heavily regulated industry to an environment shaped by market forces dealt a major economic blow to existing airlines. Initially they struggled against new, smaller and more efficient organisations. However, incumbent firms soon realised that they had a significant advantage over their fledgling rivals—their distribution systems. Soon after deregulation, airline owners of CRSs learned that they could "leverage" their competitive advantage from the CRS industry to gain advantages in the airline industry. The control of product distribution the major airlines gain through their ownership of CRSs provides them with substantial market power over smaller CRSs, other airlines, and travel agents.

There is a myriad of articles documenting the sustainable competitive advantage American Airlines created through its development of the Sabre computer reservation system (CRS) in the 1970s. Conversely, there are articles explaining how American, and other CRS owners, unfairly extend their competitive advantage. CRSs evolved from being useful inventory control tools to being powerful marketing aids, essential for both airlines and travel agents. By the early 1980s, allegations emerged in the United States that the dominance of

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leading airlines' CRSs was a source of market power that was not in the best interests of the United States air transport industry or the travelling public.\(^6\)

The CRS industry provides antitrust law and regulation with several major challenges. Traditional antitrust law lacks the theoretical base to pose any significant challenge to CRS owners. Consequently, a successful legal challenge must test the limits of antitrust. Since most cases to date have failed,\(^7\) authorities have responded with industry-specific regulation. However, because the CRS industry relies predominantly on innovation, heavy regulatory intervention is not desired. The major challenge for authorities is to decide the blend of antitrust and regulatory enforcement which will promote and foster a competitive CRS and airline industry.

2. **Purpose and Approach**

The purpose of this research is to evaluate actual and proposed regulatory responses for the CRS industry and to develop a recommended approach in the light of modern antitrust law.

This research purpose breaks down to three main objectives. The first objective is to show why airlines came to rely so heavily on CRSs and to illustrate the competitive problems which arose. Once the reader is immersed in the topic area, the second objective is to provide an understanding of new antitrust theories and to show how these may be applied to competitive problems in the CRS industry. Finally, the third objective is to evaluate different regulatory options including the codes of conduct adopted in an attempt to eliminate the competitive advantage in air transportation achieved by CRS owners.


\(^7\)See part III B.
The research material comes from several geographic areas. Since it was the regulatory attention given to Australia's CRSs which spawned the idea for the thesis, the conclusions will be of most relevance to Australasia. However, most of the background material is based in the United States where the CRS industry has its origins. The United States also provides the bulk of the litigation in the area. The experience the European Community has had with CRSs also acts as an important guide. During the time the research has been conducted, the writer corresponded with United States, European Community, Australian and New Zealand authorities. This provided a practical viewpoint which complements the theoretical basis obtained from the literature.

3. Justification and Usefulness

The recent TIAS merger case and subsequent Australian Code of Conduct for CRSs has thrust them into the regulatory spotlight in Australia. As yet, authorities in New Zealand have shown little interest in the problems associated with airline ownership of CRSs. It is hoped the thesis will provide New Zealand authorities with an understanding of the anti-competitive potential of CRSs and practical recommendations for their regulation. Furthermore, since this thesis takes into account developments from a number of countries, it is hoped its recommendations are not as ethnocentric as studies from individual nations.

In addition, the thesis illustrates the dangers of allowing a firm to leverage otherwise benign power from one industry or market into another market. The conclusions of the thesis may be broadened to other applications of information technology, or other industries, where a firm or group of firms alter the competitive balance in an industry by gaining power over an essential link in a
production chain.  Finally, the thesis offers examples of several new theories of exclusionary behaviour and shows how these may be used in the context of antitrust claims.

4. Overview

The thesis has six main parts. Part II introduces the computer reservation system industry and explains how it developed in the wake of airline deregulation. It provides the reader with an understanding of the competitive problems of CRSs and how they adversely affect the airline industry. Part III contains a discussion on the goals of antitrust law and in light of this, critically examines past United States CRS litigation. It then demonstrates that plaintiffs would be better equipped to attack CRS vendors with new theories of exclusionary conduct. Part IV looks at regulatory options for the CRS industry. In particular, it compares and contrasts CRS codes of conduct from Europe and North America. Part V outlines the recent CRS merger in Australia and discusses its implications for Australia and New Zealand. Part V also analyses the code of conduct which was developed as a result of the TIAS merger and examines the application of competition law to the CRS industry in Australia and New Zealand. Part VI contains the final conclusions and recommendations.

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Part II

Airline Deregulation and the Computer Reservation System Industry

CHAPTER A
Economic Liberalisation and Air Transportation

CHAPTER B
The Computer Reservation System Industry

CHAPTER C
Competition Problems with Computer Reservation Systems
Introduction

Since the 1930s, airlines in most countries were insulated from the effects of full competition by cumbersome regulatory regimes. Deregulation of the world's major airline markets radically altered a long established pattern of competitive behaviour. Rarely has there been an upheaval in a single industry of the magnitude experienced in the airline industry during the past fifteen years. The United States was the first country to deregulate airlines in 1978. Since then many developed countries have followed suit. Structure, conduct, and performance in the airline industry have changed dramatically since deregulation. The resulting environment forced many major airlines to search for cost advantages which they could exploit to compete with new more efficient airlines. Some major airlines found these cost advantages in their reservation systems.

Part II demonstrates how deregulation of airline markets caused computer reservation systems to become an essential tool for survival in the airline industry. Chapter A outlines the academic and industry debate which led to deregulation of air transportation. Additionally, chapter A summarises the remaining barriers to contestability in the airline industry. Computer reservation systems are identified as one of the major barriers. Chapter B introduces the reader to the computer reservation system industry. It explains the inter-dependence between computer reservation systems, airlines and travel agents, and illustrates the advantages gained by the airlines which own the systems. Chapter C explains how the advantages gained through reservation system may be exploited by their owners. The resulting competition problems provide the setting for the remainder of the thesis.
Economic Liberalisation and Air Transportation

1. Introduction

From the 1930s to the early 1970s, free markets were not trusted to produce efficient allocation of resources based on egalitarian beliefs. It was widely believed that uncontrolled markets led to maldistribution of income. Consequently, economic policy reflected distrust of laissez faire ideology through fiscal, monetary and regulatory instruments designed to alter or moderate the workings of free markets. However, more recent theoretical advances have resulted in a number of countries considering the free market as a useful policy instrument for resource allocation.

Overall economic policy is always a balance between the three aims of efficient allocation, desirable distribution and stabilisation.¹ The purpose of distribution policy is to achieve a more equitable distribution of income.² However, traditional egalitarian distribution policies often result in misallocations of resources. These misallocations, largely due to inefficiency, prompted the widespread regulatory reform of the mid 1970s and beyond.

¹Blyth, Conrad. (1987). "The Economists' Perspective of Economic Liberalisation". In Bollard and Buckle (eds). Economic Liberalisation in New Zealand. Wellington: Allen and Unwin/Port Nicholson Press. p 4. Efficient allocation of resources involves an optimal allocation between activities, between places and over time. Stabilisation policy tries to keep all resources as fully utilised as is compatible with efficient allocation. Liberalisation policies were generally implemented upon the premise that deregulation would achieve greater efficiency while stabilisation would be achieved through tight monetary policy.

²Ibid, p 3.
This chapter clarifies some key terms in regulatory economics. It also explores the theoretical background to deregulation and explains why New Zealand's economic reforms were different to reform in Great Britain and the United States. This background in deregulation provides a starting point for an analysis of air transportation deregulation in North America, Europe and Australasia.

2. Economic Liberalisation

(a) Definitional Issues

As the name suggests, liberalisation involves freeing up the market place. This includes removing barriers to entry, tariffs, licences, price controls and other forms of regulation and using the competitive market as a policy instrument. Conversely, commercialisation involves using private enterprise as the model on which to organise economic relations. The term "commercialisation" covers both the policies of corporatisation and privatisation. Some economists claim that commercialisation need not be associated with liberalisation. However, most consider that commercialisation will follow as part of a programme of liberalisation. For example, New Zealand economic reform saw deregulation coupled with commercialisation with the objective of achieving a more efficient and equitable allocation of resources. It seems unlikely that commercialisation on the scale seen in New Zealand would have been possible without, at the very least, liberalisation of the financial sector and capital controls.

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4See for example ibid, p 116.

Taken in its widest sense, the term "privatisation" is used to denote the process by which the financing and provision of goods and services by the state sector shifts to the private sector. This may refer to the financing and/or the provision of these goods and services. Privatisation can occur with or without concomitant changes in the regulatory climate.\textsuperscript{6} "Corporatisation" means converting a public enterprise into a structure more akin to a private sector organisation. The main theoretical justification for corporatisation is to improve the efficiency of a particular organisation. Corporatisation is not privatisation.\textsuperscript{7} Instead, it is a process whereby a government converts trading enterprises from a departmental form into a limited liability company, with performance criteria and a financial structure which seek to mirror those of equivalent private sector firms.\textsuperscript{8} Stan Rodger, former New Zealand Minister of State Services, explained corporatisation as follows:\textsuperscript{9}

"Corporatisation provides management autonomy and separates politicians from the ongoing operations of the enterprise. The clear commercial mandate enables managers to identify the true costs of producing costs and services and to make their own decisions in response to the demands of the marketplace."

The process of economic liberalisation can be depicted as shown in figure 1. Corporatisation is regarded as an early phase reform while privatisation is a middle-late reform, much of which is still under way in many economies.\textsuperscript{10}


\textsuperscript{7}Indeed some authors are careful to point out that although corporatised state-owned enterprises are supposed to follow private sector practice, their environment is still not neutral. Their debt is perceived to be government guaranteed, there is still some residual influence by ministers, and there is no shareholdership monitoring. See Gale, S., (1990), The New Zealand Experience of Liberalisation and Deregulation. Wellington: New Zealand Institute of Economic Research. WP 90/13. p 10.

\textsuperscript{8}Ibid.


\textsuperscript{10}Bollard and Mayes, supra, note 5, p 35.
From a broad perspective, regulation is the extent to which government specifies, in detail, resource allocations which would otherwise have been left to voluntary decisions.\textsuperscript{11} This definition clearly has implications for such things as controls over industry entry, pricing, trading operations, degree of competition, right to import and ownership.\textsuperscript{12} Regulation also includes government induced self-regulation and self-regulation caused by the threat of intervention.\textsuperscript{13} Other governmental policies, such as monetary and fiscal policy, have the potential to indirectly skew the allocation of resources. Including these under the umbrella of regulation would make the definition unnecessarily broad. Deregulation, then, means the removal of some, but not necessarily all, direct government regulation.\textsuperscript{14} But the abolition of regulation of itself will not ensure the presence of deregulation.\textsuperscript{15} This is because in the absence of government regulation, collusion may proliferate and private regulation of industry may result. To be


\textsuperscript{12}Ibid.

\textsuperscript{13}Ibid.

\textsuperscript{14}Ibid.

truly deregulated, no individual or private group should be able to subvert the system.\textsuperscript{16}

(b) Reasons for Economic Reform

Most recent economic reform involving liberalisation and commercialisation is built on several microeconomic theoretical developments which suggest the pre-eminence of markets and private regulatory systems and the minimisation of state control in provision of funding and the regulation of economic activity.\textsuperscript{17} These theoretical developments can be grouped into three divisions—political considerations, efficiency considerations and finally, consumer welfare considerations.\textsuperscript{18}

Prominent in the theoretical developments, contestability and transactions cost theory led to a different outlook on the need for regulation. Perfect contestability holds that so long as there is easy entry and exit from a market and there are no sunk costs, a market will behave competitively. In this case, the market is vulnerable to a hit-and-run entrant who can undercut the incumbent, earn a profit and leave the market costlessly when the incumbent matches the price cut.\textsuperscript{19} Transaction cost theory comes into play where sunk costs exist and therefore the market is not truly contestable.

Where sunk costs impede exit and therefore inhibit entry, the forces of contestability are suppressed. However, in such cases the market may still turn

\textsuperscript{16}Ibid, p 113.
\textsuperscript{17}Bollard, A. (1991). Economic Liberalisation in New Zealand: It was the Best of Times, It was the Worst of Times. Wellington: New Zealand Institute of Economic Research. WP 91/5. p 2.
\textsuperscript{18}See Bollard, \textit{ibid}. Bollard splits these developments into three theories: Public Funding, Ownership, and Regulation.
out to be the best governance mechanism.\textsuperscript{20} If the unaided market did everything perfectly, firms would rarely be able to enhance efficiency by integrating vertically. It would usually be optimal for intermediate goods to be bought from independent suppliers on the free market.\textsuperscript{21} Transaction cost theory claims that for any given firm there is an optimal degree of vertical integration determined by "the requirements of the economy in the governance process."\textsuperscript{22} Williamson, the pioneer of transaction cost theory, would explain this as "economising in transactions costs".\textsuperscript{23} This means that efficient allocation decisions can still be reached in markets when there are high sunk costs. This can be achieved through market, private or other governance structures.\textsuperscript{24}

In the United States and Great Britain, deregulation had become possible by the mid 1970s and received strong analytical support from academics and government alike.\textsuperscript{25} The rationale for reform was largely efficiency. For example, a British Treasury publication on nationalised industries commented:\textsuperscript{26}

\begin{quote}
"...despite the high hopes of their founders, their performance has often been disappointing. Criticisms have been voiced about their total return on capital employed, their record on prices, productivity and manpower costs, and about the low level of customer satisfaction they have provided."
\end{quote}

Like the British, the goal of United States deregulation was one of efficiency, the use of society's resources in ways preferred by consumers.\textsuperscript{27} The Keynesian

\textsuperscript{21}\textit{Ibid.}, p 279
\textsuperscript{22}\textit{Ibid.}
\textsuperscript{24}Bollard, \textit{supra}, note 17, p 6.
\textsuperscript{25}\textit{Ibid.}
revolution of the 1930s had focused United States policy on equity and stability arguments at the expense of efficiency. However, economic thinking since about 1970, heavily influenced by the Chicago School economists, drifted away from equity arguments towards the goal of economic efficiency. Many commentators considered that heavy regulation failed to produce the desired outcome, thereby inflicting unexpected costs or actual harm. Breyer identified three areas where mismatches between efficiency and regulation were apparent:

"Classical regulation should not be used to control excessive competition. Deregulation and reliance upon antitrust are more suitable . . . .

Classical regulation should ordinarily not be used for purposes of [economic] rent control. Taxes or deregulation offer preferable alternatives . . . .

Classical regulation is not able to deal comprehensively with spillover problems. Taxes, marketable rights, and even bargaining are likely to prove useful as substitutes or supplements."

Arguments such as these, combined with the competitive weakness of the American economy, eventually led to widespread deregulation in the mid-1970s. Since the 1970s successive United States administrations have deregulated airlines, trucking, financial services in brokers and banking services, railroads, buses, telephones and telecommunications, electricity, and natural gas.

New Zealand's economic liberalisation reforms are sometimes described as the most radical economic restructuring in the OECD. Appendix 1 contains a list of

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28 Ibid, p 22.
32 Boudin, supra, note 30, p 1101.
33 Millar, supra, note 27, p 24.
New Zealand liberalisation measures since 1983. Bollard sums up the New Zealand process of reform:\textsuperscript{34}

"New Zealand started in the mid-1980s with a heavily protected economy and a scale of government intervention and ownership in the economy which was among the greatest of the industrialised countries. By the end of the decade much of that protection had been removed, there had been wholesale abandonment of internal intervention and large portions of the public sector had been either corporatised or transferred into private ownership. This is rapidly switching New Zealand from one end of the spectrum to another."

A major factor of New Zealand's economic liberalisation was deregulation in agriculture, the financial sector, state-owned enterprises, the transport sector, the energy industry and labour markets. Deregulation in a wide range of sectors introduced competition to areas which were previously insulated from its effects. As a result of this insulation, prices had been allowed to deviate substantially from cost and consequently, efficiency had suffered.\textsuperscript{35} The new competitive environment meant that large incumbent firms in some industries struggled against new smaller and more efficient organisations. This was also the case in overseas examples.

To understand the risks that deregulation poses, it is important to understand the classical theoretical relationship between antitrust and economic regulation. Both economic regulation and antitrust seek to achieve the benefits of workable competition.\textsuperscript{36} Economic regulation bypasses the competitive process and seeks to obtain these benefits directly, while antitrust tries to achieve these benefits indirectly. Competition law (or antitrust law) is the alternative to regulation and is

\textsuperscript{34} Bollard and Mayes, supra, note 5, p 3.

\textsuperscript{35} Millar, supra, note 27, p 24.

\textsuperscript{36} Breyer, S. G. (1987). "Antitrust, Deregulation, and the Newly Liberated Marketplace". *California Law Review*, 75 pp 1005-1047, p 1006. Breyer lists the benefits of workable competition as (1) prices close to incremental costs, leading to buying and production decisions that minimise economic waste, (2) efficient production processes, and (3) innovation and production efficiency.
thus "deregulatory". Most observers point out that regulation and antitrust are opposite sides to the same coin. Neither regulation or antitrust are ultimate goals—they are means of achieving goals. These goals are economic efficiency and consumer welfare. However, existing antitrust doctrine is not always well suited to industries which have evolved under classical regulation. The antitrust analysis of the computer reservation system industry in part III provides a pervasive example of this.

The operation of competitive markets depends on the quality of the system of rules which sets limits on the actions of individuals in such a way as to enable them to co-operate to produce the goods or services which the community desires. Ideally, a free marketplace should be able to rely on competitive pressures to regulate an industry. But there must be a structure in place to deal with those circumstances where a natural monopoly exists (for example, the local loop in telecommunications), or the industry is in some other way anticompetitive. Competition law exists primarily as an aid to the operation of competitive markets in these circumstances.

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37 Penglsey, D. W., supra, note 15, p 111.
39 The concept of economic efficiency is discussed further in Part III A 2(a).
40 Boudin, supra, note 30, p 1107.
42 Cave, M., supra, note 19, p 4.
Antitrust theory sees the appropriate way to deal with anti-competitive industries as being to lay down restrictive rules of conduct relating to firms' abilities to collude or exclude in their normal trade practices and to regulate the ability to merge. Otherwise market pressures should be relied on to regulate an industry. *Figure 2* shows competitive pressures on an industry.

There are a number of ways in which the state can regulate industries where market forces are weak. Methods include the threat of regulation, antitrust law, price control and structural solutions. *Laissez faire* ideology, however, requires a "light-handed" approach to ensure that the market remains as contestable as possible. For example, the New Zealand Government opted for a light-handed approach based on controls over the misuse of market power, forced disclosure of

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financial information and other limited techniques such as price cap regulation or kiwi golden shares. Antitrust law is discussed in more detail in part III.

3. Air Transportation Deregulation

In no other industry did economic liberalisation have such a profound impact as it did in the airline industry. Airline deregulation provided an early opportunity for analysts to assess the effect of deregulation on a major industry. Deregulation assumes that the airline industry will be better regulated by competitive market forces than by a government agency. Yet excessive reliance on the free market may not be desirable. The new powers vested in the United States Department of Transportation (DOT) in 1984, meant that early antitrust enforcement of the airline industry was lax. The DOT’s criterion for evaluating mergers was heavily criticised by some observers as being inflexible, ambiguous and too reliant on contestability theory. It is now widely recognised that antitrust is a vital component for preserving the new competitive environment in the airline industry. Antitrust laws must be vigorously enforced to ensure that government regulation is not replaced by private constraints on competition. Cohen notes:

"If deregulation is to succeed, antitrust lawyers and economists will have to play a significant role in assuring that entry barriers remain low, that natural monopoly positions are not abused, and that the airline industry continues to be functionally competitive."

45Bollard, supra, note 17, p 8.
49Ibid, p 304.
50Cohen, supra, note 46, p 158.
The forces of economic liberalisation increased the speed of deregulation in the airline industry, but there were a number of other reasons why airline deregulation was swift.

(a) The Pressure for Change

In 1965, Michael Levine observed: "[a]ir transportation in the United States, as elsewhere in the world is a regulated and protected industry". In 1965 there were few, if any, deregulated air transportation markets in the world. The five biggest markets in the world—Australia, Brazil, Canada, Japan, and the United States—were all characterised by government licensed carriers "competing" with state-owned airlines. More recently, airlines worldwide have become a rare "natural experiment" with which to evaluate the predictions of academics by observing the effects of an abrupt policy change. There is now a myriad of economic literature devoted to studying the effects of deregulation of air transportation.

Prior to deregulation, the most compelling theoretical argument against airline deregulation was advanced by economists. They claimed that competition in the airline industry would be destructive because the additional expenditure involved in carrying an extra passenger—the marginal cost—is very low, and hence there are continuous price wars. This is illustrated in figure 3.

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Marginal Costs and Average Costs of a Single Flight

The marginal cost of an extra passenger is very low until every seat is occupied at C. The line then becomes vertical because passengers are not allowed to stand and in the short-run no more aircraft can be provided. The curve AB depicts the average costs per journey. In a regulated market, there are plenty of spare seats because the fare is F₁ and only J₁ journeys are made. In a fully competitive market, the price of a journey would drop to F₂ where they are equal to marginal costs. But the airline would make a substantial loss equal to the area F₂ZYE because costs equal 0J₂ZE but revenues only equal 0J₂YF₂.

Proponents of deregulation claim that this argument is deficient because as a matter of business, airlines plan empty seats to provide a buffer for chance variations in demand. Because airlines budget for empty seats, there is no reason to believe that they would bankrupt themselves by cutting their fares across the board to fill them. If airlines reduce prices to fill seats, at peak times they would

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54 Marginal cost should not be confused with variable costs. In terms of the volume of flights, variable costs (or avoidable costs) in the airline industry are actually very high and fixed costs are comparatively low.

55 Pryke, supra, note 53, p 71.
not be able to meet demand and waiting lists would develop. Rather than cut fares to fill seats, it is more logical to assume that airlines would increase fares so long as the reduction in revenue, through loss of passengers, is more than offset by the increase in receipts, through increased fares.56

The marginal cost argument can also be countered by reference to variable costs. It is true that the marginal cost of an extra passenger on an existing flight is minimal. But variable costs, or avoidable costs, of an extra flight are extremely high relative to fixed costs.57 That is, an airline can avoid many of the costs of a flight by simply cancelling it. It is nonsense to expect that an airline would charge less than the variable cost of providing a service because by cancelling the flight, costs would be significantly reduced.

Although there were a number of arguments outlining the detrimental effects of air transport deregulation, arguments in favour of liberalisation were far more convincing.58 First, deregulators claimed that competition would tend to improve service to air users by extending their range of choice.59 Second, under regulation, unit costs were excessively high in the airline industry due to unproductive use of staff and equipment. Increased competition should lead to a reduction in real unit costs.60 Finally, the regulated environment led to a poor relationship between

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56 Ibid, p 72. Increased fares would then be aimed at those passengers who value their time and convenience highly and want to travel on a particular flight. This is supported by Graham, D. R., D. P. Kaplan, and D. S. Sibley. (1983). "Efficiency and Competition in the Airline Industry", The Bell Journal of Economics, 14: pp 118-138. p 137. These authors found that carriers have increasingly moved to peak-load pricing systems. This shifts some travellers to off-peak flights thereby increasing time-sensitive passengers' access to peak flights.

57 Pryke, supra, note 53, p 73.

58 See ibid, for an outline of arguments for and against liberalisation of air transport. This section is based on Pryke's approach.

59 For example the provision of no frills transport or the choice of value-added services such as VIP lounges etc.

60 Pryke, supra, note 53, claims that in the United States under regulation, restrictive work rules depressed productivity and the pay of airline workers was pushed up to an excessively high level compared to workers in other industries.
prices and costs for different types of fares, and a poor relationship between capacity and demand.

These arguments, combined with the increasing pre-eminence of free market ideas, encouraged a number of countries to consider airline deregulation. The United States led the world in the late 1970s.

United States

Airlines in the United States were highly regulated by 1938 in response to similar political and economic forces that had produced regulation in many other industries.\textsuperscript{61} Regulation was achieved by the passage of the \textit{Civil Aeronautics Act of 1938} and was based upon a theory of transportation economics that viewed common carrier transportation as a public utility.\textsuperscript{62} Until the mid-1970s, an aircraft required a licence from the (former) regulatory authority, the Civil Aeronautics Board (CAB), to fly a particular route.\textsuperscript{63} The argument outlined in \textit{figure 3} (above) was the main reason for United States regulation of air transportation. It was feared that without regulation the industry would be excessively competitive and that the resulting cut-throat competition would lead to economic waste and ultimately, monopoly power.\textsuperscript{64}

\textsuperscript{61}These forces include the increasing prominence of free market thinking, theoretical advances and the acceptance that regulation led to market distortions and inefficiencies.


\textsuperscript{63}Pryke, \textit{supra}, note 53, p 39. Bailey, E., D. Graham and D. Kaplan, (1986), \textit{Deregulating the Airlines}, Cambridge, Mass: MIT Press, p11 explain that in addition to requiring a licence, the \textit{Civil Aeronautics Act (1938)} gave the CAB the authority to:

1. control entry into the industry (both interstate and foreign commerce) and control entry of existing carriers into new or existing routes,
2. control exit by requiring approval on cessation of service to a point or on a route,
3. regulate fares on the basis of rate-making provisions adopted from the \textit{Interstate Commerce Act},
4. award direct subsidies to air carriers
5. control mergers and intercarrier agreements, thus immunising them from antitrust laws,
6. investigate deceptive trade practices and unfair methods of competition,
7. exempt carriers from certain parts of the \textit{Civil Aeronautics Act}.

\textsuperscript{64}Levine, \textit{supra}, note 51, p 1423.
It became increasingly evident that the United States system of regulation in the airline industry, encouraged certain practices which allowed for the misallocation of resources.\textsuperscript{65} Overwhelming academic consensus was led by Michael Levine, who in 1965 wrote; "[r]egulation of... air transportation is predicated upon erroneous economic assumptions and results in unnecessarily high fares, disguised inefficiencies and a lack of genuinely diversified service".\textsuperscript{66} His views were based on the experience of the Californian and Texas markets. In these markets, unregulated jet carriers emerged and prospered because Federal airline regulation did not apply to carriers operating within a single state. They provided concrete information as to how a deregulated industry would actually perform and this eventually led to deregulation in 1978. The *Airline Deregulation Act of 1978* has been described as a legislative embodiment of academic consensus.\textsuperscript{67} The CAB lost its authority over routes on December 31, 1981, and its authority over fares on January 1, 1983. The Department of Justice took over control of domestic mergers, intercarrier agreements, and interlocking directorates on January 1, 1983, and, finally, the CAB ceased operations entirely on January 1, 1985.

An interesting effect of United States deregulation was that the established airlines found it hard to compete with new entrants on either medium-haul or short-haul trips. This was because incumbent airlines had fleets of wide-bodies which were preferred by travellers. Because competition was confined to quality and service, established airlines had opted to buy larger aircraft instead of smaller two-engine jets which do not involve any cost penalty on routes of up to 800


\textsuperscript{66}Levine, *supra*, note 51, p 1444.

\textsuperscript{67}Levine, *supra*, note 52, 394.
Understandably, new entrants focused their strategy on smaller aircraft. This market distortion was a direct effect of regulation.

Canada

Canadian aviation policy between the late 1930s and 1979 consisted of three major components: policy concerning Air Canada, the Regional Air Carrier policy, and general regulatory provisions. Trans-Canada Air Lines (TCA) was formed as a government corporation in 1937 to establish air services within Canada. Later renamed Air Canada, the corporation was given statutory monopoly power on all domestic trans-continental routes between 1937 and 1959. Until 1978, regulators issued Air Canada with licences when its fares and routes were approved by the Federal Cabinet. However, with the passage of the Air Canada Act of 1978, the carrier became subject to the same statutory regime as all other carriers which existed at the time. Although CP Air was the only major competitor to Air Canada, there were also a number of regional airlines. The regional carriers were severely regulated by a policy statement issued on October 20 1966 which, among other restrictions, prohibited regional carriers from competing directly with the domestic mainline operations of CP Air and Air Canada.

In the last few years before deregulation, the Air Transport Committee of the Canadian Transport Commission held major regulatory powers. Powers, conferred by the Aeronautics Act, included complete control over entry to the industry, complete control over access to routes, extensive regulation of

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68Pryke, supra, note 53, p 41.
70Regional airlines included Pacific Western Airlines, Transair, Nordair, Quebecair and Eastern Provincial Airlines.
conditions of service, regulation of fares, conditions surrounding discount fares and the geographical area within which regional carriers could provide their services. In addition, the Air Transport Committee could control mergers in the airline industry.71

Deregulation of the Canadian airline industry lagged behind the United States and could therefore observe the effects of United States deregulation. As well as this, Canadian airlines were losing passengers to the United States because people could divert to United States gateways to take advantage of cheaper fares. The New Canadian Air Transport Policy was announced on May 10, 1984. Initially, it eased entry conditions and gave carriers more freedom to lower fares.72 Total deregulation was first mooted in 1985;73 however, the conservative Government could not enact legislation quickly. Finally, the National Transportation Act 1987 came into effect on January 1, 1988. This Act divided the country into a southern zone, which was to be almost completely deregulated, and a northern zone in which carriers were subject to control over entry, fares, and other terms and conditions of service.74 The southern zone encompassed 95% of the total population. The zones are shown in figure 4 separated by the dashed line.

Rather than taking a single step to total deregulation, as the United States did, Canada adopted a more evolutionary process.75 Following partial deregulation of the industry, the Mulroney administration privatised Air Canada subject to a

71 See Oum et al, supra, note 69, p 6 for a complete description of the powers of the Air Transport Committee.
72 Oum et al, supra, note 69, p 7.
73 See Canada, Department of Transport. (1985). Freedom to Mone: A Framework for Transportation Reform, Catalogue No. c22-69/1-985E. Don Mazankowski, the new Minister of Transport strongly supported total deregulation.
74 See Oum et al, supra, note 69, p 8 for a full outline of the Canadian legislation.
75 Although the CAB was not completely wound up until 1985, the significant part of United States deregulation occurred in 1979 when restrictions on fares and routes were effectively removed. See: Bailey et al, supra, note 63, p 35.
number of conditions. Privatisation was achieved in two steps, the second completed in late 1989.

![Figure 4: Regulatory Zones in the Canadian Airline Industry](image)

**Europe**

Transportation is one of the largest European industries, providing more than seven percent of the European gross national product as of 1985. Air transportation deregulation in Europe involves both deregulation of domestic markets, and deregulation of intra-European Community flights. The Chicago

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76 See Oum et al, supra, note 69, p 9.
77 From Oum et al, supra, note 69, p 5.
Convention of 1944, which formed the International Civil Aviation Organisation (ICAO), laid the foundations of post-war aviation regulation in Europe. Discussions at the convention centred on five "freedoms". These were:

1. The right of an airline from one state to fly over the territory of another.
2. The right of an aircraft from one state to make a technical landing on the territory of another.  
3. The right of an aircraft, registered in one state, to drop off passengers in another. For example, the right of a British Airways aircraft to drop passengers in Paris which it had picked up in London.
4. The right of an aircraft, registered in one state, to pick up passengers from another. For example, the right of a British Airways aircraft to pick up passengers in Paris to take to London.
5. The right of an airline not registered in either state, plying for trade on that route. For example, the right of an Air New Zealand aircraft to pick up passengers in Frankfurt to take to London.

The third, fourth and fifth freedoms were not settled at the Chicago Convention, as was hoped for, on a multilateral basis. States instead preferred to enter into bilateral agreements. These deals only had control over entry to the European market—fares were determined by the International Air Transport Association (IATA).

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79 ICAO is a United Nations agency. In practice its role is largely concerned with technical standards and the collection of statistical data etc., rather than detailed economic regulation.


81 The word "technical" implies a landing to take on fuel etc. but not to take on or drop off passengers or freight.

82 This highlights a key difference between the United States and the European air transportation markets. Europe is made up of sovereign states, each with its own air transportation priorities and national air carriers. In addition, over fifty percent of passenger travel in Europe is on chartered aircraft. See Mietus, supra, note 78, at p 101.

83 However fares between countries had to be approved by the individual countries' regulatory bodies. IATA had almost total control over international tariffs until recently. See the section on the global airline industry for a brief outline of IATA's powers, later in this chapter.
The European Community (EC), formed in 1957 by the Treaty of Rome, comprises twelve member nations. Legislation passed by the EC’s governmental and advisory bodies is binding on all member states and takes precedence over contrary national law. The treaty requires that there should be free competition across frontiers and this called for the removal of all protective tariff, quota, and non tariff barriers to the free circulation of goods and services. Clearly this includes air services. A key feature of bilateral agreements was restrictions on entry and they were at variance with the idea of freedom to supply services. The antitrust provisions of the treaty which ban cartel agreements and prohibit the misuse of a dominant position also make price-fixing and revenue pooling arrangements vulnerable to attack. However, the treaty included the right of establishment, the abolition of obstacles to freedom, and the introduction of rules to ensure that competition was not distorted. This allowed countries to continue to impose regulations in the cause of preserving competition.

Inefficiencies in existing regulated markets prompted several EC countries to reduce regulatory constraints, but free competition in the airline industry—both within countries and between borders in Europe—remains some way off. The latest round of reforms moved the EC closer to a freely competitive aviation

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84 Mietus, supra, note 78, p 103. The European Community comprises Germany, France, Italy, the Netherlands, Belgium, Luxembourg, United Kingdom, the Irish Republic, Denmark, Greece, Spain and Portugal.

85 Namely the Parliament, the Commission, the Council, and the European Court of Justice. Of these the Commission and the Council are the most powerful, creating much of EEC law.

86 Mietus, supra, note 78, p 103.

87 Button and Swan, supra, note 80, p 213. Article 3 of the Treaty of Rome lays down the objectives of the EEC. Articles 85 and 86 detail the key competition provisions which are enforced by the Commission.

88 Button and Swan, supra, note 80, p 213.

89 Articles 85, 86 and 90.

90 Button and Swan, supra, note 80, p 213.

market. On June 22, 1992, EC transport ministers approved a third and final package of airline liberalisation features designed to permit greater freedom of pricing and market entry beginning January 1, 1993.92 The package is a compromise between nations seeking open skies (eg. Netherlands and the United Kingdom) and those who sought a slow liberalisation process such as France, Italy, Spain and Greece. The result of this compromise is a number of "safeguards" which exist until April 1, 1997.93 Although the package awards to carriers full fifth freedom rights, the "safeguards" may compromise the benefits that a competitive environment would otherwise foster. For example, proponents of a fully deregulated environment claim that the "safeguards" may allow some governments to protect their own inefficient national airlines from a truly competitive environment.94

The new package is a huge step in the direction of a fully liberalised EC market. But as was noted by Sir Michael Bishop, Chairman of British Midland Airways, "[r]eal competition comes from the ability of new airlines to secure access to routes and airport facilities, not simply the removal of existing restrictions".95 European airport and airways congestion, as well as the "safeguards" and other barriers to entry, may limit the opportunities for new entrants to compete effectively in the European market. Liberalisation in the EC does not mean deregulation. The Commission continues to be very involved in regulation of the industry, particularly to ensure that the new opportunities

93These "safeguards include: Government intervention in pricing, the allowance of only consecutive cabotage rights and restrictions on capacity. Authority for aviation within their own territories is retained by individual governments who may turn down proposed new services due to environmental, congestion and public service reasons. See Shifrin, C. A., supra, note 92 for a full evaluation of EC "safeguards".
94Shifrin, C. A., supra, note 92, p 22.
95Ibid, p 22.
provided by liberalisation are not abused in an anti-competitive way by dominant airlines.\textsuperscript{96}

\textit{Australia and New Zealand}

The New Zealand Government initiated deregulation of the aviation industry with new air licensing legislation introduced on April 1, 1984.\textsuperscript{97} However, because of the small size of the New Zealand market, few changes were felt until Ansett commenced operations in 1987. Ansett's entry has been the only significant main trunk competition for Air New Zealand since deregulation, although a number of small operators competed in regional aviation.\textsuperscript{98} The entry of Ansett increased the range and depth of discount fares available to the travelling public as well as forcing qualitative changes to Air New Zealand's domestic terminal facilities and in-flight services. In addition, Statistics Department data suggests that aggregate prices fell in real terms by approximately 23\% in the first twelve months after Ansett's entry.\textsuperscript{99}

Air New Zealand was 100\% owned by the New Zealand Government until it was privatised in 1989 as part of a wider economic liberalisation programme. The sale, completed on April 17, 1989, saw Brierley Investments Limited (a New Zealand investment company), obtain 35\%; Qantas 19.9\%; and Japan Airlines and

\textsuperscript{96}Lewis, \textit{supra}, note 91, p 50.
\textsuperscript{97}See: \textit{Air Services Act 1983} (New Zealand).
\textsuperscript{98}These smaller operators included Eagle Air, Air Central, Air Albatross, Capital Air, James Air, Newman’s Air, Air Hamilton, East Air, Float Air Picton, Great Barrier Airlines, Nationwide Air Services, Outdoor Aviation, Southern Cross Airways, Wairarapa Airlines and the tourist operator, Mount Cook Airlines. A number of these airlines have since failed. Significantly, Air New Zealand obtained a controlling interest in Mount Cook Airlines in 1985, giving it a substantial monopoly over international, domestic, freight and tourist operations. See Ewing, R., and R. Macpherson. (1986). \textit{The History of New Zealand Aviation}. New Zealand: Heineman Publishers Ltd. p 254-255
American Airlines 7.5% each.\textsuperscript{100} The remainder of the shares were purchased by employees, the New Zealand public and other institutional investors. The New Zealand Government retained a special rights convertible preference share (the "Kiwi Share") which holds a majority voting interest.

Deregulation of Australian airlines introduced competition to an industry impaired by forty years of rigid government protectionism.\textsuperscript{101} Before deregulation in 1990, Australia ran a two-airline policy which was introduced in 1952 to help Ansett survive competition from government-owned Trans-Australia Airlines (now Australian Airlines).\textsuperscript{102} This policy limited the total number of seats and shared them equally between the two carriers, limited the number of aircraft they could operate and, to a large extent, determined the prices that the airlines could charge.\textsuperscript{103} Growing public complaints about the high cost of domestic fares, and the realisation that the aviation industry had reached a stage where detailed economic regulation could no longer help, led the Australian Government to announce in 1987 that deregulation would start on November 1, 1990.\textsuperscript{104} Similar to examples from other countries, the Australian Government listed the benefits it expected to flow from deregulation as:\textsuperscript{105}

- greater incentive for existing and new participants in the industry to become more efficient and responsive to consumer needs;

\textsuperscript{100} These shareholdings have since changed. Brierley Investments own 35.4%, Qantas 19.3% and Japan Airlines 5%. This information was correct as at 28 September 1993. See Air New Zealand Ltd, Annual Report, 1993.


\textsuperscript{104} As a precursor to deregulation the government established the Federal Airports Corporation in 1988 as a quasi-public agency that assumed responsibility for most airport assets in Australia. See Ott, supra, note 101, p 47.

\textsuperscript{105} See Elder, supra, note 103, p 453.
• a wider range of air fares, in particular an increased availability of discount fares;
• growth, particularly in the price sensitive travel market;
• a greater variety in the types, standards, and frequency of services provided, and use of more appropriate aircraft on some routes.

The Australian Government was explicit in noting that the United States' experience with deregulation did not directly translate to Australia because of differences in constitutional frameworks, size and distribution of markets, political ethos and industrial relations structures. Nonetheless, policy makers in Australia had the distinct benefit of addressing, a priori, the concerns raised overseas—especially in the United States and Canada. The major concerns raised included: increased safety risk; reduced levels and quality of service; and concentration of aviation markets. The theme of Australian deregulation was to encourage the growth of the market and to make air travel more accessible to a wider range of people, while providing adequate safeguards for consumers and maintaining high safety standards.

The Global Airline Industry

As early as World War II, the United States Government advocated an international airline industry open to the forces of globalisation. Most other nations in the world feared United States domination of a global airline industry and thus imposed governmental controls over entry and pricing in international

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markets.\textsuperscript{109} Because of restrictive agreements between carriers and countries, the international airline industry is still, at best, only weakly competitive.\textsuperscript{110}

However, deregulation has brought some benefits to the global airline market. As well as individual countries deregulating their domestic air transportation industries, international aviation has undergone much change due to increasing liberalisation of bilateral agreements, increased domestic competition, and privatisation.\textsuperscript{111} Pustay explains how the international airline industry has evolved:

"Fifteen years ago the international airline industry could be characterised as a private cartel reinforced by anti-consumer, mercantilist governmental policies. In the intervening decade and a half, liberalization of bilateral treaties, privatization, and deregulation have revolutionized the external environment in which international airlines operate. As the rules of the game have changed, carriers have faced a brave new world where free market forces, rather than protective home governments, increasingly dominate their economic fates."

Nowhere is this more true than in the case of New Zealand and Australia. Although not complete, a single trans-Tasman market moved a step closer recently with Australia and New Zealand agreeing to deregulate bilateral flights and allow each other's airlines to pick up passengers en route to third countries.\textsuperscript{112} New Zealand, as a result of its radical economic reforms, has been ready for such a change for some time, but Australian politicians have been more reluctant.\textsuperscript{113} Ansett New Zealand gets the rights to fly the Tasman out of Auckland, Sydney

\textsuperscript{109}Ibid, p 104

\textsuperscript{110}Pryce, supra, note 53, p 96.

\textsuperscript{111}Pustay, M W., supra, note 108, p 103.


\textsuperscript{113}For example New Zealand's 1988 deregulation of internal air services gave Qantas on-flying rights from New Zealand across the Pacific and to Fiji. Qantas is also allowed to operate domestically within New Zealand—but it does not exercise that right. Ansett operates on New Zealand domestic routes.
and Brisbane in November 1993 and it is expected that by November 1994, all airlines will be free to fly anywhere between the two countries.114

As well as severely restricted entry into most domestic markets, international airline prices were traditionally established by IATA.115 Historically, IATA's members met to agree on a set of prices to charge.116 IATA's activities were challenged by the United States Government, but in 1978 the CAB issued an order to show why United States antitrust immunity should not be withdrawn from the pricing agreements. Finally, in 1981, the CAB found the IATA agreements to be anti-competitive. Activities of IATA were also undermined by competition from non-member airlines from the Far East. It is unlikely that IATA will ever resume the pre-eminent role it had prior to the late 1960s.117 Growth in the number of airlines, diversification of product offerings, secret price cutting and liberal bilateral agreements have combined to weaken IATA's power over international air travel tariffs.118

(b) The Effect of Deregulation on Airline Markets

The impact of deregulation on the airline industry was largely as anticipated by its proponents.119 Klingaman suggests the following to support this statement:120

1. competition created by entry/exit and fare deregulation led to an immediate drop in fares;

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115 IATA is a private trade association whose membership consists of most of the world's international airlines.


118 See Dresner and Treheway, *ibid*, for a full outline of IATA's history.


2. lower fares resulted in lower yields;\textsuperscript{121}
3. airline costs\textsuperscript{122} were reduced as a result of entry/exit deregulation;
4. changes in aircraft routes led to an immediate adjustment to a higher average load factor\textsuperscript{123} level; and
5. the early years showed an adverse impact on relative industry profitability.\textsuperscript{124}

Much of the theory underpinning deregulation of airlines is closely-related to the "theory of contestable markets".\textsuperscript{125} Some authors claim that the potential and actual problems posed by market concentration in a deregulated airline industry were largely ignored by the proponents of deregulation, under the guise of the theory of the contestable market.\textsuperscript{126} Unlike perfect competition theory, contestability theory did not require that a number of firms compete in a given market in order to achieve efficient performance.\textsuperscript{127} Levine outlines the conditions for contestability as they have emerged from literature:\textsuperscript{128}

- equal access to economies of scale and to technology, whether expressed as access to competitive levels of unit cost or as equivalent access to product quality;
- no sunk costs, a firm can enter and exit without entry and exit costs, including operating costs from predation (hit-and-run entry) and
- price sustainability, there is a set of prices that can occur after the entry of at least one firm which will support profitable operation.

\textsuperscript{121} Yield is measured as revenues ($) divided by traffic. Traffic is measured in revenue-passenger miles. See \textit{ibid.}

\textsuperscript{122} Costs are measured as expenses divided by capacity. Capacity is measured in available-seat miles. Cost units are dollars per available seat miles.

\textsuperscript{123} Load factor is a ratio measured as traffic divided by capacity.

\textsuperscript{124} Klingaman, \textit{supra}, note 62, p 287, suggests that profitability declined in the years following deregulation because yield declined immediately, but cost structures did not.


\textsuperscript{126} Fair, \textit{supra}, note 65.

\textsuperscript{127} Levine, \textit{supra}, note 52, p 404.

\textsuperscript{128} \textit{Ibid}, p 404
Contestability theory provides a useful starting point to discuss the performance of deregulated airline markets. During the debate over airline deregulation, proponents believed that perfectly contestable markets would result. A common argument was that sunk costs of entry are low because capital is extremely mobile.\textsuperscript{129} Impediments to contestability have proved to be far more significant than any academic observer predicted.\textsuperscript{130} There are many advantages that incumbent airlines possess vis-à-vis new airlines attempting to enter the market.\textsuperscript{131} Barriers to entry which are often mooted include: the developed networks of incumbent airlines; customer preference for established brand names; established distribution channels; access to CRSs; access to airports and terminals; and other cost advantages.\textsuperscript{132}

Although contestability theory was the argument behind airline deregulation, it has since been discovered that entry and exit in the industry is not costless. To start an airline from scratch, a firm must invest significant amounts of pre-operating costs. You need operating licences, you need to put together an organisation and you need to invest significant sums in advertising costs—all of which are non-recoverable.\textsuperscript{133} In addition, you need what is known in the industry as "ramp-up" costs.\textsuperscript{134} Incumbent firms can price in such a way that they raise

\textsuperscript{129} Although capital may be mobile, this is not the only impediment to entry. Graham et al, supra, note 56, point out that in many cases passengers exhibit a preference for incumbent carriers' flights because incumbents' schedules and service reliability are better known than the entrant's until the entrant has been in the market for a while. In addition, price rigidity by incumbent firms is not characteristic of the deregulated airline industry (in the United States at least). It is commonplace for incumbent firms to announce publicly that they will match the fares of any entrants.

\textsuperscript{130} See Levine, supra, note 52 for a comprehensive review of post-deregulation effects on the United States airline industry.


\textsuperscript{132} See ibid, p 105-109 for a brief explanation of each of these.


\textsuperscript{134} Levine, ibid, explains that "ramp-up" costs are those costs which an airline incurs in the starting months of operation on a new route. During this time, the customers find out that the airline is there and the airline determines whether the service will be profitable.
non-recoverable costs on new entrants by attracting a significant share of passengers.

Support for the existence of entry barriers in airline markets has also been found by a number of microeconomic studies.\footnote{See for example; Strassman, D. L. (1990). "Potential Competition in the Deregulated Airlines". \textit{The Review of Economics and Statistics}, 72 (1): pp 696-702.} One study found that future entry into the industry is heavily influenced by current prices because they provide a signal about the underlying conditions of the market and the profitability of entry.\footnote{ibid, p 701.} This suggests that airlines would try not to overprice because if prices diverge excessively from costs, new entrants would be attracted to the market.

In addition, transaction cost theory, as outlined above, may be relevant here.\footnote{See text accompanying footnotes 20-24.} That is, the presence of some barriers to entry does not necessarily mean that a market is inefficient. Efficiencies may be created by an optimal level of vertical integration which in turn may create entry barriers or sunk costs. Barriers to entry in the airline industry may be the result of a level of integration which is essential for survival. Although this suggests the presence of economies of scale, no conventional economies of scale are apparent in airline operations. There are, however, "economies of density" at the route level.\footnote{Forsyth, supra, note 131, p 103.} For example, an airline which offers several flights a day on a route can achieve lower per passenger costs and can attract more passengers because of a more attractive timetable. Therefore competition on most routes is likely to be monopolistic or oligopolistic at best. Although this example is at route level, it has important ramifications for the industry. It is critical for airlines to have a good network of routes because passengers are attracted to airlines with good networks—especially when they are
making a multi-stage flight. The number of airlines able to operate with good networks in the industry is thereby limited by competition at route level.

Airlines that already have a substantial presence in a market may further benefit from economies of information in that they can extend that information to other routes more cheaply than a new entrant can. These economies are combined with cost advantages caused by network effects, vertical integration through code sharing and induced scale and scope effects such as frequent flyer programmes. Established airlines gain substantial advantages from the combination of these factors.

Finally, access to technology, as required by contestability theory is hampered by airline ownership of CRSs. Access to distributional facilities is a major entry barrier in the airline industry. The majority of airline ticket sales are sold through travel agents who link themselves to airlines' internal reservation systems by the use of a CRS. The development and use of CRSs (the subject of part II B), has introduced an element of natural monopoly into the airline industry. In markets which can only support a few equivalently-sized independent firms, the largest firms are likely to control the CRS facilities. Innovative use of CRSs is a substantial impediment to free competition in the airline industry. Chapter C of

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139 *Ibid*

140 *Levine, supra, note 133, p 689.*

141 Code sharing allows small airlines to be identified by much larger national airline two letter designation codes on reservation systems


143 *Forsyth, supra, note 131, p 103.*

144 *Ibid*
this part addresses competition problems arising from the use of CRSs. *Table 1* summarises barriers to contestability in a deregulated airline industry.\(^{145}\)

While it was believed that airline markets could be perfectly contestable, this was not the ultimate goal of deregulation. Contestable markets were *instruments* expected to achieve public benefits.\(^{146}\) Many critics of airline deregulation ask the question; "Are deregulated airline markets as contestable as predicted?", and thus come to a negative answer. More correctly, analysts should ask the question; "is the airline industry better regulated by market forces than by regulation?". This question better addresses the issue of the effectiveness of antitrust law at achieving the benefits of workable competition\(^{147}\) as opposed to direct regulatory intervention.

<table>
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*Table 1*

**Barriers to contestability in a deregulated airline industry**

Research to date shows that deregulated airline markets, although not as contestable as predicted, provide substantial benefits. Graham et al (1983) studied the United States market several years after deregulation in 1978 and came to the following conclusions:\(^{148}\)

- More efficient levels of capacity are provided since deregulation.

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\(^{146}\) Levine, *supra*, note 52, p 481.

\(^{147}\) See *supra*, note 36.

Fares are now closely related to the cost of the service. Market characteristics, such as distance and the time sensitivity of passengers, explain most of the variation in fares across markets.

Some price-setting power can be exercised by airlines in relatively concentrated markets, but further increases in concentration have little effect on prices.

New, low cost airlines have a substantial negative effect on fares in the markets they serve. Their increasing role is contributing to the evolution of a more efficient industry.

Some researchers have concluded that potential competition at origin and destination airports does not constrain competitors enough, and that carriers in more concentrated markets have the ability to price above cost. For most studies of this nature draw their conclusions from regressions that uncover a positive correlation between average market forces and measures of market power or airport concentration. Analysis of this kind ignores variables which may be relevant. For example, omitted demand and cost variables or selection effects may produce the observed correlations. Market power, if it does exist in some cases, is not large—one study concluded that fares are only about five to ten per cent higher in concentrated than in non-concentrated markets. Even if some degree of market power should persist in the long run, it would be preferable to the inefficient regulatory mechanism that would be needed to prevent it.

One of the major concerns about airline deregulation was the reduction of safety standards because of airlines' cost reduction programmes. Yet safety statistics compiled by the United States Air Transport Association show that the

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149 For example Graham et al, Ibid. Also, Bailey et al, supra, note 63.
151 Ibid p s201.
152 See Bailey et al, supra, note 63, p 199.
153 Ibid, p 171.
fatal accident rate dropped significantly in the nine years after the US market was deregulated. The rate dropped from one fatal accident for every million departures to one for every two million departures.¹⁵⁴

Airline deregulation in the United States has achieved many benefits of competition as was predicted. Although not achieving perfect contestability, the airline industry is now far more efficient than it was under the cumbersome and expensive regulatory mechanisms which existed before deregulation. Although, the fuel price shocks and economic recessions which followed deregulation of air transportation were impossible to predict, few, if any analysts, accurately foresaw the full extent of the multitude of changes that deregulation would bring.¹⁵⁵ Bailey et al explain why analysts failed to predict all the effects of airline deregulation:¹⁵⁶

"In retrospect the failure to predict the precise effects of injecting competition into the airline industry is not surprising. Determining the full consequence of any regulation is virtually an impossible task. For that reason economists have long argued that the competitive marketplace is the only truly effective regulator of economic activity. Through a process of trial and error the market determines the most efficient way for producers to provide goods and services to consumers. The developments in the deregulated airline industry vividly demonstrate this view. A number of trends under deregulation, especially the growth of hub-and-spoke operations, were not fully anticipated but in retrospect are readily explained."

4. Conclusions

The objective of deregulation is to induce better economic performance through increasing the scope for competition.¹⁵⁷ Many governments throughout the world have deregulated major industries because of increasingly market driven

¹⁵⁴See Elder, supra, note 103, p 454. Elder notes that safety concerns could not be levelled solely at deregulation because in 1981, the traffic controllers' dispute had a significant impact on the industry. The Federal Aviation Administration were given less resources but it now has greater power and more resources to deal with breaches of regulations.

¹⁵⁵Bailey et al, supra, note 63, p 195.


¹⁵⁷Forsyth, supra, note 131 p 102.
policies. Their hope is that the market will encourage more efficient production and allocation decisions than did heavy-handed regulation.

Economic policy changes can affect productive, allocative and innovative efficiencies. Airline deregulation has the potential to impact on all of these. It is obvious that deregulation in the airline industry has had a profound impact on the range of products provided and the prices they are provided at (innovative and allocative efficiency). Productive inefficiencies have also been addressed through airlines trying to minimise their costs while providing the same or an enhanced service.

Airline deregulation was initiated to address and correct high fares, carrier inefficiency, limitations on options available to the flying public and the tendency toward excess capacity.\textsuperscript{158} Empirical research shows that this has largely been achieved. However, the transition to a more competitive environment has not followed the path envisioned by the leading proponents of deregulation.\textsuperscript{159}

It is incorrect to say deregulation of airlines has failed simply because perfectly contestable markets have not resulted. Although the United States experience has shown that deregulation can have undesirable effects such as concentration and oligopoly, one should look further to see if the benefits of workable competition have been achieved. Airlines in deregulated markets are now far more efficient than they were under expensive regulatory systems.

However, there are still a number of ways in which competition in the airline industry is hindered. Foremost is the high degree of vertical integration between

\textsuperscript{158}Fair, P., \textit{supra}, note 65, p 322.

major airlines and computer reservation systems. If left unchecked, airline control of these systems leaves open the opportunity for dominant airlines to exploit their control. The next chapter of this part outlines the development of CRSs, while chapter C analyses actual and potential competition problems with CRSs in the airline industry.
B

The Computer Reservation System Industry

1. Introduction

"Automation has played an increasingly important role over the past decade in all phases of air transport operations. It will become a critical element of survival in the next decade when the airline industry will be dominated by those large carriers which have the resources to expand their business bases and attain the efficiencies needed to compete in a free-wheeling marketplace."¹

Computerised reservation systems (CRSs) have become an important facet of competition in both domestic and international airline markets. Their usage was spurred by the fare and seat management demands created by deregulation.² The technological development and strategic importance of CRSs as marketing tools for the airline industry increased to such an extent that in May 1984, 11 domestic United States airlines concluded that the dominant reservation systems were not merely a competitive advantage, but a powerful, anti-competitive weapon.³ If left unchecked, the competitive advantages which CRSs confer on their owners are such that they may undo the potential benefits of airline deregulation.

Initially, this chapter asks the question; what are computer reservation systems? This provides a background to the uses of CRSs and their benefits to both travel agents and airlines. The chapter also provides an appreciation of the development of computer reservation systems which enables the reader to understand their

interdependence with the airline industry. Following the development of CRSs, corporate ownership and industry structure is discussed.

2. **What are Computer Reservation Systems?**

CRSs distribute to subscribers, principally travel agents, information on airline schedules, fares and seat availability and enable subscribers to make reservations and issue tickets.\(^4\) CRS distributors, usually airlines, also supply the computer reservation terminals and related equipment which are used to access the CRS and issue tickets. Travel agents usually lease the necessary terminals paying subscriber fees for the services and related equipment. The lease arrangements establish contractual relationships between the vendor and the subscriber. There is also a contractual relationship between the CRS vendor and the airline (or other firm) which chooses to have information about its services and prices displayed in a vendor's CRS.\(^5\) In addition to lease fees, CRSs earn booking fees which are paid by airlines to the vendor for each flight segment booked through the vendor's CRS.\(^6\) It is also recognised that airlines earn "incremental revenues" as a result of their ownership of CRSs. Incremental revenues arise as a direct result of ownership of a CRS—either from bias, goodwill on the part of the travel agent, or some other basis.

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\(^6\) A vendor, or system vendor, refers to any entity or its affiliates (whether air carriers or independent commercial enterprises) which in whole or part control a CRS (through ownership, lease, or similar financial affiliation) and which make the system available on a commercial basis to third parties such as travel agents who provide information to the general public.
There are two types of CRSs. A multi access system is a simple switching device which allows for access to different airlines' internal reservation systems. These systems require that agents understand and are competent users of different internal reservation systems. Single access systems allow agents to access a range of airlines using a single interface. The agent does not need to log in and out of separate airlines because these airlines are already connected to the CRS. Single access systems are used more frequently as they vastly increase the speed with which bookings may be made. Figure 5 illustrates the TIAS network operational in Australasia. This network comprises of two major CRSs linked by a switching network.7

An airline which has its seat inventory resident on a CRS is said to be "hosted". Large United States CRSs such as Sabre and Apollo, which grew from the internal reservation systems of American and United respectively, understandably host those airlines. More recently, systems such as Galileo<sup>8</sup> grew as joint ventures between a number of companies and do not play host to any airlines. Normally, a CRS which hosts an airline has more complete access to that carrier's seat inventory and thus can give travel agents who subscribe to that CRS better service, particularly in the form of what is referred to as "last seat availability".<sup>9</sup> Put simply, last seat availability allows subscribing travel agents to make and confirm bookings up to and including the last available seat on a given flight.<sup>10</sup>

Technically, there are four major components to a CRS. The basic core consists of one or more mainframe computers containing high speed central processing units.<sup>11</sup> These processors control the "real-time" transactions in the system. Back-up processors also operate to protect the data from failure. For large CRSs, these back-up processors provide a means for the development and testing of new software. The CRS processors are linked to a massive data storage facility which contains the CRS database. The database stores schedules, fares, and passenger-name-records (PNRs) containing a passenger's name, accounting data, flight itinerary, and other non-airline reservations. Finally, travel agents, airlines' internal reservation systems, airports and the like, are linked together by a high speed telecommunications network.<sup>12</sup>

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<sup>8</sup>Galileo started as a joint venture between nine European airlines. It was originally based on United's system Apollo.

<sup>9</sup>Trade Practices Commission, <i>supra</i>, note 4.

<sup>10</sup>Last seat availability is important because it allows travel agents to provide better service, particularly to business clients who desire timely access to seats on heavily booked flights.


<sup>12</sup><i>Ibid</i>, p 67.
Participating carriers determine the level of seat availability which they provide to the CRS.\textsuperscript{13} An increased level of seat availability allows travel agents to provide a better service and booking fees vary accordingly. Originally, only the host airline was able to provide last seat availability, as its seat inventory was resident on the database. However, recent advances in technology have allowed direct access links which permit other CRSs, besides the one in which the airline is hosted, to have last seat availability with respect to reservations for that airline.\textsuperscript{14} There are four levels of service in CRS markets as shown in figure 6.

![Diagram of CRS levels of service]

Figure 6
Levels of Service in the CRS Industry

Airline 1 has provided "enquiries only" service. A travel agent can only get airline schedule and fare information from the CRS. Bookings are made outside the system because there is no message capabilities between the airline and the

\textsuperscript{13}A participating carrier is an air carrier that elects to have its air transport services distributed through a CRS, either as the system vendor or as the result of an agreement with the system vendor.

\textsuperscript{14}Trade Practices Commission, \textit{supra}, note 4.
CRS. Travel agents booking on airline 2 can make reservations via the CRS but there is no seat availability information. In this case, the airline is under a contractual agreement to honour those tickets showing an "OK" status. Airline three provides both seat availability and confirmation facilities. At this level, airlines may display seat availability and receive bookings. Finally, the highest level of service is known as direct access, multi access, inside link, complete access or total access.\textsuperscript{15} This links the CRS system to the airline's internal reservation system through dedicated communication lines and allows subscribers to view and/or interact with that airline reservation system.

In the United States, the proportion of tickets sold by agents through CRSs has risen from 50 per cent in 1976 to more than 90 per cent in 1989. This has radically increased the prominence of CRSs.\textsuperscript{16} One of the largest systems, Sabre, handles in excess of 100,000 terminals listing more than 986,000 city pairs in 65 countries.\textsuperscript{17} Sabre stores 45 million fares in its database with up to 40 million changes every month. During peak usage, Sabre handles around 2000 messages per second and creates in excess of five hundred thousand PNRs per day.\textsuperscript{18} In addition to airline reservations, many CRSs now have the capacity to make other travel arrangements. Some display information for a range of travel and leisure services and permit reservations to be made for hotels, car rentals, cruises, railways, tours, boat charters and theatre and sporting events, as well as issue travellers' cheques, exchange currency, write insurance policies and order


\textsuperscript{16}In general, passengers may make bookings in two ways. They may purchase tickets directly from the airline (through its IRS) or from a travel agency (using a CRS).


flowers. In addition, CRSs can store information regarding customers such as their airline, dietary and seating preferences, as well as their addresses, telephone numbers and credit card numbers.

CRSs provide travel agents with three major capabilities. First, they allow the agent to quote fares and services, make reservations and issue tickets. Second, most modern CRSs are equipped with "back-office" capabilities which automatically record ticket sales, tabulate commission income, credit the agents who made the sales and make other bookkeeping entries. Third, the competition to install terminals in travel agent's offices has led vendors to offer full office automation features such as word processors, spreadsheets, electronic mail and database facilities. Although the vendors compete vigorously to provide these value added services, a United States Department of Transportation survey of travel agents showed that different CRSs are closely equivalent in terms of their basic service features. Each mirrors the innovations of the others.

As well as these benefits, CRSs have increased travel agent productivity immensely. Productivity gains to travel agents are estimated to be as high as 42 per cent, with CRSs enabling bookings to be made in one third of the time that it took before. CRSs provide the only practical means for a travel agent to track and process the vast and rapidly changing variety of fares and services in today's

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19 United States Department of Transportation, supra, note 5 p 43.
20 ibid.
21 ibid.
22 ibid.
travel industry.\textsuperscript{24} Further, it is estimated that CRSs save the consumer between 10 and 15 billion United States dollars annually in comparative shopping.\textsuperscript{25}

3. The Development of Computer Reservation Systems

Early technological advances and the United States' experience with high volume air transport markets led airlines in that country to develop the world's first automated reservation systems as far back as the 1950s. CRSs started as expansions to the internal reservation systems of major carriers, but as airlines realised the potential for retail automation, the use of CRSs quickly expanded. This section closely follows the excellent historical account of CRSs by Duncan Copeland and James McKenney.\textsuperscript{26}

(a) Early Reservation Systems

The years which followed World War II saw the demand for air travel begin to exceed the available supply. Consequently, the airlines' ability to process passenger reservations assumed increased importance. Manual systems in use at the time maintained seat inventories for a given flight at its point of departure. Reservation agents were free to book space upon confirmation from the reservation office which logged seat availability in a loose-leaf folder. Requests for confirmation were sent by a one-way booking message and confirmed in a similar fashion. When seats sold surpassed a certain level, a "stop sale" message was sent to all reservation offices and was posted on an availability board. Agents were also required to take a PNR which was transferred to the originating

\textsuperscript{24}Comment. (1990). "The Legal and Regulatory Implications of Airline Computer Reservation Systems". 

\textsuperscript{25}Callow, Joseph M. (1992). "Cut-throat Competition in the Friendly Skies". 

\textsuperscript{26}Copeland and McKenney, supra, note 3.
city and reconciled against the seat inventory. Frequent inconsistencies often led to flight over/underbookings and the deterioration of customer service and seat utilisation. Availability boards were replaced by magnetic drum memories in the 1950s. Agents inserted magnetic plates into desk sets to determine seat availability for a flight. However, reconciliation problems remained because although magnetic plates improved accuracy of seat inventories, they still could not store passenger data.

(b) Airline Automation

In 1953, C.R. Smith, president of American Airlines, initiated a five year joint study with IBM to investigate the technical feasibility of creating an automated system which could cope with both seat inventory and passenger record requirements. Because of technical constraints, the first of the IBM SABER designs did not meet all of American's ambitious requirements, but the system allowed for capture of PNRs, seat availability, and communication between airlines via teletype.28

Unlike common batch processing systems in use at the time, SABER was a message driven system. This feature made the system attractive to other airlines and by 1960, Delta and Pan Am had signed contracts with IBM for similar PNR systems. IBM's projects were encompassed under the SABER umbrella and American's system became known as Sabre.29 As IBM realised that the system had market potential, they persisted in improving unanticipated problems such as

27 The initial system was code named SABER - Semi-Automated Business Environment Research.
28 American wished to develop a system which could match passengers to seats; speed communications among airlines; contain seat availability on all carriers' schedules; print passenger itineraries; and issue boarding passes, with terminals located in the offices of travel agents.
29 Sabre actually has no meaning as an acronym.
response times. Some observers note that only IBM's unwillingness to admit defeat and its unlimited financial resources prevented another software failure.\textsuperscript{30} The systems IBM developed for American, Pan Am and Delta were similar with respect to functionality but differed in technological advancement, with American's system being the most advanced. As a result, American's \textit{Sabre} became fully operational by 1964, while the installation of \textit{Deltamatic} and \textit{Panamac} was not completed until 1965.

Further technological advances saw IBM leveraging the knowledge they had learned in the \textit{SABER} projects to launch a standardised airline reservations product. This resulted from the failure of TWA and United to build customised systems whose goals went beyond even American's original goals.\textsuperscript{31} IBM's standardised reservation systems, named \textit{PARS} (Programmed Airline Reservations System) put computer reservation systems within the reach of medium sized airlines. IBM began taking orders for \textit{PARS} in 1965 for installation in 1968. Initial purchasers included Braniff, Continental, Delta, Northeast and Western.

Eastern's goal to have the most advanced system for computerised reservations, traffic handling and operations service prompted it to join forces with IBM to expand the \textit{PARS} system. The Eastern-based \textit{PARS} system superseded American's pre-eminence in CRSs. American finally acquired Eastern-based \textit{PARS} in 1970, in exchange for valuable technical information which further developed the system. In 1972, American updated \textit{Sabre} to include the advantages the \textit{PARS} system offered. By the end of 1972 all but one main trunk airline in the United States had installed what became known as \textit{PARS 2}. \textit{PARS 2}

\textsuperscript{30}For example, Copeland and McKenney, \textit{supra}, note 3.

\textsuperscript{31}Copeland and McKenney claim that these airlines failed because they lacked both the application and the technology. Their failure became a major competitive liability for these airlines as they were left with outdated availability reservation systems.
allowed for extra features such as fare-quotation, advance check-in, boarding pass issuance, stand-by passenger handling and itinerary generation. Further, because a number of airlines used the same system, increased interaction was possible. These developments meant that by the early 1970s, all major carriers in the United States possessed stable, reliable internal systems and communications networks, which had become essential components of their operations.

(c) Retail Automation

American was the first airline to try to extend the scope of its reservation system (Sabre) to travel agents in 1967. By the early 1970s other major carriers had selectively distributed their systems but the airlines reached a tacit understanding that they should stop further retail expansion so as to avoid a computer war.

Travel agents tried several times to develop an industry standard reservation system between 1967 and 1974. The first such attempt was the Donnelly Official Airlines Reservations System (DOARS). This system failed because of a lack of agreement regarding its financing. Following this, the CAB was asked to approve the PARS-based Automated Travel Agency Reservations System (ATARS). However, because the industry wanted exclusive use of the system, the Department of Justice deemed it a violation of antitrust laws.

An agreement between the American Society of Travel Agents (ASTA) and Control Data Corporation (CDC, a software company) in 1972 to develop an industry-wide system prompted the airlines to look for a way to defend what they considered to be their domain. Led by Max Hopper of American Airlines, the airline consortium offered ASTA members an additional one percent commission on the value of their ticket sales in return for delaying development of the CDC
system and participating in a Joint Industry Computerised Reservations System (JICRS) study. The JICRS team issued a report in July 1975 concluding that a joint system was feasible.

United, dissatisfied with the terms of the proposed JICRS system, announced in January 1976 its withdrawal from the proposal and its intention to make its system, Apollo, available to travel agents and commercial accounts. United started taking orders for Apollo in May 1976 for delivery in September. However, Hopper was ready for the possibility of United's withdrawal and had prepared American to compete. In addition, American benefited from the goodwill of the JICRS project and by the end of 1976 Sabre was installed in approximately 130 travel agent offices in the United States. Other airlines such as Delta, Eastern and TWA, acting under tighter budgetary constraints, focused their efforts on travel agents in their principal markets.

American considered their competitive edge in information technology seriously enough to establish Travel Agency Automation as a separate organisational unit. Although they initially justified expenditure on the installation of terminals as necessary to retain revenue, it soon became apparent that retail automation would lead to substantial revenue generation.

United's bigger route network spurred the growth of Apollo in the United States, so American responded by initiating a "co-host" programme in 1978. The co-host arrangement meant that other carriers would be given preferential treatment on Sabre for a fee. The primary intention was to increase Sabre's presence in markets which American did not serve. United quickly introduced its own co-host programme. The years which followed, influenced by deregulation, saw the carriers significantly increasing the variety of fares and the frequency with which they changed them. Similarly, the nature of passenger inquiries changed
from seat availability to price shopping. These changes to the nature of the industry meant that real-time access to carriers' schedules and fares was a necessity for travel agents.

CRSs reached nationwide coverage in the United States by the early 1980s. Unfortunately, allegations concerning the anti-competitive use of reservation systems also became apparent. The process of deregulation had hit its first major stumbling block. The CAB and the Department of Justice each issued reports which concluded that the CRS industry offered significant potential for anti-competitive behaviour.

(d) Deregulation Developments

Deregulation of the air transport industry in the United States created a fundamental change in the role of CRSs.\textsuperscript{32} In regulated markets, multi access systems were adequate for the demands of travel agents; however, deregulation offered new opportunities to the traveller and therefore placed new demands on both retailers and vendors. For example, before deregulation the CAB had rarely allowed discount fares. But when it lost its authority to regulate United States domestic fares in 1983, carriers became free to create any number of discount fares and to vary the fares among markets as they chose, subject only to the restraints imposed by competition from other carriers.\textsuperscript{33} CRSs quickly grew from being simple information and booking systems tools to their current use as powerful marketing and distribution tools.\textsuperscript{34} Collier explains why deregulation caused rapid development of CRSs:\textsuperscript{35}

\begin{itemize}
\item \textsuperscript{32}Collier, \textit{supra}, note 17, p 86.
\item \textsuperscript{33}United States Department of Transportation, \textit{supra}, note 5. p 12.
\item \textsuperscript{34}Collier, D., \textit{supra}, note 17.
\item \textsuperscript{35}\textit{Ibid.}
\end{itemize}
"Deregulation brings a broad choice of fares. The CRS had to be able to cope with one million changes to air fares per day and to present these fares to agents who were being asked to find the most competitive offers. As a result single access systems were required. The technology had to access information from a broad range of airlines and to present this information to the agent on a screen in cost or time ranking."

The regulated environment which severely restricted competition meant that huge investments in information technology were possible by airlines. Developments in the CRS industry paralleled advances in both information technology and air transportation—often the demands of airlines pre-empted the capabilities of information technology. The airlines which developed the highly successful systems did so by "learning by doing". This process led to many failures. However, the regulated environment protected airlines from their expensive mistakes. Copeland and McKenney claim:\textsuperscript{36}

"If failures like these occurred in an unregulated industry, where firms could not be rescued through their purchase of a competitor's software, the consequences would be devastating".

As well as being able to survive the many failures, United and American were the only two airlines that had a sufficiently broad route and fare structure and a sufficiently broad revenue base to make unilateral development of a CRS for travel agent use worthwhile.\textsuperscript{37} Therefore the success of American and United in establishing profitable CRSs is not due to business acumen and good luck in a risky environment, but to the inherent advantages provided by the route structure awarded to them by the CAB.\textsuperscript{38}

\textsuperscript{36}Copeland and McKenney, supra, note 3, p 368.


\textsuperscript{38}Ibid.
(e) Present and Future Developments

In addition to deregulation, the rapid development of computer technology has increased the ability of computers to store, process, update and retrieve the information contained in CRSs quickly and efficiently.\[^{39}\] Instead of standard dumb terminals which were widely used just a few years ago, vendors are now making use of PC-based terminals which have vastly superior functionality. The PC-based environment provides an excellent basis for further expansion and improvements to the service provided to agents.\[^{40}\]

Global competition between major CRS players like *Galileo, Amadeus, Sabre, Abacus, System One* and *Worldspan* is now moving to another level. In order to attract further retail outlets to use their systems, CRSs need to offer system enhancements. There are two basic types of enhancements.\[^{41}\] Firstly, the introduction of more complex system capabilities such as value added services in the form of a broader range of travel products for sale.\[^{42}\] These enhancements may require both hardware and software improvements. Secondly, a CRS vendor may improve the system by linking the CRS to more databases and giving access to other systems.\[^{43}\] Enhancements such as these raise the importance of CRSs.

Expansion to include a more complete tourism product is the current direction of research in this area.\[^{44}\] The major CRSs are committed to

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39 United States Department of Transportation, *supra*, note 5.
42 Collier, *supra*, note 17.
43 Ehlers, *supra*, note 41, chapter two provides a good outline of recent developments in hardware and software for CRSs.
44 Academies recognise that the total tourism product is made up of a myriad of interconnecting products and services. See: Morrison, Alistair M. (1989), *Hospitality and Travel Marketing*, Albany, NY: Delmar.
improvements—Sabre spends $US54 million a year on research and development. The current trend is to link CRSs to other databases such as the multi-media databases of tour wholesalers or publishers. In addition, CD-Rom technology allows visual images, for example of hotels, cruise liners or places, to be projected to an agent’s screen for viewing by a customer. The Reed-developed Jaguar system in the United Kingdom achieves this. It is linked to Sabre and allows travel agents the opportunity of showing pictures on their screens of potential destinations. Other projects under way to develop this technology include EC funded EUROTOP and, in Germany, TIM. Beyond these conventional system enhancements, research is headed in the direction of expert systems which are designed to cope with problems or decisions which conventional computer tools are unable to handle because the solution relies on the knowledge and reasoning capabilities of humans.

System enhancements are particularly important where CRS markets are saturated. In markets such as the United States, CRSs can not prosper simply by continuing to process the sale and distribution of airline tickets. In 1988, the chief executive of Covia Corporation estimated the company would spend $US1 billion to improve the Apollo system. Such expansion is generally achieved through the provision of additional services at the point of sale. CRSs therefore are no longer pure marketing systems airlines. Rather they are an industry highly

45Source: Fantasia Information Network Information brochure.
46Archdale, supra, note 40, p 8.
48Archdale, supra, note 40, p 8.
interdependent with air transportation—from which they emerged. They will continue to alter the pattern of world tourism in the future.50

(f) CRSs in the Air Transportation Industry

To understand the importance of CRSs to the air transportation industry, one must understand both the essential nature of CRSs to travel agents and the crucial role of the travel agent in airline ticket sales.

The increasing use of hub-and-spoke networks meant that carriers could no longer rely on their sales offices as the principal means of distributing their product.51 The airline industry is unique in that virtually all the competitors have come to rely on a common, supposedly neutral, distribution network—travel agents—for most of their sales.52 Travel agents have become dominant because they are the most efficient means for travellers to find out what travel options are available. Deregulation brought a wider range of fares and routes to the flying public, and the increasing use of hub-and-spoke service has also expanded the number of service options in many markets.53

Not only are travel agents the most efficient way for travellers to purchase air transport, they are also the most efficient way for airlines to market their services. The economics of airline operations magnifies the importance of travel agents to the airline industry. Consider figure 3 in chapter A, which illustrates how

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50 Collier, supra, note 17, p 87. For an evaluation of the impact of CRSs on other aspects of the tourism industry see: Archdale, G, supra, note 40.

51 OECD, supra, note 49, p 87.

52 The fact that travel agents are neutral can be argued because each airline structures its commission payments with many agencies to encourage them to shift more bookings to that carrier. However, in general, the consumer perceives that travel agents offer neutral advice on airlines.

important incremental revenues are to airlines. Airlines sell a service that can not be stored and the high proportion of fixed costs involved in operating a flight means that the gain or loss of a few passengers on a flight can often determine whether it will be profitable.\textsuperscript{54} Therefore airlines can not afford to have access to their principal mode of distribution (travel agents) cut off or impeded. Their wish is to make it convenient for travel agents to sell their flights, and CRSs achieve this. The increasing prominence of travel agents and their reliance on CRSs as a sales tool means that full access to technology in the airline market is vital if effective and workable competition is to prosper.

Travel agents rely almost completely on CRSs to obtain information on airline schedules, fares, and seat availability, to make reservations, and to issue tickets. There is consensus between travel agents and carriers that for both parties, the use of a CRS is essential. Saunders explains the importance of CRSs:\textsuperscript{55}

"...CRSs have become as important to the airline industry as the telephone is to American business. The majority of airline flight reservations are booked using CRSs. Unlike the telephone, however, CRSs are controlled by competitors of the airlines forced to use them. It is the airline's ownership of CRSs that raises antitrust questions."

As noted above, the percentage of tickets issued through CRSs has increased dramatically. 1985 United States figures suggest that more than 86 per cent of domestic and international air ticket sales were issued by travel agents and 95 per cent of travel agents are connected to a CRS.\textsuperscript{56} By 1980, CRSs in the United States were the primary communication method between travel agents and airlines.\textsuperscript{57}

\textsuperscript{54}United States Department of Transportation, supra, note 53, p 43783.
\textsuperscript{55}Saunders, supra, note 23, p 165.
4. **Corporate Ownership**

The ownership of the world's CRSs is complex and is confused by many partnerships, agreements and mergers. In recent years there has been an explosion of CRS activity worldwide which "has resulted in a complex web of agreements, partnerships and joint ventures between CRS vendors and their airline owners".\(^{58}\) It is easiest to represent this in a diagram. *Figure 7* shows worldwide ownership of CRSs. The information for *figure 7* was extracted from United States Department of Transportation documents,\(^{59}\) correspondence with CRS vendors and other sources.\(^{60}\) The goal of *figure 7* is not to provide an exhaustive outline of CRS ownership and links, but to illustrate the complexity of global ownership and cross agreements which exist.

As *figure 7* illustrates, there has been significant globalisation of CRSs in recent years—some companies now refer to their systems as Global Distribution Systems (GDSs). Many companies have entered into inter-CRS marketing and technical agreements. These agreements reflect not only the need for expansion for survival, but also an attempt to provide a global service for both carriers and agents.\(^{61}\)

There are now several global alliances of airlines controlling the CRS industry worldwide. Airlines in Europe became concerned about established United States CRSs moving in to the lucrative European market in the late 1980s.\(^{62}\) Regulatory

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\(^{59}\)See: United States Department of Transportation, *supra*, note 5.

\(^{60}\)For example: Ehlers, *supra*, note 41.


constraints restricted United States CRS expansion in Europe but more recently, both Apollo and System One found an opening.

In 1987, the Amadeus group (Europe), consisting of Air France, Germany's Lufthansa, Spain's Iberia, Scandinavian group SAS and others, chose System One as its software provider to create a CRS which was planned to be the biggest in Europe. Amadeus has its head office in Madrid, development facilities in Nice and operations centre in Munich. The $US500 million project included global marketing agreements, future exchange of technology, and connectivity between the systems. Amadeus is Europe's largest CRS with nearly 15,000 locations.

Conversely, United Airlines linked up with a different consortium of European Airlines led by British Airways. This group, known as the Covia partnership, developed the Galileo CRS based on Apollo. Unlike the agreement between Amadeus and System One, Galileo did not pay United a fee for the use of its Apollo software.63 Instead, United receives royalties for as long as the Galileo system operates. Both Amadeus and Galileo are joint ventures which are expressly permitted by EC competition law under article 85(3) of the Treaty of Rome.64 Part IV B 4 discusses this exemption in further detail.

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63 Ibid p 87.

64 Mietus, John Roland Jr. (1989). "European Community Regulation of Airline Computer Reservation Systems". Law and Policy in International Business 21 : pp 93-118. p 104. Although article 85(1) prohibits "any agreements between enterprises and any concerted practices which are likely to affect trade [within the EEC] and which have as their object or result the prevention, restriction or distortion of competition within the Common Market ..., " the Commission is allowed to grant exceptions under article 85(3). Article 85(3) requires that exempted agreements: 1) contribute to the progress of European technology or trade; 2) bring the results of this contribution to consumers; 3) not impose unnecessary restrictions; and 4) not create the potential for elimination of competition in a substantial part of the trade covered by the agreement.
Figure 7
Corporate Ownership of CRSs
Electronic Data Systems (EDS), an information technology services company, recently became the first non-airline partner in a CRS. System One sought equity partners and when airline contacts failed, it turned its attention to EDS. The new facilities management agreement between these parties became effective in May 1991.\textsuperscript{65} In addition, since 1990, System One has been negotiating the possibility of closer co-operation (and possible merger) with Worldspan and Amadeus. Worldspan was formed in February 1990 with the merger of PARS and DATAS II.

In 1988, United Airline's parent, UAL, sold 49.9 per cent of Covia Corporation to USAir Group and four European Airlines which already had a stake in Galileo. Since then, Air Canada has acquired a small stake in Apollo. Other European airlines involved in Galileo include Aer Lingus, Austrian Airlines, Olympic Airways, Sabena and TAP Portugal. On September 16, 1993, Galileo and Covia combined their organisations forming Galileo International. The company operates through a network of regional distributors and serves nearly 30,400 automated travel agencies, estimated to be 30% of the world market.\textsuperscript{66}

While its American competitors have focused on the European market, Sabre has looked to the Pacific Basin for expansion.\textsuperscript{67} Sabre, owned by AMR Corporation, parent company of American Airlines, recently reached agreements with the two major Japanese airlines and distributes Sabre-based Fantasia in Australasia.

\textsuperscript{65}Source: System One Corporation, Strategic Plan 1993.
\textsuperscript{67}Sabre has gained a foothold of around 500 terminals in Europe. However, the European Joint Venture Exception, passed in July 1988 applies only to Amadeus and Galileo (but see part IV B 4). The purpose of this agreement was not only to condone the operation of Amadeus and Galileo, but also to protect them from US competition.
Parkhurst points out that the joint ventures of Amadeus, Galileo and Abacus were formed in large part to avoid surrendering the European and Asian markets to United States companies exclusively. These recent developments have led to the pre-eminence of four major alliances in the global CRS industry.

- Covia/Galileo;
- System One/Amadeus;
- Worldspan in the United States and Abacus in Asia/Pacific Basin; and
- Sabre and its alliances with Japan Airlines and several airlines in the Pacific Basin.

5 Benefits of CRS Ownership

To airlines which are not directly hosted by a CRS, participation offers substantial benefits. The Trade Practices Commission (Australia) summarises the importance of CRSs to all airlines:

- CRSs provide an efficient means of distributing airline products
- CRSs provide airlines with a medium for monitoring and executing many of the logistics of airline operation (co-ordinating supplies and crewing for aircraft)
- CRSs are sophisticated tools for studying shifts in travel patterns and volumes and are an effective means for identifying and responding to competitive developments in the market.

Although CRS development was first defended as necessary to defend market share, carrier owned systems now confer major financial and non-financial benefits on their owners.

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69 Trade Practices Commission, supra. note.
(a) Financial Benefits

There are four major groupings of financial benefits which airlines enjoy through their ownership of CRSs:  
- the booking fees they charge other airlines for reservation services,
- the fees they receive from subscribers for equipment and services,
- the value of the reservation services they provide to themselves, and
- the incremental bookings/revenues they receive because travel agents use their CRSs.

Booking fees and subscriber fees from the five major United States CRSs amounted to $US1.176 billion in 1988. Table 2 illustrates the magnitude and distribution of booking fees for the United States market.  

<table>
<thead>
<tr>
<th>Participating Carriers</th>
<th>CRS Vendors</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sabre</td>
<td>Apollo</td>
</tr>
<tr>
<td>American</td>
<td>$61.2</td>
<td>$21.0</td>
</tr>
<tr>
<td>United</td>
<td>28.7</td>
<td>63.1</td>
</tr>
<tr>
<td>USAir/Piedmont</td>
<td>34.9</td>
<td>27.2</td>
</tr>
<tr>
<td>Continental</td>
<td>22.0</td>
<td>15.0</td>
</tr>
<tr>
<td>Eastern</td>
<td>17.2</td>
<td>9.1</td>
</tr>
<tr>
<td>Northwest</td>
<td>24.3</td>
<td>15.6</td>
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<tr>
<td>TWA</td>
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<td>8.8</td>
</tr>
<tr>
<td>Delta</td>
<td>34.9</td>
<td>20.9</td>
</tr>
<tr>
<td>Pan Am</td>
<td>8.3</td>
<td>3.4</td>
</tr>
<tr>
<td>America West</td>
<td>8.2</td>
<td>5.7</td>
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<tr>
<td>Other Airlines</td>
<td>70.9</td>
<td>39.9</td>
</tr>
<tr>
<td>Total</td>
<td>324.4</td>
<td>229.7</td>
</tr>
</tbody>
</table>

Table 2

Booking Fees Received From Participating Carriers - 1988 (U.S.) ($US Millions)

Since American Airlines initiated retail automation in the late 1960s, it was recognised that incremental revenues may be earned by host airlines. Incremental

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70 United States Department of Transportation, supra, note 5. p 55.
71 The five major CRSs in 1988 were Sabre, Apollo, Datas II, PARS and System One. Since 1988, Datas II and PARS have merged to form Worldspan.
72 Source: United States Department of Transportation, supra, note 5.
revenues refer to the extra income airlines receive because they are the host of the system. Apart from anti-competitive practices (dealt with in part II C) incremental revenues arise from two sources. First, the ongoing business relationship between the vendor and its subscribing agents makes those agents more likely to make bookings on the vendor carrier. Second, the architecture of different CRSs makes it easier for an agent to make a reservation on the vendor’s services than on the services of a non-vendor carrier.\textsuperscript{73} Although incremental revenues are accepted, there is no totally credible way of measuring them.\textsuperscript{74} They are apparent through the divergence in booking shares through different CRSs to the host airline.\textsuperscript{75}

(b) Non-financial Benefits

Ownership of CRSs also confers a number of non-financial benefits on airlines. Examined individually, the advantages which host airlines gain from their CRSs do not seem significant. Nonetheless, combined they result in a substantial advantage to the host. Appendix 2 contains a full list of these advantages.

Vendors have access to the records in their CRSs and may use load flight and fare information to their advantage. Vendors may be better able to co-ordinate their yield management and thus their inventory through their CRSs.\textsuperscript{76} Yield management aims at increasing an airline’s load factor by adjusting its class, route and fare structure to the market situation.\textsuperscript{77} This control of seat inventory may ultimately lead to greater economic efficiency. Vendor airlines’ CRSs are also

\textsuperscript{73}Ibid. p 65. Architectural bias is explored further in chapter C of this part.

\textsuperscript{74}See: Ibid, p 61-63 for a discussion of measurement techniques for incremental revenues.

\textsuperscript{75}The United States General Accounting Office recommended to the DOT in 1988 that it investigate the magnitude of incremental revenues. It estimated that these revenues increased CRS-vendor airline revenues by 12 to 40 percent of what revenues would have been in the absence of CRS ownership. See: United States General Accounting Office, supra, note 37, p 7.

\textsuperscript{76}Ibid. p 70.

\textsuperscript{77}Ehlers, supra, note 41, p 47.
directly linked to their internal reservation systems, which means on-line updates are possible. Non-vendor airlines have complained that it takes a longer time for them to get their fares and schedules loaded on rivals' CRSs. In addition to these benefits, vendor airlines benefit from direct access to their competitors' booking information. This may result in valuable marketing information which can then be sold.

Vendor airlines also gain complete control over the main channel of distribution in the air transportation industry. There are three levels in the air transportation industry—figure 8 shows these levels. Airline ownership of CRSs represents vertical integration of two levels: air transportation services and reservation information distribution. The result of this integration is increased airline control of downstream air transportation sales. The shading in figure 8 denotes the degree of airline control—the darker the shading, the greater the control. Airline ownership of the top two levels of the air transportation industry has enabled dominant airlines to extend their power to the third level, air transportation sales. The ability of vendors to affect downstream competition depends on the degree of market power that they possess in the CRS market.

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78 Saunders, supra, note 23, p 181.
6. CRS Industry Structure

Table 2 (above) shows United States revenue statistics for CRSs. The table shows the existence of a concentrated oligopoly market, with *Sabre* and *Apollo* being the two major players. In smaller markets, the CRS market is a virtual monopoly. For example, a recent merger of two CRS vendors in Australia resulted in one company, Travel Industries Automated Systems Pty Ltd, controlling over 95% of the Australasian market through its two systems, *Galileo* and *Fantasia*. The Australian Trade Practices Commission realised that this market could only efficiently support a single vendor and hence approved the merger subject to a code of conduct (discussed in depth in Part V).\(^80\) However, market share data does not reflect the full extent of market power of CRS vendors.

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\(^{80}\)From an interview with Michael Rawstrom, the TPC project officer, TPC Canberra.
The United States Department of Transportation report of 1988 concluded that a new firm would have to incur substantial costs to enter the CRS industry.\footnote{United States Department of Transportation. (1988). *Study of Airline Computer Reservation Systems*. DOT-P-37-88-2.} One United States study concluded that to start a system from scratch, a firm would need start-up costs of approximately $US100 million and development time of six months to two years.\footnote{See Saunders, *supra*, note 23. Saunders quotes a US Justice Department estimate. Actually, United reported to the Civil Aeronautics Board for the purpose of the CAB investigation that it spent $500 million on *Apollo* over its years of operation. American reported development costs of $160 million.} Many of these costs to start a new system are sunk costs—not recoverable when a firm exits the market. In addition to sunk costs, incumbent firms in the industry enjoy huge economies of scale and scope.\footnote{United States Department of Transportation, *supra*, note 5. p 49.} The additional cost of an extra transaction is negligible, so the average cost per transaction declines as the number of transactions grow.

Some solutions to the high costs of implementing systems have been suggested. One example is Arkia Israeli Airlines, a small regional airline, which uses a system developed for its special purposes. *AMSYS* (Airline Management SYstem) was developed after Arkia rejected the options of buying into a co-host programme or acquiring an established system.\footnote{See: Borovits, I., and S. Neumann. (1988). "Airline Management Information System at Arkia Israeli Airlines". *MIS Quarterly*, 12(March):pp 127-137.} Yet while these systems may now be developed relatively cheaply, the problem of connection to other CRSs remains. Since, travel agents are likely to prefer a system which lists as many flights as possible, failure of small systems to connect to other CRSs may render them redundant.

Incremental revenues produced through the ownership of CRSs put incumbents in a better position to compete for other travel agents against potential entrants. If
incremental traffic results in higher average passenger loads and better utilisation of equipment and personnel, the competitive position of vendor airlines is improved relative to non-vendor airlines.\textsuperscript{85}

Entry barriers also exist in the form of existing contracts between vendors and travel agents. New entrants would have to meet the agents' "switching costs" which would mean buying agents out of their existing contracts which usually contain liquidated damages clauses. The two major CRSs claim that the reason for these long contracts, which make it hard for agents to switch, is that vendors need to undertake long term investments to increase the efficiency of their systems. There is also strong evidence of learning curve effects, although some economists disagree on whether this constitutes a barrier to entry.\textsuperscript{86} It is generally accepted that the CRS industry is not conducive to new entry. \textit{System One's} 1993 strategic plan acknowledges this:\textsuperscript{87}

\begin{quote}
"The CRS industry is unlikely to attract new entrants, thereby providing excellent profit potential for those current participants who excel in the CRS business. The next few years will likely see the entry of multiple third-party software providers who will supply special services to agencies. This will generate opportunities for new "transaction based" revenues from travel agent subscribers and third-party providers. There will be increasing pressures on the industry to achieve efficiencies through cooperation and/or consolidation."
\end{quote}

The profit performance of major United States CRSs is impressive. For example, in 1985, of American Airlines' reported profits of $US336 million, operating profits from \textit{Sabre} were $US143 million. Conservative estimates credit \textit{Sabre} with a cumulative cash contribution to American between 1976 and 1986 of

\textsuperscript{85}United States Department of Transportation, \textit{supra}, note 5. p 49.


