

MERCATUS CENTER
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REGULATORY STUDIES PROGRAM

**Public Interest Comment on
Computer Reservations Systems¹**

The Regulatory Studies Program (RSP) of the Mercatus Center at George Mason University is dedicated to advancing knowledge of the impact of regulation on society. As part of its mission, RSP conducts careful and independent analyses employing contemporary economic scholarship to assess rulemaking proposals from the perspective of the public interest. Thus, this comment on the Computer Reservation Systems does not represent the views of any particular affected party or special interest group, but is designed to evaluate the effect of the Agency's proposals on overall consumer welfare.

I. Introduction

The financial and competitive performance of the airline industry has been subject to many economic studies before and after the *Airline Deregulation Act of 1978*. Although studies conclude that deregulation intensified competition, airlines that use certain airports as hubs are still believed by some analysts to possess some market power.² The existence of such market power was among the reasons the Department of Transportation sought to regulate Computer Reservation Systems (CRS, or "systems") in 1984 and 1992; however, the principal reason for this regulation was the fact that all CRS were owned by airlines. The concern was that airlines would use their ownership of CRSs to harm rival carriers.

Traditionally, consumers had two channels to access airline services: travel agencies and airlines. Before the implementation of CRS, a travel agent had to call airlines individually to complete a flight arrangement. The advent of CRS greatly simplified this process, thereby lowering the costs to agents and consumers. A travel agent was now able to access flight information from different carriers, make a booking, and keep its operational data with a single system, which meant tremendous productivity gains for the agencies. In 1999, travel agencies made 93 percent of their domestic bookings through CRS.³

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² Severin Borenstein and Nancy Rose, "Competition and Price Dispersion in the U.S. Airline Industry," *Journal of Political Economy*, 103 (August 1994).

³ *Federal Register*, Vol. 67, No.221Page 69369 (November 15, 2002)

The advent of CRS, along with industry deregulation and changing airline distribution strategies, played a key role in the development, growth, and change of the travel agency business. The number of travel agency locations increased from 6,021 in 1968, to 13,454 by 1977, and reached a peak of 33,715 by 1996. By the mid-1990s, airlines began to experience financial pressures to decrease their costs, leading them to slash the override commissions paid to agents and eliminate the base commissions.⁴ This coincided with the development of the Internet as an alternative distribution channel. With the emergence of alternatives and decreasing commissions, the financial condition of travel agencies started deteriorating. The number of travel agents decreased by 31 percent, and the number of travel agency locations by 24 percent from 1994 to June 2002. In addition, there has been a trend toward consolidation.⁵ Despite this downward trend in the travel agency business, the Department of Transportation (DOT, or “the department”) expects that traditional travel agencies will still account for 45 percent of all airline bookings in 2005.⁶

The CRS were initially developed and owned by the airlines. American developed and owned Sabre, the first CRS, in 1976. United followed with its Apollo system (later becoming Galileo). Later came Worldspan, the product of a merger between PARS, owned by Northwest and TWA, and Delta’s DATAS II. System One of Continental later became Amadeus.

Asserting that airline ownership of a CRS can distort airline competition by providing unfair competitive advantages for the owner airlines, first the Civil Aeronautics Board (CAB) and then the Department of Transportation adopted CRS regulations in 1984 and 1992 respectively. Since the adoption of the rules, two major developments have affected the airline industry. These changes have motivated DOT’s current review of existing regulations governing CRS and the airline industry more broadly.

1. The first change involves decreasing airline ownership of the systems. Sabre is now publicly owned, while Galileo sold most of its stock to the public (although United still owns 18 percent, Swissair owns 8 percent, and five other airlines own 1.5 percent). Amadeus is owned by the public and foreign airlines today. The fourth system, Worldspan, recently announced that its airline owners, Delta, Northwest, and American intend to sell it to a newly formed venture of non-airlines in mid-2004.⁷ Because of these changes, DOT suggests that a major airline might not be able to enhance its industry position by using a system that it owns to achieve an “unfair” competitive advantage. Therefore, the main factor that caused DOT to adopt the 1992 CRS regulations—the alleged unfair leverage of the airlines’ market power in the airline distribution business—seems to have lost whatever validity it had.

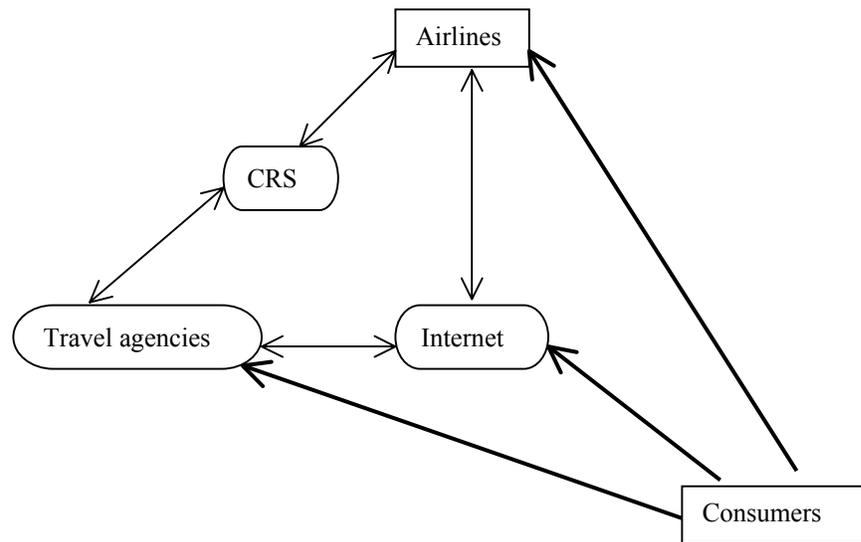
⁴ Airline payments to travel agencies are two types: Base commissions are paid regardless of how many bookings a travel agency does for the airline. Override commissions, on the other hand, are calculated based on the number of bookings made.