\textsuperscript{87}Source: System One Corporation, Strategic Plan 1993.
$US900 million, producing an internal rate of return of 68.7 per cent.\textsuperscript{88} Less conservative estimates put the net contribution at $1.7 billion with an internal rate of return of 129.5 per cent.\textsuperscript{89} The CAB concluded in 1982 that the major vendors of CRSs possessed substantial market power over other airlines, and were exercising that power to the detriment of airline and CRS competition.\textsuperscript{90} In addition, they found that vendor airlines earned excessive rates of return from the booking fees, leasing fees and incremental revenues generated from their systems. The DOT supported these findings in 1988 when they calculated that the major vendor's booking fees substantially exceeded their costs.\textsuperscript{91}

Excessive rates of return are a direct result of the ability of vendor airlines to price well above cost, with little regard for their airline competitors. The ability of vendor airlines to selectively price has important implications for airline markets. Higher CRS fees raise overall prices for all airlines and are passed on to the consumer in the form of higher air fares. Additionally, higher costs may adversely affect competition as airlines withdraw from markets where they are only marginally profitable. For example, major vendors were able to charge participating carriers widely divergent fees that bore no relationship to the cost of serving them and were unaffected by the fees charged to other carriers.\textsuperscript{92} This ability to impose higher costs on their direct competitors demonstrates both a

\textsuperscript{88} An internal rate of return is the discount rate which equates the present value of cash flows with the amount invested to create a system. United States Department of Treasury estimates that the three largest systems in the United States have internal rates of return in excess of 100%.


\textsuperscript{90} United States Department of Justice, supra, note 11.

\textsuperscript{91} United States Department of Transportation, supra, note 53, p 43785.

\textsuperscript{92} United States Department of Transportation, supra, note 5, p 76.
substantial degree of market power and an abuse of that power to harm airline competition.93

To be successful, a CRS needs to attract both agents and carriers. As the number of carriers listed on the CRS increases, the value of the CRS to agents increases. Conversely, as the number of agents increases, so does the value to the airlines. Agents do not need to purchase more than one CRS so long as all or most of the carriers they use are listed on one system. Consequently, most travel agents purchase only one system.94 So long as agents use only one CRS and most carriers are accessible through any CRS, a pattern may result: agents regard rival CRS systems as close substitutes for one another, and purchase only one, while carriers regard access to every major CRS as essential, and want to purchase access for listing in each one.95 To the airlines, different systems are not substitutes for each other because travel agents only subscribe to any one CRS. Each CRS constitutes a separate market—providing access to a discrete group of agents.96

Ultimately, the demand for CRS services is determined by the consumers' demand for the final product—air transportation services. CRSs provide the vital link in the distribution chain between the agent and the airline. The link is vital for both agents, who must serve customers quickly and efficiently, and airlines who need to sell air services through travel agents.

93Ibid.
94Most agents use only one system because using more than one system increases training costs and can make it more difficult to keep track of records. In addition, all vendors prohibit subscribers from using a CRS terminal to access more than one system; having to obtain a second terminal for accessing a second system is too inconvenient and expensive for most agencies. Finally, vendor's subscription contracts often contain terms regarding minimum use.
95United States Department of Justice, supra, note 11, p 5.
96United States Department of Transportation, supra, note 53, p 43784.
7. Conclusions

CRSs grew from the internal reservation systems developed by airlines in the 1960s. When automated reservation systems were first developed, airlines were protected from their failures by stringent regulatory control of the air transportation market. Airline deregulation in the early 1970s brought with it a myriad of constantly changing fares and routes. Only CRSs could efficiently cope with these demands.

CRSs have developed differently in various parts of the world. Because the United States was the first country to experience deregulation of the air transportation market, CRSs in that country developed early. European systems followed but these were developed under tighter regulatory contraints and were often joint ventures between a number of airlines. In general, CRSs in other parts of the world have followed developments in the United States. Single access systems are now widespread.

Benefits of ownership of CRSs soon became apparent. Financially, vendor airlines were better off because CRSs earned them booking fees, subscription fees and, more contentiously, incremental revenues. Other non-financial benefits to vendor airlines include the availability of timely load and flight information, access to competitors' booking records, and the development of useful marketing information such as changing consumer preferences and travel patterns. By participating in competitors' CRSs, airlines which do not own CRS are able to obtain many non-financial benefits. However, their participation is often restricted.

The CRS industry is very concentrated and in some geographic markets it is a monopoly. Market power is apparent through the structure of CRS markets, and
the conduct and performance of the dominant airlines. High barriers to entry preclude new entrants and CRS vendors possess significant pricing discretion, which allows them to raise the costs of their rivals. Such subtle price increases are vital to competition in the airline industry where the economics are such that just small increases in price are enough to drive competitors from the market.

The increasing prominence of travel agents in the distribution chain has made complete access to CRSs vital for airlines to compete effectively in the air transportation industry. However, as a relatively small number of firms control this vital distribution channel, small airlines are at risk if access is not granted. Chapter C investigates the ways in which it is possible for firms that control CRSs to extend their market power to another industry—the air transportation industry.
C

Competition Problems with Computer Reservation Systems

1. Introduction

In the years since airline deregulation, CRSs have been described, depending on the observer's perspective, either as "a rightful reward in return for capital, skill and risk invested", or an "anti-competitive weapon used unlawfully to obtain and exercise monopoly power".\(^1\) One fact is certainly agreed upon: CRSs have radically altered the competitive environment of the airline industry. Part II B illustrated that competition in the airline industry is highly dependent on the provision of CRS services which are non-discriminatory between airlines. This chapter explains how CRSs may be used by vendor airlines to increase competitive advantages and revenue vis-à-vis their competitors.

When airline markets were first deregulated, it was believed that by removing barriers to entry and exit, even concentrated parts of the industry would behave competitively. However, proponents of deregulation failed to appreciate the level of creativity to which airline management and their driving competitive forces would rise in the quest for a permanent spot in the newly deregulated industry.\(^2\)

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The transition from a heavily regulated industry to an environment shaped by market forces dealt a major economic blow to existing airlines. Initially, they struggled against new smaller and more efficient organisations. But incumbent firms soon realised that they had a significant advantage over their fledgling rivals—their distribution systems. These systems comprised of two components, complex computerised reservation systems and widespread travel agent contacts.

The older carriers (for example, American and United), which had made significant investments in developing CRSs, found their distribution costs were much lower than many of the newcomers. Many industry analysts did not at first fully grasp the potential this had for a profound impact on the structure of the domestic airline industry. Soon after deregulation, firms dominant in the air transportation market learned that they could "leverage" their dominant position so they could also become dominant in another industry—the CRS industry. In addition, it is possible for control of the CRS industry to be leveraged in the opposite direction. That is, an airline can gain advantages in the air transportation market by being dominant in the CRS industry. Because CRSs provide vendor airlines with an opportunity to increase rivals' costs, in an otherwise competitive environment this may provide market power. For example, if the vendor charges supra-competitive prices for CRS services, it increases its competitor's costs without increasing its own, therefore providing the vendor with a significant competitive advantage.

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3Ibid, p 327.
4Ibid.
United States Congress became deluged with complaints from non-CRS airlines about the anti-competitive use of CRSs in the early 1980s. Complainants claimed that the dominance of the leading airlines' CRSs was a source of market power that was not in the best interests of the air transportation industry or the travelling public. More specifically, the complaints focused on bias in information retrieval on fares, connections and reservations, and discriminatory practices in air carrier user access charges. The sheer volume of complaints illustrates the potential for competitive abuse in CRS computer networks, both in the way information given to the CRS vendor is handled and in the way the vendor contracts with non-host carriers and subscribers.

2. General Competition Concerns

There are two central concerns regarding the ownership and operation of CRSs:

- The first is that CRSs have, with few exceptions, been owned and controlled by airlines. CRSs play a significant role in enhancing the market power of their owners, often to the detriment of airline competitors, whether through discouraging new entry or restricting the expansion of competitors.

- The second general concern is that airlines which own or control a CRS may refuse to participate, or may not participate fully, in rival CRSs in order to reduce or eliminate competition in the market for CRS services.

Since American Airlines first realised the potential for retail automation, the possibility of using CRSs as a competitive weapon became a reality. The

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6 Copeland, supra, note 1.
resulting competitive effects prompted a number of regulatory bodies in the United States to conduct investigations into the CRS and airline industries. The Department of Transportation (DOT) is the regulatory body given the statutory responsibility of protecting competition in the airline industry in the United States. Supported by the Antitrust Division of the Department of Justice (DOJ), the DOT issued several reports regarding competition in the CRS and airline industries. These reports are further supported by comments from the Civil Aeronautics Board (CAB) and the General Accounting Office (GAO).

The reports by the Antitrust Division of the DOJ provide a valuable background on anti-competitive aspects of CRSs. The 1983 DOJ report to Congress concluded that serious competitive problems exist in the CRS industry. The report identified four main areas of concern:

1. market shares of airline owned CRSs;
2. significant entry problems in the CRS industry;
3. display bias and other CRS-related bias that contributed to entry problems and significantly distorted downstream airline competition; and
4. supra-competitive access fees that dominant carriers charged competing airlines.

The DOJ's 1989 report confirmed the findings of both its 1983 and 1985 reports. In addition, it concluded that despite CRS rules, dominant carrier/vendors continue to exercise market power over the airline industry. This report stated that the ability of CRS vendors to continue with anti-competitive practices meant

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12 United States Department of Justice, supra, note 10, p 3.

13 See United States Department of Justice (1989), supra, note 11.
that entry barriers were strengthened not only in the CRS industry but also in air transportation markets. The DOJ's reports strongly support research conducted by the DOT in 1988 and 1990.

The DOT's 1988 report drew comment form the United States GAO in September of that year. The GAO supported the finding that incremental revenues seriously affected downstream revenues, but it urged the DOT to investigate this further. The GAO estimated that 1986 aggregate revenue transfers received by each CRS vendor from all airlines were:

- **Sabre**: $US342.9 million
- **Apollo**: $US302.6 million
- **PARS**: $US67.3 million
- **System One**: $US83.6 million
- **DATAS II**: $US45.6 million

In addition to incremental revenues, the GAO testimony confirmed that airline-vendors use their market power to charge excessive booking fees which in turn create distortions in the airline marketplace by unnecessarily raising the costs of air travel. Unlike booking fees, the GAO found that subscriber fees were relatively competitive. For example, a travel agent can choose to subscribe to a different CRS if it finds the subscription fee charged by one to be too high. However, the GAO agreed that many contract provisions directly reduce

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competition in the market for servicing travel agents and added that these provisions perpetuate revenue transfers to major CRS vendors.20

As well as these general areas of concern, DOJ reports identified a number of specific forms of CRS vendor conduct they considered to pose problems for competition in the airline industry. These areas of concern are encompassed in the headings below which are those used by ICAO.21 ICAO split competition problems with the use of CRSs into three groups: (1) Display bias by CRS vendors and travel agents, (2) Market manipulation by CRS vendors other than through display bias, and (3) Other problem areas. These groupings are discussed below.

3. System Bias

For a variety of reasons travel agents usually prefer to make bookings on the host carrier's flights. Known as the "halo effect," the special relationship forged between the system vendor and the agent results in increased bookings for the carrier/vendor. In addition, agents tend to have more confidence in a CRS vendor's information concerning its own flights.22 Other more pejorative practices may also be used by system vendors to increase their bookings at the expense of competitors.

The most significant problem in relation to CRSs is that they are usually owned by airlines and show bias in favour of the owners. Thus they can exclude or hinder the entry of competing carriers by raising costs or strengthening entry

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22 Fair, supra, note 2, p 332.
barriers. System bias, in its various forms, allows airline vendors to increase their incremental revenues at the expense of other airlines. Incremental revenues are already available to the system vendor(s) without the use of system bias. By using system bias, the possibilities for increasing bookings and for securing a competitive advantage in the marketplace are astounding.

System bias is the most serious abuse committed by CRS vendors and is the practice that most CRS-specific rules are aimed at preventing. At its simplest, system bias consists of altering the display shown on an agent's terminal so what seems like objective flight information in fact favours the CRS vendor's flights. System bias can be split into four categories: Screen or display bias; connecting point bias; database bias; and architectural bias. Functional bias is also frequently referred to in CRS literature. Functional bias may fall under any of the three general categories. Appendix 2 contains examples of functional bias.

(a) Screen Bias/Display Bias

In 1985 the DOJ found that both American and United Airlines exercised their market power to disadvantage rival airlines through display bias and selective suppression or manipulation of information on display. Display bias is achieved by the development of display algorithms which systematically impose inferior

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24Fair, supra, note 2, p 335.

25CRS rules from different jurisdictions are analysed in depth in Part C of this thesis.


27United States Department of Justice, supra, note 10, p 11.
displays against competing carriers. This may result in enhanced incremental revenues as mentioned above.

Screen display limitations mean that not all information pertaining to a flight request can be shown in a single screen—only four to ten flights can be shown at once. For highly used routes, agents may be confronted with four or five screens of information to scroll through. However, because agents work under significant time pressure, they rarely search through all screens. In practice, most agents book the first suitable flight that appears. A survey of United States travel agents showed that 70 to 90 per cent of all bookings are made from the first screen, 50 per cent from the first line. As a result, vendors have great incentive to ensure that their flights appear before competitors so as to maximise incremental revenues. Vendors can program or bias their CRSs to use selection criteria for ordering the flight display. This may include criteria such as preferring wide-body jets, certain airlines, classes or routes.

Screens can be so drastically biased that even the exact flights requested by a customer do not appear first. For example, if a customer requests a certain time, the vendor's flights near to this time may be programmed to appear first. Although agents are well aware of screen bias, they may prefer to book less desirable flights in order to save time and money. In view of the importance of

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28 For example in Delta Air Lines v American Air Lines, DOT Order 89-9-35, Dkt 44094, the complainant alleged that American unfairly biased its Sabre displays by ordering flights according to unrealistic elapsed flight times.


30 Saunders, supra, note 26, p 181.


32 Saunders, supra, note 26, p 182.

33 Fair, supra, note 2, p 333.
marginal passengers in the airline business, the diversion of these revenues could make a route unprofitable for a rival and eliminate competition for the vendor.\textsuperscript{34}

(b) Connecting Point Bias

The growth of hub-and-spoke route networks makes connecting point bias a useful tool for vendors to use to increase their incremental revenues. Connecting point route structures are used where there is no direct flight. Usually this will involve a flight to a hub and then a flight along another spoke. Connecting point bias cannot be avoided once it is incorporated into a system. The main use of this form of bias is to divert passengers to the vendor’s hubs and to systematically exclude as connecting points the bases and hubs of competitors.

Connecting point bias is used to design systems so that vendors' hubs are the most prominent or only connecting points displayed, subordinating or ignoring different connecting points of different carriers.\textsuperscript{35} This form of bias is as much a concern to other carriers, agents and consumers as is screen bias. Agents may overcome screen bias by scrolling through screens. However, connecting point bias is virtually undetectable and relatively unknown to agents.\textsuperscript{36}

(e) Database Bias

This form of bias refers to the failure of the database owner to accurately and promptly update the database upon receipt of new information from a participating carrier.\textsuperscript{37} In addition, this bias could comprise of a dominant airline refusing to

\textsuperscript{34} United States Department of Transportation, \textit{supra}, note 29, p 43786.

\textsuperscript{35} Fair, \textit{supra}, note 2, p 334.

\textsuperscript{36} Saunders, \textit{supra}, note 26, p 183.

\textsuperscript{37} For example, in \textit{Trans World Air Lines}, DOT Order 87-11-46, the DOT assessed a penalty against Trans World Air Lines, in part for inaccurately displaying fare information in \textit{PAIRS}. 
supply up to date information to a CRS vendor. Recent widespread availability of direct access to airlines' internal reservation systems has decreased the ability of CRS vendors to use database bias. Direct access was first introduced by System One and although it prevents the use of database bias, there are still many airlines which do not have direct access.

For example, in Galileo, out of 320 participating airlines, only 138 provide direct access. Similarly, in System One only 54 airlines provide direct access out of 380 participating. This leaves considerable scope for database bias. The system vendor may delay inputting information on new fares, display available flights as full, or neglect to discontinue a competitor's low fare offer so that extra, but unwanted, low fare passengers are added. Saunders claims that database bias abuses have the same impact on carriers as the complete denial of access to a CRS.

(d) Architectural Bias

Architectural bias encompasses three major dimensions. First, as noted above, agents tend to have greater confidence in the accuracy of the flight information used to make bookings and transactions on the vendor airline. This greater confidence results in increased bookings of the vendor's services. Second, some
parties argue that it takes less time for an agent to make a reservation on a vendor airline using the vendor airline's CRS. Consequently, agents wishing to make bookings as quickly as possible will opt for the vendor's flights. Finally, it is argued that vendors' service enhancement features usually favour the host airline(s).

Architectural bias is perhaps the most subtle form of system bias. Relative to display, connecting point and database bias, it is virtually undocumented. ICAO provides a full list of examples of actual and/or potential problems with regard to system bias. This is reproduced in Appendix 3. In general, CRS system bias gives CRS vendors the power to increase bookings and secure a competitive advantage in the air transportation industry.

4. Market Manipulation

Apart from market distortions which arise through the use of system bias, vendors have ample opportunity to manipulate sales in their favour. Market manipulation may be achieved in a number of ways.

Because most travel agencies use one CRS exclusively, if a CRS controls a significant block of travel agents in a city from which an airline's flights originate, that airline could not afford to forego access to the dominant CRS. Conversely, dominant airlines at a hub tend to control CRS facilities because agents require

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44 Ibid.
45 Source: ICAO, supra, note 21.
47 See appendix 3 for a full list of market manipulation and examples thereof.
48 United States Department of Justice, supra, note 10, p 8. Also: United Airlines Inc. v Civil Aeronautics Board, (1985) 766 F. 2d 1107 at 1109. In his judgement, the Circuit Judge (Posner) said, "each system contains the flight information for other airlines . . . without which the system would be of very limited value to the agent since no airline serves all markets and few travel agents have more than one computerized reservation system."
good access to that airline's schedules. Therefore a dominant airline in a
geographic area may enjoy substantial competitive advantages in both the CRS
and the air transportation markets. It may leverage its position in one of the
markets to extend its dominant position in the other. This creates an unusual
anomaly which the DOJ explains: 49

"...the greater the air share, the more attractive the CRS, and the greater the CRS share
(especially with bias), the easier to gain or hold air share."

Dominant CRS vendors may strengthen entry barriers to the industry by
insisting on long-term subscriber contracts. These arrangements mean new
entrants must buy agents out of existing contracts in addition to already high
training and installation costs. Concern expressed by agents regarding long-term
contracts stems from the fact that agents require continued access to the airline
which dominates the agent's city. If the airline withdraws from a CRS in the
course of an agent's contract, the agent will be unable to book directly on that
airline. Often it is not worth switching to another system because liquidated
damages clauses in the CRS contract are so punitive. 50 Most contracts specify a
formula for calculating these damages, which include all revenues, including
booking and subscription fees, that the vendor would have received over the
contract's remaining life. 51

49 Ibid, p 10. The United States Department of Transportation provides an example of this: "... according to American's
figures for 1991, 67 percent of all CRS bookings in Dallas were made on Sabre, 50 percent of all bookings in Denver
were made on Apollo, 56 percent of all bookings in Minneapolis-St. Paul were made on Worldspan, and 47 percent
of the bookings in Houston were made on System One. These cities are, respectively, an American hub, a United
hub, a Northwest hub, and a Continental hub. In Chicago, a hub for American and United, 86 percent of all bookings
were made either on Sabre or Apollo." See: United States Department of Transportation, (1992), supra, note 29, p
43783. This is also noted by Callow, Joseph M. (1992), "Cut-throat Competition in the Friendly Skies", Cincinnati
Law Review 61 : pp 681-713, at p 682. Callow states that a CRS system is effective when as many airlines as
possible participate.

50 Appendix 4 contains an example of two liquidated damages clauses.
51 United States General Accounting Office, supra, note 17.
United States CRS rules, first promulgated in 1984, prohibited agency contracts of more than five years. Creative vendors attempted to circumvent these rules by forcing agencies to roll over their contracts each time a new piece of equipment was added. Although these practices stopped due to the threat of further regulation, they illustrate the airlines' perception of the importance of CRSS.52

Vendors also have the power to control participation in their CRS. Although most CRSS try to list flight information from as many airlines as possible, vendors may refuse to allow certain carriers to participate. This denies the carrier who is refused participation the opportunity to sell their services through agents who are connected to the offending CRS. This may have dire consequences in markets where a vendor/carrier is very dominant.

Vendor/carriers may also control their competitor's flight information and gain control of valuable marketing and sales information. At one extreme, this form of manipulation could consist of blatant incorrect entry to the CRS database of special fare and flight information. A more subtle way to exploit this is to react to a competing carrier's revised schedules and fares before they are officially announced or to calculate discount sales objectives based on rivals' sales.53 Control of flight information also leads to control of marketing information. The system vendor has initial access to such information generated by the CRS and thus may easily pre-empt reactions from competitors.

The DOJ's reports support the finding that the acquisition of valuable marketing information leads to vendor airlines having full knowledge of

52 Fair, supra, note 2, p 331.
53 Klingaman, supra, note 46, p 327.
competitors' booking information. Access to this information on a real time basis may enable an airline to respond promptly to changes in market conditions.\textsuperscript{54} Information gathered through the use of a CRS forms the basis of an airline's yield management system. The data may be used to track the performances of competitors, to obtain immediate information on rivals ticket sales, and to calculate their discount sales objectives based on rivals' sales.\textsuperscript{55} The competition issue is whether CRS vendor/carriers, which have access to the reservation data of airlines participating in their systems, are able to analyse that data in a way which gives them an unfair competitive advantage over rivals who do not have the same quality and availability of data at their disposal.\textsuperscript{56}

Vendor/carriers also control all improvements made to the CRS, commonly known as system enhancements. The system enhancement which has drawn the most comment recently is last seat availability. A system vendor may discriminate against airlines by only allowing some to have last seat availability on a given CRS. Another form of this type of discrimination is only allowing certain airlines to issue advance boarding passes. Substantial competitive advantage may be achieved through system enhancements which differentiate between airlines.

Other more outright abuses of CRS for market manipulation may include practices such as inequitable access fees for airlines or agents, discrimination between agents, tying agents to certain equipment, and tying CRS service to other commercial arrangements. Market manipulation practices are generally more

\textsuperscript{54}United States Department of Justice, \textit{supra}, note 10, p 40.
\textsuperscript{55}Klingaman, \textit{supra}, note 46, p 327.
subtle than outright system bias, yet often they have as great an impact on incremental revenues.

Successive DOJ and DOT reports questioned pricing by the two dominant vendors. By setting access prices to other carriers at supra-competitive levels, American and United could increase their rivals' costs relative to their own, and thereby decrease competition in downstream air transportation markets.\(^{57}\) For example, before early price regulation in the United States, vendors compelled least favoured carriers to pay as much as three dollars per booking while other carriers paid as little as thirty cents—and the disfavoured carriers usually received the worst service since their flights were subject to display bias. The carriers paying the highest fees and receiving the lowest service were generally the vendor's major competitors.\(^{58}\) In addition, CRS vendors fail to provide participating carriers with billing information. In the DOT's opinion, this illustrates the vendor's market power because such information would ordinarily be supplied in a competitive industry.\(^{59}\)

The practice of discriminatory pricing is denied by the major vendors. In the recent United States CRS rulemaking, Covia claimed that it cannot afford to raise fees too high because carriers would then withdraw from the system. While the DOT acknowledged that at some point fees could become so high that participating carriers would lose money on passengers booked through the system, they asserted that vendors still have the ability to raise prices well above competitive levels.\(^{60}\)

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\(^{57}\) United States Department of Justice, supra, note 10, p 12. In fact United adopted a general policy of charging higher prices to those carriers that were their direct airline competitors.

\(^{58}\) United States Department of Transportation, (1992), supra, note 29, p 43784.

\(^{59}\) Ibid.

\(^{60}\) Ibid.
5. Other Competition Problems

The structural concerns of the CRS market is an issue which requires attention because they may cause many of the problems above. Monopoly or oligopoly in the CRS market enhances the ability of airline parent companies to disadvantage their airline competitors. In addition, airline joint ownership of CRSs makes price fixing and signalling very difficult to detect.

The principal-agent relationship between travel agents and consumers, and the airlines and travel agents may also be affected using CRSs. Monitoring information produced through CRSs means that vendors may present options, such as frequent flyer programmes, which ensure consumer loyalty and increased revenue. CRSs also allow airlines to assess their efforts to induce travel agents to exploit the differences between their own interests and those of their consumer principals. Airlines may offer incentives which distort the agency relationship between the consumer and the agent such as VIP club memberships, overbooking privileges, and free tickets. These incentives are often referred to as "commission overrides". CRS airlines pay commission overrides to travel agents in order to induce the agents to book the flights of the CRS airlines rather than

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62 This is especially important in the New Zealand context with Air New Zealand and Ansett, the dominant carriers, being joint owners in the TIAS company which distributes the dominant CRSs in Australasia.


64 For example, offering incentives based on incremental revenues diverted from competitors by travel agents.
those of competitors. These incentives encourage travel agents to choose routings and fares that benefit themselves at the expense of travellers.

One of the more ambiguous marketing and service agreements in the airline industry is "code-sharing" agreements which link small carriers to the majors. These agreements have resulted from CRS display giving priority to direct flights and on-line connections. This practice disadvantages smaller carriers offering feeder services. Consequently, smaller carriers have entered into code-sharing arrangements which allow them to use the larger carrier's two letter identification code for the purposes of achieving a better CRS placement. Code-sharing has often resulted in a blurring of the identity between the two carriers, smaller carriers losing their independence and operating under the control of the majors.

Competitively, this may reduce the number and variety of smaller carriers.

The dominance of the major CRS vendors allows them to consider cross-subsidisation as a mode of increasing their market share in either the air transportation or CRS market. It is claimed that, especially in the United States, competition for travel agency subscribers is so intense that CRS vendors likely

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65 Evans, John. (1990). "Divestiture as a Legislative Solution to the Anti-consumer Effects of Airline Ownership of Computer Reservation Systems". Computer/Law Journal 10: pp 1-46. p 11. Evans claims that commission overrides work in the same way as frequent flyer programmes. If a travel agent books a certain number of flights on the CRS airline, he/she receives bonuses such as cash or free flights. Because of these overrides, the agent provides slanted advice to consumers who do not realize that the information is biased.

66 Klingaman, supra, note 46, p 340. Klingaman quotes a United States study which found that three quarters of all travel agencies receive some sort of volume incentives and 50 per cent receive override commissions. Of the agencies receiving override commissions, two thirds reported that the commissions were very important or moderately important to the agencies revenues.


68 OECD, supra, note 56, p 73.

69 Ibid.
provide this service well below cost. The vendors then use booking fee revenue from airlines to cross-subsidise the travel agent service.

In addition, as noted above, if airlines do not participate in a certain CRS, they lose access to the travel agents which that CRS serves. Airlines which own CRSs may negotiate deals with other vendor/carriers to include them in their respective systems. However, non-CRS airlines have little bargaining leverage. They must purchase space on all CRSs, thus exasperating their cost disadvantage.

6. Conclusions

Several important conclusions are apparent from this discussion. First, CRSs are now an essential component of the commercial air transportation industry. Most, if not all, carriers depend on CRSs as their principal channel of distribution because there is no ready substitute. Vendors of CRSs have significant potential to exploit the dependence of non-vendor airlines and travel agents, in the ways outlined in this chapter. Second, and argued against by major CRS vendors, CRSs have been and are being used to affect downstream airline competition. American and United airlines do not dispute this, but they do not acknowledge the significance. Airline vendors argue that because they took the financial and strategic risks to develop CRSs, they should now reap the rewards. However, these systems were developed when competition in the airline industry was under severe regulatory constraints and airlines were thus protected from their failures. Smaller airlines had no reason to believe that CRSs were a competitive threat because routes, fares and competition in the industry were relatively fixed. The

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70 Annan, supra, note 61, p 8.
71 Saunders, supra, note 26, p 195.
72 Ibid.
present role of CRSs was not realised until airlines were deregulated and fare and route structures proliferated.  

The recent explosion in the choice of fares and services offered by airlines has caused growing dependence by travel agents and airlines on CRSs. Airline control of distribution through CRSs gives the power to exercise considerable market power through information control, which affects the service side of the air transport industry as well. In some countries the CRS industry is monopolistic. Even in an oligopolistic market, such as the United States, control of CRSs raises the question of whether such a structure in the distribution sector threatens consumer choice and leads to greater concentration of airline services. The oligopolistic structure of most CRS markets constitutes a major threat to airline competition. Because vendors have the ability to raise rivals' costs above their own on routes with slim profit margins, CRSs may eat up any profits which may accrue. Concerns about airline concentration are heightened by findings that CRSs are biased in the vendor's favour, resulting in large incremental revenues at the expense of competitor airlines.

The problems of CRS information and contract abuse as competitive tools of host carriers are serious threats to competition and air transport efficiency. United States vendor/carriers have already demonstrated both their ability to abuse the systems and the capacity to sidestep tightly drawn regulations in such areas as

73 Ibid, p 196.
74 OECD, supra, note 56, p 76.
75 Ibid, p 92.
76 For example in 1984 the CAB was concerned that CRS vendors had charged some competitor's booking fees exceeding $3, when the average airline profit per segment in 1978 was $2.50. See Annan, supra, note 61.
77 Mietus, supra, note 8, p 117.
pricing and access privileges. Abuses by vendor/carriers lead to serious losses to rival airlines and to consumers because non-CRS airlines are effectively barred from some markets by the practices, and because consumers are deprived by travel agents, of information on the lowest fares and the most convenient flights available.

CRSs undoubtedly seriously impede competition in the airline industry. However, that does not mean that the industry should return to the days of heavy regulation which were characterised by highly inefficient airline operations. Michael Levine observed:

"We should not attempt to scourge the industry by antitrust fire and storm in order to create the utopian world of perfect competition many of us hoped for ... [A] sensible response to the deregulated world would accept generally that deregulation has made the airline system very much better, in particular ways that have surprised us all, while also recognising that these improvements have been brought at the expense of a new set of problems, at least a few of which may be amenable to correction".

Ultimately, if regulation of the CRS industry is to be imposed, the key question is whether it will be effective in promoting competition or whether it will be counter-productive and merely create a new set of problems and raise competition issues as serious as the ones it was designed to correct. The significant efficiencies of CRS operations should not be ignored. Indeed, it is because of efficiency that CRS operations have prospered. A certain degree of vertical integration may be desirable as is suggested by transaction cost theory in chapter A.

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78 Ibid, p 118.
81 OECD, supra, note 56, p 77.
The following parts of this thesis explore the options available to control anti-competitive aspects of CRSs. Part III looks at antitrust law and how this may or may not be effective in controlling airline vendors from exploiting both travel agents and non-CRS airlines. Part IV outlines various regulatory responses from overseas and discusses their effectiveness. Finally, in part V, the recent CRS rule-making in Australia is discussed.
Part III

Computer Reservation Systems and Antitrust Law

CHAPTER A
Introduction to Antitrust Law

CHAPTER B
Traditional Antitrust Challenges to CRSs

CHAPTER C
New Directions in Antitrust
Introduction

Part II confirms that CRSs are a major threat to contestability and workable competition in the deregulated airline industry. However, while this is true, returning to full airline industry regulation would ignore the many benefits deregulation offers. Instead, it is more prudent to address the particular problem areas of the airline industry. This section discusses whether antitrust law is effective in controlling the anti-competitive conduct of CRS vendors.

Potential and actual competition problems of CRSs are not only the result of rapid advances in computer technology outlined in part II B, but also of the way in which airlines now structure their operations using hub-and-spoke networks.\footnote{Hobbs, Caswell O., (moderator). (1989). "Panel Discussion—Exclusionary Conduct" From: The Cutting Edge of Antitrust: Lessons from Deregulation. Antitrust Law Journal, 57(3): pp 723-768. p 728.} During the time of heavy regulation of the airline industry, regulatory bodies (in particular the CAB) disallowed hub-and-spoke route structures. Removal of this regulation saw air transportation markets become increasingly competitive. Airlines quickly restructured their operations and placed heavy reliance on their fledgling reservation systems. In this new environment many new antitrust questions have emerged.

Two basic groups of antitrust questions relating to CRSs are posed. First, questions relating to their anti-competitive effects on air transportation industry. Second, questions regarding anti-competitive conduct in the CRS market. This part discusses antitrust issues which have been raised by public and private parties with respect to CRSs. CRS markets and their interesting inter-dependence with
air transportation markets have posed difficult questions for antitrust analysis and policy decisions. Judge Hall in *Alaska Airlines* noted that "[t]he CRS market's triangular structure makes the market unusually resistant to normal disciplinary mechanisms". The aim of part III is to critically analyse antitrust issues raised in CRS litigation and to suggest alternative means by which antitrust attacks may proceed.

Initially, this part introduces the reader to the field of antitrust. Chapter A provides an introduction to antitrust including its evolution in response to changing business demands and economic conditions. Fundamental to chapter A is the discussion on the differences between the two main schools of thought in antitrust analysis—Mainstream and Chicago School. Chapter A concludes with a brief definition of competition in the context of antitrust analysis.

Chapters B and C are based on United States material and cases. Chapter B begins with a brief synopsis of United States antitrust law, followed by a look at traditional issues raised in United States CRS litigation such as monopoly power, essential facilities and price fixing. Chapter C analyses some of the new antitrust challenges which have been made in the CRS area. In addition, chapter C applies several new exclusionary theories to the CRS industry.

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*Alaska Airlines Inc v United Airlines Inc.*, (1991) 948 F.2d 536 (9th Cir.).
Introduction to Antitrust

Antitrust refers to a set of policies which evolved over time in response to changes in the role of business in modern life, changes in economic thinking, and changes in value preferences.\textsuperscript{1} The structure of markets and the conduct of business firms are the major determinants of antitrust policy today.\textsuperscript{2}

Much of the widespread deregulation of the early 1980s relied heavily on antitrust law. It was seen as an alternative to the heavy-handed regulation which preceded it. As mentioned in Part II, the ultimate goal of liberalisation is efficient allocation of resources. While regulation bypasses the competitive process, antitrust seeks to utilise workable competition as a means of promoting efficiency and consumer welfare. Antitrust is a means of ensuring workable competition.

1. The Evolution of Antitrust

The United States has by far the longest history of antitrust. American antitrust was initiated by the industrial change which took place between 1865 and 1910. The structure of the firm altered radically during this period. This change was fuelled by technological development, massive immigration, expansion of the communication and transportation infrastructure, and increases in available capital


\textsuperscript{2}Ibid.
and in financial and legal facilities. More incentive existed for successful businesses to diversify, both horizontally and vertically.

The first companies to engage in horizontal agreements were the railroads. Railroads were highly capital intensive and to be economic, they required high volumes of traffic at low margins. To stabilise difficult competitive conditions, many of these companies formed "pools" to create large regionally dominant systems. Many other capital intensive industries such as steel and oil also began pooling. Initially, the main aim of these cartels was to work out agreements on rates and output. However, pools proved to be very unstable. There was often great opportunity for a member to cheat on the cartel, and without complete cooperation from all participants, a cartel is useless.

Cartel cheating eventually led to the formation of "trusts", whereby the participant companies transferred all of their assets to the trust in return for trust certificates of equivalent value. Efficiencies gained through vertical and horizontal integration meant that many members of trusts could reduce cost and prices, thereby eliminating unintegrated rivals. The increasing power of trusts fuelled concern about the potential for abusive practices. Finally, these concerns led to legislation restricting the power of the trusts. United States Congress' initial response was the passage of the *Interstate Commerce Act of 1887* and the *Sherman Antitrust Act of 1890*. Although both of these acts gained strong bipartisan support, they did not satisfy public concern. In 1914, after antitrust

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5 As firms learned from many corporate failures, agreements to lessen price competition and to co-ordinate output became common.
had dominated the 1912 presidential election, the Clayton and Federal Trade Commission Acts were passed.

Since antitrust economics and industrial organisation were not well developed until after the early 1950s, antitrust law developed with little assistance from the economic community. Early industrial organisation work confirmed that concentrated industries tend to perform less effectively than industries with a more competitive structure. Consequently, most antitrust enforcement through the 1950s and 1960s focused on limiting further concentration in industries, promoting dealer freedom and access to markets. The period from the 1940s to the 1970s is often referred to as the period of the structural consensus.

However, the 1970s saw the preoccupation with market structure develop into a wider concern which incorporated exclusionary conduct. The flexibility of antitrust allowed it to embody this and many other developments in the field of industrial organisation. As an example, Johnson suggests a greatly enhanced understanding of efficiencies and economies of scale which were readily used by antitrust scholars.

Perhaps the most radical developments in the history of antitrust started in the 1950s with the rise of the Chicago School. Chicago School proponents claim that

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10Johnson, supra, note 8, p 326/7.


12Johnson, supra, note 8, p 326/7.
allocative and productive efficiencies should be the only goals of antitrust policy. The 1980 Reagan administration embraced Chicago School antitrust philosophy, and allocative efficiency overshadowed traditional antitrust "structural" and "socioeconomic" standards as the main purpose of antitrust. Bickel claims that by 1983, "Chicagoism [was] unquestionably the accepted governmental approach to antitrust". However, as Hovenkamp suggests, the advent of Chicago School analysis in the early 1980s was not the first time economics was used in antitrust. Rather, it was the first time that an approach to antitrust analysis was exclusively economic.

Reliance on economics in antitrust policy depends largely on the ability of the economist to present an unambiguous model. If the model is unambiguous, and the degree to which the alternatives deviate from the efficient solution is clear, then policymakers are likely to weigh efficiency concerns heavily. Today's economic models are increasingly sophisticated and ambiguous. Consequently, difficulty in understanding more complex efficiency concerns has forced policymakers to favour more traditional measures.

The development of antitrust law to date has been evolutionary, not revolutionary. Because antitrust is flexible, economics has greatly influenced it. But solid antitrust reasoning has not been dislodged by economic analysis.

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15Ibid, p 1087. This was largely due to the appointment of William F. Baxter, a Chicagoan, to the position of Assistant Attorney General.
16Hovenkamp, supra, note 8, p 223.
17Ibid, p 223, suggests that although the Antitrust Division of the United States Justice Department adopted this policy, the Supreme Court continued to rely on both economic and noneconomic evidence.
18Ibid, p 223.
19Ibid, p 223.
Economic analysis now forms a basis for many cases where the decision is ultimately based on wider considerations. For example, horizontal merger analysis is no longer simply an exercise involving totting up market shares.\textsuperscript{20} Many other economic and non-economic\textsuperscript{21} variables must enter into consideration. Flexibility in antitrust refers to its ability to incorporate new knowledge and understanding.\textsuperscript{22}

\section{The Purpose of Antitrust}

The initial general purposes of Congress when it enacted the Sherman Act in 1890 were clear. Sullivan outlines these goals:\textsuperscript{23}

\begin{itemize}
  \item to protect all the buyers in the distribution chain, including consumers, from exploitative prices and other exploitative tactics resulting from either cartelisation or monopoly power,
  \item to protect small firms from coercive unfair or exclusionary practices by powerful companies, and
  \item to assure that markets remained open to entry, so that economic liberty and mobility was preserved.
\end{itemize}

Judicial interpretation of the goals of antitrust law differed over time. During periods of high enforcement, the courts enforced the laws to "promote diversity, opportunity, and access for the less established, and to guard against the creation of power and its exploitation".\textsuperscript{24} However, under more difficult economic conditions, such as the Great Depression, big business was given more freedom in

\begin{flushright}
\footnotesize
\textsuperscript{20}Johnson, supra, note 8, p 327.
\textsuperscript{21}For example ibid, p 330, suggests that terms such as "experience curve", "portfolio theory", and "product life cycle," are relatively new concepts which antitrust law has readily adopted.
\textsuperscript{22}Ibid, p 330.
\textsuperscript{23}Sullivan, supra, note 1, p 1/2.
\end{flushright}
the interests of economic recovery. It must be stressed that early antitrust did not aim at raising aggregate national wealth, sometimes equated with allocative efficiency. Instead, Fox and Sullivan claim that early antitrust law had two central concerns:

- The first was political—distrust of bigness and fewness of competitors as well as a policy preference for diversity and opportunity for the unestablished.
- The second was socioeconomic—antitrust setting fair rules for the competitive game for both competitors and consumers.

However, antitrust tradition is not isolated to political and socioeconomic goals. Developments both in antitrust economics and industrial organisation posed major questions to traditional antitrust enforcement. But while the Courts utilised the economic advances, they did not rely on them as the sole assessment of antitrust cases. Rather, they used economic analysis as a tool to reinforce the application of prevailing and complementary non-economic values.

(a) Antitrust Welfare

In analysing the goals of antitrust it is important to carefully define terms. At the broadest level, the goal of economic policy is to increase the material wealth of society. Antitrust seeks to achieve this through the instrument of inter-firm rivalry. A goal defined thus, recognises both the preferred end—wealth of society—and the desired means—inter-firm rivalry. However, it is vital that in reaching this economic goal, consumers share in the increased wealth of society.

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25 Ibid, p 941, suggest that Congress and the courts encouraged large scale industrial co-operation on a range of matters including price.

26 Ibid, p 944.

27 Ibid, p 944.

28 Johnson, E. Perry, supra, note 8, p 326.

Enhancement of aggregate social wealth (economic efficiency) must be reflected by a related increase in consumer welfare. This economic goal suggests that the best way to achieve an equitable share of consumer and producer surplus is through the operation of a competitive marketplace. Yet economic efficiency or consumer welfare do not stand individually as goals of antitrust. Instead, antitrust welfare refers to increases in efficiency such that consumers share equitably in such increases.\(^{30}\)

**Efficiencies**

To fully appreciate the efficiency component of antitrust welfare, it is useful to divide economic efficiency into its basic components: production efficiency, innovative efficiency, and allocative efficiency.\(^{31}\)

**Allocative Efficiency**

Allocative efficiency is achieved when existing stocks of resources and technical knowledge are allocated to produce the collection of goods and services that buyers value most highly as indicated by their willingness to pay for them.\(^{32}\) In figure 9, Q\(_2\) represents a firm's output where the marginal costs of supply are represented by BM and the firm faces a demand schedule of DD'. The difference between the total benefit (area 0DKQ\(_2\)) and the total cost (area 0BKQ\(_2\)) will be maximised at output Q\(_2\). Therefore the price P at output Q\(_2\) is the ideal combination. An increase in price from P to R results in a misallocation of

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\(^{30}\)Antitrust welfare is a term introduced by Brodley, *ibid*, p 1123.

\(^{31}\)Ibid, p 1125.

resources. The net benefit, previously area BKD, now becomes the area BLJD, resulting in a "deadweight loss" of JLK.\textsuperscript{33}

![Figure 9 Allocative Efficiency/Inefficiency](image)

**Production Efficiency**

Production efficiency occurs when the provision of a product or service is achieved using the most cost effective combination of productive resources available. It is measured as the ratio between the amount of a firm's (or industry's) outputs and the amount of its inputs.\textsuperscript{34} If we assume that production efficiency is achieved in *figure 10* if output $Q_2$ is produced at a price $P$. If total costs rise to $0SKQ_2$ then production inefficiencies are represented by the area BSK. Production efficiencies are often referred to as $X$-efficiencies.\textsuperscript{35}

\textsuperscript{33}Ibid, p 6.

\textsuperscript{34}Hovenkamp, *supra*, note 8, p 238.

Innovative Efficiency

Finally, innovative efficiency allows for shifts in demand (due to product innovations) and shifts in costs (due to production innovations). Whereas the situations in figure 9 and figure 10 are static, figure 11 encompasses a time element. Instead of considering a static net benefit, the time element requires analysis of a stream of net benefits which flow to serve the welfare of society. Therefore innovative efficiency maximises the present value of the stream of net benefits associated with new products and new production processes over time.\textsuperscript{36} Figure 11 roughly shows innovative efficiencies.

As price per unit progressively falls from $P_0$ to $P_3$, output expands from $Q_0$ to $Q_3$. Greer explains that the series of net benefits, which is the sequence of expanding triangular areas lying between the PC curve and the demand curve DD', would yield innovation efficiency if after discounting into present value and

\textsuperscript{36}Greer, supra, note 32, p 6.
summing they provided the greatest overall net value of all possible alternative results.\textsuperscript{37}

![Figure 11](image)

**Figure 11**

Innovative Efficiency Associated with Product Innovation

By considering these three forms of efficiency, the importance of carefully defining the terms is apparent. "Efficiency" is an ambiguous goal for antitrust policy without specification of which type, or combination of efficiencies are paramount.\textsuperscript{38} In addition, there are a number of trade-off relationships which must be considered.

The relative importance of these three forms of efficiency is a contentious issue. The importance of innovation is widely recognised and in many countries, expenditure on research and development is keenly encouraged. Scherer claims that between the late 1920s and the late 1960s, at least half of the gain in United States output was achieved by technological and scientific progress.\textsuperscript{39} In a quickly developing country, this percentage is likely to be astounding. Brodley

\textsuperscript{37}Ibid, p 89. Figure 11 is a simplistic representation of a complex relationship. Uncertainties regarding the future make forecasting innovative efficiencies impossible.

\textsuperscript{38}Ibid, p 9.

cites Scherer in his claim that innovative efficiency or technological progress is the single most important factor in the growth of real output.\textsuperscript{40} In addition, because productive efficiency increases social wealth over a whole range of output rather than just the margin, it is considered more important than allocative efficiency.\textsuperscript{41}

**Consumer Welfare**

Consumer welfare refers to the direct and explicit economic benefits received by consumers of a particular product as measured by its price and quantity.\textsuperscript{42}

![Graph showing Consumer and Producer Surplus](image)

**Figure 12**

*Consumer and Producer Surplus Illustrated*

In economic terminology, consumer welfare is that part of the total surplus (shown in figure 12 as area BDK) which is attributable to the consumer—that is, consumer surplus (area PDK). But figure 12 fails to show the temporal dimension to consumer welfare. Because consumers have both immediate and long-term

\textsuperscript{40} Brodley, *supra*, note 29, p 1026.

\textsuperscript{41} Ibid, p 1027. Greer, *supra*, note 32, p 56, also notes this ranking of efficiencies. He says that static efficiency (productive and allocative) are not as important as innovative efficiencies and distributional equity.

\textsuperscript{42} Brodley, *supra*, note 29, p 1133.
welfare considerations, policy should be directed at maximising consumer welfare in the long-run.\footnote{Ibid.}

*Consumer Welfare Trade-offs*

Usually, antitrust enforcement policies increase both economic efficiency and consumer welfare. However, properly defined consumer welfare maximisation can conflict with all three forms of efficiency.\footnote{Greer, supra, note 32, p 12.} There are three instances where this may occur.

In *Broadcast Music, Inc v CBS*,\footnote{*Broadcast Music, Inc v CBS*, 441 U.S. 1 (1979).} the ability to exercise price discrimination motivated the producer to expand output, consequently increasing allocative efficiency. But while total surplus increased, consumer surplus decreased because economic wealth was transferred from consumers to producers. In *Broadcast Music*, the producer introduced a "blanket license" which gave the right to perform any number of the compositions owned by the licensor's members or affiliates for a fee. This license clearly expanded output, but it did so by allowing the producers to capture most of the consumer surplus.\footnote{Broder, supra, note 29, p 1133.} The question arising is should a transaction which increases allocative efficiency yet decreases consumer welfare be permitted?

The second example of a consumer welfare trade-off is where a transaction significantly improves production efficiencies but may not lead to decreased prices or expanded output for the consumer.\footnote{Ibid, p 1133.} Take for example a merger
between two companies which have different advantages in a market. One may have technological advantages and the other specific production techniques. The combination of these two firms will undoubtedly reduce production costs, but this may not lead to increased consumer surplus. This is illustrated by the Williamson trade-off model shown in figure 13.48

![Figure 13: Conventional Williamson Trade-off](image)

In this model, the average costs before a merger are represented by the line $AC_1$. The production-efficient merger causes average costs to decrease to $AC_2$. However, increased market power allows the new combination to price at or close to marginal revenue (output $Q_2$ and price $P_2$), thereby maximising profits. The shaded areas represent changes in welfare. The lightly shaded area represents increased producer surplus and the dark area represents decreased consumer surplus. This raises the issue of whether increases in production efficiencies should be allowed, even if significantly increased market power will result. Bork, a prominent Chicago School advocate, contends that so long as the increase in production efficiencies is greater than the deadweight loss, the transaction should

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be allowed.\textsuperscript{49} However, this approach to the Williamson trade-off is criticised as being arbitrary.\textsuperscript{50} Ellig suggests that, at least for some classes of business activities which enhance productive but diminish allocative efficiency, one must rely on "gut feelings" in order to perform Williamson trade-off assessments.\textsuperscript{51}

The simple Williamson trade-off is complicated in the case of rapid technological development, which may have the result of increasing production efficiencies. In the case shown in figure 14, output expands while price falls. The magnitude of the drop of the average cost curve, from AC\textsubscript{1} to AC\textsubscript{2}, is large enough to cause both a reduction in price, and an increase in output. Both consumer surplus and profits rise, even though the firm produces at point B, which is the monopoly price and quantity given the new cost curve.\textsuperscript{52} The move from point A to point B results in increases to both consumer and producer surplus and will thus pass the Williamson trade-off test for evaluating the effect of industry practices on consumer welfare.\textsuperscript{53} However, point C is the perfectly competitive price and quantity combination in this model. The relevant policy question is whether a firm should be forced to move closer to this point.\textsuperscript{54} It is important to note that in terms of the dynamics of the industry, such a move may not be costless. For example, in the case of CRSs, the incentive to develop them in the first place may have been spurred on by the potential to employ

\begin{footnotesize}
\begin{enumerate}[\textsuperscript{49}]
\item Bork, supra, note 13, p 1089.
\item ibid.
\item The Williamson trade-off test weighs up the rectangle shaped gain in producer surplus with the triangle shaped loss in consumer surplus (shown in figure 1-3).
\item Ellig, supra, note 52. p 298.
\end{enumerate}
\end{footnotesize}
monopolistic business practices. Therefore forcing dominant firms towards point C may stifle innovative efficiencies which would otherwise occur.\footnote{Ibid.} 

The final case where there may be a trade-off is when the court imposes a rule which has no apparent impact on consumers but harms producer incentives.\footnote{Brodley, supra, note, 29, p 1033.} Brodley uses the example of a firm which patents an invention.\footnote{Ibid, p 1033/4.} Suppose this firm (a monopolist) is ousted from the market by another monopolist using predatory tactics. The second monopolist then takes over the patent and continues to market the invention at monopoly price and output. A court focusing on consumer welfare only would not be interested in which monopolist extracts supernormal profits because consumer surplus has not been altered. However, failure to condemn this form of activity may lead to two major problems. First, it reduces the incentive for firms to make investments in research and development, as they are more risky. Second, it increases the incentive to monopolise using
competitively unfair tactics. Considering the importance to future efficiencies, these may lead to serious problems.

(b) The Contemporary Debate—Mainstream v Chicago School

There are two major sides to antitrust commentary. On one side is the Chicago School, who believe that law should be explained by economics. On the other side are the proponents of Mainstream views of antitrust. These claim that law is essentially different to economics and that economics is simply one of the tools used to carry out the "spirit of the law".

Members of the Chicago School subscribe to the following beliefs:

- Efficiency should be the exclusive goal of all commercial law, and virtually all law other than constitutional law.
- Efficiency should be measured only in a negative sense; that is, the law should reprehend only that which is inefficient. Output restraint is the inefficiency to be prevented.
- The market punishes inefficiency faster and better than the machinery of law.
- There is no margin between the efficient and the inefficient. Therefore (since private firm inefficiency is seen only in terms of output restraint), activity will suppress the freedom of producers to serve consumers in ways that consumers desire.
- Law is economics (except to the extent that generalisations are required for administrability). Efficiency is justice.

Chicagoans claim that consumer welfare is an identical goal to that of allocative efficiency. However, they make this claim based on an erroneous

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58 Ibid, p 1034.
59 Ibid.
61 Sometimes called the "Harvard School".
62 Fox, supra, note 60, p 917.
63 From: Fox and Sullivan, supra, note 24, p 957.
definition of consumer welfare. Allocation efficiencies include both producer and consumer surplus. The Chicago School defines consumer welfare as the sum of producers' and consumers' surplus, based on the theory that consumers will be better off if producers make more money, because producers will invest that money in things consumers want.64 Further, the Chicago School claims that concerns about wealth distribution are purely political conflicts between interest groups, and cannot be rigorously justified.65

The legislative history of antitrust is far better represented by the Mainstream School.66 This school of thought takes into account concern for customers; concern for the "little man"; interest in access, diversity and pluralism; and the condemnation of coercion and exploitation.67 The Chicagoan view (in particular of consumer welfare) ignores legislative history which favours the consumer.68 The historical origins of the Sherman Act show clearly that Congress wanted consumers to be the ultimate beneficiaries.69

To a Chicago School advocate, efficiency encompasses both allocative and productive efficiencies (defined above in figures 9 and 10). Of these two forms of efficiency, Chicagoans consider allocative efficiency to be paramount. A properly

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64 Fox, supra, note 60, p 918. See also chapter five of: Bork, supra, note 13.
65 Hovenkamp, supra, note 8, p 245.
66 Ibid, p 252, explains that Chicago School scholars have abandoned hope in finding support for their position in legislative history. Instead, they consider that efficient, or "public interest" legislation should be interpreted broadly and courts should not hesitate to interpolate Congress' meaning when the language of such statutes contains ambiguities or gaps. Conversely, they consider that "interest group" legislation should be interpreted narrowly.
67 Fox, supra, note 60, p 918.
68 See: Ellig, supra, note 50, p 877. Ellig claims that the Chicago view "tries to blend contradictory notions of competition" and thus fails to produce a logically consistent theory of economic efficiency. The contradictory notions of competition are the Chicago claims that perfect information is a prerequisite for perfect competition, and that imperfect information is a prerequisite for rivalrous competition.
defined antitrust policy will, in the opinion of Chicagoans, attempt to maximise net allocative efficiency gains.

In their belief that monopoly is self-correcting, Chicagoans subscribe strongly to the theory of monopolistic competition outlined in figure 15. In the short-run, the monopolistic competitor faces the demand curve D and sets MC equal to MR to produce $Q_s$ at a price $P_s$. The attractive profits (represented by the area $Q_s \times (P_s - C_s)$) attract new entrants and shift each firm's demand curve to the left. When the demand curve reaches $D'$ firms are breaking even and there is no further entry.\footnote{Begg, D., S. Fischer and R. Dornbusch. (1987). Economics, Second Edition. London: McGraw-Hill Book Company Ltd. p 197.}

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure15.png}
\caption{Figure 15
Monopolistic Competition Illustrated}
\end{figure}

Mainstream advocates claim that this model is naïve because it fails to recognise barriers to entry which may be significant in some markets. Threat of new entry is suppressed by the existence of entry barriers. Porter outlines six major sources of barriers to entry.\footnote{From: Yip, George. (1982). Barriers to Entry. Massachusetts: Lexington Books.}
1. **Economies of scale** - Economies of scale deter entry by either forcing the entrant to make a large scale entry or accept cost disadvantages.

2. **Product differentiation** - This is a barrier to entry as it forces newcomers to spend heavily on promotion to overcome the existing customer loyalty.

3. **Capital requirements** - This is a major barrier especially where there are large up front sunk costs. This barrier is more prevalent in some industries than in others.

4. **Cost disadvantages independent of size** - These refer to the advantages that incumbent firms may hold in learning and experience curve effects, and other advantages such as access to raw materials, assets purchased at pre-inflation prices or patents.

5. **Access to distribution channels** - Existing firms will have arrangements with distributors already which may make it difficult for the newcomer to distribute his product.

6. **Government policy** - Government imposed regulations may sometimes foreclose an industry.

However, acceptance of all these factors is not widespread between Mainstream and Chicago School economists. Chicagoans have been slow to recognise barriers which may be put up by incumbent firms. The Chicagoan notion of entry barriers is based on the premise that investment will flow to any market where the rate of return is high. This relies on contestability theory which is often validly advanced to suggest that even firms with extremely high market share do not have monopoly or market power.

The Chicagoan idea of an entry barrier is far narrower than the Mainstream definition. The two most influential writers in this area are Stigler, who is subscribed to by the Chicago School, and Bain. Bain concludes that production cost advantages, economies of scale, and product differentiation advantages constitute entry barriers. The Chicago School approach takes a much narrower view of entry barriers by arguing that the only barriers which antitrust law should

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be concerned with advantages of incumbency, which result in long-term differentials in production costs. Furthermore, Stigler specifically excludes economies of scale, capital requirements (which he lists as a detriment to entry), and product differentiation advantages.

The differences between Stigler and Bain over which factors to accept as barriers are largely semantic. Stigler defines barriers to entry as "a cost of producing which must be borne by a firm which seeks to enter an industry but is not borne by firms already in the industry". Bain, on the other hand, claims that the presence of barriers to entry "permits established firms to elevate price at least somewhat above minimal average costs without inducing new firms to enter". The differences in these definitions have resulted in these two economists disagreeing on what factors should be taken into account when assessing the conditions of entry to a market.

Ordover and Wall list what they believe are the entry barriers commonly accepted by contemporary economists. First, economies of scale. Although this is still not recognised by Stigler and the Chicago School, Bain argues that these are important because the incumbent firm could make entry unprofitable to an equally efficient entrant by committing to a scale of output so large (and prices so low), that an entrant could only operate at a loss. However, Bain's argument is not valid if it is logical to expect the incumbent to accommodate the entrant by reducing output. In this situation, economies of scale would not be a barrier.

74 See: Stigler, supra, note 72, pp 67-70.
75 Stigler, supra, note 72, p 67.
77 Ordover and Wall, supra, note 73 p 15.
Modern economists accept that economies of scale can provide a good basis for discouraging entry if incumbents are able to adopt a credible entry deterring strategy. Absolute cost and demand advantages are the second generally accepted barrier to entry and are the classic Stiglerian barrier. These may stem from either natural (e.g., better access to scarce materials or government regulation) or strategic sources. Third, product differentiation which was considered by Bain as being the most important barrier to entry. Finally, costs which cannot be recovered if entry fails are significant barriers to entry. These costs are commonly known as sunk costs. Baumol et al., in their theory of contestable markets, carefully distinguish long-term fixed costs from sunk costs. They say that long-term fixed costs are costs that can be eliminated by the cessation of production. Conversely, sunk costs are those that have been spent on items such as legal fees, advertising or opportunity costs due to transferred capital.

Chicagoans claim that capital barriers do not exist because firms already in the industry have raised, and must continue to raise, the requisite capital. The weakness of this argument is highlighted when we consider the CRS situation. Any entity wishing to develop a CRS from scratch faces the prospect of extremely high capital outlay with no return during the development period. Taking a Chicago view of entry barriers, one would say that since the existing vendors once had to pay these costs, they should not be considered as a barrier. However the existing systems were developed over a number of years in an environment of high regulatory protection. Thus the risk of such a large investment was significantly lower. It is foolish not to consider the capital outlay in developing a

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78 Ibid.
80 Ibid.
new system as a barrier to entry, particularly as a large proportion of the costs are sunk.

Chicagoans assert that large firm size is necessary to produce operating, innovative and social efficiency. Further, they say that a competitor's challenge of a merger simply points to the fact that it is efficient. If a merger was price-raising, profit-maximising competitors would wish for its success because they would come under its price umbrella and thereby increase profits. The fact that a merger occurs proves that the merger is efficiency-enhancing and, in the long-run, beneficial to consumers. However, empirical evidence suggests that efficiency is not the unequivocal result of mergers. In fact it may be suggested that the high rate of corporate divestiture is the result of non-efficient marriages. There is widespread support for this view. For example, a United Kingdom study suggests:

"... it is difficult to sustain the view that merger is in fact a necessary or sufficient condition for efficiency gain. In many cases efficiency has not improved; in some cases it has declined; in other cases it has improved but no faster than one would have expected in the absence of merger... More generally we have various pieces of evidence from our investigations that merger has led to no apparent improvement in international competitiveness or export performance..."

The Mainstream's distrust of merger stems from the view that corporate power is the inevitable result of corporate "bigness". Industrial giants can manipulate the state, insulating themselves from both the compulsions and discipline of the competitive market as well as from the social control of government.

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82 Fox and Sullivan, supra, note 24, p 986.
83 Adams and Brook, supra, note 81, p 1117.
84 ibid, p 1117-8 provide a long list of articles which support their assertion.
86 Adams and Brook, supra, note 81, p 1121.
Irrespective of efficiency, monopoly or oligopoly operations can perform in an unreal world of cost-plus operations, safely protected from competition, efficiency and innovation.\textsuperscript{87} Antitrust is based on a theory which distrusts private concentrations of power. This is illustrated by Justice William Douglas' dissension in \textit{United States v Columbia Steel Co:}\textsuperscript{88}

"Size . . . should . . . be jealously watched. In final analysis, size . . . is the measure of the power of a handful of men over our economy. That power can be utilized with lightning speed. It can be benign or it can be dangerous. The philosophy of the Sherman Act is that it should not exist. For all power tends to develop into a government in itself. Power that controls the economy should be in the hands of elected representatives of the people, not in the hands of an industrial oligarchy. Industrial power should be decentralized. It should be scattered into so many hands that the fortunes of the people will not be dependent on the whim or caprice, the political prejudices, the emotional stability of a few self-appointed men. The fact that they are not vicious men but respectable and social-minded is irrelevant. That is the philosophy and the command of the Sherman Act."

Brodley suggests that the debate between the Mainstream and the Chicago School focuses on the question: Does antitrust law encompass non-economic goals or is the law limited to purely economic objectives, most particularly economic efficiency?\textsuperscript{89} Brodley's conclusion is that antitrust law's economic goals and its social goals are not as separate as opposing views might suggest. Rather there is a unity between "the pragmatic substance of antitrust—its economic goals—and the law's animating spirit—its social and political foundations".\textsuperscript{90} Ultimately, the pursuit of the correctly defined economic goals of antitrust will advance the social and political objectives as well.\textsuperscript{91}

\textsuperscript{87}Ibid.
\textsuperscript{88} \textit{United States v Columbia Steel Co.}, (1948) 334 U.S. 495, at 534.
\textsuperscript{89}Brodley, \textit{supra}, note 29, p 1020. During the heyday of Chicagoan antitrust enforcement, enforcement actions had to be justified in terms of economic common sense. Even then, they could only relate to \textit{per se} offences such as horizontal price fixing, bid rigging and market division. See Bickel, \textit{supra}, note 14, p 1087.
\textsuperscript{90}Brodley, \textit{supra}, note 29, p 1121.
\textsuperscript{91}Ibid.
Chicagoans assume that competition untouched by law is "robust", and that the natural tendency of firms is to be efficient. Based on these two assumptions, they deduce that interference on the part of government is unnecessary. However the Mainstream School considers the belief in natural efficiency of business to be naïve. Instead, they take seriously the imperfections of free market competition—in their view, the best hope for a dynamic and progressive economy is to provide incentive and opportunity for the less well established and to trust in a pluralistic marketplace.

Chicagoans may claim that recent deregulatory policies advocated by many governments (in particular the Reagan administration) puts efficiency firmly into the history of antitrust. Yet efficiency considerations form only part of a comprehensive antitrust analysis. As Fox points out:

"...the modern synthesis is not an epiphany; it does not reflect a sudden awareness that business freedom enhances efficiency or that only output limitation merits condemnation ... the modern synthesis reflects the Court's increased sophistication in distinguishing that which is competitively desirable from that which is anticompetitive ..."

Antitrust is concerned primarily with processes and secondly with outcomes. The primary purpose of antitrust is to perpetuate and preserve a system of governance for a competitive, free enterprise economy. Efficiency and consumer welfare constitute ancillary benefits that are expected to flow from a system of economic freedom.

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92 Fox, supra, note 60, p 917.
93 Ibid, p 918.
94 Ibid, p 920.
95 Adams and Brook, supra, note 81, p 1116.
96 Ibid.
97 Ibid.
Total reliance on the Chicago School approach to antitrust is defunct for two major reasons. First, exclusive focus on allocative and productive efficiencies fails to take into account the realities of the world. Second, the Chicagoan definition of consumer welfare is incorrect. The following quote captures the essence of the Chicago School's failure to account for real world happenings:98

"...[Chicagoan analysis] assumes the business world is like a chess game in which all pieces are on the board, all moves immediately visible to the opponent. Real world competition, however, is more like a poker game, with risk-taking and bluffing occurring against a backdrop of constantly changing conditions, many of which are unknown to the opposing players."

(c) The Rise of Post-Chicago Law and Economics

The three examples of trade-off effects above emphasise the importance of taking a long-run approach to assessing antitrust problems. Antitrust analysis must focus on the long-run rather than on factors which are immediate and transitory.99 Antitrust enforcement should seek a balance between economic efficiency and consumer welfare. Such a balance must be achieved by adopting a long-run perspective. For example, if long-term consumer benefits and efficiencies are apparent, a court should not necessarily condemn a merger which may decrease competition in the short-run. Brodley suggests that in permitting activities which increase social wealth but impair the immediate consumer interest, three conditions must be met:100

- The activity must increase total social wealth by realising significant production or innovation efficiencies;

99Brodley, supra, note 29, p 1124. This long run approach is reflected in §2 of the Sherman Act and §7 of the Clayton Act. Further §1 of the Sherman Act and §3 of the Clayton Act encompass long run objectives.
100Brodley, supra, note 29, p 1137.
- The activity must be necessary to achieve such efficiencies and, among reasonable available alternatives, be least harmful in its effects on consumers; and
- The activity must not permanently suppress inter-firm rivalry, but must allow for the eventual re-establishment of workable competition.

So long as antitrust law continues to embody developments in theoretical awareness, it will remain a useful vehicle for promoting competition and consequently encourage greater innovation and productivity in the economy in the long-run.\textsuperscript{101}

Chicago School criticism of Mainstream antitrust analysis has always been directed at the lack of theory in the use of industrial organisation.\textsuperscript{102} Mainstream scholars have learned from this criticism and now encompass sophisticated economic analysis into most antitrust decisions. No longer can Mainstream analysis be characterised simply as casual observation of business behaviour.\textsuperscript{103} The ability to absorb Chicago School ideas critically has made antitrust more useful in achieving its goal of perpetuating and preserving a system of governance for a competitive, free enterprise economy. Socially desirable outcomes such as static efficiencies, innovative efficiency, antitrust welfare and political decentralisation result by maintaining an effective system of workable competition.\textsuperscript{104} This is the goal of antitrust.

A move away from the stringent adherence to Chicago School ideas prevalent in the 1980s is now apparent. Recent advances in antitrust involve far wider economic analysis than has been previously considered by most courts under both

\textsuperscript{101}Johnson, supra, note 8, p.330.
\textsuperscript{102}Audretsch, supra, note 11, p.142.
\textsuperscript{103}Posner, Richard A. "The Chicago School of Antitrust Analysis". University of Pennsylvania Law Review. 127: 925-.
\textsuperscript{104}Greer, supra, note 32, p.79. Workable competition needs not, and rarely is, perfect competition.
Chicaguan and Mainstream judges. "Post-Chicago" antitrust law and economics involves analysis of strategic and dynamic competition, game theory and other developments.\textsuperscript{105} It is a more consolidated approach to case analysis and seeks to avoid consideration of traditional factors in isolation. Rather it allows the circumstances of a case to influence the antitrust claims. For example, market definition and market power are not discussed in a vacuum but in the context of the anti-competitive claims of a particular case.\textsuperscript{106} In addition, post-Chicago courts treat the efficiencies defence with increased scepticism.\textsuperscript{107} They do not completely discount the argument of efficiencies at the expense of competition—instead, they balance the short-run and long-run perspectives of the two.\textsuperscript{108}

\section*{3. Workable Competition}

Having established that the immediate goal of antitrust is to promote workable competition, it is important to realise what workable competition is. No market conforms to the microeconomic conditions of perfect competition.\textsuperscript{109} So what kind of competition does antitrust attempt to encourage? Competition in antitrust refers to market forces which are sufficient to achieve the socioeconomic, economic and political benefits. Briefly these benefits, as mentioned in part II A,
are prices close to incremental costs leading to buyer and production methods that
minimise economic waste, efficient production processes, and innovative and
production efficiencies. Heydon provides an excellent definition of workable
competition:110

"Workable competition means a market framework in which the pressures of other
participants (or the existence of potential new entrants) is sufficient to ensure that each
participant is constrained to act efficiently and in its planning to take account of those
other participants or likely entrants as unknown quantities. To that end there must be an
opportunity for each participant or new entrant to achieve an equal footing with the
efficient participants in the market by having equivalent access to the means of entry,
sources of supply, outlets for product, information, expertise and finance. This is not to
say that particular instances of the items on that list must be available to all. That would
be impossible. For example, a particular customer is not at any one time freely
available to all suppliers. Workable competition exists where there is an opportunity
for sufficient influences to exist in any one market which must be taken into account by
each participant and which constrains its behaviour."

The presence of or the potential for competition requires that there is the
opportunity for other firms to offer competing products and/or services. This is
referred to as the element of substitutability. Northrop J. illustrated this point in

Adamson v West Perth Football Club Inc.:111

"...in order to have competition in a market, there must be substitution between one
product and another and between one source of supply and another in response to
changing processes or the quality of the product being supplied."

In addition to the principles of ease of entry and substitutability, it must be
stressed that competition is not a static condition. Rather it is a process "in which
there is an absence of power in any relevant market to raise and/or decrease
services or to exclude entry by others to such market".112

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With regards to vertical integration, competitive problems may stem from three sources. First, vertical integration may raise entry barriers in the relevant industries if a potential entrant must contemplate fully integrated entry instead of entry at only one stage of production. This also causes a problem where, for example, a firm must buy access to a competitor's distribution channel, thereby increasing costs. Second, firms in an industry with relatively few competitors may integrate forward into retail distribution in order to enforce collusive agreements that otherwise could not have been enforced because of secret price cutting. Third, a firm which is highly regulated in one market may integrate with a supplier to shift the locus of profits from its basic industry. This third situation is commonly known as monopoly leveraging and is discussed in chapter 6.

For the purposes of this discussion it is important to understand the dynamic nature of competition. The Australian Trade Practices Tribunal was explicit in pointing this out in Re Queensland Co-operative Milling Association (QCMA) when it said that "competition is a process rather than a situation". Hampton explains this, noting that this approach is "in marked contrast to the static structural situation of the theoretical concept of perfect or pure competition which assumes markets composed of numerous sellers, homogeneous products, free entry and complete information".

113 As discussed in Fletcher Metals Ltd v Commerce Commission (1986) 3 NZBLC ¶99,680 at 99,688; (1986) 6 NZAR 33 at 40.
114 Ibid.
115 Ibid.
Therefore antitrust law seeks to promote a system which is conducive to interfirm rivalry. Where possible, antitrust law ensures a competitive market structure; proscribes horizontal restrictions such as collusion; restricts the power of dominant firms to engage in conduct which is likely to lessen competition; and prohibits vertical restrictions such as tying arrangements, exclusive dealing, and resale price maintenance.

4. Conclusions

The goals of productive efficiency, allocative efficiency, innovative efficiency, and consumer welfare are desirable in an equitable economy. However, they are not the immediate goals of antitrust. Antitrust seeks to promote and maintain an effective system of workable competition. Such a system ultimately results in economic and social benefits. Chicagoan antitrust analysis tries to rebuild antitrust on the foundations of economics. However, antitrust can adopt an economic methodology without accepting the Chicago School's interpretation of every business practice.

While workable competition is the immediate goal of antitrust law, enforcement agencies and courts should not lose sight of the efficiency effects of business transactions which come under scrutiny. In many situations short-run

\[118\] The elements of market structure which should be scanned in competition analysis were outlined in QCMA, supra, note 116 at 17,246. These elements are:

- (1) the number and size distribution of independent sellers, especially the degree of market concentration;
- (2) the height of barriers to entry, i.e., the ease with which new firms may enter and sever a viable market;
- (3) the extent to which the products of the industry are characterised by extreme product differentiation and sales promotion;
- (4) the character of "vertical relationships" with customers and with suppliers and the extent of vertical integration; and
- (5) the nature of any formal, stable and fundamental arrangements between firms which restrict their ability to function as independent entities.

loss of competition may be offset by resulting long-run efficiency gains. Behaviour which both damages competition and provides no increased efficiencies should be condemned *per se*. However, behaviour which provides significant efficiency benefits may be deemed legal in cases where pro-competitive (efficiency) effects outweigh anti-competitive effects. The danger of this is to allow efficiency considerations to take the forefront in antitrust analysis. Efficiency considerations are secondary to rivalry, which is paramount to the operation of competitive markets.

The rise of post-Chicagoan antitrust treats efficiencies with an increased level of scepticism. Post-Chicago law and economics allows courts to encompass economic doctrine advanced by the Chicago School in a consolidated analysis. It considers broader factors such as game theory and strategic and dynamic competition. Consequently, a more desirable long-run perspective is achieved.

It is foolish to attempt to achieve perfect competition in every market. Real world conditions are such that some firms have competitive advantages over others. Instead, antitrust should seek to promote a market framework where competitive pressures are sufficient to constrain the actions of the participants. In such a system, firms are encouraged to compete vigorously. This interfirm rivalry promotes innovative, productive, and allocative efficiencies, and maximises consumer welfare in the long-run.
Traditional Antitrust Challenges to CRSs

Before discussing specific CRS antitrust attacks and defences, it is important to establish a background in several basic antitrust principles. Most important, and advocated by the Mainstream and Chicagoans alike, is that innocently obtained monopoly power in itself is not unlawful. Some markets, particularly very thin markets, may be best suited for a monopolist. Even in markets capable of supporting more than one firm, the emergence of a monopoly, absent anti-competitive conduct, often denotes efficient and innovative market performance which the law should not, and does not, forbid. Moreover, to police the prices and output of an otherwise benign monopolist would require the courts to assume a role for which they are not equipped.¹

Therefore monopoly power is acceptable except when the power is used for exploitative or restrictive purposes—there must be a defined zone of permissible conduct and an opportunity to exploit the spoils of a firm's innovative efforts.² Central to this idea is the fact that legitimately obtained monopoly power may not be used to expand or tighten the monopolist's hold on either the monopolised market, or any other market.³


²Ibid, p 167.

The United States Sherman Act aims to prohibit both anti-competitive conduct and anti-competitive market conditions. The passage of the Sherman Act is outlined in part III A. Its substantive provisions are two-fold. Section 1 is aimed at concerted activity in restraint of trade and §2 is aimed at unilateral conduct.

§ 1: Every contract, combination in the form of trust or otherwise, or conspiracy, in restraint of trade of commerce among the several States, or with foreign nations, is hereby declared to be illegal [and is a felony punishable by fine and/or imprisonment] . . . .

§ 2: Every person who shall monopolize, or attempt to monopolize, or combine or conspire with any other person or persons, to monopolize and part of the trade or commerce among the several States, or with foreign nations, shall be deemed guilty of a felony [and is similarly punishable] . . . .

Three distinct offences are recognised as violations of §2: actual monopolisation, attempted monopolisation, and conspiracy to monopolise. A §2 claim of monopolisation requires: (1) possession of monopoly power in the relevant market; and (2) the willful acquisition or maintenance of that power as distinguished from growth or development as a consequence of a superior product, business acumen, or historical accident. A §2 claim of attempted monopolisation requires: (1) a specific intent to monopolise a relevant market; (2) predatory or anti-competitive acts; and (3) a dangerous probability of successful monopolisation. Finally, a claim of conspiracy to monopolise requires: (1) concerted action by knowing participants who have the specific intent to achieve a monopoly; and (2) the commission of at least some overt act in furtherance of the conspiracy. Recently, some courts have recognised a fourth offence—monopoly leveraging. Monopoly leveraging is discussed in part III C 1. Definite themes have emerged from case history in this area. For example, courts have proscribed

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7DiResta, supra, note 3, p 5, quoting: Key Enterprises of Delaware, Inc., v Venice Hospital, (1990), 919 F.2d 1550 (11th Cir.).
unilateral refusals to deal when a monopolist denies access to a facility considered by the court to be essential. The essential facilities doctrine is also discussed in this chapter. First, this chapter looks at more traditional antitrust attacks on CRS vendor market power.

1. Market Definition and Market Power

A number of early commentators made predictions of relevant CRS market definitions based on the structure of the CRS industry in the early 1980s. Since then the CRS industry has developed from being a subsidiary industry of air transportation to being a large and profitable industry with a number of non-airline participants. The market is becoming increasingly global with the advent of international CRS alliances and GDSs. While some early predictions have materialised, the rapidly changing structure of the market has made many redundant. This discussion looks at CRS cases which specifically refer to the issue of market definition and/or market power.

*United Air Lines, Inc. v Austin Travel Corp* involved a suit by United for liquidated damages amounting to $US423,155.09 resulting from the premature termination of a CRS lease agreement by Austin Travel Corp. United claimed that there was no genuine defence or counterclaim available to Austin. The Court in this case favoured a regional market definition. The relevant geographic market in the case was held to be Long Island, as this was the effective area of competition. However, Austin failed to prove that any airline apart from American Airlines held a monopoly position in either the air carriage or the CRS market in the New York City region.

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9Mainly electronic data companies who lend their expertise to airline partners.

York/Long Island area. As a result, Austin Travel's counter claim of monopolisation failed. Unfortunately, the District Court's opinion provides no clues as to why the Court preferred a regional geographic market. Austin also claimed that there existed a "convention market on Long Island" and a "market for airline access to travel agents who use Apollo". The Court dismissed both of these as "illusory" or not "cognisable". Concerning the "convention" market, the Court said:

"Convention booking does not constitute a special submarket; rather such business is a treatment of volume bookings within the relevant general market of computerized reservations which neither requires nor utilizes special vendors or distinct customers".

Finally, the Court disagreed with Austin's "market for airline access to travel agents who use Apollo" saying:

"Neither can a cognizable "market for airline access to travel agents who use Apollo" be defined. By owning the Apollo system, United possess a share of this "market" that approaches 100 percent. United never possessed monopoly power of "airline access" to Austin Travel or any other agency. Austin Travel always used other CRS systems, principally Sabre, and other airlines had continuous access to Austin Travel and other agents."

Austin Travel unsuccessfully appealed the decision claiming that the District Court improperly defined the relevant market for antitrust purposes as Long Island. It offered two alternative market definitions. First, the national market for CRSs, and second, the "interrelated regional and local markets . . . involving consideration of the complex relationship between travel agency and air transportation industries in numerous interrelated geographic regions . . .". The Court considered the second market definition too ambiguous. Regarding the

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11Ibid, p 185.
13Ibid.
14Ibid, p 186.
15United Air Lines Inc. v Austin Travel Corp., (1989) 867 F.2d 737 (2nd Cir.).
national market contention, the Court pointed out that United controlled only 31 per cent of the national market. Although this was higher than the 10 per cent of the Long Island market, United still lacked the market power to constitute a national monopoly.\textsuperscript{16} In addition, the Second Circuit concurred with the District Court's findings regarding the markets for conventions and access to \textit{Apollo} agents.

The Court in \textit{Air Passenger 1988}\textsuperscript{17} gave more attention to the product market than the geographic market. The participants did not dispute the geographic market—they were satisfied that it encompassed the whole of the United States. The contentious issue was the relevant service market. The plaintiffs claimed that the relevant market was "the nationwide market for access to \textit{Sabre} agents" while the defendants argued for a wider market encompassing all CRS automated travel agents. The Court cited \textit{Bushie v Stenocord Corp.},\textsuperscript{18} where it was said that a firm's own product can constitute a distinct market only where the product is so unique or so dominant in the market that control over the product would virtually assure that competition in the market would be destroyed.\textsuperscript{19} It continued to say that the "ultimate question was whether other existing or potential CRSs significantly constrain the price-raising power of American".\textsuperscript{20} If this was the case, other CRSs should be grouped together with \textit{Sabre}. However, if \textit{Sabre} was not constrained in

\textsuperscript{16}\textit{Ibid}, at 742.

\textsuperscript{17}\textit{In Re Air Passenger Computer Reservation System Antitrust Litigation}, (1988) 694 F.Supp 1443 (C.D.Cal.). In this case, a number of airlines (Continental, Texas International Airlines, New York Airlines, USAir, Pacific Southwest Airlines, AirCal, Ozark Air Lines, Muse Air Corp., Alaska Airline, Midway Airlines and Western Air Lines) brought action against competitors (American and United) alleging antitrust violations and attempts to monopolise certain air transportation markets and CRSs. Issues in the case fall under four general headings: essential facilities, monopolisation, attempt to monopolise, and monopoly leveraging.

\textsuperscript{18}\textit{Bushie v Stenocord Corp.}, (1972) 460 F.2d 116 (9th Cir).

\textsuperscript{19}\textit{Ibid}, at 121.

\textsuperscript{20}\textit{Air Passenger 1988, supra}, note 17 at 1457.
its pricing decisions by other CRSs, the other CRSs could not be considered substitutes for *Sabre*.

Continental Airlines, one of the plaintiffs, supported the view that access to *Sabre* agents was a separate market by citing *Brown Shoe v United States*, 21 where the Supreme Court suggested the following factors when determining relevant market: 22

"The boundaries of such a submarket may be determined by examining such practical indicia as industry or public recognition of the submarket as a separate economic entity, the product's peculiar characteristics and uses, unique production facilities, distinct customers, distinct prices, sensitivity to price changes, and specialized vendors."

However, despite the fact that Continental presented convincing evidence that the industry recognises access to *Sabre* as a separate service from access to other CRSs, the District Court was not convinced that a reasonable jury would not find a broader market to be relevant. Specifically, Continental presented evidence which suggested that pricing and demand for *Sabre* showed low elasticity of demand. This, they claimed, was because access to *Sabre* was the only practical means of accessing *Sabre* agents. However, the Court was not convinced, saying: 23

"... although current market conditions suggest low demand elasticity, the existence of alternative channels of distribution such as competing CRSs indicate high supply elasticity .... If *Sabre* began charging supracompetitive prices, then airlines would abandon *Sabre*, causing *Sabre*-automated travel agents to look to other CRSs. The existence of other CRSs, therefore, constrain American's ability to set supracompetitive prices for *Sabre*. The existence of alternative CRSs suggests high supply elasticity, so there exists at least a factual dispute as to whether the relevant market is access to *Sabre* agents."

The Court then moved on to consider whether it could conclude "that access to *Sabre* agents [was] a distinct service market when viewed in the light most

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22 *Ibid*, at 325.
favourable to the plaintiffs.\textsuperscript{24} The plaintiffs continued to argue that despite the existence of alternative distribution channels, significant entry barriers suggested low elasticity of supply. This claim was based on the fact that access to Sabre-automated agents was impaired by contractual provisions and the costs involved in making travel agents dual-CRS capable. However, the Court decided that Sabre must still make its product attractive to non-Sabre agents and agents who were reviewing their CRS.

Although it was clear from the District Court's analysis that Sabre was constrained by the existence of competing CRSs, the Court still had to determine whether American was precluded from charging monopoly prices.\textsuperscript{25} While it was agreed that entry barriers existed in the form of restrictive subscriber contracts, the difficult question was whether the barriers were high enough to allow monopoly pricing. On this point, the Court was satisfied that the entry barriers for access to Sabre agents were sufficient to question whether other CRSs were effective substitutes for Sabre.

Despite this, the Court did not finalise the relevant product market. However, it said that if the relevant market was the CRS market, there was evidence that the defendants may have exercised monopoly market power. In coming to this conclusion, the Court cited the United States DOT report which found Sabre's booking fees to be 233 per cent of their average costs.\textsuperscript{26} The Court was careful to note that this alone did not mandate a finding of market power, but it was unable to pass summary judgment that the defendants did not have market power in the

\textsuperscript{24}\textit{Ibid.}, at 1459.

\textsuperscript{25}\textit{Ibid.}

CRS market. In addition, evidence of price discrimination precluded such a finding.\textsuperscript{27} Yet, with respect to the claim of monopolisation of the air transportation market, the Court granted summary judgment for the defendants, saying:\textsuperscript{28}

"The existence of competing CRSs constitute a substitute for Sabre and constrain American's ability to weaken competition in the air transportation market. . . . American has never had more than a 14 percent share of the air transportation market. Although market share is, in itself, an insufficient indicator of market power, such a minimal share precludes a reasonable jury from finding monopolization."

\textit{In re Apollo Air Passenger Computer Reservation System}\textsuperscript{29} is a consolidated case which arose after United replaced its subscriber contracts in 1985. These contracts had to be replaced because the 1984 CAB regulations prohibited a number of common industry activities.\textsuperscript{30} After 18 of United's subscribers had signed new \textit{Apollo} contracts, \textit{System One}, a rival CRS, induced them to breach their \textit{Apollo} contracts and substitute \textit{System One}. United filed suit against the travel agencies for breach of contract. \textit{System One} countered by filing suit against United claiming that \textit{Apollo} contracts breached federal antitrust laws.\textsuperscript{31} This judgment is a consolidation of these actions.

System One alleged that United monopolised the market for the provision of CRS services to travel agents in twelve separate geographic markets.\textsuperscript{32} It based its claim on \textit{Apollo}'s market share in these markets, and provisions in \textit{Apollo}

\textsuperscript{27}Air Passenger 1988, supra, note 17, at 1462.
\textsuperscript{28}Ibid, at 1455.
\textsuperscript{29}In re Apollo Air Passenger Computer Reservation System, (1989), 720 F. Supp 1068 (S.D.N.Y.).
\textsuperscript{30}The CAB rules: proscribed bias in the listing of flight information which tended to artificially inflate the desirability of the vendor's flights; required vendors to charge uniform booking fees to all carriers; limited subscriber contracts to terms of five years; prohibited a vendor from requiring subscribers to use its system in booking flights on its airline; and proscribed direct or indirect prohibitions against subscribers obtaining or using other systems.

\textsuperscript{31}In re Apollo, supra, note 29, at 1074.
\textsuperscript{32}System One's claim based on monopolisation of the national market was precluded by the \textit{Austin Travel} decisions, supra, notes 10 and 15.
contracts which it claimed were anti-competitive. According to a System one expert, United's market shares for these markets were: 33

<table>
<thead>
<tr>
<th>City</th>
<th>Market Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cleveland</td>
<td>66%</td>
</tr>
<tr>
<td>Honolulu</td>
<td>74%</td>
</tr>
<tr>
<td>Reno</td>
<td>63%</td>
</tr>
<tr>
<td>Huntsville</td>
<td>68%</td>
</tr>
<tr>
<td>Denver</td>
<td>76%</td>
</tr>
<tr>
<td>Omaha</td>
<td>78%</td>
</tr>
<tr>
<td>Seattle</td>
<td>64%</td>
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<tr>
<td>Provo</td>
<td>67.3%</td>
</tr>
<tr>
<td>Greensboro</td>
<td>64%</td>
</tr>
<tr>
<td>Portland</td>
<td>73%</td>
</tr>
<tr>
<td>Colorado Springs</td>
<td>59.8%</td>
</tr>
<tr>
<td>Pueblo</td>
<td>59.8%</td>
</tr>
</tbody>
</table>

*Table 3*  
System One's 1986 *Apollo* Market Share Data

The Court was not convinced, concluding that United's *Apollo* contract provisions did not go beyond normal business conduct. It said that System One "failed to present evidence from which a jury could reasonably infer that United engaged in anti-competitive conduct to acquire or maintain its leading share of the CRS market in the 12 cities" in question. 34 System One's assertion of monopoly power was based on the assumption that any market share in excess of 60% should be considered monopoly power. It is accepted in the United States that market share alone, although strong evidence, cannot compel a finding of monopoly power. 35 Therefore the Court held that the market share data put forward by System One did not prove monopolisation in any of the geographical markets. Because System One could not prove any form of improper conduct, the Court was not required to make a final ruling on the geographical or regional markets.

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33 In re Apollo, supra, note 29, at 1078.
34 Ibid.
35 See: Broadway Delivery Corp. v United Parcel Service, (1981) 651 F.2d 122 (2d Cir.), at 129: "Depending on what the undisputed event shows concerning a defendant's market share, the structure of the market, and the activities of the defendant and others within the market, a particular record may permit no reasonable inference other than that the defendant lacks monopoly power. Such a conclusion may be reached if the defendant's share is less than 50%, or even somewhat above that figure, and the record contains no significant evidence concerning the market structure to show that the defendant's share of that market gives it monopoly power".
The three cases outlined above indicate substantial disagreement over both the relevant product/service market and the relevant geographic market in CRS antitrust analysis. The reason courts have failed to rule on the relevant geographic market is because in all these cases, traditional monopoly power could not be shown in either regional or national markets. Therefore it was not necessary to rule. Similarly, where the relevant product market was questioned, (for example in *Air Passenger 1988*), courts did not issue a final ruling, opting instead to show that monopoly power was absent from either proposed market.

The most significant issue arising from judicial discussion on relevant CRS markets is the difference between the "market for CRS services" and the "market for access to travel agents". This issue was addressed both in *Air Passenger 1988* and *Austin*. Both Courts in *Austin* rejected the market for access to *Apollo* agents because Austin Travel had always used other CRSs, meaning that airlines always had access to the agent through other reservation systems. The Court in *Air Passenger* did not rule on this matter but refused to pass summary judgment that American did not have market power in the CRS market. However, the *Air Passenger* Court appeared to favour the broader market for CRS services as relevant.

It is unlikely that a court would adopt as its relevant product market, "the market for access to agents who subscribe to a certain CRS". The observation is based on the following two premises. First, an argument which suggests that access to certain agents is based on a static reading of the market. It is nonsense to assume that any airline possesses monopoly power of airline access to an agency in the long-run. Second, even if there is low demand elasticity (agents

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36 *Air Passenger 1988*, supra, note 17, at 1458.
may be prepared to pay more for a certain CRS), this is meaningless without low
elasticity of supply. The existence of alternative channels of distribution (for
airlines) suggests high supply elasticity.

Some observers disagree with a national market definition for CRS services.
For example, Saunders makes the following points in support of his regional
market definition:37

1. There is a strong correlation between areas where a CRS vendor offers a
large number of flights and areas where the majority of its CRSs are sold;
2. CRS vendors did not even attempt to sell their systems in areas where
they do not have substantial air traffic activity requiring at least the
prospect of high sales volume before allowing an agency to subscribe;
3. Subscribing carriers view the geographic market as regional; and
4. Subscribing carriers will only desire access to the CRS system in
operation in the regional areas in which they concentrate their air traffic.

However, Saunders' regional market definition has suffered with time. His first
assertion is true—CRS vendors' systems are strong at the vendor airline's hub.
But his assertion that CRS vendors do not even attempt to sell their systems in
areas where they don't have heavy traffic ignores the fact that CRSs are very
profitable in their own right. When they were first developed it may have been
accurate to make such an assertion, but now CRSs stand alone as highly profitable
entities. It is nonsense to assume that a CRS would not compete in an area where
there was a chance of making a profit. Similarly, airlines will demand access to
all feasible systems in the areas they fly to—not just regions in which they are
concentrated. Airlines pay the CRS vendor for each booking made through the
CRS. Therefore an airline will not forego access to a CRS because it may lose a
booking worth hundreds of dollars which would have only cost the airline several

37Saunders, supra, note 8, p 168.
dollars. In his defence, Saunders predicted that the market characteristics associated with a regional definition may disappear at a later date.\textsuperscript{38} Indeed, this is becoming more apparent. Increasing globalisation of CRSs should encourage courts to adopt broader geographic market definitions.

This analysis should not be interpreted to say that courts should become preoccupied with either a national or a regional market definition. Courts should be wary of assuming an "all or nothing" approach to market definition. The Federal Trade Commission of the United States in the \textit{Grand Union} case commented on the traditional approach to market definition:\textsuperscript{39}

"The unsatisfactory nature of this "all or nothing" approach is readily apparent. It may result in complete exclusion of firms and products that apply some competitive pressure upon the acquiring firm's market, while including the entire output of other firms and products applying comparatively little competitive pressure. Moreover, the competitive impact may differ even among products and producers included in the market definition".

Therefore although the market definition is a useful analytical tool, it does not form the entire basis of the case. Post-Chicago analysis requires a consolidated approach to antitrust claims. Thus it cannot be ignored that there are a number of small influences on the main player(s) in any markets and the market definition is but a small part of complete antitrust analysis. For example, a court may be perfectly correct in accepting a regional market definition for CRS services while still taking into account the competitive pressures exerted from outside the "relevant" market. These pressures may well be sufficient to preclude the dominant CRS vendor from exercising monopoly power.

\textsuperscript{38}ibid, p 169.

Regardless of the relevant market definition, in none of these cases could market power sufficient to constitute monopolisation be shown. With regard to the CRS market, the existence of other CRSs precluded such a finding. System One in In re Apollo relied solely on market share data in its claim of monopolisation in violation of §2. While market concentration is the primary indicator of market power, courts often look at other factors influencing market power.\textsuperscript{40} The Court in this decision was willing to consider System One's arguments on regional market monopolisation. However, if forced to decide, most courts would prefer a national definition consistent with the well accepted United States doctrine that the relevant geographic market is the area of effective competition in which competing firms operate.\textsuperscript{41}

There are a number of factors which enhance CRS vendors' market power in the CRS industry. For example, barriers to entry are extremely high. They derive principally from the high initial research and development costs and from programming costs, most of which cannot be easily transferred.\textsuperscript{42} In addition, the large vendors' sizeable "installed bases" and operating experience provide them with a competitive advantage because of the economies of scale and learning-curve benefits in operating a CRS.\textsuperscript{43} New entrants wishing to gain a toehold also face the prospect of high switching costs, involving training and installation. Restrictive, long term subscriber contracts exacerbate these barriers.


\textsuperscript{43}Ibid.
However, although further entry to the CRS industry is unlikely (but not impossible\textsuperscript{44}), the presence of at least four major companies strongly suggests the presence of enough competition to preclude a finding of traditional monopoly power. Consequently, in the absence of tacit or explicit collusion between existing vendors, monopoly power is difficult to prove.

As mentioned above, low market shares at a national level preclude a finding of monopoly power in the air transportation industry.\textsuperscript{45} Many authors claim that major airline hub dominance suggests that the appropriate market definition for air transportation services should be based on a regional or hub analysis.\textsuperscript{46} However, this requires an inquiry into the cause of the market power. For instance, one factor which has a large impact is the existence of "commission overrides". A United States study concluded:\textsuperscript{47}

"Override programs in general give larger carriers an advantage in winning an agency's favour. Airline officials generally agree that no agency will be interested in a carrier's override program if the carrier has a small market share. Override programs therefore tend to shield incumbent carriers at a city from small-scale competition. However, an override program offered by a major carrier to agents serving a market that it seeks to enter could, under certain circumstances, promote new competition".

Commission overrides increase the discount available to travel agents and are widely used in the airline industry.\textsuperscript{48} For example, if a standard airfare is $599, a travel agent may get that fare for $545.09 (less a standard commission of 9%). A dominant airline may offer a "commission override" of an additional 4% to agents.

\textsuperscript{44}For example, recently a new CRS was launched in Australasia. The CRS, Worldlink, was developed by a large tour company and aims for worldwide market penetration.

\textsuperscript{45}See: Air Passenger 1988, supra, note 17, p 1455/6.

\textsuperscript{46}Klingaman, supra, note 40, p 328.


using its CRS. This takes the cost of the fare to the travel agent down to $521.13. The travel agent then has two options. The saving can be passed on to the consumer, or retained to increase the agent's profit margin. In both cases the airline benefits. The consumer will prefer to book on the airline because it is cheaper, or in the other case, the agent will try to convince the consumer to travel on the airline offering the override. Where a vendor-airline has a hub, it will be able to offer an extra commission to agents using its system. Therefore the hub airline's system is more attractive and more agents subscribe to it.

The point here is that a claim of monopolisation or attempted monopolisation of the air transportation market may be based on more factors than the presence of a dominant CRS. It is the conduct of the parties which must be analysed, not the mere structure of the market. Exclusionary behaviour in the CRS context includes system bias and market manipulation through the use of excessive booking fees and restrictive contracts. The existence of competition in the airline industry and the CRS industry is the major reason for the failure of outright monopolisation claims. As the analysis in part III C shows, antitrust attacks on CRS vendors should focus on their exclusionary conduct rather than more traditional monopoly power arguments.

With regard to entry conditions, the CRS industry has high barriers to entry regardless of the economic viewpoint of the observer. Entry conditions to the CRS industry were outlined in part II C. Most significant are the high start-up costs (much of which are sunk) involved with entry to the CRS industry. In addition, incumbent firms enjoy huge economies of scale and scope, the benefit of learning curve effects, and the fact that either agents or rival vendors face high
switching costs. It is widely accepted that the CRS industry is not conducive to new entry.⁴⁹

Despite these high entry barriers, plaintiffs have failed in their attempts to prove that vendor-airlines hold monopoly power. This is largely due to the presence of at least four major competitors in the CRS industry, and numerous competitors in the air transportation industry. Courts have consistently been satisfied that CRS vendors are sufficiently constrained by the presence of other CRSs. Although vendors are able to charge supracompetitive prices, they are restricted in their decisions. If they charge too high a price, airlines will not participate and therefore the CRS will be less attractive to travel agents.

This highlights the triangular relationship between airlines, travel agents and CRS vendors—each party highly dependent on the other two. The dependence relationship is intensified because of airline ownership of CRSs. This has led to claims that airline vendors do not allow competitors in the airline industry equal access to their CRS. In the United States these claims are brought under the essential facilities doctrine.

2. Essential Facilities

A non-CRS airline wanting to make its seats available for sale in a certain CRS often faces a difficult dilemma. If it does not pay what it may consider an excessive booking fee, it cannot distribute its service through travel agents subscribing to the CRS.⁵⁰ Although it is rare for an airline to be completely denied access to a CRS, airlines which are vertically integrated into the CRS

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⁴⁹ This is acknowledged in System One's 1993 strategic plan.
⁵⁰ This is because the huge majority of travel agents subscribe to only one CRS.
industry often have the power to raise rivals' costs above their own.\textsuperscript{51} Additionally, non-CRS airlines allege that despite anti-bias rules, CRS owners continue to bias their displays and influence travel agents to select the CRS owners' flights more frequently.\textsuperscript{52} In this respect, non-CRS airlines claim that the CRS is an essential facility for it to reach certain travel agents and thus try to gain the court's approval for non-discriminatory access to the system (and therefore the agents).\textsuperscript{53}

Several CRS actions have been brought under the essential facilities doctrine in the United States. The doctrine imposes on a business that controls an essential facility the obligation to provide its competitors reasonable access to that facility.\textsuperscript{54} The purpose of the doctrine is to prevent a competitor from achieving a monopolist's position in a market by virtue of its control over a facility that other competitors must use in order to compete in that market.\textsuperscript{55} A facility or resource is essential when competitors must have access to the facility to meaningfully be able to compete with the firm controlling the facility.\textsuperscript{56} However, to be essential, a facility need not be indispensable; it is sufficient if duplication of the facility would be economically unfeasible and if denial of its use inflicts a severe handicap on potential market entrants.\textsuperscript{57} Under United States law, refusal to deal in this context violates §2 of the Sherman Act because control of an essential

\textsuperscript{51}Raising rivals' costs is analysed in part III C 3.
\textsuperscript{52}Harvard Law Journal Comment, supra, note 42, p 1935. More subtle forms of system bias are exceedingly difficult to prove. For example in American Airlines v Eastern Air Lines, DOT Order 87-12-34, Dkt 44891, the DOT dismissed an American Airlines complaint against Eastern which alleged that Eastern used an inadequate number of connecting points in its CRS displays. There was no evidence of the violation.
\textsuperscript{53}See for example: Air Passenger 1988, supra, note 17.
\textsuperscript{54}Byars v Bluff City News Co., (1979) 609 F.2d 843 (6th Cir), at 856.
\textsuperscript{55}Air Passenger 1988, supra, note 17, at 1451.
\textsuperscript{57}Air Passenger 1988, supra, note 17, at 1451.
facility can extend monopoly power from one stage of production to another, and from one market into another. In other words, a participant in the downstream market, who also controls a facility which is deemed essential to the downstream market, has the power to increase the costs of market entry through its control of the essential facility. The facility owner has the opportunity to monopolise the market to which his facility is the "bottleneck". In a normal case under the essential facilities doctrine, the facility at issue constitutes a bottleneck to competition in the downstream market, that is, control of the facility can foreclose competition in the underlying market. Duplication of the facilities characterised as natural monopolies is an inefficient waste of resources where one facility is all that is needed. However, if the market can support more than one facility, innovative efficiencies may result by requiring new entrants to develop their own.

The question of what is an essential facility is difficult. An economist, Professor L. White gave the following opinion regarding what constitutes an essential facility:

"... if the concept of an essential facility means anything, it is the capability of an incumbent to raise price by a substantial amount, and that substantial amount has to be more than the five or ten per cent price-increase standard that we used in developing the Merger Guidelines. ... if it does mean anything, it has to mean a more substantial exercise of market power—a more substantial price increase capability on the part of the single or joint owner of the thing that's being called an essential facility—than just a mere production or marketing advantage of one producer vis-à-vis another."

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58 MCI Communications Corp. v American Tel. and Tel. Co., (1983) 708 F.2d 1081 (7th Cir.), at 1132.
59 Gianco, Inc v Providence Fruit and Produce Bldg. Inc., (1952) 194 F.2d 484 (1st Cir.), at 487.
60 Air Passenger 1988, supra, note 17, at 1451. For example in the MCI case, supra, note 58, at 1133, foreclosure of access to local telephone distribution channels precluded MCI from competing in the long distance telephone service market because access to the local distribution channels is necessary to providing long distance service. The Court stated that because local telephone service is a natural monopoly it would be unfeasible for MCI to have to outlay millions of dollars in duplicating it.
61 Ibid, at 1452.
There are five elements required to satisfy a claim under the essential facilities doctrine: (1) control of an essential facility by a monopolist; (2) the inability practically or reasonably to duplicate the facility; (3) the denial of the use of the facility, which raises questions, obviously, of pricing—if you don't simply deny access, but you price at a certain high level; (4) the feasibility of providing access; and (5) whether legitimate business or technical reasons can be demonstrated to support denial of access.\textsuperscript{63}

There is a danger, particularly in deregulated industries, for courts to unnecessarily widen the scope of element (5) above. The question must be addressed as to what constitutes a legitimate business or technical reason. Mahinka claims that focus in essential facilities cases is not totally on the economic effects of the challenged activities, but rather on the fairness of the monopolist's decisions.\textsuperscript{64}

The notion of essential facilities has been used in the context both of multi-firm combinations and single firm conduct. The first multi-firm case to use the essential facilities doctrine was the \textit{Terminal Railroad} combination case.\textsuperscript{65} In this case, the railroad company, formed by a combination of some of the railroads transiting in St. Louis, controlled a facility which was needed by competitors wishing to pass through St. Louis. The Supreme Court in this case recognised that

\textsuperscript{63}Ibid, p 730. The first four of these elements come from the Seventh Circuit decision of MCI Communications Co., supra, note 58. The fifth element was discussed in Aspen Skiing Co. v Aspen Highlands Skiing Co., (1985) 472 U.S. 585, 601-05.


\textsuperscript{65}United States v Terminal Railroad Association, (1912) 224 U.S. 383.
the monopoly position resulted from joint purchase concluded that the best remedy was to admit non-member companies to the consortium.\footnote{Areeda, Phillip. (1990). "Essential Facilities: An Epithet in Need of Limiting Principles". \textit{Antitrust Law Journal}, 58(3): pp 841-853. p 842.}

The other frequently cited multi-firm case is \textit{Associated Press}.\footnote{\textit{Associated Press v United States}, (1945) 326 U.S. 1.} This case involved a group of around 1200 newspapers that pooled their resources to achieve certain activities in which there was significant economies of scale. The Supreme Court in this case held that Associated Press was not required to admit everybody, but it was not entitled to discriminate against competitors.\footnote{See \textit{Associated Press}, \textit{ibid}, at 28-9.} Areeda suggests that \textit{Associated Press} now stands for the following propositions: (1) whenever competitors jointly create a useful facility, (2) that is essential to the competitive vitality of rivals, (3) and (perhaps) essential to the competitive vitality of the market, (4) and admission of rivals is consistent with the legitimate purposes of the venture, then (5) the collaborators must admit rivals on relatively equal terms.\footnote{Areeda, \textit{supra}, note 66, p 844.}

However, \textit{Associated Press} and \textit{Terminal Railroad} both deal with cases where there has been concerted action. The principles of multi-firm cases are not immediately transferable to cases where a firm acts unilaterally.\footnote{\textit{Ibid}, explains at 844/5: "[\textit{Associated Press}] cannot automatically govern unilateral denial of essential facility for several reasons. First, and most obvious, concerted action is exceptional, whereas unilateral action is omnipresent. Innumerable firms engage in unilateral action every day. We have to be wary about examining the decisions of each of those firms in our economy . . . . Second, concerted exclusion is much easier to remedy, particularly when an outsider, who is willing to invest on an equal basis, seeks admission at the time the joint venture is created . . . . Third, admission to a joint venture is a one-time remedy that does not require [the exertion of] day-to-day control [by the courts]."} In a single firm context, the essential facilities issue arises predominantly where the facility owner also operates in a vertically related market.\footnote{Sullivan and Jones, \textit{supra}, note 1, p 176.} United States courts have tended to
relax the conduct component of antitrust liability when requiring a monopolist to deal under the essential facilities doctrine.\textsuperscript{72}

This is one of the main differences between the essential facilities doctrine and monopoly leveraging theory (discussed in part III C). Monopoly leveraging requires not only monopoly power, but also an anti-competitive intent in the conduct in question. This became clear in \textit{Grinnell} when Justice Douglas characterised monopoly power wilfully acquired or maintained, from power achieved as a result of historical accident, business acumen, or the like.\textsuperscript{73} This encompasses an element of impropriety—usually termed exclusionary conduct. The jury in \textit{Aspen}\textsuperscript{74} was told that the defendant had no \textit{general} duty to deal with the plaintiff, but if the jury found that the defendant acted "with exclusionary or anti-competitive purpose or effect," then it may find for the plaintiff.\textsuperscript{75} The jury was satisfied to infer this exclusionary conduct due to the absence of a legitimate business purpose. They therefore found in favour of the plaintiff and awarded treble damages.

The other main difference between monopoly leveraging and essential facilities is that in the bottleneck situation, the source of a monopolist's power (the facility) is more closely scrutinised than is a simple monopoly.\textsuperscript{76} That is, the plaintiff must prove that the defendant has control of the facility, that it is unfeasible to duplicate the facility, and that the owner has denied the plaintiff fair use of the facility.

\textsuperscript{72}Ibid, p 177.

\textsuperscript{73}Grinnell, supra, note 5 at 571.

\textsuperscript{74}Aspen Highlands Skiing Corp. v Aspen Skiing Co, (1984) 738 F.2d 1509 (10th Cir.).

\textsuperscript{75}The decision in \textit{Aspen} for the plaintiff was based on the defendant's refusal to deal and the fact that it constituted an important change in an established pattern that had originated when the market was competitive.

\textsuperscript{76}Sullivan and Jones, supra, note 1, p 177.
The judge's advice to the jury in *Aspen* has drawn criticism from a number of commentators. Areeda claims that instructing the jury in the manner above may have serious implications. In fact, taken to its extreme, any conduct by a successful business which does not share the fruits of its success with smaller competitors may be deemed to be exclusionary. For example, the absolute requirement for a dominant firm to share its facilities would be a serious disincentive to develop them in the first place. To correct the distortions caused by decisions such as *Aspen*, Areeda believes six limiting principles to the essential facilities doctrine should apply.

1. There is no general duty to share. Compulsory access, if it exists at all, should be very exceptional.

2. A single firm's facility, as distinct from that of a combination, is "essential" only when it is both critical to the plaintiff's competitive vitality and the plaintiff is essential for competition in the marketplace. "Critical to the plaintiff's competitive vitality" means that the plaintiff cannot compete effectively without it and that duplication or practical alternatives are not available.

3. No one should be forced to deal unless doing so is likely substantially to improve competition in the marketplace by reducing price or by increasing output or innovation.

4. Denial of access is never *per se* unlawful; legitimate business practice always saves the defendant.

5. Any instruction on intention must ask whether the defendant had an intention to exclude by improper means.

6. No court should impose a duty to deal that it cannot explain or adequately and reasonable supervise.

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79 This improvement is unlikely (a) when it would chill desirable activity; (b) the plaintiff is not an actual or potential competitor; (c) when the plaintiff merely substitutes itself for the monopolist or shares the monopolist's gains; or (d) when the monopolist already has the usual privilege of charging the monopoly price for its resources.
These principles mean courts would proscribe only conduct which is
unnecessarily exclusionary. This is important because most competitive conduct
tends to exclude in one way or another.\textsuperscript{80} Only acts which are not "honestly
industrial", but rather impair the opportunities of rivals and corrupt competition on
the merits are "unnecessarily exclusionary".\textsuperscript{81} Penalising competitive conduct,
which competition law actually intends to promote, would prevent large firms
from competing vigorously with their smaller rivals and hence discourage rather
than promote competition.\textsuperscript{82}

Examples of essential facilities where absolute entry barriers have been created
by public policy include most electrical utilities and local telephone exchanges
which are required for competition in long distance service.\textsuperscript{83} In both of these
industries, public policy has created or maintained a monopoly bottleneck.\textsuperscript{84} The
same argument could be advanced for the CRS industry. As pointed out in Part II,
CRSSs were developed in the era of stringent fare and route regulation in the
United States.

It is important to realise that no case rests solely on the essential facilities
doctrine. The case must be tied to the particular statutory provision under which
relief is sought.\textsuperscript{85} The doctrine is an abstraction designed to assist courts in
determining whether the statute has been violated.\textsuperscript{86} The starting point for case
analysis should be the statute itself. For example, in applying the essential facilities doctrine in the context of §2 of the Sherman Act, a facility should be deemed essential to the downstream market only where control of the facility by a competitor poses a danger of monopolisation of the downstream market.\textsuperscript{87} The doctrine establishes the conditions for requiring a firm to co-operate with its competitors and "thereby rendering the failure to provide reasonable access an anti-competitive act under section 2".\textsuperscript{88}

The first United States case to mention CRSs as essential facilities was \textit{United Airlines v Civil Aeronautics Board}.\textsuperscript{89} Judge Posner initially pointed out that if one airline owned all of the CRSs, a conventional antitrust problem of the "bottleneck variety" would exist. However, in the CRS market no one firm has complete market control. Posner noted that "none of the airline owners of computerised reservation systems [had] a conventional monopoly position".\textsuperscript{90} Although this was true, the CAB had previously found that some vendors "had substantial market power".\textsuperscript{91} Because of the CAB's findings, Posner held the opinion that "[p]rice discrimination, and denying a competitor access to an essential facility on equal terms . . . are traditional methods of illegal monopolisation". It must be noted that the \textit{United} case was decided under §411 of the Federal Aviation Act of 1958 which has the very broad provision of "unfair or deceptive practices or unfair methods of competition in air transportation". Thus the Court did not consider whether a dominant CRS was an essential facility. Rather they asked whether the CAB's rules regarding CRSs were acceptable. Because there was authority

\textsuperscript{87} \textit{Ibid.}
\textsuperscript{88} \textit{Ibid.}, at 1456.
\textsuperscript{89} \textit{United Airlines Inc. v Civil Aeronautics Board}, (1985) 766 F.2d 1107.
\textsuperscript{90} \textit{Ibid.}, at 1114.
\textsuperscript{91} \textit{Ibid.}, at 1114.
condemning practices thought to create a danger of foreclosing competitors from sources of supply of marketing channels, the Court ruled that the Board's rules were fair.

Interestingly, the Court in United also noted that national market share data understates the power which some airlines hold in the CRS market. For example, in Denver where United accounts for a large fraction of the air transportation market, United is able to persuade 72% of travel agents to subscribe to its CRS. Therefore airlines must list on Apollo if they wish to compete in any city pairs out of Denver. However, in a market where a CRS vendor held only modest share, it is doubtful the Court would have come to the same conclusion. Since United was the only airline challenging the Board's finding on market power, the Court held that the CAB's rules were not arbitrary or capricious.

The second case to discuss CRSs as essential facilities was Air Passenger 1988. In this case, plaintiffs including USAir, Pacific Southwest Airlines, Republic Airlines, Northwest Airlines and Alaska Airlines contended that Sabre was an essential facility for domestic airlines. The basis of their claim was that Sabre conferred exclusive access to a number of travel agents, and airlines could not afford to forego access to Sabre. That is, other CRSs conferring access to other travel agents were not a substitute because the agents subscribing to Sabre did not subscribe to other CRSs.

American Airlines vehemently denied that Sabre was an essential facility. The Court's view, consistent with American's, was that there were acceptable channels of distribution other than Sabre. Other CRSs existed and the plaintiffs could look

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92Ibid, at 1116.
93Air Passenger 1998, supra, note 17.
to other systems as alternative channels of distribution. In the Court's opinion, because there were competing systems, plaintiffs were not forced to enter the market for CRSs in order to compete in the downstream market of air transportation.\footnote{Ibid, at 1452.}

The plaintiffs argued that \textit{Sabre} was essential because only \textit{Sabre} could provide airlines with access to agents who subscribed to that system. Therefore other systems were not an acceptable substitute. The Court noted that under ideal market conditions, American would wish for as many airlines to be listed on \textit{Sabre} as possible because the absence of an airline from \textit{Sabre} would decrease its attractiveness to travel agents.\footnote{Ibid, at 1452.} However, Continental pointed out some market imperfections.\footnote{The importance of market imperfections assumed increased importance after the decision of \textit{Eastman Kodak Company v Image Technical Services, Inc}, U.S. Sup. Ct., 1992-1 Trade Cases ¶69,839. In \textit{Eastman Kodak} the Supreme Court held that for purposes of a claim by independent service organisations that a manufacturer monopolised or attempted to monopolise its aftermarkets for service and parts, the manufacturer's nearly 100 per cent control of the market for parts for its equipment and 80 to 90 per cent of the market for servicing of the equipment was sufficient to survive summary judgement on the issue of monopoly power. The aftermarket of service and parts for Kodak equipment had inherent imperfections which were sufficient to satisfy the Court that a monopolisation case may proceed.} First, \textit{Sabre}'s contract provisions made it very difficult for agents to switch systems.\footnote{Provisions in the subscriber contracts include liquidated damages clauses, minimum usage clauses and roll-over provisions.} Second, travel agents have strong incentives to carry only one CRS. For example, the high cost of installation and training often precludes the economic use of more than one system. Finally, to support the claim that it is essential for airlines to access \textit{Sabre} agents, Continental pointed out the tight operating margins which characterise the airline industry. They said that "even slight reductions in sales have a disproportionately adverse impact on profits and
the ability to compete." To support their assertions, the plaintiffs quoted Judge Posner's remarks in *United Airlines Inc. v Civil Aeronautics Board*:

"Unless an airline limits its operations to one small region, it must, whether or not it has its own computerized reservation system, persuade several of the largest airlines to list its flights in their [CRS] systems if it is to have a fair chance of success. It is thus dependent for an essential facility on what may be its principal competitors; and while the airlines that own computerized reservation systems do not refuse to include their competitors' flight information, they sometimes charge substantial fees for inclusion."

However, the Court in *Air Passenger* was quick to point out the context of Posner's quote. As explained above, the *United* case concerned the CAB's rulemaking authority and the issue at hand was the CAB's authority to forbid anti-competitive practices before they became serious enough to violate §2 of the Sherman Act. Therefore Posner did not rule that United's system was an essential facility, he merely held that the Board's analysis was not arbitrary and capricious in light of its statutory authority.100

Interestingly, Posner also noted that an airline needed to be listed "if not in all systems, at least in the largest ones, which means in the systems of its principal competitors".101 Conversely, the owner of a CRS needs to retain as many airlines as possible to maximise the attractiveness of the CRS to travel agent subscribers. Hence, "the CRS vendor will charge as high a price as it can without losing participating airlines".102 This suggests that CRS vendors have price setting power, but are constrained to a certain extent by subscribing airlines' narrow profit

98 *Air Passenger* 1988, supra, note 17, at 1453.
99 *United*, supra, note 89, at 1114.
100 *Air Passenger* 1988, supra, note 17, at 1453.
101 *United*, supra, note 89, at 1115.
102 *Air Passenger* 1988, supra, note 17, at 1453. The Court also noted with respect to display bias (at 1453/4), "the CRS vendor hopes to gain more business by complicating the marketing of competing services than it would lose to travel agents by providing them with less flight information."
margins. Additionally, he observed the following regarding the market for CRSs:

"If the owner of a computerised reservation system used the system to weaken competition from other airlines, it is a little hard to see why those airlines would not simply switch their patronage to a competing system that was not biased against them. Competition would (one might have thought) force at least some of the owners of competing systems to offer unbiased listings in order to expand the market for their systems. Even if every airline owner refused, because of the impact on its air transportation revenues, to give equal prominence to a competitor's flights, there is nothing to stop independent companies from offering a computerized reservation system with no such inhibitions—and one does".

The Court in *Air Passenger 1988* decided that the question was whether the entry barriers to competing CRSs (with respect to access to *Sabre* agents) were sufficient to qualify *Sabre* as an essential facility. In asking this question, the Court adopted a Chicagoan approach to entry barriers. Consequently, the Court decided that entry barriers (namely the contract provisions) did not foreclose competition in the market—rather they raised the cost of entry. The increased cost of entry was viewed as an impediment to entry rather than a barrier.

Therefore while American was able to extract supra-competitive booking fees in the CRS market, and such price increases do create entry barriers in the air transportation market by raising competitor's costs, the entry barrier was not sufficient to create a danger of monopolisation. At worst, the Court decided that American would only restrain trade in the air transportation market—it would not threaten monopolisation. The Court was satisfied that the presence of other CRSs constituted substitutes to *Sabre* because if *Sabre* was to charge an excessively high price, no airline would participate and the system would be worthless.

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103 *United, supra,* note 89, at 1114/5.

104 *Air Passenger 1988, supra,* note 17, at 1454.

105 Judge Rafeedie said at 1454: "An entry barrier is . . . a condition that makes the long run costs of a new entrant into the market higher than the long run costs of the firms existing in the market . . ."
The Court decided that in the context of §2 of the Sherman Act, there was no danger that American would monopolise the market for air transportation. It held that "even if the entry barriers to accessing Sabre agents are substantial enough to preclude a single airline from withdrawing from Sabre because Sabre agents will not look to other CRSs when making reservations, there is no danger that American will monopolize the air transportation market". The Court followed Posner's reasoning in United that American was "restrained by the existence of competing CRS". Therefore although the owner of a CRS may be able to extract a high enough price to constrain the growth of competitors, in the opinion of the Court, such a restraint of trade did not violate §2 of the Sherman Act. In the absence of an essential facility, a competitor's failure to provide access to a facility does not constitute "anti-competitive conduct" since the general rule laid down in Aspen is that "even a firm with monopoly power has no general duty to engage in a joint marketing program with a competitor".

By far the clearest judicial discussion regarding essential facilities and CRSs is provided by the Ninth Circuit in Alaska Airlines, Inc. v United Airlines, Inc. This case involved Alaska Airlines along with Midway Airlines, Northwest Airlines and Muse Air Corporation suing United and American Airlines based on allegations that airlines' control of CRSs denied competitors an essential facility in

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106 For an attempt to monopolise claim to be upheld under §2 of the Sherman Act, three elements must be established: (1) anti-competitive or exclusionary conduct; (2) specific intent to monopolise, and (3) a dangerous probability that the attempt will succeed. International Distribs, Centers, Inc. v Walsh Trucking Co., (1987), 812 F.2d 786 (2d Cir.), at 790.

107 Air Passenger 1983, supra, note 17, at 1455.

108 Ibid, at 1456.

109 Aspen Skiing Co v Aspen Highlands Skiing Corp., (1985) 472 U.S. 585, at 600. Also Olympia Equipment Leasing v Western Union Telephone Co., (1986) 797 F.2d 370 (7th Cir.), at 375, "a firm with monopoly power has no general duty to help competitors by pulling its competitive punches." However, in the case of a monopolist, failure to cooperate without business justification for the action may indicate probable anti-competitive effect.

110 Alaska Airlines Inc v United Airlines Inc., (1991) 948 F.2d 536 (9th Cir.).
violation of antitrust laws. The Court refused to allow the plaintiff's motion under §2 of the Sherman Act and granted summary judgment for the defendant.

The plaintiffs in Alaska proposed a broad view of the essential facilities doctrine, claiming that the defendants were liable under the doctrine even though the defendants' control of their respective CRS systems did not give them power to eliminate competition in the downstream air transportation market. The Court was compelled to make a ruling as to whether the essential facilities doctrine reaches that far.

Interestingly, the Court did not mention Aspen in its discussion of a single firm's control of an essential facility. Instead, it relied on the Supreme Court's commentary in Otter Tail Power Co. v United States. Otter Tail Power Co. supplied both "wholesale" and "retail" electrical services in its operating area. A number of municipalities attempted to supply "retail" electrical services by contracting Otter Tail to supply them. However, Otter Tail Power refused and thereby eliminated the possibility of competition in the provision of electrical services. Given the difficulty in duplicating Otter Tail's "wholesale" facilities, the Court was of the opinion that Otter Tail had both attempted to monopolise and had succeeded in monopolising the downstream market for "retail" electrical services. Otter Tail's refusal to deal did more than merely impose a handicap

111 Ibid, at 542. The plaintiffs relied (mistakenly in the eyes of the Court) on three Supreme Court cases: United States v Griffith, 334 U.S. 100, (holding invalid concerted action by a number of movie distribution companies); Associated Press, supra, note 67 (Associated Press was not allowed to exclude potential members simply because they competed with existing members); and Terminal Railroad, supra, note 65 (competitors had to be admitted to a combination of facilities which had acquired control of facilities into and out of St. Louis). The Court held that since Griffith, Associated Press, and Terminal Railroad all involved combinations in restraint of trade, they were of little value to the Alaska Airlines case.


113 Ibid, at 369-71, 376-79.

on potential competitors; it eliminated all possibility of competition in the downstream market for "retail" electrical services.\textsuperscript{115}

There have been two decisions since \textit{Otter Tail} which suggest limits to the essential facilities doctrine in the single firm context. In \textit{MCI Communications Co. v AT & T},\textsuperscript{116} AT & T was held to violate §2 of the Sherman Act because, like \textit{Otter Tail}, it refused MCI access to its network. AT & T's network could not be duplicated feasibly, and also its refusal completely eliminated competition, rather than merely impeding it. Therefore, AT & T had the power to eliminate competition in a downstream market, and since it had exercised this power, it had monopolised the market.\textsuperscript{117}

The other case which limits the application of the essential facilities doctrine is \textit{Olympia Equipment Leasing v Western Union Telephone Co.}\textsuperscript{118} In this case, Western Union, previously in the business of leasing telex equipment, decided to turn its leasing agents into a sales force. At first, it was happy to sell competitors' products alongside of its own, but when its own products did not sell as well, the firm ordered its sales force to stop mentioning the products of competing vendors. Olympia, a competing vendor, brought action under §2 of the Sherman Act claiming that Western Union's sales force was a facility essential to participation in the telex machine supply market, and asserted a right to nondiscriminatory access.\textsuperscript{119} The Seventh Circuit Court of Appeals disagreed with the plaintiff's petition saying:\textsuperscript{120}

\textsuperscript{115} \textit{Alaska Airlines}, supra, note 110, at 543.
\textsuperscript{116} \textit{MCI Communications}, supra, note 58.
\textsuperscript{117} \textit{Alaska Airlines}, supra, note 110, at 543.
\textsuperscript{118} \textit{Olympia}, supra, note 109.
\textsuperscript{119} \textit{ibid}, at 376-77.
\textsuperscript{120} \textit{ibid}, at 377-78.
"Olympia had no right under antitrust law to take a free ride on its competitor's sales force. You cannot conscript your competitor's salesmen to sell your product even if the competitor has monopoly power and you are a struggling new entrant."

In addition, Western Union's sales force was not an essential facility because withdrawal of the sales force did not eliminate the potential for competition. Similarly, in Alaska, the Court held that defendants' control of their CRSs did not give them power to eliminate competition in the downstream air transportation market.\textsuperscript{121} The Court made several astute observations. First, the plaintiffs would withdraw from Sabre or Apollo if the cost of using either CRS caused the cost to the airline of providing a flight booked on a CRS to exceed the revenue that the airline would gain from providing the flight. Second, United and American had never refused any of the plaintiffs access to their respective CRSs—rather they had given their competitors access for a fee. Finally, neither United or American would set a fee which would drive their competitors away because if they did, they would destroy their own CRS rather than competition. Thus, the ability of United or American to abuse their downstream competitors by manipulating their CRSs is severely limited.

The plaintiffs claimed that both Sabre and Apollo were essential facilities since control over them, gave the vendors power to redistribute a portion of rivals' revenues to itself. However, the Court held that although each defendant may have gained some leverage over its competitors through its control of its CRS, each defendant's power fell far short of the power to eliminate competition seen in Otter Tail, and MCI.\textsuperscript{122} The Court agreed that the defendants may gain a

\textsuperscript{121} Alaska Airlines, supra, note 110, at 545.
\textsuperscript{122} Ibid.
monetary profits at their rival's expense but the exercise of this power is not actionable under §2.123

Table 4 shows a summary of the main points which emerge from the three CRS cases discussed above regarding essential facilities.

<table>
<thead>
<tr>
<th>Case</th>
<th>Main Essential Facilities Points</th>
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<tbody>
<tr>
<td>United Airlines v Civil Aeronautics Board (1985)</td>
<td>✷ No one firm has conventional market control in the CRS market.</td>
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<td></td>
<td>✷ Some CRS vendors may have substantial market power.</td>
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<td>✷ In some cases CRS market share data understates the power held by airline vendors.</td>
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<td>✷ Denying access to CRSs on equal terms may be illegal monopolisation.</td>
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<td>✷ An airline needs to be listed at least on the largest CRSs. Conversely, the owner of a CRS needs</td>
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<td>to retain as many airlines as possible to maximise the attractiveness of the CRS.</td>
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<td>✷ Under §411 of the Federal Aviation Act, the CAB's rules were not arbitrary or capricious.</td>
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<td>In Re Air Passenger Computer Reservation System Antitrust Litigation (1988)</td>
<td>✷ CRSs are reasonable substitutes for each other.</td>
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<td>✷ Because competing systems exist, new entrants are not forced to enter the market for CRSs in</td>
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<td>order to compete in the downstream market of air transportation.</td>
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<td>✷ It is in the vendors' best interests to include as many airlines as possible on a CRS. Therefore</td>
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<td>they will charge as high a price as possible without losing participating airlines.</td>
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<td></td>
<td>✷ Existing CRSs are constrained by the existence of other CRSs.</td>
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<td>✷ Entry barriers to competing CRSs (with respect to, for example, Sabre agents) do not foreclose</td>
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<td>competition in the CRS market—they merely raise the cost of entry.</td>
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123 Ibid, at 546.
<table>
<thead>
<tr>
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</table>
| *Alaska Airlines Inc. v United Airlines Inc.*  | • The power conferred through control of a CRS falls short of power to eliminate competition in the downstream air transportation market.  
• Airlines would withdraw from a system when the costs of using the system exceeded the revenue conferred on an airline by the system.  
• CRS vendors will not set a fee that was so high that they would drive competition away. This would destroy their own CRS rather than destroying competition.  
• Gaining a monetary advantage at the expense of a rival does not constitute an offence under §2 of the Sherman Act. |

Table 4

Essential Facilities Issues Raised in CRS Cases

Generally, plaintiffs in these cases allege two ways that CRS owners have denied them reasonable access to air travel customers. First, they claim that CRS owners charge excessive booking fees. Second, they allege that CRS vendors have ample opportunity to bias their CRSs in ways explained in part II B.124 However, these allegations are insufficient to establish an essential facilities claim.

Although CRS vendors traditionally have exceptional profit performance, there are several reasons that booking fees should not be deemed exclusionary. The reasonableness of booking fees connotes the closeness with which the fees charged compare to the costs incurred.125 The 1988 Department of Transportation report suggests that vendors recover approximately 80 per cent of subscriber related costs from agents, and charge participating carriers roughly twice their average unit cost per passenger segment booked.126 At the same time the report acknowledges the difficulty in allocating joint costs between these two fees, and

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125United States Department of Transportation, *supra*, note 26, p 91.
126Ibid, p 5.
hence does not conclude whether either are unreasonable.\textsuperscript{127} In addition, CRS subscriber and booking fees are largely uniform among different vendors, suggesting that dominant vendors charge fair market rates for their services.\textsuperscript{128}

The main point that runs through the cases is the Courts' belief that airline owners of CRSs will not price in such a way that competing airlines will not use the CRS. This is because to attract travel agent subscribers, the CRS must be able to offer as many airlines at the highest service level as possible. If CRS services are priced in such a way that airlines are forced not to list, the CRS is unattractive to travel agents and is likely to fail. This emphasises the inter-dependence between CRS operations and the air transportation market. A CRS vendor is likely to charge as high a fee as possible without losing participating airlines.

The claim of significant system bias is much harder to refute. Although United States CRS rules\textsuperscript{129} forbid system bias, more subtle forms of bias are virtually undetectable and may continue to significantly impact on the distribution of revenues within the air transportation industry. The only real factor which may stop a vendor exercising subtle bias is travel agents' demand for non-biased CRSs. However, travel agents are sceptical about the extent of bias in the systems. If a CRS could be shown to be an essential facility, system bias would form the basis of a plaintiff's claim. System bias is one of the major anti-competitive problems of airline control of CRSs.\textsuperscript{130}

\begin{itemize}
\item\textsuperscript{127}Ibid, p 91.
\item\textsuperscript{128}Harvard Law Journal Comment, supra, note 42, p 1936.
\item\textsuperscript{130}See discussion in \textit{ibid}, p 43785-43787.
\end{itemize}
However, as a definitional issue, a CRS cannot be construed as an essential facility. The most important point concerning essential facilities and CRSs was raised in *Alaska*. The Court correctly observed that the power a single CRS owner gains from control of a system does not give it the power to eliminate competition in the downstream market for air transportation services. This fact means that the existence (or non existence) of a single system is not essential to maintain competition in the air transportation market. If a single owner unilaterally charges an excessively high price, participating airlines would simply withdraw and the CRS would be useless. Vendors in the CRS market are sufficiently constrained by the existence of competing systems. The Court in *Alaska* was correct in limiting the reach of the essential facilities doctrine by using *MCI, Otter Tail* and *Olympia* as authorities.131

Yet the point that market share data understates the power held by airline vendors is valid. In some markets, especially when the CRS owner is dominant at a hub, CRS vendors may gain enough power to be characterised as monopolists in the regional market.132 This raises the important issue of market definition. For example, if an airline wishes to compete in the "market" for air transportation services to and from Denver, that airline may have a good case that *Apollo* is an essential facility.133 However, the discussion above on market definition annuls this possibility. So long as the airline at the hub participates in competing CRSs, which they do, other CRSs will be acceptable substitutes.

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131 The Court in *Alaska*, supra, note 110, at 546, was careful to say that reliance on the *Olympia* case does not render the essential facilities doctrine superfluous. Rather, "[w]hen a firm's power to exclude rivals from a facility gives the firm the power to eliminate competition in a market downstream from the facility, and the firm excludes at least some of its competitors, the danger that the firm will monopolize the downstream market is clear. In this circumstance, a finding of monopolization, or at least attempted monopolization, is appropriate, and there is little need to engage in the usual lengthy analysis of factors such as intent".

132 For an example of this see Pt II C, note 49.

133 Denver is a major United hub and more than 50% of bookings in Denver are made using *Apollo*.
There are also wider policy reasons why a finding that a single CRS is an essential facility would be inappropriate. Without a showing that Sabre or Apollo possesses a monopoly, identifying either CRS as an essential facility would set an "unusual and drastic precedent". Such a finding would ignore the fact that CRSs were developed by single firms rather than by a joint venture as in Terminal Railroad or Associated Press. CRSs are the result of risky investment, and although the firms who developed CRSs were protected by regulation, they should still be allowed to reap rewards for their innovation. However, they should not be allowed to use their innovation anti-competitively. Additionally, a finding that a CRS vendor's booking fees were unreasonable would invalidate that CRS's entire pricing structure. This would compel the Court to dictate CRS booking fees and, in effect, regulate the CRS industry.

3. **Price Fixing**

Under the Sherman Act, "unreasonable" restraints of trade can be proved in two ways:

1. By proof that it has a substantially adverse effect on competition in light of all the circumstances of the case—the rule of reason; or

2. By a conclusive presumption of unreasonableness based on the character of the restraint—the *per se* rule.

The function of price is to allocate resources and production, and since price fixing distorts this market operation, it falls squarely within the second

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135 Terminal Railroad, supra, note 65.


category. But not all agreements to fix price are deemed to be price-fixing. Early cases acknowledged that explicit agreements by competing or independent firms to fix prices are a primary concern of §1 of the Sherman Act. In the *Socony-Vacuum Oil* case, the United States Supreme Court held decisively that horizontal price-fixing is illegal *per se*. This landmark decision is now regarded as the "high-water mark" for price-fixing claims.

Although the *per se* approach forms the basis of price-fixing claims in the United States, contemporary developments indicate a willingness on the part of courts to depart from the *per se* rule in certain circumstances. The leading case is *Broadcast Music* where the Supreme Court found that:

"[n]ot all arrangements among actual or potential competitors that have an impact on price are *per se* violations of the Sherman Act or even unreasonable restraints."

Before an arrangement to fix price is *per se* illegal, it must be characterised as price-fixing. Price-fixing involves a naked restraint—a restrictive agreement without redeeming aspects. However, some agreements to fix price may be given latitude by courts in view of their ability to yield benefits. *Broadcast Music* is important because it shows that the Supreme Court was willing to consider that firms may horizontally fix price for pro-competitive purposes. In the few circumstances that pro-competitive benefits are arguable, the conduct would not

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141 *United States v Socony-Vacuum Oil Co.*, (1940) 310 U.S. 150.


144 *Ibid*, at 23.

145 See: Hampton, Lindsay F. "Aspects of the Commerce Act 1986". In Farrar and Russell (eds). *Butterworths Commercial Law in New Zealand, Second Edition*. Wellington: Butterworths. p 719. In a more recent case, the Supreme Court allowed the use of the rule of reason for agreements to fix prices because sometimes "horizontal restraints on competition are essential if the product is to be available at all". *National Collegiate Athletic Association (NCAA) v Board of Regents*, (1984) 468 U.S. 85.
be characterised as price-fixing under the *per se* rule. Put succinctly, unless an overriding need is fulfilled by an arrangement to fix price (for example, efficiency) the arrangement should be condemned.146

A comparison of *Broadcast Music* with another United States case illustrates this characterisation process. In *Broadcast Music* the Court engaged in a preliminary inquiry to determine whether the *per se* rule was applicable. However, because the "quick look" showed that an agreement on price was necessary if the product in question was to be marketed at all, the Court decided the *per se* rule should not apply.147 Conversely, in *Catalano, Inc v Target Sales, Inc.*,148 the "quick look" demonstrated that the restriction was unnecessary for any productive integration—it was the kind of restraint that the *per se* rule was meant to condemn.149

The most famous airline price-fixing case involved a telephone conversation between the chief executives of Braniff and American Airlines.150 American Airlines sought an agreement to raise prices 20 percent on transportation to various cities from Dallas/Fort Worth. Since the Braniff chief executive officer rejected the proposal, the District Court held there was no conspiracy to monopolise. However, Fifth Circuit Court of Appeals found that American Airlines' actions constituted attempted monopolisation because had Braniff

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146 Gelhorn, *supra*, note 139, p 175. Gelhorn provides an excellent discussion regarding the increasing importance of rule of reason analysis in price fixing agreements, *ibid*, pp 186-196.
accepted the proposal, the two airlines would have been in a position of joint monopoly.\footnote{United States v American Airlines, Inc., et al., (1984) 743 F.2d 1114.}

CRSs were recently examined in the context of price-fixing in Re Domestic Air Transportation Antitrust Litigation.\footnote{Re Domestic Air Transportation Antitrust Litigation, 1993-1 Trade Cases ¶70,165.} The plaintiffs brought a class action alleging that the defendants, beginning at least as early as January 1, 1988 conspired to fix the prices of passenger air transportation.\footnote{Ibid, at 69,758.} The defendants were American Airlines, Continental, Delta, Midway, Northwest, Pan American, Trans World, United, US Air and Airline Tariff Publications Inc. (ATPCO).\footnote{Subsequent to the institution of the litigation, Pan Am, Continental, Midway and TWA all sought protection from bankruptcy courts. Midway and Pan Am no longer operate.} The allegation was that the airline defendants had an agreement or understanding not to engage in price competition with any other defendant airline on routes to or from all the defendants' hub airports. The defendants allegedly conducted their pricing conspiracy through the Airline Tariff Publishing Company's (ATPCO) computerised fare system, to which each defendant airline subscribed.\footnote{Pengilley, Warren. (1993). "The United States Class Action Airlines Settlement: Some Possible Lessons For Class Actions and Antitrust in Australia". Unpublished Manuscript, 14p. p 4.}

Specifically, the plaintiffs alleged that the airline defendants used the ATPCO system to exchange current and future price information, signal price changes and solicit agreement to those changes.\footnote{Re Domestic Air Transportation Antitrust Litigation, supra, note 152, at 69,759.} They claimed that each airline sent information regarding their prospective fare changes to ATPCO. Those prices and other information were integrated into the ATPCO system and made available to the defendant airlines. Plaintiffs contend that when a proposed fare increase, effective at a future date, appeared in the system, it constituted an offer to the
other airlines to agree to the price level proposed. Under the agreement, if other airlines did not "accept" the offer and match the increase, the proposing airline would pull the increase from the system. The airlines allegedly accepted the offer by entering a fare into the ATPCO system that matched the offer in amount and effective date. In addition, plaintiffs alleged that other price signalling practices facilitated a conspiracy to fix prices.\textsuperscript{157}

This case provides an example of the difficulties plaintiffs may have in proving the existence of a conspiracy to satisfy §1 of the Sherman Act. The defendants argued strongly that the plaintiffs had no direct evidence of any price-fixing activities. However, in a series of drawn out hearings, the Court did not rule on the price-fixing allegations. It made some useful comments regarding the likelihood of the success of the plaintiffs' claims on their merits.\textsuperscript{158} Specifically, the Court made the following observations:

(1) To prove the price-fixing alleged, plaintiffs would have had to establish that defendants in their use of ATPCO had a conscious commitment or common design or understanding to achieve an unlawful objective, here, to fix prices.\textsuperscript{159}

(2) Proof of an exchange of price data among competitors was not sufficient because such communication doesn't necessarily have an anti-competitive effect and can, in certain circumstances, increase economic efficiency and make markets more competitive. Mere exchanges of information are not \textit{per se} illegal.\textsuperscript{160}

(3) The Supreme Court has limited the circumstances where circumstantial evidence can be used to prove a conspiracy. Conduct which is as

\textsuperscript{157} Ib. id.

\textsuperscript{158} The antitrust claims in this case did not get as far as summary judgment. The parties agreed that the class of plaintiffs was in the order of between twelve and fifty million people. The parties negotiated a settlement and sought the Court's approval. The Court was explicit in noting that by authorising the settlement, it did not establish antitrust liability on the defendants. It said at 69,757: "At the onset, the Court emphasizes that the settlement does not establish the price fixing liability of participants in the already beleaguered airline industry and it is unrealistic to expect a recovery that is equivalent of a victory by plaintiffs at trial. Rather, the settlement of this action represents a reasonable alternative to a protracted litigation in which the Court finds plaintiffs possess a slim chance of recovery."\textsuperscript{162}

\textsuperscript{159} Todorow v DCH Healthcare Authority (1991), 921 F.2d 1438 (11th Cir.), at 1455/6.

consistent with permissible conduct as with an illegal conspiracy does not, standing alone, support an inference of antitrust conspiracy.  

(4) Advance announcement of prices, without more, is not per se unlawful. Price leadership and other activities that have the effect of creating uniform or parallel pricing within an industry have not been found to be per se illegal. The Court in Sugar Institute noted that arrangements merely to circulate or relay announcements on prices and terms were permissible.

(5) "Conscious parallelism", of itself, does not prove the existence of a conspiracy unless plaintiffs can demonstrate that the actors are economically inter-dependent and that, absent an assumption of conspiracy, each participant would be considered to be acting contrary to its self interests.

(6) The Court may consider "plus factors" to infer conspiracy. Plus factors are activities, when viewed as a whole or as compound circumstantial evidence, make the inference of conspiracy permissible. Plus factors may include price parallelism, product uniformity, exchange of price information, and opportunities to meet to form anti-competitive policies.

Consequently, the Court doubted the plaintiffs' ability to prove a case of price-fixing. Judge Shoob said:

"The determination of whether or not the actions complained of by plaintiffs in this action rise to a violation of §1 of the Sherman Antitrust Act is subject to an intense analysis of numerous factors, the existence or nonexistence of any of which could result in a finding for defendants. Plaintiffs admit that it would be difficult to succeed on the merits of their claim. ... The Court agrees with defendants that there are many compelling legitimate business purposes for their actions which may prove that the matching of fares merely amounts to conscious parallelism. An airline that initiates a fare increase with hopes that its competitors will match it may be acting in full compliance with the law. ... [T]here has been no meaningful argument ... that defendants' exchange of future price information was motivated by anything other than independent pricing decisions".

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163 Ibid, 580/1.
165 Ibid, at 525/6.
The question to be addressed with respect to price-fixing using CRSs is whether the electronic exchange of information by airlines—in particular, advance announcements of price increases—is a practice that facilitates an electronic negotiating process, resulting in an illegal agreement on fares.¹⁶⁶ The crucial legal test is whether the defendants "had a conscious commitment to a common scheme designed to achieve an unlawful objective."¹⁶⁷ Consistent with complete case analysis, the special conditions of the airline industry must be discussed to address this question.

ATPCO serves the United States airline industry as a central clearing house to collect, organise, and disseminate airline fares electronically.¹⁶⁸ ATPCO's significance should not be underestimated. More than 170,000 fare changes are published daily through ATPCO. CRS vendors receive and disseminate information collected by ATPCO on a daily basis.¹⁶⁹ Because airlines wish to avoid customer antagonisation through surprise fare increases, most tend to provide advance notice through ATPCO. Antitrust attention was directed at this practice when it was discovered that the fare increases were typically only adopted if other carriers announced similar intentions.

Game theory may provide valuable insights to parallel pricing in situations such as this.¹⁷⁰ In concentrated markets, an individual firm's conduct directly affects demand for its rivals' goods. This inter-dependence means that a firm's


¹⁶⁸ Cooper, supra, note 166, p 549.

¹⁶⁹ ibid.

competitive decisions are based largely on the likely reactions of its rivals.\textsuperscript{171} For this reason, courts have refused to impose liability for conscious parallelism.\textsuperscript{172} The airlines' practice of waiting for other airlines to electronically "agree" to prices may increase antitrust concerns in this area. Nevertheless, there are a number of reasons why the ATPCO system should not be held to constitute price-fixing. The main reason for disclosing future price information is that airlines must make available future price information so as to avoid disgruntled customers and travel agents. Since most customers book well in advance of their travel date, they do not expect fares to change in the meantime. Future price information allows travel agents to advise clients of impending fare increases so they seek the lowest fare.\textsuperscript{173}

But, is it collusion when an airline retracts a fare because its competitors did not electronically match it? Certainly not. The retraction of a higher price is the exercise of sound business judgment.\textsuperscript{174} If the first airline went ahead with its price increase, it would lose business to its competitors. Assume a different scenario. Airline A makes public a price increase. Instead of agreeing to the price increase, airline B makes information available that it is going to raise prices by a smaller amount. Airline A then reduces its price increase to match that of its rival. Is this collusion? The key here is that each airline is uncertain when it announces its fare information whether competitors will follow.\textsuperscript{175} This same process would happen in the absence of the price sharing technology. Firms in a relatively concentrated market will always play their prices off against each other until some

\textsuperscript{171} Ibid, p 116.
\textsuperscript{172} For example: \textit{Theatre Enterprises, Inc. v Paramount Film Distribution Corp.}, (1954) 346 U.S. 537, at 541.
\textsuperscript{173} Cooper, supra, note 166, p 552.
\textsuperscript{174} Ibid, p 553.
\textsuperscript{175} Ibid.
kind of "equilibrium" is reached. Additionally, it is useful to examine the competitive effect of the operation of ATPCO. Cooper claims that nothing in the airline industry suggests collusion.\textsuperscript{176} His assertion is supported by the fact that real prices have dropped,\textsuperscript{177} a number of airlines have failed, and the industry continues to make massive losses.\textsuperscript{178}

Ultimately, in order to decide whether a situation such as ATPCO should be condemned, the court must distinguish between unilateral and concerted conduct. If an agreement is unnecessary for firms to reach co-ordination on price, it would be irrational for firms to agree.\textsuperscript{179} Although price changes in the airline industry are largely uniform, an agreement is not necessary to effect these changes. The structure of the industry makes it highly likely that price increases or decreases will be mirrored by competitors eventually. The industry practice of informing consumers and travel agents of future price changes has the inevitable result of allowing competitors to hear each other's future price information. Upon hearing future price information, airlines jog for position with regard to price before the prices come into effect. Consequently, in the absence of other evidence,\textsuperscript{180}

\begin{itemize}
\item \textsuperscript{176}Ibid, p 554.
\item \textsuperscript{177}A DOT study shows that between 1981 and 1991, real industry fares dropped 28 percent. Remarks of the (former) Secretary of Transportation Samuel K. Skinner, Jan 23, 1992.
\item \textsuperscript{180}The Supreme Court has developed a series of "plus factors". These, combined with parallel pricing, may infer an agreement. Baker, ibid, p176/7, lists plus factors as follows: a. proof that the rivals had the opportunity for direct communication, or that they in fact communicated directly; b. evidence of anti-competitive intent behind the parallel conduct; c. behaviour difficult to imagine as arising in the absence of detailed communication, because it appears arbitrary or unusually complex; or d. behaviour difficult to understand as rational in the absence of an agreement, including the absence of a legitimate justification for the practice.
\end{itemize}
parallel pricing through CRSs in the airline industry should be treated as a series of rational unilateral business decisions.

4. Conclusions

Excessive focus on market definition in CRS cases is unnecessary. The all or nothing approach to market definition may cause errors in subsequent antitrust analysis. Instead of looking for complete substitutability, it is better for antitrust analysis to consider all the competitive forces which impinge on a firm's commercial activities. Accordingly, most CRS cases do not require stringent market definition. For instance, there is strong argument that access to travel agents which subscribe to a particular CRS is the relevant product market. However this is too narrow because control of a single CRS does not have the effect of eliminating competition from the market for the provision of CRS services. It would be imprudent to set a hard-and-fast rule regarding the relevant market in CRS cases. Instead, the facts of the case should determine the type of analysis. Then market definition may form a small part of a wider, consolidated antitrust examination.

Instead of narrowing the relevant market, courts should analyse the defendant's behaviour to see if it has tried to create a market of its own—for instance, by raising rivals' costs or entry barriers. The Court in *Air Passenger 1988* correctly focused its attention on entry barriers. CRS vendors have ample opportunity to increase rivals' costs or entry barriers through instruments such as subscriber contracts or systems bias. By generating incremental revenues through system bias, CRS owners can reduce their own unit costs of providing airline service
while raising the costs of competing carriers.\textsuperscript{181} Although the CAB's rules outlaw
the more overt forms of bias, there is still considerable scope for airline vendors to
engage in more subtle forms of bias.\textsuperscript{182}

Traditional market power allegations in the CRS industry have failed because
CRS vendors do not hold monopoly power sufficient to invoke §2—they hold
exclusionary market power.\textsuperscript{183} For example, incumbent firms are able to raise the
cost of entry to the CRS industry and also do their best to raise the costs for their
rivals in the air transportation industry.

CRS vendors have raised a number of defences to essential facilities claims
brought by competitors. The major aspect of essential facilities claims in this
context is that no single CRS possesses the power to eliminate competition in the
downstream market for air transportation. This limiting principle to the essential
facilities doctrine articulated in Alaska Airlines\textsuperscript{184} relies on MCI,\textsuperscript{185} Otter Tail,\textsuperscript{186}
and Olympia.\textsuperscript{187} The definition of an essential facility limited by these cases
precludes a finding that CRSs fall within the doctrine.

\textsuperscript{181} Hawk, Barry E. (1989). "Airline Deregulation After Ten Years: the Need for Vigorous Antitrust Enforcement and

\textsuperscript{182} For example connecting point, database, and architectural bias or the failure to allow fast seat availability. Posner
provides the following example in United, supra, note 89, at 1110: "[A]n airline might for example impose a
penalty in its computerized reservation system of 30 minutes on a competitor's flights. Suppose (to take a
hypothetical case) United had a nonstop leaving Denver for New York at 12:25 p.m. and Frontier had an identical
flight leaving at noon. If a customer booked a travel agent who had United's computerized reservation system and
said he wanted a flight from Denver to New York leaving around noon, and the travel agent punched this into the
computer, the computer would display United's flight first, ahead of Frontier's. The 30 minute penalty would have
put Frontier's flight in second place as if it really left after rather than before United's flight.

\textsuperscript{183} The distinction between traditional monopoly power and exclusionary market power is addressed in the next chapter.

\textsuperscript{184} Alaska Airlines, supra, note 110.

\textsuperscript{185} MCI Communications, supra, note 58.

\textsuperscript{186} Otter Tail, supra, note 112.

\textsuperscript{187} Olympia, supra, note 109.
When considering airline price-fixing claims using CRSs, a court should consider the nature of competition in the airline industry. Because airline customers are very price sensitive, any price change by an airline (particularly a reduction) is likely to prompt a similar reaction from competitors. To invoke the *per se* rule in price-fixing allegations, courts have made clear what factors must be taken into account. The airlines who share price information through ATPCO have a compelling number of legitimate business reasons for doing so which prevents a *per se* finding of price-fixing. In addition, conscious parallelism in pricing is insufficient to prove price-fixing. The nature of the airline market makes parallel prices a competitive reality. Consequently, in the absence of evidence regarding a conspiracy, price-fixing claims should be rejected.

The complexities of airline-vendor and vendor-travel agent relationships have confused many plaintiffs attempting to bring actions under §2. Because the threshold for monopolisation or attempted monopolisation under the Sherman Act is very high and since there are a number of competitors in the CRS industry, claims have failed. Rather than relying on traditional antitrust doctrines, plaintiffs in these cases must seek the court's dependence on new theories of exclusionary behaviour. Acceptance of new theories regarding anti-competitive exclusion would underscore plaintiffs' claims. Ultimately, courts must be willing to lower the extremely high Sherman Act thresholds for proving antitrust liability. It is clear that there is anti-competitive conduct exercised by the major vendors in the CRS industry. As part III C shows, there are a number of new developments which could provide the theoretical basis for renewed antitrust attacks.
C

New Directions in Antitrust

It seems obvious to many plaintiffs in CRS cases that vendors engage in a significant amount of anti-competitive conduct. However, to date none have been able to base their claims on theoretical reasoning solid enough to satisfy a court. The use of traditional antitrust attacks on CRSs has made little progress because although most CRS markets are concentrated, there are at least four main competitors who appear to compete vigorously or could enter if a profitable opportunity arose. Similarly, none of the vendors' airline owners come close to monopoly power in the air transportation market. The theories presented in this chapter demonstrate alternative means by which plaintiffs may be able to persuade the courts of the anti-competitive consequences of many CRS vendor practices.

The theories discussed in this chapter are theories of exclusionary behaviour, one of the most controversial areas of antitrust law and economics. Many Chicagoan arguments note that much aggressive competitive conduct which is beneficial to competitors is suppressed because of fear that antitrust enforcers will label it as anti-competitive exclusionary behaviour. These criticisms have resulted in many courts being lenient on exclusion claims.


The three widely accepted offences under §2 of the Sherman Act—monopolisation, attempted monopolisation and conspiracy to monopolise—all require a full appreciation of the concept of monopoly power. The terms "market power" and "monopoly power" are often used interchangeably. In fact many authors suggest that the terms refer to identical concepts. Nevertheless, some United States courts and commentators have opted to separate the definitions.

Hay claims that the most widely accepted definition of market power is found in the 1984 DOJ Merger Guidelines. The Guidelines define market power as "the ability of one or more firms to profitably maintain prices above the competitive levels for a significant period of time". Although this definition of market power has been accepted by the Supreme Court, the definition of monopoly power from the Du Pont case is often cited with approval in §2 cases. In Du Pont, the Supreme Court held that monopoly power is "the power to control prices or exclude competition". In reality, there may be little difference; however, those who prefer a separate definition, define monopoly power as "a high degree of market power".

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3Constantine, Lloyd. (1992). "Introduction to The Cutting Edge of Antitrust: Market Power". Antitrust Law Journal, 60(3): pp 799-806. At p 799 Constantine states: "The touchstone of an offense under Section 2 of the Sherman Act has always been a conspiracy or attempt to monopolize or the willful acquisition or maintenance of monopoly power".


6The Supreme Court accepted this definition of market power in NCAA v Board of Regents of University of Oklahoma, (1984) 468 U.S. 85 at 109.


8See for example: Landes, William; Posner, Richard. (1981). "Market Power in Antitrust Cases", Harvard Law Review, 94: p 937. See also: Areeda, Phillip, and Turner, Donald, (1978). Antitrust Law, Boston: Little Brown. Contrary to this approach, Krattenmaker et al, supra, note 4, p 247, suggest that the Supreme Court's language in NCAA and Du Pont requires a higher burden of proof to establish market power than to establish monopoly power. This is because proof of a defendant's ability to exclude competition (Du Pont) would not be sufficient to satisfy the NCAA market power standard.
Some authors claim that the wording of the *Du Pont* decision creates two tests for monopoly power. But the *Du Pont* formulation recognises that the fundamental concept underlying the notion of market power or monopoly power is a firm's ability to increase profits and to harm consumers by charging prices above competitive levels. A firm may achieve this in two ways—it may restrict its own output, or it may engage in behaviour which forces its competitors to restrict their output. The second approach to gaining power over price requires that a firm or group of firms excludes competition. The ability of a firm or group of firms to exclude competition is known as exclusionary market power.

The distinction between controlling price and excluding competition articulated in *Du Pont* is of fundamental importance to antitrust law. Krattenmaker, Lande and Salop suggest that courts should dispense with the market power/monopoly power distinction and focus on distinguishing clearly between the two alternative and independent methods of achieving anti-competitive economic power. These two methods correspond to the *Du Pont* formulation—achieving supra-competitive prices by exercising power to control prices or power to exclude competition. Proof of either of these should suffice.

Exclusionary market power theories pose legitimate challenges to CRS vendors. First, this chapter looks at the theory of monopoly leveraging as it has

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11 Krattenmaker et al., *supra*, note 4, p 249, refer to exclusionary market power as "Bainian" market power. Conversely, they refer to a firm's ability to charge supra-competitive prices by restricting its own output as "Stiglerian" market power.

12 Krattenmaker et al., *supra*, note 4.


14 *Ibid*. 


been analysed in several CRS cases. This discussion shows that in these cases, particularly the Ninth Circuit's decision in *Alaska*, the courts incorrectly assessed the theory. Monopoly leveraging is then revisited with reference to "installed base opportunism". The chapter then examines the practice of raising rivals' costs through methods such as screen bias or restrictive contracts. Finally, the chapter focuses on CRS contracts in light of the Aghion/Bolton theory of contractual penalties.

1. Monopoly Leveraging

The failure of essential facilities claims in some CRS cases has led plaintiffs to propose the broader argument of monopoly leveraging. Leveraging refers to any conduct, like that first analysed in *Griffith*, where a dominant firm uses its monopoly power in one market to gain a competitive advantage in an adjacent, related market. Leveraging may also refer to leveraging power from one product to another. Sullivan and Jones identify the common characteristics of leveraging tactics: ". . . first, all are efforts to maximise monopoly returns (they are exploitative); second, all impede the competitive process in ways that straightforward monopoly pricing does not (they are restrictive); third, the restrictive impact of the conduct is felt at a point removed from the source of power". Consequently, a successful claim of monopoly leveraging requires

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16 *United States v Griffith*, 334 U.S. 100. In *Griffith* the Court refused to allow a monopolist to utilise power in one market to affect outcomes in another market where it was involved. *Griffith* owned 85 picture theatres, some in cities where competition constrained its behaviour and some in cities where it was the only theatre. In dealing with distributors, *Griffith* bargained on behalf of the chain as a unit to obtain first run clearance in competitive towns which would not have been available but for its monopoly position in the towns where there was no competition.


19 Ibid.
proof of (1) monopoly power in a market; (2) use of that power to gain a competitive advantage in another market; and (3) distortion of competition or antitrust injury in the leveraged market. Recall that one of the principal differences between essential facilities and monopoly leveraging is that essential facilities inquiry relaxes the conduct requirement, whereas a successful monopoly leveraging claim requires that there be some "unwarranted" competitive advantage in the target-leverage market. The key to distinguishing unlawful monopoly leveraging from lawful competitive advantage is intent.

Chicago School theorists are critical of cases such as Griffith where courts limit the use of a firm's monopoly power using the leveraging argument. Their criticisms fall under two general categories. First, under the "fixed sum argument", Chicagoans claim that if the existing degree of monopoly power was legally obtained, monopoly profits deriving therefrom are also legal. This argument is extended to say that since the extent of monopoly power is fixed, supranormal profits will be gained either in this market or in any other markets. However, the total amount of restriction that the monopolist will profitably be able to impose is fixed regardless of what practice is used. Second, Chicagoans

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21See for example Berkley Photo, Inc. v Eastman Kodak Co., (1979) 603 F.2d 263 (2d Cir.). The Court required that some "unwarranted" competitive advantage be obtained through the exportation of the power to another market.

22Key Enterprises of Delaware, Inc. v Venice Hospital, (1990) 919 F.2d 1550 (11th Cir.) at 1567/8.

23Sullivan and Jones, supra, note 18, p 172/3, provide an excellent refutation of Chicago School arguments regarding the Griffith case.


25Ibid, p 518. Kaplow quotes Posner's argument as an example of Chicagoan reasoning: "A [fatal] weakness of the leverage theory is its inability to explain why a firm with a monopoly of one product would want to monopolize complementary products as well. It may seem obvious that two monopolies are better than one, but since the products are by hypothesis used in conjunction with one another . . . it is not obvious at all. If the price of the tied product is higher than the purchaser would have had to pay in the open market, the difference will represent an increase in the price of the final product or service to him, and he will demand less of it, and will therefore buy less of the tying product. To illustrate, let a purchaser of data processing be willing to pay up to $1 per unit of computation, requiring the use of one second of machine time and ten punch cards each of which costs 1¢ to produce. The computer monopolist can rent the computer for 90¢ a second and allow the user to buy cards on the open market for
draw a distinction between profit maximisation and monopoly extension. Practices which maximise profits are deemed legitimate on the ground that any challenge to such practices would be a challenge to existing monopoly power and thus the attack should be directed at the monopoly itself. If the monopoly is legal, then profit maximisation is permissible. Conversely, monopoly extension is seen as undesirable but Chicagoans claim that it is impossible because of the fixed sum argument.

The first Chicagoan argument, regarding the fixed sum of monopoly power, assumes that firms dealing or competing with the monopolist have the same information as the monopolist and therefore the monopolist can not pick off its competitors/customers. This situation is highly unlikely in most instances of leveraging. In more realistic market scenarios, firms dealing with the monopolist probably do not know what the monopolist knows. In this situation, leveraging may well increase aggregate monopoly returns. Therefore the monopolist is encouraged to lever its monopoly power to adjacent or related markets, thereby increasing returns.

The distinction between what constitutes practices which maximise profit and practices which are aimed at monopoly extension is arbitrary. As Kaplow notes,
both practices are initially motivated by the firm's desire to maximise its profits.\textsuperscript{29} However, as part III A illustrates, many practices which increase profits without extending monopoly decrease consumer welfare and should not be permitted. Because monopoly extension and profit maximisation may have similar effects on consumer welfare, Kaplow suggests that the two categories are a Chicago School attempt to distinguish between short-run and long-run (or static and dynamic) models.\textsuperscript{30} A relevant economic distinction must rely on grounds other than an evaluation of the net welfare effects in each instance.\textsuperscript{31} However, such a distinction is unnecessary as it is the total net welfare cost which must be assessed (this encompasses both static and dynamic models). When leverage occurs, the source of power may often be innovation. Such a situation emphasises the importance of considering innovation, or dynamic efficiencies, in the leveraging inquiry.\textsuperscript{32} But as part III A illustrates, innovative efficiencies are impossible to forecast accurately.

Prohibition of leveraging protects innovative efficiencies in three important ways.\textsuperscript{33} First, it preserves competition in markets where firms wish to succeed through innovation. These markets may be either the source-leverage market or the target-leverage market. For example, an airline vendor of a CRS may use supranormal profits gained through leveraging to the air transportation market to protect its dominant position in the market for CRS services. Second, if a firm is not allowed to protect itself using supranormal profits from the target-leverage market (which should not be available if the market is competitive), it must

\textsuperscript{29}Ibid, p 523.
\textsuperscript{30}Ibid.
\textsuperscript{31}Ibid.
\textsuperscript{32}Sullivan and Jones, supra, note 18, p 171.
\textsuperscript{33}Ibid, p 175.
continue to innovate to retain its position in the source-leverage market. Finally, because of opportunities for supranormal profits in the source-leverage market, other firms may be attracted—thereby increasing the incentive for both incumbents and new entrants to innovate.

A common argument for rejecting monopoly leveraging is that by allowing supranormal profits to continue, monopoly firms will spend more on research. However, leveraging becomes possible only after the monopolist has gained its position through innovation or the like. Normally, the leveraging conduct does not increase efficiency in either market involved.\textsuperscript{34} If integration of two markets does yield efficiencies, courts may allow for increases which are socially desirable.\textsuperscript{35} Nonetheless, courts should not insulate a monopolist which extends its power in order to extract monopoly rents from consumers in an apparently competitive market. Sullivan and Jones make the following observation:\textsuperscript{36}

"When a firm leverages power held in one market into a different market, the initial inference ought to be that unreasonable, restrictive and exploitative consequences will result. Competition is being restricted in the second market and the monopolist, by increasing its monopoly return, is in all likelihood exploiting consumers and distorting allocative efficiency to a degree that cannot be justified under the protective rationale for monopoly in the concrete".

One of the most influential recent cases concerning monopoly leveraging is \textit{Berkey Photo v Eastman Kodak Co.}\textsuperscript{37} In this case the Second Circuit struggled with the questions arising when a firm with monopoly power uses that power to gain an advantage in a second market, but the advantage falls short of attempted monopolisation. The District Court, at first instance, awarded Berkey treble damages based on the fact that Kodak engaged in cross leveraging between the

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\textsuperscript{34}Sullivan, supra, note 17, p 1237.
\textsuperscript{35}The Court in Berkey, supra, note 21, specifically said that an integrated business is allowed to gain from its association.
\textsuperscript{36}Sullivan and Jones, supra, note 18, p 174.
\textsuperscript{37}Berkey, supra, note 21.
camera and film markets which enhanced its power in each. Further, it agreed that Kodak leveraged power from the film market to the camera market, giving it an advantage which was independent of the merits of the competing cameras. The Second Circuit reversed, but became the first Court to formally accept monopoly leveraging as a separate §2 offence:

"We tolerate ... monopoly power ... only insofar as necessary to preserve competitive incentives and to be fair to the firm that has attained its position innocently. There is no need to allow the exercise of such power to the detriment of competition, in either the controlled market or any other .... [T]he use of monopoly power attained in one market to gain competitive advantages in another is a violation of Section 2, even if there has not been an attempt to monopolize the second market .... [However,] an integrated business [does not violate the Act merely because] one of its own departments benefits from association [with another]."

This decision has two main consequences. First, a firm could be held liable under §2 through "using its monopoly power in one market to gain a competitive advantage in another, albeit without an attempt to monopolize the second market". Second, so long as it does not exclude others, an integrated firm is entitled to gain from the benefits resulting from its integration. The attitude of the Court in Berkey signified a slight move toward Chicago theory. The Court viewed concentration as almost inevitable. It emphasised the social interest in dominant firm efficiency over the social interest in eroding current dominance. The District Court's decision in Air Passenger 1988 and the Ninth Circuit's

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38 The District Court also accepted Berkey's arguments that because of Kodak's size and market power, it had an obligation to predisclose information about new products.

39 Even though Berkey Photo conceded that there was no dangerous probability that Kodak could monopolise either the camera or the film market.

40 Berkey's monopoly leveraging claim was not rejected because its legal theory was faulty, but rather because Berkey's reasoning was inappropriate. Berkey claimed Kodak had an obligation to predisclose information about a new camera before its introduction. This claim was rejected by the Second Circuit.

41 Berkey, supra, note 21, at 275.

42 Berkey, supra, note 21, at 275. The Second Circuit has since reiterated its opinion in Berkey, providing the constituent elements of a monopoly leveraging claim in Honeywell, supra, note 20. See text accompanying note 20. Additionally, the Sixth Circuit recognised monopoly leveraging as a separate §2 offence in Kerasotes Michigan Theatres, Inc. v National Amusements, Inc. (1988), 854 F.2d 135 (6th Cir.), cert. dismissed, 490 U.S. 1087 (1989).

43 Sullivan, supra, note 17, p 1249.

44 Ibid, p 1250.
decision in Alaska went far beyond Berkey to abandoning traditional concepts of monopoly leveraging.45

As explained in part III B above, the Courts in the Air Passenger 1988 and Alaska decisions rejected the essential facilities argument. In Air Passenger 1988, the District Court agreed that dominant CRSs held market power and they also noted that the defendants had engaged in "egregious" tactics with anti-competitive effects in the air travel market.46 Despite conceding that the systems conferred considerable power to their owners, the District Court said that the power was not sufficient to eliminate competition in the downstream air transportation market. The power hed by the vendor-airlines was not sufficient to constitute monopoly power.

However, the Court did not stop at this point as it should have. It went on to state that it was convinced that "an impermissible use of monopoly power does not encompass benefits reaped in a second market through efficient size, integration, and competitive advantages of a monopoly's broad based activity".47 It considered three main points in its decision regarding monopoly leveraging: (1) the activity complained of must entail an abuse of monopoly power as opposed to some sort of competitive advantages the defendant enjoys; (2) the advantage sought in the second market must be "unwarranted"; and (3) the plaintiff must define "both the market in which monopoly power is allegedly held, and the

46Ibid, p 1254, citing In Re Air Passenger Computer Reservation System Antitrust Litigation, (1988) 694 F Supp 1443 (C.D.Cal.), at 1450. The Court noted that vendor airlines "received substantial revenue from additional airline business they received through biasing the system . . . , and that] each system was biased to different degrees, so that the desirability of the vendor's flights would be artificially inflated".
47Air Passenger 1988, supra, note 46 at 1473.
separate markets in which the leveraging of that power has allegedly taken place".48

Since there was evidence to suggest that the defendants engaged in a significant degree of biasing, the Court was satisfied that significant display bias was dependent on monopoly power.49 Similarly, the Court held that the defendants' acts were unreasonably restrictive of competition because they restricted competition on its merit in the air transportation market.50 Therefore the competitive advantage was unwarranted. There was no question as to the relevant market—it was the national (United States) CRS market and the national air transportation market.

Based on this reasoning, monopoly leveraging was apparent, but the Court held that a claim based on monopoly leveraging was inappropriate because the theory "is inconsistent with the requirements of section 2".51 This reasoning relied on the Supreme Court's decision in Copperweld Corp. v Independence Tube Corp.52 In Copperweld, the Supreme Court said:53

"[t]he conduct of a single firm is governed by section 2 alone and is unlawful only when it threatens actual monopolization. It is not enough that a single firm appears to 'restrain trade' unreasonably, for even a vigorous competitor may leave that impression."

Therefore the Air Passenger Court said that monopoly leveraging theory was inconsistent with Copperweld because a firm may be liable merely upon a

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48Ibid.
49Ibid.
50Ibid at 1474.
51Ibid at 1475.
52Copperweld Corp. v Independence Tube Corp., 467 U.S. 752.
53Ibid at 768.
showing that its conduct was unreasonably restrictive of competition. The District Court viewed such a precedent to be "overly restrictive". The Court was of the opinion that deeming monopoly leveraging a violation of §2 would inhibit vertically integrated firms from vigorously competing in complementary markets.

The *Air Passenger* Court failed to distinguish between conduct which is restrictive or exclusionary, and conduct which is competitive on its merits. The *Aspen* case discussed the subtle difference between vigorous competition and exclusionary behaviour. In *Aspen*, not only did the defendant refuse to deal with the plaintiff, it also engaged in other behaviour which made it very difficult for the plaintiffs to compete. Therefore the Supreme Court was willing to infer liability from the intent of the defendant. With regard to CRSs, vendors certainly have engaged and continue to engage in tactics which go beyond mere "competitive advantage". For example, the use of long restrictive contracts and liquidated damages provisions in these contracts, system bias and other such conduct combine to suggest anti-competitive intent which should be condemned by the courts. The *Air Passenger 1988* Court did not look closely enough at the conduct of the defendants.

Monopoly leveraging was also rejected outright in the Ninth Circuit decision of *Alaska*. This Court rejected *Berkey* because the decision failed to distinguish between distorted and destroyed competition. The Ninth Circuit said:

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54 *Air Passenger 1988*, supra, note 46 at 1474.
55 Ibid at 1475.
57 For example, the defendants embarked on an advertising campaign which implied that the plaintiffs mountain did not exist.
58 *Alaska*, supra, note 15.
"We believe that Berkey Photo misapplied the elements of Section 2 by concluding that a firm violates Section 2 merely by obtaining a competitive advantage in the second market, even in the absence of an attempt to monopolize the leveraged market."

Instead, the Alaska Court believed Berkey's monopoly leveraging doctrine failed to differentiate between efficient monopolies, natural monopolies and monopolies achieved through anti-competitive behaviour. They considered that efficiencies gained by American and United allowed them to leverage their power into the air transportation market because any monopoly power was due to innovative business behaviour—not predatory tactics. This opinion relies heavily on Chicagoan arguments against monopoly leveraging, in particular, the "fixed sum" argument. Two quotes in particular made clear the Court's Chicagoan slant:61

"[m]onopoly leveraging is just one of a number of ways that a monopolist can permissibly benefit from its position".

This stand positively encompasses the theory of the Chicago School and its arguments regarding monopoly leveraging. In addition, the Court relied heavily on the Chicagoan "fixed sum" argument:62

"Both "monopoly leveraging" in an adjacent market, and setting high prices in the original "monopoly" market, represent the cost that we incur when we permit efficient and natural monopolies".

It is unfortunate that the Court considered an airline which is vertically integrated to the CRS industry could be more efficient than an airline which is not. There is absolutely no evidence to suggest that this is the case.63 The product

59 The Court in Berkey, supra, note 21, at 275, said: "That the competition in the leveraged market may not be destroyed but merely distorted does not make it more palatable".
60 Alaska Airlines, supra, note 15, at 547.
61 Ibid at 548.
62 Ibid at 548/9.
63 Although airline ownership of CRSs does create significant economies of scope.
market for air transportation services and the product market for CRS services are completely separate. No sound logic suggests that by owning a distribution channel (that is, a CRS) the cost, or price, of an airline's service will decrease. This is what the Court suggested happens.

Consider an example. Three airlines, A, B and C, compete in a competitive market for air transportation services. All three airlines are around the same size, attracting the same economies of scale. However, airline A owns the only CRS and most travel agents in the geographic market subscribe to that CRS. Since airline A had the skill and innovativeness to develop the CRS, the law allows it to extract supracompetitive profits from the market for CRS services. If airline A uses the CRS to distort competition in the downstream market for air transportation services (for example by biasing), its conduct should be viewed as anti-competitive. Why? Airline A is using its monopoly position in the CRS market to disturb competition on its merits in the air transportation market. That is, travel agents become more likely to book on airline A's flights, not because it is better or offers cheaper services, but because it has used its power over the CRS to influence the booking decision (in ways outlined in part I C). There is nothing to suggest that airline A produces air transportation services more efficiently than the other two airlines. The reason it may be able to offer cheaper flights is not because of enhanced efficiency. It is because the airline can cross-subsidise by extracting supracompetitive profits from the CRS industry. Since airline A is leveraging its power in such a way that distorts competition in an adjacent market yet does not in any way increase efficiency, its conduct should be viewed as anti-competitive.

Chicagoans claim that the amount of monopoly power is fixed, therefore it does not matter from which market supracompetitive profits are derived.
However, even if the fixed sum argument is true, monopoly leveraging still leads to severe long-run distortions in the leveraged market. Taking the example above, suppose the air transportation market is characterised by very tight operating margins, as many commentators say it is. If airline A is allowed to reduce its prices, or raise its rivals costs excessively (using leveraging), it may drive its competitors from the market. This would leave it in a monopoly position, able to extract monopoly profits in not one, but two markets. Chicagoans may claim that there would be no benefit from eliminating all competitors from the air transportation market because now airline A is the only consumer of CRS services. However, the behaviour has two serious implications. First, the ultimate users of CRSs are travel agents. The existence of only one system with complete monopoly power would not be beneficial to them. Second, airline A now has monopoly power in two markets and can gain further monopoly profits from the newly monopolised air transportation market.

The *Alaska* Court failed to decide whether American or United were in fact more efficient operators in the airline industry or if they could simply gain advantages by raising rivals’ costs. It denied the petitions for monopoly leveraging because it wrongly believed that monopoly leveraging is a legitimate method of exploiting innocent monopoly power. However, as the example above shows, the simple fact that airlines are vertically integrated does not make them more efficient. Allowing them to continue leveraging their power to the air transportation market results in distortions to an otherwise competitive market. It

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64 This discussion places emphasis on the fact that a monopolist in one market may gain a competitive advantage in another market by increasing its rivals’ costs. There are a series of “raising rivals’ costs” theories which recognise that an effective anti-competitive strategy is to engage in actions which raise rivals costs. These are discussed in the next section of this chapter (II C 2). See: Scheffman, David T. (1992). “The Application of Raising Rivals’ Costs Theory to Antitrust”. *The Antitrust Bulletin*, 37(1): pp 187-206. See also: Krattenmaker, Thomas; Salop, Steven C. (December 1986). “Anti-competitive Exclusion: Raising Rivals’ Costs To Achieve Power over Price”. *The Yale Law Journal*, 96(3): pp 209-293.
is the Courts' task to address these distortions and in *Alaska* and *Air Passenger*, they failed.

In fact, in both of these cases, the Courts' analyses of monopoly leveraging was unnecessary—neither Court was required to make a ruling on the doctrine. To establish liability under monopoly leveraging theory, plaintiffs must prove the existence of monopoly power in a market. The plaintiffs in both cases failed in this respect. Therefore the Court should have rejected monopoly leveraging theory by pointing to the fact that neither *Sabre* or *Apollo* have monopoly power in the non-collusive CRS market.

Yet this discussion should not be read to discount the theory of monopoly leveraging. In some cases, monopoly leveraging provides a valuable aid to antitrust analysis. Some United States courts to date have been strongly swayed by the Chicagoan fixed sum argument. Consequently, they have held that monopoly leveraging, absent predatory tactics, is a legitimate use of monopoly power. Other commentators suggest that monopoly leveraging theory is superfluous to the Sherman Act because monopolisation, attempt to monopolise and conspiracy to monopolise are already caught. However, a valid claim of monopoly leveraging does not require the defendant to monopolise the target market. It simply requires use of a monopoly position to gain an unwarranted competitive advantage in another market. Therefore central to a monopoly

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leveraging claim is proof of monopoly power in the source market. As discussed above, this was not achieved in the CRS litigation.

Although the Ninth Circuit expressly rejected the theory of monopoly leveraging in *Alaska*, there are several previous decisions which suggest that if unswayed by Chicagoan notions, courts may adopt monopoly leveraging as a fourth offence under the Sherman Act. The decisions of *Berkey* and *Kerasotes* confirm that unlawful monopoly leveraging can be found even where a dangerous probability of successful monopolisation is absent in the second (leveraged) market. In addition, the *Alaska* decision conflicts with several other Ninth Circuit decisions which accepted monopoly leveraging. Recently the Eleventh Circuit implicitly accepted the application of monopoly leveraging in the absence of an attempt to monopolise. Thus the Eleventh Circuit has joined the Second and Sixth Circuits in suggesting "that the last element of the attempt test—a dangerous probability of success—may not have to be proven by the plaintiff under the theory of monopoly leveraging".

In *Alaska* especially, the attempt to apply monopoly leveraging to the airline industry demonstrated the plaintiffs', and the courts' confusion with the doctrine. The defendants were two separate firms with high percentages of the market, yet demonstrated no combination or conspiracy to establish a §1 claim. Instead, the

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67 *Berkey*, supra, note 21.
68 *Kerasotes*, supra, note 42.
70 See for example: *Calin v Washington Energy Co.*, (1986), 791 F.2d 1343; *Syny Enterprises v American Multicinema, Inc.* (1986) 793 F.2d 990 (9th Cir.); *M.A.P. Oil Co., Inc v Texaco, Inc.* (1982) 691 F.2d 1303 (9th Cir.).
71 See *Key Enterprises*, supra, note 22. See *Kay*, supra, note 69, p 19.
73 *Callow*, supra, note 66, p 695.
plaintiffs tried to persuade the Court to consider the *Sabre* and *Apollo* as one entity because of the effect they had on the smaller players in the market.\(^7\) However, they were unable to show how defendants were gaining an advantage other than that the defendants were bigger vertically integrated corporations.\(^5\)

If the theory of monopoly leveraging is embraced by United States courts, as is likely in the era of post-Chicago antitrust, a fundamental inconsistency must be addressed. The inconsistency lies between §2 of the Sherman Act and the theory of monopoly leveraging. Section 2 requires proof of monopolisation, attempted monopolisation, or conspiracy to monopolise, while monopoly leveraging only requires use of monopoly power to obtain an unwarranted competitive advantage. Even under a claim of attempt to monopolise, an unwarranted competitive advantage often falls short of the required threshold.\(^6\) This doctrine is in need of more precise articulation by the Supreme Court.\(^7\)

The courts' difficulty in understanding monopoly leveraging in the CRS litigation appears to arise because instead of conventional anti-competitive behaviour, CRS vendors have the opportunity to raise the costs of their rivals. This requires a different approach by the courts and the plaintiffs in analysing anti-competitive claims.

\(^7\)Ibid, p 710.
\(^5\)Ibid, p 711.
\(^6\)For a claim of attempted monopolisation to succeed, the courts require a dangerous probability that the defendant will attain monopoly power. *Lorain Journal Co v United States*, (1951) 342 U.S. 143, 153-55.
\(^7\)The *Alaska Airlines* appeal to the Supreme Court asked for resolution of the dispute between the United States Circuit courts regarding monopoly leveraging. However, the Supreme Court did not oblige. See Diresta, *supra*, note 65, for a full list of opinions regarding monopoly leveraging.
2. Installed Base Opportunism

The theory of monopoly leveraging outlined above, may be interpreted very differently in the wake of the recent *Kodak* decision. In *Kodak*, a group of independent service organisations (ISOs) brought an action against Eastman Kodak claiming, among other things, that Eastman Kodak had monopolised and attempted to monopolise the aftermarkets for the sale of service and parts of particular equipment. The main legal issue in the case was whether Eastman Kodak possessed market power in a relevant antitrust market. It was agreed that in the equipment market, Eastman Kodak did not have market power—it only sold 23 per cent of high-volume copiers and only 2 per cent of all plain paper copiers.

The case depended on whether the Court was willing to accept the "aftermarket" concept as legally meaningful. The plaintiffs claimed that Eastman Kodak had monopolised their installed base of customers who were locked-in because of their contractual obligations to Kodak. In April 1988, the District Court granted summary judgement for defendant. However, the Ninth Circuit reversed the summary judgement stating that significant questions of fact existed with respect to both the ISOs tying and monopolisation claims. Eastman

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78*Image Technical Services, Inc. v Eastman Kodak Co.*, supra, note 65.


80Eastman Kodak had refused to sell replacement parts for its high-speed photocopi ers and micrographic equipment to owners of Kodak equipment unless the owners agreed not to have their equipment serviced by ISOs. Kodak also refused to sell parts to the ISOs.

81The District Court held that: 1. Kodak's policy was a valid unilateral refusal to deal; 2. No evidence of a conspiracy to restrain trade in the parts market had been adduced; 3. Kodak did not possess monopoly power in the interbrand equipment market; 4. Assuming Kodak had a dominant share of the service market for its own equipment, the ISOs did not come forward with any facts to suggest that Kodak attempted to leverage power in that market to gain competitive advantage in another market; and 5. Kodak's natural monopoly over parts for its equipment imposes no duty to deal with the ISOs. See: Diresta, supra, note 65, p 411/2.
Kodak appealed the Ninth Circuit decision to the Supreme Court which granted certiorari.\textsuperscript{82}

Of particular interest to the CRS context is that Justice Blackmun, writing for the majority, found that the ISOs raised trialable issues of fact concerning whether a single product market could be relevant for a § 2 analysis.\textsuperscript{83} Similarly, in \textit{Air Passenger 1988}, the Court held that there was a material issue as to whether access to \textit{Sabre} automated agents is a relevant market\textsuperscript{a}.\textsuperscript{84} Although no cases to date have analysed monopoly leveraging in the context of \textit{Kodak}, the implications of the decision are clear. The previous section rejects monopoly leveraging theory in the CRS context because in the cases discussed, monopoly power could not be shown. However, if a court was to accept that the presence of an installed base, such as tied in travel agents, was a single product market, CRS vendors would clearly monopolise this market. Monopoly leveraging would then be a valid claim under § 2.

The important finding in \textit{Kodak} was that competition in the durable goods market (for example, the market for the sale of copiers) will not necessarily preclude a supplier from exercising market power in an aftermarket for complementary goods of which it is the sole supplier.\textsuperscript{85} Similarly, competition in the market for the supply of CRS services to travel agents, does not necessarily preclude a CRS vendor from exercising market power in the aftermarket for access to particular travel agents. Particularly significant is that CRS vendors have exercised market power in the past.

\textsuperscript{82}111 S.Ct. 2823 (1991).
\textsuperscript{83}Diresta, supra, note 65, p 21.
\textsuperscript{84}Air Passenger 1988, supra, note 46 at 1461.
\textsuperscript{85}Kattan, supra, note 79, p 1.
On the surface, installed base exploitation by CRS vendors appears feasible. A number of factors are suggested to affect the ability of a firm to exercise market power in a market that is linked to another: the magnitude of switching costs; the extent of the lock-in phenomenon; the relative size of the markets; the ratio of new customers to locked-in customers; the nature of the selling firm; price discrimination; and the quality of information.\textsuperscript{86} Although the CRSs display a number of these characteristics, the triangular structure of the market raises doubt as to whether a vendor can exploit its installed base. For example, if a CRS vendor charges booking fees which are too high, it will lose many participating airlines, making its system unattractive to agents. Instead, a CRS vendor would charge the maximum amount possible without losing participating airlines. Thus the vendor is constrained in two ways. First, it must charge subscription fees in such a way as to attract and retain travel agents. Second, it can not charge booking fees to airlines which would force major airlines to withdraw.