⁵ National Commission to Ensure Consumer Information and Choice in the Airline Industry, *Upheaval in Travel Distribution: Impact on Consumers and Travel Agents* (November 13, 2002)

⁶ *Federal Register*, Vol. 67, No.221 Page 69374 (November 15, 2002)

⁷ See <http://www.computerworld.com/industrytopics/travel/story/0,10801,79013,00.html>.

2. The other critical development involves the increasing role of the Internet as an alternative distribution channel for airline services.⁸



Consumers now have a variety of alternatives to obtain airline services through the Internet as shown in the diagram above. They can still call airlines or travel agencies who can provide service by using CRS or the Internet. Alternatively, they can use individual airline websites, or any number of on-line travel agencies, some of which are affiliated with airlines.⁹ As the share of Internet airline bookings increases, the strength of the CRS' alleged market power against airlines and travel agents recedes.

II. Summary of DOT-Proposed Modifications to the CRS Regulations

The following table summarizes existing CRS regulations addressed in the DOT proceeding together with the proposed modifications. The number in parenthesis appearing in the first column refers to the part and section identifiers of the existing rules.

⁸ The share of Internet-based airline bookings is 12 percent today. The share of travel agency bookings made through Internet is expected to reach 20 percent in 2005. See Proposed Rule, *Federal Register*, Vol. 67, No.221, p. 69374 (November 15, 2002).

⁹ Travelocity (owned by Sabre) and Expedia (developed by Microsoft) are the two largest on-line travel agencies, followed by Orbitz (airline affiliated). The cost of a booking made through an airline's website is significantly lower than the alternatives. One study calculates the costs of making a booking through a traditional travel agency, on-line travel agency, airline's call center, and airline's website respectively as \$23, \$20, \$13, and \$6 (for America West). See Proposed Rule, *Federal Register*, Vol. 67, No.221, p. 69374 (November 15, 2002).

Table 1. Summary of Existing CRS Regulations and Proposed Modifications

	Summary of Existing CRS Regulations Subject to the DOT Proposal¹⁰	Proposed Modifications
Use of third-party hardware, software, and databases (255.9)	<ul style="list-style-type: none"> • The systems cannot prohibit the use of third-party hardware and software in conjunction with the system unless it is required to protect system’s integrity. • A CRS terminal can be used to access any other system or database providing airline information unless the terminal is owned by the system. 	<ul style="list-style-type: none"> • Eliminate the rule allowing the systems to bar travel agencies from accessing other systems and databases by using the CRS terminal provided by the system.
Contracts with participating carriers (255.6)	<ul style="list-style-type: none"> • Parity clauses are not allowed. The systems cannot require a carrier to participate in a system at the level that it participates in any other system. The only exception is carriers owning or marketing a competing system. 	<ul style="list-style-type: none"> • Eliminate the exception allowing the systems to impose parity clauses against the airlines owning or marketing a competing system. • Add a rule barring the systems from preventing airlines from discriminating against the system at least in cases where discrimination occurs because the system has higher booking fees. • Add a rule barring the systems from requiring airlines to provide their complete fare information to the system as a condition for participation.
System owner participation in other systems (255.7)	<ul style="list-style-type: none"> • Carriers owning a system shall participate in every other system and their enhancements unless the other system offers commercially unreasonable terms. 	<ul style="list-style-type: none"> • Eliminate mandatory participation rule.
Display of information (255.4 and 256)	<ul style="list-style-type: none"> • The systems cannot use carrier identity as the criteria to select and display the flight information (“display bias”). • A system cannot discriminate against code-sharing carriers, but may limit their listings as long as the service is listed at least once under each partner’s code. 	<ul style="list-style-type: none"> • Maintain rule against display bias. • Possibly add a rule limiting the number of times that code-share services are displayed. • Add a rule prohibiting airlines from providing software to travel agencies that would bias the display in favor of that airline.

¹⁰ Not all of the items in each section of 14 CFR 255 are included here. Excluded items are not subject to change.

Defaults and service enhancements (255.5)	<ul style="list-style-type: none"> No default feature can favor any carrier. The systems shall offer service enhancements to all participating airlines in nondiscriminatory terms. 	<ul style="list-style-type: none"> Maintain the equal functionality rule.
Contracts with participating carriers (255.6)	<ul style="list-style-type: none"> The systems cannot charge discriminatory booking fees to participating airlines. 	<ul style="list-style-type: none"> Eliminate the rule against discriminatory booking fees.
Marketing and booking information (255.10)	<ul style="list-style-type: none"> The systems shall provide data to all participating airlines on nondiscriminatory terms. 	<ul style="list-style-type: none"> Add a rule restricting the sale of data – two alternatives are proposed: <ol style="list-style-type: none"> A ban on the release of data on bookings made by travel agencies. A ban on the release of data without the consent of the airline owning the data.
Contract with subscribers (255.8)	<ul style="list-style-type: none"> Maximum contract period is five years. When a system offers a term more than three years, it shall offer an alternative contract with a term no more than three years as well. Rollover and minimum use clauses are not allowed. 	<ul style="list-style-type: none"> Proposes three alternatives for the maximum term: <ol style="list-style-type: none"> Maintain existing rule. Decrease it to three years. Adopt the European rule¹¹ Maintain the rule against rollover and minimum use clauses. Add a rule barring systems from demanding liquidated damages when subscribers terminate the contract
Productivity pricing		<ul style="list-style-type: none"> Add a rule restricting or prohibiting the systems from using productivity pricing.
Internet based systems		<ul style="list-style-type: none"> No regulation.
Contract with subscribers (255.8)	<ul style="list-style-type: none"> An owner airline can not require a travel agency to use its system to be able to receive override commissions. 	<ul style="list-style-type: none"> Possibly add a rule to ban tying practices that includes marketing benefits such as discount fares.
Internet		<ul style="list-style-type: none"> Possibly add a rule prohibiting the systems from requiring