Undoubtedly, installed base opportunism is an area of antitrust which will come under judicial scrutiny in the near future. It has important implications for relevant market determination in traditional monopolisation claims. However, the triangular structure of the CRS industry precludes the use of installed base opportunism as it was used in \textit{Kodak}. In \textit{Kodak}, purchasers of a durable product were exploited by the selling firm because of their reliance on that firm for supporting service and equipment. Conversely, CRS vendors are not exploiting their installed base of customers. Instead, vendors exploit airlines by charging a supra-competitive price to access their installed base of agents. Using \textit{Kodak}, a court may find that access to the agents subscribing to a particular CRS was a

\textsuperscript{86}See: \textit{ibid.}
relevant market. The success of a plaintiff's case would then depend on the willingness of the court to adopt the theory of monopoly leveraging outlined above.

3. Raising Rivals' Costs

While traditional antitrust attacks on CRS vendor market power have failed, one theory which has received little judicial comment is raising rivals' cost theory (RRC). RRC is suggested as an alternative theory for analysing exclusionary behaviour. It provides a robust method for distinguishing competitive from anti-competitive conduct. In this respect, RRC theory is a valuable tool for antitrust analysis.

RRC theory suggests that an effective anti-competitive strategy is for one or a group of firms to partake in conduct which raises the costs of their rivals. RRC is a form of non-price predation used to raise the costs of existing competitors or deter entry to a market. In general, RRC theory was developed to provide a model for examining exclusionary conduct.

RRC strategy works as follows: The predator engages in some conduct which has the effect of increasing the cost of a vital input to its rivals. To remain profitable the rivals reduce their output, which increases the predator's market share. RRC is of relevance to the CRS industry for two reasons. First, through system bias, booking fees and incremental revenues, CRS vendors have the power to directly influence the operating costs of rival airlines. Second, by tying up the

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88 RRC was formally advanced as an alternative theory for analysing exclusionary behaviour by Krattenmaker and Salop, supra, note 64.

market with restrictive subscriber contracts, the costs of entry or operation for CRS competitors are increased.

The inherent danger with RRC, and the greatest concern for antitrust law, is that often the strategies are completely plausible tactics and may be defended as legitimate business practice. Unlike predatory pricing, which requires the predator to initially sell at a loss, with RRC the predator does not suffer any short-term loss. Therefore the success of RRC strategy is not as risky. Further, a successful RRC strategy does not require the complete elimination of rivals from the market. RRC strategies require antitrust scrutiny because they may lead to price increases or price stability when otherwise prices would fall.90

However, like many forms of exclusionary behaviour, RRC which appears anti-competitive may in fact be pro-competitive, and vice-versa. For example, most innovations raise rivals' costs because rivals must invest heavily in research and development to retain their market position. Similarly, effective advertising raises rivals' costs as they must invest in advertising to retain their share of the market. These activities are part of a healthy competitive system. But some conduct falls closer to the borderline. When a firm secures exclusive rights to the lowest cost supplier, it closes this channel of supply off to its competitors, thereby raising their costs. Should this conduct be proscribed? This decision depends on a number of considerations. Scott notes that before imposing liability for raising rivals' costs, a court should adopt a model that distinguishes between normal behaviour, which unobjectionably raises rivals' costs, and behaviour which

90 Ibid, p 5. Scott cites Judge Easterbrook's views in Premier Electrical, supra, note 87, p 5 where he said: "[t]he principal purpose of the antitrust laws is to prevent overcharges to consumers".
competition law should outlaw. The first such model was developed by Krattenmaker and Salop.

Krattenmaker and Salop claim that antitrust lacks a "coherent analytical framework" for analysing exclusionary behaviour. Their basic formulation is stated thus:

"Exclusionary conduct creates or enhances market power where the conduct raises rivals' costs and thereby endows the excluding firm(s) with power over price. Unless that conduct is the only way to achieve overriding efficiency benefits, both consumer welfare and economic efficiency are served by prohibiting the conduct."

A two stage analysis is proposed. The first question asks whether the conduct unavoidably and significantly raises rivals' costs. There should be an unequivocal relationship between the predator's conduct and the rival's cost increase. If the answer to the first question is positive, the analysis continues by asking whether the predator's conduct enables it to exercise market power by raising prices above competitive levels. Therefore the inquiry asks questions first regarding injury to the competitor(s) (or potential competitors), and second regarding injury to competition. A unified standard for assessing exclusion claims is suggested based on the framework shown in figure 16. This model is based on the assumption that virtually all claims of anti-competitive exclusion involve the same basic allegation—that the conduct consists of the creation and purchase of

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91 Scott, supra, note 89, p 8.
92 Krattenmaker and Salop, supra, note 64.
93 Krattenmaker and Salop, supra, note 1, p 74.
95 Scott, supra, note 89, p 9.
96 Krattenmaker and Salop, supra, note 64, p 226.
exclusionary rights. In some cases these rights increase the owner's market power, the power to raise price above the competitive level.

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*Figure 16*

Krattenmaker and Salop's Basic Analytical Framework

In this model, the firms which compete against each other (in the output market) require inputs from the input market. When some firms secure exclusive rights through exclusionary rights contracts (ERCs), they foreclose a channel of supply to other firms in the output market. The crossed line in the diagram represents a closed off source of supply. The excluded rivals will turn to unrestrained suppliers for their inputs, but in some situations, this will not prevent an increase in their costs. Krattenmaker and Salop outline four RRC strategies; bottleneck, foreclosure, cartel ringmaster and Frankenstein monster.

(a) Bottleneck

The bottleneck is similar to the essential facilities problem discussed in part II B. Rivals' costs may be raised in this situation when a group of rivals gain control

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97 Krattenmaker and Salop, *supra*, note 1, p 73. Exclusionary rights are defined as rights which exclude competitors from equal access to significant inputs to their production process.

98 Excluded rivals may be able to receive inputs at discriminatory prices.
over a source of supply, excluding one or several other rivals. Figure 17 shows an originally competitive market where price equals \( W \), given a demand \( D \), and a supply \( S \). After the acquisition, the only source of supply open to the excluded rivals is high cost suppliers represented by \( S' \). Their costs are increased by \( W' - W \) because of foreclosure of the cheaper source of supply. If the acquiring firms have excess capacity, they may sell this also anywhere between \( W \) and \( W' \).

![Figure 17: RRC through Bottleneck](image)

(b) Real Foreclosure

Foreclosure may raise rivals' costs in two ways. The predator may use either a naked exclusionary right or purposely overbuy a vital input. A naked exclusionary right is where the purchaser obtains the right to exclude rivals without any obligations (for example the acquisition of a supplier). In either of these cases, figure 18 shows the competitive price (\( W \)) and quantity (\( R \)) before the exclusionary right is attained. In the case of a naked exclusionary right, the supply to excluded firms is reduced, moving the supply curve to the left.

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100 *Ibid.*
Conversely, overbuying raises rivals' costs because it removes from the market more supply (shift from S to S') than rivals demand (shift from D to D'). In the case of overbuying, a higher price is paid by both the predator and its rivals. This strategy is successful only where the predator has a differing ratio of inputs to its rivals (for example the predator uses the input less intensively) or the rivals' price increases are greater. In both cases price rises to W', and output falls to R'.

![Diagram](image)

**Figure 18**

RRC through Real Foreclosure

(c) **Cartel Ringmaster**

As with real foreclosure, there are two variants to the cartel ringmaster. However, this is a form of collusion rather than foreclosure. One involves price discrimination and the other involves refusal to deal. Effectively, the predator organises the suppliers to form a cartel which decreases supplies to the predator's rivals.

The "price squeeze" is a situation where a firm purchasing a vertical restraint induces a number of its suppliers only to deal with its rivals on discriminatory

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terms. Figure 19 shows the competitive price and quantity at W and R respectively. The use of a purchase agreement removes the purchaser's demand from the market, shifting demand from D to D'. A corresponding drop in supply shifts the supply curve from S to S'. Yet the exclusionary purchase agreement induces suppliers with the remaining industry capacity to reduce output and exercise monopolistic pricing. The naked exclusionary right may involve an outright refusal to deal with no change in the industry supply or demand. Suppliers are induced to form a cartel to exploit the remaining demand. Their inducement is the gain by sharing in the increased profits of the purchaser (ability to price where marginal revenue equals marginal costs).

(d) Frankenstein Monster

In the last RRC strategy, the predator creates an industry structure which has a high probability that remaining unrestrained suppliers will successfully collude in

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102 This technique was employed in Interstate Circuit, Inc v United States (1939) 306 U.S. 208. In this case, movie distributors promised Interstate Circuit that they would effectively raise the costs of rival motion picture theatres.

103 Krattenmaker and Salop, supra, note 64, p 240.
a way similar to the purchase agreement above.\textsuperscript{104} For example, assuming there are entry barriers in a duopoly market, the predator gains an ERC with one supplier, leaving the other as a monopolist for the remaining supply. \textit{Figure 20} shows how the Frankenstein Monster works.

The competitive market has an output $R$ at a price $W$. When the predator's demand is removed from the market through the ERC, the supply also drops accordingly. At the new industry supply and demand, the competitive price and quantity is $W$ and $R'$ respectively. But because the unrestrained suppliers now hold substantially increased market power, they may collude, tacitly or expressly, forcing the market output towards $R''$ and the price towards $W''$.

\begin{figure}[h]
\centering
\includegraphics[width=0.8\textwidth]{frankenstein_monster.png}
\caption{RRC through the Frankenstein Monster}
\end{figure}

A court's initial inquiry should decide whether, based on these four models, the conduct of one or several firms raised the costs of its rival(s). However the fact that a firm's rivals' costs are raised does not mean competition has been harmed. This is where the second part of the Krattenmaker and Salop analysis starts. This

\textsuperscript{104}Ibid.
part of the analysis seeks to show that the predator's conduct enables it to increase market prices above the competitive level. Yet, power over price is not always absolutely necessary to establish liability. A RRC strategy can be very successful without power over price.

The profitability of an RRC strategy requires three conditions:\textsuperscript{105}

1. the predator(s) ability to raise some of its competitors' costs in a manner which raises the cost of marginal \textit{industry} protection;

2. a sufficiently inelastic market demand; and

3. a sufficiently small increase in the predator's average costs as a result of the cost-raising action.

Conditions 1 and 2 are required for the predator's RRC actions to raise the market price. Condition 3 recognises that the predator may incur costs from its actions but this does not necessarily prevent the actions. To illustrate these conditions, consider \textit{figure 21}.

\textbf{Figure 21}

\textit{Simple RRC Theory}

\textsuperscript{105}Scheflin, \textit{supra}, note 64, p 189/90.
The three lines $I_1$, $I_2$, and $M$ represent the average costs of an industry. $I_1$ is a group of firms which is able to produce quantity $Q_1$ at a price $C_1$. Similarly, firm $I_2$ can produce a quantity $Q_2-Q_1$ at a price $C_2$. These two firms are "inframarginal" because they are able to produce below the market price. Firm $M$ will produce the remaining quantity $(Q^*-Q_2)$ at its average cost, which is the same as industry price. If the costs of firm $M$ are increased to $C'_m$, the industry output will reduce to $Q^{**}$. Such a change does not affect the output of firms $I_1$ and $I_2$ because they remain inframarginal. In addition, if costs of either $I_1$ or $I_2$ increase, the market price does not increase unless the costs increase to a higher level than $C_m$. This illustrates the point that increases in industry marginal costs are required to increase the market price. Increased industry cost means that marginal producers will reduce their output while inframarginal producers reap supranormal profits. Condition 2 is needed because even if industry costs rise, if the demand is very elastic, market price will not rise.

Therefore if $I_1$ or $I_2$ can raise industry marginal costs, they have the opportunity to increase their market share because $M$'s output is reduced while the other firms' output remains steady. The difference to predatory pricing is that with RRC, the predator need not reduce its output to increase the market price. In addition, RRC differs from price predation because expansion in the predator's share does not impose costs on the predator which must be recouped in a later period for it to be profitable.

The scenario in figure 3-6 offers the predators three options. First, they could keep output constant and enjoy a higher market price. Second, if possible, they could expand output, to make up for the rivals' decreased output and thus enjoy a

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106 "Inframarginal" means that although the market price is above average costs, the firms still behave competitively.
greater share of the market at the original market price. Finally, they could make up some, but not all, of the rivals’ reduced output and thus increase both profits and market share in a smaller market.\footnote{Scott, supra, note 89 p 3.} Therefore rivals need not be completely excluded from the market for an RRC strategy to be effective.

Applying this example to the interrelationship between the CRS industry and the air transportation industry reveals the potential impact of CRSs. In the market for CRS services, vendors exercise a kind of price squeeze on competing airlines. Similar to the situation in figure 19, vendors supply their service to competing airlines only on discriminatory terms and conditions. For example, excessive bookings fees and system bias. The average costs of the airline industry are increased because non-CRS airlines face additional costs. This causes vendor-airlines to gain a greater share of the market. Figure 22 illustrates this situation.

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure22.png}
\caption{RRC in the Airline Industry}
\end{figure}

\(AC_v\) represents the average costs CRS vendor airlines face. As airline competitors face the additional cost of CRS booking fees, their average costs are
AC_c. Thus at demand D, vendor airlines are inframarginal and non-vendor airlines are marginal. If CRS vendors are allowed to charge excessive booking fees, the average costs of the non-CRS airlines rise to AC'_c. This change reduces the output of competing airlines from (Q*-Q_v) to (Q**-Q_v). Consequently, vendor airlines enjoy a larger market share and have a number of options available to them, as in figure 21.

This example shows how RRC may be used to raise the market price. It can also be used to prevent the market price from falling. For example, a firm threatened by a new innovation could make it difficult for the new entry to reach the market, thereby keeping its market price up. The Blue Cross of Kansas case provides an example of RRC used to maintain market prices. This case involved an insurance company (Blue Cross) which had an agreement with a hospital in Kansas. Upon hearing that the hospital had purchased a competing insurance company, Blue Cross terminated its agreement with the hospital. Blue Cross' reason was that the hospital had integrated vertically. The plaintiffs alleged that the termination of the contract would raise its costs of attracting and processing patients; reduce its revenues; and, by threatening other hospitals considering vertical integration with a similar termination, would deter entry of other efficient vertical arrangements for providing health care and health insurance. The jury found for the plaintiffs because whether or not Blue Cross had the power to increase prices by unilaterally restricting its output, its threatening conduct would prevent prices from falling. Therefore because RRC ultimately leads to a higher market price, or the prevention of lower market prices,
it is a concern for competition law. Indeed, even the most ardent Chicagoans advocate the condemnation of RRC and other forms of predation.

CRS vendors concerned with a new innovation which may lower demand for existing CRS services may engage in RRC conduct to prevent this. For example, an RRC strategy might involve raising the costs of reaching the market for the new or potentially expanding technology or product. CRS vendors maintain market prices by tying up the market through liquidated damages and minimum use clauses. These have the effect of deterring entry to the CRS market and thus preserving demand for their own product.

As mentioned above, a predator can benefit from an RRC strategy even though it does not gain power over price. For example, figure 21 depicts at least three producers. An RRC strategy raises the cost of the M producer(s) and the industry price. As the industry price is now higher, producers I₁ and I₂ now extract increased inframarginal rents. They have no need to alter either their price or output. Indeed, if remaining firms are competitive they will not increase price but will still share in increased profits. Producer M will reduce output because if it produces more than Q*, it will not cover costs. Therefore the profitability of RRC does not generally require that the predator(s) have power over price in the output market. This issue confuses the two step analysis.

111 Scott, supra, note 89, p 5.
112 For example, Bork, Robert, (1978), The Antitrust Paradox: A Policy at War With Itself. New York: Basic Books. Borks asserts at p156: "... by disturbing optimal distribution patterns, one rival can impose costs upon another, that is force the other to accept higher costs ... [the imposition of costs may be a means of predation]."
113 Scheffman, supra, note 64, p 194.
114 CRS contracts are discussed in part II C 2, infra.
115 Scheffman, supra, note 64, p 196.
If a plaintiff proves that an RRC strategy (one of the four models above) caused the predator to gain power over price, a court should impose liability. However, in situations where power over price is not achieved, the court must extend its analysis of the RRC strategy. There are two obvious cases where RRC does not result in power over price. The first is when the effect on rivals' costs is minimal. For example, the cost is not increased much or the input is only a small fraction of total cost. Second, even if cost is increased significantly, the predator may not gain power over price unless most industry producers are marginal.

Although it may be argued that the influence of increased booking fees on the airline industry is minimal, the financial position of many marginal carriers is significantly affected by excessive fees. Because operating margins in the airline industry are very thin, excessive CRS booking fees do have a relevant effect on airline profitability. In addition, most airlines would arguably be characterised as marginal producers.

The predator's power may also be diminished by other competitors who purchase exclusionary rights, unexcluded rivals and potential entrants. Other competitors who have exclusionary rights will, in the absence of collusion, reduce the predator's ability to exercise power over price. Similarly, the costs of unexcluded rivals will not be affected. Absence of entry barriers also means the predator cannot exercise monopoly power over price. If it chose supranormal prices in the short-term, new entry would be attracted, thereby reducing the price

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116 Krattenmaker and Salop, supra, note 64, p 243.
118 Krattenmaker and Salop, supra, note 64, p 243.
back to the competitive level. However, if ERCS significantly raise costs for potential entrants, such rights will raise entry barriers into the market and enhance the power of established firms to raise price.\textsuperscript{119}

Although the vendor-airline's ability to exercise power over price in the airline industry is diminished by other vendor-airlines, courts have recognised that a certain amount of power is gained. In \textit{Air Passenger 1988}, the Court questioned the ability of other CRS vendors to restrain each others' pricing decisions. The Court held:\textsuperscript{120}

\begin{quote}
"[T]here is direct evidence of the defendants' exercise of monopoly power in the CRS market . . . . defendants' price booking fees above marginal cost . . . . [d]efendants' exercise of price discrimination [and] . . . . other CRSs may not constrain \textit{Sabre} since the other CRSs are not substitutes for \textit{Sabre}."
\end{quote}

A fundamental aspect of the Krattenmaker/Salop analysis is their claim that a distinction between market power and monopoly power is unnecessary. The United States Supreme Court defines market power as "the ability to raise price above those that would be charged in a competitive market"\textsuperscript{121} and monopoly power as "the power to control prices or exclude competition".\textsuperscript{122} Instead of this distinction, Krattenmaker and Salop define market and monopoly power as "the ability to raise prices above levels which may be charged in a competitive market".\textsuperscript{123} The monopoly power/market power distinction is unnecessary because a firm may increase price by decreasing output—it may control price (classic market power), or it may increase price by raising rivals' costs, thereby

\textsuperscript{119}\textit{Ibid}, p 246.
\textsuperscript{120}\textit{Air Passenger 1988}, supra, note 46, at 1461-3.
\textsuperscript{123}Krattenmaker, Lande and Salop, supra, note 4, p 248.
causing those rivals to decrease their output (exclusionary market power). Focus on classic market power does not explain RRC behaviour. For example, if a predator is able to keep prices level when otherwise they would fall, classical market power will not exist. However, if this is the case, properly defined consumer welfare will suffer because the predator has control over price, meaning it can skew the total surplus in its favour. In addition to allocative inefficiencies, productive inefficiencies result if the predator retains exclusionary rights which raise the costs of rivals relative to its own. Therefore a successful RRC strategy may result in misallocations of assets both at the production and the consumption levels.

Although vertical restraints have the tendency to cause great inefficiencies, they may also produce cost savings in uncompetitive markets characterised by easy entry. For example, the United States Supreme Court, in Sylvania, adopted the view that vertical restraints can have "redeeming virtues" of helping manufacturers increase interbrand competition by solving free rider problems. As a result, the Court allowed rule of reason consideration of vertical restraints. Some commentators believe the Sylvania decision suggests a trend towards

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124 Scott, supra, note 89, p 13, quoting Krattenmaker, Lande and Salop, supra, note 4, at 248. Salop, Steven C. (1993). "Exclusionary Vertical Restraints Law: Has Economics Mattered?" American Economic Review, 83(2): pp 168-172, p 169, provides the following definition of exclusionary market power: "Exclusionary market power is the ability to raise or maintain prices above the competitive level by conduct that raises the cost or excludes competitors and thereby induces those rivals to restrict their output".

125 Scott, supra, note 89, p 13.


127 Ibid.

128 Krattenmaker and Salop, supra, note 64, p 277.


130 Salop, supra, note 124, p 168.

131 Ibid.
increasing reliance on economics and an acceptance of the efficiency defence in certain forms of vertical restraints.\textsuperscript{132}

Although Krattenmaker and Salop analyse the possibility of an efficiencies defence, they come to no final conclusion. So, once a plaintiff has established that its costs have risen due to an RRC strategy adopted by a firm which now holds power over price, should the strategy be allowed if it produces efficiencies? In looking at this question, a court must analyse both short-run and long-run perspectives. Nevertheless, efficiency must not be allowed to defend an RRC strategy which is patently anti-competitive. Since the CRS market is not characterised by easy entry, vertical restraints therein have few, if any, redeeming qualities.

Several commentators suggest a court should not condemn a predator if the predator shows overriding efficiency benefits.\textsuperscript{133} Scheffman goes as far to say that the critical component in evaluating an RRC situation is not whether rivals are injured, but whether or not the action taken is efficiency enhancing. This extends the Krattenmaker/Salop analysis by allowing an efficiency defence to be considered. In allowing conduct which can be characterised as RRC, the question a court must address is: does the conduct generate any offsetting efficiency benefits or cost savings which can only be achieved by permitting the exclusionary practice?\textsuperscript{134}

RRC situations provide proof that the exercise of market power does not require a firm to restrict its own output in order to raise price. This is unnecessary

\textsuperscript{132}\textit{Ibid.}

\textsuperscript{133}For example Scott, supra, note 89, p 14; and Scheffman, supra, note 64, p 205/6.

\textsuperscript{134}Scott supra, note 89, p 14.
if it can engage in behaviour which forces other firms to reduce their output. In the CRS context, when a vendor engages in system bias, it raises its competitors' costs of attracting passengers. This may result in reduced market share and decreased competition in the market for air transportation.\textsuperscript{135} This occurs even though the CRS vendor does not hold market power in the air transportation industry. Instead, it uses its power in the CRS industry to raise the costs of its competitors in the air transportation industry.

Under RRC theory, a finding that system bias is anti-competitive would require proof that dominant CRS vendors have the ability to raise the prices of their rivals in the provision of air transportation services. It is clear from the discussion in Part II that this is so. CRS ownership confers substantial financial and non-financial benefits to their owners.\textsuperscript{136} Tight margins in the air transportation industry unquestionably force biassed airlines to reduce output and allow vendor airlines to extract inframarginal rents. In addition, booking fees should be considered unfairly exclusionary if the fees charged are not reasonably related to cost but instead reflect the use of market power which injures competition.\textsuperscript{137} Indeed, the 1988 DOT report suggests that vendors charge booking fees substantially greater than cost.\textsuperscript{138} Finally, as mentioned in part II C, market data gathered through the CRS provides vendors with significant competitive advantages. It may be argued that by withholding this information from other participating carriers, their costs of marketing are increased. In summary, it is fair

\begin{footnotes}
\item[135] Krattenmaker and Salop, supra, note 1, p 277.
\item[136] See Pt. II, Ch. B., text accompanying notes 62-72.
\end{footnotes}
to say that system bias, excessive booking fees and non-disclosure of marketing information anti-competitively raise costs for rival airlines. Vendor-airlines use the power they possess in the CRS market to influence competition in the air transportation market.

Although RRC was not specifically referred to in any of the CRS cases, the *Air Passenger 1988* Court referred to the possibility of monopolisation through lock-in practices and predatory pricing. Unfortunately, the Court was engaged in a search for traditional monopoly power and did not consider the full effect of RRC strategy.

4. **The Aghion/Bolton Theory of Contractual Penalties**

Rival airlines are not the only parties to experience increased costs through anti-competitive use of CRSs. Some provisions in CRS subscriber contracts significantly increase the costs of smaller rivals in the CRS industry, thereby reducing competition. One obvious example of this is the widespread practice of liquidated damages clauses in CRS contracts.

Liquidated damages clauses in CRS agreements are contractual penalties, which require agents in breach of their contracts to pay the vendor a set amount of future revenue. These clauses generally require the agent to pay a lump sum representing the stream of booking fees anticipated by the contract's minimum-use clause. In addition, 80 to 100 per cent of the remaining subscription fees, and

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139 *Air Passenger 1988*, supra, note 46, at 1471 and 1465. The Court said: "There is competent evidence supporting the plaintiffs' claim that defendant engaged in predatory or anticompetitive conduct . . . . [T]he onerous contractual provisions, in conjunction with alleged predatory pricing, have locked-in travel agents to Sabre and, in this manner, have effectively prevented normal market factors from functioning".

140 See Appendix 3 for examples of liquidated damages clauses.
special bonuses paid to induce the agent, are usually required to be repaid.\textsuperscript{141} Liquidated damages clauses should be considered penalties when they impose costs on switching customers that exceed actual losses to the contractor.\textsuperscript{142} This section shows that liquidated damages clauses operate as a strategic mechanism either to exclude the entrant from the market, or to force the entrant to sell at a low price and earn little, if any, economic profit.\textsuperscript{143}

Courts deciding antitrust cases have not yet developed an effective theory for evaluating contract penalties.\textsuperscript{144} To illustrate how penalty clauses raise the costs of entry to a market, and may encourage inefficient supplier decisions, consider three situations.\textsuperscript{145} These examples are based on the Aghion-Bolton model.\textsuperscript{146} In a spot market sale, a good may be worth, say, $80 to the consumer. A monopolist produces this good for $50 and sells it to the consumer at $80, making a profit of $30. There is no consumer surplus in this transaction. However, an entrant with costs less than $50 could displace the monopolist by undercutting its price. Assume the entrant's cost is $35 and it sells the good for $50. Now, the consumer enjoys a surplus of $30 from a reduction in market price.\textsuperscript{147} In a second situation, the monopolist and the consumer have a long-term contract with no penalty provision. If a lower priced supplier appears during the course of the contract, the


\textsuperscript{143}Brodley and Ma, supra, note 142, pp 1161-1213.

\textsuperscript{144}Ibid, p 1195.

\textsuperscript{145}Based on ibid.

\textsuperscript{146}Aghion, Philippe and Patrick Bolton, (1987). "Contracts as a Barrier to Entry". \textit{American Economic Review}, 77(2), pp 388-401. This model makes three assumptions: First, absent a penalty contract, an efficient entrant can earn economic profit in competition with a higher cost incumbent; second, the incumbent and its customers have imperfect, but not equal, knowledge of the new entrant's costs; and third, a new entrant cannot negotiate directly with customers before entry.