¹¹ The European contract allows travel agencies to terminate a contract with a few months notice, without a penalty, as long as the contract has been in force for at least one year.

participation		airlines to provide their complete fare information to the channels that airlines do not prefer to provide.
Fare Advertising (399.84)	<ul style="list-style-type: none"> • Price advertised by an airline or travel agency shall be the complete price that must be paid by the traveler. 	<ul style="list-style-type: none"> • Extend to include system display of fares as well. • Modify to require on-line and traditional travel agencies to list their service fees and the total cost separately.

III. Critique of the Proposed Rule Changes

In its attempts to address the concerns about market imperfections in the airline industry, DOT adopted the current CRS regulations in 1992. The current proposal recognizes that changes in the airline industry make many of these regulations unnecessary, and seems disposed to lifting previous encumbrances on the air travel industry, though in only a piecemeal fashion.

Both the existing rules and the current DOT proposals presume that the systems have market power over the airlines and travel agencies. Our analysis, on the other hand, suggests that the intense competition in the travel agency business coupled with the emergence of system alternatives is likely to have a counter-balancing effect on any alleged market power. Given thin profit margins, large numbers of incumbents, and low barriers to entry, travel agencies remain extremely alert to any innovation that would benefit their customers. This alertness gives the agencies a degree of bargaining power against the systems and airlines since both need travel agencies for bookings.

In the sections below, we examine each of the proposed changes from the perspective of their impact on the ultimate consumer.

A. The Proposal To Enable Travel Agencies To Use Third-Party Hardware And Software

Current DOT regulations restrict the systems from enforcing contracts that prevent travel agencies from accessing multiple systems using the same terminal unless the terminal is owned by the system, and from using third-party hardware and software in conjunction with the system hardware and software except as necessary to protect the system's integrity.

The proposed regulation expands upon the existing one by barring a CRS from restricting travel agencies' access to any other system by using the equipment provided by the CRS. The objective of the proposal is to make it easier for travel agencies to access alternative systems, and thus foster competition among all of the systems.

In the more competitive marketplace that exists today, however, this rule is unnecessary inasmuch as a restrictive CRS will lose market share to ones that offer wider choices, including those offering a wider application of system equipment that can access multiple

systems. In other words, if a CRS were to take action or attempt to structure a contract that diminishes an agent's choices or abilities to serve her clients, then the CRS will be harming the traveling public, and therefore, itself as the public and its agents attempt to discover superior avenues to the satisfaction of their traveling preferences.

It is worth noting here that traveling preferences are not exclusively confined to price. Depending on the particular traveler and trip, other considerations may take precedence over price such as (a) travel on a particular carrier (because of "Captain's Clubs" or other amenities, for example), (b) departure or arrival times that are more convenient but higher in price, (c) minimization of total travel time or connecting flights, or layovers, or (d) maximization of travel mileage (e.g., for frequent flyer programs). CRS that restrict a travel agent's ability to choose or satisfy along any of these dimensions will eventually lose business to less restrictive CRS or to alternative flight-booking venues.

Therefore, we suggest that DOT eliminate both current and proposed regulations respecting the ability of travel agents to use third-party software and/or hardware.

B. The Proposal To Bar Systems From Enforcing Contract Clauses That Restrict an Airline's Business Choices

With respect to specifying in advance certain contractual terms, the Department should bear in mind that it is difficult if not impossible in a large and fragmented market like air travel for the Department to specify the appropriate contract terms under all economic circumstances and with respect to all available resource allocations. The default setting in other words that the Department should follow recognizes that self-interests of the various contracting parties will lead to outcomes that are *at least as efficient* as those that could be designed by regulation.

1. The proposal to bar systems from using parity clauses

Current regulations bar the systems from enforcing parity clauses in their contracts with airlines except in those with the airlines that owned or marketed a competing system. Parity clauses require airlines to participate in a system at least at the same level as they participate in any other system.

An airline needs distributors to sell its seats, though it does not need any particular distributor. It follows, therefore, that airlines will enter contracts that provide them with the most favorable terms (and similarly for the CRS). Thus, a contract between an airline and a CRS may contain a parity clause, or not, as the two contracting parties mutually see fit. In other words, it may prove advantageous for airlines to participate differentially across the competing CRS in order to extract the lowest distribution costs. Or, conversely, an airline might wish to treat all the CRS equivalently if its business plan and future profit prospects so indicate that the widest possible distribution path is the best course for it to pursue. The important fact to recognize in either case, however, is DOT's *inability* to know and thus regulate what the appropriate contract terms should be for all airlines under all economic circumstances *ex ante*.

Therefore, we suggest terminating the rule prohibiting parity clauses.

2. The proposal to prohibit a system from barring an airline from “discriminating” against the travel agencies using the system

There is no existing rule barring the systems from enforcing contractual clauses that require airlines not to “discriminate” against travel agencies using the system, but DOT proposes to adopt such a rule. DOT argues that without such a rule, airlines might be able to persuade travel agents to use a system with lower booking fees.

On the one hand, DOT assumes that strengthening the ability of the airlines to persuade travel agencies to prefer a particular system against the others would decrease the fees charged by the systems to the airlines. Then, on the other hand, DOT tries to prevent the airlines from exercising this power since it asserts that this ability might cause the travel agents not to use alternative systems to the one supported by the airline.

Practically speaking, it would be difficult for DOT to identify whether an airline’s persuasive ability with travel agents is “fair” or “unfair” in each case since it seems highly likely that an airline would be supporting the low-cost systems anyway. Therefore, we suggest that DOT not adopt any rule to govern the airlines’ “discrimination” against or for the systems.

3. The proposal to prohibit a system from requiring any airline—as a condition for participation—to provide that system with fares the airline has chosen not to sell through the travel agencies or the systems

DOT proposes to adopt a new rule that prevents the systems from requiring airlines to provide all of their fare information to the systems once they have decided to participate. DOT argues that an airline should be able to choose the fares that it prefers to offer through different distribution channels.

Clearly, an airline should be able to offer different fares to different distribution channels based on its business requirements. However, a regulation mandating that outcome may prove counterproductive. This counterintuitive result may arise if the CRS provide an important counterweight in the future to Internet-based distribution venues like Orbitz and Travelocity. However, to be an effective counterweight, the CRS should be able to bargain and contract with the airlines—seeking the best terms they can—just as the airlines should be allowed to bargain freely with the CRS. Thus, while the mandated freedom for airline distribution venues sounds attractive, it is only attractive economically so long as it does not come at the cost of restricting another’s ability to seek favorable contract terms.

We, therefore, suggest that DOT not adopt any rule that regulates contract practices between the systems and airlines including this suggested rule that prohibits the systems from enforcing airlines to provide their complete fare information.

C. The Proposal to Eliminate the Mandatory Participation Rule

The mandatory participation rule adopted by DOT requires each airline with a 5 percent or more share in a CRS to participate in all of the systems at the same level. In its original rule-making, DOT was concerned that airlines with an ownership interest in one system would

limit their participation and complete fare information to that system in order to encourage travel agencies to use their affiliated system. Considering the changes in the ownership structure of the systems and the strengthening role of Internet as a distribution medium, DOT suggests that elimination of the mandatory participation rule would increase the bargaining power of airlines against the systems, and therefore increase the competition among systems.

DOT is clearly correct in its argument that the competitiveness of the airline business causes airlines to be extremely alert to any profit opportunities. As such, airlines use all necessary means to reach the largest number of customers possible. This in turn provides airlines with ample incentive to participate in multiple if not all systems. This is also the main reason why we believe that the current regulation has been ineffective. In addition, the proposed elimination would potentially increase an airline's bargaining power against a CRS since that airline would be able to withdraw from a system if it did not meet the airline's needs.

More importantly, elimination of the mandatory participation rule would lead to increased distribution innovations. Airlines, for example, would be able to create and own a distribution channel without a requirement to participate in all of the other systems at the same level. This would lessen the barriers to entry into the airline distribution market, and increase the competition among the systems.

Therefore, we concur that DOT's proposal to terminate the mandatory participation rule is a well-thought out step that will strengthen the competitive structure of the airline distribution business.

D. Proposals Regarding the Display of Information

DOT proposes to maintain its rules against organizing displays according to carrier ("display bias") and to add two more rules designed to discourage display bias. However, research suggests such regulations actually harm competition, customers and airlines – the very entities the rules are designed to protect.

1. The proposal to maintain the prohibition against display bias

The rules define display bias as using the carrier identity as the criteria to select and rank flights to display. Current regulations do not permit systems to bias their displays in favor of an airline. DOT argues that the systems could benefit an airline by providing it a better display position, which would mislead travel agents and customers, and cause other airlines not to be able to compete on the basis of price and quality. Therefore, DOT proposes to maintain the rule prohibiting the display bias.

Three main assumptions have supported the rule against display bias. We evaluate each in turn.

a. An airline can leverage its monopolistic power to bias the display of its CRS against its competitors

Changing ownership structure of the CRS renders the assumption invalid. Although the CRS are still affiliated with airlines for marketing purposes, the ownership ties are indeed not as

strong. Therefore, the objective for a CRS becomes maximizing the CRS profits rather than strengthening the market position of the affiliated airline.

We suggest that the only way that a CRS would bias its screens is if this maximizes its profits. Direct implication of this argument is that a CRS would sell a display position to an airline if the marginal benefit of doing so exceeds its marginal cost.

b. Biased display harms consumers

Lack of collusion in the CRS business and the intense competition among travel agencies would prevent any display bias harming consumers.

The travel agency business is a highly competitive one with no significant barriers to entry, large number of agencies, and low profit margins. In this setting, it is reasonable to expect travel agents to be extremely alert to customer needs. When customers are not indifferent between two flights, a travel agent has the opportunity of providing better service to the customers by giving information about the preferred flight. This requires the travel agent to incur a certain amount of search cost. The time spent to select between alternative display options, scroll down on the same screen, or go to the next screen is an example of this cost. A travel agent would have the options of incurring this cost, requiring the CRS to change its display criteria, or lose its customers to a better serving travel agency.