\textsuperscript{147}This assumes that there is no collusion between the monopolist and the new entrant.
consumer will breach its contract and pay the incumbent damages equal to the incumbent's lost profit. This breach is efficiency-enhancing because it means that production is carried out by a lower cost producer. The efficient entrant's superior productivity is rewarded by economic profit earned from its cost advantage over the incumbent. The consumer will only switch if the long-term savings of the efficient producer are greater than the cost of the incumbent's lost profits. In a third situation, the monopolist and the consumer have a long-term contract with a penalty provision which requires the consumer to pay damages greater than the incumbent's lost profits. A more efficient entrant is now disadvantaged despite its lower costs. If the entrant's costs are low enough, the consumer may be able to buy itself out of the monopolist's contract. However, the entrant suffers because it loses much of its economic surplus. If the entrant's costs are not sufficiently low to induce the consumer to switch, entry is precluded entirely. Figure 23 illustrates this situation.

```
0 ------ E1 ------ E2 ------ C(I) ------ PRICE $
          PENALTY
          ACTUAL DAMAGES
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*Figure 23*

New Entry: Contract Penalties

PRICE is the current contract price, C(I) is the monopolist's production cost. An entrant with production costs of E2 is not able to enter because the size of the contract penalty is greater than the cost savings offered. Although the entrant with production costs E1 is able to enter, its surplus is seriously diminished. The penalty produces an inefficient result because entrant 2 does not enter despite having costs lower than the incumbent. In a situation involving a long-term contract with no penalty, the contract damages would only have been PRICE - C(I). Therefore it would have been feasible for entrant 2 to enter profitably.
It is interesting to note that an incumbent firm may actually welcome entry from a more efficient rival.\textsuperscript{148} This is possible because the shaded area representing the penalty in \textit{figure 23} gives the incumbent more than its profit under the original contract. This is illustrated by giving values to \textit{figure 23}. Assume the following values; PRICE=$65, C(I)=$50, PENALTY=$25, $E_2=$45, $E_1=$35. Entrant 2 is excluded from the market because its cost plus the penalty comes to $70, higher than the current monopoly price. Entrant 1 is able to price at $60, thereby undercutting the monopolist. The monopolist could drop its price to compete with the more efficient producer, but it has no incentive to do so. It receives $25 (from the breached contract), whereas under the contract it would only receive $15 ($65-$50). Entrant 1's surplus on entry will be less than $5 ($65-$35-$25=$5). Without the penalty, the entrant's surplus would be $15 ($65-$35-$15 (damages)=$15).

So why would a customer initially sign a contract with a penalty clause? Brodley and Ma claim that a monopolist is only able to induce such a contract if entry is uncertain.\textsuperscript{149} If entry is certain, the consumer would prefer to play suppliers off against each other. At the time of signing the contract, the consumer may believe that it is in its advantage because it gives guarantee of supply and the new entrant would have to compensate by offering a much lower price than it would otherwise. Apart from this, a consumer dependent on a monopolist's supply may have little choice but to accept the rather onerous contractual terms.

There is also a chance that customers will be motivated to sign penalty contracts when the market has multiple customers and the entrant's product has

\textsuperscript{148}Brodley and Ma, \textit{supra}, note 142, p 1171.
\textsuperscript{149}\textit{Ibid}, p 1167.
high fixed costs or economies of scale.\textsuperscript{150} The customer, when signing with the monopolist, hopes that enough customers sign with the entrant to secure its entry to the market. However, each customer who signs with the monopolist increases the other customers' costs by reducing the number of customers available to the entrant.\textsuperscript{151} This effect has been described as "free rider in reverse".\textsuperscript{152}

The CRS cases discussed earlier in this part provide examples of the courts' failure to adopt an acceptable theoretical base for analysing the antitrust effects of penalty contracts. In particular, two CRS cases discuss contract penalties.\textsuperscript{153} In \textit{Austin Travel}, the travel agent raised the defence that United's liquidated damages clause was void and unenforceable as a penalty. Appendix 3 contains the liquidated damages clause in question. However, the Court decided that the liquidated damages clause was "a genuine pre-estimation by sophisticated parties fully aware of the terms and of the nature of the injury that would be caused by a future breach of the lease".\textsuperscript{154} Hence the Court was satisfied that the clause was standard and upheld by industry practice. It awarded United the full amount claimed, $US423,155.09. Further affirmative defences raised by Austin were: United waived its rights to the liquidated damages clause by releasing other agents; United failed to install terminals when requested; and United exercised

\begin{footnotesize}
\begin{itemize}
  \item\textsuperscript{150}\textit{Ibid}, p 1171.
  \item\textsuperscript{151}\textit{Ibid}.
  \item\textsuperscript{153}As well as these cases, the DOT has issued a number of orders regarding CRS contracts. These orders include: \textit{Northwest Airlines v American Airlines}, Order 90-1-29, Dkt. 45641; \textit{Hanover Travel v Northwest Airlines}, PARS, Order 90-1-30, Dkt 45593; \textit{System One Direct Access, Continental Airlines, Eastern Air Lines v United Air Lines, Covia Partnership, and Covia Corp.}, Order 90-1-32, Dkt. 45759; and \textit{Universal Travel of Virginia Beach, Inc. v Delta Air Lines}, Order 90-9-26, Dkt. 46920.
  \item\textsuperscript{154}\textit{United Air Lines, Inc. v Austin Travel Corp.}, (1988) 681 F Supp. 176 (S.D.N.Y.), at 188.
\end{itemize}
\end{footnotesize}
coercion and duress. However, in the Court's opinion, these defences did not bear closer examination.

In the *Apollo*\textsuperscript{155} case, *System One* claimed that *Apollo* subscriber agreements violated the Sherman and Clayton Acts\textsuperscript{156}. However the Court held that *System One* did not produce any evidence showing how the liquidated damages clause made the *Apollo* contracts more restrictive "than a contract silent on the point of damages".\textsuperscript{157} The prevailing United States approach is that the burden of proof in these cases is on the party which asserts the existence of an unlawful penalty.\textsuperscript{158} Since *System One* could not show this, the Court found for United.

Both of these cases involved potential entry by firms outside the market, as well as attempted expansion by an inside firm with a toehold position.\textsuperscript{159} Brodley and Ma contend that these cases "illustrate that rent capture from final consumers and existing rivals can provide an alternative source of rents to induce customers [travel agents] to sign penalty contracts".\textsuperscript{160} This section examines these cases together because they both involve challenges to the validity of CRS contracts.

Both of these cases arose when *System One* induced travel agents to breach *Apollo* contracts. *System One* promised to defend the travel agents and indemnify them against any losses suffered as a result of their breach. The Second Circuit held that clauses did not constitute a penalty because they represented "a reasonable proportion to the probable loss".\textsuperscript{161} In fact, the Second Circuit went so


\textsuperscript{156}As well as the other claims outlined in this part.

\textsuperscript{157}In re Apollo, supra, note 157, at 1076.

\textsuperscript{158}Brodley and Ma, supra, note 142, p 1179.

\textsuperscript{159}Ibid, p 1189.

\textsuperscript{160}Ibid.

\textsuperscript{161}United Air Lines Inc. v Austin Travel Corp., (1989) 867 F.2d. 737 (2nd Cir.), at 740.
far as to say that the clauses favoured the agents rather than the CRS vendor.\textsuperscript{162} This demonstrates ignorance of the effect contractual penalties may have on market efficiency.

The key issue in \textit{Austin} was whether the liquidated damages provisions constituted penalties.\textsuperscript{163} The Court's analyses were inadequate. The \textit{Apollo} contract required payment of 80 per cent of the remaining fixed and variable charges. Austin was of the opinion that the 20 per cent discount underestimated the savings realised by United in the event of early contract termination. Furthermore, \textit{System One's} testimony was that United's avoidable costs were likely to equal 40 to 50 per cent of the total costs. Both the District Court and the Second Circuit noted that United only called for 80 per cent, whereas their competitors called for 100 per cent. This fact was interpreted very favourably for United. The Court was of the opinion that "[t]he estimate of damages was made by knowledgeable, sophisticated businessmen in the industry on both sides acting at arm's length without any coercion or inability to contract freely".\textsuperscript{164} In addition, it considered the amount liquidated to be a reasonable representation to the actual loss.

After the \textit{Austin} and \textit{Apollo} decisions, System One stopped indemnifying agents and conversions by smaller systems virtually ground to a halt.\textsuperscript{165} This suggests that restrictive leases act as a strong deterrent to entry or toehold expansion. Furthermore, "rent capture" is apparent through \textit{System One's}...

\begin{footnotes}
\item[162] \textit{Ibid.}, at 740/1.
\item[163] Brodley and Ma, \textit{supra}, note 142, p 1191.
\item[164] \textit{Austin 1988, supra}, note 154, at 189.
\end{footnotes}
inducement attempts through indemnification. That is, liquidated damages provisions force future entrants to either reduce prices well below the current vendor's price plus the penalty, or buy the customer out of its contract. Therefore the current vendor captures economic profit which would not have been available in the absence of the liquidated damages provision.

Liquidated damages provisions have also been questioned by several United States administrative proceedings. The CAB rules passed in 1984 prohibited the use of contractual mechanisms such as rollover clauses, which provide for automatic renewal of a contract whenever any new equipment is installed at an agency. However, vendors adopted other means of securing contract renewals. The most common way is to offer travel agents some form of inducement, such as free equipment and cash bonuses, along with pressure regarded by many travel agents as coercive.\textsuperscript{166} The DOJ remarked in 1989 that "[b]oth Sabre and Apollo seek renewals when there are two or three years remaining on the contract".\textsuperscript{167} In general, these vendors are very successful in securing renewals.\textsuperscript{168} By coercing agents to agree to contractual provisions several years in advance, the vendors increase the uncertainty about new entry. This uncertainty is only exasperated by the rapidly increasing technology in the CRS industry. The GAO commented on CRS contracts by saying:\textsuperscript{169}

"Contract provisions which discourage travel agents from switching vendors directly reduce competition in the market for servicing travel agents, and also perpetuate the revenue transfers to major CRS vendors . . . These provisions include . . . liquidated damages clauses."

\textsuperscript{166}Ibid, p 28.
\textsuperscript{167}Ibid.
\textsuperscript{168}Ibid.
\textsuperscript{169}United States General Accounting Office, supra, note 141, p 10.
The DOJ is also aware of the problems that penalty clauses pose to firms trying to gain entry or expand a toehold position in a market. The 1989 DOJ report said:\(^{170}\)

"Contracting practices that may impede competition for travel agent subscribers are of concern because of their potential effect on competition in air transportation markets. Because an airline with a substantial CRS share in particular cities has a significant advantage over other airlines seeking to serve those cities, a competing airline may find that in order to enter certain airline city-pair markets, it must simultaneously enter or expand its CRS presence in those cities. To the extent that the contracting practices of the CRS vendors make it difficult for competing vendors to do so, an incumbent airline with a substantial CRS presence may be able to deter even those airlines that have an interest in a CRS from entering their airline market."

There are two possible reasons why agents are persuaded to enter into contracts containing penalty provisions:\(^{171}\) First, where the contract is with a regionally dominant airline, the reverse free rider effect is triggered by the large sunk costs and economies of scale required for CRS systems. Second, a dominant CRS vendor is able to compensate travel agents using additional revenue from passengers and other airlines. This second condition is true where the CRS vendor is also dominant in the air transportation market for a region.

Brodley and Ma’s framework for analysis of penalty clauses in contracts requires inquiry into market power, intent, and the efficiency of the provision(s) in question:\(^{172}\) Market power is a necessary condition because without market power, customers would not agree to onerous contracts. The market power must be sufficient to foreclose a large number of the potential market. If the incumbent(s) does not control enough of the market, the entrant can sell to the remaining customers and bypass any penalty which may have been incurred.\(^{173}\) If

\(^{170}\) United States Department of Justice, supra, note 165, p 29/30.

\(^{171}\) Brodley and Ma, supra, note 142, p 1191/2.

\(^{172}\) See ibid, p 1194-1205.

\(^{173}\) Ibid, p 1196.
a substantial amount of the market is foreclosed by the incumbent(s), customers who decline to sign a penalty contract are at a greater risk of paying a higher price.\textsuperscript{174} It is clear from the reasons above that the reverse free rider effect operated in the CRS cases. Courts should first look to objective evidence of a contractual penalty. Three factors are suggested in this analysis:\textsuperscript{175}

1. differential treatment of customers who switch to a rival firm, or between customers in monopoly and competitive markets;
2. refusal of a sale or short-term lease option; and
3. the level of stipulated damages in relation to actual damages.

If the objective analysis is inconclusive, the Court should then look at evidence as to intent.\textsuperscript{176} The main question with respect to intent is when the contracting parties drafted the penalty clause, did they only have regard to losses incurred to themselves, or did the parties consider the entry effects on other firms? If the parties did consider the effect on other firms, it is likely the intent was to raise the costs of new entry. Intent evidence can be shown in the following ways:\textsuperscript{177}

1. stipulated damages are fixed with a purpose to deter new entry or increase the existing profits of incumbent firms through payments by customers, standardised by price concessions from new entrants;
2. the contract term is lengthened solely or primarily to deter new entry;
3. contract length is set to delay a potential entrant's access to the necessary market share to achieve an efficient level of output; or
4. the contract extends beyond the product lifecycle, or anticipated future product lifecycle, without a clear showing of efficiency gains.

\textsuperscript{174}ibid. This is because these left over customers may have to buy from a high cost supplier, or from an unsympathetic monopolist who denies the price concession given to local buyers. Brodley and Ma also show that even a monopoly buyer will sign penalty contracts if the monopolist allows it to share in a larger proportion of the entrant's surplus.

\textsuperscript{175}ibid, p 1198.

\textsuperscript{176}Generally, evidence of intent is inferior to objective evidence. However, the relevance of intent evidence was recognised in Aspen, supra, note 56.

\textsuperscript{177}Brodley and Ma, supra, note 142, p 1204.
Clearly, using either objective or intent evidence, liquidated damages provisions amount to contractual penalties. Primarily, in the absence of rules, CRS vendors refuse to contract for any period shorter than five years. Since the level of stipulated damages in relation to actual damages is unclear, intent evidence is required. Two pieces of evidence point to a specific intent to deter new entry. First, the length of a CRS contract delays a potential entrant’s access to the requisite market share. Second, the practice of forcing contract rollovers lengthens the contract term, which raises the costs of profitable entry.

Important to these factors is the concept of waiting costs. If the contract is only short-term, a penalty clause would not be a significant barrier to entry as the entrant would simply wait until the contract had expired. The longer the wait, the greater the waiting costs. The courts in the CRS cases failed to consider waiting costs. This would have revealed two compelling facts. First, vendors only limited their contracts to five years after regulatory pressure. Therefore it could be inferred that the goal of these very long-term contracts was to raise the cost of new entry. Second, the speed of innovation in the CRS industry makes waiting time very costly. Developing a CRS is already very expensive, but add to this waiting time of up to five years, during which time the entrant must continue to update its system, and the cost escalates. In this instance, the penalty provision may have the effect of deterring entry because the contract length is longer than the product lifecycle.

Finally, courts should consider the efficiency of the contractual provisions being questioned. As yet there is no definite ruling on the conditions for a successful efficiencies defence. However, courts tend to recognise three main conditions. The transaction underlying the penalty contract must produce substantial efficiencies, there must be no alternative less restrictive, and the parties
to the transaction bear the burden of proof. There are few valid efficiencies
defences available to CRS vendors. It is unlikely that penalty contracts
favourably influence either productive or allocative efficiencies. Vendors may
argue that longer contracts give them time and incentive to invest in research and
development of the systems. However, equally compelling arguments are put
forward refuting this. For example, absence of long-term contracts and penalty
clauses may increase innovation because firms must invest in research and
development to remain viable in the long-term and the short-term. This argument
is strengthened by the short product life cycle and the rate of innovation in the
CRS industry.

The main defence to restrictive CRS subscriber contracts is that they have
legitimate business justifications and are common throughout the industry. It is
often claimed that the long duration of CRS contracts is necessary to enable
vendors "to make the sizeable investment to automate travel agencies . . . with
confidence that the equipment would be in place long enough for . . . [the
vendor's] costs to be recovered and earn a profit". 178 Minimum use provisions are
argued to be necessary because "CRS owners have a legitimate need to ensure that
the equipment is producing the booking fees that represent a substantial portion of
that return on their CRS investment." 179 Finally, liquidated damages clauses are
claimed to be standard industry practice, enforceable under contract law "if the
[c]ourt is convinced that [the clause] is a genuine pre-estimate by the parties of the
extent of injury that will be caused by a future breach of the contract". 180
However, the discussion above shows that the purpose and effect of restrictive

178 Air Passenger 1988, supra, note 46, at 1471.
180 Austin Travel, supra, note 154, at 187.
CRS contracts is the reduction of competition in the CRS industry. As such they should be condemned.

Having established that vendor contracts and other CRS conduct such as bias is anti-competitive, one must seek statutory authority with which to base antitrust claims. The success of RRC claims and motions for relief from restrictive CRS contracts depends upon the willingness of courts to embrace the notion of exclusionary market power. As Krattenmaker and Salop contend, a distinction between monopoly and market power is unnecessary.181 Conduct which has the purpose or effect of harming competition in either the CRS industry or the air transportation industry falls under the general ambit of the Sherman Act and should be condemned.

Through anti-competitive conduct, CRS vendors increase their market power by gaining power over the price of air transportation services. It is not necessary to assess the extent of power over price—just that competition is harmed. Similarly, competition is harmed in the CRS industry through the suppression of new entry. The preceding arguments prove the exclusionary nature of liquidated damages clauses. However, how should these anti-competitive aspects of CRSs be attacked under antitrust laws? There are a number of cases where courts have been receptive to claims of undue, unfair or anti-competitive exclusion as grounds to invalidate vertical arrangements.182 Krattenmaker and Salop claim that in most cases concerning exclusionary conduct, "the expressed fear is that rather than enhancing competition by reducing costs or improving quality, the challenged practice may destroy competition by providing a few firms with advantageous

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181 Krattenmaker and Salop, supra, note 64.
182 See ibid, p 215-219 for a survey of these cases.
access to goods, markets, or customers, thereby enabling the advantaged few to gain power over price, quality or output".183

The main Chicagoan criticism of exclusionary cases where courts have held a plaintiff liable under antitrust laws is that such agreements may harm competitors, but cannot diminish the vigour of competition. However, RRC theory provides a robust method of distinguishing between behaviour which is inherently anti-competitive and conduct which is competitive on its merits. By utilising exclusionary market power, such as system bias or liquidated damages clauses, cost increases to rivals and price increases by the offending firm are unambiguously inconsistent with the consumer welfare antitrust standard of antitrust law (outlined in part II A).184 Artificially increased prices give the offending firms effective monopoly power—the ability to raise price above the competitive level.185 This conduct is clearly proscribed by §2 of the Sherman Act and equivalent provisions in other countries' competition legislation.

5. Conclusions

Some authors claim that exclusionary behaviour within the CRS market has a less significant impact on competitiveness within the air transportation market than other behaviour.186 However, the analysis in this part shows that this is not true. The considerable overlap between the air transportation and the CRS industry makes exclusionary behaviour in the CRS market a paramount consideration in analysing airline competitiveness.

183Ibid, p 216.
184Ibid, p 249.
185Ibid, p 250.
186For example Klingaman, supra, note 94, p 341.
Theories of exclusionary behaviour provide the best means of antitrust attack on the market power of CRS vendors. Although monopoly leveraging has so far been unsuccessful in the CRS context, the other theories in this chapter provide plaintiffs in CRS cases with a powerful theoretical basis for claims of exclusionary market power.

However, the success of these claims depends on the willingness of the courts to adopt the concept of exclusionary market power. Exclusionary market power is the ability to raise or maintain prices above the competitive level by conduct that raises the cost or excludes competitors and thereby induces those rivals to restrict their output.

This chapter shows clearly that CRS vendors possess exclusionary market power. In particular, the conduct courts must address is system bias (especially the more subtle forms outlined in part II C), and restrictive subscriber contracts, which increase barriers to entry for potential competitors in the CRS industry. These forms of vendor conduct are obviously anti-competitive for two main reasons. First, they unnecessarily raise the costs of rivals in a different market. Second, they reduce competition from potential entrants to the CRS industry.

Courts should be innovative in their analysis of exclusion claims. Stringent focus on traditional monopoly power precludes the success of antitrust claims for conduct which is obviously what these laws are supposed to forbid.
Part IV

Regulatory Options

CHAPTER A
Regulatory Options for the CRS Industry

CHAPTER B
CRS Codes of Conduct
Introduction

As part III shows, antitrust law used effectively is sufficient to control most of the anti-competitive behaviour of CRS vendor-airlines. However, because of the failure of traditional antitrust challenges, and the ignorance of new exclusionary theories, many countries have resorted to more explicit regulations to control the conduct of CRS vendors.

This part looks at regulatory options for the CRS industry. Specifically, chapter A discusses the distinction between public and private regulation. Within this context a number of regulatory options are explored. These include the threat of regulation; various forms of price regulation; and structural solutions proposed for the CRS industry. This discussion provides insights into how an antitrust enforcement regime may be complemented by different forms of regulation.

Chapter B looks closely at CRS codes of conduct adopted by many countries to provide conduct guidelines to vendors. Codes of conduct specifically examined are the International Civil Aviation Organisation (ICAO), United States, Canada, European Community, and European Civil Aviation Conference. The Australian Code of Conduct is discussed in part V.
A number of observers have strongly advocated a return to full regulation of the airline industry. Many of these commentators use the competition problems of CRSs as an example of market failure, thereby claiming that deregulation has failed. The theme of this thesis is that deregulation has brought many benefits to the airline industry and has on the whole been advantageous. However, it would be imprudent to completely disregard the problems which have arisen.

At the outset, a distinction must be drawn between private and public regulation. Private regulation relies solely on antitrust law, while under public regulation the instrument of control is an administrative agency with specialised staff. That is not to say that a court cannot impose remedies such as price control, structural solutions or simple regulatory measures on an industry through the antitrust laws. But if ongoing remedial regulation of an industry's business activities is required, the matter is not suitable for private regulation.

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3 Ibid.
much debate which suggests the airline and CRS industries need this kind of ongoing regulation. This chapter explores some of the regulatory solutions which have been suggested for the CRS industry. Many of the regulatory solutions discussed herein may be imposed either through the courts or through a public regulatory body. This chapter clarifies which of these measures is preferable to promote and foster competition in the CRS industry.

1. Regulation

As outlined in part II, regulatory thinking in recent years has moved away from heavy-handed regulation toward a more *laissez faire* approach based on free market ideology. The "theories of regulation debate" started with the publication of George Stigler's article, "The Theory of Economic Regulation". Stigler claimed that public regulation could be considered as a commodity and should be analysed like other commodities in terms of supply and demand. Three years later, Posner added to Stigler's theory of regulation. Posner proposed two theories of regulation. First, he suggested that regulation is imposed by governments to correct market failure in order to benefit consumers and enhance social welfare (public interest theory). Second, he proffered "capture" theory under which a regulatory agency is captured by the industry subject to regulation. However, Posner qualified his arguments by saying that neither his two theories nor Stigler's fully explains public regulation. Much of the ensuing academic debate heavily criticised regulation and extolled the virtues of competition and

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economic freedom. This led to the liberalised environment of the 1980s and beyond.

Some authors suggest that in this environment of wholesale deregulation, benefits which may be gained from tighter regulation are often overlooked. Cudahy, for example, claims that during the period of air transportation regulation, consumers gained from a certain level of stability. In addition, Cudahy takes the position that as more and more airlines face bankruptcy, States will begin to question the wisdom of complete deregulation of the airline industry. He supports his position by asserting that in the 1930s, airline regulation was not perceived as anti-consumer—at least with regard to service.

However, critics of airline deregulation overlook the fact that it is market forces which have shaped the industry. For instance, as most airline customers are very price sensitive, they prefer to pay less for air transportation with a reduced level of service. Although deregulation may have let service levels fall, price levels have decreased accordingly in response to consumer preferences.

Proponents of airline deregulation were enthusiastic that the airline industry would provide a model example of the theory of contestable markets. Nevertheless, even Alfred Kahn, one of the principal figures behind deregulation, recognised the potential for anti-competitive pricing in the airline industry.

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7Ibid. Priest contains an excellent synopsis of the early articles published in the Journal of Law and Economics. The first editors of this Journal (Aaron Director and Ronald Coase) encouraged studies of direct industry regulation and regulation through antitrust enforcement.


suggested in 1978 that to prevent large carriers exercising predatory pricing, they should be required to keep their low fares in place for three to five years.\textsuperscript{11} Indeed, a number of anti-competitive problems have surfaced which were not predicted. There remain three particular areas of competitive concern in the airline industry requiring vigorous antitrust or regulatory enforcement—concentration and mergers, CRSs, and the enhanced role of travel agents in the airline industry.\textsuperscript{12} For a number of reasons, outside the scope of this thesis, such enforcement has not been apparent to date. With regards to CRSs, a number of regulatory options have been suggested.

Cudahy argues that the competition problems which have arisen are regulatory problems—not antitrust problems.\textsuperscript{13} In his view, antitrust enforcement is "untailored to the specific circumstances of air transport and insufficiently nimble to keep up with rapidly changing airfares".\textsuperscript{14} However, the new antitrust theories presented in part III show that Cudahy's argument is premature. While it is true that antitrust has had difficulty in coming to terms with the triangular structure between airlines, CRS vendors and travel agents, the adoption of new theories such as raising rivals' costs will increase the relevance of antitrust for enforcing a competitive air transportation industry.


\textsuperscript{13}Cudahy, supra, note 11, p 7.

\textsuperscript{14}Ibid.
Cudahy forecasts that "the principal impetus for a possible re-introduction of regulation is likely to be either the airline industry's financial decline, its potentially oligopolistic structure, or both". Yet public regulation for either of these reasons would address the result, not the cause of problems in the airline industry. Antitrust law, concerned with the preservation of competition is better suited to deal with the cause of anti-competitive industry conditions. To be effective, antitrust laws must be vehemently enforced. In addition, courts must accept new theoretical insights as tools to explain many of the airline industry's anti-competitive ills.

One of the biggest problems of airline deregulation in the United States was accentuated by the Civil Aeronautics Board Sunset Act of 1984. This act was motivated by several concerns including rules on airline CRSs. Effectively, all of the CAB's remaining powers were transferred to the DOT. This transfer of power to the DOT has been criticised because of the difference between the DOT's function and the function of antitrust agencies. Douglas and Metrinko argue that these differences and the fundamental differences in staff expertise have led to less than vigorous antitrust enforcement. For example, because of its mission the DOT employs highly trained technical staff, whereas the Federal Trade Commission and the Antitrust Division of the Department of Justice employ lawyers trained in economics and economists. Consequently, the airline industry


\[16\]The DOT's function is largely supportive of the transportation network and operating modes. In particular, the DOT has jurisdiction over highway, urban mass transit, railroad, and maritime development, construction, and subsidisation.

has lacked the specialised antitrust surveillance needed to preserve a competitive market structure.\textsuperscript{18} Douglas and Metrinko suggest that:\textsuperscript{19}

"Economists and engineers have distinctly different approaches and perceptions. Economists view the world and describe its characteristics in terms of equilibrium systems. A positivist economist seldom characterizes an observed characteristic as a problem. And not all problems require solutions—the equilibrium system takes care of most problems.

The engineer, by contrast, perceives the world pragmatically. By instinct and training, he seeks to solve problems by adjusting mechanisms; an engineer is a tinkerer by nature. . . . [The] DOT has a tendency to respond with "engineered" approaches to problems."

Although there are now a number of staff economists at the DOT, their ambivalence toward the growing oligopoly problem in the airline industry suggests a preoccupation with Chicago School notions of firm size and efficiency.\textsuperscript{20} Ultimately, to preserve competitive market structure and conditions, vigorous antitrust enforcement is necessary. Evans illustrates a level of frustration with the regulation of CRSs in the United States:\textsuperscript{21}

"Since the disbanding of the CAB, the response of the DOJ and DOT to the anticompetitive effects of airline ownership of CRSs has been sporadic and has resulted in ineffectual regulation."

One of the leading proponents for renewed public regulation of the airline industry is Dempsey.\textsuperscript{22} Dempsey advocates a specialised Federal Transportation Commission. Such a body could then adopt price controls, structural solutions and the like. Alternatively, under a private regulatory system, litigants could

\textsuperscript{18}Evans heavily criticizes the DOT for ignoring the advice of DOJ and GAO. He claims that "[d]espite the recommendations of DOJ and GAO that DOT rigorously enforce the CAB rules, DOT took a non-interventionist stance regarding regulation of the airline industry." Evans, John. (1990). "Divestiture as a Legislative Solution to the Anti-consumer Effects of Airline Ownership of Computer Reservation Systems*. Computer/Law Journal, 10: pp 1-46. p 19.

\textsuperscript{19}Douglas and Metrinko, supra, note 17, p 194.

\textsuperscript{20}See for example: Keyes, Lucile. (1988). "The Regulation of Airline Mergers by the Department of Transportation*. The Journal of Air Law and Commerce, 53(Spring): pp 737-64. Keyes is critical of the DOT's approach to regulating mergers in the airline industry since it was given these powers by the CAB Sunset Act of 1984.

\textsuperscript{21}Evans, supra, note 18, p 23.

\textsuperscript{22}See supra, note 1.
request similar solutions before the courts. This chapter takes the position that public regulation is not the correct option for the airline industry. Deregulation has made the airline industry much better, even though it has caused a number of unforeseen problems.\textsuperscript{23} Proponents of re-regulation argue their point on the premise that airline deregulation failed to deliver the level of competition desired. However, perfect competition is seldom achieved. The goal of antitrust is not perfect competition, but workable competition. As Levine notes, "in virtually every area of regulation, an imperfect world will produce imperfect results".\textsuperscript{24}

Proponents of re-regulation usually point to "market failure"—the notion that in a number of contexts completely free markets do not yield the best performance in terms of economic welfare, with the implied corollary that the performance can be improved by some form of regulation.\textsuperscript{25} Using this argument for the airline industry ignores the public benefits which have occurred since the removal of the cumbersome regulatory bodies of the past. Complete re-regulation of the airline industry would strip consumers of the substantial benefits they currently enjoy. Instead, would-be regulators should look to those areas of the airline industry which may need regulatory attention. CRSs are one of these areas.

There is clearly a need to monitor the use of CRSs in the airline industry to prevent vendor abuse of their power over airlines and travel agents. Part III identified the possibility for antitrust law to be used as a deregulatory mode of controlling vendor conduct. This part looks at the regulatory options which have


\textsuperscript{24}Levine, supra, note 23, p 163.

been suggested either as part of an antitrust regime, or as part of a public regulatory system.

2. The Threat of Regulation

A government has the power to regulate in any way it sees fit. This power is the pervasive force behind the threat of regulation. Used as an active policy, the threat of regulation can restrain the behaviour of dominant firms in any industry. The more carefully the government defines the threatened regulation and the more carefully it defines the unacceptable behaviour, the closer the threat will become to explicit regulation.  

Conduct falling outside the boundaries outlined may be dealt with severely.

Three factors are suggested to influence the threat of regulation: the intensity of public demand for regulation, the urgency of the legislators' competing demands, and the availability of industry scapegoats for price increases. The problem with regulatory threats to CRS vendors is that CRSs are almost invisible to consumers. Consumers of air transportation only pay one price for the product provided, even though that product is made up of many costs. Consequently, there is unlikely to be significant public demand for regulation in the CRS industry. Instead, demand for regulation in the CRS industry comes from non-vendor airlines and, to a lesser extent, travel agents. The political clout of these airlines and travel agents is likely to be minimal compared with the influence of the large vendor-carriers. Therefore the demand for regulation of the CRS industry is low.

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Even if the threat of regulation was high, the drawback with regulatory threats is that they may not affect all firms equally. Erfle, McMillan and Grofman proposed a "regulatory threat hypothesis" to explain the response of different firms to the threats of governmental regulation:28

"When the threat of governmental price regulation is high, the larger, more visible firms in the threatened industry restrain price increases on those products where price changes are readily apparent to the public; the smaller, less visible firms do not exercise such price moderation. As the threat of governmental price regulation diminishes, firms which had previously exhibited price restraint (and thus whose products are underpriced relative to the market norm) increase prices to equalize with the industry average".

This means that during times of high scrutiny, large CRS vendors such as Sabre and Apollo may stave off regulatory threats by restraining price increases or lowering prices. Although this is the intention of regulatory threats, vendors with less market share escape regulatory pressure. In addition, regulatory threats would have little effect on the entry conditions of the CRS industry when most travel agents are already tied up with restrictive contracts. Any regulatory threats to the CRS industry would have to be made over a sustained period to give existing contracts time to terminate. Alternatively, if a court ruled restrictive CRS contracts to be invalid, the threat of regulation would be immediately useful.

The success of regulatory threats is extremely hard to measure. Although industry price may stabilise, there are a number of reasons why dominant firms may suppress price increases. For example, they may fear loss of market share.29 Moreover, CRS vendors have a worthy scapegoat for rate increases and restrictive contracts—time for innovation.

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29Erfle, McMillan and Grofman, supra, note 27. p 59.
However, there is positive evidence to suggest that anti-competitive behaviour is less likely in the presence of active antitrust enforcement or increased regulatory monitoring. Firms prefer not to attract the attention of regulatory bodies, therefore they do not engage in questionable conduct. For example, increases in regulatory monitoring triggers decreases in vertical integration, and increase in antitrust capacity decreases the level of tacit price-fixing in an industry.

The implication for the CRS industry is that although the threat of regulation can actively constrain the power of market participants, the CRS market requires additional means of ensuring competitive market conditions. Threat of regulation in the United States CRS industry has been apparent for many years. Studies by DOJ, DOT, and GAO have combined to force CRS vendors to defend their positions against would-be regulators. Additionally, the recent hearings into the Airline Competition Enhancement Act of 1992 made it clear to the dominant CRS vendors that legislative regulation could easily be imposed on the industry. During these hearings, Robert Crandall, Chief Executive Officer of American Airlines, assured the Senate that American was in favour of functional neutrality, but not public regulation. His statement included:

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32 Fair notes that "[I]ronically, fears of deregulation or forced divestiture of CRSs may have encouraged U.S. CRS vendors to step-up plans for CRS mergers and involvement in global systems. This may in turn create an environment even more anticompetitive than deregulation proponents could have imagined." Fair, Pam. (1989). "Anti-Competitive Aspects of Airline Ownership of Computerized Reservation Systems. Transportation Law Journal, 17: pp 321-344. p 343.


34 Ibid, Appendix A to the Statement by Robert Crandall.
"We support [the objective of functional neutrality], and whether there is or there is not legislation, will eliminate the remaining minor "defaults" in Sabre within the next 10 months. By the Spring of 1993, we will also install in Sabre a function called "seamless connectivity." Utilizing the most advanced real-time interactive computer technology, "seamless connectivity" will allow travel agents immediate and simultaneous access to internal reservations systems of any carrier that elects to participate. In short, for Sabre, neutrality is a done deal".

The kind of regulatory debate sparked by this hearing should be encouraged. Crandall's statement regarding functional neutrality shows that the vendor-airlines take the threat of regulation seriously. Increased antitrust enforcement, combined with regulatory threats, can effectively restrain the exercise of market power by CRS vendors.

3. Price Regulation

Regulation of price or rate of return is an attempt to proxy conditions that would exist in a competitive position. Many criticisms have been levelled at such regulations because it is said they may reduce incentives to cut costs and encourage over-capitalisation.

Full-scale price regulation is posited as an option to control the supra-competitive fees in the CRS industry. Price regulation requires that the CRS vendors set access charges and booking fees at levels which allow them to earn only the competitive rate of return on their investment. A number of practical and theoretical difficulties exist, however, with price regulation in the CRS industry.

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First, there are serious difficulties in deciding on appropriate price levels for different firms. The 1988 DOT report acknowledges the difficulty in assigning the costs of operating a CRS between travel agents and airlines.\textsuperscript{38} This leads to subjective cost allocations which may be unfair on different CRS vendors. Moreover, the level of economies of scale and scope achieved by each CRS firm are unsure. Forcing vendors to price at a certain level would put the vendors with less economies of scale at an immediate competitive disadvantage. Difficulties such as these make it impossible to accurately set a price which is a surrogate for the competitive market price.

As well as the difficulties of cost allocation, price regulation brings problems with "rate-base padding" and reduced incentives to minimise vendors' costs.\textsuperscript{39} Currently, agents receive incentives such as subscription discounts. In fact, when the override commissions and inducement incentives are taken into account, travel agents often break even on the costs of their distribution system. The imposition of price regulation encourages vendors to cut back on such incentives. The DOJ also claims that price regulation would hinder the CRS vendor's ability to react flexibly to changes in the market.\textsuperscript{40} Price regulation would also require a public regulatory body to oversee the formulation and review of rates. It is this kind of costly direct public regulation which liberalisation attempts to avoid. Consequently full price regulation of subscription fees does not sufficiently address the competitive problems of CRSs. In its 1984 rules, the CAB did impose limited regulation on fees by prohibiting discrimination not justified by cost


\textsuperscript{39}United States Department of Justice, supra, note 37, p 59.

\textsuperscript{40}Ibid.
differences. While this minimal form of regulation is on the whole beneficial, it is not without its detractors.\footnote{For example, Ellig notes that "the elimination of discrimination is not costless, since that which diminishes profits diminishes entrepreneurial incentives". Ellig, Jerome. (1991). "Computer Reservation Systems, Creative Destruction, and Consumer Welfare: Some Unsettled Issues." Transportation Law Journal, 19: pp 287-307. p 304.}

**Zero Price**

The 1985 DOJ also analysed, although inconclusively, the complete abolition of booking fees to airlines. This would mean that vendors would have to derive all of their revenue from travel agents. The United States General Accounting Office supports this approach also.\footnote{United States General Accounting Office. (September 14 1988). "Competition in the Computerized Reservation System Industry". Testimony: Statement of Victor Rezende, Associate Director Resources, Community and Economic Development Division. p 15.}

Zero price restrictions would place added emphasis on agents to shop around for the best financial deal from vendors. CRS vendors would thus be forced to compete on price to gain travel agency patronage. Agents would then pass the cost of higher subscription fees back to the airlines by demanding higher commissions.\footnote{\textit{Ibid.} See also: United States General Accounting Office. (1990). \textit{AIRLINE COMPETITION: Industry Operating and Marketing Practices Limit Market Entry}. Washington D.C.: CAO/RCED-90-147.} The GAO claims that since CRS vendors have less market power in setting subscription fees than they have in setting booking fees, the increase in subscription fees would be less than the reduction in booking fees, so non-vendor airlines would be better off.\footnote{\textit{Ibid.}}

Although a zero price rule is preferable to full scale price regulation, it would not eliminate the need for collateral rules.\footnote{United States Department of Justice, supra, note 37, p 60.} For example, additional rules would be required to prevent vendors from charging travel agents for bookings on a
carrier specific basis. If such rules were not imposed, vendors could target certain carriers that were direct competitors, therefore decreasing their attractiveness to the agent. As well as this, a zero price rule would require rules regarding:

- what constitutes the basic level of service and service enhancements;
- equality of treatment to regulate the timing and number of schedule and fare changes;
- non-discriminatory data-loading; and
- increased regulatory supervision.

If adopted, the zero price rule should only apply to those attributes of CRSs which give airline-vendors market power over their rivals. This would encourage competition on other attributes such as incentives and service enhancements. However, the changing technological make-up of the industry makes "basic service level" an ambiguous phrase. Technological evolution continually redefines the basic structure of CRS service. This increases the cost of regulatory action. Moreover, there are efficiency problems with providing equal access to very small carriers at zero cost. It may be more efficient for such carriers to consider alternative means of distribution. Finally, zero pricing, like other forms of price regulation, only addresses one of the competition concerns of CRSs—booking fees.

### Rate of Return Regulation

Rate of return regulation attempts to adjust accounting profits from supranormal to normal. It achieves this by allowing a certain rate of return on an entity's assets. In recent years, rate of return regulation has been the favoured

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form of controlling prices in regulated industries in the United States.48 There are several complex issues with rate of return regulation— the determination of the rate base, the choice of an allowable rate of return, and the speed of response of the regulatory process.49

Interestingly, there is little written regarding rate of return regulation for the CRS industry. It suffers from similar problems to other forms of price regulation. In addition, a major problem which arises with rate of return regulation has been termed the Averch-Johnson effect. The New Zealand Business Roundtable explains this as follows:50

"If the allowed rate of return is greater than the cost of capital and if the regulatory body effectively constrains the firm to earn its allowed rate of return and no more, then the profit maximising regulated firm will have an incentive to inefficiently substitute capital for other inputs. On the other hand, where an organisation is required to earn a rate of return that is higher than would be required in a competitive situation, the firm will tend to produce its output by using a less capital intensive method of production than would an unconstrained organisation. The result of rate of return regulation may be that the output of the regulated organisation will be produced at a higher cost."

Rate of return regulation requires close, and expensive, regulatory supervision. For example, electric power utilities in the United States are regulated by Public Service Commissions (PSCs). PSCs set prices and determine an allowable overall rate of return figure which is supposed to be a proxy for the profitability the company would attain in a competitive market.51 However, setting the rate is not simple. In each state, a legalistic hearing is necessary every two years. Einhorn comments on the expense of rate of return regulation:52

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48 Cave, supra, note 36, p 18.
49 See Ibid, pp 19-24 for a discussion of these.
50 NZ Business Roundtable, supra, note 35, p 74.
51 Russo, supra, note 30, p 13/14.
"[I]t was costly to administer, provided no consistent incentives to cost-efficiency and technological improvement, afforded many opportunities for strategic misrepresentation of reported costs, and may have encouraged both uneconomic expansion of the utility's rate base and cross-subsidisation of its competitive services".

In the CRS context, as well as suffering from the same problems as other forms of price regulation, rate of return regulation may encourage inefficiencies which other forms of price regulation do not. For example, firms may not have the same incentive to cut costs and attain production efficiencies. For these reasons, rate of return regulation is not the appropriate option for the CRS industry.

Because price controls and similar forms of regulation require a public regulatory body, they may result in politicisation of the regulation process. This may result in two undesirable situations—delays in reasonable price increases, and pressure for the special treatment of particular customers. Price controls are an attempt to surrogate for a competitive situation in the presence of a natural monopoly. The CRS industry is not a monopoly and the rapidly changing nature of the industry makes it inherently unsuited to the expensive regulatory regime which would be required under any form of price regulation. Price regulation is not an option to control anti-competitive behaviour in the CRS industry. The OECD makes the following comment on price regulation of CRSs:

"[I]t would seem both impractical and poor public policy for governments to set or regulate prices charged by vendor-carriers. Regulated prices may appear to be an acceptable short-term solution, but, over time, they create distortions that are frequently more harmful than the injustices they were designed to correct."

**4. Structural Solutions**

Divestiture is the most extreme measure a government could take in an attempt to promote competition in the airline industry. Divestiture of airlines from CRSs

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has been suggested by a number of observers. Ehlers claims that separation of CRS ownership from the airline parent might facilitate the entry of new CRSs and increase CRS competition because the advantages which are enjoyed by vendor-airlines would be eliminated. The main premise behind the call for divestiture is that it would eliminate the ability of airlines which control CRSs to manipulate the distribution of the products of their competitors. The latest call for divestiture of CRSs was made before the United States Congress in the hearings for the Airline Competition Enhancement Act.

Michael Levine, the former General Director for International and Domestic Aviation at the CAB, Vice President of Marketing at Continental Airlines, and Chief Executive Officer at New York Air is the most notable advocate of divestiture. Levine claims that divestiture would limit the marketing practices of airlines which distort the principal/agent relationship between airlines and travel agents. He suggests that:"

"[W]e should ... consider how to restructure business incentives—perhaps by forcing divestiture of computer reservation systems . . ."

Proponents of divestiture claim that the solution offers a number of competitive benefits. First, since non-airline vendors can not earn incremental revenues through bias, more neutral systems would result. Even more subtle forms of bias such as architectural and functional bias may be eliminated because the airline would be completely severed from the CRS. Second, it is claimed that price

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59Levine, supra, note 23.
discrimination would disappear. Price discrimination is currently a problem because vendor-airlines only have to pay the marginal cost of the use of a CRS whereas other airlines have to pay high booking fees. Divestiture would result in non-discriminatory fees being charged to all airlines who would have equal access. This would reduce the CRS vendors' ability to affect competition in the downstream air transportation market. Finally, some commentators note that divestiture may bring access prices down to competitive levels by facilitating entry and increasing CRS competition.\textsuperscript{60} Evans claims that "[d]ivestiture would be the most cost effective option, because it would eliminate the continuing need to regulate and supervise the CRS industry against further display bias".\textsuperscript{61}

The benefits offered by divestiture seem obvious at the outset, but they must be carefully weighed against the possible efficiency losses and hardware duplication which would be imposed by the separation of computer facilities.\textsuperscript{62} In addition, there are a number of factors which mitigate the benefits mentioned above.

Divestiture of CRSs from airlines would do nothing about the oligopolistic nature of the CRS industry. Consequently, the market power of CRSs would remain and although the booking fees may be non-discriminatory, they may still reflect the exercise of exclusionary power (see part III C). To the extent that CRS vendors retain market power, the benefits of divestiture would be limited.\textsuperscript{63} In fact there is evidence which suggests market power would continue—for example, an airline would still need to be listed on every CRS to ensure access to all travel agents. Moreover, divestiture may not rid the CRS industry of system bias.

\textsuperscript{60} United States Department of Justice, \textit{supra}, note 37, p 64.
\textsuperscript{61} Evans, \textit{supra}, note 18, p 36.
\textsuperscript{62} United States Department of Justice, \textit{supra}, note 37, p 64.
\textsuperscript{63} Ibid, p 65.
Vendors would still be able to earn extra revenue by selling bias to willing airlines. On the surface, this is the way a competitive market should work, but most agree that the airline industry is not yet mature enough to handle it.64

As well as these long-run implications, there are a number of more directly measurable costs which would result from divestiture. These costs depend on what form the divestiture takes.65 The immediate costs of divestiture would be minimised to the extent that the CRS resources are shared between the vendor and the former host airline.66 For example, complete divestiture would require almost total duplication of expensive hardware equipment and housing, modification of software, and extension of the telecommunications network. In addition, reservation system staff and management would have to be separated and retrained.

Long-run costs of divestiture should also be considered. First, non-airline vendors would not have the same incentive to upgrade a system to keep it at the forefront of technology.67 Airline-vendors have the incentive of increasing their airline market share and earning incremental revenues. Without these incentives, innovation would suffer. This may result in a less reliable system of distribution than would develop in a carrier-vendor market.68 Some commentators have raised

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64 Lyle, supra, note 56, p 10.

65 United States Department of Justice, supra, note 37, p 66. This report suggests that there is a continuum of possibilities involving the degree of separation of each of the four major components of a CRS. The DOJ report considers three scenarios: "(1) The CRS and the related airline IRS would share the same physical location. Some processors would be shared but the databases would be separated. The systems would also share a common communications network. (2) The CRS and the related airline IRS would be separated into two nearby sites. The computer facilities, including processors and database, would be separate, but the two systems would continue to share a common communications network. (3) The CRS and the related airline IRS would be completely separated into remote sites. All systems, processor, database storage facilities and the communications network would be duplicated.

66 Ibid, p 69.

67 Ehlers, supra, note 55, p 55.

68 United States Department of Justice, supra, note 37, p 74.
concerns that divestiture would remove the economies of scope between operating an airline and operating a CRS. Undoubtedly, there are substantial economies of scope in the joint operation of an airline and a CRS. Divestiture would remove these benefits, resulting in higher overall costs of distribution and ultimately, higher air transportation prices. Additionally, certain skills and capabilities possessed by carriers and contributing to the success of CRSs could not be transferred with divestiture.69

Even with complete divestiture, it would still be necessary to retain some regulation of CRSs, for example to prevent the selling of bias.70 Therefore to some extent, expensive public regulation would remain. Expense would also be incurred by the administrative body which was entrusted to oversee divestiture. It would have to decide on the terms and conditions of a divestiture. This process, particularly the formulation of price is likely to be a very complex and speculative.71 Since divestiture would be forced, airlines are unlikely to be rewarded fully for their risk and innovativeness.72 A subsidiary problem with divestiture is that the airlines which sell their systems would be left with very large amounts of money. This would place them in an advantageous financial position over their rivals.

In short, divestiture would take many years, and would destroy certain efficiencies which are only available due to economies of scope.73 For the passenger, divestiture may well result in increased costs and it cannot be assumed

69Ehlers, supra, note 55, p 55.
70United States Department of Justice, supra, note 37, p 74.
71Ibid, p 75.
73Ehlers, supra, note 55, p 56.
with certainty that it would lead to improvements. The quality and reliability of the CRS product would be likely to suffer because as Lyle claims, independent vendors have little incentive to operate CRSs.

Generally, divestiture is viewed as being too severe a measure to solve the problems caused by unfair practices in the operation of CRSs. Besides this, divestiture may simply move the possibility of abuse to an entity outside the airline industry. Although it is difficult to quantify the benefits and detriments of divestiture, it is clear that the costs and potential for disruption is great. Since the benefits of divestiture are conjectural and potential costs are clear, such an oppressive regulatory solution should not be adopted.

The most famous instance of forced structural remedies is the decision of the United States Supreme Court in the Paramount case. This case provides proponents of divestiture with a case study of a successful divestiture. More than forty years after the decrees, it is possible to assess the divestiture by analysing the extent of competition which was injected into the industry. In Paramount, the Supreme Court ordered divestiture of a number of theatres from the five major motion picture distributors. The justification was that these five distributors had effective control of the motion picture industry because of their dominance of both exhibition and distribution in a number of locations. The Supreme Court order was followed by a number of consent decrees in which each of the five firms divorced its theatre circuit and disposed of individual theatres in towns where any

74 Ibid.
75 Lyle, supra, note 56, p 10.
78 Loew's (MGM), Paramount, R.K.O., Twentieth Century-Fox and Warner Brothers.
of the five distributors had a monopoly on distribution. A very significant effect of the Paramount decision was that it opened the way for hundreds of private litigants to bring treble damages suits against the defendants.

The Paramount decrees significantly affected the United States motion picture industry. The five major firms lost their control, and many new competitors entered at the production and exhibition levels of the industry. There is a major similarity between the motion picture industry before divestiture and the current structure of the airline industry. The motion picture industry comprises of three levels: production, distribution and marketing. Similarly, the air transportation industry comprises of three levels: air transportation services, reservation information distribution and air transportation sales (see part II B, *figure 8*). However, the control which vendor-airlines gain from their power over distribution is not as commanding as the power the five movie theatres had before the Paramount decrees. *Figure 24* contrasts the two situations.

![Diagram](image)

*Figure 24*
Contrast between the air transportation market and the motion picture industry

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Figure 24 shows that the level of control which the major motion picture possessed before divestiture greatly exceeds the level of control currently enjoyed by CRS vendors. Although vendor-airlines, through their joint ownership of CRSs and air transportation, gain control over the top two levels of the industry, their influence over air transportation sales (travel agents) is limited. In addition, unlike the firms in Paramount, CRS vendors do not possess monopoly power in any market (see part III B).

There are two further structural solutions posited for relief of the anti-competitive woes of the airline industry. The first solution is "hostless" CRSs. This means that although airlines may still own the CRS, the internal reservation system of that airline is not allowed to host the CRS. This suggestion was deleted from the proposed Airline Competition Enhancement Act before it reached Congress because it was realised that hostless systems offered no benefits. The only hostless CRS in operation in the United States is System One, owned by Continental Airlines. Nonetheless, despite the fact that System One is run on computers physically separate from those running Continental's internal reservation system, it includes numerous software driven defaults to Continental.\textsuperscript{80} Non-host CRSs appear to offer few redeeming qualities.\textsuperscript{81}

One final structural solution suggested to prevent the abuse of monopoly or exclusionary power in the CRS industry is state ownership of CRSs. However, this solution has many problems. Besides being contrary to the principles of economic liberalisation, state ownership does not prevent an organisation from

\textsuperscript{80}US Senate, \textit{supra}, note 33, p 87.

\textsuperscript{81}The most recent European Community Code of Conduct contains provisions regarding non-host CRSs. See part IV B 4.
exercising monopoly power.\textsuperscript{82} State ownership should not be an option for CRSs because of inefficiencies which would be likely, susceptibility to political interference and the problems with managerial incentives. There is no reason why the cost of obtaining the information necessary for regulating behaviour could be obtained more cheaply from a state organisation.\textsuperscript{83}

5. Conclusions

Although deregulation has resulted in some competitive problems in the airline industry, returning to a cumbersome regulatory regime would strip the consumer of many benefits currently enjoyed. Instead, the areas of competitive concern must be analysed and solutions specific to each area should be devised. The CRS industry is clearly one area which requires attention if the airline industry is to remain competitive.

Properly implemented, antitrust law will foster competition in both the airline industry and the CRS industry. In the opinion of this writer, public regulation is not the answer to the competition problems which have arisen through the use of CRSs since deregulation. The new antitrust theories outlined in part III C show how vendor-airlines gain advantages over their rivals through anti-competitive means. Using these theories, courts should be willing to impose liability on vendor-airlines for behaviour which is found to be anti-competitive.

Price regulation in any form does not adequately address all the problems of CRSs. Price regulation, if adopted, would require a number of other regulations which would be costly to administer and maintain. In addition, price regulation

\textsuperscript{82}The NZ Business Roundtable claims that "monopoly rents are likely to be captured by managers in terms of an easier life and more perquisites and by workers through soft wage settlements." NZ Business Roundtable, supra, note 35, p 76.

\textsuperscript{83}NZ Business Roundtable, supra, note 35, p 75.
brings with it a myriad of adjacent problems and it may reduce innovation, the key to the further development in the CRS industry.

One problem specific to CRSs with stringent regulations is that they would tend to ignore a customer's (that is, a travel agent's) preference for bias. For example, now that CRSs are largely PC based rather than dumb terminals, travel agents may "program" the level of bias they require. Stringent CRS bias rules may prevent this and force courts to impose unwanted rules.\textsuperscript{84} Any regulations would have to be flexible enough to encompass the changing technological developments of the industry. Lyle suggests that the best regulator of screen bias may be PC driven terminals where agents select the bias they desire. This would put the onus back on the airlines to win the agencies' favour—for example by offering increased incentives such as commission overrides.\textsuperscript{85} Most important is that the level of bias be known by the consumer.

Unlike restrictive regulations, antitrust law has the advantage of flexibility. The ability to adapt to fact-specific situations makes antitrust an effective option for controlling the competitive conduct of vendor-airlines. However, the success of antitrust claims depends on the willingness of the courts to embrace new theories of antitrust.

Divestiture is a solution which could be adopted either by courts or by a public regulatory body empowered with such authority. However, the analysis in this chapter shows that this should not be a policy option for CRSs. Although divestiture may remove the market power of vendor-carriers, this power would only be transferred to other companies. The social costs of divestiture are further

\textsuperscript{84} Lyle, supra, 56 p 9/10.
\textsuperscript{85} Ibid.
evidence that it is undesirable. These costs include the loss of a great many productive and innovative efficiencies from the CRS industry leading to an overall increase in the cost of air transportation. Further, costs are incurred during the divestiture process through litigation and the disruption of the economic activities in which the organisation is involved.\textsuperscript{86}

Vigorous antitrust enforcement is the key to ensuring a competitive civil aviation environment. Since the CRS industry has been described as "unusually resistant to normal disciplinary mechanisms",\textsuperscript{87} a government may augment its antitrust programme with threats of regulation. Threats may take various forms such as continued in depth studies into the CRS and airline industry, or specific guidelines for the operation of CRSs. If subtle threats do not appear to be effective, steps may then be taken to regulate the industry further. However, a government must be aware of the consequences of further regulation.


\textsuperscript{87}Alaska Airlines, Inc. v United Airlines, Inc., (1991) 948 F.2d 536 (9th Cir.).
B

CRS Codes of Conduct

Frustrated with the resilience of CRSs to usual competition laws, many countries have adopted codes of conduct specific to the operation of CRSs. These codes have been adopted with differing levels of complexity, application and statutory authority. This chapter provides a comparison of some of the world's CRS rules with the recommendations of the International Civil Aviation Organisation (ICAO).

1. International Considerations

The increasing globalisation of the CRS industry has often led to tension between some states. Conflict usually arises because of the furtherance of the "national interest". In an era of economic liberalisation, countries expose themselves to the rigours of international competition. It follows that if another country has an advantage in an industry, it will be a stronger competitor. This situation occurred with the advanced United States CRSs trying to get a foothold in the undeveloped European market. At first, the United States CRSs were far superior to the fledgling European CRSs. The response of some European Community countries was to hinder the expansion of the United States CRSs to allow their own systems a chance to compete.

The conduct of some European Community countries and organisations with regard to CRS competition led to a number of complaints by United States vendors and airlines lodged with the DOT. In 1989, the DOT approved a settlement between British Airways (BA) and American Airlines, which resulted
from BA's refusal to allow *Sabre* to issue BA tickets in the United Kingdom. On January 11, 1988, American filed a complaint against BA charging that this refusal was a violation of the United States International Air Transportation Fair Competitive Practices Act (IATFCPA). The DOT found that BA's conduct was in violation of the United States-United Kingdom air transport services agreement and initiated an investigation to determine what action to take. However, before this investigation could proceed, BA and American Airlines reached an agreement and American Airlines withdrew their complaint. Yet the DOT elaborated on the matter because "the parties' pleadings . . . created an extensive record on the competitive consequences of British Airways' CRS operations in the United Kingdom". On this matter, the DOT said:

"The ability of U.S. carriers to have a meaningful opportunity to establish CRSs in the United Kingdom is critical to the exercise of their bilateral right to a fair and equal opportunity to compete. Even a CRS completely devoid of anticompetitive or discriminatory elements provides a competitive benefit to the host carrier, much in the same way that ownership of any facility needed for the marketing and operation of airline services, such as airport gates, enhances a carrier's market presence. . . . Thus, we conclude that the "fair and equal opportunity" clause in the U.S.-U.K. Air Services Agreement applies to the ability of carriers to have the opportunity to market their services through their computer reservation systems."

A similar case to this was also brought against Iberia Airlines for its refusal to participate in *Sabre* in Spain. In addition, prior to the British Airways case, United Airlines complained that Japan Air Lines (JAL) did not allow *Apollo* to

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1 See: *American Airlines, Inc. v British Airways Plc.*, DOT Order 88-7-11, Docket 45389. American Airlines urged the DOT to require BA to instruct each US CRS to list its flights last, prohibit BA from issuing its tickets through US CRSs, and withhold authority for BA to engage in a code-sharing arrangement with United over certain domestic US routes.


3 *American Airlines, Inc. v British Airways Plc.*, supra, note 1, p 2/3.


5 Complaint of American Airlines, Inc. against Iberia, Lineas Aereas de Espana, S.A., before the U.S. Department of Transportation (March 12, 1990), Docket 46836.
issue JAL tickets in Japan.⁶ Like the British Airways case, the DOT found that JAL's discriminatory treatment was in violation of the United States-Japan bilateral agreement. Without an agreed worldwide code of conduct, disputes such as these may threaten the capacity of carriers to participate effectively in overseas markets. Similarly, if a dominant airline in a country refused to participate fully in a competing CRS, such as in the Iberia case, that CRS would be useless.

Recently the United States has attempted to include CRS provisions in its bilateral aviation agreements. However, many states resent the imposition on them of United States CRS rules. As at May 1990, only two countries, Saudi Arabia and Turkey, had accepted the United States rules.⁷ New Zealand flatly rejected the DOT's CRS provision and has refused to agree to any other CRS provisions. A source from the New Zealand Ministry of Transport indicates that this stance was adopted for two reasons. First, New Zealand did not want to regulate an industry during a period of widespread liberalisation. Second, New Zealand's dominant carrier, Air New Zealand, was vehemently opposed to the United States regulations. The bilateral negotiations between the United States and New Zealand have thus been stalled since September 1988. The Ministry of Transport sees no reason for adopting any specific rules because in their view the CRSs offered in New Zealand are "fairly neutral".

In an attempt to alleviate difficulties such as these, ICAO has published several documents regarding the use of CRSs. ICAO's recommendations stipulate that the guidelines should be the basis of a worldwide code or agreement among nations regarding CRS conduct. Before it issued its latest CRS code, ICAO published a

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⁶DOT Order 88-9-33. (September 16, 1988).
⁷Trinder, supra, note 2, p 29.
document to provide member states with guidance on the regulation of CRSs.\textsuperscript{8} These guidelines are reproduced in appendix 5.

On 17 December 1991, the Council of ICAO adopted a resolution which urges all contracting states\textsuperscript{9} to follow a prescribed code of conduct for the regulation and operation of CRSs. ICAO's latest Code of Conduct is reproduced in appendix 6. This Code is due for review before 17 December, 1994. The latest Code is based on four general principles:\textsuperscript{10}

1. the promotion of desirable practices in the distribution of air carrier products through CRSs;
2. the enhancement of fair competition among airlines and CRS vendors;
3. the belief that air transport users should have access to the widest possible choice of options which meet their needs; and
4. the encouragement of increasing participation by developing countries and their air carriers in CRS activities.

For a state which decides to follow ICAO's regulations, the Code has a more formal status than the guidance material, but is less binding than a multilateral


\textsuperscript{9}ICAO contracting states as of July 4, 1993 are: Afghanistan, Albania, Algeria, Angola, Antigua and Barbuda, Argentina, Armenia, Australia, Austria, Azerbaijan, Bahamas, Bahrain, Bangladesh, Barbados, Belarus, Belgium, Belize, Benin, Bhutan, Bolivia, Bosnia and Herzegovina, Botswana, Brazil, Brunei Darussalam, Bulgaria, Burkina Faso, Burundi, Cambodia, Cameroon, Canada, Cape Verde, Central African Republic, Chad, Chile, China, Columbia, Comoros, Congo, Cook Islands, Costa Rica, Côte d'Ivoire, Croatia, Cuba Cyprus, Czech Republic, Democratic People's Republic of Korea, Denmark, Djibouti, Dominican Republic, Ecuador, Egypt, El Salvador, Equatorial Guinea, Estonia, Ethiopia, Federated States of Micronesia, Fiji, Finland, France, Gabon, Gambia, Germany, Ghana, Greece, Grenada, Guatemala, Guinea, Guinea-Bissau, Guyana, Haiti, Honduras, Hungary, Iceland, India, Indonesia, Iran (Islamic Republic of), Iraq, Ireland, Israel, Italy, Jamaica, Japan, Jordan, Kazakhstan, Kenya, Kiribati, Kuwait, Kyrgyzstan, Lao People's Democratic Republic, Latvia, Lebanon, Lesotho, Liberia, Libya, Libyan Arab Jamahiriya, Lithuania, Luxembourg, Madagascar, Malawi, Malaysia, Maldives, Mali, Malta, Marshall Islands, Mauritius, Mexico, Moldova, Monaco, Mongolia, Morocco, Mozambique, Myanmar, Namibia, Nauru, Nepal, Netherlands (Kingdom of the), New Zealand, Nicaragua, Niger, Nigeria, Norway, Oman, Pakistan, Panama, Papua New Guinea, Paraguay, Peru, Philippines, Poland, Portugal, Qatar, Republic of Korea, Romania, Russian Federation, Rwanda, Saint Lucia, Saint Vincent and the Grenadines, Sao Tome and Principe, Saudi Arabia,塞舌尔, Seychelles, Sierra Leone, Singapore, Slovakia, Slovenia, Solomon Islands, Somalia, South Africa, Spain, Sri Lanka, Sudan, Suriname, Swaziland, Sweden, Switzerland, Syrian Arab Republic, Thailand, The former Yugoslav Republic of Macedonia, Togo, Tonga, Trinidad and Tobago, Tunisia, Turkey, Turkmenistan, Uganda, Ukraine, United Arab Emirates, United Kingdom, United Republic of Tanzania, United States, Uruguay, Uzbekistan, Vanuatu, Venezuela, Viet Nam, Yemen, Zaire, Zambia, and Zimbabwe.

agreement. To express ratification of the Code, each state is required to publicly announce their approval of the Code. The provisions are intended to be compatible with existing regulatory schemes of countries which, if they so desire, may deal with the topics in greater depth or specificity. The Code includes provisions regarding the obligations of states (article 3), obligations of system vendors (article 4 and 7), commercial arrangements (article 5), information displays (article 6), obligations of air carriers and subscribers (articles 8 and 9), and safeguards for developing countries (article 10). The main recommendations in the Code are summarised below:

A system vendor is not allowed to:

1. refuse participation in its CRS to any carrier that is prepared to pay the requisite fees and to accept the vendor's standard conditions;
2. impose anti-competitive or extraneous conditions on a carrier's participation or a subscriber's use of a system;
3. discriminate among participating carriers or subscribers (e.g. by charging different fees to carriers); and
4. misuse commercially sensitive information generated by its CRS.

A carrier:

1. is responsible for the accuracy of the information it provides to system vendors;
2. cannot refuse to provide information on schedules or tariffs to any CRS used in the carrier's state of domicile;
3. that is also a system vendor cannot refuse to participate in another CRS used in a state where the carrier holds a dominant market position (except where legitimate commercial or technical reasons exist).

As of 24 September, 1993, 23 member states had agreed to follow ICAO's Code.\textsuperscript{11} These countries are Argentina, Austria, Bahrain, Brazil, Czechoslovakia, Ethiopia, Indonesia, Israel, Jamaica, Kuwait, Malaysia, Morocco, Pakistan, Papua New Guinea, Paraguay, Sri Lanka, Switzerland, Tunisia, Antigua and Barbuda,

\textsuperscript{11}This information was provided by ICAO in an update to the Attachment to State Letter EC 2/28-93/6.
Dominican Republic, El Salvador, Nicaragua and Lesotho. On behalf of European Community members, the European Commission replied that its own Code of Conduct goes well beyond the scope of the ICAO Code. Therefore 12 of the member states of the European Community and several states who have agreements with the EC responded to ICAO but did not specifically indicate that they would follow the Code. The United States reserved its position on the ICAO Code because it believes that its own CRS provisions are consistent. In addition, Australia reserved its position and has since developed its own voluntary Code (discussed in part V). The Russian Federation has also reserved its position because its CRSs are currently being modernised. Russian officials believe that systems there are in accordance with the ICAO Code. New Zealand authorities, although sympathetic to the general substance of the Code, have some difficulties in giving it full effect. They consider the practice of the CRS industry in New Zealand to be consistent with the Code. A number of states are still considering the ICAO Code while seven states, for various reasons, have informed ICAO that they do not wish to follow it.

ICAO's Code and Guidelines use broad language, which easily enables countries in agreement to modify its provisions using either specific industry regulation or existing competition laws. Unique to the ICAO Code is its concern for CRSs and airlines from developing countries. The Code promotes equal and fair opportunity in overseas markets for developing countries' airlines. However,

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12 These states are Denmark, Finland, Germany Greece, Ireland, Italy, Kingdom of the Netherlands, Norway, Portugal, Spain, Sweden and the United Kingdom.

13 See part V A for a general discussion on the New Zealand approach to CRS regulation.

14 States still considering the ICAO code are: Barbados, Botswana, Burkina Faso, Chile, Egypt, Estonia, Poland, Senegal, Thailand, the United Arab Emirates and Uruguay.

15 Reasons for not following the ICAO code include: no CRS in use; not ready yet; not in the national interest; and code does not apply at this stage. These states are Afghanistan, India, Monaco, Myanmar, Romania, Saudi Arabia, and Tonga.
some developing countries do not have adequate distribution facilities in their own countries. Unreliable, or non-existent internal reservation systems will seriously hamper their ability to compete effectively in overseas markets. The ICAO Code contains a provision (article 10) which protects developing countries from the full effect of the rules until they are ready. In future, ICAO intends to develop the Code into a full multilateral agreement governing CRS activities.\(^{16}\)

2. **United States**

After several years of complaints from disadvantaged groups, United States Congress finally ordered an investigation into the use of CRSs as a means of unfair competition in December 1982.\(^{17}\) Both the CAB and the Antitrust Division of the DOJ investigated the systems.\(^{18}\) The House Aviation Subcommittee held hearings in 1982, during which it received the CAB and Antitrust Division reports.\(^{19}\) Despite finding that there were competitive problems with CRSs, the DOJ did not file suit. The CAB, however, was concerned that CRS vendor-airlines were violating §411 of the *Federal Aviation Act*.\(^{20}\) It issued an advanced notice of proposed rulemaking in September 1983 prohibiting tying arrangements,

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\(^{16}\) Crayston, supra, note 10, p 8.


\(^{18}\) United States Department of Justice. (1983). *Comments and Proposed Rules of the Department of Justice before the Civil Aeronautics Board, and Reply Comments of the Department of Justice*. The initial CRS rules were filed under 14 C.F.R. Part 255.


\(^{20}\) The *Airline Deregulation Act of 1978* transferred the remaining antitrust authority under §411 to investigate unfair and deceptive practices or unfair methods of competition in foreign air transportation to the DOT at Sunset. Specifically, the CAB indicated concern with the current and prospective effects of CRS competition both on the distribution of air transportation and on air transportation markets themselves. The CAB expressed to Congress its concern that market power on the part of certain CRS vendors could significantly impair the operation of the travel agent network and limit the ability of travel agents and other retailers to provide fair and impartial service to passengers. See: Guerin-Calvert, Margaret E. (1989). "Vertical Integration as a Threat to Competition: Airline Computer Reservation Systems". In Kwoka and White (eds). *The Antitrust Revolution*. Glenview, Ill: Scott Foresman.
screen bias and discriminatory pricing. Based on its own report, and the DOJ report, the CAB adopted specific CRS rules as of November 14, 1984. The Final Order promulgated two major rules. The first forbade discriminatory pricing and disallowed air carriers from biasing their CRS except against certain foreign carriers. The second rule concerned the practice of delisting certain connecting flights. The principal achievements of these rules were to:

- require the criteria by which flights are ranked in primary CRS displays to be objective, unbiased and published;
- prohibit factors relating to carrier identity from being used in ranking flights;
- open participation in CRS systems to all carriers;
- prohibit discriminatory charges for participation;
- prohibit vendor requirements regarding exclusive use;
- make available on a non-discriminatory basis all marketing, booking and sales data generated by the system; and
- outline the expected conduct for foreign carriers.

The CAB's authority to issue rules regarding bias, price discrimination, and the deletion of certain connecting flight information was challenged by United Airlines and British Airways in 1985. United questioned the CAB's authority to enforce the prohibition in §411 of the Federal Aviation Act against "unfair or deceptive practices of unfair methods of competition in air transportation or the sale thereof." The CAB was empowered to make rules under §204(a) which were "pursuant to and consistent with" the provisions of the Act. United questioned the Board's authority because §411 only allowed the Board to issue "cease-and-

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21Ibid.


23Trinder, supra, note 2, p 7.


desist-orders". United's question was: How can a rule forbidding a deceptive practice or an unfair method of competition be pursuant to or consistent with §411 when that section specifies cease-and-desist-order proceedings for enforcing its prohibitions?26 Put simply, this asks whether the CAB can issue proactive rules rather than reactive cease-and-desist-orders.

On this question, the Seventh Circuit found in favour of the CAB. Its reason was that on winding up the CAB in 1984,27 the CAB's rulemaking powers were transferred to the DOT rather than the Federal Trade Commission. The Court held that this illustrated Congress' approval of the Board's past use of rulemaking to enforce §411.

More specifically, United then asked if the CAB had authority to issue rules regarding system bias, price discrimination between airlines, and delisting of certain connecting flights.28 The CAB had issued the prohibition against bias based on its power to prohibit deceptive rather than anti-competitive practices. Price discrimination and delisting of certain connecting flights were both competitive problems.29 The Court had no hesitation in upholding the rule concerning bias because such a rule "was necessary simply to protect travel agents and air travellers from being deceived".30 The other two rules were held to be solidly enough based to adhere to the relevant statutory standard.31 The Court

26 Ibid.
28 United wished to delist some flights which were using "code sharing" because it considered that this was deceptive to passengers.
29 The CAB prohibited both the delisting of connecting flights and the practice of price discrimination.
30 United Airlines, supra, note 24, at 1112. In coming to this conclusion the Court noted that the Board had not yet acted on other practices which may achieve the same diversion of revenue which bias achieves (such as commission overrides). However the Court qualified its comments by saying "we cannot prescribe the Board's enforcement priorities".
31 The Court said that "the Board's analysis and conclusions, although far from airtight, can hardly be thought arbitrary or capricious."
noted that the CAB had found that some of the CRSs possessed market power and this finding, if sustained, would bring their competitive practices under §411.\textsuperscript{32} However, the Court doubted the ability of the CAB to defend its rules against CRSs with small market shares, such as Delta (2%). Since United was the only airline challenging the Board’s findings with respect to market power, this issue was not important. Accordingly, the Court upheld the CAB’s rules.

Guerin-Calvert claims the initial CRS rules were an important development for a number of reasons.\textsuperscript{33} First, they represented a situation where specific rules regarding conduct were chosen over structural relief to deal with the competitive issues raised by vertical integration. Second, the CAB proceedings which led to the rules provided convincing empirical evidence of the competitive effects of market power at one level of an industry on an adjacent level. Finally, the CAB proceedings demonstrated the value of thorough economic analysis in policy decisions.\textsuperscript{34}

The rules resulting from the CAB’s initial proceedings were an enormous improvement over nothing.\textsuperscript{35} However, in 1985, because of continued complaints from affected parties, Congress held a series of hearings on the need for divestiture of CRSs. These hearings resulted in the DOT negotiating agreements with American, United and TWA to eliminate biased secondary displays from their CRSs. In addition, the DOJ and GAO were asked to prepare reports on the current state of the CRS industry.\textsuperscript{36} Both these reports indicated the possibility

\textsuperscript{32}United Airlines, supra, note 24, at 1114. A monopoly share was not required under §411.

\textsuperscript{33}Guerin-Calvert, supra, note 20, p 339/340.

\textsuperscript{34}ibid.

\textsuperscript{35}ibid.

\textsuperscript{36}ibid. p 362.
that CRS vendors may have been exercising market power, but they indicated that there was no simple way to test for monopoly pricing.\footnote{United States Department of Justice. (1985). \textit{1985 Report of the Department of Justice to Congress on the Airline Computer Reservation System Industry}. Washington D.C. Also: United States General Accounting Office. (1986). \textit{Airline Competition: Impact of Computerized Reservation Systems}. Report to Congressional Requesters, Report No. GAO/RCED-B6-74.}

Later, in 1988, a DOT study showed that despite more stringent rules, CRS vendors still possessed substantial market power.\footnote{United States Department of Transportation. (1988). \textit{Study of Airline Computer Reservation Systems}. DOT-P-37-88-2.} Specifically, the rules eliminated most overt system bias but they failed to deal with a number of issues such as the more subtle forms of bias, excessive subscriber fees and restrictive contracts. This report led to a review of the DOT rules in September 1989. It took the opportunity to consider amendments and modifications to the existing rules and called for comments on a variety of issues including: the adverse effects of incremental revenues; information loading abuses; the effect of excessive booking fees; subscriber contracts; foreign carriers; and mandatory participation in CRSs. Numerous submissions were received from air carriers, air carrier organisations, and CRS vendors.\footnote{Trinder, supra, note 2, p 9. Trinder notes the submissions received from the CRS vendors and the Orient Airlines Association (OAA). Covia and American both believed (and continue to believe) that regulation of the CRS industry is unnecessary. The smaller vendors urged for extension of the CRS rules. In particular they wished for rules regarding flight ranking, information loading, booking fees and CRS contracts. The OAA advocated a more aggressive approach. It promoted the idea of freezing booking fees at the current levels and only allowing price increases if the vendor could prove that its costs had risen.}

The CRS rules were amended by the DOT and finally expired on December 11, 1992.\footnote{Between 1983 and 1992, there were a number of congressional attempts to regulate CRSs. See: Evans, John. (1990). "Divestiture as a Legislative Solution to the Anti-consumer Effects of Airline Ownership of Computer Reservation Systems". \textit{Computer/Law Journal}, 10: pp 1-46. Evans discusses the \textit{Airline Computer Reservation Systems Arbitration Act}, the \textit{Airline Passenger Protection Act}, and the Hearings before the Senate Antitrust Subcommittee.} In March 1991, the DOT issued a notice of proposed rulemaking which tentatively found that the rules should be re-adopted and strengthened in several
respects. The Department used its two reports\textsuperscript{41} and the public comments of the DOJ\textsuperscript{42} to justify its re-adoption of the CRS rules. The major provisions of the new rules were explained in a paper from the United States to an official of the Australian Department of Foreign Affairs and Trade.\textsuperscript{43} They include the following:

1. **Third Party Equipment and Software.** Subscribers can use third party hardware and software in conjunction with their CRSs. Consequently, they can reshape the information presented by the systems in ways that would better help them serve their customers.

2. **Use of One Terminal for Access to Several CRSs.** The rules therefore allow agencies to use their own equipment (but not vendor-owned equipment) to access other systems and databases.

3. **Architectural Bias.** The rules include three provisions providing for equal functionality with respect to specific characteristics. However, the rules do not require non-host systems or "equal functionality" in every respect.

4. **Enhancements.** The rules require vendors to make enhancements available for bookings on other carriers as well as for bookings on itself.

5. **Equal Loading of Fares and Schedule Changes.** The rules require vendors to load changes in other airlines' schedules and fares on the same basis that it loads its own changes. This keeps vendors from obtaining a competitive advantage by delaying the display of new fares and schedules offered by their competitors.

6. **Default Mechanisms.** The rules require vendors to eliminate any system defaults which favour a specific carrier.

7. **CRS Displays.** The previous CRS rules are strengthened by requiring each vendor to provide other airlines with instructions used by its programmers for creating the display algorithm so that other carriers can learn which type of flights will be included in each display and how they will be ranked. The rules also prohibit biased secondary integrated displays.


Finally, the rules require each vendor to use an equal number of connect points and double connect points in constructing its schedule displays.

8. **Adequate Billing Information.** The rules require vendors to provide enough information in their booking fee bills to enable other carriers to check the accuracy of the fees charged.

9. **Subscriber Contracts.** The rules eliminate several restrictive contract provisions imposed by the vendors that deter agencies from switching systems or using multiple systems. The rules reduce the maximum contract term for subscriber contracts from five years to three years (but allow vendors to offer a contract with a term up to five years), prohibits a vendor from requiring its subscribers to make a specified minimum number of bookings on each terminal each month, and prescribes vendors from limiting the number of terminals leased by subscribers from other vendors.

10. **Mandatory Participation.** The rules require each vendor to participate in other systems and their individual features, subject to certain limitations. These rules are consistent with the United States' position that foreign airlines must participate in US systems operated in their homelands. It also strengthens a vendor's ability to compete for subscribers in cities used by other vendors as hubs.

11. **International Marketing Data.** The rules provide similar access for U.S. carriers to data on international bookings and make the data available to foreign carriers if they reciprocate.

The current United States CRS rules are reproduced in *appendix 7*. They are due to expire on December 31, 1997.

The DOT continues to hear complaints from disgruntled smaller vendors and travel agent parties. The American Society of Travel Agents (ASTA) recently requested the DOT to amend the CRS regulations to prohibit the inclusion of lost booking fees in liquidated damages in subscriber agreements because, they claim, the current system allows American to circumvent the rules. ASTA's claim is

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supported by *System One* and Delta, who encourage the DOT to adopt a "bright line test" (such as termination after a specified period with no damages) to limit the amount of damages for the breach of a subscriber contract and to ensure that agents obtain the intended benefit of the current three year rule.\(^{46}\) This loophole illustrates the ability of large vendors to manipulate the rules for their own benefits.

3. **Canada**

Canada's CRS rules exist in the form of a Consent Order issued as a result of a 1989 Canadian Competition Tribunal case.\(^{47}\) Before this case was argued, there were three CRSs operating in Canada. The largest, *Reservec*, was owned and operated by Air Canada. Canadian Airlines International (CAIL) was hosted by the second largest CRS, *Pegasus*. *Pegasus* was developed by CAIL's predecessor, CP Air because CP Air was dissatisfied with the *Reservec* systems.\(^{48}\) American Airlines entered the Canadian market in 1983 with *Sabre* and captured 10 per cent of travel agencies by 1987. On June 1, 1987, Air Canada and CAIL merged their two systems to form *Gemini*.\(^{49}\) However, the Canadian competition policy authorities became alarmed because of the substantial lessening of competition in the CRS market and the potential for anti-competitive effects on the airline market. The Director General of Investigation and Research, the statutory head of the Canadian competition agency, filed an application with the Canadian Competition Tribunal alleging that the merger "substantially lessened competition in the provision of CRS services to travel agents and airlines".\(^{50}\) The application

\(^{46}\)Ibid.

\(^{47}\)The Director of Investigation and Research v Air Canada et al. (1989), Competition Tribunal Consent Order, CT 88/1.


\(^{49}\)In March 1989, Apollo joined the Gemini partnership as a one third owner with CAIL and Air Canada.

\(^{50}\)Annan, *supra*, note 48, p 11.
requested the Competition Tribunal to dissolve the merger of Reservec and Pegasus.

The Canadian Competition Tribunal allowed the merger to stand subject to a number of conditions. Indeed, the Director determined that the imposition of terms and conditions on Air Canada, CAIL and Gemini would create a situation in which the merger could be allowed to stand and no substantial lessening of competition would arise therefrom.\(^{51}\) The Order deals first with obligations affecting Air Canada, CAIL, and their affiliated airlines, and second, with the CRS rules (see appendix 8).

The main provisions of the rules are:

- Air Canada and CAIL must supply the same information at the same time to CRS competitors as they do to Gemini. They must participate in competing CRSs and make information available at reasonable terms.
- All enhancements made available to Gemini by participating carriers must be made available to subscribers at reasonable terms.
- A system must have a primary display(s) which does not use any factors directly or indirectly related to carrier identity.
- Information must be available regarding connecting point construction and screen display.
- Data shall be loaded on a non-discriminatory basis.
- Contracts with carriers shall not discriminate with regards to fees and shall not be conditional to any tied goods or services.
- CRS vendors must not discriminate between subscribers willing to pay the reasonable fees. Contracts with subscribers shall not discriminate with regards to fees, shall not be conditional to any tied goods or services, shall not exceed three years or include roll over or liquidated damages clauses.
- Non-carrier-specific information must be available to participating airlines.

\(^{51}\) The Director of Investigation and Research v Air Canada et al. (1989), Competition Tribunal, reasons for consent order dated July 7, 1989, CT 88/1, p 15.
Recently, the Director applied to the Competition Tribunal to vary the Consent Order containing the CRS rules to eliminate the impediment to a proposed alliance between CAIL and American Airlines (AA).\textsuperscript{52} Financially troubled CAIL reached an agreement with American Airlines which, if it proceeded, would allow AA to take 25 per cent of CAIL's voting stock in return for a $CN250 million equity investment. However, AA's offer was conditional on CAIL exiting from the "Gemini hosting contract" and being hosted by Sabre. The Gemini hosting contract was an agreement between CAIL, Air Canada, their airline affiliates and the Gemini partnership. Under the contract, Gemini would play host to the said airlines until December 31, 2067. The Director of Investigation and Research claimed that the agreement with AA was the only way to save CAIL and pleaded with the Competition Tribunal to vary its CRS rules to allow the investment by AA to go ahead. However, the Competition Tribunal, in majority decision, ruled that it did not have jurisdiction to grant the relief requested by the Director, and therefore dismissed the application.\textsuperscript{53} The Director has appealed the case to the Federal Court of Appeal.

The Competition Tribunal's reaction to the case illustrates little about the CRS rules. The Director's action did not succeed before the Competition Tribunal because it believed it lacked the jurisdiction to grant the relief sought. Yet the case illustrates the very restrictive nature of the 1989 Consent Order. While other countries' CRS rules deal mainly with the conduct of CRS vendors (apart from the responsibility of the carriers for the information they provide), the Canadian rules


impose by far the most stringent regulations on the airlines concerned. This may reflect the Competition Tribunal's fear of monopoly conditions returning to the Canadian airline industry. Ironically, if the Director does not succeed in the Federal Court of Appeals, this is what may well happen in Canada.

Canada's CRS rules, however, are similar in many respects to the other codes analysed in this section. Notably, the rules explicitly prohibit liquidated damages clauses—a provision absent from the other codes discussed. Missing from Canada's rules are restrictions on minimum use provisions, architectural bias rules and rules regarding data security and privacy. Apart from the restrictions on the airlines involved, Canada's CRS rules are broadly worded and allow for interpretation. However, as the recent Gemini decision shows, excessive restriction may result in supression rather than furtherance of competitive market conditions.

4. Europe

The European air transportation market is unique in two important respects. First, more than 50 per cent of air travel is on chartered aircraft. Second, since Europe is made up of sovereign states, many of its airlines are heavily supported by governments. These differences have important implications for aviation regulation—especially the regulation of CRSs.

In the opinion of the European Commission, regulation of CRSs is necessary in order to avoid abuse of the systems and to ensure fair competition between air carriers and CRSs to the benefit of both the industry and the consumer. The

54 See: The Director of Investigation and Research v Air Canada et al., supra, note 47, pp 4-15.

Council of European Community adopted Regulation 2299/89 (see appendix 9) on July 24, 1989, to be effective in all member states as from August 1, 1989. The recommendations for amendments to the 1989 Code were first contained in the 1992 Report and Proposals to the Commission. The 1989 Code was subsequently amended and the new Code adopted on October 29, 1993 (see appendix 10).

The EC issued its original Code in 1989 and the CRSs operating in the Community had to adapt quickly to a completely new piece of legislation which was adopted without prior practical experience. In fact, when the Code came into force, no CRS operating in the Community was able to adhere to the display requirements outlined in articles 5(3) and 9(5). Waivers were granted under article 21(2) to give system vendors the opportunity to adapt their CRS. All of the CRSs operating in the Community at that time requested an extension of their waivers. The Commission granted these extensions to all CRSs but Sabre.

The main points of the original EEC Code include the following:

- Vendors are required to allow access to carriers on a non-discriminatory basis. The Code forbids attaching "unreasonable conditions" to any CRS contract. Data loading, processing and service enhancements are to be offered on an equal basis.

- Participating carriers are required to provide "comprehensive, accurate, non-misleading and transparent" data. The system vendor is not allowed to manipulate any material.

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59In the opinion of the Commission, Sabre did not need any waiver. Waivers granted were: Amadeus until 31/12/90; Galileo until 31/12/90; GETS until 31/12/90; Datas II until 30/6/90.
• Principal displays should be clear and without discrimination or bias. Ranking criteria is specified by the Code.
• Marketing information is to be available. Single booking information is to be available to the airline the booking concerns, aggregate information is to be available to all participating carriers.
• CRSs from third countries which do not adhere to the EC Code are not entitled to protection under the Code.
• No CRS airline-vendor may link incentives to the use of its CRS.
• Vendors must not demand exclusive contracts.
• Fees charged must be non-discriminatory and related to the cost of the service provided and used. Changes to fees, conditions or facilities must be effected and communicated in a non-discriminatory basis.

In addition to these specific provisions, the Code outlines the rights and obligations of the Commission with respect to CRSs. Interestingly, the EC Code contains a provision regarding the security of CRS data. Article 22 allows the application of national legislation on security, public order and data protection.

The swiftness with which vendors and airlines were expected to adhere to the Code led to a great deal of confusion. Consequently, there were a number of complaints and requests for interpretation from the Commission. The Commission responded by publishing an explanatory note on the EEC Code (see appendix 9). Although the explanatory note had no legal power, and was therefore not binding, it provided additional guidance under the original Code. The EC's revised Code of Conduct means that the explanatory note is unnecessary.

The majority of questions raised before the Commission relate to the way in which information on schedules and fares is to be displayed. The Commission noted recently that more complex issues are now being raised with respect to the

operation of CRSs. Questions include issues such as: the display of joint venture flights leading to screen padding; display of flights with code-sharing arrangements; the discriminatory inclusion of air fares not yet approved by the authorities; the possibility of direct access to air carriers' own inventories; abuse of a dominant position; the provision of free hardware dependent on booking volume; and discrimination between members and non-members of the EC. Some of these complaints are still under consideration.

These complaints and requests for information provided the Commission with valuable practical experience with the regulation of CRSs. This experience, coupled with rapid technical and marketing developments, have increased the need for a new code. In late 1992, the Commission issued its proposal for amendments to the original Code of Conduct.

The proposal amends the 1989 Code of Conduct in a number of significant ways—in particular, aspects of the principal display and ranking criteria. The Commission expressly notes that the relatively small number of complaints received regarding the original Code is an indication of its efficiency.\textsuperscript{61} The Commission identifies four main areas where modifications are necessary: (1) clarifications/modifications of existing rules; (2) inclusion of non-scheduled services;\textsuperscript{62} (3) mandatory participation in CRSs; and (4) dehosting or specific safeguards.

Specifically, modifications apply to the following aspects of the Code:

\textsuperscript{61}Commission for the European Communities, \textit{supra}, note 55, p 10.

\textsuperscript{62}Since the adoption of the first CRS rules, the third package has been adopted by the Council. The third package removes most of the distinction between scheduled and non-scheduled services. See: Lewis, Claire Simone. (1992). "EC Air Transport Policy: Third Package Proposals for Liberalisation". \textit{EIU European Trends}, (2): pp 42-52.
• The modifications clarify the definition of a subscriber. Only airline offices which are clearly identified as such fall outside the scope of the Code (article 2k and 20a).

• The airlines supplying data under the proposed Code must ensure it conforms to the new ranking criteria in the annex (article 4.1).

• Marketing information must be available to all participating carriers at the same time (article 6).

• Principal display must always be accessed first (annex).

• Contracts for the use of a CRS and the supply of technical equipment are separated. The latter are dealt with under normal contract law (article 9.4).

• Third party software is allowed provided it is compatible (article 9.6).

• Because PC-based equipment makes it easier for subscribers to manipulate information, the revised Code respects this development by limiting this obligation to a contractual provision only (article 9.5).

• Basic billing requirements are outlined (article 10.2).

• Reciprocity rules apply regardless of where discrimination exists outside the territory of the Community (article 7.1 and 2).

• Non-scheduled services are included in the scope of the Code of Conduct and unbundled products are integrated in the same display irrespective of whether they are offered on scheduled or non-scheduled services (articles 1, 2 and the annex). Non-scheduled services are clearly labelled as such and at the request of the consumer, the agent may elect not to display non-scheduled services (article 5.2b).

• Mandatory participation is restricted to parent carriers and their affiliates (article 3a).

• Although the revised provisions do not require dehosting, they ensure equal treatment by establishing "Chinese walls" between the host carrier's inventory and the CRS.\textsuperscript{63} In addition, the host carrier is forbidden from reserving any specific loading and up-dating method for itself (article 4.4 and 6).

\textsuperscript{63} Recently, United States and European CRS operators agreed on procedures for dehosting. The agreement allows for a software-based method of separating CRS operators from airlines. American Airlines had feared that physical separation requirements proposed by the Association of European Airlines (AEA) would cost it SUS250 million. The breakthrough in negotiations resulted from meetings of the ECAC in Paris on September 8-9, 1993. The agreement allows for regular and on-the-spot checks to ensure that CRS companies are meeting the code's demands. See: Anon. (1993). "U.S., European CRS Operators Agree On Dehosting", Aviation Daily, September 16, 1993, p 427.
A last minute surprise addition to the Code requires CRSs operated in Europe to have legal identities separate from their airline owners (article 3(1)).

European transport ministers decided to approve the new Code of Conduct for computer reservation systems on September 28, 1993.

Even before the first CRS Code was passed in 1989, the European Commission recognised that significant benefits could be obtained from CRS joint ventures. Accordingly, the Commission promulgated the CRS Joint Venture Exemption in July, 1988. This was updated in 1991 by a draft which was followed by a revised regulation. The exemption outlines which CRS agreements do not fall under the ambit of article 85(1) of the Treaty of Rome, pursuant to article 85(3).

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69 Article 85(1) prohibits agreements that restrict competition and threaten the unity of the common market. However, not all agreements which restrict competition are prohibited. Korah notes that some forms of collaboration may have beneficial effects. Such agreements may be capable of exemption by the Commission under article 85(3). See: Korah, Valentine. (1986). An Introductory Guide to EEC Competition Law and Practice, 3rd Edition. Oxford: ESC Publishing Limited.

Article 85 states:
1. The following shall be prohibited as incompatible with the common market: all agreements between undertakings and concerted parties which may affect trade between Member States and which have as their object or effect the prevention, restriction or distortion of competition within the common market, and in particular those which:
   (a) directly or indirectly fix purchase or selling prices or any other trading conditions;
   (b) limit or control production, markets, technical development, or investment;
   (c) share markets or sources of supply;
   (d) apply dissimilar conditions to equivalent transactions with other trading parties, thereby placing them at a competitive disadvantage;
   (e) make the conclusion of contracts subject to acceptance by the other parties of supplementary obligations which, by their nature or according to commercial usage, have no connection with the subject of such contracts.
2. Any agreements or decisions prohibited pursuant to this Article shall be automatically void.
3. The provisions of paragraph 1 may, however, be declared inapplicable in the case of:
The first article of the *CRS Joint Venture Exemption* provides specific competition law exemptions designed to promote co-operation.\(^70\) It exempts from article 85(1) "agreements between undertakings" to "purchase or develop a CRS in common; or to create a system vendor to market and operate the CRS; or to regulate the provision of distribution facilities by the system vendor or by distributors".\(^71\) However, the scope of the exemption is limited. It only applies to undertakings not engaged directly or indirectly in the development, marketing or operation of another CRS. Furthermore, it only applies if the system vendor: allows carrier partners to become sole distributor within their countries; grants exclusive rights to a single distributor in each geographic market; and requires that the distributor deals with only one CRS. Accordingly, the *CRS Joint Venture Exemption* only applies to the European joint venture systems (*Amadeus* and *Galileo*). Mietus claims that the purpose of the exemption is not only to condone the operation of the European systems but also to protect them from United States competition.\(^72\) However, recently the Commission showed that it may allow joint undertakings between EC Members and non-Members.\(^73\) This is an encouraging sign from the Commission. It signifies the Commission's interest in productive

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\(^{71}\) Commission of the European Communities, *supra*, note 68, Article 1.

\(^{72}\) Mietus, *supra*, note 70 p 107.

\(^{73}\) See: Commission of the European Communities. (August 1991). "Joint venture - co-operation agreement between computer reservation systems to be exempted". *Press Release*, IP(91) 784 2. The Commission approved a joint venture between *Amadeus* and *Sabre*.
and innovative efficiencies in the operation of the systems, so long as the consumers' share in savings is protected under article 85(3) of the Treaty of Rome.

Although the exemption confers on CRS vendors a powerful means of sidestepping the Community's competition laws, the remainder of the exemption imposes conditions to eliminate prospective competition problems. These provisions in the 1988 *Joint Venture Exemption* only applied to the joint venture CRSs operating in the market at that time. Since then, the CRS Code of Conduct has widened the application and detail of the information and contract abuse provisions as outlined above. The 1990 revision of the exemption took into account Council Regulation 2299/89.

Article 85(3) was recently used by the Commission to authorise the combination of *Galileo* and Covia. On February 24, 1993, these companies submitted to the Commission a notification and application for a negative clearance or an individual exemption pursuant to Article 85(3). The merger finally proceeded on September 16, 1993.

The Commission should be commended for encouraging the development of joint industry CRSs. Some observers may note that joint venture CRSs could lead to an increasingly oligopolistic CRS market. However, the Commission's regulations under the 1990 *Joint Venture Exemption* thwart any anti-competitive effects this may have. Apart from requiring adherence to the CRS Code of

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74Mietus, supra, note 70, p 108.

75In principle, all agreements, decisions and concerted practices falling under Article 85(1) have to be notified to the Commission unless they are automatically exempted (eg. under the block exemption). In cases of any doubts whether such an exemption will apply, these arrangements, decisions and concerted practices have to be notified also to the Commission which will then decide on an individual basis on the application of Article 85(3). This is what has been done in the Galileo/Covia case.

76See: Re the combination of the Galileo and Covia Computer Reservation Systems. (1993) EC Commission Notice 4 CMLR 638, Case IV/34.632. See also part V B 1 for a discussion of the European Community notification and negative clearance procedures under regulation 17.
Conduct, the Commission may withdraw its exemption of a joint venture if it finds that adverse market effects are present. Article 12 allows the Commission to withdraw the benefits of the joint venture approval where it finds that an agreement exempted by the regulation has effects which are incompatible with the conditions laid down by Article 85(3) or which are prohibited by Article 86 of the Treaty of Rome.\(^7\)

The exemption as it stood expired on 31 December 1992. It was recently extended in its period of effectiveness to 31 December 1993.\(^8\) In addition, there is a more general regulation covering a wider range of agreements and concerted practices in the air transport sector.\(^9\) This wider regulation has recently been amended to contain a provision which deals specifically with the "common purchase, development and operation" of CRSs. In particular, it notes the Commission's obligation to ensure consistency with the Code of Conduct adopted by the Council.\(^10\)

The European Civil Aviation Conference (ECAC) has also issued a CRS Code of Conduct for use by its member states.\(^11\) The ECAC Code of Conduct was

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\(^{7}\) European Commission, *supra*, note 68, p 12. Article 86 of the Treaty forbids any abuse of a dominant position within the Common market. Article 12 of the *CRS Joint Venture Exemption* provides examples of situations where the Commission would be likely to withdraw its approval. These include: restricting competition in the CRS, air transport, or travel related markets; discriminatory pricing; non-participation without valid reason; and denial of access to a CRS.

\(^{8}\) A new block exemption is under preparation. It is intended that the new Regulation should enter into force on 1/1/94. In the case that it is not possible, the existing block exemption will be extended once more for a short period of time.


\(^{10}\) *Ibid*, article 2(2).

\(^{11}\) The ECAC was established in 1954 with status immediate between complete independence and being a subordinate regional organisation of ICAO (its secretariat is provided by ICAO). ECAC's aim is to "review generally the development of European Civil Aviation in order to promote its co-ordination, better utilization and orderly development; consider any problems that may arise in this field". ECAC members are: Austria, Belgium, Bulgaria, Czechoslovakia, Cyprus, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, Monaco, Netherlands, Norway, Poland, Portugal, Romania, Spain, Sweden, Switzerland, Turkey, UK, Yugoslavia.
adopted and recommended for implementation by the Directors General of Civil Aviation of the Member States on March 7, 1989. The ECAC's Code is reproduced in appendix 11. Although the ECAC is working closely with the European Commission to produce a uniform code, there are some differences between the Codes as they stand.

Principally, the Codes have different types of authority. The EC Code is binding on all its Member States, whereas the ECAC Code is not legally enforceable. In addition, unlike the EC Code, the ECAC Code does not specify any rule regarding third party hardware and/or software, or data privacy and security. Conversely, the EC Code does not contain specific rules regarding minimum use provisions or connecting point bias.

5. Conclusions

CRSs continue to provide a difficult and complex policy problem of the costs and benefits associated with vertical integration where market power in one market can affect other markets in irreversible ways. It is important that there is a uniform code of conduct for both the domestic and international operation of CRSs. Such a code would provide the boundaries within which vendors should behave.

ICAO's guidance material on the regulation of CRSs, and subsequent International Code of Conduct, provides a valuable reference source for countries to develop their own regulatory regimes. The broad language and clear definitions allow these rules to be encompassed by most countries' competition legislation and, if required, industry specific regulations may be developed. Although

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82 Trinder, supra, note 2, p 14.
83 Guerin-Calvert, supra, note 20, p 361.
ICAO's Code and guidance material is designed to assist States in developing policy and regulations to curb abusive use of computer reservation systems at the international level, both documents contain valuable advice on the domestic regulation of CRSs.

The attempt to further the national interest may lead to further conflicts such as those discussed in section 1 of this chapter. To avoid such conflicts, countries should embrace the recommendations of ICAO. Of all the Codes analysed, the ICAO Code provides the most in-depth guidance for system vendors, airlines, subscribers, and regulatory bodies. Furthermore, ICAO recognises the specific needs of countries which are still developing their CRSs. The ICAO exemption for these countries allows them to develop their CRSs to a level where they are comparable to the mega-systems. The globalisation of the CRS market will increase the number of international CRS alliances. ICAO must continue to improve its already excellent international regulations to provide its member states with a conceptual framework on which they may base their regulations.

Appendix 12 provides a comparison between the five Codes of Conduct discussed in this section. In general, the Codes focus on the obvious restrictions such as screen bias, restrictive CRS contracts and discriminatory pricing. There are a number of specific provisions which deserve comment.

The United States Rules allow a travel agent, through the use of a personal computer (rather than a dumb terminal) to alter the primary display or have access to more than one CRS simultaneously. Conversely, the EC Code states that the principal display must be accessed first by all subscribers. The EC provision is too restrictive. By allowing the travel agent to dictate the level of "bias" the system displays, the onus is put on the airlines to offer good service. If all airlines were equal, the travel agent would not want any display bias. A number of other
important issues are identified by the different codes. These include: the provision of information regarding the editing and ordering of the CRS display and connecting points; the information which should be included in booking fee bills; mandatory participation for carrier-vendors in other systems; rules regarding data privacy; and architectural bias rules concerning system enhancements, information loading procedures, and CRS default mechanisms.

Several innovative provisions are found in the EC Code of Conduct. First, the EC Code contains a broad provision which forbids CRS contracts which attach "unreasonable conditions". This leaves significant scope for interpretation by the courts under existing contract and competition law. Second, the EC Code separates the contracts used for the use of a CRS and the provision of technical equipment. Although all the codes forbid tying equipment to the use of a CRS, contracts often contain liquidated damages provisions for the cost of the equipment and the use of the CRS. Under the EC Code, equipment provision contracts are covered under normal contract law. Another way to circumvent liquidated damages provisions is to prohibit them altogether, as in the Canadian Consent Order. Third, the EC recognise non-scheduled services in their rules. This recognises that non-scheduled services are close substitutes for scheduled services and should be given an equal opportunity to compete. In fairness to system vendors, non-scheduled services would have to provide information which is as detailed as scheduled services. With real-time links now the norm, this requirement should provide few difficulties. Fourth, the EC regulation deals with the issue discussed in chapter A of hostless CRSs. The EC Code requires "Chinese walls" which separate the inventory of the host carrier from the main CRS database. This may remove any residual architectural bias. Finally, the EC has recognised the value of CRS joint ventures by exempting them from the full rigours of competition legislation. The 1990 CRS Joint Venture Exemption
recognises the value of productive and innovative efficiencies while retaining the consumer's share of the surplus under article 85(3) of the Treaty of Rome.

The Canadian experience with CRS regulation illustrates the need for flexibility with the rules. Even when an alternative arrangement would increase competition in the CRS and airline markets, the stringent rules which were imposed at the time of the Consent Order have proved to be difficult to avoid. Flexibility is an important part of rulemaking in such a rapidly changing industry.

However, the preference that the writer shows for CRS rules in some form does not discount the conclusions of part III. While rules may provide guidance for parties to CRS contracts, antitrust law has the capacity to make up for the shortcomings of the rules. Courts should be prepared to use CRS rules as a guideline to which conduct should be proscribed using the theories in part III.

According to Baker, public regulation has some significant advantages over antitrust because of antitrust law's inability to address some problems which are clearly anti-competitive and harmful to the overall performance of an industry.\textsuperscript{84} In some circumstances Baker's preference for public regulation may be true. For example, in the \textit{E.I. du Pont de Nemours v Federal Trade Commission}, the Second Circuit held that "before business conduct in an oligopolistic industry may be labelled 'unfair' within the meaning of §5 [of the \textit{Federal Trade Commission Act}], a minimum standard demands that, absent a tacit agreement, at least some indicia of oppressiveness must exist such as (1) evidence of anticompetitive intent or purpose . . . , or (2) the absence of an independent legitimate business reason

for [the] conduct. The existence of some form of rules or guidelines would be the indicia required by a court.

Flexible CRS rules imposed by a competition agency have the ability to guide courts in private actions. As well as relying on private actions, regulatory bodies can take the responsibility of ensuring CRS vendors compete fairly and do not confer any unwarranted competitive advantage on their airline owners.

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Part V

Australasian Developments

CHAPTER A
CRS Activity in Australasia

CHAPTER B
Competition Law in Australasia
Introduction

Australia and New Zealand were slow to adopt explicit CRS regulation, relying on their competition laws to provide a competitive marketplace. Australia recently adopted a voluntary code. New Zealand, however, remains reluctant to adopt industry-specific regulation. Australia's CRS Code of Conduct is the consequence of merger similar to the Gemini case in Canada.

Like CRS industries in North America and Europe, the development of the Australasian CRS industry was heavily influenced by airline deregulation. As well as deregulation in Australasia, CRS development in this region was influenced by deregulation in the United States and Europe. Systems now used in Australia and New Zealand are based on and linked to the major United States and European systems.

The heavily regulated environment in Australasia, prevalent until the mid 1980s, meant that airlines and competition were not synonymous. In New Zealand there was only one major airline and in Australia, two airlines were dictated to by the Government. Under these conditions, CRSs did not evolve to serve the customer or the travel agent. Instead, those travel agents who could afford the cost accessed airlines' internal reservation systems through antiquated multi-access systems such as MAARS in New Zealand and the original TIAS system in Australia.

This part outlines the Australian CRS Code of Conduct and its inception. Chapter A looks at the TIAS merger and subsequent Code of Conduct decisions. New Zealand's approach to regulation of CRSs is also critiqued in chapter A.
Chapter B takes a close look at some of the key competition law provisions in Australia and New Zealand. Specifically discussed are the authorisation procedures, the misuse provisions, and the catch-all provisions. Australasian competition law provides disgruntled CRS vendors, travel agents, airlines, and regulatory bodies with a wide scope for antitrust attack on dominant vendors. However, as becomes apparent, not all competition problems with CRSs can be addressed through competition law.
CRS Activity in Australasia

"This market is hurting from ... global and regional misadventure by the mega systems. The terms and conditions that they place on the travel agents ... are currently unacceptable to an increasing number of users that have already contracted these systems at what are exorbitant rates in anyone's currency."

Referring to the Australasian market, this statement was recently made by the president of the Travel Agents' Association of New Zealand. Although the use of CRSs has vastly increased travel agent productivity, the share of the efficiency increase is unfairly skewed toward the system owners. The Australasian market is no exception. Nonetheless, Australia and New Zealand have taken different approaches to regulating CRS activity. Not only are their approaches different to each other, they are different from the other states outlined in part IV B.

1. **The TIAS Merger**

On January 29, 1992, the Australian Trade Practices Commission (TPC) authorised Travel Industries Automated Systems Pty Ltd (TIAS) to acquire a dominant position in the provision of CRS services in Australia. TIAS, jointly owned by Qantas, Australian Airlines, Ansett Airlines and Air New Zealand, acquired Southern Cross Distribution Systems Pty Ltd (SCDS) and Qantas Distribution Services (QDS). Until December 31, 1991, TIAS provided a multi-

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2 See part V B 1 for a discussion on the Australian authorisation procedure.

3 At the time of the application, Air New Zealand was not a partner in TIAS. On September 1, 1992, Air New Zealand entered into an agreement with TIAS whereby Air New Zealand's MAARS system would be progressively wound down. New Zealand travel agents would then have the opportunity to replace MAARS with Sabre, Galileo, or another CRS on the New Zealand market. Air New Zealand would take an equal share in TIAS.
access reservation switching service to subscribers. The introduction of more advanced single-access systems by QDS and SCDS saw the demise of TIAS as an airline reservation system. QDS, now known as Fantasia Information Network (FIN), was established by Qantas after one of its subsidiaries obtained the licence to distribute the Sabre CRS in the Asian Pacific region. FIN markets Sabre in Australasia as Fantasia. SCDS was formed in November 1988 when Ansett and Australian Airlines entered into a joint venture agreement to operate and market the Galileo CRS in Australia and New Zealand.\(^4\) TIAS has continued to operate FIN and SCDS as separate entities.

The acquisition of FIN and SCDS gave TIAS a 95 per cent market share of CRS sites. The only two other CRSs operating in Australia at the time were System One and Abacus. Since the owner airlines of TIAS were also market share leaders in the domestic, trans-Tasman, and international inbound and outbound markets, the TPC understandably was concerned at the competition consequences. TIAS claimed the following public benefits would result from the acquisition:\(^5\)

1. The merger was the only possible way to preserve the opportunity for Fantasia and Galileo to continue in operation against each other.

2. Cost savings would result from having TIAS combine the two distributorships, while continuing to market them separately. These savings were estimated to be $A4.7 million in the first year and $A44 million over seven years.

3. If the acquisition were allowed, Ansett and Australian would provide last seat availability on Fantasia.

4. TIAS would be able to take advantage of emerging advances in communication technology.

5. TIAS proposed implementing the code of conduct it had drawn up. The code would eliminate display bias and other discriminatory features.

\(^4\)See figure ? for ownership details of Galileo and Sabre.

Although there was no evidence presented to the TPC as to how many subscribers a system needed to be economic, the Commission agreed with TIAS on the first point above. It stated that "from an economic efficiency standpoint, the relatively small size of the Australian market is such that it can only optimally support one major CRS".\(^6\) Despite this, the TPC could not conclude whether without the merger, the two systems would continue, or conversely whether the merger would ensure their survival.

The reason TIAS sought authorisation for the merger was because it was likely to contravene §50 of the Trade Practices Act.\(^7\) The TPC has power under §88(9) to authorise an acquisition of a controlling interest in an entity. Under §90(9), for a merger to be authorised, it must be likely to result in a public benefit. Although the TPC mentioned a number of substantial public benefits which would be likely as a result of the merger, the decision has been criticised by some observers. Most of the criticism stems from the TPC's decision to discern its own public benefits from the merger. Usually, it is the responsibility of the applicant to identify and establish the public benefit and demonstrate that it results from the acquisition.\(^8\) Yet in the TIAS merger decision, the TPC attached relatively little weight to the public benefits proposed by TIAS, opting to discern other "core public benefits".

The TPC accepted TIAS' contentions of the savings which would be achieved in marketing, administration and manpower, but noted that compared to the total budget of the merged entity, these savings were of limited significance. They also

\(^{6}\)Ibid, at 5434.

\(^{7}\)At the time of the TIAS merger application, §50 of the Trade Practices Act prohibited mergers which resulted in a corporation or person being in a position to dominate a substantial market for goods and services in Australia or in an Australian State or Territory. Changes to the Trade Practices Act were introduced into Federal Parliament on 3/11/92. Among other things, these changes strengthened the mergers test under §50 and 50A to prohibit mergers or acquisitions which would have the effect or be likely to have the effect of substantially lessening competition.

\(^{8}\)CCH Australia, supra, note 5, at 5434.
found public benefits in the merged entity's ability to assist travel agents with transitional arrangements should either Sabre or Galileo exit the market, and the efficiencies which may be achieved in the expansion and operation of the TIAS land content network. Instead, the core public benefits found by the TPC were: (1) the supply by Ansett and Australian of last seat availability on Fantasia; and (2) TIAS' and the parent airlines' undertakings to adhere to the draft CRS code of conduct. Consequently, the TPC authorised the acquisition subject to two conditions: (1) Ansett Australia and Australian Airlines had to provide last seat availability on Fantasia; and (2) TIAS and its airline owners were required to adhere to the code of conduct, still to be authorised by the TPC.