Having said this, a travel agent would accept a biased display of flight A against flight B only if the customer is indifferent between A and B. Therefore, travel agencies would not provide biased information to customers unless it does not cause any harm.

c. Biased display harms some airlines

A superior display position might provide profits to an airline, in some cases exceeding those of its competitors if they were to be displayed in the same position. In this case, it is likely that this position is more valuable to that airline, and the airline is willing to pay more than its competitors to obtain the display position. Although some airlines might be “harmed” in this process, it is nevertheless effective in terms of allocating display positions to the highest-valued uses.

DOT gives the example of United and Galileo.¹² Galileo’s display algorithm that favored United flights allegedly caused Alaska to lose \$15 million. In this case, Alaska should have been willing to pay up to \$15 million to obtain the preferred display position. Alaska could have bought the display position from Galileo or decreased its ticket prices to a certain extent to get a better position when displayed by travel agents according to the price criteria.

To sum up, we see no evidence suggesting that travel agencies do not or cannot avoid the consumer harm caused by display bias if there is any. This renders a rule to regulate the displays unnecessary. Airlines’ practice of buying a preferred display position does not justify the adoption of a rule against display bias since the only case in which travel agents

¹² See Proposed Rule, *Federal Register*, Vol. 67, No.221Page 69395 (November 15, 2002)

would accept a display bias is when there is no difference between the two flights for the consumer.¹³

2. The proposals on screen padding

When two airlines, A and B, code-share, a system would display a flight of A connecting with a flight of B as an A to A connection, a B to B connection, an A to B connection, and a B to A connection. In this way, the connecting flight consumes a larger display space.¹⁴

Current DOT rules allow a system to limit the listing of code-sharing services given that a code-sharing flight is listed at least once under each carrier's name. Although DOT states in the preamble to the proposed rules that it tentatively believes consumers would benefit from a limitation of the code-sharing flights' display, there is not yet a concrete proposal in this direction.

We question DOT's assertion that consumers would benefit from a limitation of the code-sharing flights' display. Considering the competitive structure of the travel agency business, there is no reason to assume that travel agencies would not continuously adjust their business operations to better meet consumer needs. If travel agencies decide that the multiple listing of code-sharing flights does not provide a value to their customers, they would push the systems to change their displays, and the systems would do so, or risk losing business to competing systems who respond to travel agent and consumer demands.

3. The proposal to prohibit airlines from providing biasing software to travel agencies and the proposal to not regulate the displays created by travel agencies

DOT has two proposals regarding the biasing software used by travel agencies. While banning airlines from providing biasing software to travel agencies, DOT allows travel agencies to develop and use their own biasing software.

According to DOT, "the travel agency owner in theory can choose whether or not to use the program offered by an airline, but the relationship between the travel agency and the airline, which is likely to be the airline most important to the agency and its customers, makes it doubtful that the agency's choice would be entirely voluntary". In other words, DOT argues that the airlines have market power over travel agencies.

Even if one accepts that airlines have market power over travel agencies, biasing software does not confer that power or even enhance it. DOT recognizes that intense competition in the travel agency business causes travel agents to provide information that benefits their customers. This motivation alone is sufficient for travel agents not to accept any biasing software provided by the airlines that harms its customers. There are two possible outcomes: (1) biasing software works to the airline's benefit by selling passengers on higher-priced (or

¹³ For additional information on the screen bias issue and a discussion of the 1992 rule, see, Donald J. Boudreaux and Jerome Ellig, "The Case Against Regulating Airline Computerized Reservation Systems," *Journal of Air Law and Commerce* 57 (3), (Spring 1992), pp. 567-597.

¹⁴ See Proposed Rule, *Federal Register*, Vol. 67, No.221Page 69396 (November 15, 2002)

in some other way, inferior) seats, or (2) it does not benefit airlines even in the presence of a bias because alternatives remain open. If (1), passengers and their agents eventually find out and seek alternative means of booking seats (Internet, etc.), or if (2), there's no issue. DOT has not made the case that there is either a principal-agent problem between travel agencies and travelers, or that airlines can prevent travel agencies from pursuing the best interests of their customers. Thus, biasing software is either ineffective or beneficial to the traveling public, and DOT's proposal to bar airlines from providing biasing software to travel agencies, while allowing travel agencies to create their own display software, does not appear to be in consumers' best interests.

E. The Proposal To Maintain Equal Functionality Rule

According to DOT, architecture bias might occur in various ways. A system can update the availability information of the discriminated airlines less frequently or work less easily or reliably while travel agents are making bookings for them.¹⁵

The existing DOT rule requires the systems to provide equal access to system enhancements and equal treatment on the loading of information across all of the airlines, and prohibits the systems from using default features that favored an airline.

Indicating that there has not been any objection regarding this rule, DOT concludes that the rule has been effective, and therefore should be retained.

We argue that the systems are unlikely to engage in an architectural bias since the cost of this conduct would be high considering the competitiveness of the travel agency business. When architectural bias impedes a travel agency's ability to access the best possible deals, travel agencies would require the systems to correct the architectural bias or seek alternative means of satisfying their customers. A CRS that did not correct the bias would lose revenue to the CRS that provided superior service. Competitive threats therefore give sufficient incentive to the systems to avoid an architectural bias. It therefore seems more likely that the reason no party has objected to the existing rule is that the CRS have figured out that they would not benefit from architectural bias in any case. Hence, we suggest ending the rule against the architectural bias.

F. The Proposal To Eliminate The Rule Barring Discriminatory Booking Fees

1. Discriminatory booking fees

DOT's current rule prohibits the systems from charging different booking fees to different airlines. The rationale for the rule was that a system owned by an airline can charge higher booking fees to the airline's competitors and thus distort the competition among the airlines.