During the TIAS merger application, virtually all the interested parties who lodged submissions supported the concept of an Australian code of conduct for the operation of CRSs. However, criticisms from several parties led the TPC to a more detailed consideration of the code as a separate authorisation application. In addition to these criticisms, there were several other reasons why the TPC opted for a separate authorisation for the code of conduct. First, the code may have substantially lessened competition or may have constituted an exclusionary provision contrary to §45 of the Trade Practices Act. Since the code introduced uniformity to the contracts between subscribers and vendors, it may have removed the potential for competition in the terms and conditions offered by vendors. Further, the code had the potential to lead to the uniform adoption of restrictive provisions which could limit entry to the Australian market. Second, since the code set out rules regarding subscribers and airline participants, it had the

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9 The TIAS land content network is a computer distribution service for hotels, automobile rentals and other non-airline components of the travel industry. See figure 5 for a description of the structure of the TIAS network.

potential to "legitimise" the non participation of any airlines at some later stage, in systems other than those marketed by TIAS.\textsuperscript{11} The merger was allowed because the possible or actual entry of other CRSs to the market would work as a "competitive catalyst" to TIAS. Finally, the entry of other CRSs was dependent upon obtaining reasonable access to the seat and fare inventories of local airlines. Therefore to the extent that the code requires airlines to participate in other CRSs, it has a critical role in diminishing or enhancing competition and public benefit.\textsuperscript{12}

2. The Australian Code of Conduct

Pursuant to the merger decision, TIAS filed two applications on January 24, 1992 for authorisation under §88(1) of the Trade Practices Act with respect to a proposed code of conduct for the operation of CRSs in Australia. TIAS' application to the TPC included a request for authorisation of an arrangement which may affect competition, and authorisation for an arrangement which may constitute an exclusionary provision. To authorise the code of conduct, under §90(6), the TPC had to be satisfied that in all circumstances:

1. the provisions of the subject arrangement would result or would be likely to result in a benefit to the public; and
2. the benefit would outweigh the detriment to the public constituted by any lessening of competition that would result or would be likely to result from the subject arrangement.

Although "public benefit" is not defined in the Trade Practices Act, the TPC followed the guidelines espoused in \textit{QCMA}.\textsuperscript{13} In \textit{QCMA} the Trade Practices Tribunal held that public benefit may constitute "anything of value to the

\textsuperscript{11}Ibid, ¶6.5, p 16.
\textsuperscript{12}Ibid, ¶6.6, p 16.
\textsuperscript{13}Re Queensland Co-operative Milling Association Ltd and Defiance Holdings Ltd. (1976) ATR 40-012; 25 FLR 169.
community generally, any contribution to the aims pursued by the society". The parties to the TIAS merger summarised the public benefits of the code of conduct as follows:

1. non-discriminatory access by airlines and agents to CRS facilities in Australia;
2. the avoidance of display bias and other alleged CRS anti-competitive activities;
3. the provision of reasonable terms and conditions to travel agents; and
4. permission for users to attach third party hardware, software and databases to the system.

Submissions were received from a wide range of parties and included written submissions from; Abacus, Air New Zealand, Fantasia Subscriber Forum of NSW, Harvey World Travel (Newcastle), American Airlines, Inc., The Australian Federation of Travel Agents, and the Commission of the European Communities. These submissions, coupled with the oral submissions in the pre-decision conference led to a number of changes to the proposed code of conduct. The final code is reproduced in appendix 13. Specifically, the code of conduct was revised to include the following:

- scope of the code broadened to include the proposed TIAS land content network;
- specific obligation on CRS related airlines to provide last seat availability information to competing CRSs;
- provisions for three year subscriber contract terms which would be varied on agreement from 1 year to a maximum of 5 years;

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14 See part V B 1 for further discussion on public benefit and QCMA.
16 For a summary of the submissions from interested parties in the TIAS case see attachment 3 of ibid.
17 The TPC held a pre-decision conference on November 23, 1992 to discuss a draft determination. Present at the conference were representatives from TPC, TIAS, Harvey World Travel, Abacus, Thomas Cook, American Airlines, System One, and The Australian Federation of Travel Agents.
• provision for subscribers to provide their own terminal equipment with subscriber fees reasonably related to costs;
• limitation of fees to interconnect third party hardware and software to commercially reasonable levels;
• elimination of automatic contract extension clauses (rollovers) and minimum use clauses;
• maintenance of confidentiality for travel agent sales information and PNRs;
• code to be incorporated into contracts between subscribers and CRS system vendors;
• provision for the settlement of disputes arising under any aspect of the code; and
• provision for the review of the operation of the code every two years.

The TPC's final determination noted a number of peculiarities in the Australian market. It mentioned that other constraints impinge upon the competitive behaviour of CRSs in Australia. For example, Sabre's behaviour is influenced by the United States CRS rules (see part IV B 2), and the Galileo CRS is no different to its European counterpart where it is constrained by the EC rules (see part IV B 4). In addition to being constrained by overseas codes of conduct, the TPC noted that the potential for anti-competitive practices in the Australian context is limited by a number of other factors. First, no airline in Australia dominates a specific geographic area. Second, unlike some overseas examples, no Australian airline has ownership of a CRS. The TPC said "[w]hile the parties to this application own the marketing rights to the Sabre and Galileo CRSs, their rights do not extend to deciding whether or not an airline can participate in a CRS". ¹⁹ In fact, one of the licensing agreements requires that access is provided to all airlines. This is because it is to the CRS owner's advantage to have as many participating airlines as possible. Notwithstanding this, the TPC decided that there may be

instances where CRS vendors in Australia have the opportunity to engage in conduct inconsistent with their practice elsewhere. On this point, the Commission stated:

"To the extent that the code works to ensure that CRSs act pro-competitively in the Australian market, consistent with CRS regulations in other countries, it must be of some public benefit. In those areas where the code goes further than overseas practice, then there is more clearly a case for public benefit."

The TPC recognised significant potential for large airlines to preclude the entry of competing CRSs to the market. Part II C 2 notes that competitive problems often arise where dominant airlines refuse to participate in competing CRSs. Until the TIAS merger, Australian and Ansett refused to provide last seat availability to Fantasia. This placed Fantasia at a significant disadvantage. Not surprisingly, the TPC viewed the offer by Australian and Ansett to provide Fantasia with last seat availability favourably.

This raised the issue of whether mandatory participation should be required in the Australian context. The TPC initially took the view that because of the dominant position of the parties to the merger, they should unconditionally participate in all CRSs available in Australia. However, this was argued to be unreasonable if there was no obligation on the part of the CRS owner to establish a reasonable commercial presence. Instead, the TPC ruled that mandatory participation should be required subject to a number of constraints. To demand participation of a carrier affiliated to a system vendor, a CRS must first have an established base of 50 sites in Australia. But to remove any long-term barriers to entry, a vendor with less than 50 sites is able to secure an airline's participation by

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21 Ibid.
22 See appendix 13, section 12(a)-(d).
paying the costs of connection. These costs must be refunded by the participating airline when the CRS reaches an installed base of 50 sites. Notably, the code provides no provisions as to the situation if a CRS falls below 50 sites.

The question of display bias in the Australian context raised two contentious issues. First, the TPC had to decide whether it was practical to specify a particular algorithm to be used by the CRS as does the EC code. Second was the question of secondary displays and whether they should be subject to the same rules as primary displays. Since the code lacked legislative backing, the TPC decided that it was not possible to adequately address either of these issues. Besides this, with respect to the second point, the Commission was of the opinion that it may be in the consumers' interest for the travel agent to be permitted to adjust the secondary display.\textsuperscript{23} Instead of specifying a display algorithm, the code recommends the use of similar displays as prescribed by the United States and European Community codes.

One of the Commission's stated objectives with the code was to give CRS subscribers and participants stronger bargaining positions in terms of their contractual relationships with CRS vendors.\textsuperscript{24} Specifically, the code eliminates restrictive terms and minimum use clauses. The TPC is of the opinion that this may facilitate the switching of agents from one CRS to another.

The contract termination clauses in the Australian code are unlike any other codes. The code provides for a standard contract length of three years (section 11(a)). This provision is augmented by sections prohibiting minimum use provisions (section 11(h) and (i)), and rollover provisions ((section 11(p)).

\textsuperscript{23}Trade Practices Commission, \textit{supra}, note 10, \S 6.11 and \S 6.12, p 17.
\textsuperscript{24}\textit{Ibid}, \S 6.22, p 19.
Swayed by industry submissions, the TPC decided to permit contracts of up to five years so agents could obtain maximum price benefits. Similarly, contracts of one to three years in duration are permitted. To prevent agents from opting for five year contracts to obtain savings, further provisions were required (sections 11(b)-(e)). The TPC explains:25

"The Commission also recognised that the price differential between 3 year and 5 year contracts would encourage subscribers to elect longer contracts than the standard 3 year which the Commission favoured. To overcome this difficulty the code provides that subscribers can terminate longer contracts at the end of the third year, subject to an adjustment to take account of the different prices associated with contracts of different lengths. Thus subscribers who enter longer contracts are nevertheless given the opportunity to terminate its contract at the end of 3 years. This allows competitors the opportunity to compete for subscribers as if the contract had only been for a 3 year period."

The Commission decided that the same contract rules should apply to information-only subscribers. That is, subscribers who supply their own hardware obtain the same flexibility that the code provides to those who contract for both hardware and access to the CRS. The TPC made this decision after travel agent representatives indicated that agents supplying their own hardware would want the same contract flexibility as those who obtain equipment as part of the CRS connection contract.26

Interestingly, the code retains the right of system vendors to recover liquidated damages in respect to contracts not terminated according to section 11 of the code (section 11(f)). However, this appears to be modified by a later provision (section 11(q)) which forbids vendors from attaching "unreasonable conditions" for the withdrawal from subscriber contracts. Combined, these two clauses leave the decision to the courts to rule on the fairness of damages charged by the vendor.

Finally, the code embodies several innovative administrative clauses. It provides for disputes to be referred to an industry appointed conciliator (section 18(b)). This idea was widely supported at the pre-decision conference. The conciliator is appointed by a selection committee made up of nominees from The Australian Federation of Travel Agents, the system vendors, and the Trade Practices Commission (section 18(c)). The code outlines the required qualities of the conciliator and his/her role. The idea of an industry conciliator is to keep disputes informal and inexpensive. The TPC hopes this will offer advantages to the smaller players in the industry who otherwise would not seek resolution of their disputes.\textsuperscript{27}

The code also provides for biennial review of its operations (section 19). Representatives of all groups who are signatories to the code are expected to meet every second year to consider the operation and effect of the code, including dispute resolution, travel principals' participation in CRSs and coverage of the code by the authorisation procedures of the Trade Practices Act. The meeting is chaired by the TPC and a report must be placed on the public register.

Unlike overseas codes, the Australian code takes into account the fact that external constraints impinge on CRSs in that country. For example, it specifies that the display algorithms permitted by ECAC and the United States DOT are acceptable. The key difference with the Australian code of conduct is its legal applicability. Power vested in regulatory agencies gives overseas codes legal force. To be bound by the Australian code, however, a party must become a signatory to it. Additionally, the code requires that all contracts with subscribers and participating principals must contain specific reference to the code.

\textsuperscript{27}Ibid, ¶6.34, p 22.
Consequently, enforcement of the code may be left to private litigants. However, in enforcing the contracts, questions regarding privity may be raised.

An interesting question for the TPC to consider is whether the code of conduct should be extended to products which complement existing CRSs. Although CRS developments in Australasia mirror those in the United States and Europe, some promising developments in the region indicate that opportunities are available for local firms to enter the CRS market. The recent development of Worldlink is an example of this. Worldlink is a proprietary computer-based system for making non-airline travel bookings. It offers the opportunity for major vendors of tourism related and other leisure products to distribute their products in the same manner as airlines do on CRSs. Through Worldlink agents may make airline bookings through an invisible link to Sabre and Galileo. Worldlink has been developed by Australian-based Jetset Tours, a 50 per cent owned subsidiary of Air New Zealand.

3. CRS Activity in New Zealand

It is impossible to ignore the fact that technology in the New Zealand travel industry originated from the upheaval caused by airline deregulation in the United States.\textsuperscript{28} Since that time, technological advances in New Zealand have more or less followed the United States. Each of the CRSs currently used in New Zealand can in some way be traced back to one of the United States mega-systems.

For some years, the New Zealand travel industry has been proactive in advocating the use of technology. Peter Brandley, president of the Travel Agents' Association of New Zealand (TAANZ), notes that industry lobbying is essential to

\textsuperscript{28}Brandley, supra, note 1, p D22.
signal to large system suppliers the minimum standards the industry is willing to accept.\textsuperscript{29} On November 28, 1990, TAANZ announced that it was going to proceed with the development of TAANZNET. TAANZNET, later known as Travellink, was to be a single neural network which would allow individual agents to select the CRS and associated software/hardware packages of their choice rather than the restraint of a single airline-owned system.\textsuperscript{30} The initiative was aimed at creating a system which was customer and user-driven rather than supplier-driven and a system which would "foster neutrality and interconnectivity across the broad spectrum of the travel and tourism industry".\textsuperscript{31} Even Fantasica and System One indicated their interest in distributing across Travellink. However, a number of difficulties finally led to the demise of Travellink. TAANZ's vision may have become a reality with the recent entry of Worldlink to the market.

The New Zealand travel industry remains keen to endorse a system which would break some of the power of the mega-systems. This would require an industry system to control the distribution of data. Not surprisingly, airline-vendors are extremely reluctant to participate in any system which they do not have total control over.\textsuperscript{32} The ambitious Travellink project hoped to include electronic links to banks, travel wholesalers, IATA, car rentals, hotel reservations as well as access to airline bookings through existing CRSs. It was hoped that such a system would provide the technology required by an automated travel

\textsuperscript{29}Ibid.


\textsuperscript{31}Ibid.

\textsuperscript{32}For example, during the planning of TAANZNET, TCL MAARS (Air New Zealand's CRS at the time) refused to relinquish its control of MAARS. Although TAANZ viewed this as Air New Zealand ostracising itself from the end user it purported to serve, MAARS survived while TAANZNET failed. See: Ibid.
agency. Table 5 provides a contrast between the automated travel agent of today and a non-automated travel agent.

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<td>➔ Manually reconcile trust accounts</td>
<td>➔ Automated Accounting/Audit</td>
</tr>
<tr>
<td></td>
<td>➔ Take 2/3 bookings daily</td>
<td>➔ Cash/Credit Card/EFT</td>
</tr>
<tr>
<td></td>
<td></td>
<td>➔ EDI?</td>
</tr>
<tr>
<td><strong>Output</strong></td>
<td>➔ Handwrite tickets and documentation</td>
<td>➔ Automated BSP Tickets</td>
</tr>
<tr>
<td></td>
<td>➔ Type itinerary</td>
<td>➔ Satellite Ticket Printers STP's</td>
</tr>
<tr>
<td></td>
<td></td>
<td>➔ 3rd party networks</td>
</tr>
<tr>
<td></td>
<td></td>
<td>➔ ATM's</td>
</tr>
<tr>
<td></td>
<td></td>
<td>➔ Fax Tickets</td>
</tr>
<tr>
<td></td>
<td></td>
<td>➔ T&amp;E Links (Amex, Diners)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>➔ EDI?</td>
</tr>
</tbody>
</table>

Table 5

Automated vs Non-Automated Travel Agents

The mega-systems soon realised that they were failing to cater for the needs of the users and modified their offerings. As part II B explains, many CRSs now provide some, if not all, of these automation needs. Although this is desirable for the travel agent, a major problem remains. The control of data distribution is left in the hands of the CRS vendor-airlines. Even the development of systems such as Worldlink may not break the power of CRS vendors. The mega-systems still have control of the airlines, and agents may be exploited by the new market power which systems such as Worldlink enjoy.

Put in perspective, the New Zealand travel industry is minute. Despite its small size, three major CRS vendors have a foothold in New Zealand. The TIAS merger, and Air New Zealand's subsequent inclusion in the TIAS partnership has
actually injected a renewed level of competition in the New Zealand CRS industry. Before Air New Zealand decided to join TIAS, New Zealand Travel Agents had the choice of three CRSs. MAARS and MAARS plus were distributed by an Air New Zealand subsidiary, Travel Communications Ltd (TCL). Since the TCL systems were the only ones offering last seat availability on Air New Zealand, they had clear market dominance—76 per cent in 1990.\(^3\)

Before the TIAS merger, *Galileo* and *System One* could only establish toe-hold positions because for agents wishing to book on Air New Zealand, it was useless. In fact, Air New Zealand's dominance was such that some agents even had terminals with direct links to Air New Zealand's internal reservation system (*Carina*) rather than a CRS.

Since the TIAS merger, Air New Zealand has offered last seat availability on *Fantasia*, *Galileo*, and *System One*. The other major CRS in the Pacific, *Abacus*, is expected to enter the New Zealand market in the near future. *Table 6* shows the characteristics of the New Zealand travel industry.

<table>
<thead>
<tr>
<th>Number of Travel Agents</th>
<th>650</th>
</tr>
</thead>
<tbody>
<tr>
<td>Travel Agents Automated</td>
<td>600+</td>
</tr>
<tr>
<td>Major Systems Available</td>
<td>Fantasia</td>
</tr>
<tr>
<td>Systems Linkage By Agency (approx)</td>
<td>300+</td>
</tr>
<tr>
<td>Other Systems</td>
<td>NZ Host Database (NZ Tourism)</td>
</tr>
<tr>
<td></td>
<td>Worldlink (Jetset)</td>
</tr>
<tr>
<td></td>
<td>Flag Inns</td>
</tr>
<tr>
<td></td>
<td>Interislander</td>
</tr>
</tbody>
</table>

*Table 6*  
Characteristics of NZ Travel Industry

To date, New Zealand authorities have been reluctant to resort to any industry-specific regulation of CRSs. The New Zealand Ministry of Transport (MOT)

\(^3\)Source: Brandley, *supra* note 1, p D27.
explains that adopting specific industry regulation would be inconsistent with Government policy and the position that the Commerce Act 1986 provides sufficient protection against anti-competitive practices.\textsuperscript{34} New Zealand's position on industry-specific regulation with regard to CRSs became apparent recently when the United States pressed New Zealand to include a CRS Article in the two countries' bilateral aviation agreement.\textsuperscript{35}

New Zealand and the United States reached an impasse on CRSs due to an American proposal to include a CRS article in the aviation agreement. The MOT opposed this for the reasons outlined above. Previous to this fundamental disagreement, the two countries signed two memoranda of understanding in 1988. The first memorandum, signed June 6, 1988, contained an attachment which outlined the two countries' expectations regarding CRSs. The governments of New Zealand and the United States recognised their responsibility to ensure CRSs were operated in a fair manner consistent with Article 8 of the United States—New Zealand Air Transport Services Agreement.\textsuperscript{36} Specifically, they agreed on the following:\textsuperscript{37}

1. Editing, ranking and the construction of connecting services in CRSs must not be influenced by airline or market identity and CRS data bases must be as comprehensive as possible.

2. CRS vendors should allow all airlines willing to pay a non discriminatory fee the opportunity to participate. Details of data base update, storage, editing and ranking procedures should be available.

3. Neither the United States or New Zealand should impose conditions more restrictive on the other country's CRS vendors than on its own. In

\textsuperscript{34}Relevant sections of the New Zealand Commerce Act 1986 is discussed in the next chapter of this section.

\textsuperscript{35}See also the discussion in part IV B.

\textsuperscript{36}Article 8 provides: "There shall be a fair and equal opportunity for the airlines of each Contracting Party to operate on any route covered by this agreement."

\textsuperscript{37}From attachment 6 to the Memorandum of Understanding signed on 9/6/88 by New Zealand and the United States.
addition, both countries should ensure that the other country's CRS vendors are treated fairly by existing airlines.

These points were reiterated later in 1988 when the United States and New Zealand agreed that the quality of information about airline services available to travel agents who directly distribute such information to the travelling public, and the ability of an airline to offer those agents competitive CRSs, represent the foundation for an airline's competitive opportunities. The latter memorandum included more specific information on CRS primary displays.

The MOT believes that Air New Zealand's participation in TIAS, which has an integrated primary display, has resulted in the New Zealand CRS environment evolving close to the situation favoured by the Americans. Furthermore, they point out that there are no regulatory barriers for alternative CRS suppliers and note that System One operates in New Zealand. Consequently, the New Zealand Government's position in regard to the American proposal for a CRS article remains unchanged, so long as this continues to require industry-specific legislation.

New Zealand's bilateral aviation agreement with the United States is the only one in which New Zealand has been pressed to include a CRS article. As discussed in part IV B, New Zealand also has difficulty in adopting ICAO's code of conduct. The MOT is sympathetic to the substance of the code, but similar to the reasons for not including a CRS article in bilateral aviation treaties, it has not given the ICAO code full effect. The MOT is of the opinion that the New Zealand CRS environment is consistent with the principles of overseas codes.

38 From attachment 4 to the Memorandum of Understanding signed on 24/8/88 by New Zealand and the United States.
4. Conclusions

The TIAS merger and Air New Zealand's inclusion in the partnership signalled a new direction for CRS activity in Australasia. Contrary to the belief of many critics of the merger, the companies which currently compete in this market compete fiercely. In fact, the new environment is far more competitive than the situation before the merger.

The parties to the TIAS merger proposed an industry code of conduct to the Australian TPC. The TPC saw this code as an opportunity to illustrate to the parties involved the conduct which would be tolerated. Consequently, the TPC, with the aid of other interested parties, amended the rules and it is now given effect as a voluntary industry code. Ultimately, the effect of the code is similar to the European and North American CRS codes. Yet unlike overseas codes, parties in Australia must become signatories to the code to be bound. In this respect, it is voluntary. Once an entity is a signatory, they are contractually bound. This approach recognises that as well as restricting parties, the code of conduct may provide substantial benefits.

Even though the Australian code is voluntary, the TPC recognised the unusual commercial inter-dependence between airlines, travel agents and system vendors by appointing the conciliator. The TPC also allowed for the rapidly changing technology of the CRS industry by providing for biennial reviews of the code.

Instead of adopting industry-specific regulation, New Zealand authorities have placed more reliance on general competition legislation to protect small airlines and travel agents from the potential anti-competitive effects of CRSs. Consistent with its overall economic policy, the New Zealand Government's position on CRS-specific regulation remains unchanged.
The entry of other CRSs and leisure distribution systems to the Australasian market may indicate that competition legislation is sufficient to monitor their conduct. For example, *System One* has expanded its position in New Zealand recently without any CRS code of conduct. Similarly, Jetset has launched the *Worldlink* system to complement conventional CRSs (although *Worldlink* sees the other CRSs as its competitors\(^{39}\)). Conversely, it may be argued that CRS rules such as the Australian code of conduct facilitate entry by forcing vendor-airlines to participate in competing systems.

The New Zealand and the Australian CRS, travel and tourism markets are inextricably linked. In turn, the Australasian market is dictated to by developments from North America and Europe. Despite this, New Zealand and Australia have taken very different approaches to regulating the behaviour of CRSs. New Zealand's approach is unique among developed countries. It places complete faith in the ability of its competition laws to operate competitive markets. Conversely, Australia, by requesting parties to become a signatory to a code, has moved some of the burden from its competition legislation. Parties allow themselves to be disciplined by the industry conciliator. Failing that, subject to contractual privity considerations, specific performance may be requested through contract law.

These two markets may provide clues in the future as to the more effective means of regulating the CRS industry. However, any observation of the Australasian CRS market must take into account that regulation in Australasia may have little effect on the conduct of vendors, airlines and agents. Instead,
these markets may be directed by rules and regulations promulgated in the Northern Hemisphere where CRS development is centred.
Antitrust law must be responsive both to the legal environment and to the economic environment in which it operates. Consequently, many procedural and substantive differences exist in the competition laws from one jurisdiction to another. This chapter introduces the reader to competition law in Australasia. Specifically, it discusses the provisions in Australasian competition law which may be used by plaintiffs in antitrust claims against CRS vendors.

The approach of this chapter is to analyse the four main areas of competitive concern with CRSs in terms of Australasian competition law. To recap, the four main areas of concern (identified by the United States DOJ) are:

1. high market shares of airline owned CRSs;
2. significant barriers to entry to the CRS industry;
3. system bias which distorts downstream competition in the airline industry and adds to entry problems in the CRS industry; and
4. supra-competitive access fees charged to competing airlines.

The chapter first tackles the structural concerns, discussing the merger control provisions and authorisation procedures in Australasia. The chapter then discusses the issues relating to the conduct of CRS vendors. Usually, this conduct arises because of the market power which results from the structure of the market.

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Finally, section 4 looks at the competition problems with CRSs which appear to be immune to competition law attack in Australasia.

1. Authorisations

In part II C, the first major competition problem identified with CRSs was the high market shares of airline owned CRSs. Like most antitrust regimes, Australia and New Zealand have provisions specifically designed to limit the continued accumulation of market power through merger. In New Zealand these provisions are §47 and §48 of the Commerce Act. Similarly, in Australia §50 of the Trade Practices Act prohibits acquisitions which would result in a substantial lessening of competition. However, authorisation procedures in Australia and New Zealand may allow mergers or restrictive trade practices to continue if public benefits can be demonstrated. Of particular interest in the CRS industry is the high concentration of the industry, and whether the authorisation procedures may be used by vendors to gain immunity from competition laws which would otherwise forbid mergers and restrictive trade practices.

In New Zealand, the Commerce Commission administers competition law under the Commerce Act 1986. The principles of the Commerce Act are largely consistent with general antitrust principles identified in part III A. This is illustrated by the High Court's judgment in Union Shipping NZ Ltd v Port Nelson Ltd:

"It is the [promotion] of competition which the Court is directed to foster.... Section 27 prohibits contracts, arrangements or understandings, which substantially lessen competition. Section 36, following in the footsteps of a tradition at least as old as the Sherman Act (USC 15 ss 1-7) recognises that even in competitive markets dominant positions do arise which in the end can generate anticompetitive activity. Accordingly

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3 The Commerce Commission was originally established by the Trade Practices (Commerce Commission and Pyramid Selling) Act 1974. It was re-established by the Commerce Act 1986 under §8.

it is intended to prohibit the use of such dominant position within a market for serious anticompetitive purposes. Such provisions are directed at the protection of the concept of competition as such. They are not directed at the protection of individual competitors, except insofar as the latter may promote the former."

In drafting the Commerce Act, the legislature recognised that public benefits may be obtained even in situations where competition is lessened (§27 and §29) or where a dominant position is obtained or strengthened by merger (§47). Consequently, Part V of the Act provides for most practices caught by the Act, and business acquisitions, to be authorised, in effect allowed to continue, by reference to prescribed public benefit tests. The parties must satisfy the Commerce Commission that the "public benefit" flowing from the practice outweighs the anti-competitive harm.

Part V of the Commerce Act sets out the process that parties should follow to obtain authorisation. The process may be represented as below:

<table>
<thead>
<tr>
<th>application using prescribed form</th>
</tr>
</thead>
<tbody>
<tr>
<td>filing and payment of prescribed fee</td>
</tr>
<tr>
<td>registration recorded</td>
</tr>
<tr>
<td>notice given by the Commission</td>
</tr>
<tr>
<td>confidentiality orders may be sought</td>
</tr>
<tr>
<td>investigation</td>
</tr>
<tr>
<td>draft determination</td>
</tr>
<tr>
<td>conference</td>
</tr>
<tr>
<td>final determination</td>
</tr>
</tbody>
</table>

Figure 25

Authorisation Procedure Under the Commerce Act 1986

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7From: ibid, p 218.
Apart from two differences, this process is the same for both restrictive trade practices and merger authorisations. The first difference is that for mergers, the Commission's time period is limited, whereas for authorisations of restrictive trade practices it is not. Second, following registration, the Commission must give notice of the restrictive trade practice application to the public as well as "other interested persons", whereas there is no such duty regarding mergers.\(^8\) As well as the power to grant clearances and authorisations, the Commerce Commission has the power to amend, replace or revoke any earlier restrictive trade practice authorisation under §65.\(^9\) Section 92 sets out the persons entitled to appeal any Commerce Commission determination under §91.

The Commerce Commission is empowered to grant authorisation to three broad classes of business behaviour:\(^10\)

(a) restrictive trade practices (§58). This includes restrictive trade practices under §§27-29 and, since 1990, resale price maintenance under §§37-38;

(b) acquisitions which have been declined clearance (§67);\(^11\) and

(c) prices for controlled goods or services (§70).

Prior to the Commerce Act Amendment Act 1990, resale price maintenance could not be authorised. Section 19 of that Act added resale price maintenance to the list of authorisable practices. The only important form of conduct not able to be authorised is misuse of a dominant position under §36.\(^12\)

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\(^8\)Ibid, p 219. For a more detailed discussion of the authorisation process, see ibid, pp 218-222.

\(^9\)Ibid, p 222. The original applicant(s) and any other interested persons must be given a reasonable opportunity to make submissions.

\(^10\)Ibid, p 228.

\(^11\)Under §66 any person who proposes to acquire assets of a business or shares may apply to the Commission for clearance. Clearance may be granted on the grounds that no dominant position is achieved. If a party fails to gain clearance, they may proceed with an authorisation application on public benefit grounds. See generally: Berry, Mark N. (1993). "The Application of Competition Laws to Business Acquisitions in New Zealand". In Farrar, J.H., (ed). Takovers, Institutional Investors and the Modernization of Corporate Laws. Auckland: Oxford University Press.

\(^12\)See section 2 of this part for the text of §36.
In order for the Commission to authorise certain conduct, applicants must satisfy the requirements of §61. With respect to anti-competitive arrangements and covenants (§§27-28), §61(6) provides that the Commission shall not make a determination granting an authorisation unless it is satisfied that:

"(a) The entering into of the contract or arrangement or the arriving at the understanding; or
(b) The giving effect to the provision of the contract, arrangement or understanding; or
(c) The giving or the requiring of the giving of the covenant; or
(d) The carrying out or enforcing of the terms of the covenant as the case may be, to which the application relates, will in all circumstances result, or be likely to result, in a benefit to the public which would outweigh the lessening in competition that would result, or would be likely to result or is deemed to result therefrom."

The other tests for authorisation in the Commerce Act have subtly different wording. For example, for boycotts (§29), §61(7) says authorisation shall not be granted unless the Commission is satisfied that the entering into, or giving effect to, the exclusionary provision would likely result in "such a benefit to the public" that it should be permitted.\(^\text{13}\) Although §61(7) does not require a weighing of public benefit against detriment, the Commission appears to favour this as its approach. For example in Re New Zealand Stock Exchange,\(^\text{14}\) the Commission followed Australian experience by reading in a requirement to balance public benefits against any public detriment.\(^\text{15}\) Ahdar suggests that a similar balancing will be preferred for the recently added §61(8) which deals with resale price maintenance.\(^\text{16}\)

The key difference in the authorisation tests is apparent in the test for authorisation of mergers. This test is contained in §67(3) and reads:

\(^{13}\text{Ahdar, supra, note 6, p 229.}\)
\(^{14}\text{Re New Zealand Stock Exchange, Commerce Commission No. 232 (10 May 1989), § 62.}\)
\(^{15}\text{Ahdar, supra, note 6, p 229.}\)
\(^{16}\text{Ibid.}\)
"the Commission shall—
(b) if it is satisfied that the acquisition will result, or will be likely to result, in such a benefit to the public that it should be permitted . . . grant an authorisation."

Thus, the distinction between the authorisation tests for restrictive trade practices and business acquisitions is that the test for mergers uses the words "if it is satisfied such a benefit . . . grant an authorisation" and the test for restrictive trade practices says "shall not grant authorisation unless it is satisfied".\textsuperscript{17} The test for authorisation of restrictive trade practices, therefore, is harsher because the words create a presumption in favour of refusing authorisation where there is a lessening of competition. However, Ahdar indicates that the different wording makes little practical difference:\textsuperscript{18}

"[T]he legal onus, at the end of the day, is upon the applicants in both restrictive trade practice and merger applications to establish that the benefit outweighs the detriment shown to exist."

Therefore, subject to the authorisation tests outlined in statute, in New Zealand, restrictive trade practices and mergers may gain immunity from antitrust laws. The methodology established in \textit{Weddel Crown}\textsuperscript{19} has been adopted by the Commerce Commission. This is shown below.\textsuperscript{20}

\textsuperscript{17}ibid, p 230.
\textsuperscript{18}ibid.
\textsuperscript{19}Re \textit{Weddel Crown Corp. Ltd} (1987) 1 NZBLC (Com.) 104,200, at 104,214.
\textsuperscript{20}From: Ahdar, supra, note 6, p 235.
Fundamental to the operation of the authorisation tests is the concept of public benefit. Not surprisingly, public benefit has been the subject of considerable judicial debate. During the brief history of the Commerce Act, a number of public benefits have been accepted and rejected.\textsuperscript{21} The wide construction given to the public benefit test as in \textit{QCMA} (see chapter A of this part) has drawn criticism from a number of observers in New Zealand. Principally, the 1988 review of the Commerce Act suggested a restriction on the concept with the focus being narrowed to economic efficiency.\textsuperscript{22} Because CRSs offer significant efficiencies through economies of scale, such a focus would have important ramifications for any prospective CRS merger. However, Ahdar notes that the Ministry of Commerce recanted this comment a year later, admitting the broad objective of the Commerce Act required a broad public benefit test encompassing both economic and non-economic variables.\textsuperscript{23}

\textsuperscript{21}See: \textit{ibid}, p 239/240 for a catalogue of these.


\textsuperscript{23}Ahdar, \textit{supra}, note 6, p 240.
Discussion regarding the relative weight to be given to efficiency considerations continued in various decisions and reports. This debate led to the 1990 amendments which inserted the following section into the Commerce Act:

"SECTION 3A. COMMISSION TO CONSIDER EFFICIENCY

3A. Where the Commission is required under this Act to determine whether or not, or the extent to which, conduct will result, or will be likely to result, in a benefit to the public, the Commission shall have regard to any efficiencies that the Commission considers will result, or will be likely to result, from that conduct."

The High Court in *Telecom Corporation of New Zealand Limited v Commerce Commission* confirmed that §3A is intended to direct the public benefit analysis to "any efficiencies that will likely result from [an] acquisition". Furthermore, although the Court was of the opinion that the weight to be given to efficiencies in relation to other public benefits is "a matter of judgement in the particular case", it provided the following statement which makes efficiencies a prime consideration in merger authorisations:

"The more efficient use of society's resources in itself is a benefit to the public to which some weight should invariably be given. That is not to say it is the only consideration, or indeed, in the circumstances of the particular case, the most important consideration. In the specific case of merger, however, it may well be that efficiency considerations, positive, and negative, will be the prime consideration."

The 1992 review of the Commerce Act supports the High Court's approach, but advocates that the analysis of the efficiency benefits and detriments arising from a proposed merger or practice should be the principal consideration in every

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24 For example: *Re NZ Co-operative Dairy Co Ltd/Auckland Co-operative Milk Producers*, (1988) 1 NZBLC (Com.) 104,320.


26 Section 3A came into effect on July 1, 1990.

27 *Telecom Corporation of New Zealand Limited v Commerce Commission*, (1991) 4 TCLR 473, at 528. The High Court noted the three generally accepted components of efficiency—allocative, productive and dynamic efficiencies.

28 *Ibid*.

29 *Ibid*, at 530.
decision made in relation to applications for authorisation.\textsuperscript{30} Assuming efficiencies are the prime consideration in the authorisation process, the next question which must be addressed is whether efficiency gains must be passed from producers to consumers or other wider classes of persons before they are considered to be a benefit.

There is a level of disagreement on this issue. The Ministry of Commerce notes that during the past six years, the Commission has stated that in order to qualify as a benefit to the public, the fruits of a productive efficiency gain must be "widespread and indiscriminate".\textsuperscript{31} Such an approach is consistent with antitrust welfare as defined in part III A 2(a). Yet the recent High Court decision in \textit{Telecom} suggests that courts may move away from the Commission's previous approach. The Court quoted the following passage from \textit{OCMA} with approval:\textsuperscript{32}

"... it is clear that it could be possible to argue in some cases that a benefit to the members or employees of the corporations involved served some acknowledged end of public policy even though no immediate or direct benefit to others was demonstrable."

The most recent review of the Commerce Act 1986 also looked closely at the scope of the public benefit test applied by the Commission.\textsuperscript{33} The review suggests that benefits arising from efficiency gains have to date been the main consideration in most cases.\textsuperscript{34}

In view of the latitude the Commission and the courts currently enjoy in analysing public benefits, statutory clarification on this issue is needed.\textsuperscript{35}

\textsuperscript{32} \textit{Telecom}, \textit{supra}, note 27, at 530, quoting \textit{Re Queensland Co-operative Milling Association Ltd} (1976) 8 ALR 481.
\textsuperscript{33} Ministry of Commerce; The Treasury; The Department of Justice; The Department of the Prime Minister and Cabinet. (1992). \textit{Review of the Commerce Act 1986}. Wellington: Ministry of Commerce.
\textsuperscript{34}\textit{ibid}, p 4.
\textsuperscript{35} Ministry of Commerce et al, (1992), \textit{supra}, note 33, p 10, supports this view.
Clarification would suppress the imposition of a particular administrative body's economic views. In this writer's view, the term "public benefit" positively encompasses the definition of antitrust welfare defined in part III A 2(a). That is, efficiency gains must be reasonably shared between producers and consumers.

Four main obstacles stand in the way of applicants in authorisations. First, the applicant must establish a "causal nexus" between the questioned conduct and the public benefits claimed. Second, if the public benefits may be achieved in any other way which is less anti-competitive, the weight attached to the benefits is severely lessened. Third, public benefits must be clearly argued. If the public benefits are well defined, the conduct or merger is more likely to be authorised. Finally, because the authorisation tests are concerned with net benefit, any detriment must be weighed against its associated benefits before the final balancing takes place.

The New Zealand Commerce Act authorisation provisions are based largely on provisions in the Australian Trade Practices Act 1974. Although Australian precedent is frequently invoked, the Commerce Commission, soon after its inception, cautioned against "slavish following" of Australian or any other countries' antitrust jurisprudence. For this reason it is prudent to separately analyse the Australian authorisation procedures.

37 Ibid, p 38.
38 Ibid.
39 Ibid.
The Australian equivalent to the Commerce Commission is the Trade Practices Commission. The Trade Practices Act, gives the TPC the power to grant authorisation of certain types of conduct which would otherwise be prohibited by the substantive provisions of part IV. The Australian Act is far more explicit than the Commerce Act in outlining conduct which is able and not able to be authorised. It specifically disallows authorisation of the following conduct:⁴¹

- price recommendation arrangements for goods which involve less than 50 participants;
- price fixing in respect to goods;
- monopolisation;
- resale price maintenance;
- price discrimination; and
- conduct entered into before making the application.

Similarly, the categories of conduct able to be authorised are outlined in §88.

Two tests apply to authorisations under the Trade Practices Act. The first test applies to all types of conduct able to be authorised except exclusionary provisions, secondary boycotts and related arrangements under §45D and §45E, third line forcing and mergers. This first test involves a consideration of anti-competitive effect and public benefit whereas the second test does not require a competition evaluation.⁴² The second test applies to authorisable conduct not covered by the first test.⁴³

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⁴³Section 90(9) concerning the public benefit requirement for merger authorisations is based on the second test. That section requires the TPC to be satisfied in all circumstances that the proposed acquisition "would result, or be likely to result, in such a benefit to the public that the acquisition should be allowed to take place".
The first test, covering most forms of anti-competitive behaviour, is outlined by §90(6) and (7). Combined, these provisions require public benefits and anti-competitive effect to be weighed up against each other. They provide:

"(6) The Commission shall not make a determination granting an authorization ... unless it is satisfied in all circumstances that the provision of the proposed contract, arrangement or understanding, the proposed covenant, or the proposed conduct, as the case may be, would result, or likely to result, in a benefit to the public and that benefit would outweigh the detriment to the public constituted by any lessening of competition that would result or would be likely to result ...

(7) The Commission shall not make a determination granting an authorization ... unless it is satisfied that the provision of the contract, arrangement or understanding, or the covenant, as the case may be, has resulted, or is likely to result, in a benefit to the public and that the benefit outweighs or would outweigh the detriment to the public constituted by any lessening of competition that has resulted, or is likely to result ...
"

The decision in QCMA is the starting point for most judicial discussions on public benefit. The Trade Practices Tribunal\(^{44}\) stated that the term "public" referred to "some wider conception of the public interest". The Tribunal added that public benefit is:\(^{45}\)

"... anything of value to the community generally any contribution to the aims pursued by society including as one of its principal elements (in the context of trade practices legislation) the achievement of the economic goals of efficiency and progress".

This wide construction of the public benefit test in QCMA has led to a great deal of commentary on the concept of public benefit in the Australian situation.\(^{46}\) The result of that decision, and subsequent decisions involving the test for public benefit, is that competition law authorities and courts are willing to take into account a large number of benefits. Such bodies give the greatest weight to efficiencies.\(^{47}\)

\(^{44}\) The Australian Trade Practice Tribunal is the appeal body for authorisation matters.

\(^{45}\) Re Queensland Co-operative Milling Association Ltd., and Defiance Holdings Ltd. (1976) ATPR ¶ 40-012, at p 17,242.


\(^{47}\) The TPC issued a statement which lists a large number of public benefits. See: CCH Australia, supra, note 41, ¶12-380 for a list of these.
The TIAS merger and subsequent code of conduct were assessed according to the Australian authorisation procedure. As mentioned in chapter A, the TIAS merger decision was unusual because the TPC opted to discern its own public benefits rather than leaving the onus of proof to the applicant. The tests employed for the merger authorisation and the subsequent code of conduct authorisation were from different sections of the Trade Practices Act.

For the merger authorisation the TPC employed the second test outlined above. A competitive evaluation is not part of this test because anti-competitive considerations are not part of the substantive offence. The merger decision was made pursuant to §88(9). Section 90(9) contains the test employed in the decision. As mentioned above, this test does not require any competition inquiry—just an inquiry into whether the merger would produce public benefits.

Conversely, the TPC's authorisation of the code of conduct was pursuant to §88(1) and used the first test as above. As this test includes a balancing requirement, the TPC was of the opinion that the public benefits of the code outweighed its anti-competitive detriment. The TPC stated:

"... the Commission believes that the code represents a fair balance between the interests of users and providers of CRS services and that in all the circumstances the code is a benefit to the public. To the extent feasible the code has been structured to minimise the potential anti-competitive effects."

The Australian and New Zealand procedures regarding authorisation are similar to those of the European Community. Article 85(3) of the Treaty of Rome provides immunity from antitrust laws to conduct "which contributes to improving the production or distribution of goods or to promoting technical or economic

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48 CCH Australia, supra, note 41, ¶12-230, p 7,063.
progress, while allowing consumers a fair share of the resulting benefit.\textsuperscript{50} In addition, there are a number of block exemptions to commercial activity in the European Community.\textsuperscript{51}

EEC procedural issues are outlined by regulation 17, which was adopted by the European Council in 1962. The purpose of the regulation was to confirm that conduct prohibited by articles 85 and 86 of the Treaty of Rome was prohibited, even if there had been no prior decision to that effect.\textsuperscript{52} Regulation 17 spells out several procedural issues. First, negative clearance under article 2 allows the Commission to certify that on the basis of the facts in its possession, there are no grounds under article 85(1) or article 86 for action on its part in respect of an agreement, decision or practice.\textsuperscript{53} A negative clearance is not an exemption but a statement of the Commission's opinion. If circumstances change, the Commission is empowered to withdraw a negative clearance. Second, article 4 introduced a notification procedure.\textsuperscript{54} Notification must be made by the parties to an agreement which may infringe article 85(1) if they wish to receive exemption under article 85(3).

Regulation 17 in the European Community and the authorisation procedures of Australia and New Zealand provide a higher level of certainty for business conduct falling close to competition law boundaries than is possible in the United States. Although the United States has no specific authorisation or notification procedures, there are a number of exemptions. United States exemptions are

\textsuperscript{50}See part IV B 4, footnote 69 for the full text of Article 85(3).

\textsuperscript{51}See part IV B 4 for a summary of the exemptions applicable to the CRS industry.


\textsuperscript{53}Ibid.

\textsuperscript{54}Article 4 applies to agreements entered into after Regulation came into force on February 6, 1962. Article 5 applies to agreements entered into before that date.
embodied in legislation such as the McCarran-Ferguson Act, the Clayton Act, the Norris-LaGuardia Act and the Webb-Pomerene Act. None of these United States exemptions apply to CRS activity.

The opportunity for businesses to apply for immunisation from competition laws using the authorisation procedures of the Commerce Act and the Trade Practices Act are in contrast to the competition laws of Europe, and in particular, the United States. Arguably, the procedure in Australia and New Zealand is far more efficient than the United States example because it circumvents the need to establish a specialist regulatory body. In the TIAS decision, the TPC used industry submissions from "interested parties" and penultimately, a pre-decision conference. This process places increased weight on the opinions of informed parties from the industry concerned rather than on the possibly less informed opinions of economists and lawyers of a specialist agency.


As well as prohibiting many forms of concerted conduct which have anti-competitive effects, antitrust laws also forbid dominant firms from using their market power to harm competition. This kind of activity, depending on the jurisdiction, is known as "misuse of a dominant position". Provisions prohibiting the misuse of market power, rather than aiming at market power as such, aim to control the uses to which market power is put. In the New Zealand context, §36 contains this prohibition. It reads:

"SECTION 36 USE OF A DOMINANT POSITION IN A MARKET
36(1) No person who has a dominant position in a market shall use that position for the purpose of—
   (a) Restricting the entry of any person into that or any other market; or

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(b) Preventing or deterring any person from engaging in competitive conduct in that or in any other market; or
(c) Eliminating any person from that or any other market."

Using this section, the first step to antitrust analysis is determining whether a firm has market dominance.\(^{56}\) In this respect, §36 is similar to §2 of the Sherman Act. For example, under §2 of the Sherman Act, a firm cannot be liable for monopolisation unless it has monopoly power or is dangerously close to achieving it. Similarly, under §36 of the Commerce Act, a finding of market dominance is a precondition for condemnation of a firm's behaviour. Different market power thresholds exist between countries due to different terminology used by courts and statutes. For example, courts in the United States commonly use "market power" or "monopoly power", while §36 of the New Zealand Commerce Act requires an inquiry into "market dominance". The purpose of competition thresholds is to provide courts with the ability to distinguish between beneficial and harmful behaviour.\(^{57}\) The Ministry of Commerce indicates that the §36 dominance threshold focuses on whether a firm has sufficient market power to harm the competitive process.\(^{58}\) However, there are a number of cases which indicate that courts face considerable difficulty in giving legal meanings to economic concepts. As Yeung observes:\(^{59}\)

"Many economic terms are not capable of a universally applicable, precise technical definition. Rather, they refer to intangible concepts which must be tailored to the analysis of competition at hand".

\(^{56}\)Hay, George A. (1990). "Economic and legal aspects of 'dominance' and 'market'". Proceedings of the First Annual Workshop of the Competition Law and Policy Institute of New Zealand (Inc.). "Misuse of a Dominant Position", August 10-12, 1990, Christchurch Town Hall. However, as part III C 3 notes, traditional monopoly power does not explain anti-competitive conduct by firms which use exclusionary market power. Theories of exclusionary market power in the Australasian context are discussed later in this chapter.


\(^{58}\)Ibid, p 6.

(a) Constituent Elements

"Dominant Position in a Market"

Both the New Zealand High Court\(^{60}\) and the Court of Appeal\(^{61}\) recognise that New Zealand's dominance test is based on European Community experience. Therefore an informed discussion on dominance requires consideration of the European Court of Justice interpretation of article 86. Article 86 reads:

"Any abuse by one or more undertakings of a dominant position within the common market or in a substantial part of it shall be prohibited as incompatible with the common market insofar as it may affect trade between member states."

While the Treaty does not define dominance, the European Court of Justice has consistently stated that a dominant position relates to a position of economic strength enjoyed by an undertaking which enables it to prevent effective competition being maintained in a relevant market by giving it the power to behave to an appreciable extent independently of its competitors, customers and ultimately of consumers.\(^{62}\) The European Community's approach to market dominance can be traced to four cases. The first of these cases is *Continental Can*, where the Commission held that undertakings are in a dominant position:\(^{63}\)

"...when it is possible for them to behave independently, which puts them in a position to act without regard to their competitors, purchasers or suppliers. That is the case where, because of their share of the market, or because of their share of the market combined with the availability of technical knowledge, raw materials or capital that have the power to determine prices or to control production or distribution for a significant part of the products in question".

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\(^{60}\) *Auckland Regional Authority v Mutual Rental Cars*, (1987) 2 NZLR 647. The Court said at 649: "Section 3(8) is based on Article 86 of the Rome Treaty: cases based on that treaty in common market Courts have relevance".

\(^{61}\) *Electricity Corporation Ltd, v Geotherm Energy Ltd.*, (1992) CA 169/91. The Court noted at p 14: "The concept of dominant position in the New Zealand Act appears to have been drawn from the European Law.


The second case recognised as forming part of the European Community's definition of dominance is United Brands. In this case, the Commission defined dominant position as:

"A position of economic strength enjoyed by an undertaking which enables it to prevent effective competition being maintained on the relevant market by giving it the power to behave to an appreciable extent independently of its competitors, customers and ultimately of its consumers. In general, a dominant position derives from the combination of several factors which, taken separately are not necessarily determinative."

In the third and fourth cases, Hoffman-La Roche and Michelin, the Commission reiterated the comments it made in Continental Can and United Brands. However, as Patterson recognises, European interpretations of dominance should be treated with care because of their propensity to regard market share alone as conclusive evidence of dominance. For example, the Court in Hoffman-La Roche was of the opinion that a large market share created a presumption of dominance:

"Although the importance of market shares may vary from one market to another, the view may legitimately be taken that very large market shares are, in themselves, and save in exceptional circumstances, evidence of the existence of a dominant position. An undertaking which has a very large market share and holds it for some time . . . is by virtue of that share in a position of strength . . ."

Australasian courts tend to have regard to a broader range of factors in dealing with dominance. For example, Tipping J. in New Zealand Magic Millions v

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64 United Brands Co. v EC Commission, (1978) 1 CMLR 429.
65 Ibid.
66 Hoffman-La Roche A.G. v EC Commission, (1979) 3 CMLR 211.
69 Hoffman-La Roche, supra, note 66.
70 There is some evidence to suggest that the Commerce Commission places more weight on market share as an indicator of dominance than does the High Court. The Commerce Commission was criticised by the High Court for placing too much weight on market share in Foodstuffs (Wellington) Co-operative Society v Commerce Commission (1992) 4 NZBLC 102,786 at 102,796. See: Kirby, J. (1992). "Mergers and Business Acquisitions". Unpublished LLB (Hon) Paper, University of Canterbury. p 17.
*Wrightson Bloodstock Ltd* held that "without barriers to entry, dominance will seldom, if ever, be found".\(^1\) In addition, the differences between the policy objectives of the Treaty of Rome and the Commerce Act must be considered. In the European Community, the promotion of competition and efficiency take second place to the interests of market integration.\(^2\)

Having said this, it cannot be ignored that there is a marked similarity between the European Court of Justice interpretation of dominance in *Continental Can* and §3(8) of the New Zealand Commerce Act, which defines a "dominant position" as follows:\(^3\)

> "...a dominant position in a market is one in which a person as a supplier or an acquirer of goods or services alone or together with any interconnected body corporate is in a position to exercise a dominant influence over the production, acquisition, supply, or price of goods or services in that market and for the purposes of determining whether a person is in a position to exercise a dominant influence over the production, supply, or price of goods or services in a market regard shall be had to:  
> (a) The share of the market, the technical knowledge, the access to materials or capital of that person or that person together with any interconnected body corporate;  
> (b) The extent to which that person is constrained by the conduct of competitors or potential competitors in that market;  
> (c) The extent to which that person is constrained by the conduct of suppliers or acquirers of goods and services in that market."

Two early Commerce Commission decisions indicate the belief that the §3(8) definition of dominance is based on the European experience. The Commission's definition of a dominant position in *Re News Limited/Independent Newspapers Limited*\(^4\) was similar to the passage from *Continental Can* (above).\(^5\)

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\(^1\) *New Zealand Magic Millions v Wrightson Bloodstock Ltd* (1990) 1 NZLR 731, at 757.

\(^2\) Patterson, *supra*, note 68, p 269.

\(^3\) As a result of the 1989 Amendment, §3(8) now applies only for the purposes of §36 and §36A. Another section, §3(9), was inserted to define "dominant influence".


\(^5\) The Commerce Commission held at 104,054:

> "In order to determine whether a person will or will be likely to be in a dominant position in a market as a result of the proposal, the Commission must determine whether a person is in a position to exercise a dominant influence over the production, acquisition, supply or price of goods or services in that market. A person can be considered to have a dominant position in a market when that person is able to make significant business
Additionally, in the *Magnum/DB* decision, the Commission held that dominance was a measure of market power and a firm with a dominant position has "sufficient market power (economic strength) to enable the dominant party to behave to an appreciable extent in a discretionary manner without suffering detrimental effects".\(^{76}\) This definition of dominance resembles that of the European Court of Justice in *United Brands*.\(^{77}\)

The New Zealand High Court approved the *Magnum/DB* definition in *Lion Corporation Limited v Commerce Commission* asserting that a dictionary meaning of dominance was inappropriate.\(^{78}\) Instead, it said the term should be considered in an economic context.\(^{79}\) Consistent with this economic approach, the Commission applied the "independence of behaviour" test in its ensuing decisions.\(^{80}\) To date, the decision which has received the most commentary is *Re Broadcast Communications Limited*. In that decision, the Commission described dominance as follows:\(^{81}\)

"...the dominance test is not an absolute test based on an ability to act independently. Indeed no person, not even a monopolist, acts without regard to competitors, suppliers or customers. Rather, the concept of dominance is based on the degree of control a person has over the market involving his or her good or service. Dominance exists when a person is in a position of economic strength such that it can behave in a large extent independently of that person's competitors. A person in a dominant position will be able to effect an appreciable change in the price and of other aspects of supply of his goods and services and maintain this change for an appreciable length of time without suffering serious adverse impact on profitability".\(^{82}\)

\(^{76}\)*Re Magnum Corporation Limited v Dominion Breweries Limited*, (1987) 1 NZBLC (Com.) ¶99-504 at 104,073.

\(^{77}\)Patterson, supra, note 68, p 272.

\(^{78}\)*Lion Corporation Limited v Commerce Commission*, (1987) 2 NZLR 682 at 690.

\(^{79}\)Patterson, supra, note 68, p 273.


\(^{81}\)*Re Broadcast Communications Limited*, ibid, at 104,542.
Since dominance is a measure of market power, several Australian references to market and market power have aided New Zealand courts. The decision of the Australian Trade Practices Tribunal in QCMA provides the basis of Australasian commentary on markets.\textsuperscript{82} Furthermore, the decision of the High Court of Australia in Queensland Wire\textsuperscript{83} provides New Zealand courts with direction in enquiries into market power. The Court in Queensland Wire described market power as:\textsuperscript{84}

"... the ability of a firm to raise prices above the supply cost without rivals taking away customers in due time, supply cost being the minimum cost an efficient firm would incur in producing the product."

The decisions of the Commerce Commission, the High Court and the Court of Appeal in the Telecom\textsuperscript{85} AMPS-A case provide the most recent New Zealand commentary on dominance. In defining market dominance, the Commerce Commission was consistent with its previous definitions. It quoted the Broadcast Communications decision with approval and followed it.\textsuperscript{86}

The High Court started its discussion of dominance with reference to the Magnum/DB decision.\textsuperscript{87} Because the Magnum/DB decision focused on market power, the Court made particular reference to market power. It adopted the "discretionary power" approach saying:\textsuperscript{88}

"... the essence of market power is discretionary power, the discretion to adopt production and selling policies different from those that a competitive market would constrain. Section 3(8) sets down explicitly four of the constraints to which regard shall

\textsuperscript{82}See part III A 3, footnote 119 for the quote from QCMA, supra, note 45, which contains the elements of market structure.

\textsuperscript{83}Queensland Wire Industries Pty Ltd v Broken Hill Pty Co Ltd, (1989) ATPR 540-925.

\textsuperscript{84}Ibid., at 50.008.

\textsuperscript{85}See citations accompanying text below.

\textsuperscript{86}Telecom Corporation of New Zealand Limited/The Crown, Decision 254 (17 October 1990).

\textsuperscript{87}Telecom, supra, note 27.

\textsuperscript{88}Ibid., at 508.
be had: the conduct of (existing) competitors, of potential competitors, of suppliers, and of acquirers of relevant goods or services".

The Court then entered into a discussion regarding the relevance of market conduct and market structure to defining dominance. First, it accepted that "market structure sets real limits upon the market conduct that is possible". The Court accepted the contention that market structure is the primary determinant of market power and adopted the QCMA list of elements of market structure. Second, with regard to market conduct, the Court noted that although market power "may be manifested by market practices directed at excluding competition," there is no necessity for evidence of conduct, or imaginary scenarios before dominance can be inferred. This is because dominance may exist in the absence of anti-competitive conduct—the wording of §3(8) simply requires firms to be in "a position to exercise a dominant influence". In other words, the Court was of the opinion that although the conduct of a firm may indicate market power, the structure of the market is the most important indicator of such power. It accepted a broad range of elements of market structure but consistent with QCMA, accepted entry conditions as the most important.

The Court stated that because entry conditions were the most important aspect of market structure, it was required to "predict the shape of the future" with and without the questioned transaction. It was particularly critical of the Commerce Commission for adopting European Community attempts to define dominance more precisely. In particular, the Court criticised the Broadcast Communications decision for following United Brands and Hoffman La-Roche. The Court made special reference to the use of the Broadcast Communications formulation of an

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89 Ibid, at 508.
90 See part III A, footnote 118.
91 The Court referred to Queensland Wire, supra, note 83.
"appreciable change in price or supply for an appreciable length of time". This was criticised for two reasons. First, this test amounts to a double dominance test. Second, the Court was not impressed by the use of the word "appreciable" because of its ambiguity. The Court interpreted "appreciable" to mean "large". It held that market dominance means no more than high market power. On this point, and consistent with its earlier reference to "discretionary power", the Court held that:

"[t]he degree of market power is high where there is a discretion to depart from competitive behaviour e.g. a large pricing discretion or a large discretion to choose the pace of technological change."

Telecom appealed the High Court's decision. The Court of Appeal, considering the §3(8) dominance threshold for the first time, criticised the High Court for not paying sufficient regard to the statutory definition of dominance in §3(8). In the words of Cooke P.:  

"It is a dangerous method of statutory interpretation to substitute words which the Legislature has not in fact chosen."

In particular, attention focused on the High Court's adaptation of the Broadcast Communications test. Cooke P. considered that "large" and "appreciable", as used in Broadcast Communications, understated the extent of market power required to meet the dominance test. Consistent with Cooke P's approach, Richardson J. stated:

"[T]he dominance test sets a rigorous threshold. It is not sufficient that the influence be advantageous or powerful. It must be dominant. The word comes from the Latin dominus meaning master. Only one person can be dominant in a particular aspect of a

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92 Telecom, supra, note 27, at 510.
93 Ibid, at 510.
94 Ibid, at p 513.
95 Telecom Corporation of New Zealand Limited v Commerce Commission, 4 TCLR 648.
96 Ibid, at 653.
97 Ibid at 661.
market at any one time. Not surprisingly standard dictionaries give meanings such as "ruling", "governing", "commanding", "reigning", "ascendant", "prevailing", and "paramount".

Richardson J. relied on an Australian case, Trade Practices Commission v Ansett Transport Industries (Operations) Pty Ltd, where Northrop J. held that "dominate" was to be construed in its ordinary sense of having a commanding influence. Yet when it came to relying on Australian precedent for the definition of dominance, Richardson J. was of the opinion that the different statutory language in the Australian statute made comparisons unhelpful.

Commentators have been very critical of the Court of Appeal's decision in Telecom. Critics claim the decision ignores both the economic theory underlying the Commerce Act and the established European and Australian precedent. Patterson goes so far as to say:

"In discrediting the European Court of Justice independence of behaviour test, the QCMA dicta on competition and market structure, and the Queensland Wire analysis of market power, the Court of Appeal completely demolished the foundation upon which New Zealand competition law was built".

Indeed, the most unfortunate aspect of the Court of Appeal's decision was its insistence that dominance is a greater threshold than "high market power". This stems from the Court's eagerness to chide the High Court for blindly following Australian precedent and paying insufficient regard to the statutory definition.

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99 Ibid, at 325.
100 Telecom, supra, note 95, p 662. The Australian statute used a different threshold of "substantially lessening competition".
101 See for example: Kirby, supra, note 70; and Patterson, supra, note 68.
102 Patterson, supra, note 68, p 284.
103 Kirby, supra, note 70, p 33, suggests that the Privy Council's rebuke of the Court of Appeal's decision in the Apple Fields case is also significant. See: Apple Fields Limited v The New Zealand Apple and Pear Marketing Board, (1991) 3 NZBLC ¶101.946 (PC); (1989) 2 NZBLC ¶103.741 (CA). Richardson J. made special mention to Apple Fields to justify his restrictive approach to the definition of dominance. The Judicial Committee rejected the Court of Appeal decision in Apple Fields because although the Court of Appeal considered that the purpose of the Commerce Act was of "first importance", the Privy Council stated that "when an act is governed by statute, its resolution must be purely a matter of interpretation. Kirby criticises Richardson J's approach saying "to cite Apple
The Court of Appeal was correct in taking time to point out that the statutory definition must be given due weight. However, the Court's reluctance to use economics as a tool to define dominance\textsuperscript{104} ignores the fact that the Commerce Act is based on that economic premise that society's resources are best allocated in a competitive market where rivalry between firms ensures maximum efficiency in the use of resources.\textsuperscript{105} Courts must be willing to accept that it "is intrinsically difficult to translate the economic concepts involved in competition law into legal terms".\textsuperscript{106}

In addition, in over turning the established interpretation of "dominance", the Court of Appeal failed to offer an alternative analytical framework for assessing whether a firm is in a dominant position in a market.\textsuperscript{107} According to Richardson J's comments, and the fact that two of the judges of the Court of Appeal found that Telecom did not hold market power, only firms with a very high level of discretion over price and output levels would meet the threshold required for §36.\textsuperscript{108}

Most informed observers would not doubt that the first part of §3(8) takes an approach which corresponds to the economic definition of market power.\textsuperscript{109} In fact, the Ministry of Commerce is explicit in noting that the provisions of §3(8)

\textsuperscript{104}Apparent from Richardson J's remark that "... it would be naive to think that economics furnishes a body of settled conclusions dispositive of any particular factual circumstances ..." Telecom, supra, note 95, at 661.


\textsuperscript{106}Ministry of Commerce, supra 57, p 4.

\textsuperscript{107}Ibid, p 24.

\textsuperscript{108}Ibid.

\textsuperscript{109}See for example Hampton, supra, note 5, p 747.
and §3(9) were intended to point to a market power definition. While it is true that the definition of "dominant" is supposed to encompass "market power", the statutory definition precludes an excessively narrow economic definition of dominance such as "the ability of the firm to increase its profits by reducing output and charging supra-competitive rates". Instead, Hampton claims that:

"[i]n encompassing an expansive perspective of market power, §3(8) better captures the essence of dominance than the conventional short-hand formulation of market power expressed in terms of increased price and reduced output".

The conventional economic approach conflicts with the Court of Appeal "dictionary meaning" approach to dominance in Telecom. But is the conflict reconcilable? Judicial discussion of §3(8) in the Telecom case occurred when the section covered mergers. However, the 1990 Amendment restricted the §3(8) definition of dominance to §36 and §36A. Since there is no substantive difference between §3(8) and §3(9) with regard to the definition of dominance, courts are compelled to follow the Court of Appeal's formulation. Yet there is a possibility of limiting the application of the very high threshold test set by Telecom through the instrumental use of the concept of "market". Before explaining this, a discussion on market definition in Australasia is required.

*Market Definition in Australasia*

Clearly, a finding of dominance, or high market power, relies heavily on the definition of the market adopted by the Court. Normally, plaintiffs argue in

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111 Hampton, *supra*, note 5, p 23.
112 There has only been a few decisions regarding dominance since the Telecom case. The Commerce Commission appears to have amended its approach to one consistent with the Court of Appeal. In H.J. Heinz Company/Wattie Foods Ltd, (30 September 1992) Commerce Commission Decision No. 268, the Commission stated at ¶13: "The degree of market power that a person must have to constitute a dominant influence has been the subject of recent judicial comment... The Court of Appeal has noted that determining a dominant position must be undertaken in the context of section 3(9) of the Act. However, it remains for the Commission to consider the level of market power which constitutes dominance on the basis of the facts of a particular case. The Court of Appeal has suggested that level would need to be a commanding one".
favour of narrow markets with defendants favouring broad markets. The Commerce Act provides the following statutory definition of market in §3(1A):

"3(1A) Every reference in this Act... to the term "market" is a reference to a market in New Zealand for goods and services as well as other goods or services that, as a matter of fact and commercial common sense, are substitutable for them."

In the New Zealand context this is the starting point for market definition. There is also a large body of judicial and academic commentary on the subject. Principally, New Zealand courts have been influenced by the decisions of the Australasian Trade Practices Tribunal—in particular, the decision in QCMA. There, the Tribunal said:113

"A market is the area of close competition between firms or, putting it a little differently, the field of rivalry between them... Within the bounds of a market there is substitution between one product and another, and between one source of supply and another, in response to changing prices. So a market is the field of actual and potential transactions between buyers and sellers amongst whom there can be strong substitution, at least in the long run, if given a sufficient price incentive. Let us suppose that the price of one supplier goes up. Then on the demand side buyers may switch their patronage from this firm's product to another, or from this geographic source of supply to another. As well, on the supply side, sellers can adjust their production plans, substituting one product for another in their output mix, or substituting one geographic source of supply for another. Whether such substitution is feasible or likely depends ultimately on customer attitudes, technology, distance, and cost and price incentives.

It is the possibilities of such substitution which set the limits upon a firm's ability to "give less and charge more". Accordingly, in determining the outer boundaries of the market we ask a quite simple but fundamental question: If the firm were to give less and charge more would there be, to put the matter colloquially, much of a reaction? And if so, from whom? In the language of economics the question is this: From which products and which activities could we expect a relatively high demand or supply response to a price change, i.e. a relatively high cross elasticity of demand or cross elasticity of supply?"

In the past, questions were raised concerning the relevance of Australian precedent in market definition because the old definition of market in the Commerce Act omitted the word "substitutable".114 This debate focused on the

113 QCMA, supra, note 45.
114 It read: "3(1) ... 'Market', means a market for goods and services within New Zealand that may be distinguished as a matter of fact and commercial common sense."
fact that the Australian statutory test is based on "substitutability" \(^{115}\) compared with the New Zealand approach of "commercial common sense". However, the first time the High Court considered the revised New Zealand definition it saw no conflict between these two elements: \(^{116}\)

"The practical effect of the revised wording appears to be no more than to make the relevance of economic substitutability explicit. It thus resolves some doubts that had been previously expressed, and confirms the relevance of the main line of New Zealand decisions (such as Auckland Regional Authority and Tru Tone at first instance and on appeal) and of Australian authorities (such as QCMA, Tooth and Tooheys, Queensland Wire). The retention to the reference to "commercial common sense" ... affirms the traditional New Zealand emphasis upon the need for a commercially realistic factual base. We see no source of conflict or tension in the juxtaposition of the two elements, substitutability and commercial common sense, in this formulation."

Consequently, the well established principles laid down in these cases may be followed within the context of §3(1A). This economic approach to market definition was affirmed in the Queensland Wire Industries case. \(^{117}\) For example, Toohey J. recognised the starting point of market analysis is an economic concept. \(^{118}\) The Queensland Wire and the QCMA cases have become influential in New Zealand, with the economic approach being adopted by the Commerce Commission and the courts alike. The recent legislative amendment allows courts to embrace a wider economically based approach, consistent with cases such as QCMA or Queensland Wire.

It is important to note that cases in which there has been a considerable amount of judicial time devoted to interpretation of the term "market" should only be used as a guide as to which approach to adopt. They cannot determine how the market

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\(^{115}\) Pursuant to §4E of the Trade Practices Act which reads:

"For the purposes of this Act, unless the contrary intention appears, "market" means a market in Australia and, when used in relation to any goods and services, includes a market for those goods or services and other goods or services that are substitutable for, or otherwise competitive with, the first-mentioned goods or services."

\(^{116}\) Telecom, supra, note 27, at 499.

\(^{117}\) Queensland Wire Industries Pty Ltd v Broken Hill Pty Co Ltd, supra, note 83.

\(^{118}\) Ibid, at 50,021.
should be defined in any individual case.\textsuperscript{119} For example, in \textit{Edmond's Food Industries Limited v WF Tucker and Co Ltd}\textsuperscript{120} the Commission expressly stated that the judgment of the relevant markets "must be made on the basis of commercial common sense in the circumstances of each case".\textsuperscript{121}

Increasingly, courts are expressing concern about the proportion of trial time devoted to market definition. Wilcox J. in \textit{Trade Practices Commission v Australia Meat Holdings Pty Ltd}\textsuperscript{122} stated:

"It is for me a matter of concern that the crucial determination of the limits of the market—about which question I assume commercial people frequently make almost intuitive judgments—should be seen as requiring the time, effort and expense involved in this case.

The proper definition of a market is entirely a matter of fact, the determination of which ought not to be made more protracted and expensive by the abduction of unnecessary expert evidence"

Indeed, some courts have recognised that excessive reliance on market definition may lead to incorrect conclusions. Dawson J. commented in \textit{Queensland Wire}:\textsuperscript{123}

"Too rigid an approach in defining a market is apt to lead to unrealistic results."

This concern reflects a trend towards the use of market as an instrumental concept.\textsuperscript{124} That is, market definition should be used as a tool for antitrust analysis rather than the matter on which a case may turn. This approach does not preclude an informed economic approach to market definition—it simply means


\textsuperscript{120} \textit{Edmond's Food Industries Limited v WF Tucker and Co Ltd.} Commerce Commission Decision No. 84, 21 June, 1984.


\textsuperscript{122} \textit{Trade Practices Commission v Australia Meat Holdings Pty Ltd}, (1989) ATPR ¶ 40-876 at 49,479

\textsuperscript{123} \textit{Queensland Wire}, supra, note 83, at 50,015.

\textsuperscript{124} Australian courts are increasingly using market identification as an instrumental concept. See: \textit{Re John Dee (Export Pty Ltd)}, (1989) ATPR ¶ 40-938 at 50,219; \textit{ Dowling v Dulgety Australia Limited}, (1992) ATPR ¶41-165 at 40,268.
that the definition of market must not be divorced from the facts of a case. Consistent with post-Chicagoan antitrust analysis, market definition should be approached with full awareness of its impact on the legal issue before the court. Areeda and Turner express this philosophy as follows:

"One cannot determine the degree of market power that merits concern, or consequently, the "proper" market definition, without reference to the legal context in which the issue arises. One must consider what is under attack, the substantive rules of liability that govern the particular case and the relief that is an issue."

Hampton explains that two of the judgments from *Queensland Wire* may provide New Zealand courts with the flexibility to tailor the market concept to the conduct at issue. First, Mason C.J. and Wilson J. emphasised that market and market power are interrelated concepts:

"In identifying the relevant market it must be borne in mind that the object is to discover the degree of the defendant's market power. Defining the market and evaluating the degree of power in that market are part of the same process, and it is for the sake of simplicity of analysis that the two are separated."

Furthermore, Deane J. implicitly approved this approach through the following statement:

"In the case of an alleged contravention of the provisions of §46(1) there will ordinarily be little point in attempting to define relevant markets without identifying precisely what it is that is said to have been done in contravention of the section."

Brunt explains that in Australasia, a "relativist" approach to market definition has been developed. She uses two cases, both involving car rentals, to validate this comment. In the New Zealand *Budget* case, the relevant market was the

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125 See part II A 2(e).
127 Hampton, supra, note 5, p 750.
128 *Queensland Wire*, supra, note 83, at 50,008.
129 *Ibid*, at 50,012.
130 Brunt, supra, note 1, p 141.
narrow Auckland Airport market. This contrasts with the Ansett/Avis case where the market was held to be the wide Australian car rental market. The reason the courts chose very different relevant markets is reflected by the conduct in question. The Australian case involved an economy-wide merger with far reaching implications. Conversely, in the Budget case, the questioned conduct related to the Auckland Regional Authority awarding exclusive contracts for Avis and Hertz to operate at Auckland International Airport. Both these cases posed the question of whether the conduct should be allowed to proceed given its competitive setting. While the questioned conduct is important, this approach to market definition is not totally driven by conduct. It also requires identification of the relevant constraints upon firms or divisions of firms whose conduct is alleged to breach the terms of the statutes in light of the remedies available.

While Australasian courts are not unique in using the concept of market in the ways explained, they have certainly developed an approach which is distinctive. Moreover, Australasian courts have adopted an approach to cross-elasticities which places importance on both supply-side and demand-side considerations. The New Zealand case of Festival Records demonstrates the overall approach. In this case, the plaintiff asked the High Court to decide whether each album which gets onto the charts was a single market for antitrust purposes. The Court considered both the conduct in the market and the constraints upon the firms in

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133 Brunt, supra, note 1, p 144.
134 See ibid, p 145. Dawson J., in Queensland Wire held that: "Basic test involves the ascertainment of the cross-elasticities of both supply and demand, that is to say, the extent to which the supply of or demand for a product responds to a change in the price of another product." Queensland Wire, supra, note 83, at 50,014.
135 Tru Tone Limited v Festival Records Retail Marketing Limited, supra, note 105.
deciding that "charting records are too short-lived to qualify as any form of
dominance".\(^{136}\)

This use of market delineation means that the high threshold test for dominance
set in the *Telecom* case may prove to be not so insurmountable as some
commentators have suggested. The key point is that Australasian courts regard
market as an instrumental concept. They do not identify the relevant market using
an approach which is isolated from the facts of the case. Rather, they analyse the
market in the context of the legislation in which it is mentioned and with regard to
the conduct in question.\(^{137}\) New Zealand courts are compelled to approach
dominance according to the Court of Appeal's approach in *Telecom* but they may
limit the high threshold by adopting a flexible market approach.

"Substantial Degree of Market Power"

The Australian misuse of power provision contains a different threshold test to
New Zealand's. Section 46 of the Trade Practices Act reads:

"A corporation that has a substantial degree of power in a market shall not take
advantage of that power for the purpose of—
(a) eliminating or substantially damaging a competitor of the corporation or of a
body corporate that is related to the corporation in that or any other market;
(b) preventing the entry of a person into that or any other market; or
(c) deterring or preventing a person from engaging in competitive conduct in that
or any other market."

Thus the relevant threshold is the capacity of a corporation to exercise
substantial market power. Unlike the New Zealand Court of Appeal approach in

\(^{136}\) *ibid*, at 103,089.

\(^{137}\) The inter relatedness of "market" and "dominance" was also noted by Davison CJ in *Lion Corp v Commerce
Commission*, (1988) 2 NZBLC 999-999 where he said at 102,906: "...the word is used in the context of "a
dominant position in a market" so that in order to occupy such a dominant position in a market the concept of
dominance must be looked at in the market context".
Telecom, Australian courts have explicitly noted that §46 is economic in nature. Deane J. in Queensland Wire explained: 138

"The starting point ... is the fact that the essential notions with which sec. 46 is concerned and the objective which the section is designed to achieve are economic and not moral ones. The notions are those of markets, market power, competitors in a market and competition. The objective is the protection and advancement of a competitive environment and competitive conduct ..."

In fact, the old provision in the Trade Practices Act was deliberately changed from the words "substantially control a market" because "control" summoned a legal test rather than an economic one. 139 Of course, the debated issue with regard to §46 is how much market power a corporation needs before it can be said to have "a substantial degree of market power". Section 46(3) provides assistance in determining whether a firm has a substantial degree of power in a market. It provides:

"In determining for the purposes of this section the degree of power that a body corporate or bodies corporate has or have in a market, the Court shall have regard to the extent to which the conduct of the body corporate or any of those bodies corporate in that market is constrained by the conduct of—

(a) competitors, or potential competitors, of the body corporate or of any of those bodies corporate in that market; or

(b) persons to whom or from whom the body corporate or any of those bodies corporate supplies or acquires goods or services in that market."

This provision directs courts to adopt a "discretionary power" approach—the approach favoured by the European Court of Justice (as outlined above). The leading Australian case on market power, Queensland Wire, confirmed that §46(3) is intended to direct the courts to the European approach to market power. 140 However, as noted above, courts in Australasia consider a broader range of elements when considering market power. There remains considerable scope for

138 Queensland Wire, supra, note 83, at 50,011.
139 CCH Australia, supra, note 41, at 3531, ¶5-045. Corones provides a section explaining §46 of the Australian Trade Practices Act and "Misuse of Market Power".
140 Queensland Wire, supra, note 83, at 50,009.
further judicial debate in Australia regarding the extent of discretionary market power a firm must have to be considered as having a "substantial degree of market power". Nevertheless, it is generally agreed that the Australian threshold test for §46 is lower than its New Zealand equivalent.\textsuperscript{141} This has important implications for any comparison of these two jurisdictions.\textsuperscript{142}

"Use" or "Take Advantage of"

Once the dominance threshold is satisfied, plaintiffs must prove, to a court's satisfaction, that CRS vendors use their market power for a proscribed purpose. Courts in New Zealand construe the word "use" in a neutral sense. Similarly, Australian courts take a neutral meaning for their phrase "take advantage of". Compare this with the approach taken by article 86, where the misuse of market power is embodied in the pejorative concept of "abuse". The leading authority on the misuse provision in both Australia and New Zealand is *Queensland Wire*, where Mason C.J. and Wilson J., in a joint judgment said:\textsuperscript{143}

"The phrase "take advantage of" in s46(1) does not require a hostile intent inquiry – nowhere is such a standard specified. And it is significant that s46(1) already contains an anti-competitive purpose element. It stipulates that an infringement may be found only where the market power is taken advantage of for a purpose proscribed in para (a), (b) or (c). It is these purpose provisions which define what uses of market power constitute misuse .... The question is simply whether a firm ... has used that power for a purpose proscribed in the section, thereby undermining competition, and the addition of a hostile intent inquiry would be superfluous and confusing."

\textsuperscript{141} Although the Ministry of Commerce claims that before the *Telecom* Court of Appeal decision, there was little evidence that the thresholds differed in practice. *Ministry of Commerce, supra*, note 57, p 12.

\textsuperscript{142} Some authors claim that New Zealand should adopt the Australian test for §36 because New Zealand could look to Australian precedent, (for example, Kirby, *supra*, note 70, p 42/43). However, the cases in Australia point to different conclusions and may not provide any certainty at all.

\textsuperscript{143} *Queensland Wire, supra*, note 83, at 50,010.
This approach was endorsed by the New Zealand Court of Appeal in *Electricity Corp Ltd v Geotherm Energy Ltd* where the Court agreed that "[m]arket power can be exercised legitimately or illegitimately".\(^{144}\)

It must also be established that a defendant used its market power to achieve the anti-competitive conduct—there must be a connection between the market power and the conduct. This is known as the "causation" issue.\(^{145}\) Although different courts give differing levels of scrutiny to the causation requirement, the fundamental concept is that without a causal nexus there will be no taking advantage of market power.\(^{146}\)

In both the New Zealand and the Australian Act, the words "for the purpose of" make it clear that only intentional or purposive conduct by a firm is caught.\(^{147}\) It is not necessary that one of the proscribed purposes is achieved—a firm just needs to use its dominant position (or market power) for the purpose of achieving one or more of the effects listed.

*The Purpose Requirement*

A finding that a person has used market power or a dominant position, in itself, is insufficient to establish liability under §46 or §36 of the Trade Practices Act or the Commerce Act respectively. A plaintiff must show that the defendant has used the questioned conduct for one of the proscribed purposes.\(^{148}\) To paraphrase

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\(^{144}\) *Electricity Corp*, supra, note 61, at 15.

\(^{145}\) *Hampton*, supra, note 5, p 752.

\(^{146}\) CCH Australia, *supra*, note 41, §5-300, at 3760. For the Australian perspective, see Corones’ discussion in CCH Australia, *supra*, note 41, §5-300. For a New Zealand perspective see *Hampton*, supra, note 5, pp 752-756.


\(^{148}\) See *Hampton*, supra, note 5, pp 756-760 for a discussion of the purpose requirement. See above for the purposes set out in both the Commerce Act and the Trade Practices Act.
the legislation, once a corporation has a certain level of power in a market, the Acts prohibit the use of that power:

1. To prevent or restrict entry into that market or any other market;
2. To prevent or to deter competitive conduct in that or any other market; and
3. To eliminate or damage another person in that or any other market.

(b) **Application to the Australasian CRS Industry**

In the United States, one of the main reasons that monopolisation claims against CRS vendors have been unsuccessful is the failure of plaintiffs to prove that monopoly power exists in the relevant market. Australasian courts facing similar questions may arrive at different conclusions depending on the conduct at issue. Since the misuse provisions in Australia and New Zealand require a substantial degree of market power, or market dominance (depending on the jurisdiction), it is necessary to ascertain whether CRS vendors possess sufficient market power to meet the thresholds. This depends on the relevant market.

The *Austin Travel* case turned on whether the relevant market could be the "market for airline access to travel agents using *Apollo*."149 While the Second Circuit rejected the contention, this issue could validly be raised in the Australasian context. For example, a non-vendor airline could bring an action against one of the major CRSs claiming that it was in breach of, say, §46 of the Trade Practices Act. The court's adoption of a narrow market definition would depend on the conduct at issue. Suppose the questioned conduct is the level of booking fees which airlines must pay to the CRS vendor. Arguments may be raised that if the prices of one CRS were high, airlines would simply cease to use

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that CRS and it would be useless to travel agents. However, as noted in part III, airlines are unlikely to refuse to pay a booking fee of several dollars on a fare amounting to hundreds or thousands of dollars. This does not prove that booking fees are not anti-competitive.

If a CRS vendor has an established base of travel agents, airlines require access to those agents. The reality of the market is that agents rarely subscribe to more than one CRS. Consequently, airlines must have access to those agents automated by a certain CRS. If they are tied up by a vendor who has established entry barriers to other vendors, Australasian courts are likely to agree that the market could be narrowed to those agents who subscribe to a certain CRS. In reaching this conclusion, a court would have regard to the conduct in question and the constraints on the firms. Airlines reliant on existing channels of distribution, particularly if they only have a small market presence, have little other option than to pay the booking fees if they wish to reach those travel agents who subscribe to the CRS. Therefore high booking fees may act as constraints on non-vendor airlines. Furthermore, depending on the subscriber contracts, substantial entry barriers to the CRS industry may exist.

A finding that the relevant market is access to agents automated by a certain CRS would give rise to a finding of market power necessary to pass the threshold test in either Australia or New Zealand. Conversely, a ruling that the relevant market is the provision of CRS services may cause differences between the two

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150 For nearly all travel agents, subscribing to more than one CRS is an expensive and unnecessary option. Occasionally, a travel agent will be connected to more than one CRS. For example, recently when the Air New Zealand MAARS system was being wound down, some travel agents were connected to MAARS and either Galileo or Parnassus simultaneously.

151 The court would be required to analyse the extent of these entry barriers. For instance, the Australian rules provide that vendors may recover liquidated damages (see appendix 13, section 11(0)). In addition, in New Zealand where no rules govern the use of CRSs, five year contract terms are the norm.
countries. However, because complaints regarding the use of CRSs usually relate to the conduct of vendors, in most cases the market would be narrowed. In the TIAS merger, because the conduct affected a wider area, the relevant market was the provision of CRS services in Australia. In cases where more specific anti-competitive conduct is alleged, market may be used as a tool in its relativist sense.

The changing nature of the market, coupled with the Australian Code of Conduct, may allow agents to switch from vendor to vendor more easily. The easier it is for vendors to switch, the less likely it is that a court will find that they hold sufficient market power to surpass the thresholds. This is because of the importance of entry barriers to New Zealand and Australian courts. It is unlikely that an Australasian court will rule that market power exists if barriers to entry are very low. In the Australasian market, de novo entry to the CRS market is highly unlikely. If the court was considering the narrow market as outlined above, it would be compelled to look closely at subscriber contracts to see how easily they could switch systems. In addition, other switching costs such as installation and training, which are high, should be considered.

Of the four main competition concerns with CRSs listed in part II C, the discussion above on the Australasian authorisation procedures tackled the structural problems. In light of the misuse of market power discussion above, the analysis below looks at two of the behavioural problems with CRS vendors—system bias and supra-competitive booking fees.

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152 The threshold test in New Zealand is higher than Australia's. Consequently, if a wider relevant market was defined, §36 of the New Zealand Commerce Act may not apply whereas in Australia, §46 of the Trade Practices Act may still be able to be invoked.
System Bias

As mentioned in part II, CRS system bias has the potential to seriously distort competitive conditions in the downstream airline industry. By skewing airline bookings toward themselves and earning incremental revenues, dominant vendors can use power in one market to affect competition in another. But does this conduct fall within the ambit of §36 of the Commerce Act and §46 of the Trade Practices Act?

A case based on such facts would proceed based on the monopoly leveraging principles outlined in part III C 1. The leading authority in Australasia on monopoly leveraging is Queensland Wire. This case involved the refusal of one company (BHP) to sell a certain type of steel product, Y-Bar, to Queensland Wire Industries (QWI).\textsuperscript{153} Y-Bar is used in the manufacture of star picket fence posts which is an essential item component in rural fencing. BHP's refusal to sell Y-Bar to QWI left Australian Wire Industries (AWI), a BHP subsidiary, as the only supplier of a complete range of fencing products.

On appeal to the High Court of Australia, BHP was found to possess a substantial degree of market power in the market for the sale of steel and steel products.\textsuperscript{154} In finding that BHP had market power, Mason C.J. and Wilson J. held that:\textsuperscript{155}

"...the relevant market for determining degree of market power will be at the product level which is the source of that power."

\textsuperscript{153}BHP eventually sold Y-Bar to QWI, but only at extremely high prices.
\textsuperscript{154}Queensland Wire, \textit{supra}, note 83, at 50,009.
\textsuperscript{155}\textit{Ibid}, 50,008.
Mason C.J. and Wilson J. applied three indicators of market power in their analysis. First, they looked at market share as evidence of market power. Second, they noted the importance of barriers to entry. Finally, and most interestingly in the context of CRSs, they said that vertical integration is often an indicator of market power. Mason C.J. and Wilson J. used as their authority the European Court's decision in *United Brands*.\textsuperscript{156} They observed:\textsuperscript{157}

"Another indicator of market power . . . is vertical integration . . . although vertical integration does not by itself mean that a firm has a substantial degree of market power, it may well be the means by which the firm capitalises on that market power".

While the none of the judges in *Queensland Wire* explicitly mentioned monopoly leveraging, their approach to the case shows that the Trade Practice Act, and thus the Commerce Act, allows courts to embrace the concept. The Acts forbid the use of market power in one market for one or more of the proscribed purposes in that or any other market. BHP leveraged its market power from the market for steel and steel products (where it held sufficient power to surpass the required threshold), to the market for rural fencing products.

As noted above, the High Court in *Queensland Wire* accepted that "take advantage of" was to be construed in a neutral sense. With regards to causation, the Mason C.J. and Wilson J. commented:\textsuperscript{158}

"In effectively refusing to sell Y-Bar to the appellant, BHP is taking advantage of its substantial market power. It is only by virtue of its control of the market and the absence of other suppliers that BHP can afford, in a commercial sense, to withhold Y-Bar . . ."

After these issues were resolved, all that was left for the Court to decide was whether BHP's conduct fell within one of the proscribed purposes. The Court

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\textsuperscript{156} *United Brands*, supra, note 64, at 487-489.

\textsuperscript{157} *Queensland Wire*, supra, note 83, at 50,009/50,010.

\textsuperscript{158} Ibid, at 50,011.
concluded that BHP's power was being extended for the purpose provided in §46(1)(c), "deterring or preventing a person from engaging in competitive conduct". That is, BHP was preventing or deterring QWI from engaging in competitive conduct in the market for rural fencing products.

In light of this decision, the arguments put forward in part III regarding monopoly leveraging are of direct relevance to the New Zealand and Australian context. Since Australia has a lower threshold test, the principles may be of greater importance there. In New Zealand, the higher dominance test established in *Telecom* may lead to a similar problem to that which has confronted plaintiffs in the United States—the failure to prove the defendant has a sufficient level of market power in the source-leverage market.

However, if a court was to adopt a narrower market definition, as advocated above, a monopoly leveraging claim of system bias would be viable. It should be noted that the propensity of Australian and New Zealand courts to adopt the relativist approach to market identification increases the likelihood of a narrower market. Since New Zealand does not have its own CRS code of conduct, and is unlikely to adopt one, courts must be willing to embrace the notion of monopoly leveraging in this way. In Australia's case, the TPC Code of Conduct may well eliminate any residual bias in the major systems. But if the Code fails to eliminate bias, a competition law claim of monopoly leveraging would be appropriate using the principles conveyed in *Queensland Wire*.

By taking a narrow market definition of the market for access to agents automated by a certain CRS, a monopoly leveraging claim under §46(1) or §36

\[159\] *Ibid.*
would proceed as follows. The market threshold would easily be met as a CRS vendor dominates the agents who subscribe to its CRS. By virtue of its market power, CRS vendors have the ability to exercise the questioned conduct. Finally, with regards to the purpose requirement, system bias arguably has the purpose of deterring competitive conduct in the airline industry.

In addition to system bias, vendor-airlines may leverage their market power in the CRS industry by not allowing airlines to distribute through their CRS. This seems unlikely in Australasia since the agreements between the mega-systems and their Australian representatives provide for all airlines to be included. Nevertheless, if a vendor did refuse to allow an airline to participate in its system, a valid claim may be available under §46(1)(c) of the Trade Practices Act or §36(1)(b) of the Commerce Act.

\textit{Supra-competitive Booking Fees}

Non-CRS airlines may also try to bring a misuse case regarding excessive booking fees. Booking fees are widely accepted to be supra-competitive. Yet this is not sufficient to establish liability under §36 of the Commerce Act or §46 of the Trade Practices Act. To be prohibited by either of these sections, a firm with the required level of market power must engage in conduct for one of the purposes identified in §36(1)(a)-(c) or §46(1)(a)-(c).

RRC theory could be used to show a court that the effects of supra-competitive booking fees may fall under those proscribed. Recall \textit{figure 22} in part III, which illustrates how vendor-airlines have the ability to increase the costs of their

\footnote{This would require the court to look at the realities of the marketplace. As mentioned above, because of subscriber contracts, CRS vendors do not subscribe to more than one CRS. Therefore there is no other CRS present in the relevant market. Long-term contracts with restrictive terms make entry to the relevant market very difficult.}
unintegrated rivals in the airline industry. This may have the effect of restricting entry to an air transport market. Moreover, since profit margins on many flights are very thin (see part II), small cost increases may have the effect of eliminating a weak competitor. Using these arguments, excessive booking fees charged by CRS vendors to non-vendor airlines may fall under §46(1)(a) and (b) of the Trade Practices Act or §36(1) (a) and (c) of the Commerce Act.

However, simply because the effect of certain conduct falls under one of the proscribed purposes does not mean this is the purpose of the conduct. Hampton explains that for liability to arise under the misuse provisions, there must be a purposive pursuit of the anti-competitive outcome.¹⁶¹ Central to a claim of this nature is the court's willingness to infer the purpose.¹⁶² Part III B emphasises that competition law does not condemn monopoly power in itself. Monopoly pricing is not unlawful under §36 of the Commerce Act or §46 of the Trade Practices Act unless it falls within one of the proscribed purposes. This point was emphasised by counsel for the respondents in Pont Data.¹⁶³ Wilcox J. accepted the substance of this argument saying:

"It is true that [§46] does not eliminate the evils of monopolisation and it does not require corporations to deny their own self-interests. But it does forbid particular conduct by corporations having a substantial degree of market power."

Consequently, a case of whether supra-competitive booking fees are unlawful would be dependent on whether the plaintiff could prove that the defendant engaged in its conduct for one of the purposes proscribed. A plaintiff trying to

¹⁶¹ Hampton, supra, note 5, p 756.
¹⁶² For a discussion on the proof of purpose and whether purpose denotes a subjective or objective test, see: Hampton, supra, note 5, pp 575-759. For an Australian perspective, see Corones' discussion in CCH Australia, supra, note 41, ¶5-400, pp 3,783-3,792.
¹⁶³ Pont Data Australia Pty Limited v ASX Operations Pty Limited & Anor (1990) ATPR ¶41-007, at 51,125.
prove that booking fees were anti-competitive would face considerable difficulty in proving that the purpose of the vendor was not simply profit maximisation.

The purpose of an arrangement was the major issue in *Pont Data Australia Pty Limited v ASX Operations Pty Limited & Anor*.\(^{164}\) ASXO, a subsidiary of ASX, entered into three arrangements with Pont Data. The arrangements provided that ASXO would supply Pont Data with certain stock exchange information ("Signal C") subject to certain conditions. Pont Data claimed the arrangements contravened §§ 45, 46(1)(b) and (c) and 49 of the Trade Practices Act.\(^{165}\) The Federal Court found that the respondents had dominance in the market for the provision of facilities for public trading of stocks and securities (the stock exchange market), and had a substantial degree of power in the market for the supply of information about activities on the stock exchange (the information market). This conclusion made it necessary for the Court to consider the respondents' purpose in imposing the terms embodied in the questioned agreements.\(^{166}\) Wilcox J. approached the matter of purpose "by reference to the background documents and the contracts themselves".\(^{167}\) Wilcox J. considered a number of background factors in concluding that ASXO's purpose was to prevent competition in the information market and to deter entry in the stock exchange market.\(^{168}\)

On appeal to the Full Federal Court of Australia, the appellants submitted that the purpose of the agreements was to protect the ability of ASXO to obtain a

\(^{164}\) *Ibid.*

\(^{165}\) Pont Data signed the contracts only because the alternative was to lose access to Signal C.

\(^{166}\) Pont Data, *supra*, note 163, at 51,122/3.

\(^{167}\) *Ibid.*, at 51,123.

\(^{168}\) In particular, Wilcox J. analysed the relationship between ASXO and its retail information service, JECNET, which competed directly with Pont Data. See *Ibid.*, at 51,123/4.
"commercially reasonable price" for Signal C. ASXO argued that there was no independent purpose of excluding others, "although such exclusion may have been a consequence of the pursuit of the identified purpose of protection of the appellants' proprietary rights". The Full Court's careful approach to this argument highlights the difficulty of ascribing a purpose to the conduct before the Court. Nevertheless, in view of the evidence reviewed by Wilcox J. at first instance, Lockhart, Gummow and von Doussa JJ. for the Full Court held:

"The present is not a case in which one would characterise or treat what occurred simply as the exercise or exploitation in good faith of legal rights or what were believed to be legal rights, for the best price the market would bear and to the exclusion of the taking advantage of a substantial degree of power in a market or markets. Further, we accept the submissions for Pont that it was well open to his Honour to find, as he did, the existence of the purpose of preventing . . . and of deterring competition . . ."

A CRS vendor faced with such a case could present a compelling argument that its booking fees simply represent the exercise of its legal rights. As noted in Pont Data, the misuse provisions do not prevent a corporation from acting in its own self-interest. The fact that profit maximisation in the CRS market has anti-competitive effects in the air transportation market does not mean the CRS vendor has as its purpose the deterrence or elimination of competition. In fact, if a CRS vendor is not vertically integrated, it is logical to expect it to charge as high a fee as the market will bear. In that case, there would be no question that the purpose of supra-competitive booking fees is to maximise the profits of the vendor.

3. Contracts Substantially Lessening Competition

The other main competition concern with carrier-owned reservation systems identified in part II is unfair subscriber contracts, which increase the barriers of

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170 Ibid.
171 Ibid, at 52,067.
entry to the CRS industry. Few observers would claim that entry and exit to the CRS industry is easy. The recent entry of *Worldlink* in Australasia shows that entry is not impossible, but courts are likely to consider that the high capital costs and difficulties in establishing a market presence make entry barriers unusually high. CRS vendors have the opportunity to exacerbate the problem of entry barriers through their use of long-term contracts with anti-competitive clauses relating to minimum use, rollovers, and liquidated damages.

In Australasia, the most effective way of making an antitrust attack against these clauses is by using the statutory provisions which deal with anti-competitive arrangements—the "catch-all" provisions. These provisions are different to the misuse provisions in that the misuse provisions govern unilateral activity while §27 of the Commerce Act and §45 of the Trade Practices Act require duality of action. That is, there must be a contract, arrangement or understanding.

The New Zealand provision, §27, applies to all types of anti-competitive arrangements. Section 27(1) of the Commerce Act reads:

"No person shall enter into a contract or arrangement, or arrive at an understanding, containing a provision that has a purpose, or has or is likely to have the effect, of substantially lessening competition in a market".

The Australian equivalent is very similar. Section 45(2)(a)(ii) and (b)(ii) provides:

"A corporation shall not:
(a) make a contract or arrangement, or arrive at an understanding, if:
   (ii) the provision of the proposed contract, arrangement or understanding has the purpose, or would have or be likely to have the effect, of substantially lessening competition . . .
(b) give effect to a provision of a contract, arrangement or understanding, whether the contract or arrangement was made, or the understanding was arrived at, before or after the commencement of this section, if that provision:
   (ii) has the purpose, or has or is likely to have the effect, of substantially lessening competition . . ."
Because the application of these two sections is very similar, they will be discussed simultaneously.

Unlike the misuse provisions, which only allow conduct to be caught if it is conducted for a proscribed purpose, §27 and §45 allow courts to prohibit conduct even if its effect or likely effect is to lessen competition as well as if its purpose is anti-competitive. Furthermore, to come under attack from these provisions, the defendant does not necessarily need market power. Many provisions in CRS subscriber contracts have the potential to fall within the ambit of these sections. Before there can be a breach, the lessening of competition must be substantial. The New Zealand High Court in Fisher and Paykel Ltd v Commerce Commission approved the approach of the Commerce Commission where the test of "substantially lessening competition" was evaluated on a net basis.

While the catch-all provisions relax the market power threshold, the conduct which is questioned must result in or have the purpose of substantially lessening competition. The threshold for substantially lessening competition is generally regarded as being below the threshold required for the misuse provisions to be invoked. As mentioned above, the accepted approach for §27 or §45 claims is to assess the "net" effect on competition. That is, a court is compelled to take into account the pro and anti-competitive effects of the conduct. While the Australian legislation does not define "substantial", the Commerce Act defines it in §2(1A)

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172 Although §45(2) does not mention "market", this is dealt with in §45(3).
173 Although, often market power is necessary for the types of behaviour concerned.
174 Fisher and Paykel Ltd v Commerce Commssion & Ors, (1990) 3 NZBlC 399-183, at 101,663. The Court stated that pro and anti-competitive effects must be taken into account. However, the Court also noted that non-competition public benefits were more appropriately dealt with at the authorisation stage.
as "real or of substance". In the context of this provision, the New Zealand Commerce Commission made the following interpretation of "substantial":\textsuperscript{175}

"Accordingly, it seems reasonable to assume that "real or of substance" in New Zealand was intended to mean not insignificant, not ephemeral or nominal or minimal. Of course, as Deane J. says, such a test conceals a lack of precision. In this respect, the evaluation of the question of degree, based on the criterion of "not insignificant, ephemeral, nominal or minimal" must be a matter of judgment for the appropriate adjudicating body."

This approach has since been approved by the New Zealand High Court in \textit{Fisher and Paykel},\textsuperscript{176} There is mixed Australian authority regarding the correct approach to "substantial" in the context of the Trade Practices Act. Some courts use "substantial" in the same way as New Zealand courts,\textsuperscript{177} while others prefer to define substantial as "considerable".\textsuperscript{178} After canvassing the relevant Australian judicial commentary, Pengilley concludes that "substantiality is to be evaluated on the basis of the nature of the arrangement itself and its tendency".\textsuperscript{179}

The catch-all provisions apply if an arrangement has the prohibited purpose, or would have or be likely to have the prohibited effect. Even if an arrangement does not have the effect, or is not likely to have the effect, it may be caught if its purpose is to substantially lessen competition. Both in the misuse provisions and the catch-all provisions, the nature of the purpose test has come under close scrutiny. Differences have emerged between Australia and New Zealand as to whether the purpose test is to be subjective or objective.

\textsuperscript{175}\textit{Re Weddel Crown Corp Ltd, supra}, note 19, at 104,212.
\textsuperscript{176}\textit{Fisher and Paykel}, supra, note 174.
\textsuperscript{177}For example: \textit{Tillmans Butcheries Pty Ltd. v The Australasian Meat Industry Employees' Unions & Ors} (1979) \textit{ATPR} ¶40-138. Bowen C.J. equated "substantial" with something that is "more than trivial or minimal".
\textsuperscript{178}\textit{Radio 2UE Sydney Pty. Ltd. v Stereo FM Pty. Ltd. & Anor} (1982) \textit{ATPR} ¶40-318. Lockhart J. held at 43,918 that "substantially" should be used "in the sense of considerably".
\textsuperscript{179}CCH Australia, \textit{supra}, note 41, ¶3-450, p 2,303.
Toohey J., in *Hughes v Western Australian Cricket Association (Inc.) & Ors*, held that it is the subjective purpose which §45(2) is concerned with.\(^{180}\) Although a large proportion of Australian cases use the subjective approach, there are some cases which have preferred the other approach. For instance, Franki J. favoured an objective approach in *TPC v TNT Management*.\(^{181}\)

In comparison, New Zealand courts, when assessing the purpose in a §27 case, have in the past preferred to adopt an objective approach. For instance Barker J. in *Auckland Regional Authority* said that §2(5)(a) "provides for an objective test".\(^{182}\) Nevertheless, the High Court in *Apple Fields* doubted that the objective approach is the correct one.\(^{183}\) After noting the differences in Australian and New Zealand authorities, Holland J. commented:\(^{184}\)

"The use of the words "purpose" and "effect" in the one sentence tends to support the view that "purpose" means what was intended to result whereas "effect" means what is likely to result but it must always be borne in mind that the statute is speaking of the purpose or likely effect of the provision contained in the arrangement rather than the arrangement itself or the parties to the arrangement."

Ultimately, regardless of the approach adopted, the Courts will not be deterred from drawing inferences from conduct and other circumstances, as well as more direct evidence from the parties involved.\(^{185}\) It is not absolutely necessary for plaintiffs to show an anti-competitive purpose. Under the "three limbs" of §27 and §45(2), a court may condemn contracts, understandings and arrangements which have the purpose, effect or likely effect of substantially lessening competition.

\(^{180}\) *Hughes v Western Australian Cricket Association (Inc.) & Ors* (1986) ATPR ¶40-736 at 48,044.


\(^{182}\) *Auckland Regional Authority*, supra, note 131, at 103,055.

\(^{183}\) *Apple Fields Limited v NZ Apple and Pear Marketing Board* (1989) 2 NZBLC 103,564.

\(^{184}\) *Ibid*, at 103,578.

\(^{185}\) Hampton, supra, note 5, p 678.
So how do CRS contracts with anti-competitive provisions, as outlined above, substantially lessen competition and thus fall under either §27 of the Commerce Act or §45(2) of the Trade Practices Act? Recall the discussion in part III on the Aghion Bolton theory of contractual penalties. That discussion illustrated how liquidated damages provisions preclude entry to a market if many customers (that is, travel agents) are tied up with restrictive contracts. A court should have little difficulty in concluding that liquidated damages clauses may have the effect of lessening competition in the market for the provision of CRS services to travel agents.

Yet there remains the problem of establishing the substantiality of the lessening of competition. In the New Zealand case of Fisher and Paykel v Commerce Commission,186 the Court was asked to rule on whether an exclusive dealing contract was in breach of §27. All the parties involved agreed that if the contract raised the costs of Fisher and Paykel's rivals, it could breach §27.187 In the Fisher and Paykel case, the Court was not satisfied that this occurred.188

Conversely, there is little doubt that liquidated damages clauses in CRS contracts, rather than raising the operating costs of rivals, strategically raise the costs of entry for new CRS vendors. This is especially true where liquidated damages amount to contractual penalties (see figure 23). In addition, part III showed the importance of waiting costs to new entrants and how these costs are very significant in the CRS industry. Clauses which unnecessarily extend the life of a contract, such as rollover clauses, fall under this category and may be held to

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186 Fisher and Paykel, supra, note 174.
187 It should be noted that while RRC was raised in Fisher and Paykel, it was not the only issue.
substantially lessen competition if plaintiffs can show that they raise their costs. Likewise, other restrictive contract provisions such as minimum and/or exclusive use provisions can be proved as anti-competitive in this manner.

4. Other Issues

Given a narrow market definition, the misuse provisions may be used to prohibit some of the other potential anti-competitive conduct in the CRS industry. One area is the level of control which vendor-airlines gain over their competitor’s inventory information. Misuse of this power would easily fall within the proscribed purposes of the Acts. For example, all the CRS rules outlined in part IV B and V A contain provisions regarding the loading of information into the CRS databases. If a vendor failed to load information in a fair manner, a claim would be possible under the misuse provisions. The vendor is using its power in the CRS industry to restrict competition on its merits in the airline industry.

However, it must be noted that in some instances a vendor’s dominant position or market power is not at issue. For example, with regards to mandatory participation, there is no chance that a case may be brought against a vendor-airline under the misuse or catch-all provisions for refusing to deal with a new entrant to the CRS industry. Even though this may have the effect of precluding entry, neither the misuse provisions nor the catch-all provisions could be invoked because market power is not being used and there is no contract, arrangement or understanding.\footnote{One commentator incorrectly observes that the refusal of a third party airline to participate in a CRS could be questioned under the misuse provisions. See: Rait, George. (1990). "Legal Implications of Computer Reservation Systems", Presented to the Conference on "Beyond Airline Deregulation: Computer Reservation Systems, Competition and Infrastructure", Sydney, Australia, 24 & 25 September, 1990. p 16.}
The Australian Trade Practices Act may have the capacity to prevent airlines from refusing to deal with vendors wishing to gain entry to the market. Rait claims that under §47(3), vendors may be able to bring an action for an outright refusal to deal.\textsuperscript{190} Section 47 is an exclusive dealing provision under which a supplier's refusal to supply goods or services is deemed to be exclusive dealing if the reason for the refusal falls under one of those reasons outlined. Refusals to deal will fall under the section if the reason for the refusal is that the other party has acquired or has not agreed not to acquire goods and services from another person; or has re-supplied or has not agreed not to re-supply goods and services to another person. Therefore if an airline refused to participate in a CRS, a claim under this section may be possible subject to a competition test. It would be up to the court to decide whether the refusal to deal falls within the reasons proscribed. New Zealand has no equivalent section to §47.

Even though Australasian competition law has the capacity to deal with the major competition issues raised by the development of CRSs in the region, there remains a number of problems which raise more complex regulatory questions. A recurring theme in this thesis is the inter related nature of the three industries involved—the airlines, travel agents, and CRSs. All three of these are dependent on the others to participate, or subscribe or provide CRS services. Refusal to participate in a CRS is likely to have the effect of precluding a rival CRS's entry. Yet even though the airline refusing to participate may have market power, the refusal to deal may be a legitimate competitive decision. Issues such as mandatory participation, agency inducements and override commissions, and the availability of marketing information, may require further remedial regulation.

\textsuperscript{190}Ibid.
For this reason, competition law alone may not be sufficient to provide a "level playing field" in the airline industry. In Australia, the development of a voluntary Code of Conduct has gone a long way towards addressing the complexities of the unusual triangular structure of the CRS, travel agent and airline industries. The more obvious competitive issues such as monopoly leveraging can be dealt with effectively under existing competition law. Other issues such as mandatory participation and availability of marketing information confront courts with competitive problems which they are ill-equipped to handle. Although no problems of these sorts have been raised so far, the potential for abuse is present. The Australian Code of Conduct is a positive step by both the CRS vendors and the regulatory authorities. It is a light-handed and pro-active approach to potential problems.

New Zealand authorities, in deciding to rely on competition law, seem unaware of the potential problems CRSs pose. Although New Zealand is reluctant to adopt industry-specific regulation, the use of a voluntary code of conduct or adherence to the ICAO Code of Conduct (see appendix 6) represents a light-handed approach to regulation. Such an approach would address the complexities of the CRS industry before they cause problems in New Zealand.

However, it must be noted that New Zealand's very small size may have the effect of insulating it from the competitive problems outlined in this thesis. As one Ministry of Transport official stated, New Zealand is likely to ride "on the coat-tails" of Australia with regard to the regulation of CRSs. This indicates that New Zealand does not need to adopt specific regulation because the CRSs operating in the country already adhere to the Australian Code of Conduct. Similarly, Australian vendors are constrained by many regulatory restrictions
which are built into the systems. These restrictions ultimately stem from Europe and the United States.

5. Conclusions

Australasian competition law appears to be flexible enough to prevent much of the anti-competitive conduct which has been prevalent in the CRS industry since airline deregulation. In a number of instances, the more up to date competition law in Australia and New Zealand provides far more efficient solutions than are possible under the Sherman Act or Treaty of Rome. However, a number of the other minor competitive problems posed by CRSs may prove to be difficult to challenge in an Australasian court.

The small size of the Australian and New Zealand markets means that fringe competition provides an important competitive constraint on the major airlines. Combined, the competitive problems with CRSs which can not be touched by competition law may threaten the survival of smaller competitors which provide the fringe competition.\(^{191}\)

Competition law may be relied on to prevent outright anti-competitive behaviour and conditions in the CRS market. However, the more subtle competitive advantages which vendor airlines gain from their ownership of CRSs are more difficult to prevent. The Australian Code of Conduct is an effective light-handed approach to CRS regulation. It does not require an expensive and cumbersome regulatory body such as the United States DOT to administer and is the result of extensive industry consultation. The Code outlines to those involved with CRS activity the limits of conduct which will be tolerated. Importantly, it

recognises the difficulties which have occurred from the inter-dependence of the three industries overseas and tailors the more stringent foreign regulation to suit the Australian context.

It is possible that New Zealand does not require any regulatory intervention in the CRS industry. Any CRS offered in New Zealand will be based on an Australian system which will in turn track back to one of the mega systems. There are suggestions that even in the Australian situation, a Code of Conduct is unnecessary because the Australian CRSs are simply switching networks for the mega systems. Nevertheless, a light-handed Code of Conduct clarifies acceptable conduct to the firms concerned. Although any code in either Australia or New Zealand has little choice but to follow overseas examples, the value of a code depends on its ability to supplement competition law. A voluntary code of conduct should not be viewed as regulatory. Instead, it should be seen as an active threat of more stringent regulation. Within the context of a tight competition law regime, such a regulatory threat is adequate in protecting and promoting competition in the markets which would otherwise be adversely affected by anti-competitive conduct.
Part VI

Conclusions
Conclusions

1. Introduction

Deregulation had a significant impact on the airline industries of North America, Europe and Australasia. Although deregulation of the airline industry did not deliver the level of contestability which was predicted, it caused substantial improvements in efficiency and, by lowering prices, brought air transportation within the reach of many people.

Nevertheless, a number of problem areas continue to seriously distort the competitive process in the airline industry. Many of these areas are a result of the regulatory regimes which existed in some airline markets prior to deregulation. Computer reservation systems are one of these areas. CRS problems are not solely a result of the oligopolistic structure of the CRS industry. Airline-vendors are known to engage in anti-competitive conduct which has accentuated the competitive advantage they already enjoy through their distribution systems.

Proponents of airline industry re-regulation use CRSs as an example of the failure of contestability in the airline industry. However, rather than returning to cumbersome airline industry regulatory regimes, it is more prudent to address those particular areas of competitive concern. Authorities have a number of options by which they could promote workable and effective competition in the CRS industry.

2. Antitrust

The complex relationship between the CRS, airline and travel agent industries illustrates the limits of antitrust. The litigation to date, especially in the United
States, shows that most plaintiffs lack the theoretical basis to satisfy the courts of the anti-competitive nature of CRS vendor conduct. Use of new theories of exclusionary behaviour such as installed base opportunism, raising rivals' costs and the Aghion Bolton Theory of contractual penalties may provide plaintiffs with sufficient backing for a claim under the relevant competition legislation. Nevertheless, in some jurisdictions, problem areas such as mandatory participation and supra-competitive booking fees remain difficult to challenge.

Areas such as these indicate the need for some additional form of regulation to augment the competition law legislation which already exists.

3. **Industry Regulation**

There is a myriad of literature which discusses the benefits and detriments of public and private regulation. In the past, public regulatory regimes have failed because of their expense and their tendency to encourage inefficient allocation of resources. Free market ideology, prevalent since the early 1980s, relies on antitrust law to promote and foster workable competition in markets.

Price regulation in its different forms requires the reinstatement of some form of public regulation. In addition, price regulation deals only with problems relating to price. For these reasons, price regulation is rejected as a feasible option for the CRS industry. Conversely, solutions such as divestiture or state ownership do not address pricing problems and are overly repressive. Common to most forms of direct regulation is their detrimental effect on innovation—a vital component of competition in the CRS industry.

Most of the countries discussed in this thesis recognised the limitations of these forms of regulations and opted for industry-specific codes of conduct. However, many observers are sceptical about whether CRS regulations will ever be effective
in their original purpose—which is to eliminate the competitive advantage in air transportation achieved by CRS vendors.\textsuperscript{1} New Zealand and Australia have the benefit of being able to learn from overseas experience with regard to CRS-specific regulation.

The promotion of competitive markets is better entrusted with competition agencies rather than specialised bodies such as the Department of Transportation in the United States. For example, the ineffectual antitrust enforcement over the United States airline industry is a result of the DOT being responsible for it.\textsuperscript{2} Competition agencies exist to promote competitive market conduct and conditions. Such bodies must actively enforce competition laws utilising theoretical advances in antitrust law and economics. The CRS industry has proved to be unusually resistant to normal regulatory measures. Courts and authorities have struggled to come to terms with the unusual inter-dependence between the airline, travel agents and CRS industries.

4. Conclusion

Antitrust law provides a basis for a light-handed regulatory regime consistent with the principles of economic liberalisation. However, because the CRS industry confronts authorities with specific problems, antitrust law should be complemented with active regulatory threats. These threats should take the form of regular industry studies and voluntary codes of conduct such as the Australian Code.


In Australia and New Zealand, this combination would maintain competition in the airline industry by fostering allocative, productive and innovative efficiencies in the CRS industry. Australia and New Zealand authorities are fortunate that the benefits of the United States and European Codes of Conduct flow through to their countries. Consequently, CRS regulation in Australasia can focus on emphasising the most important aspects of overseas codes.

The best way the United States could promote competitive CRS and airline markets is through vigorous antitrust enforcement based on exclusionary behaviour claims. This would complement its existing CRS rules which act to illustrate the bounds of acceptable conduct.

Since the objectives of European Community competition law differs from that of individual states elsewhere in the world, it is difficult to conclude on a single regulatory solution for the whole of the EC. Moreover, additional CRS regulation appears unnecessary because the European systems are joint industry systems and the EC Code of Conduct is effective.

Ultimately, the use of a consistent world wide code of conduct would be the most effective way to promote a competitive global airline market. Individual countries would then be responsible, through their own antitrust and regulatory regimes, for fostering this competitive spirit in their domestic markets.
Acknowledgments

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I also wish to express my gratitude to the family of the late G. B. Battersby for the financial support I received through the G.B. Battersby Scholarship. Finally, I wish to thank the academic and administrative staff of the Department of Accountancy, University of Canterbury. The resources this department provided for me during my research were exceptional. Moreover, I appreciate the opportunity this department gave me to broaden my degree by accommodating my special research interests. Naturally, all residual errors and/or omissions are the sole responsibility of the author.

Paul J. Anderson

University of Canterbury, 1993
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Appendices
## Appendix 1

**List of New Zealand Economic Liberalisation Measures.**

<table>
<thead>
<tr>
<th>Measure</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Closer Economic Relations with Australia</td>
<td>1983+</td>
</tr>
<tr>
<td>Announcement to deregulate air transport</td>
<td>1983</td>
</tr>
<tr>
<td>Deregulation of land freight transport</td>
<td>1983-85</td>
</tr>
<tr>
<td>Removal of foreign exchange controls</td>
<td>1984</td>
</tr>
<tr>
<td>Deregulation of entry licensing in industry</td>
<td>1984+</td>
</tr>
<tr>
<td>Removal of other operating barriers in industry</td>
<td>1984+</td>
</tr>
<tr>
<td>Removal of concessions for favoured investment (eg. R &amp; D)</td>
<td>1984+</td>
</tr>
<tr>
<td>Removal of Subsidised Agricultural Prices</td>
<td>1984</td>
</tr>
<tr>
<td>Removal of financial controls (interest rate ceiling, reserve ratio</td>
<td>1984-86</td>
</tr>
<tr>
<td>requirements, priorities for various sectors)</td>
<td></td>
</tr>
<tr>
<td>Announcements of major taxation and benefit reforms</td>
<td>1985+</td>
</tr>
<tr>
<td>Liberalisation of foreign direct investment</td>
<td>1985</td>
</tr>
<tr>
<td>Floating of the exchange rate</td>
<td>1985</td>
</tr>
<tr>
<td>Partial deregulation of occupational licensing</td>
<td>1985-89</td>
</tr>
<tr>
<td>Significant increase in import tariffs</td>
<td>1985-92</td>
</tr>
<tr>
<td>Introduction of Goods and Services Tax</td>
<td>1986</td>
</tr>
<tr>
<td>Deregulation of the milk industry</td>
<td>1986</td>
</tr>
<tr>
<td>Deregulation of financial services sector</td>
<td>1986</td>
</tr>
<tr>
<td>Government expenditure reform announced</td>
<td>1986+</td>
</tr>
<tr>
<td>Removal of concessional funding for agricultural exports</td>
<td>1986-88</td>
</tr>
<tr>
<td>Partial deregulation of the energy sector</td>
<td>1986-91</td>
</tr>
<tr>
<td>Removal of monopoly rights on state trading</td>
<td>1986-88</td>
</tr>
<tr>
<td>Revision of corporate, personal and direct taxation</td>
<td>1986-88</td>
</tr>
<tr>
<td>Corporatisation of state trading activities</td>
<td>1986-90</td>
</tr>
<tr>
<td>Review of competition regulation Commerce Act</td>
<td>1986-91</td>
</tr>
<tr>
<td>Abolition of many quangos and quasi-government organisations</td>
<td>1987</td>
</tr>
<tr>
<td>Review of the role of producer marketing boards</td>
<td>1987+</td>
</tr>
<tr>
<td>Reorganisation of core government departments</td>
<td>1987+</td>
</tr>
</tbody>
</table>

**New entry to air transport** **1987-90**

<table>
<thead>
<tr>
<th>Measure</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revision of town and country planning</td>
<td>1987-90</td>
</tr>
<tr>
<td>Programme of sale of state assets</td>
<td>1987-90</td>
</tr>
<tr>
<td>Business law reform (Companies Act, Securities Legislation)</td>
<td>1988+</td>
</tr>
<tr>
<td>Review of education and health provision</td>
<td>1988-90</td>
</tr>
<tr>
<td>Deregulation of harbours and wharves</td>
<td>1989</td>
</tr>
<tr>
<td>Removal of shop trading hours restrictions</td>
<td>1989</td>
</tr>
<tr>
<td>Corporatisation of some local authority trading activities</td>
<td>1989</td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>Reform of local government</th>
<th>1989+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deregulation of land passenger transport</td>
<td>1989-90</td>
</tr>
<tr>
<td>Restructuring of science funding</td>
<td>1989-92</td>
</tr>
<tr>
<td>Partial deregulation of shipping</td>
<td>1990</td>
</tr>
<tr>
<td>Resource management law reform</td>
<td>1990+</td>
</tr>
<tr>
<td>Deregulation of the Labour Market</td>
<td>1991-92</td>
</tr>
</tbody>
</table>
## Appendix 2

**Host Advantages With CRSs**

This chart describes the differences in host/nonhost functionality for both **PARS** and *Sabre*. Comparisons which do not apply to *Sabre* are marked "●", and those items which the author was unable to confirm for *Sabre* are marked "■".

<table>
<thead>
<tr>
<th>Host carriers</th>
<th>Nonhost carriers</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Availability displays</strong>:</td>
<td></td>
</tr>
<tr>
<td>The primary display shows any number of seats, from 0 to 9 (0 to 7 on <em>Sabre</em>), as available for a host carrier flight.</td>
<td>For nonhost carriers, the seat availability is shown as either &quot;0&quot; or one other number (typically &quot;4&quot;).</td>
</tr>
<tr>
<td>The primary display shows a maximum of 8 classes of service. A secondary entry may display additional classes for host carriers.</td>
<td>No additional classes of service are shown for nonhost carriers.</td>
</tr>
<tr>
<td>The display may indicate that flight information (FLIFO) exists for a host carrier flight. The agent can display this information by making another entry ●.</td>
<td>Nonhost flights display no indication of FLIFO.</td>
</tr>
<tr>
<td>An agent may be able to display amenities on host flights ●.</td>
<td>Nonhost flights do not display information on amenities.</td>
</tr>
<tr>
<td><strong>Other flight information</strong>:</td>
<td></td>
</tr>
<tr>
<td>Flight service information for host flights includes mileage ■.</td>
<td>Nonhost flights do not show mileage.</td>
</tr>
<tr>
<td>FLIFO is provided for host flights. It details scheduled times and nonroutine operations.</td>
<td>FLIFO for nonhost flights is provided only with a Direct Access function.</td>
</tr>
</tbody>
</table>

*Continued over...*

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2 **PARS** is now incorporated into the *Worldspan CRS* owned by Northwest, Delta and TWA.
<table>
<thead>
<tr>
<th><strong>Host carriers</strong></th>
<th><strong>Nonhost carriers</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Reservation of space:</strong></td>
<td>When an agent requests a number of seats on a nonhost flight equal to or less than the number shown as available (typically 4), the response will include the status code &quot;SS&quot; and immediate redisplay of the PNR will show an &quot;HK&quot; status code. However, it is possible that when the nonhost airline receives the request (typically seconds after the agent files the PNR), it may reject the request because its inventory shows the flight as full. In this case it will send a message to the CRS which will cause the status code to be changed to &quot;UC&quot; or &quot;US&quot;, indicating that space is not reserved.</td>
</tr>
<tr>
<td>When an agent requests a reservation on a host flight, the CRS will respond either with a rejection, because the space is not available, or with an acceptance. If the request was accepted, the response will include the status code &quot;SS&quot; indicating that space was sold after availability was checked. Because the host inventory was checked and decremented at the time of the original sale, the reservation will not be rejected when the agent subsequently files the passenger name record (&quot;PNR&quot;). When the agent redisplay the PNR, the status code &quot;HK&quot; will appear, indicating that the space is confirmed.</td>
<td>When an agent requests more seats on a nonhost flight than are shown as available, the response will include the status code &quot;NN&quot;, indicating that the space will be requested. When the nonhost airline receives the request, it replies with a message indicating whether or not the request was accepted and changing the status code accordingly. When the agent redisplay the PNR, the &quot;HK&quot; status code will not appear; rather the status code will indicate either that the CRS is awaiting a reply from the airline or that the booking request was accepted or rejected by the airline.</td>
</tr>
<tr>
<td><strong>Updates to host carrier PNRs rarely are rejected . . .</strong></td>
<td>When an agent updates or files a PNR containing nonhost bookings and quickly begins to make another update to the same PNR, the second update may be rejected if the CRS itself is updating the PNR in response to booking information sent by the nonhost airline.</td>
</tr>
<tr>
<td>An agent may be allowed to use nonstandard status codes for host flights to request special services (e.g., priority in waitlisting).</td>
<td>Agents generally may not use special status codes for nonhost flights.</td>
</tr>
<tr>
<td>A response to a request to book a host flight may have additional flight information appended.</td>
<td>Responses to nonhost booking requests do not contain additional flight information.</td>
</tr>
<tr>
<td><strong>Seat assignment and boarding pass printing:</strong></td>
<td>Only nonhost airlines with Direct Access will have seat maps available.</td>
</tr>
<tr>
<td>Seat map displays for host flights are available . . .</td>
<td></td>
</tr>
<tr>
<td><strong>Host carriers</strong></td>
<td><strong>Nonhost carriers</strong></td>
</tr>
<tr>
<td>-------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>When a seat assignment is requested on a host flight, the request is immediately confirmed if the seat is available; otherwise, a seat map is displayed. With the same entry, the agent also may request that a boarding pass be printed.</td>
<td>Seat assignment requests for nonhost flights require the agent to wait for a response to a PNR (this may take seconds or much longer). The agent then must retrieve the PNR to determine whether the request was accepted. Thereafter, the agent must then request that the boarding pass be printed.</td>
</tr>
<tr>
<td>An agent can request a host seat assignment for any number of passengers in a given PNR.</td>
<td>An agent reserving nonhost seats must request a seat assignment for all passengers listed in the PNR at once.</td>
</tr>
<tr>
<td>A passenger on a host flight who requests that frequent flyer mileage be credited to an account with another airline (pursuant to an interline agreement) will receive a boarding pass showing the frequent flyer number of the other airline.</td>
<td>Boarding passes for nonhost carriers will not show the frequent flyer number of the second, non-host airline.</td>
</tr>
<tr>
<td>A travel agent can review changes (such as seat assignments or boarding passes printed) made to a PNR by the hosts' airport agents.</td>
<td>PNR changes made by nonhost airport agents cannot be reviewed by the travel agent.</td>
</tr>
<tr>
<td>If an agent rebooks a passenger in another class within the same cabin on a host flight (e.g., to obtain a cheaper fare), the existing seat assignment will be retained.</td>
<td>Agents rebooking in another class on nonhost flights will lose their existing seat assignment. Automatic rebooking provided for host flights may be restricted if PNRs contain nonhost seat assignments.</td>
</tr>
<tr>
<td><strong>Passenger name record (PNR) display:</strong> FLIFO text for host flights appears under the flight item in the PNR display.</td>
<td>FLIFO for nonhost flights will not appear at a convenient place in the PNR display.</td>
</tr>
<tr>
<td>PNR changes made by host airlines will always appear.</td>
<td>PNR changes made by nonhost airlines appear only in certain standard circumstances.</td>
</tr>
<tr>
<td>PNRs can always be retrieved by specifying a host flight in the PNR and the passenger's name.</td>
<td>PNRs containing nonhost flights may not be well-indexed.</td>
</tr>
<tr>
<td>PNRs containing host flights will show certain status codes for reservations affected by schedule changes.</td>
<td>Nonhost flights displayed in PNRs will show different status codes to reflect schedule changes.</td>
</tr>
<tr>
<td>The PNRs maintained by host airlines and subscribers are almost always compatible.</td>
<td>Separate PNRs maintained by the CRS and the nonhost airline may be incompatible, requiring agents to repair the damage before making or altering bookings.</td>
</tr>
<tr>
<td><strong>Other differences:</strong> Agents may save keystrokes by indicating that a host airline code is to be used.</td>
<td>Nonhost bookings may require more keystrokes.</td>
</tr>
<tr>
<td>When ticketing on a host airline, agents are notified whether the host accepts a particular credit card.</td>
<td>If the host does not appear in the PNR of a multi-airline itinerary, the CRS will not confirm the existence of interline agreements.</td>
</tr>
</tbody>
</table>
Appendix 3

Examples of Actual and Potential Problems Arising From the Development of Computer Reservation Systems

This appendix presents examples of problems which have been raised in connection with the development of CRSs, under three headings:

a) display bias by CRS vendors and/or by travel agents;

b) market manipulation by CRS vendors other than through display bias; and

c) other problem areas.

A. Display Bias by CRS vendors and/or by travel agents

<table>
<thead>
<tr>
<th>Bias factor</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carrier identity</td>
<td>Displaying flights or fares of a specific carrier ahead of those of other carriers by overriding other display priority parameters.</td>
</tr>
<tr>
<td>Carrier's status of participation in CRS</td>
<td>Excluding a carrier's flights or fares from the display because that carrier is not a participating carrier in the CRS (the printed multicareer schedule guides, which CRSs are tending to replace or supplement, attempt to include all flights.</td>
</tr>
<tr>
<td></td>
<td>Giving flights or fares of participating carriers display priority over those of non-participating carriers.</td>
</tr>
<tr>
<td></td>
<td>Giving flights or fares of certain participating carriers display priority over those of other participating carriers.</td>
</tr>
<tr>
<td>Use of default departure times</td>
<td>Assuming a certain departure time if passenger does not indicate a desired departure time, with the (intentional or unintentional) result that the display of flights favours certain carriers.</td>
</tr>
<tr>
<td>Commonality of screen priority parameters</td>
<td>Applying the same display parameters to domestic, domestic/international and purely international services, despite the distinctive characteristics of these services.</td>
</tr>
<tr>
<td>Means of constructing connecting flights</td>
<td>Limiting the number of alternative connections which may be listed, or excluding from the display some or all connecting flights through a particular city.</td>
</tr>
</tbody>
</table>

Airport identity: Displaying flights or fares from or via a certain airport ahead of those from or via another airport by overriding other display priority parameter.

Display priority given to on-line transfers: Giving flights for an on-line connection display priority over flights for an interline connection, despite other inferior connection parameters for the former. (Where the connection is domestic/international, a wholly domestic carrier or a foreign international carrier thereby loses display priority.)

Code-sharing: Carrier "A" and carrier "B" making an arrangement to designate a connection between their flights as carrier "A" to carrier "A" and such a connection being considered by some CRSs as on-line, thus gaining display priority.

Dual-listing or "screen padding": In previous example, the same carriers "A" and "B" having their connection listed twice, firstly as "A" to "A" and secondly as "A" to "B".

Change of gauge without change of flight number: A carrier using a single flight number where a change of aircraft is required en route and such a service being considered by some CRSs as a direct flight, thus gaining display priority.

Falsification of flight schedules: A carrier providing inaccurate departure, arrival or elapsed journey times to the CRS vendor, in order to achieve display priority.

Restrictions on display of fares: Limiting the number of classes of service or types of fare which may be listed for a specific carrier.

B. Market manipulation by CRS vendors other than through display bias

<table>
<thead>
<tr>
<th>Form of manipulation</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control of participation</td>
<td>Refusing outright to accept a (foreign) carrier as a participant, or accepting only under unduly burdensome or discriminatory conditions, or conditions that are unrelated to participation in a CRS.</td>
</tr>
<tr>
<td>Control of sales information</td>
<td>Manipulating a participating carrier's flight and fare information to that carrier's disadvantage. Evaluating and responding to a competing carrier's revised schedules and fares before they are officially announced.</td>
</tr>
</tbody>
</table>
Control of marketing information

Information generated through a CRS being exclusively available to the vendor or sold by the vendor at excessive fees (such information could include, for example, data to identify travel agents who might be induced to direct their business away from competing carriers, or analyses of reservation patterns with a view to amending tariffs).

Control of reservations policy

Conditioning reservations for flights on routes where the vendor is a dominant or monopoly carrier upon the use of the same carrier wherever available for any other segments of the journey.

Control of ticket issuance

Designating the vendor as the issuing carrier on all tickets or an any ticket containing a coupon for that carrier (whether first coupon or not) in order to achieve improved cash flow.

Control of system enhancements

Offering "last seat" availability (information on and reservation of seats which are still available shortly before departure) or advance issue of boarding passes only for certain participating carriers.

Inequitable access fees

Allocation costs inequitably amongst the vendor, participating carriers and travel agents.

Charging excessive fees for the services provided.

Using fee structures that vary amongst participating carriers.

Using fee structures with, for example, high initial costs which smaller carriers cannot afford (unlike CRSs the printed multicarrier guides are financed primarily by subscriptions rather than by carriers.)

Discrimination amongst travel agents

Offering certain services or enhancements to some agents but not to others.

Tying of agents to a vendor's system or equipment

Prohibiting an agent's use of other systems.

Limiting the number of reservation terminals for other CRSs permitted on an agent's premises.

Refusing to allow agents to use terminal equipment that is not provided by the vendor.

Tying the provision of CRS services to use of the vendor's ticket printer (or imposing excessive charges for connection or testing of other ticket printers).
Tying of CRS service to other commercial arrangements

Requiring an agent to use a vendor carrier's CRS for all reservations that contain a flight segment for that carrier (whether first segment or not).

Tying the prices charged to an agent to the identity of carriers whose services are sold by the agent.

Tying the levels of commission paid to an agent on the sale of a vendor carrier's air transport services to the use of the vendor's CRS.

Unreasonable termination clauses in contracts with travel agents

Requiring contracts to have excessively long duration.

Requiring excessive "liquidated damages" for withdrawal and/or change to another CRS by agents.

C. Other problem areas

<table>
<thead>
<tr>
<th>Problem area</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monopoly characteristics of CRS market</td>
<td>In many countries, one CRS (usually owned by the national carrier) dominates the market.</td>
</tr>
<tr>
<td>Collusion amongst CRS vendors</td>
<td>Agreements amongst CRS vendors not to compete with each other in certain markets.</td>
</tr>
<tr>
<td>Impact of CRS ownership on airline performance</td>
<td>Even without display bias or market manipulation, ownership of a dominant CRS could give a carrier increased exposure in a market and hence an advantage over its competitors (the halo effect).</td>
</tr>
<tr>
<td>Problems specific to multi-access systems</td>
<td>Although a multi-access system enables a travel agent to have access to the CRSs of a number of individual carriers, each of these CRSs usually displays information regarding the flights and fares only of certain carriers. As travel agency staff become familiar with the procedures involved in using certain of the individual carrier CRSs in the multi-access system (for example that of the dominant carrier in the country concerned), they may find it convenient to use those CRSs for most of their reservations activities (&quot;camping&quot;).</td>
</tr>
<tr>
<td>Impact of CRSs on the role of the travel agent</td>
<td>Increasing use of CRSs may exacerbate the adverse effect of the neutrality of travel agents arising from the different commission levels and other incentives offered by carriers, and might also be biased.</td>
</tr>
<tr>
<td>Lack of awareness concerning the weaknesses of CRSs</td>
<td>Travel agents and customers may frequently not be aware that information provided by a CRS might be incomplete in its coverage of the carriers operating on a route or routes, and might also be biased.</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Technical and commercial obstacles faced by CRS vendors entering foreign markets, despite observing laws/regulations of the countries concerned</td>
<td>Difficulties in obtaining access to communication facilities. Hardware and software specifications which may favour the national carrier's CRS over foreign CRSs. The need to have the national carrier's approval in some countries before making a CRS available to travel agents. Refusal by a national carrier to provide information on schedules, fares or &quot;last seat&quot; availability, to a foreign CRS. Refusal by a national carrier to allow its tickets to be issued by travel agents using a foreign CRS, even when the CRS meets all the relevant industry standards.</td>
</tr>
<tr>
<td>Privacy of personal data</td>
<td>Information of a personal nature regarding a passenger which is entered into a CRS may fall into the hands of individuals or entities which could use it to the disadvantage of the passenger.</td>
</tr>
<tr>
<td>Restrictions on transborder data flows</td>
<td>Certain restrictions adopted on a general basis which, when applied to the specific case of CRSs, can hinder their development.</td>
</tr>
</tbody>
</table>
Appendix 4

Examples of Liquidated Damages Clauses

This appendix contains two examples of liquidated damages clauses from CRS subscriber contracts.

The first example is from a contract between Southern Cross Distribution Systems (NZ) Limited and a New Zealand Travel Agent. It contains the following provision:

"...

SUBSCRIBER'S DEFAULT

(a) If Southern Cross is prevented or delayed from performing its obligations under this agreement because of any act or omission of the Subscriber then the Subscriber will be in breach of this agreement.

(b) The Subscriber must indemnify Southern Cross against all losses, damages, claims, expenses and costs incurred or suffered by Southern Cross because of any breach or repudiation of this agreement by the Subscriber.

""

A more overt example of a liquidated damages clause is contained in *United Airlines v Austin Travel Corp.* United's contract at the time contained the following provisions:

"...

Subscriber will pay to United liquidated damages in an amount calculated as follows:

A. The amount of the monthly fixed charge . . . will be multiplied by the number of months, including any portion thereof, remaining under the term of this Agreement and the product thereof multiplied by .80;

B. The amount of the variable charges . . . paid by Subscriber for the calender month immediately preceding the date of termination will be multiplied by the number of months, including any portion thereof, remaining under the term of this Agreement and the product thereof multiplied by .80;

---

C. The Monthly Minimum Guarantee will be multiplied by the amount of the airline booking fee in effect on the date of termination and the product thereof will be multiplied by the product of the number of months, including any portion thereof, remaining under the term of this Agreement multiplied by the number of Apollo CRTs . . . ; and

D. The amount of liquidated damages will equal the sum of the amounts derived under [A., B., and C.].

..."
Appendix 5

ICAO CRS Regulation Guidance Material

GUIDANCE MATERIAL ON THE REGULATION OF
COMPUTER RESERVATION SYSTEMS

Introduction and Objectives

In recent years, the use of computer reservation systems has increased markedly, with substantial benefits for air carriers, travel agents and passengers. These systems enable information to be distributed and reservations to be processed in a much more efficient manner than is possible with the traditional procedures involving printed schedules and tariff guides. As a result, in many markets, particularly those where there are frequent changes in schedules and fares, they have become an essential business tool.

There has also been some abuse of these systems, however which has had a detrimental effect on the fair and equal opportunity of carriers to compete and has led to misrepresentation of information to passengers on air transport services.

This guidance material is designed to assist States in developing policy and regulations to curb abusive use of computer reservation systems at the international level, in order to enhance fair competition between airlines and to protect the travelling public, while furthering the development and application of the systems. It also serves as a reference source for national or international agencies which are responsible for questions of trade, competition or contractual law and to which certain complaints regarding computer reservation systems could have been submitted.

Definitions

Computer reservation system (CRS). A computerized system that contains information about air carrier schedules, seat availability, fares and fare rules, and through which reservations can be made and tickets can usually be issued.

CRS vendor. Any entity or its affiliates (whether air carriers or independent commercial enterprises) which in whole or part control a CRS (through ownership, lease, or similar financial affiliation) and which make the system available on a commercial basis to third parties such as travel agents who provide information to the general public.

Participating carrier. Any air carrier which is a vendor of the CRS concerned or any other air carrier which pay the requisite fees for the services offered by the CRS vendor.

Non-participating carrier. Any air carrier which is not a participating carrier. Although a non-participating carrier does not pay participation fees to the CRS vendor it may nevertheless have its published schedules, fares and fare rules stored and displayed on the CRS at the vendor's discretion.

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Service enhancement. Any improved or additional service option offered in conjunction with participation in a CRS.

Travel agent. Any entity which is authorized, *inter alia*, to sell air transport services on behalf of a carrier (except when acting as a carrier's general sales agent).

Scope of Application

The suggested regulatory principles in paragraphs 1 through 27 below apply to any CRS which displays information about itineraries including one or more international sectors and which can be accessed directly in travel agent locations, or to any other CRS which serves as a general replacement for printed multi-carrier timetable and tariff guides and therefore bears a public interest obligation. Conversely, the guidance is not intended to apply to a CRS used by an air carrier solely in house or in its own sales offices, on the grounds that a passenger contacting a particular carrier would expect to be offered a product preferred by that carrier.

These principles are intended to apply to all CRSs no matter how they are technically configured, including multi-access systems where the user has direct access to the CRSs of a number of individual carriers through a common switching centre and/or interface. In the case of multi-access systems, however, it is recognized that full conformity with the paragraphs regarding inventory and display (9 through 12) and regarding data integrity (13 through 17) may present technical difficulties in the short term and that these may for the present require special interpretation to ensure that the principles concerned are followed.

These principles are designed to apply to the scheduled passenger services of air carriers. If, however, a CRS vendor decides also to include non-scheduled passenger operations in its system the vendor should offer this facility on equal terms to all carriers or travel organizers carrying out such operations for each city-pair concerned. The information provided on non-scheduled operations should be stored and displayed in a manner which does not discriminate amongst the carriers or travel organizers concerned and treated in accordance with the paragraphs below regarding data integrity and sensitivity (13 through 21); in the particular case of operations on a seat-only basis (such as advance booking charter, travel group charter), the paragraphs regarding inventory and display (9 through 12) would also be applicable, although a CRS vendor should not be obliged to present non-scheduled operations on the same display as the scheduled services for the city-pair concerned.

Carrier Participation in CRSs

1. A CRS vendor should not deny participation in that CRS to any carrier which is prepared to pay the requisite fees for the services concerned.
2. A CRS vendor should not discriminate amongst participating carriers in the fees it charges for any of the services or service enhancements it provides.
3. A CRS vendor should not structure the fees it charges for any services it provides it such a way that they result in inequitable conditions which may preclude participation by smaller carriers.
4. A CRS vendor should not impose any conditions on participation in that CRS which have no connexion with participation, such as the purchase or sale of any other goods or services.
5. A CRS vendor should not attach anti-competitive conditions as to duration of contracts or penalties for withdrawal from contracts, to any contract with a participating carrier.
6. If a CRS vendor makes any service enhancements available to participating carriers, it should make them available on a non-discriminatory basis to all such carriers.
7. On written request by any interested carrier, a CRS vendor should make available, in written form and in a timely manner, current information on the services and enhancements it offers to participating carriers and the fees it charges for these services and enhancements.

Travel Agents' Relationships with CRS Vendors

8. A travel agent should have the opportunity of unrestricted access to as many different CRSs as it wishes. Consequently, a CRS vendor should not, in particular:
   a) discriminate amongst agents in offering CRS services of enhancements;
   b) charge prices to agents conditional in whole or in part on the identity or carriers whose services are sold by the agent;
   c) require agents to use the vendor's CRS exclusively or for a certain proportion of their sales activity;
   d) require agents to use the vendor's CRS for sales of air transport services provided by the vendor;
   e) tie any other aspect of the commercial arrangements between carriers and agents regarding the sale of air transport services provided by the vendor (for example levels of commission or other payments) to use of the vendor's CRS;
   f) require agents to use the vendor's terminal equipment, although a vendor may require that the equipment used by agent be technically compatible with the vendor's system; or
   g) require agents to enter into contracts of more than X years [the "X" probably in the order of 2 to 5, to be determined in individual countries], use "rollover" provisions to undermine contract termination provisions (such as recommencing the contract period when an additional item of hardware or software is provided), or attach anti-competitive conditions for withdrawal by agents from the contracts.

CRS Inventory and Display

9. When furnishing information regarding schedules, seat availability, fares and fare rules, a CRS vendor should provide at least one principal display, that is a display which would conform with the following requirements while being as fully functional and easy to use as any other display maintained by the vendor (any editing or updating of information for such a principal display should also be consistent with these requirements):
   a) more favourable treatment should not be given to some participating carriers than to other participating carriers;
   b) different treatment may be given to non-participating carriers than to participating carriers, but any information on non-participating carriers that a CRS vendor chooses to display should not be presented in a misleading fashion;
   c) any methodology used by a CRS vendor for ordering flights in displays of schedule information (including that used for the selection and construction of connecting flights) should meet the following criteria:
      i) it should be based on objective service criteria that meet consumer needs (such as fares, routing, number of stops, number of connexion, departure/arrival times, and total elapsed time between flight departures at origin and flight arrival at destination, etc.);
      ii) it should not be influenced by carrier identity or by airport identity
      iii) it should be applied consistently and on a non-discriminatory basis to all participating carriers and to all city-pairs displayed;
d) in applying any methodology for ordering flights, the services concerned should not be misrepresented and, in particular:

i) any flights which are routinely expected to include a change of aircraft en route (whether or not they use a single flight number) should not be treated as if they were direct flights;

ii) any combination of flights which involves one air carrier using the designator code of another air carrier should not be treated as if it were an on-line combination;

iii) each combination of flights should not be presented more than once (such as different flight numbers or air carrier codes);

e) in presenting information, CRS displays should be accurate and not misleading. For example, displays of schedule information should clearly identify (and participating carriers should provide vendors with means of identifying):

i) any flights which are routinely expected to include a change of aircraft en route;

ii) any flights which involve one carrier using the airline designator code of another carrier;

iii) any combination of flights which require a change of airport by surface transport; and

iv) the number of stops en route for each flight.

10. A CRS vendor or a travel agent may also provide displays which differ from the principal display(s) referred to in paragraph 9 above. Such alternative displays should, however, be presented only in order to meet preferences expressed by a passenger, and in the absence of such expression of preference the CRS should default to presentation of a principal display. Moreover, alternative displays should, to the extent applicable and feasible, reflect those principles contained in paragraph 9 that are not overridden by passenger preference and, in particular, should always reflect the disclosure principles contained in 9 e).

11. A CRS vendor should provide in its contracts with travel agents that the travel agent should use the principal display available for each transaction, except where the use of alternative displays is permitted under paragraph 10 above, and that the travel agent should not manipulate information supplied by the CRS in a manner that would result in inaccurate, misleading or discriminatory information being given to passengers.

12. On written request by any interested party, a CRS vendor should make available, in written form and in a timely manner, a description of the methodologies it applies for entering, storing, displaying, editing or updating information. A CRS vendor should not, however, be obliged to make available proprietary information such as software programs.

**Data Integrity**

13. A participating carrier should be primarily responsible for the accuracy of the information that it provides to a CRS vendor directly or via a publisher of schedules or tariffs.

14. A CRS vendor should take measures to ensure that the information provided by participating carriers is accurate. If a CRS vendor believes such information to be inaccurate, it should contact the participating carrier to resolve the problem as soon as possible.

15. A CRS vendor and/or the publisher concerned should be responsible for the accuracy of any information contained in that CRS regarding non-participating carriers or any other information that the vendor and/or publisher provide themselves (such as fare construction rules).

16. A CRS vendor should load in its CRS information from any participating carrier, whether received directly or via an intermediary, with consistent standards of care and timeliness, subject to any constraints imposed by the participating carrier's loading method.
17. If a CRS vendor provides special data loading capability to any other carrier, it should offer the same services to all participating carriers in an non-discriminatory fashion.

Commercially Sensitive CRS Information

18. A CRS vendor should make the information generated by that CRS concerning single booking available on an equal basis to the carrier (or carriers) on whose services the booking was made. Without the written consent of the carriers, the vendor should not make such information available to any other party.

19. A CRS vendor should not provide any information generated by that CRS in aggregated or anonymous form to any carrier without making it available on a non-discriminatory basis to all participating carriers.

Privacy of Personal Data and Free Flow of Information

20. A CRS vendor, participating carriers and travel agents should ensure that they safeguard the privacy of personal data.

21. Subject to paragraph 20, a CRS vendor, participating carriers and travel agents should be permitted free flow of the information needed to meet passengers’ reservation, ticketing and related requirements.

CRS Operations in Foreign Markets

22. A CRS vendor must respect the national sovereignty of any state in which operations are planned or already current, and all operations must be in observance of the national laws and regulations of the State(s) concerned and in accordance with any relevant agreement between the State(s) where it is operated. Consistent with or subject to any relevant provisions of such national or bilateral laws, regulations or agreements, a CRS vendor should be granted access to a foreign market if the following conditions are met:

   a) effective reciprocity for any CRS vendor from the State concerned is available;
   b) any carrier from the State concerned is permitted to participate in the CRS; and
   c) the CRS is operated in accordance with the other principles contained in this guidance material.

23. Any national requirements imposed on CRS vendors regarding access to and use of communications facilities, selection and use of technical hardware and software, or installation of hardware, should not have the effect of favouring one CRS vendor over another.

24. Any national requirements imposed on CRS vendors in connexion with any aspect of CRS operations or sales shall apply equally to all CRS vendors.

25. A CRS vendor should not enter into any arrangement with other vendors, regarding any aspect of CRS services or enhancements, the objective or the effect of which would be to partition markets

26. Any designated international carrier which provides information on schedules, fares and fare rules to a CRS should not refuse to provide this information, directly or indirectly, to any other CRS available in the same country.

Reciprocity

27. A CRS vendor should not be bound by all the paragraphs of this guidance material in its treatment of a carrier which is a vendor of a CRS which does not conform to the principles contained therein; however, if the CRS vendor avails itself of this provision and does not follow one or more of the principles, it should not act in a disproportionate manner.
Appendix 6

ICAO CRS Code of Conduct of Member States

INTERNATIONAL CIVIL AVIATION ORGANIZATION (ICAO)

RESOLUTION ON A CODE OF CONDUCT FOR THE REGULATION
AND OPERATION OF COMPUTER RESERVATION SYSTEMS,
ADOPTED BY THE COUNCIL OF ICAO ON 17 DECEMBER 1991

Whereas Resolving Clause 2a) of Assembly Resolution A27-16 requests the Council to carry out studies on a code of conduct regarding computer reservation systems (CRSs) which can be applied world-wide and which might lead to a multilateral agreement; and

Whereas in the light of the studies which have subsequently been carried out the attached code of conduct and complementary notes have been prepared;

THE COUNCIL

1. Adopts the attached ICAO Code of Conduct for the Regulation and Operation of Computer Reservation Systems and urges all Contracting States to follow it;

2. Requests each Contracting State that decides to follow the Code of Conduct to inform the Secretary General of its decision; and

3. Undertakes to review the Code of Conduct within a period of 3 years in the light or experience with its application by Contracting States and with a view to determining the feasibility of developing the Code of Conduct into a multilateral agreement governing CRS activities.

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INTERNATIONAL CIVIL AVIATION ORGANIZATION

CODE OF CONDUCT FOR THE REGULATION AND OPERATION OF COMPUTER RESERVATION SYSTEMS

Introduction

The Council of ICAO recognizes that computer reservation systems (CRSs) provide substantial benefits both to the air transport industry and to air transport users. However, there has also been some abuse of these systems.

The Council therefore considers that there should be an ICAO code of conduct which can be applied world-wide and which can promote desirable practices and avoid harmful ones in the distribution of air carrier products through CRSs.

The Council wishes to enhance fair competition among airlines and among vendors of CRSs.

The Council believes that air transport users should have access to the widest possible choice of options which meet their needs.

The Council is conscious of the national development requirements of developing countries and encourages the increasing participation of developing countries and their air carriers in CRS activities.

With these principles in mind, on 17 December 1991 the Council adopted this Code of Conduct as the recommended basis for Contracting States to regulate the operations of CRSs in their territories.

The Code necessitates no formal process of national adherence or ratification, but each Contracting State that decides to follow it is expected to make its decision transparent and to pursue the Code in its totality. At the same time, the Code does not supplant or obviate individual or collective State regulation of CRS operations, nor does it imply that any particular means of regulation must be employed. A State may choose to employ the Code itself as a regulatory instrument; develop national CRS regulations based upon the Code; modify existing national regulations if necessary for consistency with the Code; employ the provisions of existing trade or competition legislation where relevant; require or encourage self-policing arrangements by CRS vendors, air carriers and subscribers; or use any combination of these and similar means. Moreover, a State which chooses to follow the Code is not precluded from expanding the scope of CRS regulation beyond the provisions of the Code, provided that such expansion is not inconsistent with the Code.

Article 1 of the Code establishes a relevant terminology, while Article 2 defines the Code's scope of application. These are followed by articles defining certain obligations of States (Article 3), of CRS vendors (Articles 4 through 7), of air carriers (Article 8), and of
subscribers to CRS services (Article 9). Finally, Article 10 defines certain safeguards for developing countries, which take the form of exceptions to certain articles. The text of the Code is followed by complementary notes on the application of each article. These notes explain why certain provisions have been included in the Code and identify relevant factors that may need to be taken into account when applying the Code.

The Code covers a rapidly changing field, since CRS activities are driven by fast-moving technological and commercial developments. When adopting the Code, the Council undertook to review it within a period of 3 years, in the light of experience with its application by ICAO Contracting States and with a view to determining the feasibility of developing the Code into a multilateral agreement governing CRS activities.

**Article 1**

**Terminology**

In this code:

a) "Computer reservation system (CRS)" means a computer system that provides information on air carrier schedules, space availability and tariffs, and through which reservations on air transport services can be made;

b) "System vendor" means an entity that operates or markets a CRS;

c) "Participating carrier" means an air carrier that elects to have its air transport services distributed through a CRS, either as the system vendor or as a result of an agreement with the system vendor; and

d) "Subscriber" means an entity such as a travel agent that uses a CRS under contract with a system vendor for the sale of air transport services to the general public.

**Article 2**

**Scope of Application**

This Code shall apply:

a) to the distribution of scheduled international passenger air service products through CRSs to subscribers; and

b) at the declared option of any State that decides to follow this Code and as may be limited by that State, to:

i) the distribution of non-scheduled international passenger air service products through CRSs to subscribers; and/or

ii) the provision of information on international passenger air service products to subscribers by computer systems that do not come within the CRS definition in Article 1 because reservations cannot be made through them.
Article 3

Obligations of States

A State that decides to follow this Code shall:

a) make such decision fully transparent nationally and to other States;

b) ensure compliance with this Code by system vendors (Articles 4 to 7), air carriers (Article 8) and, where practicable, subscribers (Article 9), for their CRS activities in its territory;

c) remove regulatory obstacles, if any, to part-ownership of CRSs domiciled in its territory by air carriers or other entities, domiciled in the territory of another State;

d) allow system vendors that are domiciled in the territories of other States following this Code to provide their CRS services in its territory;

e) treat all system vendors impartially regarding their CRS activities in its territory;

f) permit the free flow across and within its national borders of the information needed to meet the reservation and related requirements of air transport users;

g) take appropriate measures to ensure that all parties involved safeguard the privacy or personal data;

h) use intergovernmental consultation processes to resolve any dispute involving another State following this Code, regarding the distribution of air transport products through CRSs, that cannot be resolved satisfactorily by the parties immediately concerned; and

i) not allow or require air carriers and/or system vendors under its jurisdiction to take actions not in conformity with this Code, except to address, in an appropriate and proportionate manner, a lack of CRS reciprocity in a State not following the Code or the consequences of a failure of intergovernmental consultation processes to resolve any CRS dispute.

Article 4

Obligations of System Vendors to Air Carriers

A system vendor shall:

a) permit participation in its CRS by any carrier prepared to pay the requisite fees and to accept the system vendor's standard conditions;

b) not require carriers to participate in its CRS exclusively or for a certain proportion of their sales activities;

c) not impose any conditions on participation in its CRS that are not directly related to the process of distributing a carrier's air transport products through the CRS;
d) not discriminate among participating carriers in the CRS services it offers;

e) ensure that any fees it charges are non-discriminatory, and are not structured in such a way that small carriers are unfairly precluded from participation;

f) attach no anti-competitive conditions to contracts;

g) if it believes the information provided directly or indirectly by any carrier to be inaccurate, attempt to resolve the problem with the carrier concerned;

h) if it cannot resolve a problem regarding accuracy of information with a participating carrier, refer the matter to the appropriate regulatory authorities;

i) load information provided by participating carriers with consistent and non-discriminatory standards of care, accuracy and timeliness, subject to any constraints imposed by the loading methods selected by the participating carrier;

j) not manipulate the information provided by carriers in any way that would lead to inaccurate or discriminatory information being given to subscribers;

k) make any information generated by its CRS concerning a single booking available on an equal basis to all the carriers involved in the service covered by the booking, but to no other parties without the written consent of such carrier(s); and

l) not discriminate among participating carriers in making available any information generated by its CRS in an aggregated or anonymous form.

**Article 5**

**Obligations of System Vendors to Subscribers Regarding Commercial Arrangements**

A system vendor shall not:

a) discriminate among subscribers in the CRS services it offers;

b) restrict access by subscribers to other CRSs by requiring them to use its CRS exclusively or by any other means;

c) charge prices conditioned in whole or in part on the identity of carriers whose air transport services are sold by the subscriber;

d) require subscribers to use its CRS for sales of air transport services provided by any particular carrier;

e) tie any commercial arrangements regarding the sale of air transport services provided by any particular carrier to the subscriber's selection and/or use of the system vendor's CRS;

f) require subscribers to use its terminal equipment or prevent them from using computer hardware or software that enable them to switch from
use of one as to another, although it may require technical compatibility with its CRS; and

g) require subscribers to enter into excessively long-term contracts, use "rollover" provisions to undermine contract termination provisions, or attach anti-competitive conditions for withdrawal by subscribers from the contracts.

**Article 6**

**Obligations of System Vendors Regarding Information Displays Provided to Subscribers**

A system vendor shall:

a) ensure that the displays provided to subscribers by its CRS are accurate and not misleading in any way;

b) make available a "neutral" display or displays (i.e. any display that is not influenced, directly or indirectly, either by the identity of participating carriers or by airport identity) of air carrier schedules, space availability and tariffs;

c) ensure that any neutral display made available is as fully functional and easy to use as any other display it offers;

d) always present a neutral display except where, as allowed for in clause a), a subscriber initiates a specific request for another display;

e) base the selection and construction of connecting services and the ordering of services in a neutral display of schedule and/or space availability information on objective criteria (such as departure/arrival times, total elapsed time between initial flight departure at origin and final flight arrival at destination, routing, number of stops, number of connections, fares, etc.);

f) in the selection and construction of connecting services, select as many alternative (single or multiple) connecting points on a non-discriminatory basis as is necessary to ensure a wide range of options;

g) in the ordering of services in a neutral display of schedule and/or space availability information, ensure that no carrier obtains an unfair advantage through misrepresentation of services;

h) in any neutral display of schedule and/or space availability information:

i) clearly identify scheduled en-route changes of equipment, use of the designator code of one air carrier by another air carrier, the number of scheduled en-route stops, and any surface sectors or changes of airport required; and

ii) clearly indicate that the information displayed regarding direct services is not comprehensive, if information on participating carriers' direct services is incomplete for technical reasons or if any direct services operated by non-participating carriers are known to exist and are omitted; and
i) in cases where States do not find it practicable to ensure that subscribers comply with Article 9, include appropriate provisions regarding compliance in its contract with each subscriber.

**Article 7**

***Other Obligations of System Vendors***

A system vendor shall:

a) make available in written form and in a timely manner, on the written request of any interested party, information on the services offered by its CRS, the associated fees, the procedures it applies for entering and storing information in its CRS, and the methods it uses for developing, editing and updating information displays provided to subscribers; and

b) not enter into any agreement with other system vendors, regarding any aspect of CRS services, the objective or the effect of which would be to partition markets on a geographical or other basis in such a way as to eliminate or substantially reduce competition among system vendors or air carriers.

**Article 8**

***Obligations of Air Carriers***

An air carrier shall:

a) be responsible for the accuracy of information it provides to a system vendor for inclusion in a CRS;

b) in providing information on its air transport services, enable a system vendor to identify scheduled en-route changes or equipment, use of the designator code of one air carrier by another air carrier, the number of scheduled en-route stops, and any surface sectors or changes of airport required;

c) not refuse, except where legitimate commercial or technical reasons exist, to participate in any CRS used by subscribers in a State where the carrier holds a dominant market position, if it is financially linked or otherwise affiliated with any other CRS (other than as a result of a participation agreement with the system vendor);

d) not refuse to provide information on schedules or tariffs to a system vendor whose CRS is used by subscribers in the carrier's State of domicile, if it already provides such information to another system vendor whose CRS is used by subscribers in that State;

e) not require subscribers to use a particular CRS for sales of its air transport services, if the carrier is financially linked or otherwise affiliated with a CRS; and

f) not tie any commercial arrangements with subscribers regarding the sale of its air transport services to the subscriber's selection and/or use of a particular CRS, if the carrier is financially linked or otherwise affiliated with any CRS.
Article 9

Obligations of Subscribers

A subscriber shall:

a) use or provide a neutral display meeting the requirements of Article 6 for each transaction, except where it is necessary to use another display in order to meet a preference indicated by an air transport user;

b) not manipulate information supplied by a CRS in a manner that would result in inaccurate or misleading information being given to an air transport user; and

c) be responsible for the accuracy or any information it enters into a CRS.

Article 10

Safeguards for Developing Countries

A State which is recognized by the United Nations as a developing country, until completion of the review of the Code by the Council may:

a) exempt any "multi-access" CRS (i.e. any CRS which does not have its own database and which can function as a CRS only by giving subscribers direct access to various air carrier CRS displays through a common switching centre and/or interface) from any or all of the requirements of clauses g), h), i), k) and l) of Article 4 and clauses a) through h) of Article 6, if it considers that compliance would present significant and genuine technical difficulties, provided the exemption is granted at the time that the State decides to follow the Code and is made fully transparent nationally and to other States; and

b) choose to delay approving operations in its territory by a foreign CRS, subject to an ample demonstration to the foreign system vendor and, upon request, to the State of domicile or the vendor, of an overriding national development-related need for such a delay.
NOTES ON THE APPLICATION OF
THE CODE OF CONDUCT

Article 1
Terminology

Computer Reservation System (CRS) [clause a)]

This term identifies the minimum features which define a CRS for the
purposes of this Code, namely the ability to provide information on air
carrier schedules, space availability and tariffs, and the ability to make
reservations on air transport services. In practice, most systems also
make available other air carrier information and provide subscribers with
other related services such as ticketing.

The term is intended to include "multi-access" systems, even if they
do not have their own database and they function as a CRS only by giving
subscribers direct access to displays through a common switching centre
and/or interface.

Certain States may require an element of air carrier ownership in the
CRS as a legal predicate for regulation by air transport authorities.
Although this term does not require such ownership, neither does it
preclude a State from retaining this requirement and from accepting this
code without any reservation. Thus, no practical problem is presently
posed or anticipated.

System Vendor [clause b)]

When CRSs were in their infancy, they were usually owned by
individual air carriers. Today several major CRSs are being developed by
entities that are owned or controlled by groups of air carriers. There
are also some cases where CRSs are owned or controlled by parties outside
the air transport industry. Irrespective of the ultimate ownership or
control of a CRS, this clause identifies the system vendor as the entity
that operates or markets the CRS concerned, i.e. it is expected to be the
entity (or entities) with which the subscriber contracts for CRS services
but could include (as necessary) any related entity within the
jurisdiction of the regulatory body, such as a carrier owner or part-
owner of the CRS.

Participating Carrier [clause c)]

Participating carriers are air carriers that elect to have their air
transport services distributed through a CRS. Although participating
carriers generally enter into an agreement with the system vendor and pay
fees for the various services provided, the term "participating carrier"
can also include the system vendor itself in those cases where the vendor
is an air carrier.

Not all carriers whose air transport services are included in a CRS
are participating carriers. Some system vendors choose to display
information regarding other air carriers (referred to in these notes as
"non-participating carriers"), often with the advice to subscribers
that for reservations they should contact the carrier directly.

Subscriber [clause d)]

Users of a CRS are only considered to be "subscribers" if they use the CRS for the sale of air transport services to the general public. This limitation means that in practice most subscribers to CRSs are travel agents.

Article 2
Scope of Application

Usual Application of the Code [clause a)]

The Code has been designed (and these notes have been written) with the expectation that the Code will, in most cases, be applied only to the distribution of scheduled international passenger air service products through CRSs to subscribers.

It follows from this clause and from the definitions of CRS and of subscriber in Article 1 that the Code would not usually apply to:

- information-only systems, such as the electronic editions of the ABC World Airways Guide and the Official Airline Guide (OAG);

- the non-air transport portions of any systems (for example those devoted to accommodation, car rentals, etc);

- systems that are not used by subscribers, such as those used by an air carrier solely in-house or in its own sales offices (on the grounds that anyone contacting a particular carrier would expect to be offered products preferred by that carrier);

- use of systems by travel agents when acting as the general sales agent for a carrier; or

- use of systems by users that are not subscribers, such as corporate travel departments or members of the general public who gain access through videotex/teletext, personal computers or by other means (in both cases they are likely to direct their uses of systems towards achievement of predetermined corporate or personal objectives).

Opportunities for Wider Application of the Code [clause b)]

It is recognized that some States may wish to apply the Code more widely than is envisaged in clause a) of this article. Two particular opportunities for wider application, to non-scheduled products and to information-only systems, are provided for in sub-clauses i) and ii). A State may opt for either or both of these sub-clauses and, if it so wishes, may limit the extent of application in either case. As specified in the Introduction, States are not precluded from further expanding the scope of CRS regulation, provided such expansion is not inconsistent with the provisions of the Code.
While the Code has been designed primarily for scheduled products, sub-clause i) provides for a State to apply the Code (or part of it) to non-scheduled products. In practice, the question of whether the distribution of non-scheduled international service products should be regulated is only likely to arise in markets where both scheduled and non-scheduled products exist on a significant scale. Any State that opts to do this would need to examine carefully the differences in the manner in which scheduled and non-scheduled products are distributed in its territory and, in the light of its findings, would probably need to adapt the Code's provisions in so far as they would apply to non-scheduled products. For example, the following aspects would need to be taken into account:

- Would the Code cover both bundled and unbundled products (i.e. respectively those with, and those without, ground arrangements such as accommodation and/or car rentals)?

- How would the Code be applied in cases where charter organizers and tour operators (rather than air carriers) control the space on aircraft and set their own prices?

- Would the Code's provisions regarding information displays provided to subscribers (Article 6) be appropriate in the case of non-scheduled products? Would displays of non-scheduled products have to be consolidated with displays of scheduled products or could they be displayed separately?

Sub-clause ii) enables States, if they wish to do so, to extend the application of the Code to include information-only systems such as the electronic editions of the ABC World Airways Guide and the Official Airline Guide (OAG). At the present time, information-only systems generally have been subject to few complaints about bias. However some States, notably in Europe, believe that it is nevertheless necessary to include information-only systems in CRS regulations, particularly in order to ensure that they do not become biased in the future.

**Article 3**

**Obligations of States**

This article lists the obligations of States that decide to follow the Code. Although in most cases each State would undertake these obligations separately, it is anticipated that any State acting in community with another State (or with other States) to follow the Code would ensure that sections taken collectively fulfil its obligations under this article.

**Transparency** [clause a)]

In order to make its decision to follow the Code fully transparent it is anticipated that a State will inform ICAO and will take such public measures to inform others as it usually employs when promulgating its air transport regulations. If it opts for either of the wider applications of the Code provided for in Article 2, clause b), then full transparency would imply a need to define the scope of such application in general terms. For example, if non-scheduled international passenger air service products are covered, a State would be expected to specify whether the Code would cover both bundled and unbundled products. Any information of a more detailed nature that may be required in order to apply the Code would be expected to be made transparent in the State's regulations (for
example, details such as whether displays of non-scheduled passenger products could be separate from or must be consolidated with displays of scheduled passenger services).

**Compliance** [clause b]]

Any State following the Code is also required to ensure compliance by system vendors, air carriers and, where practicable, subscribers for their CRS activities in its territory. States will employ their own means of achieving compliance. In usual circumstances, their regulation will be part of their systems of regulating air transportation. Some regulatory bodies may have limited enforcement capabilities, particularly as regards subscribers, and this must be taken into account. Some aspects of the Code may already be covered in some States by more general legislation (for example, regarding competition, trade, data protection, etc.).

**Ownership of CRSs** [clause c]]

With ownership or control of many CRSs now being exercised by several air carriers (rather than by a single carrier) and with the influence of government regulation, the advantages that accrue to a carrier that owns or controls a CRS are being reduced. However, it is likely that there will always remain a residual core of advantage for these carriers. In such circumstances, it is clearly desirable that ownership or control of CRSs be widened as much as possible, including the increased involvement of developing countries. With this principle in mind, this clause calls on States to remove regulatory obstacles, if any, to part-ownership of CRSs domiciled in their territories by air carriers or other entities, domiciled in the territory of another State.

**Foreign-domiciled System Vendors** [clause d]]

Any State following the Code is required to allow foreign system vendors to provide their CRS services in its territory, with such system vendors being expected to comply with the State's national laws and regulations. A foreign system vendor is likely to be owned, at least in part, by a foreign air carrier which may associate provision of its own CRS services with an agreed right to fair and equal opportunity to compete in the air transport market. Of equal importance is the opportunity for subscribers to choose among CRSs with different capabilities and features. While this clause does not apply to foreign system vendors that are not domiciled in the territories of other States following the Code, nothing in the Code prevents a State from also allowing such vendors to provide services in its territory if it so wishes.

**Impartiality** [clause e]]

Any State following the Code is also required to treat all system vendors, whether national or foreign, impartially. For example, any national requirements that apply to system vendors regarding access to and use of communications facilities, selection and use of technical hardware and software, installation of hardware or any other aspects of CRS operations or sales, should not have the effect of favouring one system vendor over another.
Free Flow of CRS Information and Privacy of Personal Data [clauses f) and g)]

In order to meet the reservation and related requirements of air transport users, air carriers need to have free flow of the relevant information across and within national borders. This is provided for in clause f).

However, the counterpart is that there must be safeguards regarding the privacy of personal data, as provided for in clause g). In order to make a seat reservation through a CRS a subscriber needs to enter into the CRS some personal data regarding the passenger. This could include age, nationality, religious dietary requirements and other information needed by the carrier concerned, which, in the wrong hands, could endanger the well-being or property of the passenger. Thus all parties involved must safeguard the privacy of such personal data. "All parties" in this context primarily means system vendors, air carriers and subscribers, but also refers to other parties that may have access to personal data, such as telecommunications agencies.

States may wish to take guidance from IATA's Recommended Practice 1774 (Protection of Privacy and Transborder Data Flows of Personal Data used in International Air Transport of Passengers and Cargo*).

Intergovernmental Consultation Processes [clause h])

The intent of this provision is to ensure that a State choosing to follow the Code will employ to the fullest extent practicable the internationally accepted conflict resolution tool of intergovernmental consultations to resolve any CRS dispute involving another State following the Code, rather than allowing or requiring private parties (air carriers, system vendors) to take unilateral actions. A State following the Code may also wish to use such consultations in disputes involving States not following the Code.

Actions not in Conformity with the Code [clause i])

This clause identifies two sets of circumstances - the only ones except for the safeguards for developing countries in Article 10 - in which it would be acceptable for a State following this Code to allow or require air carriers and/or system vendors under its jurisdiction to take action not in conformity with this Code.

The first is a need to address a lack of CRS reciprocity in a State not following the Code. This is necessary because air carriers of States not following the Code can be expected to benefit from some of the Code's provisions, such as those guaranteeing participation in a CRS (Article 4, clause a)), those requiring neutral displays of information concerning participating carriers (Article 6, clauses b) through h)), or those regarding information generated by a CRS (Article 4, clauses k) and l)). If such benefits are not reciprocated in a State not following the Code (for example, if a system vendor in that State were to refuse participation in its CRS to an air carrier of a State following the Code), States which follow the Code should be free to withhold them.

The second circumstance would be if intergovernmental consultation processes with another State following the Code (as foreseen in clause h) of this article) or with a State not following the Code were to fail to resolve any CRS dispute.
In both cases, air carriers and/or system vendors should only be allowed or required to take actions that are appropriate and proportionate to the prevailing circumstances.

In allowing or requiring air carriers and/or system vendors to take actions not in conformity with this Code, States should of course take into account both the impact this might have on the quality of information made available via subscribers to air transport users and any possible implications this might have for other interested parties, and notably for those following the Code.

Article 4

Obligations of System Vendors to Air Carriers

Participation Open to All Carriers [clause a)]

The underlying principle contained in this clause is that an air carrier should have the opportunity to participate in any CRS and that therefore a system vendor should not be able to refuse participation. A separate provision (Article 7, clause a)) ensures that the system vendor makes available to air carriers information that would help them to decide on whether or not they wish to participate in its CRS.

However, since system vendors need to recover the substantial costs involved in establishing and operating CRSs, air carriers are guaranteed participation only if they are prepared to pay the requisite fees and to accept the system vendor's standard conditions.

Implementation of this clause might, however, oblige some system vendors to expand the capacity of their CRSs in order to meet air carriers' requests to participate. Should such expansion pose problems, the matter should be referred to the appropriate regulatory authorities.

Exclusive Use of a CRS [clause b)]

The intent of this clause is to ensure that an air carrier's freedom to participate in any CRS is not compromised by a system vendor requiring participation in its CRS exclusively or for a certain proportion of the carrier's sales activities. This clause is not intended to prevent air carriers that own a CRS entering into agreements among themselves regarding their participation in that CRS.

Extraneous Conditions [clause c)]

The intent of this clause is to ensure that an air carrier's freedom to participate in a CRS is not compromised by a system vendor imposing conditions on such participation that are not directly related to the process of distributing a carrier's air transport products through the CRS, such as a required purchase or sale of any other goods or services.

No Discrimination among Participating Carriers [clause d)]

Some system vendors offer different levels of CRS service to participating carriers. In addition, there can be frequent changes in the services offered (both new services and improvements to existing ones). Whereas clause a) of this article ensures that an air carrier
has the opportunity to participate in any CRS, the purpose of the present clause is to ensure that all carriers which have chosen to participate are treated in a non-discriminatory manner. This means that any CRS service which is offered to one participating carrier should be offered to all of them. It follows that a carrier with an ownership interest in a system should not receive any preferential treatment regarding CRS services.

**Fee Structure (clause e)**

Concerns have been expressed regarding the fees charged by some system vendors to participating carriers. Although these concerns have been focused primarily on the levels of fees, they also relate to the all-inclusive ("bundled") nature of some fee structures that can result in unreasonable payments by participating carriers for CRS services that they do not use. This clause therefore requires a system vendor to ensure that certain principles are followed.

Firstly, fees should not be discriminatory. This means, for example, that all carriers should be charged the same fees for the same level of service.

Secondly, fees should be structured in such a way that all carriers that wish to participate can do so. In this regard, concerns have been expressed that some system vendors with fee structures consisting of an initial payment plus charges related to the level of activity (for example, a charge per booking) may preclude participation by small carriers if the initial payment is too high. The clause therefore requires system vendors to structure their fees in such a way that small carriers are not unfairly precluded from participation. "Small" is deliberately not defined because it is likely to vary from one market to another. It should be noted that the intention is to give fair treatment to small carriers rather than to promote discrimination in their favour.

The Code stops short of requiring States to regulate system vendors' fee levels because it is recognized that some States are not empowered to do this or are unable to allocate the necessary resources. However, this does not prevent States from regulating fees, for example by requiring that they be set at a reasonable level or be cost-related.

**Anti-competitive Conditions (clause f)**

This clause requires that a system vendor not attach anti-competitive conditions to contracts with participating carriers. Examples of "anti-competitive" conditions include excessively long contract duration and excessive penalties for withdrawal from contracts.

**Accuracy of Information Provided by Carriers (clauses g) and h)**

The text below should be read in conjunction with that on other provisions in the Code which require an air carrier to be responsible for the accuracy of information it provides to a system vendor for inclusion in a CRS (Article 8, clause a)) and require a system vendor to ensure that displays provided to subscribers by its CRS are accurate (Article 6, clause a)).

Clauses g) and h) establish the steps to be taken in the event that a system vendor believes that information about a carrier's services, provided directly or indirectly by that carrier, is inaccurate. Clause g) requires the system vendor to attempt to resolve the matter with the
carrier concerned. While most problems are likely to be resolved satisfactorily, clause h) provides for the referral of any outstanding problems regarding a participating carrier's information to the appropriate regulatory authorities. This latter provision is considered necessary in order to guard against the possibility that a system vendor that is also an air carrier might seek to dictate "accuracy" to carriers with which it may be competing. Referral to the authorities is not provided for in the case of information regarding a non-participating carrier, since there is no obligation in the Code requiring that a system vendor display such information and the system vendor could therefore reject it.

Loading of Information Regarding Participating Carriers [clause i])

The increasing use of CRSs has encouraged air carriers to change schedules and tariffs much more frequently than they did in the past, either on their own initiative or in response to other carriers' changes. Subscribers need to be aware of such changes as quickly as possible and any delays could have substantial commercial implications for the carriers concerned. In order to guard against the possibility that a system vendor that is also an air carrier might seek to delay the effective implementation of changes by participating carriers with which it may be competing, this clause requires a system vendor to load information provided by participating carriers with consistent and nondiscriminatory standards of care, accuracy and timeliness. This applies (subject to any constraints imposed by the carrier's loading method) whether the information is received directly from a participating carrier or via an intermediary.

The "non-discriminatory" element in this clause also applies to any special dataloading capability provided by a system vendor and is intended to ensure that if its provided to one participating carrier it should be offered to all participating carriers. It is recognized, however, that in practice a system vendor that is also an air carrier may be in a position to load its own data more rapidly than it loads the data of other participating carriers. In such circumstances, system vendors should make every effort to minimize the differential treatment concerned.

Manipulation of Information [clause j])

Once a system vendor has loaded the information received from carriers, it may need to manipulate this information for technical reasons (for example to reassemble it in another format). The purpose of this clause is to ensure that any manipulation of this information does not lead to inaccurate or discriminatory information being given to subscribers, either deliberately or by mistake.

Information Generated by a CRS [clauses k) and l])

Since some CRSs process millions of sales transactions involving many different subscribers and participating carriers, they are capable of generating a wide range of sales-related data that could be of great importance to carriers for marketing purposes (for example, data on the booking behaviour of passengers or subscribers, or data on carriers' traffic and yields). In order to guard against the possibility that certain carriers might seek to gain an unfair commercial advantage by having access to sales-related data generated by a CRS, these clauses determine the extent to which such data may be made available. In cases where the information concerns a single booking, clause "k) requires a system vendor to make it available on an equal basis to all the carriers.
involved in the service covered by the booking, but to no other parties without the written consent of such carrier(s). In cases where the information is generated in an aggregated or anonymous form (for example to provide a marketing data base), clause 1 requires that a system vendor does not discriminate among participating carriers in making it available: if it is made available to one participating carrier, it must be made available to all of them.

When the system vendor concerned is also an air carrier (or is in any way affiliated with an air carrier), that air carrier should not have access to any sales-related data generated by the CRS unless it is entitled to do so under clauses k) or l). In practice this may be difficult for States to enforce.

It should be noted that even if clauses k) and l) are fully complied with, it is probably inevitable that sales-related information generated by CRSs will be more useful to those carriers which have the computer resources and analytical skills necessary to take advantage of these data (for example, many of the large carriers) than to those which do not (for example, many small carriers, and especially those from developing countries).

Article 5

Obligations of System Vendors to Subscribers Regarding Commercial Arrangements

The underlying principle throughout this article is that a subscriber should have the opportunity of unrestricted access to as many different CRSs as it wishes and, consequently, that a system vendor should not be permitted to distort the market forces influencing a subscriber's selection or usage of a particular CRS.

Discrimination among Subscribers [clause a)]

This clause requires that a system vendor does not discriminate among subscribers in the CRS services it offers. In this context, "CRS services" include any enhancements, that is any improved or additional service which may become available. This clause does not preclude differentiation in fees charged to subscribers when the State involved allows such differentiation.

Exclusivity [clause b)]

The purpose of this clause is to prevent a system vendor from restricting access by subscribers to other CRSs. Such restrictions could include a system vendor requiring a subscriber to use its CRS exclusively or for a certain sales volume (for example, at least X bookings per year) or for a certain proportion of their sales activities (for example, at least 75 per cent of bookings). Another example would be a system vendor insisting that a certain number or proportion of the CRS terminals used by a subscriber be linked to the vendors CRS.

Carrier-linked Arrangements [clauses c), d) and e)]

These three clauses are similar in that they all seek to prevent a system vendor from attempting to influence a subscriber's selection or usage of its CRS by introducing considerations related to the identity of the air carriers whose air transport services are sold by the subscriber. In this connexion, it is important to bear in mind that many system
vendors are themselves air carriers or are affiliated to air carriers. Clause c) seeks to prevent a system vendor from offering lower prices for its CRS services to subscribers which are prepared to promote certain carriers than it offers to other subscribers. Clause d) seeks to prevent a system vendor from insisting that a subscriber use its CRS when selling the air transport services or any particular carrier. Clause e) seeks to prevent a system vendor from arranging for any carrier to offer special commercial arrangements (such as higher commission payments) to subscribers which select and/or use the vendor's CRS.

**Choice of Hardware and Software** [clause f)]

Terminal equipment acts as an interface between a subscriber and a CRS. The simplest terminals consist of a keyboard and a screen, while more sophisticated ones are based on personal computers into which a subscriber can introduce its own software.

Concerns have been expressed about cases where system vendors have insisted that subscribers may only use the terminal equipment which the system vendor provides, thus giving the vendor a captive market for these products. In order to address these concerns, this clause prohibits a system vendor from insisting that subscribers use only its terminal equipment.

There is also communications equipment available which, with appropriate software, can enable a subscriber to link up with more than one CRS, thus providing access to additional information and making the subscriber less reliant on a particular CRS. The clause therefore also prohibits a system vendor from preventing the use of such equipment.

The system vendor retains the right to require that equipment and software used by the subscriber be technically compatible with its CRS. However, since "compatibility" may be open to different interpretations, States may need to ensure that system vendors do not abuse this requirement.

**Form of Contract** [clause g)]

In order to recoup the substantial costs involved in developing and operating a CRS, it is in a system vendor's interest to ensure that subscribers are tied for as long as possible to using that CRS. In some States there have been cases where system vendors have included allegedly unreasonable and unfair provisions in their contracts with subscribers, in order to achieve this objective. Examples of such provisions include a very long contract duration, "rollover" provisions that undermine contract termination provisions (such as restarting the contract period when an additional item of hardware or software is provided) and substantial penalties for withdrawal from contracts, including unrealistic provisions for liquidated damages. Although problems of this kind are covered by national competition regulations in many States, some regulators have found it necessary to introduce specific regulations to address them. For example, the United States has established a maximum contract period of five years and the European Community has ruled that a subscriber may terminate a contract after the end of the first year, without penalty and without having to give more than three months' notice. This clause therefore seeks to prevent a system vendor from requiring subscribers to enter into long-term contracts, from using rollover provisions to undermine contract termination provisions, or from
attaching anti-competitive conditions for withdrawal by subscribers. The clause is expressed in general terms, leaving States to decide on the specific elements, in recognition of the fact that many States already have regulations that may be applicable.

Article 6

Obligations of System Vendors Regarding Information Displays Provided to Subscribers

Information is usually presented to subscribers on a display terminal, one "screen" at a time. When the amount of information to be presented is too much to fit onto the first screen, as often happens with schedule information, the subscriber can move to one or more additional screens. A "display" of information typically consists of more than one screen.

Clause a) of this article addresses the need for accuracy in information displays. Clauses b) through d) govern the provision of "neutral" displays of three types of air carrier information, namely schedules, space availability and tariffs. Clauses e) through h) address specific issues relating to neutral displays of schedule and/or space availability information and therefore do not apply to tariff information. Finally, clause i) calls on system vendors to help ensure that subscribers comply with Article 9.

Accuracy of Information Displayed [clause a]

Accuracy is of paramount importance in the information displays provided to subscribers. This clause therefore requires that a system vendor ensure that such displays are accurate and not misleading in any way.

Much of the information displayed is obtained by the system vendor either directly from the carrier concerned or indirectly via an intermediary that collects and publishes information regarding carriers' schedules and tariffs (such as another carrier or an independent publishing house). In cases where the information is provided directly by the carrier or is obtained from an intermediary with the carrier's consent, the carrier also has certain obligations regarding accuracy (Article 8, clause a). However, the vendor is solely responsible for the accuracy of any information obtained from an intermediary without the specific consent of the carrier concerned (as might be the case when a vendor chooses to display information on non-participating carriers) and of any other information displayed to subscribers.

Provision of Neutral Displays [clauses b) through d)]

In order to ensure that all carriers have a fair and equal opportunity to compete, clause b) requires that a system vendor make available a "neutral" display or displays of air carrier schedules, space availability and tariffs. The clause is worded in such a way that a system vendor is free to choose whether the three types of information identified (schedules, space availability and tariffs) are presented in the same neutral display or, as is more likely, in a combination of neutral displays.
Neutrality is a somewhat subjective issue, particularly regarding schedule and space availability information, and it is doubtful whether any display can be truly neutral. However, clause b) identifies two conditions that must be met if a display is to be considered a neutral display. Firstly, it should not be influenced (directly or indirectly) by the identity of participating carriers. In other words, it should treat all participating carriers on an equal and non-discriminatory basis. Secondly, it should not be influenced by airport identity. This aspect could become increasingly important as competition among airports increases. Moreover, if a neutral display of services for a city-pair were allowed to be influenced by a particular airport, this could favour certain participating carriers.

In these conditions defining a neutral display, no mention is made of non-participating carriers. The reason is that participation in a CRS is open to all carriers and, if a carrier is not willing to pay the requisite fees to become a participating carrier, a system vendor should not be obliged to include information regarding that carrier in any neutral display. It is nevertheless recognized that some system vendors may choose to include such information. Apart from requiring any vendor to clearly indicate when neutral displays omit certain types of information on non-participating carriers (clause h), sub-clause ii) of this article, the Code does not include specific provisions regarding such carriers. For example, it is silent on whether information on all such carriers in the market must be displayed if information on any one is displayed. However, this does not preclude States that wish to regulate this matter from doing so.

Clause c) elaborates on the manner in which neutral displays are made available. The system vendor is required to ensure that any neutral display is as fully functional and easy to use as any other display offered.

A subscriber requesting a display of information on schedules, space availability or tariffs would normally receive a neutral display of such information. Clause d) defines the only circumstances in which a system vendor may present a display other than a neutral one, namely if a subscriber has initiated a specific request to obtain such a display. This clause should be read in conjunction with Article 5, clause a) which requires that a subscriber may only use another display in order to meet a preference indicated by an air transport user (for example, a request to travel on a particular carrier).

**Use of Objective Criteria [clause e]**

Whereas the printed timetable publishers are able to present the various service options between any two points on a single page, the CRS terminals currently in use permit only a small number of service options to be shown on the first screen of a display. For many subscribers, the economic pressures of time and resources result in a tendency to book one of the first service options displayed which meets the passenger's known requirements. As a result the order in which a system vendor lists service options can influence the probability of reservations being made for each one, with significant commercial consequences for the carriers involved.

Consequently, system vendors have developed various methodologies (sometimes referred to as "algorithms") which attempt to list service options in an order which would help a subscriber quickly identify the most suitable ones. While some of these methodologies are comparatively simple, others are complex and take many different factors into account.
For example, some methodologies are based on a system whereby service options are assigned "penalty points" according to certain criteria and those service options with the fewest penalty points are listed first. Under such a system, service options attract penalty points if, for example, they do not depart at the requested time, they require excessive travel time, they involve a connexion or stops en-route, or they involve interlining.

In order to guard against the possibility that a system vendor might use a methodology which systematically gives greater or lesser priority to a particular carrier or group of carriers, this clause requires that the ordering of services in a neutral display of schedule and/or space availability information be based on objective criteria and some examples of such criteria are listed. This requirement also applies to the selection and construction of connecting services.

This clause stops short of prescribing a particular methodology which system vendors must use for ordering services in a neutral display, because it is very difficult (if not impossible) to identify a methodology which is completely neutral and cannot be criticised for favouring a particular carrier, or group of carriers from a particular region, in some way or other. Moreover, an insistence on a particular methodology could prevent a system vendor from using different methodologies in different circumstances and could stifle innovation among system vendors in developing neutral displays. However, States are not precluded from prescribing a particular methodology, if they wish to do so.

States in the European Civil Aviation Conference (28 States) and the European Community (12 of the same States) have decided to prescribe that service options, for the day or days requested, must be listed in the following order:

1. Firstly: all direct non-stop flights, listed in order of departure time;
2. Secondly: other direct flights, not involving change of aircraft, listed in order of elapsed journey time; and
3. Thirdly: connecting services, listed in order of elapsed journey time.

On the other hand, other States have determined that their regulatory objectives can best be achieved by intentionally not prescribing a particular methodology.

**Number of Alternative Connecting Points (clause f)**

Theoretically, it is possible for a CRS to construct many connecting services between an origin and a destination, using different connecting points. For example, connecting services can be constructed between Montreal and Nairobi using a United States gateway (such as New York) as a connecting point, or a European airport (such as Paris) or both United States and European airports. However, some theoretical constructions are likely to be unattractive to passengers and in practice would probably not be used, for example if they involve very circuitous routings or inordinately long delays between flights. These connecting services are therefore of little or no use to system vendors or to subscribers. For this and other reasons, such as limited system capacity, system vendors have developed methodologies which attempt to select connecting services in such a way as to exclude the unattractive ones.
In order to guard against the possibility that a system vendor might deliberately select or omit connecting points that are served by a particular carrier, this clause requires the use of as many alternative (single or multiple) connecting points selected on a non-discriminatory basis as is necessary to ensure a wide range of options. The expression "as is necessary" has been included because the number of alternative connecting points required may vary from one market to another, depending upon such factors as the distance involved and the characteristics of carriers' route networks. In some short-haul markets with very frequent non-stop service it may not be necessary to select any connecting points. Nevertheless, this does not prevent any regulatory body from defining a specific minimum number of alternative connecting points to be used in all cases, if it so wishes. This approach has been adopted in both the United States and the European Community.

**Misrepresentation (clause g)**

This clause requires that a system vendor ensure that, in the ordering of services in a neutral display of schedule and/or space availability information, no carrier obtains an unfair advantage through misrepresentation of services. Although misrepresentation is already referred to in clause a) of this article, it is necessary to expand on it specifically here in connection with the ordering of services, because carriers' efforts to obtain the highest screen placement possible for their services have in some cases given rise to allegations of misrepresentation and to subsequent disputes between competing carriers and between States.

Such allegations have tended to focus on the following three issues:

- Many of the methodologies used by system vendors display all single aircraft flights before connecting services and some others determine the ranking or service options using formulae which favour single aircraft flights over connecting services, while also taking other factors into account. When these methodologies are used, the question arises of how to treat services which have one flight number, but which are scheduled to have a change of aircraft en route. Allegations of misrepresentation have arisen when vendors treat such services as single aircraft flights.

- Some system vendors use methodologies which differentiate between on-line connexions and interline connexions, either by displaying on-line connexions before interline connexions or by ranking service options on the basis of formulae which favour on-line connexions over interline connexions, while also taking other factors into account. When these methodologies are used, the question arises of how to treat code-sharing connexions (i.e., connexions between two air carriers, one of which is using the designator code of the other). Code-sharing takes many different forms. Some major carriers own their code-sharing partners and the operations of the two carriers are fully integrated and, in these circumstances, the connexions may be indistinguishable from on-line connexions. However, in some other code-sharing arrangements, the connexions may be indistinguishable from interline connexions. Allegations of misrepresentation have arisen when vendors that use methodologies which differentiate between on-line and interline connexions routinely treat all code-sharing connexions as on-line.

- Some system vendors have allowed a single service option to be displayed more than once, but described or listed in different
ways. For example, if a connecting service is available between two points (A and C based on two flights with a connexion at an intermediate point (B), this is sometimes displayed both as a connecting service (A - B, plus B - C) and as one flight (A - C) with a single flight number and a change of aircraft en route. If one or other of the two flights involves code-sharing or if there is more than one intermediate point en route, further duplication may occur. Allegations of misrepresentation have arisen, claiming that the primary purpose of duplication is to fill up the screen, pushing other service options down the screen or onto a subsequent screen (a practice known as "screen-padding"). However, in some circumstances duplication may be justifiable, for example when different services at distinct prices for seats subject to different yield management are offered on the same aircraft by different carriers or when each carrier in a joint operation wishes to maintain market identity. Some other cases of duplication may simply be due to programming weaknesses.

Underlying these three issues are complex and very significant matters of commercial access to particular markets. The States directly concerned with these markets have been unable to reach agreement as to the extent of misrepresentation concerned, if any, and the Council is not therefore presently in a position to draw any specific conclusions regarding misrepresentation in those markets or, by extension, to develop any specific provisions regarding misrepresentation for inclusion in a code with world-wide application. The Council will reconsider this matter when undertaking the planned review of the Code.

Content of Information Displays [clause h)]

Any neutral display of schedule and/or space availability information must contain the elements listed in the two sub-clauses.

Sub-clause i) requires a neutral display to clearly identify scheduled en-route changes of equipment, use of the designator code of one air carrier by another air carrier, the number of scheduled en-route stops, and any surface sectors or changes of airport required. The listed factors have been selected on the grounds that they are of probable general concern or interest to passengers.

In order that a subscriber should give advice to passengers on the basis of comprehensive information, sub-clause ii) requires that if a neutral display omits some direct services, this should be clearly indicated on that display. This requirement does not apply to connecting services, because system vendors are not expected to include all possible combinations (as explained in the notes on clause f) of this article). There are two different sets of circumstances where sub-clause ii) is relevant.

Firstly, information on the direct services of participating carriers may be incomplete for technical reasons. Until the situation is rectified, a subscriber needs to be warned that the displayed information is incomplete.

Secondly, a subscriber also needs to be warned when information on some or all direct services offered by non-participating carriers that are known to exist is omitted by a system vendor. Since such information is often omitted, in practice it is likely that many neutral displays will need to include this indication. The requirement "to clearly indicate" is not intended to mean that a system vendor must provide information on the services (or the carriers) that are missing. The
expression "are known to exist" recognizes that although a system vendor should usually be able to identify missing direct services without difficulty, in some circumstances a vendor may not be aware of the existence of certain services.

In both of the above cases a simple on-screen warning would suffice, which need be no more than a one character symbol to indicate incompleteness of either kind.

**Compliance by Subscribers [clause i])**

As already explained in the notes on Article 3, clause b), some regulatory bodies may have limited enforcement capabilities, particularly as regards subscribers and their compliance with the Code's obligations (Article 9). In cases where States do not find it practicable to ensure compliance with Article 9, the present clause calls on the system vendor to include appropriate provisions regarding such compliance in its contract with each subscriber.

**Article 7**

**Other Obligations of System Vendors**

**Transparency [clause a])**

In the interest of transparency, this clause requires a system vendor to make certain information about its CRS available to any interested party. Although this includes the methods used for developing information displays, a system vendor is not obliged to make available proprietary information such as the actual system software used.

**Partitioning of Markets [clause b])**

The main purpose of this clause is to maintain competition among system vendors. It is not intended to inhibit technical and marketing cooperation among vendors. In some States, this subject may already be covered by competition legislation.

**Article 8**

**Obligations of Air Carriers**

**Accuracy of Information Provided to System Vendors [clause a])**

As explained in the notes on Article 6, clause a), a system vendor usually obtains information on carriers' services either directly from the carrier concerned or indirectly via an intermediary. The present clause establishes that an air carrier is responsible for the accuracy of information it provides to a system vendor for inclusion in a CRS. The clause is worded in such a way that a carrier is not responsible for the accuracy of information about its services that a system vendor may obtain via an intermediary without the specific consent of the carrier (as might be the case for some non-participating carriers).

**Content of Information Provided to System Vendors [clause b])**

In order that a system vendor can comply with Article 6, clause b), sub-clause i), this provision requires that an air carrier provide information on its air transport services in such a way that a system
vendor can identify scheduled en-route changes of equipment, use of the
designator code of one air carrier by another air carrier, the number of
scheduled en-route stops, and any surface sectors or changes of airport
required. The listed factors have been selected on the grounds that they
are of probable general concern or interest to passengers.

Refusal to Participate in Certain CRSs [clause c]]

Carriers sometimes choose not to participate in certain CRSs. In many
cases this is because the carrier does not wish to distribute its
products through a particular CRS for justifiable commercial reasons (for
example, where the costs involved are considered to be too high).
However, there have also been some cases where a carrier that is itself a
system vendor (or is affiliated to one) has refused to participate in a
competing CRS in order to make that CRS less attractive to subscribers.
In markets where the carrier plays a major role, action of this kind is
likely to have an adverse impact on the CRS options available to
subscribers and ultimately on the quality of information made available
to passengers.

This clause therefore seeks to prevent a carrier from refusing to
participate in any CRS, but only applies in a State where the carrier
holds a dominant market position and where it is financially linked or
otherwise affiliated with any other CRS (other than as a result of a
participation agreement with the system vendor). In this context, refusal
to participate in a CRS is intended to include refusal to allow ticketing
for its services by that CRS or placing similar obstacles on ticketing.
The clause allows on exception in cases where legitimate commercial or
technical reasons exist for not participating in a particular CRS. It is
envisioned that such reasons would exist only in extremely rare and
isolated cases.

Refusal to Provide Information to Certain CRSs [clause d]]

Carriers sometimes choose not to provide information on their
services to certain CRSs. For example, a participating carrier may be
willing to provide some types of information, but prefer to withhold
other types, and a non-participating carrier might even choose not to
provide any information to the CRS concerned. However, as in the case of
refusal to participate in a CRS (see previous clause), this could have an
adverse impact on the CRS options available to subscribers and ultimately
on the quality of information made available to passengers.

This clause therefore seeks to prevent a carrier from refusing to
provide information on schedules or tariffs to a system vendor, but only
applies in the carrier's State of domicile and only if it already
provides such information to another system vendor whose CRS is used by
subscribers in that State. Some States may also wish to extend the
coverage of this clause to include information on space availability.

It is recognized that this obligation may place an unwanted burden on
some carriers. However, nothing in the Code prevents a carrier from
charging system vendors in order to recoup the costs incurred in
providing such information.

Relationships with Subscribers [clauses e) and f)].

The aim of both of these clauses is to ensure that carriers do not
attempt to intervene in a subscriber's selection or usage of a CRS. They
closely resemble two of the obligations of system vendors to subscribers
(Article 5, clauses d) and e)). Clause e) seeks to prevent
a carrier that is financially linked or otherwise affiliated with a CRS from requiring that a subscriber use a particular CRS when selling its air transport services, while clause f) seeks to prevent such a carrier from tying any commercial arrangements (such as higher commission payments) to the subscriber's selection and/or use of a CRS.

**Article 6**

**Obligations of Subscribers**

**Use of Neutral Display and Manipulation of Information** (clauses a) and b)

Article 6 requires a system vendor to make available to subscribers a neutral display or displays. However, this is insufficient to ensure that subscribers will use such a display in providing information to passengers. It may not be in a subscriber's interest to provide neutral information to passengers, particularly if certain carriers are offering special incentives (such as additional commission payments) to persuade subscribers to make bookings on their services. Clause a) therefore obliges a subscriber to use or provide a neutral display meeting the requirements in Article 6 for each transaction, except where it is necessary to use another display in order to meet a preference indicated by an air transport user (i.e. a passenger or someone acting on the passenger's behalf). However, since many subscribers may consider it necessary to use alternative displays to meet their clients' or their own needs and there is likely to be a large volume of transactions daily, this will be very difficult to enforce, even when system vendors include this obligation in their contracts with subscribers.

With the help of appropriate software, those subscribers wishing to do so can take the data available from a CRS (or more than one CRS) and reassemble it into a display format that they themselves have designed. While this can benefit passengers, allowing displays to be tailored to their specific needs, there is also a danger that subscribers will reassemble data in order to meet their own commercial objectives. Clause b), while recognizing that subscribers may wish to manipulate information supplied by a CRS, seeks to avoid this being done in any way that produces inaccurate or misleading information for air transport users. It too maybe very difficult to enforce in practice.

**Accuracy of Information** (clause c)

This clause requires subscribers to be responsible for the accuracy of any information it enters into a CRS, such as data relating to a passenger or a passenger's requirements. However, at least some of this information is likely to have been provided to the subscriber by the passenger and, in these circumstances, subscribers would usually be in a position to hold passengers responsible for the information's accuracy.
Article 10

Safeguards for Developing Countries

CRSs originated in certain developed countries, notably the United States and various States in Europe. Although their use is now spreading throughout the world, many developing countries have yet to reap fully the benefits associated with CRSs for air carriers, subscribers and air transport users. Consequently, one of the underlying principles of the Code is to encourage the increasing involvement of developing countries and their air carriers in CRS activities.

In a CRS context, the main concerns of carriers from developing countries are to receive fair and equal treatment in CRSs in foreign markets and to ensure that there is an adequate and appropriate product distribution system in their own national markets. While the Code addresses the first of these concerns and should benefit carriers from developing countries, it may not meet the second of these concerns unless certain safeguards are introduced, at least in the short term.

This article contains such safeguards. They are expressed in the form of exceptions which developing countries (as defined by the United Nations) may make to certain provisions of the Code, but only during the period between the adoption of the Code and completion of its review by the Council as envisaged in the Introduction. They relate to two specific problems experienced in developing countries, namely the continuing existence of multi-access CRSs (clause a)) and the impact of foreign system vendors operating in their territories (clause b)).

In the event that a foreign carrier or system vendor considers that there is a lack of CRS reciprocity as a result of action taken by a developing country under this article, intergovernmental consultation processes (Article 3, clause h)) and subsequent possible actions (Article 3, clause i)) are available to their State of domicile.

Multi-Access CRSs (clause a))

A "multi-access" CRS is one that does not have its own database and which can function as a CRS only by giving subscribers direct access to various air carrier CRS displays through a common switching centre and/or interface. Because of the manner in which it operates, a system vendor could have difficulties in complying with certain provisions of the Code, including those governing information displays. In some cases, these difficulties could only be overcome at great financial cost or even by replacing the entire system. This type of CRS in fact is rapidly being replaced by other types in many countries and, as a result, only a small number of multi-access CRSs are expected to continue in operation in developing countries.

In order to allow these remaining multi-access CRSs to continue to operate in the short term, this clause enables a State that is a developing country to exempt any multi-access CRS from the listed provisions of the Code, if it considers that compliance would present significant and genuine technical difficulties. Any exemption may only be granted at the time that the State decides to follow the Code and must be made fully transparent nationally and to other States (in accordance with Article 3, clause a)).
Foreign System Vendors (clause b)

Article 3, clause d) requires that a State allow foreign system vendors (from other States following the Code) to provide their services in its territory. Since most existing and planned CRSs are owned or controlled by air carriers from developed countries, this requirement could have a far-reaching impact in some developing countries.

The development of a CRS is an immensely capital-intensive activity, one that is well beyond the reach of air carriers in most individual States, especially those of the developing world. At the present time, very few air carriers from developing countries have an ownership or controlling interest in any CRS (the removal of regulatory obstacles to part-ownership called for in Article 3, clause c) may help in this regard). A significant number of such carriers, notably from Africa and Latin America, are operating or plan to operate the Gabriel Extended Travel Service (GETS) CRS launched by Société Internationale de Télécommunications Aéronautiques (SITA) in 1989. Thus the CRS industry in developing countries is still in its infancy. Understandably, therefore, some of the States concerned are hesitant about allowing competition from foreign system vendors at a time when their local systems have yet to obtain the "critical mass" required to ensure their survival.

In developing countries where there are no plans to own or operate a local CRS, the prospect of a foreign system vendor being given free access to the national market may still be a cause for concern. Even if the foreign CRS complies fully with the Code, the carrier(s) that own or control that CRS may gain certain advantages, perhaps to the detriment of the national carrier of the developing country with which they may be competing.

In order to meet the concerns of some developing countries in this regard, this clause enables a State that is a developing country to delay approval of operations in its territory by a foreign CRS, until completion of the Council's review of the Code. However, any State wishing to invoke such a delay must be prepared to provide an ample demonstration to the intended entrant (and, upon request, to the State of domicile of the vendor) that there is an overriding national development-related need for such a delay. It is therefore envisaged that this is more likely to occur in those States designated as "least developed countries" and is unlikely to happen in the newly-industrialised countries.

Before invoking such a delay in the case of a carrier-owned system, a State should take into consideration the likely impact on the carrier(s) concerned. If the carrier operates services to or from the State's territory, it may be able to claim that the delay adversely affects its ability to market its services, thereby infringing rights granted in a bilateral air services agreement. However, in these circumstances, the foreign carrier would have the assurance that the local CRS (if one existed) would comply with the Code.

Before invoking such a delay, a State should also take into consideration that the benefits of competition between system vendors will be lost and that this may have a negative impact on the CRS services available to subscribers in its territory and, ultimately, on the quality of information given to air transport users.

- END -
Accordingly, the Department of Transportation is revising 14 CFR part 255 to read as follows:

PART 255—CARRIER-OWNED COMPUTER RESERVATION SYSTEMS

255.1 Purpose.
255.2 Applicability.
255.3 Definitions.
255.4 Display of information.
255.5 Defaults and service enhancements.
255.6 Contracts with participating carriers.
255.7 System owner participation in other systems.
255.8 Contracts with subscribers.
255.9 Use of third-party hardware, software, and data bases.
255.10 Marketing and booking information.
255.11 Exceptions.
255.12 Termination.


§ 255.1 Purpose

(a) The purpose of this part is to set forth requirements for the operation by air carriers and their affiliates of computer reservations systems used by travel agents so as to prevent unfair, deceptive, predatory, and anticompetitive practices in air transportation.

(b) Nothing in this part operates to exempt any person from the operation of the antitrust laws set forth in subsection (a) of the first section of the Clayton Act (15 U.S.C. 12).

§ 255.2 Applicability

This rule applies to air carriers and foreign air carriers that themselves or through an affiliate own, control, operate, or market computerized reservations systems for travel agents in the United States, and to the sale in the United States of interstate, overseas, and foreign air transportation and of other airline services through such systems. Each carrier that owns, controls, operates, or markets a system shall ensure that the system's operations comply with the requirements of this part.

§ 255.3 Definitions

Affiliate means any person controlling, owned by, controlled by, or under common control with another carrier. Availability means information provided in displays with respect to the seats carrier holds out as available for sale on a particular flight.

Carrier means any air carrier or foreign air carrier, and any commuter air carrier, as defined in 49 U.S.C. 1301(3), 49 U.S.C. 1301(22), and 14 C.F.R. 298.2(f), respectively, that is engaged directly in the operation of aircraft in passenger air transportation.

Discriminate, discrimination and discriminatory mean, respectively, to discriminate unjustly, unjust discrimination, and unjustly discriminatory.

Display means that system's presentation of carrier schedules, fares, rules or availability to a subscriber by means of a computer terminal.

Integrated display means any display that includes the schedules, fares, rules, or availability of all or a significant proportion of the system's participating carriers.

On-time performance code means a single-character code supplied by a carrier to the vendor in accordance with the provisions of 14 CFR part 234 that reflects the monthly on-time performance history of a non-stop flight or one-stop or multi-stop single plane operation held out by the carrier in a CRS.

Participating carrier means a carrier, including the systems owned, that has an agreement with the system for display of its schedules, fares, or seat availability, or for the making of reservations or issuance of tickets through a system.

Service enhancement means any product or service offered to subscribers or participating carriers in conjunction with the system other than the basic display of information on schedules, fares, rules, and availability, and the basic ability to make reservations or issue tickets for air transportation.

Subscriber means a ticket agent, as defined in 49 U.S.C. 1301(40), that holds itself out as a neutral source of information about, or tickets for, the air transportation industry that uses a system.

System means a computerized reservations system offered by a carrier or its affiliate to subscribers for use in the United States that contains information about schedules, fares, rules or availability of other carriers and provides subscribers with the ability to make reservations and to issue tickets, if

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1This information is reproduced from: United States Department of Transportation. (September 22 1992.). "Computer Reservations System (CRS) Regulations; Final Rule". Federal Register, 57(184): 14 CFR Part 255.
it charges any other carrier a fee for system services. System owner means a carrier that holds five percent or more of the equity of a system, that has one or more affiliates that hold such an equity interest, or that together with affiliates holds such an interest.

§ 255.4 Display of Information.

(a) All systems shall provide an integrated display that includes the schedules, fares, rules and availability of all participating carriers in accordance with the provisions of this section. This display shall be at least useful for subscribers, in terms of functions or enhancements offered on the basis with which such functions or enhancements can be performed or implemented, as any other displays maintained by the system vendor. No system shall make available to subscribers any integrated display unless that display complies with the requirements of this section.

(b) In ordering the information contained in an integrated display, systems shall not use any factors directly or indirectly relating to carrier identity.

(1) Systems may order the display of information on the basis of any service criteria that do not reflect carrier identity and that are consistently applied to all carriers, including each system owner, and to all markets.

(2) When a flight involves a change of aircraft at a point beyond the final destination, the display shall indicate that passengers on the flight will change from one aircraft to another.

(3) Each system shall provide to any person upon request the current criteria used in editing and ordering flights for the integrated displays and the weight given to each criterion and the specifications used by the system's programmers in constructing the algorithm.

(c) Systems shall not use any factors directly or indirectly relating to carrier identity in constructing the display of connecting flights in an integrated display.

(1) Systems shall select the connecting point (and double connect points) to be used in the construction of connecting flights for each city pair on the basis of service criteria that do not reflect carrier identity and that are applied consistently to all carriers, including each system owner, and to all markets.

(2) Systems shall select connecting flights for inclusion ("edit") on the basis of service criteria that do not reflect carrier identity and that are applied consistently to all carriers, including each system owner.

(3) Systems shall provide to any person upon request current information on:

(i) All connecting points and double connect points used for each market;
(ii) All criteria used to select connecting points and double connect points;
(iii) All criteria used to "edit" connecting flights; and
(iv) The weight given to each criterion on paragraphs (c)(3)(ii) and (iii) of this section.

(4) Participating carriers shall be entitled to request that a system use up to five connect points (and double connect points) in constructing connecting flights for the display of service in a market. The system may require participating carriers to use specified procedures for such requests, but no such procedures may be unreasonably burdensome, and any procedures required of participating carriers also must be used by any system owner when it requests or causes its system to use specific points as connect points (or double connect points).

(5) When a system selects connecting points and double connect points for use in constructing connecting flights it shall use at least fifteen points and, after September 15, 1993, six double connect points, for each city-pair, except that a system may select fewer such connect or double connect points for a city-pair where:

(i) Fewer than fifteen connecting points and six double connect points meet the service criteria described in paragraph (c)(1) of this section; and
(ii) The system has used all the points that meet those criteria, along with all additional connecting points and double connect points requested by the participating carriers.

(6) If a system selects connecting points for use in constructing connecting flights it shall use every point requested by itself or a participating carrier up to a maximum number of points that the system can use. The system may use fewer than all the connect points requested by itself and participating carriers to the extent that:

(i) Points requested by the system and participating carriers do not meet the service criteria described in paragraph (c)(1) of this section; and
(ii) The system has used all the points that meet those criteria.

(d) Each system shall apply the same standards of care and timeliness to loading information concerning participating carriers as it applies to the loading of its own information or the information of a system owner. No system owner may use procedures for providing information on its own services to its system that are not available to participating carriers. Each system shall provide to any person upon request all current data base update procedures and data formats.

(e) Systems shall use or display information concerning on-time performance of flights as follows.

(1) Within 10 days after receiving the information from participating carriers or third parties, each system shall include in all integrated schedule and availability displays the on-time performance code for each nonstop flight segment and one-stop or multi-stop single plane flight for which a participating carrier provides a code.

(2) A system shall not use on-time flight performance as a ranking factor in ordering information contained in an integrated display.

(f) Each participating carrier shall ensure that complete and accurate information is provided each system in a form such that the system is able to display its flights in accordance with this section.

(2) A system may make available to subscribers the internal reservations systems display of a system owner or other participating carrier, provided that all participating carriers are offered the ability to make their internal reservations displays available to subscribers, and provided further that a subscriber and its employees may see any such display only by requesting it for a specific transaction.

§ 255.5 Default and service enhancements.

(a) In the event that a system offers a service enhancement to a system owner or other participating carrier, it shall
offer the enhancement to all participating carriers on nondiscriminatory terms, except to the extent that such service enhancement is still in the development stage or that participation is not immediately feasible for technical reasons, in which event the system shall make it available to all participating carriers as soon as possible.

(b) After October 1, 1993, no system may create or maintain a default in any system feature that automatically prefers one or more system owners over other participating carriers.

§ 255.6 Contracts with participating carriers.

(a) No system may discriminate among participating carriers in the fees for participation in its system, or for system-related services. Differing fees to participating carriers for the same or similar levels of service shall be presumed to be discriminatory.

(b) No system may condition participation in its system on the purchase or sale of goods or services.

(c) Notwithstanding paragraph (b) of this section, a system may condition participation in its system in the United States on a participating carrier's agreement to participate in the system or affiliated systems in other countries, if the system and such affiliates agree that:

1. The display of services in such system and its affiliates will not use any factors related to carrier identity and
2. Any fees charged the carrier shall not be discriminatory.

(d) A system shall provide upon request to carriers current information on its fee levels and fee arrangements with other participating carriers. A system's bill to a participating carrier for any fee must contain adequate information and be on magnetic media so that the participating carrier can determine whether the bill is accurate. At a minimum, booking fee bills must include the following information for each segment: PNR record locator number, passenger name, booking status, agency ARC number, pseudo-city code, CRS transaction date, city-pair information, flight number, flight date, class of service, and type of CRS booking.

§ 255.7 System owner participation in other systems.

(a) Each system owner shall participate in each other system and each of its enhancements (to the extent that such owner participates in such an enhancement in its own system) if the other system offers commercially reasonable terms for such participation. Fees shall be presumed commercially reasonable if:

1. They do not exceed the fees charged by the system of such a system owner in the United States or
2. They do not exceed the fees being paid by such system owner to another system in the United States.

(b) Each system owner shall provide complete, timely, and accurate information on its airline schedules, fares, and seat availability to each other system in which it participates on the same basis and at the same time that it provides such information to the system that it owns, controls, markets, or is affiliated with. If a system owner offers a fare or service that is commonly available to subscribers to its own system, it must make that fare or service equally available for sale through each other system in which it participates.

§ 255.8 Contracts with subscribers.

(a) No subscriber contract may have a term in excess of five years. No system may offer a subscriber or potential subscriber a subscriber contract with a term in excess of three years unless the system simultaneously offer such subscriber or potential subscriber a subscriber contract with a term no longer than three years. No contract may contain any provision that extends the contract beyond its initial date of termination, whether because of the addition or deletion of equipment or because of some other event.

(b) No system may directly or indirectly impede a subscriber from obtaining or using any other system. Among other things, no subscriber contract or contract offer may require the subscriber to use the system for a minimum number of transactions, and no subscriber contract or contract offer may require the subscriber to lease a minimum number or ratio of system components based upon or related to:

1. The number of system components leased from another system vendor or
2. The volume of transactions conducted on any other system.

(c) No system owner may require use of its system by the subscriber in any sale of its air transportation services.

(d) No system owner may require that a travel agent use or subscribe to its system as a condition for the receipt of any commission for the sale of its air transportation services.

(e) No system may charge prices to subscribers conditioned in whole or in part on the identity of carriers whose flights are sold by the subscriber.

§ 255.9 Use of third-party hardware, software and databases.

(a) No system may prohibit or restrict, directly or indirectly, the use of:

1. Third-party computer hardware or software in conjunction with CRS services, except as necessary to protect the integrity of the system, or
2. A CRS terminal to access directly any other system or database providing information on airline services, unless the terminal is owned by the system.

(b) This section prohibits, among other things, a system's:

1. Imposition of fees in excess of commercially reasonable levels to certify third-party equipment;
2. Undue delays or redundant or unnecessary testing before certifying such equipment;
3. Refusal to provide any services normally provided subscribers because of a subscriber's use of third-party equipment or because of the subscriber's using the same equipment or because of the subscriber's using the same equipment (unless owned by the system) for access to both the system and to another system or database; and
4. Termination of a subscriber contract because of the subscriber's use of third-party equipment or use of the same equipment for access to the system and the other system or database.

(c) A system shall make available to third-party hardware and software on commercially reasonable terms the nonproprietary system architecture specifications and other nonproprietary technical information needed to enable such developers to create products that will be compatible with the system.

(d) Nothing in this section shall be construed to require any system or system owner to:
(1) Develop or supply any particular product, device, hardware or software to enable a subscriber to use another system, or
(2) Provide service or support with respect to any product, device, hardware, software, or service not provided to a subscriber by the system or system owner.

§ 255.10 Marketing and booking information.

(a) Each system shall make available to all US Participating carriers on nondiscriminatory terms all marketing, booking, and sales data relating to carriers that it elects to generate from its system. The data made available shall be as complete and accurate as the data provided a system owner.

(b) Each system shall make available to all foreign participating carriers on nondiscriminatory terms all marketing, booking, and sales data relating to bookings on international services that it elects to generate from the system, provided that no system may provide such data to a foreign carrier if the foreign carrier or an affiliate owns, operates, or controls a system in a foreign country, unless such carrier or system provides comparable data to all U.S. carriers on nondiscriminatory terms. Before a system provides such data to a foreign carrier, it shall give written notice to each of the U.S. participating carriers in its system that it will provide such data to such foreign carrier. The data made available by a system shall be as complete and accurate as the data provided a system owner.

(c) Any U.S. or foreign carrier receiving data on international bookings from a system must ensure that no one has access to the data except its own personnel and the personnel of any outside firm used for processing the data on its behalf, except to the extent that the system or a system owner provides such access to other persons.

§ 255.11 Exceptions.

(a) The obligations of a system vendor under §255.4 shall not apply with respect to a carrier that refuses to enter into a contract that complies with this part or fails to pay a nondiscriminatory fee. A system shall apply its policy concerning non-paying carriers on a uniform basis to all such carriers, and shall not receive payment from any carrier for system-related services unless such payments are made pursuant to a contract complying with this part.

(b) The obligations of a system under this part shall not apply to any foreign carrier that operates or whose affiliate operates an airline computer reservations system for travel agents outside the United States, if that system discriminates against the display of flights of any United States carrier or imposes discriminatory terms for participation by any United States carrier in its computer reservations system, provided that a system must continue complying with its obligations under this part until 14 days after it has given the Department and such foreign carrier written notice of its intent to deny such foreign carrier any or all of the protections of this part.

§ 255.12 Termination.

Unless extended by a document published in the Federal Register, these rules shall terminate on December 31, 1997.

Issued in Washington, DC on September 15 1992.

Andrew H. Card, Jr.,
Secretary of Transportation.

[FR Doc. 92-22773 Filed 9-16-92; 4:03 pm]

BILLING CODE 4910-62-M
Appendix 8

Canadian Competition Tribunal CRS Rules

COMPETITION TRIBUNAL

The Director of Investigation and Research

v.

Air Canada et al.

COMPUTER RESERVATION SYSTEM RULES

1. Definitions

(a) "Affiliate" means any person owned by, controlled by, or under common control with a carrier.