DOT proposes to terminate this rule on the grounds that ending the prohibition against discriminatory booking fees, together with the elimination of the mandatory participation rule, can strengthen the airlines' bargaining power over the systems and ultimately decrease the booking fees.

¹⁵ See Proposed Rule, *Federal Register*, Vol. 67, No.221Page 69398 (November 15, 2002)

We agree with DOT on the need to eliminate the rule. Ending the rule would not motivate the CRS to charge discriminatory booking fees to provide unfair competitive advantage to some airlines. There is no evidence suggesting collusion in the CRS business. Therefore, when allowed to charge different prices to airlines, the CRS can always compete on price. A CRS charging a higher price to an airline to favor another one would lose the former to a competitor CRS.

2. Third-party proposals to limit booking fees

Some parties have suggested that DOT limit the level of booking fees that can be charged by the CRS. We agree with DOT on the impracticability of enforcing such rules since not just the determination of the “reasonable” level of booking fees, but also understanding the current cost structure and the level presents a complex case.

3. third-party proposals to prohibit fees on passive bookings

Other parties have suggested that DOT prohibit fees charged to passive bookings. Passive bookings are bookings made by travel agents without sending a message to an airline’s internal reservation system. Although DOT prefers not to address the passive booking issue in this rulemaking, it argues that the systems provide an incentive to travel agents to make passive bookings.

DOT accepts that travel agencies can use passive bookings to better serve their customers as well as to satisfy the booking quotas for the systems. However, it is unclear whether it would be practicable to differentiate these two conducts from each other, which is a necessary step since barring travel agencies from making passive bookings might harm the consumers as well.

In addition to this difficulty, we do not see any evidence suggesting that the airlines have not been able to pass the cost of passive bookings to travel agencies in terms of reduced commissions. What is more, the systems, if barred from charging for passive bookings, might compensate for it in various ways such as increasing other fees.

Therefore, a rule that prohibits travel agencies from making passive bookings or the systems from charging for passive bookings would likely be ineffective.

4. Third-party proposal to prohibit charges for billing information

The current regulation requires each system to provide a detailed bill to airlines. If airlines request a magnetic copy, DOT allows the systems to charge for it. DOT proposes to retain this rule.

Some parties suggest that the CRS not be able to charge for providing billing information. However, a producer can charge the price in many ways. In this case, if the systems are not allowed to charge a price for billing information, they can compensate for it by increasing other types of charges. Thus, any restrictions imposed on the systems against charging for billing information has been and will be unsuccessful. Not only should DOT not impose

additional rules but it should end the existing rule requiring the systems to provide billing information at no charge.

G. The Proposal to Restrict Airlines' Access to Marketing and Booking Data

A system can sell marketing and booking data to airlines, showing the tickets sold by each travel agent through a CRS for each flight. DOT argues that not all of the airlines have symmetric access to this data, and their use of the data might differ depending on their share of a market. DOT is concerned that a dominant airline in a market—by obtaining the information about its competitors' flights and ticket prices—would be able to “coerce” travel agents in that market to increase their sales of the dominant airline's tickets. DOT finds both of these practices anti-competitive, and therefore suggests proposes new rules restricting the sale of marketing and booking data.¹⁶

The first proposal bans the release of data on bookings made by each travel agent, although it would allow airlines to purchase aggregate data at the market level. The rationale for the proposal is the ability of some airlines to divert sales from their rivals by “coercing” travel agents.

Although the means of “coercion” are unclear in the proposed rule, it may involve an airline that can decrease the price of its tickets to compete more effectively with its rivals. Secondly, such “coercion” could also mean using benefits such as override commissions or access to various fares offered by the airline that motivate travel agencies to increase their bookings for the airline, and thus decrease their bookings for the airline's competitors. On examination, though, the impact of either “coercive” policy on consumers would be positive. In each case, travel agents would have access to better fares and would be able to offer more attractive deals to consumers. Therefore, we suggest DOT reject the rule banning the sale of data on bookings made by each travel agent, because it will harm consumers.

The second proposal bans the systems from selling the marketing and booking data of an airline unless the airline has consented. With this proposal, DOT is assigning the ownership of the data to the airlines.

We recognize that the decision on who should assume the ownership rights of the marketing and booking data in this case is not a simple one. On the one hand, it is true that airlines create the data. However, on the other hand, without the CRS there is no data to be owned. The important factor to consider here is the cost of storing and extracting the data. Currently the CRS bear this cost. Therefore, unless DOT requires airlines to pay the CRS to meet this cost, the CRS would either not provide the data or compensate for the cost by increasing their other prices such as booking fees. The price that the CRS charges for the data cannot be controlled though since DOT accepts that it is impracticable to enforce a price regulation.¹⁷

¹⁶ See Proposed Rule, *Federal Register*, Vol. 67, No.221, p. 69402 and 69403 (November 15, 2002).

¹⁷ See Proposed Rule, *Federal Register*, Vol. 67, No.221, p. 69399 and 69402 (November 15, 2002).

Besides, major airlines can get the marketing and booking data on smaller airlines in any case. According to the Coase theorem,¹⁸ regardless of the initial allocation of the rights to a resource, if the ownership rights are transferable, then ultimately an efficient allocation would be attained. When applied to this case, the theorem suggests that when an airline assumes the ownership of the marketing and booking data, it would sell the data to another airline if that airline makes more profitable use of the data. However, if the owner airline uses the data more profitably, it would prefer to maintain its ownership. DOT's initial argument in this case shows us that major airlines (or dominant airlines) might use the data more profitably. Therefore, when a small airline assumes the data ownership, major airlines would be willing to pay the owner airline to purchase the data, and the price that they would offer would be more than the value of the data for the owner airline. As a result, the marketing and booking data would be sold to major airlines anyway.