(b) "Availability" means information provided in display with respect to the seats a carrier holds out as available for sale on a particular flight.

(c) "Carrier" means any air carrier that is engaged directly in the operation of aircraft in passenger air transportation within, to or from Canada.

(d) "Discriminate", "discrimination", and "discriminatory" mean, respectively, to discriminate unjustly, unjust discrimination and unjustly discriminatory.

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1 Reproduced from the text accompanying: The Director of Investigation and Research v Air Canada et al., (1989), Competition Tribunal consent order, CT 88/1.
(e) "Display" means the system's presentation of carrier schedule, fares, rules or availability to a subscriber by means of a computer terminal.

(f) "Owing carrier" means any carrier that has directly or indirectly at least a 20 per cent ownership interest in a system or a system vendor.

(g) "Participating carrier" means a carrier, including a hosted carrier, that has an agreement or an arrangement with a system vendor for display of its flight schedules, fares, or seat availability, or for the making of reservations or issuance of tickets through a system. For greater certainty, a system vendor that is a carrier or an owning carrier of a system vendor shall be considered as a participating carrier with respect to that system vendor.

(h) "Primary display" means and display presented by a system vendor to comply with section 4.

(i) "Service enhancement" means any product or service offered to subscribers or passengers by a system vendor in conjunction with a system other than the display of information on schedules, fares, rules and availability, and the ability to make reservations or to issue tickets for air transportation.
(j) "Subscriber" means a travel agent or other person that holds itself out as a neutral source of information about, or tickets for, the air transportation industry and that uses a system.

(i) "System" means a computerized airline reservation system offered by a system vendor to subscribers for use in Canada that contains information about schedules, fares, rules or availability of carriers and that provides subscribers with the ability to make reservations and to issue tickets.

(l) "System vendor" means any entity that owns, controls, or operates a system.

2. **Purpose**

   (a) The purpose of these Rules is to set forth requirements for operation by system vendors of computer reservation systems used by subscribers so as to prevent unfair, deceptive, predatory and anti-competitive practices in air transportation and in the provision to subscribers of systems and services through such systems. These Rules shall not apply to agreements or arrangements between hosted carriers and system vendors for non-system related services.

   (b) Nothing in these Rules operates to exempt any person from the operation of the *Competition Act*, R.S.C., 1985, c. C-34, as amended (the "*Competition Act*").
3. **Applicability**

These Rules apply in Canada to carriers and system vendors where so ordered by the Competition Tribunal or where the agree by contract to be bound by the Rules.

4. **Display of Information**

(a) The system shall provide a primary display or primary displays that include the schedules, fares, rules and availability of all carriers in accordance with the provisions of this section. Primary displays shall be as useful for subscribers, in terms of functions or enhancements offered, and the case with which such function or enhancements can be performed or implemented, as any other displays maintained by the system vendor. The system vendor shall make the primary display available for each transaction so that subscribers must enter a request specific to that transaction for a display other than the primary display to be made available. For greater certainty, a secondary display can be requested for each transaction without a primary display being called up.

(b) In ordering information contained in a primary display, the system vendor shall not use any factors directly or indirectly relating to carrier identity.
(1) The system vendor may order the display of information on the basis of any service criteria that do not reflect carrier identity and that are consistently applied to all carriers and to all markets.

(2) The system vendor shall provide to any person upon request the current criteria used in ordering flights for the primary displays and the weight given to each criterion.

(c) The system vendor shall not use any factors directly or indirectly relating to carrier identity in constructing the primary displays of connecting flights.

(1) The system vendor may select the connecting points to be used in the construction of connecting flights for each city-pair on the basis of any service identity and that are applied consistently to all carriers and to all markets.

(2) The system vendor may select connecting flights for inclusion ("edit") on the basis of service criteria that do not reflect carrier identity and that are applied consistently to all carriers.

(3) The system vendor shall provide upon request to all subscribers and participating carriers current information on:
(i) all connecting points used for each market;
(ii) all criteria used to select connecting points;
(iii) all criteria used to "edit" connecting flights;
and
(iv) the weight given to each criterion in (ii) and (iii)
above.

(4) If the system vendor selects connecting points for use
in constructing connecting flights, it shall use at least nine points for each
city-pair, except that the vendor may select fewer than nine such connecting
points for a city-pair where:

(i) fewer than nine connecting points meet
the service criteria described in
paragraph (c) (1) of this section; and
(ii) the vendor has used all the points that
meet those additional criteria, along with
all additional points requested by
participating carriers.

(d) The system vendor shall apply the same standards of
care and timeliness to loading the information of each and every
participating carrier.
(1) If the system vendor provides special loading capability to any participating carrier, it shall offer the same capability to all participating carriers as soon as technically feasible.

(2) The system vendor shall provide upon request to all participating carriers all current data base update procedures and data formats.

5. **Contracts with Participating Carriers**

(a) The system vendor shall not discriminate among participating carriers in the fees for participation in its system, or for system-related services. Differing fees to participating carriers for the same or similar levels of service shall be presumed to be discriminatory. This Rule shall not apply in respect of fees charged to non-owing carriers pursuant to contracts in existence as of April 1, 1989.

(b) The system vendor shall not condition participation in its system on the purchase or sale of any other goods or services.

(c) The system vendor shall provide upon request to carriers current information on its fee levels and fee arrangements with participating carriers.
(d) The system vendor shall not discriminate in providing access to the system to any carrier willing to pay the non-discriminatory fee and comply with the system vendor's customary terms.

6. **Contracts with Subscribers**

(a) No new or renewed subscriber contracts shall have a term in excess of three years. As at the date these Rules become applicable to the system vendor, the system vendor shall not enforce an unexpired term in excess of three years in its existing subscriber contracts.

(b) Neither the system vendor nor its owning carrier(s) shall directly or indirectly prohibit a subscriber from obtaining or using any other system.

(c) No carrier shall require use of any system by the subscriber in any sale of its air transportation services.

(d) The owning carrier(s) shall not directly or indirectly require a subscriber or potential subscriber to use the system in which it has an ownership interest as a condition for the receipt of any commission or other incentive for the sale of or access to air transportation services of it or of its carrier affiliates.
(e) The system vendor shall not charge prices to subscribers conditioned in whole or in part on the identity of carriers whose flights are sold by the subscriber.

(f) The system vendor shall not include as part of its contract with subscribers any rollover provisions, including any provision that by its terms require the automatic extension of the contract beyond the stated date of termination because of the addition or deletion of equipment.

(g) The system vendor shall not include liquidated damage clauses based on segment bookings or airline revenues as part of its new or renewed subscriber contracts. As of the date these Rules become applicable to the system vendor, the system vendor shall not enforce such liquidated damage clauses in its existing subscriber contracts.

7. **Access to Airline Information**

The owning carrier(s) shall provide complete, timely and accurate information concerning their airline schedules, fares, fare rules and seat availability by class to all systems operating subscriber locations in Canada, either directly or through carrier-supported central agencies such as the Air Tariff Publishing Company ("ATP") and the Official Airline Guide ("OAG"), on the same basis and at the same time as such information is provided to the system or system vendor owned by such carriers. In
particular, in no circumstances shall information concerning any restricted or special classes of seats or fares on the owning carrier(s) available through the system or system vendor owned by such carriers be withheld from any other system operating subscriber locations in Canada.

8. **Service Enhancement**

(a) In the event that the system vendor offers a service enhancement to any participating carrier, it shall offer it to all participating carriers on non-discriminatory terms, subject to technical limitations of the participating carrier.

(b) Subject to technological limitations and on commercially reasonable terms, the system vendor shall make available to its subscribers and all system enhancements which are made available to the system vendor by carriers participating in it.

9. **Marketing Information**

The system vendor shall make available to all participating carriers on non-discriminatory terms all non-carrier-specific marketing, booking and sales data that it elects to generate from its system.
10. **Ticketing**

The owning carrier(s) shall, without discrimination, allow any system vendor in whose system it participates to issue tickets if:

(a) the system vendor agrees to issue such tickets on terms and conditions that are commercially reasonable and non-discriminatory; and

(b) such tickets are issued by the system vendor in accordance with industry standards;

except that this obligation shall not apply in respect of a system vendor whose owning carrier(s) discriminates among system vendors in respect of the issuance of its tickets.

11. **Exceptions**

(a) The obligations of the system vendor under section 4 shall not apply with respect to a carrier that refuses to enter into a contract that complies with these Rules or fails to pay a non-discriminatory fee. The system vendor shall apply its policy concerning treatment of non-paying carriers on a uniform basis to all such carriers, and shall not receive
payment from any carrier for system-related services unless such payments are made pursuant to a contract complying with these Rules.

(b) The obligations of the system vendor under section 4 shall not apply to any foreign air carrier that operates or whose affiliate operates an airline computer reservation system for travel agents outside Canada that does not display the flights of all Canadian carriers equally with the flights of the foreign carrier.

12. **Enforcement**

Nothing in this Rule is intended to restrict the right of the parties to any link contracts to pursue injunctive or monetary relief in courts of competent jurisdiction, or through binding arbitration with the agreement of the parties, for breach of the terms of the contracts including breach of these Rules, provided that no such action be commenced without prior written notification to the Director of Investigation and Research under the *Competition Act* (the Director).

13. The system vendor shall provide to all its subscribers before entering into a contract or renewal thereof a copy of these Rules. On or before February 1st of each year the President or Chief Executive Officer of the system vendor shall provide the Director with a letter indicating that this provision has been complied with.
14. The owning carrier(s) shall indicate in writing to all travel agents who sell their products at least once each year that it is the policy of the owning carrier(s) that airline promotions and incentives to travel agents are not conditional upon the use of a particular CRS system.

15. An officer of the owning carrier and the system vendor shall provide a report to the Director on or before February 1st of each year indicating that the owning carrier(s) and system vendor have complied with these Rule in the prior year. The report shall include a schedule which indicates any period in which any direct access link between the data bases of the owning carrier(s) and system vendors operating in Canada were non-operational and provide an explanation of each such non-operation.
Appendix 9

Commission of the European Community 1989 Code of Conduct and Explanatory Note

COUNCIL REGULATION (ECC) No 2299/89
of 24 July 1989
on a code of conduct for computerized reservation systems

THE COUNCIL OF THE EUROPEAN COMMUNITIES.

Having regard to the Treaty establishing the European Economic Community, and in particular Article 84 (2) thereof,

Having regard to the proposal from the Commission.

Having regard to the opinion of the European Parliament.

Having regard to the opinion of the Economic and Social Committee.

Whereas the bulk of airline reservations are made through computerized reservation systems;

Whereas such systems can, if properly used, provide an important and useful service to air carriers, travel agents and the travelling public by affording easy access to up-to-date and accurate information on flights, fares and seat availability, making reservations and, in some cases, issuing tickets and boarding passes;

Whereas abuses in the form of denial of access to the systems or discrimination in the provision, loading or display of data or unreasonable conditions imposed on participants of subscribers can seriously disadvantage air carriers, travel agents and ultimately consumers;

Whereas this Regulation is without prejudice to the application of Articles 85 and 86 of the Treaty;

Whereas Commission Regulation (EEC) No 2672/88 exempts for the provisions of Article 85(1) of the Treaty agreements for the common purchase, development and operation of computerized reservation systems;

Whereas a mandatory code of conduct applicable to all computerized reservation systems and/or distribution facilities offered for use and/or used in the Community could ensure that such systems are used in a non-discriminatory and transparent way, subject to certain safeguards, so avoiding their misuse while reinforcing undistorted competition between air carriers and between computerized reservation systems and thereby protecting the interests of consumers;

Whereas it would not be appropriate to impose obligations on a computerized reservation system vendor or on a parent or participating carrier in respect of an air carrier of a third country which, alone or jointly with others, owns and/or controls another such system which does not conform with this code or offer equivalent treatment;

Whereas a complaints investigation and enforcement procedure for non-compliance with such a code is desirable,

HAS ADOPTED THIS REGULATION:

Article 1

This Regulation shall apply to computerized reservation systems (CRSs) when offered for use and/or used in the territory of the Community for the distribution and sale of air transport products irrespective of:
— the status or nationality of the system vendor,
— the source of the information used or the location of the relevant central data processing unit,
— the geographical location of the air transport product concerned.

Article 2

For the purpose of this Regulation:

(a) 'air transport product' shall mean a scheduled passenger air service, including any related ancillary services and additional benefits offered for sale and/or sold as an integral part of the air service;

(b) 'computerized reservation system (CRS) shall mean a computerized system containing information about, inter alia, air carriers' schedules,

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availability,
- fares, and
- related services
  with or without facilities through which
- reservations can be made or
- tickets may be issued
to the extent that some or all of these services are made available to subscribers;

(c) 'distribution facilities' shall mean facilities provided by a system vendor to a subscriber or consumer for the provision of information about air carriers' schedules, availability, fares and relates services and for making reservations and/or issuing tickets, and for any other related services;

(d) 'system vendor' shall mean any entity and its affiliates which are responsible for the operation or marketing of a CRS;

(e) 'parent carrier' shall mean an air carrier which is a system vendor or which directly or indirectly, alone or jointly with others, owns or controls a system vendor;

(f) 'participating carrier' shall mean an air carrier which has an agreement with a system vendor for the distribution of its air transport products through a CRS. To the extent that a parent carrier uses the distribution facilities of its own CRS, it shall be considered a participating carrier;

(g) 'subscriber' shall mean a person or an undertaking, other than a participating carrier, using under contract or other arrangement with a system vendor a CRS for the sale of air transport products directly to individual members of the public;

(h) 'consumer' shall mean any person seeking information about and/or intending to purchase an air transport product;

(i) 'principal display' shall mean a comprehensive neutral display of data concerning services between city pairs, within a specified time period, containing inter alia all direct flights by participating carriers;

(j) 'elapsed journey time' shall mean the time difference between scheduled departure and arrival time;

(k) 'service enhancement' shall mean any product or service offered by a system vendor on its own behalf to subscribers or consumers in conjunction with a CRS other than distribution facilities;

(l) 'scheduled air service' shall mean a series of flights each possessing all the following characteristics:
- it is performed by aircraft for the transport of passengers or passengers and cargo and/or mail for remuneration, in such a manner than on each flight seats are available for individual purchase by members of the public (either directly from the air carrier or from its authorized agents),
- it is operated so as to serve traffic between the same two or more points, either:
  1. according to a published timetable; or
  2. with flights so regular or frequent that they constitute a recognizably systematic series.

Article 3

1. A system vendor offering distribution facilities in respect of scheduled passenger air services shall allow any air carrier the opportunity to participate, on an equal and non-discriminatory basis, in these facilities within the available capacity of the system concerned, subject to any technical constraints outside the control of the system vendor.

2. (a) A system vendor shall not
- attach unreasonable conditions to any contract with a participating carrier,
- require the acceptance of supplementary conditions which, by their nature or according to commercial usage, have no connection with participation in its CRS and shall apply the same conditions for the same level of service.

(b) A system vendor shall not make it a condition of participation in its CRS that a participating carrier may not at the same time be a participant in another system.

(c) A participating carrier shall have the right to terminate his contract with a system vendor without penalty on giving notice which need not exceed six months, to expire no earlier than the end of the first year.

3. Loading and processing facilities provided by the system vendor shall be offered to all participating carriers without discrimination.

4. If the system vendor adds any improvement to the distribution facilities provided or the equipment used in the provision of the facilities, it shall offer these improvements to all participating carriers on the same terms and conditions, subject to current technical limitations.

Article 4

1. Participating carriers and others providing material for inclusion in a CRS shall ensure that the data submitted are comprehensive, accurate, non-misleading and transparent.

2. A system vendor shall not manipulate the material referred to in paragraph 1 in a manner that would lead to
inaccurate, misleading or discriminatory information being provided.

3. A system vendor shall load and process data provided by participating carriers with equal care and timeliness, subject to the constraints of the loading method selected by individual participating carriers and to the standard formats used by the said vendor.

Article 5

1. A system vendor shall provide a principal display and shall include therein data provided by participating carriers on schedules, fares and seats available for individual purchase in a clear and comprehensive manner and without discrimination or bias, in particular as regards the order in which information is presented.

2. A system vendor shall not intentionally or negligently display inaccurate or misleading information and, subject to Article 9 (5), in particular:

— the criteria to be used for ranking information shall not be based on any factor directly or indirectly relating to carrier identity and shall be applied on a non-discriminatory basis to all participating carriers

— no discrimination on the basis of different airports serving the same city shall be exercised in constructing and selecting city-pairs.

3. Ranking of flight options in the principal display, for the day or days requested, shall be as set out in the Annex unless requested in a different way by a consumer for an individual transaction.

Article 6

A system vendor shall provide information, statistical or otherwise, generated by its CRS, other than that offered as an integral part of the distribution facilities, only as follows:

(a) information concerning individual bookings shall be made available on an equal basis to the air carrier or air carriers participating in the service covered by the booking;

(b) information in aggregate or anonymous form when made available on request to any air carrier shall be offered to all participating air carriers on a non-discriminatory basis;

(c) other information generated by the CRS shall be made available with the consent of the air carrier concerned and subject to any agreement between a system vendor and participating carriers;

(d) personal information concerning a consumer and generated by a travel agent shall be made available to others not involved in the transaction only with the consent of the consumer.

Article 7

1. The obligations of a system vendor under Articles 3 to 6 shall not apply in respect of a parent carrier of a third country to the extent that its CRS does not conform with this Regulation or does not offer Community air carriers equivalent treatment to that provided under this Regulation.

2. The obligations of parent and participating carriers under Article 8 shall not apply in respect of a CRS controlled by air carriers of a third country to the extent that a parent or participating carrier is not accorded equivalent treatment in that country to that provided under this Regulation and under Commission Regulation (EEC) No 2672/88.

3. A system vendor or an air carrier proposing to avail itself of the provisions of paragraphs 1 or 2 must notify the Commission of its intentions and the reasons therefor at least 14 days in advance of such action. In exceptional circumstances, the Commission may, at the request of the vendor or the air carrier concerned, grant a waiver from the 14-day rule.

4. Upon receipt of a notification, the Commission shall without delay determine whether discrimination within the meaning of paragraphs 1 and 2 exists. If this is found to be the case, the Commission shall so inform all system vendors or the air carriers concerned in the Community as well as Member States. If discrimination within the meaning of paragraph 1 or 2 does not exist, the Commission shall so inform the system vendor or air carriers concerned.

Article 8

1. A parent or participating carrier shall not link the use of any specific CRS by a subscriber with the receipt of any commission or other incentive for the sale of or issue of tickets for any of its air transport products.

2. A parent or participating carrier shall not require use of any specific CRS by a subscriber for any sale or issue of tickets for any air transport products provided either directly or indirectly by itself.

3. Paragraphs 1 and 2 shall be without prejudice to any condition which an air carrier may require of a travel agent when authorizing it to sell and issue tickets for its air transport products.

Article 9

1. A system vendor shall make any of the distribution facilities of a CRS available to any subscriber on a non-discriminatory basis.

2. A system vendor shall not require a subscriber to sign an exclusive contract, nor directly or indirectly prevent a subscriber from subscribing to, or using, any other system or systems.
3. A service enhancement offered to any other subscriber shall be offered by the system vendor to all subscribers on a non-discriminatory basis.

4. A system vendor shall not attach unreasonable conditions to any contract with a subscriber and, in particular, a subscriber may terminate his contract with a system vendor, without penalty, on giving notice which need not exceed three months to expire no earlier than the end of the first year.

5. A system vendor shall ensure, either through technical means or through the contract with the subscriber, that the principal display is provided for each individual transaction and that the subscriber does not manipulate material supplied by CRs in a manner that would lead to inaccurate, misleading or discriminatory presentation of information to consumers. However, for any one transaction a subscriber may re-order data or use alternative displays to meet a preference expressed by a consumer.

6. A system vendor shall not impose any obligation on a subscriber to accept an offer of technical equipment, but may require the use of equipment compatible with its own system.

Article 10

1. Any fee charged by a system vendor shall be non-discriminatory and reasonably related to the cost of the service provided and used, and shall, in particular, be the same for the same level of service.

2. A system vendor shall, on request, provide to interested parties details of current procedures, fees, systems, facilities, editing and display criteria used. However, this provision does not oblige a system vendor to disclose proprietary information such as software programmes.

3. Any changes to fee levels, conditions or facilities offered and the basis thereof shall be communicated to all participating carriers and subscribers on a non-discriminatory basis.

Article 11

1. Acting on receipt of a complaint or on its own initiative, the Commission shall initiate procedures to terminate infringement of the provisions of this Regulation.

2. Complaints may be submitted by:

(a) Member States;

(b) natural or legal persons who claim a legitimate interest.

3. The Commission shall immediately forward to the Member States copies of the complaints and applications and of all relevant documents sent to it or which it sends out in the course of such procedures.

Article 12

1. In carrying out the duties assigned to it by this Regulation, the Commission may obtain all necessary information from the Member States and from undertakings and associations of undertakings.

2. The Commission may fix a time limit of not less than one month for the communication of the information requested.

3. When sending a request for information to an undertaking or association of undertakings, the Commission shall forward a copy of the request at the same time to the Member State in whose territory the head office of the undertaking or association of undertakings is situated.

4. In its request, the Commission shall state the legal basis and purpose of the request and also the penalties for supplying incorrect information provided for in Article 16 (1).

5. The owners of the undertakings or their representatives and, in the case of legal persons or of companies, firms or associations not having legal personality, the person authorized to represent them by law or by their rules shall be bound to supply the information requested.

Article 13

1. In carrying out the duties assigned to it by this Regulation, the Commission may undertake all necessary investigations into undertakings and associations of undertakings. To this end, officials authorized by the Commission shall be empowered:

(a) to examine the books and other business records;

(b) to take copies of, or extracts from, the books and business records;

(c) to ask for oral explanations on the spot;

(d) to enter any premises, land and vehicles used by undertakings or associations of undertakings.

2. The authorized officials of the Commission shall exercise their powers upon production of an authorization in writing specifying the subject matter and purpose of the investigation and the penalties provided for in Article 16(1) in cases where production of the required books or other business records is incomplete. In good time before the investigation, the Commission shall inform the Member State, in whose territory the same is to be made, of the investigation and the identity of the authorized officials.

3. Undertakings and associations of undertakings shall submit to investigations ordered by decision of the Commission. The decision shall specify the subject matter
and purpose of the investigation, appoint the date on which it is to begin and indicate the penalties provided for in Article 16(1) and the right to have the decision reviewed in the Court of Justice.

4. The Commission shall take the decisions mentioned in paragraph 3 after consultation with the Member State in the territory of which the investigation is to be made.

5. Officials of the Member State in the territory of which investigation is to be made may assist the Commission officials in carrying out their duties, at the request of the Member State or of the Commission.

6. Where an undertaking opposes an investigation ordered pursuant to this Article, the Member State concerned shall afford the necessary assistance to the officials authorized by the Commission to enable them to make their investigation.

Article 14

1. Information acquired as a result of the application of Articles 12 and 13 shall be used only for the purposes of the relevant request or investigation.

2. Without prejudice to Articles 11 and 20, the Commission and the competent authorities of the Member States, their officials and other servants shall not disclose information of a kind covered by the obligation of professional secrecy which has been acquired by them as a result of the application of this Regulation.

3. Paragraphs 1 and 2 shall not prevent publication of general information or of surveys which do not contain information relating to particular undertakings or associations of undertakings.

Article 15

1. When an undertaking or association of undertakings does not supply the information requested within the time limit fixed by the Commission or supplies incomplete information, the Commission shall by decision require the information to be supplied. The decision shall specify what information is required, fix an appropriate time limit within which it is to be supplied and indicate the penalties provided for in Article 16(1) as well as the right to have the decision reviewed by the Court of Justice.

2. At the same time the Commission shall send a copy of its decision to the competent authority of the Member State in the territory of which the head office of the undertaking or association of undertakings is situated.

Article 16

1. The Commission may, by decision, impose fines on undertakings or associations of undertakings from ECU 1,000 to 50,000 where, intentionally or negligently:

(a) they supply incorrect information in response to a request made pursuant to Article 12 or do not supply information within the time limit fixed;

(b) They produce the required books or other business records in incomplete form during investigations or refuse to submit to an investigation pursuant to Article 13(1).

2. The Commission may, by decision, impose fines on system vendors, parent carriers, participating carriers and/or subscribers for infringements of this Regulation up to a maximum of 10% of the annual turnover for the relevant activity of the undertaking concerned.

In fixing the amount of the fine, regard shall be had both to the seriousness and to the duration of the infringement.

3. Decisions taken pursuant to paragraphs 1 and 2 shall not be of a penal nature.

Article 17

The Court of Justice shall have unlimited jurisdiction within the meaning of Article 172 of the Treaty to review decisions whereby the Commission has imposed a fine, it may cancel, reduce or increase the fine.

Article 18

For the purposes of applying Article 16, the ECU shall be that adopted in drawing up the general budget of the European Communities in accordance with Articles 207 and 209 of the Treaty.

Article 19

1. Before taking decisions as provided for in Article 16, the Commission shall give the undertakings or associations of undertakings concerned the opportunity of being heard on the matters to which the Commission takes, or has taken, objection.

2. Should the Commission or the competent authorities of the Member States consider it necessary, they may also hear other natural or legal persons. Applications by such persons to be heard shall be granted when they show a sufficient interest.

Article 20

1. The Commission shall publish the decisions which it adopts pursuant to Article 16.

2. Such publication shall state the names of the parties and the main content of the decision; it shall have regard to the legitimate interest of undertakings in the protection of their business secrets.
Article 21

1. This Regulation shall apply from 1 August 1989 to all CRSs for scheduled passenger air services.

2. Notwithstanding paragraph 1, Articles 5(3) and 9(5) shall not apply until 1 January 1990 to CRSs which have established their central administration and their principal place of business in the Community before 1 August 1989. The Commission may grant a further 12 months’ waiver to CRSs which for technical reasons are unable to comply with these provisions by 1 January 1990.

This Regulation shall be without prejudice to national legislation on security, public order and data protection.

Article 23

The Council shall decide on the revision of this Regulation by 31 December 1992, on the basis of a Commission proposal to be submitted by 31 March 1992 accompanied by a report on the application of this Regulation.

This Regulation shall be binding in its entirety and directly applicable in all Member States.


For the Council
The President
H. NALLET
ANNEX

RANKING CRITERIA

General criteria

1. A principal display shall, wherever practicable, include connecting flights of participating carriers constructed by using a minimum number of nine connecting points. A participating carrier may request the inclusion of an indirect service unless the routing is in excess of 130% of the great circle distance between the two airports. Connecting points with routings in excess of 130% need not be used.

2. A system vendor shall not use the screen space in its principal displays in a manner which gives excessive exposure to one particular travel option or which displays unrealistic travel options.

3. Where a system vendor chooses to display information for any city-pair in relation to the schedules or fares of non-participating carriers, such information shall be displayed in an accurate, non-misleading and non-discriminatory manner as between those carriers displayed.

4. If information as to the number of direct air services and the identity of the air carriers concerned is not comprehensive, this shall be clearly stated on the relevant display.

Criteria for scheduled air services

1. Ranking of flight options in principal displays for scheduled air services, for the day or days requested, shall be in the following order unless requested in a different way by a consumer for an individual transaction:
   (i) all non-stop direct flights between the city-pairs concerned;
   (ii) other direct flights, not involving a change of aircraft, between the city-pairs concerned;
   (iii) connecting flights.

   A consumer shall at least be afforded the possibility of requesting the principal display ranked by departure or arrival time and/or elapsed journey time. Unless a consumer preference is expressed, a principal display shall be ranked by departure time for group (i) and elapsed journey time for groups (ii) and (iii).

2. Scheduled flights involving stops en route, change of aircraft, change of airport and/or code-sharing shall be clearly identified. Code-sharing flights shall be treated as connecting flights.
Explanatory note on the EEC code of conduct for computer reservation systems

(90/C 184/02)

1. Introduction

During the first few months of the implementation phase of Regulation (EEC) No 2299/89 on a code of conduct for computerized reservation systems a number of questions have been raised on the way in which the provisions of the code have to be applied in practical terms with respect to the programming and operation of systems. The resulting clarification would seem to be of interest to system vendors in general since it would give some guidelines in particular to the programming by the system vendors. However, the solutions outlined may not be exhaustive and other approaches may in some instances comply with the provisions of the Annex. Furthermore, other elements in a total system may well influence unfavourably solutions which otherwise would be acceptable. The Commission, therefore, must reserve to itself the possibility of examining any system in its totality with a view to assessing its total compatibility with the code of conduct. It is important, therefore, that the Commission is kept up to date with the problems and the solutions found to them in the application of the code of conduct.

Reference is made to the block exemption Regulation on the application of Article 85(3) of the EEC Treaty to certain categories of agreements between undertakings relating to computer reservation systems for air transport services.

2. Existing contracts

Existing contracts with air carriers, travel agents and subscribers may not be fully in compliance with the code. How should they be treated?

Since the code of conduct is a Regulation and directly legally binding in the Community, all relevant contracts will have to be brought in line with the provisions of the code. This does not essentially mean a renegotiation of these contracts. An additional clause to the contract sent by the system vendors to the other contracting parties, referring to the direct applicability of the code of conduct and indicating the way in which certain clauses of the contracts would consequently have to be understood, is sufficient to bring all contracting parties up to date with the effects of the code on their contractual situation.

It goes without saying that the abovementioned procedure can only be followed for amendments to those provisions in the contracts which are in contravention of the code of conduct.

3. Responsibility for Information

According to Article 4(1) participating carriers and other providers of information (e.g. OAG or ABC) are responsible for the quality of the information. The system vendors might, in their contracts with information suppliers, adopt a clause in this respect.

It is, for example, the responsibility of participating carriers and others to ensure that system vendors can recognize and consequently indicate that there is a change of aircraft and not just a stop en route (otherwise a connecting flight might be displayed as an indirect flight).

This would mean that participating carriers and others are responsible for the submission of data in such a way that the system vendors are given sufficient information to enable them to rank the services in accordance with the requirements of the code.

If a system vendor is aware or should be aware of inaccurate or misleading information, Article 5(2) of the code of conduct comes into play.

The system vendor should ensure that the information concerning direct flights of participating carriers is comprehensive. If schedules of non-participating carriers are not displayed and it can be reasonably expected that the system vendor is aware that services of non-participating carriers on the requested route exist (that is the case when these flights are mentioned in ABC/OAG guides), then this must be clearly indicated. A general statement is not sufficient; specific messages should be displayed wherever this is the case.

4. Secondary displays

The code applies primarily to principal displays. However, the responsibility of system vendors, in respect of displays, is not limited to principal displays. In particular Article 4(2) applies to secondary displays.

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5. Use of principal displays

The system vendor shall ensure that the principal display is accessed first by the subscribers, either by technical means or through the contract. Unless a consumer, that is any person seeking information about and/or intending to purchase an air transport product, expressly requests another display, the principal displays shall be used for the provision of information and consequent transactions.

When preference has been expressed for a specific flight then a direct access display may be used to indicate a certain seat availability, even when this display does not respect the display principles. A consumer can express a preference for a specific secondary display for more than one transaction, e.g., a company can request a travel agent to book its employees only on a specific airline for their business travel. This can be considered as an express request for each individual booking. In such cases secondary displays can be used for information and booking purposes.

6. Information on fares

Information on fares in relation to the principal display must be complete and not misleading. This means that all publicly available air fares for the air services displayed must be included in the database (see paragraph 3) and must be displayed on a non-discriminatory basis.

7. Exclusive use of computerized reservation systems

The code of conduct does not create ticketing authorization for system vendors. A system vendor may get that authorization through the agreement with the participating air carrier. Article 8 stipulates that the basic ticketing authorization is a matter for agreement between the airline in question and the travel agent. When an agent has been given authorization to issue printed tickets by an air carrier he can then use stock for that purpose which the air carrier either has given to him or which the authorization indicates he can use (e.g., bank settlement plan tickets). For the purpose of printing the tickets the agent can use any printer which can do the job and the air carrier cannot specify only the use of its own printer. However, no printing fee to the system vendor can be incurred for the air carrier which is not participating. In other words the ticket is issued by the travel agent and not by the system vendor.

If an air carrier does participate fully in a computerized reservation system than an authorized travel agent is free to use that computerized reservation system for ticketing on that airline. However, if an air carrier does not participate in or accept reservations or tickets from a computerized reservation system, then Article 8 does not create a right for the travel agent to use that computerized reservation system for those purposes anyway. Neither does Article 8 in any way create a right for a travel agent to make reservations or issue tickets for an air carrier.

8. Exclusivity clauses

A system vendor can link in its contracts with subscribers the fee levels with the number of bookings processed through its computerized reservation system, as long as the fee levels are cost-related.

The linkage of fee levels with a certain percentage of bookings made by the subscriber is not permitted, since the difference in fee level could not be justified by differences in costs.

9. Termination of contracts

Article 9(4) gives subscribers the right to terminate contracts with system vendors without any penalty on three months' notice irrespective of the agreed termination date. Contracts may be concluded for a period exceeding one year. If a contract is terminated before the first year has expired, real damages may be claimed. In other cases system vendors can only charge the costs directly related to the termination of the contract.

10. Relationship of fees to costs

It should be acknowledged that some costs may differ in different countries. Therefore, in order to comply with the provision of Article 10(1), it is possible, for example, to make a distinction between costs for the service and costs for communication. The fee level should be the same for the same level of service, but communication and other costs can differ from one country to another. Fee levels may reflect the differences in such costs only if these differences can be adequately demonstrated.

11. Sample for display

The system vendor should always bear in mind that the purpose is to provide the consumer with accurate and non-misleading information. It is this basic criterion which prohibits the subscribers and/or the system vendors from constructing or displaying flight options with the purpose of discriminating against and/or of giving advantage to one or more carriers or airports.

The selection of the sample of flights of participating carriers which is to be displayed on one or more pages in response to a consumer request must respect at least the following principles:

- All direct services within the time limits between the two airports or cities in question must be included, i.e. both nonstop services and services with intermediate stops;

- The time limits within which the sample of connecting flights is to be selected may be a specific departure time around which a bracket is then constructed or the same principle applied to arrival time. It is also possible for a system to sample according to elapsed journey time on the day in question.

A minimum number of nine connecting points shall, if possible, be used for the construction of connecting flights for inclusion in the sample for the principal display. This does not mean, however, that unrealistic travel options are included.
A routing with an elapsed journey time which is considerably longer than alternative connections and which does not offer specific advantages may be considered as unrealistic, for example.

A system vendor is obliged to include in a sample for a principal display indirect services requested by participating carriers and falling within the time limits of the consumer request, unless the routing is in excess of 130% of the great circle distance between the two airports.

Routing in excess of 130% may, at the option of the system vendor, be included. However, this must be done in a non-discriminatory way. This means in fact that objective parameters should be set to determine which of these routes are to be included. The system vendor must take all practical measures to ensure that no unrealistic travel options are included.

Paragraph 2 of the general part of the Annex is aimed to prohibit the so-called 'screen padding' practice. A system vendor is not allowed to give excessive exposure to one particular travel option or to display unrealistic travel options. This means in practice that similar flights should be displayed in a comparable format, that flight options should be displayed without discrimination and without giving advantage to particular carriers or airports and that unnecessary information should be avoided, for example, when a code-shared flight is displayed then the basic individual flights of the two carriers should not be sampled and shown as well as a connection; likewise, when a through flight is displayed with one flight number.

A system vendor has the option to sample and display information of any non-participating carrier in any or all of the three categories of flights set out in the Annex to the code. This information has to be displayed in an accurate, non-misleading and non-discriminatory manner as between the non-participating carriers. Within the three different categories of flights, participating carriers may be treated more favourably than non-participating carriers. Since the non-participating carrier is not providing information directly to the system vendor, it cannot be held directly responsible for the quality of the data. However, Article 4(1) of the code also refers to other information providers such as OAG or ABC. These information providers should ensure the quality of the information of non-participating airlines if they are providing the information under contract to the system vendor (see paragraph 3).

12. Ranking and quality of information in display

The ranking of the sample shall, unless the consumer requests otherwise, be in the following order:

first group: all direct non-stop flights in order of departure time;

second group: all direct flights with intermediate stop(s) in order of elapsed journey time:

— no change of aircraft may take place,

third group: all connecting flights in order of elapsed journey time:

— all on-line flights including a change of aircraft or a change of flight number, all interline and all code-shared flights fall within this category,

— change of aircraft and/or intermediate stop(s) and/or change of airport must be clearly indicated. Special attention should be given to flights involving a change of aircraft where the same type of equipment is used for the different segments,

— code sharing is possible, but should be clearly indicated,

— code-shared flights may be displayed on one line or two lines but a system must be consistent in its practice. It must be quite clear that more than one airline is involved. The clearest way of doing this would be by displaying the flights on two or more lines,

— one flight number may be used for connecting flights, unless the different segments are displayed separately on a connection,

— one flight number may be used if there is a change of aircraft and/or change of terminal building involved,

— the use of one flight number when there is a change of airport included is not acceptable.

It should be noted that elapsed journey time should be realistic. The participating carriers are primarily responsible for the accurate and non-misleading scheduling of departure and arrival time. The use of penalty points by the system vendor is not in conformity with the provisions of the code, for instance for a change of terminal. However, it is the responsibility of the airline or the vendor to consider a realistic connecting time when providing or constructing a connection.

In addition to the abovementioned default display there shall be a possibility for the consumer to request displays:

1. ranked by departure time:
2. ranked by arrival time, and
3. ranked by elapsed journey time.

Any combination of:
1. departure time and elapsed journey time, and
2. arrival time and elapsed journey time is also possible.
Appendix 10

1993 Revisions to the 1989 EC CRS Code of Conduct

COUNCIL REGULATION (EC) No 3089/93

of

29 October 1993

amending Regulation (EEC) No 2299/89 on a code of conduct for

computerized reservation systems

THE COUNCIL OF THE EUROPEAN COMMUNITIES.

Having regard to the Treaty establishing the European Community, and in particular Article 84(2) thereof.

Having regard to the proposal from the Commission.

Having regard to the Opinion of the European Parliament.

Having regard to the Opinion of the Economic and Social Committee.

1 The Author is grateful to Mr. F. Sorensen, Head of Air Transport Policy Division, Commission of the European Communities, for supplying this information.
Whereas Regulation (EEC) No 2299/88 constitutes a significant step towards the achievement of undistorted competition between air carriers and between computer reservation systems, thereby protecting the interests of consumers;

Whereas it is necessary to extend the scope of Regulation (EEC) No 2299/89 and to clarify its provisions and it is appropriate to take these measures at Community level to ensure that the objectives of the Regulation are met in all Member States;

Whereas this Regulation is without prejudice to the application of Articles 85 and 86 of the Treaty;

Whereas Commission Regulation (EEC) No 83/91 exempts agreements for the common purchase, development and operation of computer reservation systems from the provisions of Article 85(1) of the Treaty;

Whereas non-scheduled air services are of major importance in the territory of the Community;

Whereas the bulk of these journeys are package tours or bundled products with air transport forming only one element of the whole product;
Whereas, in principle, "seat-only" or unbundled products on non-scheduled air services compete directly with air transport products offered on scheduled services;

Whereas it is desirable to treat like products equally and to ensure fair competition between both kinds of air transport products and the neutral dissemination of information to the consumer;

Whereas it is appropriate to deal with all matters of use of computer reservation systems for all kinds of air transport products in the same Council Regulation;

Whereas consumers looking for different products should be given the possibility to request displays for only scheduled or non-scheduled flights;

Whereas it is desirable to clarify that Regulation (EEC) No 2299/89 should apply to computer reservation systems offered to and/or used by all final consumers, be they individual members of the public or corporate users;

Whereas air carriers using a computer reservation system in their own clearly marked offices or counters should not be subject to the provisions governing the principal display;
Whereas a clear distinction between a contract for participation in or allowing for use of a system and the supply of the technical equipment itself is appropriate, the latter being subject to normal contract law, thus allowing a system vendor to claim his direct costs in the case of the termination of a participation or subscription contract in accordance with the provisions of this Regulation;

Whereas the refusal by parent carriers to provide the same information on schedules, fares and availability to systems other than their own and to accept bookings made by those systems can seriously distort competition between computer reservation systems;

Whereas competitive neutrality of computer reservation systems for air carriers must be ensured in respect of equal functionality and data security, in particular through equal access to functions, information/data and interfaces and a clear separation between private airline facilities and distribution facilities;

Whereas competitive parity will be enhanced by ensuring the separate legal identity of computer reservation systems;

Whereas a parent carrier may enjoy unfair advantages arising from its control over its computer reservation system in the competition between air carriers; whereas, therefore, total equality of treatment of parent and participating carriers is necessary to the extent that a parent carrier uses the facilities of its own system which are covered by this Regulation;

Whereas it is desirable in the consumer's interest that a principal display be provided for each transaction requested by a consumer;
Whereas it is desirable that detailed marketing, booking and sales data shall be made available to participating carriers on a non-discriminatory basis and with equal timeliness; whereas identification or personal information on a passenger or a corporate user must remain private; whereas, therefore, a system vendor has to ensure by technical means and appropriate safeguards, at least regarding software, that no unauthorized access to information can take place;

Whereas billing information should be sufficiently detailed to allow participating carriers and subscribers to control their costs; whereas, in order to facilitate such control, such information should be made available on magnetic media;

Whereas it is desirable in the consumer interest to clarify that no flight or combination of flights shall be shown more than once in the principal display, except where, in a joint venture or other arrangement, each operating carrier assumes separate responsibility for the offer and sale of air transport products on the flights concerned;

Whereas the system vendor should ensure that the principles of technical compliance with the provisions concerning equal functionality and data security are monitored by an independent auditor,
HAS ADOPTED THIS REGULATION:

Article 1

Regulation (EEC) No 2299/89 is hereby amended as follows:

1) Articles 1, 2 and 3 are replaced by the following:

"Article 1

This Regulation shall apply to computerized reservation systems to the extent that they contain air transport products, when offered for use and/or used in the territory of the Community, irrespective of:

- the status or nationality of the system vendor;

- the source of the information used or the location of the relevant central data processing unit;

- the geographical location of the airports between which air carriage takes place."
Article 2

For the purposes of this Regulation:

(a) "unbundled air transport product" means the carriage by air of a passenger between two airports, including any related ancillary services and additional benefits offered for sale and/or sold as an integral part of that product;

(b) "bundled air transport product" means a pre-arranged combination of an unbundled air transport product with other services not ancillary to air transport, offered for sale and/or sold at an inclusive price;

(c) "air transport product" means both unbundled and bundled air transport products;

(d) "scheduled air service" means a series of flights all possessing the following characteristics:

- performed by aircraft for the transport of passengers or passengers and cargo and/or mail for remuneration, in such a manner that seats are available on each flight for individual purchase by consumers (either directly from the air carrier or from its authorized agents);

- operated so as to serve traffic between the same two or more points, either:

1) according to a published timetable; or

2) with flights so regular or frequent that they constitute a recognizably systematic series;
(e) "fare" means the price to be paid for unbundled air transport products and the conditions under which this price applies;

(f) "computerized reservation system" (CRS) means a computerized system containing information about, inter alia, air carriers' 
- schedules,
- availability,
- fares and
- related services,

with or without facilities through which
- reservations may be made, or
- tickets may be issued,

to the extent that some or all of these services are made available to subscribers;

(g) "distribution facilities" means facilities provided by a system vendor for the provision of information about air carriers' schedules, availability, fares and related services and for making reservations and/or issuing tickets, and for any other related services;
(h) "system vendor" means any entity and its affiliates which is or are responsible for the operation or marketing of a CRS;

(i) "parent carrier" means any air carrier which directly or indirectly, alone or jointly with others, owns or effectively controls a system vendor, as well as any air carrier which it owns or effectively controls;

(j) "effective control" means a relationship constituted by rights, contracts or any other means which, either separately or jointly and having regard to the considerations of facts or law involved, confer the possibility of directly or indirectly exercising a decisive influence on an undertaking, in particular by:

- the right to use all or part of the assets of an undertaking;

- the rights or contracts which confer a decisive influence on the composition, voting or decisions of the bodies of an undertaking or otherwise confer a decisive influence on the running of the business of the undertaking;

(k) "participating carrier" means an air carrier which has an agreement with a system vendor for the distribution of air transport products through a CRS. To the extent that a parent carrier uses the facilities of its own CRS which are covered by this Regulation, it shall be considered a participating carrier;
(l) "subscriber" means a person or an undertaking, other than a participating carrier, using the distribution facilities for air transport products of a CRS under contract or other arrangement with a system vendor;

(m) "consumer" means any person seeking information about and/or intending to purchase an air transport product;

(n) "principal display" means a comprehensive neutral display of data concerning air services between city-pairs, within a specified time period;

(o) "elapsed journey time" means the time difference between scheduled departure and arrival time;

(p) "service enhancement" means any product or service offered by a system vendor on its own behalf to subscribers in conjunction with a CRS, other than distribution facilities.

Article 3

1. A system vendor shall have the capacity, in its own name as a separate entity from the parent carrier, to have rights and obligations of all kinds, to make contracts, inter alia with parent carriers, participating carriers and subscribers, or to accomplish other legal acts and to sue and be sued.

2. A system vendor shall allow any air carrier the opportunity to participate, on an equal and non-discriminatory basis, in its distribution facilities within the available capacity of the system concerned and subject to any technical constraints outside the control of the system vendor.
3(a) A system vendor shall not:

- attach unreasonable conditions to any contract with a participating carrier;

- require the acceptance of supplementary conditions which, by their nature or according to commercial usage, have no connection with participation in its CRS and shall apply the same conditions for the same level of service.

(b) A system vendor shall not make it a condition of participation in its CRS that a participating carrier may not at the same time be a participant in another system.

(c) A participating carrier may terminate its contract with a system vendor on giving notice which need not exceed six months, to expire not before the end of the first year.

In such a case a system vendor shall not be entitled to recover more than the costs directly related to the termination of the contract.

4. If a system vendor has decided to add any improvement to the distribution facilities provided or the equipment used in the provision of the facilities, it shall provide information on and offer these improvements to all participating carriers, including parent carriers, with equal timeliness and on the same terms and conditions, subject to any technical constraints outside the control of the system vendor, and in such a way that there will be no difference in leadtime for the implementation of the new improvements between parent and participating carriers".
2) The following Article is added:

"Article 3a

1. (a) A parent carrier may not discriminate against a competing CRS by refusing to provide the latter, on request and with equal timeliness, with the same information on schedules, fares and availability relating to its own air services as that which it provides to its own CRS or to distribute its air transport products through another CRS, or by refusing to accept or to confirm with equal timeliness a reservation made through a competing CRS for any of its air transport products which are distributed through its own CRS. The parent carrier shall be obliged to accept and to confirm only those bookings which are in conformity with its fares and conditions.

(b) The parent carrier shall not be obliged to accept any costs in this connection except for reproduction of the information to be provided and for accepted bookings.

(c) The parent carrier shall be entitled to carry out controls to ensure that Article 5(1) is respected by the competing CRS.

2. The obligation imposed by this Article shall not apply in favour of a competing CRS when, in accordance with the procedures of Article 6(5) or Article 7(3) or (4), it has been decided that the CRS is in breach of Article 4a or that a system vendor cannot give sufficient guarantees that obligations under Article 6 concerning unauthorized access of parent carriers to information are complied with."
3) Article 4 is replaced by the following:

"Article 4

1. Participating carriers and other providers of air transport products shall ensure that the data which they decide to submit to a CRS are accurate, non-misleading, transparent and no less comprehensive than for any other CRS. The data shall, inter alia, enable a system vendor to meet the requirements of the ranking criteria as set out in the Annex.

Data submitted via intermediaries shall not be manipulated by them in a manner which would lead to inaccurate, misleading or discriminatory information.

2. A system vendor shall not manipulate the material referred to in paragraph 1 in a manner which would lead to the provision of inaccurate, misleading or discriminatory information.

3. A system vendor shall load and process data provided by participating carriers with equal care and timeliness, subject only to the constraints of the loading method selected by individual participating carriers and to the standard formats used by the said vendor."
4) The following Article is added:

"Article 4a

1. Loading and/or processing facilities provided by a system vendor shall be offered to all parent and participating carriers without discrimination. Where relevant and generally accepted air transport industry standards are available, system vendors shall offer facilities compatible with them.

2. A system vendor shall not reserve any specific loading and/or processing procedure or any other distribution facility for one or more of its parent carrier(s).

3. A system vendor shall ensure that its distribution facilities are separated, in a clear and verifiable manner, from any carrier's private inventory and management and marketing facilities. Separation may be established either logically by means of software or physically in such a way that any connection between the distribution facilities and the private facilities may be achieved by means of an application-to-application interface only. Irrespective of the method of separation adopted, any such interface shall be made available to all parent and participating carriers on a non-discriminatory basis and shall provide equality of treatment in respect of procedures, protocols, inputs and outputs. Where relevant and generally accepted air transport industry standards are available, system vendors shall offer interfaces compatible with them."
5) Articles 5 and 6 are replaced by the following:

"Article 5"

1. (a) Displays generated by a CRS shall be clear and non-discriminatory.

(b) A system vendor shall not intentionally or negligently display inaccurate or misleading information in its CRS.

2. (a) A system vendor shall provide a principal display or displays for each individual transaction through its CRS and shall include therein the data provided by participating carriers on flight schedules, fare types and seat availability in a clear and comprehensive manner and without discrimination or bias, in particular as regards the order in which information is presented.

(b) A consumer shall be entitled to have, on request, a principal display limited to scheduled or non-scheduled services only.

(c) No discrimination on the basis of airports serving the same city shall be exercised in constructing and selecting flights for a given city-pair for inclusion in a principal display.
(d) Ranking of flight options in a principal display shall be as set out in the Annex.

(e) Criteria to be used for ranking shall not be based on any factor directly or indirectly relating to carrier identity and shall be applied on a non-discriminatory basis to all participating carriers.

3. Where a system vendor provides information on fares, the display shall be neutral and non-discriminatory and shall contain at least the fares provided for all flights of participating carriers shown in the principal display. The source of such information shall be acceptable to the participating carrier(s) and system vendor concerned.

4. Information on bundled products regarding, inter alia, who is organizing the tour, availability and prices, shall not be featured in the principal display.

5. A CRS shall not be considered in breach of this Regulation to the extent that it changes a display in order to meet the specific request(s) of a consumer.
Article 6

1. The following provisions shall govern the availability of information, statistical or otherwise, by a system vendor from its CRS:

(a) information concerning individual bookings shall be provided on an equal basis and only to the air carrier(s) participating in the service covered by and to the subscriber(s) involved in the booking:

(b) any marketing, booking and sales data made available shall be on the basis that:

(i) such data are offered with equal timeliness and on a non-discriminatory basis to all participating carriers, including parent carriers;

(ii) such data may and, on request, shall cover all participating carriers and/or subscribers, but shall include no identification of or personal information on a passenger or a corporate user;

(iii) all requests for such data are treated with equal care and timeliness, subject to the transmission method selected by the individual carrier.

2. A system vendor shall not make personal information concerning a passenger available to others not involved in the transaction without the consent of the passenger.
3. A system vendor shall ensure that the provisions in paragraphs 1 and 2 above are complied with, by technical means and/or appropriate safeguards regarding at least software, in such a way that information provided by or created for air carriers can in no way be accessed by one or more of the parent carriers except as permitted by this Article.

4. A system vendor shall, within 3 months of the entry into force of this Regulation, make available on request to all participating carriers a detailed description of the technical and administrative measures which it has adopted in order to conform with this Article.

5. Upon receipt of the detailed description of the technical and administrative measures which have been adopted or modified by a system vendor, the Commission shall decide within 3 months whether the measures are sufficient to provide the safeguards required under this Article. If not, the Commission's decision may invoke the application of Article 3a(2). The Commission shall immediately inform Member States of such a decision. Unless the Council, at the request of a Member State, takes a different decision within two months of the date of the Commission's decision, the latter shall enter into force."
6) In Article 7, paragraphs 1 and 2 are replaced as follows:

"1. The obligations of a system vendor under Articles 3 and 4 to 6 shall not apply in respect of a parent carrier of a third country to the extent that its CRS outside the territory of the Community does not offer Community air carriers equivalent treatment to that provided under this Regulation and under Commission Regulation (EEC) No 83/91.

2. The obligations of parent or participating carriers under Articles 3a, 4 and 8 shall not apply in respect of a CRS controlled by (an) air carrier(s) of one or more third country (countries) to the extent that outside the territory of the Community the parent or participating carrier(s) is (are) not accorded equivalent treatment to that provided under this Regulation and under Commission Regulation (EEC) No 83/91.

7) In Article 7, the following paragraph is added:

"5. (a) In cases where serious discrimination within the meaning of paragraph 1 or 2 is found to exist, the Commission may by decision instruct CRSs to modify their operations appropriately in order to terminate such discrimination. The Commission shall immediately inform Member States of such a decision.

(b) Unless the Council, at the request of a Member State, takes another decision within two months of the date of the Commission's decision, the latter shall enter into force.".
8) Article 8 is replaced by the following:

"Article 8

1. A parent carrier shall neither directly nor indirectly link the use of any specific CRS by a subscriber with the receipt of any commission or other incentive or disincentive for the sale of air transport products available on its flights.

2. A parent carrier shall neither directly nor indirectly require use of any specific CRS by a subscriber for sale or issue of tickets for any air transport products provided either directly or indirectly by itself.

3. Any condition which an air carrier may require of a travel agent when authorizing it to sell and issue tickets for its air transport products shall be without prejudice to paragraphs 1 and 2."

9) Article 9(4), (5) and (6) are replaced by the following:

"4. (a) A system vendor shall not attach unreasonable conditions to any subscriber contract allowing for the use of its CRS and, in particular, a subscriber may terminate its contract with a system vendor by giving notice which need not exceed three months, to expire not before the end of the first year.

In such a case, a system vendor shall not be entitled to recover more than the costs directly related to the termination of the contract."
(b) Subject to paragraph 2, the supply of technical equipment is not subject to the conditions set out in (a).

5. A system vendor shall provide in each subscriber contract for:

(a) the principal display, conforming to Article 5, to be accessed for each individual transaction, except where a consumer requests information for only one air carrier or where the consumer requests information for bundled air transport products alone;

(b) the subscriber not to manipulate material supplied by CRSs in a manner which would lead to inaccurate, misleading or discriminatory presentation of information to consumers.

6. A system vendor shall not impose an obligation on a subscriber to accept an offer or technical equipment or software, but may require that equipment and software used be compatible with its own system."

10) In Article 10, paragraph 1 and 2 are replaced by the following:

"1. Any fee charged by a system vendor shall be non-discriminatory, reasonably structured and reasonably related to the cost of the service provided and used and shall, in particular, be the same for the same level of service.
The billing for the services of a CRS shall be sufficiently detailed to allow the participating carriers and subscribers to see exactly which services have been used and the fees therefore as a minimum, booking fee bills must include the following information for each segment:
- type of CRS booking
- passenger name
- country
- IATA/ARC agency identification code
- city-code
- city pair or segment
- booking date (transaction date)
- flight date
- flight number
- status code (booking status)
- service type (class of service)
- PNR record locator
- booking/cancellation indicator.

The billing information shall be offered on magnetic media.

A participating air carrier shall be offered the facility of being informed at the time that any booking/transaction is made for which a booking fee will be charged. Where a carrier elects to be so informed, it shall be offered the option to disallow such booking/transaction, unless the latter has already been accepted.

2. A system vendor shall, on request, provide interested parties with details of current procedures, fees and systems facilities, including interfaces, editing and display criteria used. However, this provision does not oblige a system vendor to disclose proprietary information such as software programmes."
11) Article 21 is replaced by the following:

"Article 21

The provisions in Article 5, Article 9(5) and the Annex to this Regulation shall not apply to a CRS used by an air carrier or a group of air carriers in its (their) own office(s) and sales counters clearly identified as such.".

12) The following Article is added:

"Article 21a

1. The system vendor shall ensure that the technical compliance of its CRS with Articles 4a and 6 is monitored by an independent auditor. For this purpose, the auditor shall be granted access at any time to any programs, procedures, operations and safeguards used on the computers or computer systems through which the system vendor is providing its distribution facilities. Each system vendor shall submit its auditor's report on his inspection and findings to the Commission at least once a year. This report shall be examined by the Commission with a view to any necessary action in accordance with Article 11(1).

2. The system vendor shall inform participating carriers and the Commission of the identity of the auditor at least three months before confirmation of an appointment and at least three months before each annual reappointment. If, within one month of notification, any of the participating carriers objects to the capability of the auditor to carry out the tasks as required under this Article, the Commission shall, within a further two months and after consultation with the auditor, the system vendor and any other party claiming a legitimate interest, decide whether or not the auditor is to be replaced.".
13) Article 22 is replaced by the following:

"Article 22

1. This Regulation shall be without prejudice to national legislation on security, public order and data protection.

2. The beneficiaries of rights arising under Article 3(4), Articles 4a, 6 and 21a cannot renounce these rights by contractual or any other means."

14) Article 23 is replaced by the following:

"Article 23

1. The Council shall decide on the revision of this Regulation by 31 December 1997, on the basis of a Commission proposal to be submitted by 31 March 1997, accompanied by a report on the application of this Regulation.

2. The Council shall review the application of Articles 4a and 6(3) based on a report to be submitted, at the latest by the end of 1994, by the Commission."

15) The Annex is replaced by the Annex to this Regulation.

Article 2

1. This Regulation shall enter into force on the thirtieth day following that of its publication in the Official Journal of the European Communities.
2. The new Articles 3(1) and 5(2)(b) of Regulation (EEC) No 2299/89 shall not apply until six months after the date referred to in paragraph 1. The Commission may grant a further 12 months' waiver to CRSs which, for objective reasons, are unable to comply with Article 3(1) and Article 5(2)(b).

3. The obligation in point 9(c) of the Annex to display connecting flights with one line per aircraft segment shall apply from 1 January 1995.

Done at Brussels, For the Council

The President
ANNEX

PRINCIPAL DISPLAY RANKING CRITERIA FOR FLIGHTS OFFERING UNBUNDLED AIR TRANSPORT PRODUCTS

1. Ranking of flight options in a principal display, for the day or days requested, shall be in the following order unless requested in a different way by a consumer for an individual transaction:

   (i) all non-stop direct flights between the city-pairs concerned;

   (ii) other direct flights, not involving a change of aircraft, between the city-pairs concerned;

   (iii) connecting flights.

2. A consumer shall at least be afforded the possibility of having, on request, a principal display ranked by departure or arrival time and/or elapsed journey time. Unless otherwise requested by a consumer, a principal display shall be ranked by departure time for group (i) and elapsed journey time for groups (ii) and (iii).

3. Where a system vendor chooses to display information for any city-pair in relation to the schedules or fares of non-participating carriers, but not necessarily all such carriers, such information shall be displayed in an accurate, non-misleading and non-discriminatory manner between carriers displayed.
4. If, to the system vendor's knowledge, information on the number of direct scheduled air services and the identity of the air carriers concerned is not comprehensive, this shall be clearly stated on the relevant display.

5. Flights other than scheduled air services shall be clearly identified.

6. Flights involving stops en route shall be clearly identified.

7. Where flights are operated by an air carrier which is not the air carrier identified by the carrier designator code, the actual operator of the flight shall be clearly identified. This requirement shall apply in all cases, except for short-term ad hoc arrangements.

8. A system vendor shall not use the screen space in a principal display in a manner which gives excessive exposure to one particular travel option or which displays unrealistic travel options.

9. Except as provided for in paragraph 10, the following shall apply:

(a) for direct services, no flight shall be featured more than once in a principal display;

(b) for multi-sector services involving a change of aircraft, no combination of flights shall be features more than once in a principal display;

(c) flights involving a change of aircraft shall be treated and displayed as connecting flights, with one line per aircraft segment.
Nevertheless, only one reservation shall be necessary where the flights are operated by the same air carrier, with the same flight number, and where the air carrier requires only one flight coupon.

10. 1. Where participating carriers have joint venture or other contractual arrangements requiring two or more of them to assume separate responsibility for the offer and sale of air transport products on a flight or combination of flights, the terms "flight" (for direct services) and "combination of flights" (for multi-sector services) in paragraph 9 shall be interpreted as allowing each of the carriers concerned - up to a maximum of two - to have a separate display using its individual carrier designator code.

2. Where more than two carriers are involved, designation of the two carriers entitled to avail themselves of the exception provided for in subparagraph 1 shall be a matter for the carrier actually operating the flight.

11. A principal display shall, wherever practicable, include connecting flights on scheduled services which are operated by participating carriers and are constructed by using a minimum number of nine connecting points. A system vendor shall accept a request by a participating carrier to include an indirect service, unless the routing is in excess of 130% of the great circle distance between the two airports or except where this would lead to the exclusion of services with a shorter elapsed journey time. Connecting points with routings in excess of 130% need not be used.
Appendix 11

European Civil Aviation Conference Code of Conduct

RESOLUTION

ECAC CODE OF CONDUCT FOR COMPUTER RESERVATION SYSTEMS

Adopted by Directors General of Civil Aviation of ECAC Member States on 7 March 1989 *

RECOGNIZING the need to ensure that computer reservation systems (CRSs) are used in Europe in a fair, non-discriminatory and transparent way with a view to avoiding misuse of these systems, so ensuring fair competition between airlines and protecting the interests of the consumers of air transport products;

RECALLING that the Thirteenth Triennial Session adopted the principles for a code of conduct for CRSs and resolved to finalize at the earliest possible date ECAC’s code of conduct for CRSs, based on those principles;

RECOGNIZING the need to give the code a formal status from the earliest possible date, while bearing in mind the intention to give the code a stronger legal status within a reasonable period of time;

NOTING that the code covers scheduled passenger air services and that it is the intention to explore, in due course, the issues arising in covering non-scheduled passenger air services,

THE CONFERENCE RESOLVES TO ADOPT

the following code of conduct for CRSs.

* "While adopting the present Resolution, the Member States of the European Communities declare that the provisions or this Resolution cannot prevail over Community law."

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ECAC CODE OF CONDUCT FOR
COMPUTER RESERVATION SYSTEMS (CRSs)

PURPOSE

1. The purpose of this document is to set down a code of conduct for application by ECAC Member States in respect of the use in their territories within Europe of computer reservation systems (CRSs) for the distribution and sale of passenger air transport products.

OBJECTIVES

2. The objective of the code is to ensure that CRSs are used in a fair, non-discriminatory and transparent way with a view to avoiding misuse of these systems, so ensuring fair competition between airlines and protecting the interests of the consumers of air transport products.

OBJECTIVES

3. For the purposes of this code:

"Air transport product" means a scheduled passenger air service (including any related ancillary services and additional benefits marketed as an integral part of the air fare).

"Availability" means information provided in respect of the seats an airline holds out as available for sale on a particular flight by class of service and fare.

"Computer reservation system (CRS)" means a computerized system containing information about schedules, availability, fares and related services, and through which reservations can be made and/or tickets issued, and which makes some or all of these facilities available to subscribers.

"CRS terminal" means a facility comprising a television-typescreen (which may be entered by use of a keyboard and on which information is displayed or transmitted by the system to which it is linked), together with the associated keyboard and other enhancements, such as ticket issuing machinery.

"Consumer" means any person interested in purchasing an air transport product.

"Database" means the information, relating to passenger air transport schedules, fares, rules, and seat availability, contained in a CRS.
"Distribution facilities" means facilities provided by a system vendor for the display of information about schedules, availability and fares, and for the making of reservations and/or issuing tickets and any other related services.

"Participating airline" means an airline which uses the distribution facilities provided by a system vendor and includes an airline which owns the CRS in whole or in part.

"Service enhancement" means any product or service offered to subscribers or consumers in conjunction with a CRS, other than the display of information on schedules, fares, rules and availability and the ability to make reservations or to issue tickets for air transport.

"System vendor" means any entity and its affiliates that own in whole or in part a CRS.

"Subscriber" means a person or entity, other than an airline using a CRS under contract from a system vendor for the sale of air transport products.

SCOPE

4.1 The code establishes the requirements applicable to all CRS terminals or other means of access to CRSs used in the territories within Europe of ECAC Member States irrespective of:

   i) the status or nationality of the system vendor: or

   ii) the geographical location of the source of the information used or of the relevant central data processing unit.

4.2 The code does not apply to CRSs to the extent that they are used in an airline office, clearly identified as such, in connection with the sale direct to the consumer of its own products or the products of other airlines.

LOADING AND DISPLAY OF INFORMATION

5. Overall approach

5.1 Data loaded into a CRS should be comprehensive, accurate and non-misleading.

5.2 Data display by a CRS should be clear and non-discriminatory.
6. **Data integrity**

6.1 Airlines providing material, either directly or indirectly, for inclusion in a CRS database should be primarily responsible for the accuracy of the information supplied and should ensure that the data submitted accurately reflects the services actually available to consumers.

6.2 System vendors should take reasonable measures to ensure that the material supplied by airlines, either directly or indirectly, is accurate. They should not manipulate it in a manner that would lead to inaccurate, misleading or discriminatory presentation of information to consumers.

6.3 Data bases should contain genuine and accurate information and should be as comprehensive as possible. In particular:

   a) they should not contain misleading information, such as interline flights held out as on-line flights, or connecting flights held out as direct flights;

   b) they should not contain, for example, inaccurate departure or arrival times, misrepresented equipment, or incorrect fares information;

   c) they should be capable of providing a reasonable number of travel options for any city-pair requested; a minimum number of nine connecting points should, where practicable, be used in constructing connecting flights, except that connecting points providing routings in excess of 130% of the great circle distance need not be used.

6.4 All material from participating airlines should be loaded and processed with equal care and timeliness subject to the constraints of the loading method selected by the participating airline.

6.5 Any special loading and processing capability should be offered to participating airlines on a non-discriminatory basis.

6.6 Each system vendor should provide on request details of its data base update and storage procedures.
7. **Ordering of Information**

7.1 Every CRS should provide a principal display which should conform with this code and, in particular, should satisfy the following requirements:

a) ranking of information should not be influenced, either directly or indirectly, by airline identity and should have the objective of constructing travel options that meet consumer needs in terms of departure/arrival time, elapsed journey time, routing, fares, etc.;

b) the criteria to be used for ranking information should be applied on a non-discriminatory basis to all participating airlines;

c) no discrimination on the basis of different airports serving the same city should be exercised in constructing and selecting city-pairs;

d) in applying the criteria for ranking information, the material should be interpreted in a manner that ensures, for example, that flights involving change of aircraft, including code-shared flights, are recognized and processed as connecting flights;

e) ranking of flight options, for the day or days requested, should be in the following order:

   i) all direct non-stop flights in order of departure time;

   ii) other direct flights, not involving change of aircraft, in order of elapsed journey time;

   iii) connecting flights in order of elapsed journey time.

7.2 The principal display should be at least as useful for subscribers, in terms of functions and enhancements offered and the ease with which such functions or enhancements can be performed or implemented, as any other displays available through the CRS.

7.3 The criteria used in ranking information, including the weight given to each criterion, should be available on request. The criteria used for selection of connecting points and inclusion of connecting flights should be similarly available.
7.4 Subscribers should not manipulate material supplied by CRSs in a manner that would result in inaccurate, misleading or discriminatory presentation of information to consumers.

8. **Consumer preferences**

   Nothing in paragraph 7 is intended to restrict re-ordering of data or provision of alternative displays by a system vendor or a subscriber to the extent required by the preferences expressed by the consumer. A system vendor should make the principal display available for each transaction so that the subscriber must enter a request specific to that transaction for a display other than the principal one to be made available.

9. **Screen display**

   9.1 Screen displays should be clear, accurate and non-misleading. For example, flights involving stops en-route, change of aircraft (including code-shared flights), change of airport, etc., should be identified as having those characteristics.

   9.2 Screen space should be utilized in an economic manner that gives consumers a reasonable range of information and choice. It should not be used to give excessive exposure to one particular travel option or to display unrealistic travel options.

---

**RELATIONS BETWEEN SYSTEM VENDORS AND POTENTIAL PARTICIPATING AIRLINES**

10. Relations between system vendors and airlines interested in becoming participating airlines should be governed by the following provisions:

   a) any airline should have the right to participate in a CRS on an equal and non-discriminatory basis;

   b) all distribution facilities which a system vendor provides should be offered on a non-discriminatory basis to any airline;

   c) a system vendor should provide on request to any airline current information on its system and fee levels;

   d) no system vendor should structure fees charged for participation in such a way that they result in unreasonable conditions which may preclude participation by smaller airlines;
e) a system vendor should not refuse any airline the right to participate in its system because it is a participant in another system;

f) a system vendor should not require any airline to accept supplementary conditions, which, by their nature or according to commercial usage, have no connection with participation in a CRS.

**CONTRACTUAL AND OTHER RELATIONS BETWEEN SYSTEM VENDORS AND PARTICIPATING AIRLINES**

11. Contractual and other relations between system vendors and participating airlines should be governed by the following provisions:

a) all distribution facilities which a system vendor provides should be offered on a non-discriminatory basis to participating airlines;

b) any fee charged by a system vendor to a participating airline should be non-discriminatory and reasonably related to the cost of the service provided, and should, in particular, be the same for the same level of service;

c) no system vendor should make it a condition of participation in its system that a participant may not at the same time be a participant in another system or systems;

d) a participating airline should have the right to terminate its contract with a system vendor without penalty on giving notice which should not exceed six months to expire no earlier than the end of the first

e) a system vendor should not make it a condition for participation in its system that an airline accepts supplementary conditions which, by their nature or according to commercial usage, have no connection with the subject of the contract;

f) should a system vendor offer any improvement to the service offered or the equipment used in the provision of the service, it should be offered to all participants on a non-discriminatory basis.

**Commerciaally sensitive information**

12. Commerciaally sensitive information (statistical or otherwise) generated by a system vendor should only be accessible to
airlines (including any airline which owns in whole or in part the CRS in question) as follows:

a) where the information concerns a single booking, it should be made available on an equal basis to the airline or airlines participating in the service covered by the booking;

b) where the information is generated in aggregate or anonymous form, and is provided to any airline, it should be made available to all participating airlines on a non-discriminatory basis.

### CONTRACTS BETWEEN SYSTEM VENDORS AND SUBSCRIBERS

13. Contracts between system vendors and subscribers should be governed by the following provisions:

a) no subscriber contract should have a term in excess of 3 years;

b) no system vendor should directly or indirectly prohibit a subscriber from obtaining or using any other system;

c) no system vendor should require use of its system by a subscriber for any sale of air transport services provided either directly or indirectly by the vendor;

d) no system vendor should link the use of its system by a subscriber with the receipt of any commission for the sale of its air transport services;

e) no system vendor should charge prices to subscribers conditioned in whole or in part on the identity of airlines whose flights are sold by the subscriber;

f) a subscriber should have the right to terminate his contract with a system vendor without penalty on giving notice which should not exceed three months to expire no earlier than the end of the first year of the contract;

g) should a system vendor offer a service enhancement to any subscriber, it should offer it to all subscribers on nondiscriminatory terms;
h) a system vendor should make any of the distribution facilities of a CRS available to any subscriber on a non-discriminatory basis. Any fee charged should be non-discriminatory and reasonably related to the cost of the service provided and should, in particular, be the same for the same level of service;

i) subscribers' contracts should provide that, except where permitted under paragraph 8, subscribers should use the principal display available for each transaction and should not manipulate material supplied by CRSs in a manner that would lead to inaccurate, misleading or discriminatory presentation of information to consumers.

NON PARTICIPATING AIRLINES

14. Where a system vendor chooses to include in its CRS information on schedules, fares or rules of non-participating airlines, it should be the responsibility of the vendor to ensure that such information is presented in an accurate and non-misleading fashion.

RECIROCITY

15.1 The obligations of a system vendor under this code should not apply in respect of an airline owning a CRS, in whole or in part, or of an airline affiliated to a CRS, to the extent that the CRS does not conform with this code or does not provide ECAC airlines with equivalent rights to those available under this code.

15.2 A system vendor proposing to avail itself of the provisions of paragraph 15.1 must notify the appropriate competent authorities of its intentions and the reasons therefor at least 14 days in advance of such action. In exceptional circumstances, such authorities may, at the request of the vendor, grant a waiver from the 14-day rule.

COMPLAINTS

16. It should be open to any person to make a complaint where that person considers that the code of conduct is not being observed. Such complaints should be made to the appropriate competent authorities.
ENTRY INTO FORCE

17.1 This code will enter into force on 1 August 1989.

17.2 In the case of any CRS in operation before 1 August 1989:

a) the provisions in paragraphs 5.2, 7.2, 9 and 12 will not apply for a transitional period of six months, on notification by the system vendor to the appropriate competent authorities, before 1 August 1989, of its plans to achieve full compliance with the code during the transitional period;

b) the competent authorities may, at the request of the system vendor and to the extent necessary, extend the transitional period in respect of any of the provisions referred to in paragraph a) if they are satisfied that the system vendor is unable for objective and legitimate reasons of a technical or commercial nature to achieve full compliance with the code during the transitional period. Save in the most exceptional circumstances, the competent authorities should not grant extensions that go beyond 31 December 1990;

c) application of the provisions in paragraphs 6.3, 7.1 and 8 may, at the request of the system vendor and to the extent necessary, be deferred by the competent authorities for a period of six months from 1 August 1989. Such extension should only be granted if the competent authorities are satisfied that the system vendor is unable to comply with those provisions for substantial reasons of a technical nature outside the control of the system vendor. If these reasons continue to apply, the competent authorities may grant an extension for a further period, which should not, in any event, exceed three months.

REVIEW

18. A review of this code should be completed not later than three years after it has been adopted, or earlier if circumstances so warrant.
## Appendix 12

### Comparison of International CRS Codes of Conduct

<table>
<thead>
<tr>
<th>CRS Code</th>
<th>ICAO</th>
<th>United States</th>
<th>Canada</th>
<th>European Community</th>
<th>ECAC</th>
<th>Australia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legally Binding?</td>
<td>No, Although the code is more than more guidelines, it is not as binding as a multilateral agreement.</td>
<td>Yes Enforced by the Department of Transportation.</td>
<td>Yes</td>
<td>Yes on member states.</td>
<td>No Voluntary industry code. Parties to the code are bound insofar as they are signatories to the code</td>
<td></td>
</tr>
<tr>
<td>Applicability</td>
<td>Code applies to ICAO member states that advise acceptance. For such states, the code applies to the distribution of scheduled international passenger air service products. States may elect to adopt the code for non-scheduled services.</td>
<td>Air carriers and foreign air carriers who own operate or market CRSs for travel agents in the United States.</td>
<td>Applies in Canada to carriers and system vendors where so ordered by the Competition Tribunal or where they agree by contract.</td>
<td>Directly applicable to all member states. Applies to CRSs when offered for use and/or used in the territory of the Community for the distribution and sale of air transportation products.</td>
<td>Applicable to all CRS terminals or other means of access to CRSs used in the territories within Europe of ECAC member states.</td>
<td>Applies to all vendors and principals who have agreed to be bound. Specifically, the code applies to TIAS, FIN, SCDS and their owners and affiliates</td>
</tr>
<tr>
<td>Air Carrier Responsible for information provided</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Direct price regulation?</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>No but price must be reasonably related to the cost of the service provided and used and be the same for the same level of service.</td>
<td>No but price must be reasonably related to the cost of the service provided and used and be the same for the same level of service.</td>
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<td></td>
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</tr>
<tr>
<td>Discimination regulations on the CRS systems</td>
<td>Yes. ICAO rules prohibit fee structures which preclude participation by smaller air carriers.</td>
<td>Yes. Differing fees for participating carriers are presumed to be discriminatory.</td>
<td>Yes. Differing fees for participating carriers are presumed to be discriminatory.</td>
<td>Yes. All forms of discriminatory conduct is forbidden subject to technical constraints.</td>
<td>Yes. Fees to be reasonably related to cost.</td>
<td></td>
</tr>
<tr>
<td>Tying arrangements forbidden?</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>CRS Code</td>
<td>ICAO</td>
<td>United States</td>
<td>Canada</td>
<td>European Community</td>
<td>ECAC</td>
<td>Australia</td>
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</tr>
<tr>
<td>Allowance for third party hardware/softwa re</td>
<td>Yes provided the hardware or software is compatible</td>
<td>Yes</td>
<td>Nothing specified</td>
<td>Yes, but system vendor may demand computability.</td>
<td>Nothing specified</td>
<td>Yes Interconnection must be on commercially reasonable terms.</td>
</tr>
<tr>
<td>Limitations of subscriber contract length</td>
<td>Yes but no specific time period. Three years. Five years in some instances. Yes, three years.</td>
<td>Three years.</td>
<td>Yes, three years. Allows termination of contract without penalty on giving notice which need not exceed three months after one year.</td>
<td>Yes, three years. Subscriber can terminate their contract after one year at three months notice.</td>
<td>Yes. Three years. May be varied on agreement from one to five years. If the contract is for more than three years, the contract must state the three year price.</td>
<td></td>
</tr>
<tr>
<td>Minimum use provisions proscribed</td>
<td>Yes</td>
<td>Yes</td>
<td>Nothing specified</td>
<td>Nothing specified, but vendors are not allowed to attach &quot;unreasonable conditions&quot;.</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Allows use of more than one CRS per site</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Equal Enhancements?</td>
<td>Nothing specified</td>
<td>Yes, unless the enhancement is still in the development stage. Yes, subject to technical constraints</td>
<td>Yes, subject to technical constraints.</td>
<td>Yes, subject to technical feasibility.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equal Loading of Fares and Schedule changes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Architectural bias rules</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Screen Bias Rules?</td>
<td>Yes but no specific rules apart from ranking factors must be unrelated to carrier identity. ICAO code regulates the way in which certain service options must be displayed. A Neutral display is required except where a subscriber requests another display.</td>
<td>Yes but no specific rules apart from ranking factors must be unrelated to carrier identity.</td>
<td>Yes. Includes ranking criteria.</td>
<td>Yes. ECAC code specifies the order in which flight options should be ranked for display purposes.</td>
<td>Yes. The code suggests factors to be taken into account. It also suggests following the guidelines in the ECAC and the United States DOT codes of conduct.</td>
<td></td>
</tr>
<tr>
<td>Connecting Point Bias Rules?</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Nothing specified</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>CRS Code</td>
<td>ICAO</td>
<td>United States</td>
<td>Canada</td>
<td>European Community</td>
<td>ECAC</td>
<td>Australia</td>
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<tr>
<td><strong>Data Security/Privacy Rules?</strong></td>
<td>Yes. States are requested to</td>
<td>Yes</td>
<td>Not specified</td>
<td>Yes. Allows</td>
<td>Nothing specified</td>
<td>Yes. Confidentiality for sales data and PNRs.</td>
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<td></td>
<td>ensure all parties involved</td>
<td></td>
<td></td>
<td>national</td>
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<td></td>
<td>safeguard the privacy of</td>
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<td>legislation to</td>
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<td></td>
<td>personal data.</td>
<td></td>
<td></td>
<td>apply.</td>
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<tr>
<td>**Mandatory Participation in</td>
<td>Yes. Carriers are required to</td>
<td>Yes</td>
<td>Yes in the 1992 amendments.</td>
<td>No. However plans</td>
<td>Yes. Specific obligation on</td>
<td></td>
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<tr>
<td>other systems for system</td>
<td>participate if they already</td>
<td></td>
<td></td>
<td>to emulate</td>
<td>CRS airlines to provide last seat availability to</td>
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<td>vendors?</td>
<td>participate in a competing</td>
<td></td>
<td></td>
<td>the EC's 1992</td>
<td>competing CRSs.</td>
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<td>system.</td>
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<td></td>
<td>amendment.</td>
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<tr>
<td>**Marketing and booking</td>
<td>Yes, to all carriers covered</td>
<td>Yes to participating</td>
<td>Yes, Exact information to be provided</td>
<td>Accessible to</td>
<td>Vendor must make available</td>
<td></td>
</tr>
<tr>
<td>information to be made available</td>
<td>by the service.</td>
<td>US carriers. US system</td>
<td>specified.</td>
<td>participating</td>
<td>to participating principals, all</td>
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<td>on non-discriminatory terms</td>
<td></td>
<td>vendors must supply to</td>
<td></td>
<td>airlines where the</td>
<td>non-principal specific</td>
<td></td>
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<td></td>
<td></td>
<td>overseas participating</td>
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<td>information is</td>
<td>marketing, booking and</td>
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<td></td>
<td></td>
<td>carriers if reciprocal</td>
<td></td>
<td>in aggregate form.</td>
<td>sales data.</td>
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<td>information is</td>
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<td>Single booking</td>
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<td>furnished.</td>
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<td>information should</td>
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<td>be available only</td>
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<td>to a particular</td>
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<td><strong>Exceptions</strong></td>
<td>Developing countries are</td>
<td>Display rules don't</td>
<td>Rules do not exempt any person from</td>
<td>Some provisions do</td>
<td>Does not apply to CRSs which</td>
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<td></td>
<td>exempt from the Code if its</td>
<td>apply to carriers who</td>
<td>the Canadian Competition</td>
<td>not apply to CRSSs</td>
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<td>general provisions are</td>
<td>refuse to enter into</td>
<td>legislation.</td>
<td>which are used in</td>
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<td></td>
<td>considered to be too harsh.</td>
<td>contracts or fail to</td>
<td>Rules do not apply to agreements and</td>
<td>not apply to</td>
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<td></td>
<td></td>
<td>pay non-discriminatory</td>
<td>arrangements between hosted carriers</td>
<td>vendors if other</td>
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<td></td>
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<td>fees.</td>
<td>and system vendors for non-system</td>
<td>CRSs do not</td>
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<td></td>
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<td>related services. Does not apply to</td>
<td>conform to the</td>
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<td>third countries if reciprocal rules</td>
<td>code.</td>
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<td>are unacceptable.</td>
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</table>
Appendix 13

Australian CRS Code of Conduct

Attachment 1

CODE OF CONDUCT

FOR

COMPUTER RESERVATION SYSTEMS IN AUSTRALIA

1. PURPOSE

(a) The purpose of this document is to set down a code of conduct for the operation of CRS for the provision of air transportation and associated travel services offered by participating carriers and other industry principals and used by subscribers in Australia.

(b) Nothing in this code of conduct operates to exempt any person from the operation of the Trade Practices Act (1974) as amended.

(c) This code of conduct shall not apply to agreements or arrangements between participating carriers and system vendors for non-CRS related services.

2. OBJECTIVES

The objectives of this code are to ensure that:

(a) The interests of the consumers of air transportation and associated travel products, subscribers, participating carriers and other travel industry principals are protected;

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(b) CRS made available to subscribers in Australia will:

i) be operated in a fair and non-discriminatory way which precludes deceptive, predatory and anti-competitive practices;

ii) not operate in a manner which would discourage new entry or expansion of airlines and other travel principals serving the Australian market; and

iii) not operate in a manner which would discourage new entry or expansion of computer reservations systems made available to subscribers in Australia.

3. DEFINITIONS

In this code the following terms shall be defined as follows:

(a) 'affiliate' means any entity, whether in whole or in part, controlling, owned by, controlled by, or under common control of another entity;

(b) 'air transportation' means scheduled passenger air services;

(c) 'availability' means information provided by a carrier or other travel industry principal for display in a system with respect to the seats or any other service a carrier or other travel industry principal holds out as available for sale on a particular flight or service;
(d) 'carrier' means any air carrier or affiliate that is engaged directly in the operation of aircraft in air transportation;

(e) CRS' means a computer reservation system offered to subscribers by a system vendor that provides information about travel related products including the schedules, fares, fare rules and seat availability of services offered by carriers and the schedules, rates and availability of services offered by other travel industry principals and any other functions used by subscribers to book reservations and/or issue tickets. 'CRS' does not include multi-access systems which provide only direct access to principals' internal inventory control systems, or such internal inventory control systems to the extent that they are used solely by airline personnel, through an airline office clearly identified as such, for the sale direct to the consumer of its own products or products of other airlines;

(f) 'CRS terminal' means a facility comprising a display monitor (which may be entered by use of a keyboard and on which information is displayed or transmitted by the systems to which it is linked), together with the associated keyboard and other equipment such as ticketing devices;

(g) 'consumer' means any person interested in purchasing air transportation and/or other travel service products;
(h) 'distribution facilities' means facilities provided in a CRS by a system vendor for the display of information about schedules, availability and fares of carriers and schedules, availability and rates of other travel related services for the booking of reservations and issuance of tickets and documents for these services;

(i) 'equally non-discriminatory' means at the same standard in all respects;

(j) 'display' means a presentation of schedules, fares, rules or availability and other information to a subscriber by means of a CRS terminal;

(k) 'participating principal' means a carrier or other travel industry principal which uses the distribution facilities, or has contracted to use the distribution facilities, of a CRS to distribute its products or services and includes a carrier or other principal which is a system vendor;

(l) 'primary display' means the default display presented by a CRS to comply with Section 7;

(m) 'secondary display' means a display presented by a CRS to comply with a specific request which has been entered into the system by a subscriber, and which may provide variations from the primary display;
(n) 'service enhancement' means any product or service offered to subscribers or participating principals by a system vendor in conjunction with a CRS during the term of their contract with a system vendor but not offered at the time the subscriber or participating principal entered into their contract with the system vendor;

(o) 'subscriber' means a travel agent or other person that holds itself out as a neutral source of information about, and makes reservations or issues documents for the travel industry by means of a CRS terminal located in Australia;

(p) 'system' see 'CRS';

(q) 'system owner' means an entity that holds an equity interest in a CRS or that has an affiliate that owns such an equity interest;

(r) 'system vendor' means any entity or its affiliate that markets, controls or operates a CRS offered to subscribers in Australia.
4. INTERPRETATION

(a) Where in this code the doing of something or the obligations imposed on System Vendors participating principals or subscribers is conditional on technical feasibility, it shall be assumed that the doing of something, or the obligations imposed by this code, are technically feasible unless the party raising the exception can demonstrate otherwise.

(b) Such feasibility shall take into account technical possibility of the undertaking as well as the cost, time and return on investment of the undertaking.

(c) Any disputes as to technical feasibility are to be resolved in accordance with Clause 17.

5. APPLICABILITY

(a) This code of conduct and the benefits and obligations arising under it apply in Australia to all system vendors and participating principals which have agreed to be bound in a manner satisfactory to the Trade Practices Commission, and to the sale of air transportation and travel related products by such entities through CRS in Australia, irrespective of:

i) the status or nationality of the system vendor; or
ii) the geographical location of the source of the information used or of the relevant central data processing unit.

(b) Specifically, the code will apply to Travel Industries Automated Systems Pty Ltd, Fantasia Information Network, Southern Cross Distribution Systems Pty Ltd and their owners and affiliates all of whom have agreed to be bound by the terms of the code. Other system vendors and participating principals who wish to obtain the benefits derived from the code will first be required to be bound to its terms and become signatories to the code.

(c) A copy of this code, duly signed by the party agreeing to be bound by it must be lodged with the Trade Practices Commission, where it will be put on the public register.

6. LOADING AND DISPLAY OF INFORMATION

(a) Data loaded into a CRS shall be comprehensive, accurate and non-misleading.

(b) Data displayed by a CRS shall be clear and equally non-discriminatory

(c) The rules used by a CRS to display information shall be consistently applied to all participating principals in their particular product market.
7. DATA INTEGRITY

(a) Participating principals providing material, either directly or indirectly, for inclusion in a CRS database are primarily responsible for the accuracy of the information supplied and shall ensure that the data submitted accurately reflects the services actually available to consumers.

(b) System vendors shall take reasonable measures to ensure that the material supplied by participating principals either directly or indirectly, is loaded accurately, completely and in a timely manner. They shall not manipulate it in a manner that would lead to inaccurate, misleading or discriminatory presentation of information to consumers.

(c) Data bases shall contain genuine and accurate information and be comprehensive. In particular:

i) they shall not contain misleading information;

ii) they shall not contain, for example, inaccurate departure or arrival times, misrepresented equipment, or incorrect fares information;

iii) they shall be capable of providing a reasonable number of options for any city-pair or service requested.
(d) All information from participating principals shall be loaded and processed with equal care and timeliness subject to the constraints of the loading method selected by the participating principals.

System Vendors who are affiliated to participating principals shall ensure the same care and timeliness is used in the loading of information from other participating principals as is used with the loading of their own information.

(e) If the system vendor provides a special loading capability to any participating principal including itself, it shall offer the same capability to all participating principals on an equally non-discriminatory basis subject to commercially reasonable terms, except to the extent that the provision of a special loading facility is not immediately technically feasible.

(f) The system vendor shall provide upon request to all participating principals all current data base update procedures and data base formats.
8. ORDERING OF INFORMATION FOR DISPLAY - AIR TRANSPORTATION

(a) All CRS's used, or proposed to be used in Australia and subject to this code of conduct shall provide a primary display or primary displays that include the schedules, fares, fare rules and availability information of all participating carriers in accordance with the provisions of this section.

(b) Each primary display shall be at least as useful for all subscribers, in terms of functions offered, and the ease with which such functions can be performed or implemented, as any other primary display maintained.

(c) The ranking of information shall not be influenced, either directly or indirectly, by a carriers identity and shall have the objective of constructing travel options that meet consumer preferences.

(d) The criteria to be used for ranking information shall be applied on an equally non-discriminatory basis to all participating carriers and may be on the basis of any algorithm which is reasonably in the best interests of consumers, provided that such algorithm is consistently applied.
(e) The algorithm used to determine the ranking of information in a primary display shall be so designed as to provide a flight ranking which will most closely match an intending consumer's preference and which will take into account factors such as:

i) preferred time of departure;

ii) preferred time of arrival;

iii) lapsed time;

iv) relative convenience. which will include consideration of the characteristics of the flights, be they:

- non-stop flights;
- flights with stops on the same aircraft;
- flights with stops involving change of aircraft (e.g. to the same airline, to another airline, to another terminal);
- or code share flights,

and which will conform with algorithms permitted by the European Civil Aviation Conference, United States Department of Transportation, or such other algorithm as satisfies the criteria in this code of conduct.
(f) The system vendor shall provide
upon request to any subscriber or
participating carrier current
information on:

i) all rules for ordering the
primary display in each
market;

ii) criteria used to select
connecting points;

iii) criteria used to edit
connecting flights; and

iv) the weight (if any) given to
each criterion in (i) and (iii)
above

(g) Nothing in this section is intended
to restrict re-ordering of data or
provision of secondary displays by
a system vendor to the extent
required by the preferences
specifically expressed by the
consumer.

(h) Subscribers shall not manipulate
datal supplied by CRSs in a
manner that could result in
inaccurate, misleading or
discriminatory presentation of
information to consumers.

(i) Where a display contains
additional data provided by a
subscriber such data shall not be
used by a subscriber in a manner
that could result in the provision of
inaccurate or misleading
information to consumers.
9. ORDERING OF INFORMATION FOR DISPLAY - OTHER TRAVEL SERVICES

The ranking of any display of information by a CRS subject to this code of conduct, of travel services other than air transportation shall be equally non-discriminatory to all participating principals and shall not be influenced, either directly or indirectly, by principal identity, except to the extent required by the preferences expressed by the consumer.

10. CONTRACTS BETWEEN SYSTEM VENDORS AND PARTICIPATING PRINCIPALS

Contractual and other relations between system vendors and participating principals shall be governed by the following provisions:

(a) Under certain circumstances contracts between system vendors and participating principals can only be concluded with system owners based outside Australia. Such contracts are subject to the laws and codes of conduct prevailing in the country in which the system owner is based. The stated objectives of these overseas codes and this code are fundamentally consistent.

(b) In so far as system vendors in Australia who are signatories to this code enter into contracts with participating principals for the purposes of providing distribution facilities then:
i) any principal willing to comply with the system vendor's customary terms shall have the right to participate in a system on equally non-discriminatory basis;

ii) the system vendor shall provide upon request to principals current information on its fee levels and fee arrangements for participating principals;

iii) for all principals having similar product types and participating in its system, a system vendor shall charge the same fee, for the same type and level of service, without discrimination;

The fee charged will be reasonably related to the costs incurred in providing the service, or in appropriate cases the unit cost of the principals' products. The fee shall not be structured so as to result in unreasonable conditions which would preclude participation by smaller principals;

iv) the system vendor shall not condition participation in its system on the purchase or sale of any other goods or services;
v) in the event that a system vendor offers a service enhancement to any participating principal, it shall, subject to technical feasibility, offer it to all such participating principals on equally non-discriminatory terms.

vi) Any such enhancement will be offered at fair and reasonable cost having regard to, without limitation, such matters as development, implementation and delivery costs incurred by the system vendor.

(c) A system vendor shall not make it a condition for participation that principals accept supplementary conditions, which by their nature or according to commercial usage, have no connection with the provision of CRS services.

(d) A system vendor shall not discriminate against a participating principal or refuse to permit a principal to participate in the system on the grounds that the participating principal participates in another system.

(e) Participating principals' contracts in Australia with system vendors are subject to this code of conduct and such contracts will contain specific reference to the code.
11. CONTRACTS BETWEEN SYSTEM VENDORS AND SUBSCRIBERS

Contractual and other relations between system vendors and subscribers shall be governed by the following provisions:

(a) subject to paragraph (b) the standard term of subscriber contracts shall be for 3 years.

(b) Subject to mutual agreement, where the subscriber specifically requests a contract term for a period other than 3 years, then the subscriber may elect to enter into a contract for some other term provided the contract term is at least 12 months and no more than 5 years. Such a contract, should the term exceed 3 years, shall also state the contract price for a similar contract for a 3 year term.

(c) A subscriber to a contract exceeding 3 years shall have the right to terminate such a contract upon 3 months notice in writing, such notice expiring 3 years after the commencement date of the contract.

(d) A contract terminated in accordance with paragraph (c) above shall only be effective upon the subscriber paying to the system vendor an amount that reasonably reflects the difference between the 3 year contract price referred to in (b) above and the amounts already paid by the subscriber to the system vendor up to the date of termination.
(e) Where at the time this code comes into operation an existing subscriber contract has a term exceeding 3 years, the subscriber shall have the option to terminate the contract in accordance with the provisions in paragraph (c). On termination the subscriber shall pay to the system vendor such an amount that reasonably reflects the difference between what has been paid by the subscriber up to the date of termination of the contract and the reassessed price of the contract given the new termination date.

(f) Nothing in section 11 prevents system vendors from recovering from subscribers liquidated damages in respect of the contracts not terminated in accordance with section 11.

(g) The variation in charges to subscribers between contracts of varying terms shall reasonably relate to variations in costs arising from the difference in terms.

(h) As at the date this code becomes applicable to the system vendor, no new or renewed subscriber contract shall contain any minimum use provision requiring a minimum level of usage of the CRS by the subscriber.

(i) Minimum use provisions in existing subscriber contracts shall not be enforced.
(j) Subscriber contracts shall state that the activities of the system vendor are subject to this code of conduct which shall be specifically referred to in the contract and incorporated by reference.

(k) Any term in a subscriber contract inconsistent with a provision of this code is null and void.

(l) Nothing in the subscriber contract or in the relationship between a system vendor and the subscriber shall in any way directly or indirectly prohibit or inhibit an existing or potential subscriber from contracting with, obtaining or using any other CRS.

(i) No system vendor or affiliate of a system vendor shall discriminate against a subscriber for refusing to use a particular system;

(ii) No system vendor or affiliate of a system vendor shall require, directly or indirectly, a subscriber to acquire particular goods or services as a condition of subscribing to a particular system;

(iii) A system vendor shall provide access to CRS services to all subscribers to its system on an equally non-discriminatory basis.

(m) No participating principal shall require use of any system by the subscriber in any sale of its services.
(n) No system vendor shall directly, indirectly or through a third party, require an existing or potential subscriber to use the system in which it has an interest as a condition for the receipt of any commission, or any other incentive or inducement for the sale of or access to air transportation or other services of it or of its affiliates.

(o) No system vendor shall, whether directly or indirectly, charge prices to subscribers conditioned in whole or in part on the identity of principals whose products are sold by the subscriber.

(p) No system vendor shall include as part of its contracts with subscribers any rollover provisions, including any provision that by its terms require the automatic extension of the contract beyond the stated date of termination because of the addition or deletion of equipment or of the passage of time past the stated date of termination.

(q) No system vendor shall attach unreasonable conditions for withdrawal from any subscriber contract.

(r) Subject to technical feasibility and on commercially reasonable terms, the system vendor shall make available to its subscribers any and all enhancements which are made available to the system vendor by participating principals.
(s) System Vendors shall make available on request to subscribers, as soon as possible after this code comes into effect:

(i) the technical specifications for connecting third party hardware to the vendor's CRS; and

(ii) a list of non proprietary third party hardware and software which the CRS has previously certified as being able to be connected to or used with the vendor's CRS.

System Vendors shall ensure that these documents are updated periodically or at least every 6 months.

(t) System Vendors shall not require subscribers to seek certification for hardware and software included on the list mentioned in 11 (s).

(u) Subject to mutually satisfactory technical evaluation a subscriber shall, at its cost, be permitted to connect to a CRS such non proprietary third party hardware, software and databases as it chooses, provided that no damage may be carried to the CRS. Charges by the system vendor to the subscriber for the certification and/or connection of such third party software and databases shall not be in excess of commercially reasonable levels.
(v) System vendors shall complete such necessary technical evaluation and certification in a timely manner.

(w) Information generated or received by a subscriber through a CRS which is commercially sensitive to the subscriber shall be maintained as confidential to the subscriber and shall not be accessible to or made available to any third party other than at the request of and cost of the subscriber.

12. ACCESS TO CARRIER INFORMATION

(a) Subject to this section carriers affiliated to system vendors shall, where requested, subject to technical feasibility and on normal industry cost terms, provide to all CRS which are signatories to this code of conduct and are available to subscribers in Australia:

(i) the same complete, timely and accurate information concerning all their airline schedules, fares, fare rules and seat availability;

(ii) last seat availability;

(iii) the same system facilities and enhancements as it offers to any other system;

(iv) the same level of service as it provides to any other system.
(b) Where a CRS has fewer than 50 sites in Australia, paragraph (a) does not apply to carriers affiliated to system vendors unless the CRS pays the cost of the carrier's connection to the CRS.

(c) Where a CRS pays the cost of connection carriers affiliated to system vendors shall refund that cost to the CRS once it has been installed in 50 sites in Australia.

(d) Carriers affiliated to system vendors will be subject to the payment to other systems of standard industry charges for transactions.

13. MARKETING INFORMATION

(a) The system vendor shall upon request make available to all participating principals on equally non-discriminatory and reasonable commercial terms all non-principal-specific marketing, booking and sales data that it elects to generate from its system, and principal-specific data relating to that principal.

(b) The system vendor shall not, without the permission of the participating principal concerned, make available to another person, including itself, marketing, booking and sales data, relating to that participating principal, other than as provided for under IATA resolutions and recommended practices.
14. BILLING INFORMATION

(a) To the extent possible, the system vendor shall provide to all participating principals whose services are booked or cancelled by subscribers in Australia, information regarding such bookings and/or cancellations in sufficient detail so as to enable identification of such activities by participating principals in their own system.

(b) The system vendor shall ensure that invoices generated by it on booking and other fees and charges which are sent to participating principals shall be accurate, complete and clear.

15. TICKETING

(a) Each participating principal shall, without discrimination, allow any system vendor in whose system it participates to issue neutral accountable documents if:

(i) the system vendor agrees to issue such documents on terms and conditions that are commercially reasonable and non-discriminatory;

(ii) such documents are issued by the system vendor in accordance with industry standards;

(iii) subscribers are authorised by the participating principal to issue documents on its behalf.
16. RECIPROCITY

(a) The obligations of the system vendor under this code shall not apply with respect to a principal that has not entered into a contract that complies with this code or fails to pay a non-discriminatory fee. The system vendor shall apply its policy concerning treatment of non-paying principals on a uniform basis to all such principals.

(b) The obligations of the system vendor under this code to provide equally non-discriminatory display shall not apply to the display of information of any principal that operates or whose affiliate owns or operates a CRS that does not display information in an equally non-discriminatory manner about any affiliate of any system vendor bound by this code as it does for its own services and products or which charges fees which discriminate against any such affiliates participating in another system.

17. ENFORCEMENT

(a) Nothing in this code is intended to restrict the rights of parties to any contract the subject matter of which is subject to the terms of this code to pursue injunctive or monetary relief in courts of competent jurisdiction, or conciliation pursuant to Clause 18 for breach of the terms of such contract including, any breach of this code. A breach of this code may, of itself, give rise to such action.
(b) The system vendor shall make available to all its subscribers before entering into a contract or renewal thereof a copy of this code. On or before 1 February of each year the Chief Executive Officer of each system vendor who is a signatory to this code shall provide the Trade Practices Commissioner with a letter indicating that this provision has been complied with.

18. DISPUTE RESOLUTION

In the event of a dispute arising under any aspect of this code, including reviewing the code, or concerning a subject matter subject to the provisions of this code, the parties to the dispute may elect to proceed by way of dispute resolution provided under this code. In that case the following provisions apply:

(a) The complainant shall raise the matter in writing with the other party and the parties shall make every effort to resolve the dispute fairly.

(b) If the dispute cannot be settled by the parties within 28 days, the parties agree to endeavour to settle the dispute by conciliation undertaken by the travel industry conciliator.
Appointment of Conciliator

(c) A Selection Committee made up of a nominee from Australian Federation of Travel Agents, a nominee of all system vendors of CRSs operating in Australia at the time this Code comes into effect, and a nominee of the Trade Practices Commission will appoint an independent Conciliator to serve for a term to be set by the Committee and shall have the authority to discharge the Conciliator. The Conciliator will be a person of recognised integrity and stature who will command respect from all sectors of the industry. During their terms of office the Conciliator shall not be an officer, director, employee or hold any substantial interest, in the airline or travel industry.

Role of Conciliator

(d) The Conciliator’s role is to facilitate constructive discussion between the parties on the causes of a dispute and to assist the parties in reaching agreement on a mutually acceptable solution to a dispute. If requested by the parties involved in the dispute, the Conciliator will recommend a reasonable basis for resolving the dispute.
(e) In seeking to resolve a dispute between the parties involving a particular aspect of their contractual relationship the Conciliator will, as necessary, consider all of the terms of the contract between the parties, the commercial assessment on which the contract was based and the conduct of the parties in executing and implementing the contract, with the purpose of conciliating a fair and reasonable solution.

(iii) The parties agree that:

- everything which occurs before the Conciliator shall be in confidence and in closed session;

- the discussions are without prejudice; and no documents brought into existence for the purpose of the conciliation process may be called into evidence in further litigation by either party.

(iv) The Conciliator shall:

- act fairly, in good faith and without bias and shall treat matters brought before him in confidence;
give each party
the opportunity of
adequately stating
his case, and
correcting or
contradicting any
relevant statement
prejudicial to his
case;

ensure that
relevant
documents which
are looked at by
the Conciliator are
disclosed to the
parties to the
dispute subject to
their
acquiescence;

make appropriate
recommendations
for resolution of
the disputes
between the
parties

(v) The parties shall report
back to the Conciliator
within 14 days on actions
taken on the Conciliators
recommendation.

(vi) The Conciliator shall deal
with matters referred to it
as expeditiously as
possible but no later
than 14 days after the
matter has been referred
to.

(h) The costs of the conciliation shall
be equally shared by the parties to
the dispute, unless agreed
otherwise.
19. **REVIEW**

(a) This code can be amended at any time by mutual agreement of those parties whose rights and obligations would be affected by such change.

(b) Representatives of all groups which are signatories to the code shall meet every second year to consider the implementation and operation of this code. The meeting will be chaired by a nominee of the Trade Practices Commission who may extend invitations to attend to other interested parties.

(c) Matters to be considered at the meeting shall be any issue related to the scope, operation and effect of the code, including dispute resolution, subscriber and principals participation in CRSs and the continued coverage of the Code by Authorisation under the Trade Practices Act.

(d) A report of the meeting shall be prepared and made available to interested parties and a copy placed on the public register of the Trade Practices Commission.

20. **WITHDRAWAL**

Signatories to this code may withdraw from the code on giving to other signatories 6 months in notice in writing. A copy of the notice of withdrawal shall be forwarded to the Trade Practices Commission where it will be placed on the public register.