Ironically, when the airlines pay to obtain the data and sell the data to major airlines, we are at the point where we have started. In conclusion, we do not think assigning the ownership of marketing and booking data to the airlines without requiring them to pay the CRS for the cost of storing and extracting the data would be preferable since the CRS would increase its prices in this case. A rule that requires the airlines to pay for the ownership of the data would not create a situation different than that of today, and thus would be ineffective. Therefore, we suggest that DOT not adopt any rule governing the purchase and supply of the marketing and booking data.

H. The Proposals To Maintain Or Strengthen The Rules Governing The Subscriber Contracts

1. The proposal to limit the maximum term of a contract

Current DOT rules set the maximum contract term at five years and require the systems to offer five-year contracts together with three-year contracts. DOT asserts that the systems' three-year contract terms are so unattractive for travel agencies that they "have to" choose the five-year term. Therefore, DOT requests comment on whether to (1) maintain the existing rule, (2) reduce the maximum contract term to three years, or (3) adopt the European rule (which allows travel agencies to terminate a contract with a few months notice, without a penalty, as long as the contract has been in force for at least one year.) With the limitation of the maximum contract term, DOT aims to motivate travel agencies to switch systems, thus increase competition among systems.

The prerequisite for analyzing the effects of a rule restricting the contract terms is an appreciation for the cost differences between five-year and three-year contracts. A three-year contract has the potential to be more costly for a CRS since the system would have to incur contracting costs more frequently than under a five-year contract. Thus, it is not surprising that systems charge more for three-year contracts than they do for five-year contracts.

In the absence of evidence suggesting that travel agencies "have to" choose five-year contracts, it may be simply that travel agencies prefer to have five-year contracts since the

¹⁸ R. H. Coase, *The Problem of Social Cost*, *The Journal of Law and Economics*, Volume III (October 1960)

cost of having them is lower than that of having three-year contracts. Adoption of the European rule, by contrast, would be tantamount to ending (or at least greatly attenuating) the costs associated with liquidated damages (discussed below).

We would suggest, therefore, that any rule that places more restrictions on the contract terms would be likely to harm travel agencies and consumers. DOT should eliminate the existing rule as well.

2. The proposal to prohibit the systems from requesting liquidated damages with the termination of the contract

The systems can include damage clauses in their contracts with travel agencies in case travel agencies terminate the contract before it expires. The specific damage clause that DOT addresses in its proposal relates to liquidated damages, which require a travel agent to pay an amount equal to the booking fees allegedly lost by the CRS when the agent terminates its CRS contract before the end of its term. DOT argues that these clauses burden travel agencies such that they are less willing to switch systems. To remove the burden, DOT proposes to bar the systems from requiring travel agencies to pay liquidated damages when they terminate the contract.

DOT accepts that there are various ways that a system can charge for the cost it incurs with the termination of a subscriber contract. By prohibiting only liquidated damages provision, DOT assumes that other types of provisions to compensate for the early termination of a contract are acceptable, which is an inaccurate assumption. A system can charge a pre-specified fixed amount regardless of when a travel agent terminates the contract. This fixed-amount compensation can well exceed the liquidated damages.

On the other hand, prohibiting all types of contractual damage provisions raise the costs for the systems, which in turn cause the systems to increase their price, making them less efficient and less profitable in the long run.

3. The proposal not to regulate contract practices on equipment additions

The systems usually require a travel agency under an existing contract to sign a new contract for each equipment addition it requests. Although DOT believes that this practice interferes with travel agencies' ability to switch systems, it is aware of the probability that the systems might increase the price of equipment additions if they are barred from enforcing this type of contract. We argue that signing new contracts for equipment additions does not hinder travel agencies ability to switch systems. First of all, a travel agency that has decided to add new equipment makes this decision most certainly with the objective of using the existing CRS. Secondly, if the travel agency does not prefer to be bound to a new contract with any equipment addition, it always has the opportunity to purchase its own equipment. Moreover, we agree with DOT in its assessment that prohibiting the systems from enforcing contracts for equipment additions would cause them to increase the price of the equipment.

All in all, we find a rule governing the contract practices for new equipment additions to be neither effective nor desirable.

I. The Proposal To Prohibit Or Limit The Use Of Productivity Pricing

Although the current rules prohibit inclusion of minimum use and parity clauses as well as terms more than five-years in the contracts between the systems and travel agencies, there is no regulation of productivity pricing. Productivity clauses are basically a means of offering financial incentives to a travel agent if the agent exceeds a certain amount of bookings using the system.

DOT proposes to adopt rules that prohibit or limit the use of productivity pricing. DOT argues that productivity pricing deters travel agents from using alternatives to their existing systems, and harms consumers since travel agents may not always offer travelers the lowest price using all possible resources such as the Internet or direct links to an airline's internal systems.

We would suggest that a travel agent always has the option to forego the benefits of productivity pricing, and will do so when the marginal benefit of using multiple systems exceeds the marginal cost of using a single system. That most travel agents predominately use a single system may suggest that the marginal cost of using multiple systems is higher than its marginal benefit, but without further supporting evidence, it is not possible to say conclusively that this result stems from productivity pricing.

If DOT prohibits productivity pricing, travel agents' system marginal revenues would decline. The long run effect of this will be to drive the marginal travel agencies from the market—i.e., those who cannot adjust their marginal cost structures to align with lower marginal revenues due to eliminated productivity pricing. Here, it is important to appreciate the competitive nature of the travel agency business and their inability to adapt along the price dimension, leaving only quantity as the adjustment mechanism. Economic principles thus suggest that rules restricting the use of productivity pricing will reduce the number of competitors in the travel agent market, to the detriment of consumers.

J. The Proposal To Explore The Possibility Of A Rule Prohibiting Tying Practices

Current rules prohibit airlines from tying override commissions that they give to travel agencies to the use of a particular system. DOT plans to extend the rule to cover the airlines' marketing practices as well such as access to corporate discount fares.

The rationale for the adoption of the existing rule was the ability of an airline to motivate travel agencies to use the CRS that it owned and gain an unfair competitive advantage against its competitors by its system. Tying override commissions to the use of a particular system enhanced this ability. Today, the CRS ownership structure is different. Airlines do not have significant ownership interests in the CRS. Therefore, this argument is no longer valid.

In fact, if and when airlines can persuade travel agencies to use a particular system, this would increase airlines' bargaining power against the systems. Tying override commissions

and marketing benefits to the use of a CRS are two examples of the incentives that airlines can use in this context. The effectiveness of these incentives lessens the airlines' need to participate in all of the systems, and therefore increases the bargaining power of airlines. This would help DOT to strengthen the effects of its elimination of the mandatory participation rule.

Therefore, we suggest ending the existing rule that prohibits airlines from tying override commissions to travel agencies use of a system.

K. The Proposal To Not Adopt Any Regulations Governing On-Line Distribution Systems

DOT suggests not adopting any rules to govern the airline distribution through the Internet. We concur with this decision, since the Internet venue will likely foster increased competition in the airline and airline distribution businesses.

Some of the involved parties have asserted that DOT must regulate on-line travel agencies in order to prevent them from biasing their displays. DOT rejects this assertion, suggesting that there is no incentive for an on-line travel agent to bias the display since consumers dissatisfied with the agency's service can easily switch the agent that they use.

DOT proposes not to regulate airlines' different treatment of distribution channels. As DOT argues, an airline's decision to offer different compensations and fares to distribution channels is a business decision based on profit concerns. Additionally, we find that adopting rules to restrict this differential treatment would reduce an airlines' bargaining power with the systems, which DOT aims to strengthen by ending the mandatory participation rule and by ending the prohibition against discriminatory booking fees.

L. The Proposal To Prohibit Tying Of Internet Participation

Although DOT proposes not to adopt any rules to regulate on-line distribution, the assertions by airlines that system contracts with airlines require them to provide fare information and booking ability to every user of the system including on-line and traditional travel agents, raises questions according to DOT. DOT questions whether these practices limit the ability of airlines to offer differential treatment to distribution channels.

Any rule prohibiting the systems from tying distribution alternatives as described above may lead airlines to pay higher prices for the systems to compensate for this difference. As mentioned before, we would suggest not adopting any rule that limits the contract practices of the systems since it is likely to be ineffective in any case.

M. The Proposals For The System Display Of Complete Fares As Well As Disclosure Of The Service Fees Charged By Travel Agencies

DOT requires airlines and travel agencies to advertise complete prices that a customer has to pay for the flight. The Department suggests extending the rule to cover fare displays as well as travel agency service fees.

DOT proposes to require the systems to display complete fare information to travel agencies. This appears unjustified since DOT does not present an argument explaining why travel agencies have not requested modifications on the existing displays to be able to see complete fares.

DOT's second proposal—requiring travel agencies to provide their service fees as well as the complete fare information to the customers—rests on the assumption that consumers are unaware of the travel agency fees that they pay. This seems unlikely since it suggests consumers are indifferent to their own welfare. Moreover, we find no evidence to suggest that consumers are unable to get travel agency fee information as and when they need it..

IV. CONCLUSION

The DOT proposals addressed above presume that the systems have market power over the airlines and travel agencies. Our analysis, on the other hand, suggests that the intense competition in the travel agency business coupled with the emergence of system alternatives is likely to have a counter-balancing effect on any alleged market power. Given thin profit margins, large numbers of incumbents, and low barriers to entry, travel agencies remain extremely alert to any innovation that would benefit their customers. This alertness gives the agencies a degree of bargaining power against the systems and airlines since both need travel agencies for bookings.

The display bias issue clearly illustrates this fact. DOT presents no evidence to support a conclusion that a ranking method accepted and used by travel agencies would harm consumers. Moreover, it presents no evidence to suggest that travel agencies could not adequately negotiate with the systems to change the display criteria to avoid the consumer harm if there were any.

DOT's proposal to eliminate the rule requiring mandatory participation and the rule against discriminatory booking fees will benefit consumers by increasing bargaining options for the airlines and the systems. However, the effect of ending these rules would be strengthened if DOT does not adopt a rule to restrict tying practices of airlines.

The majority of the remaining DOT proposals address various contract practices, and typically try to restrict the contract terms. We contend that one must consider contract terms as an integral to price, and thus any restriction on contract terms would be tantamount to an attempt to regulate price.

DOT, in revisiting these regulations, seems disposed to lifting previous encumbrances on the air travel industry, though in only a piecemeal fashion. The ability to effectively regulate prices and contract terms—as DOT has concluded in several places and as we have endeavored to point out above—is at best ineffective (as industry participants innovate along non-regulated margins), and at worst counterproductive (as costs are raised and air travel is thereby made less attractive). It may prove easier, and far less socially costly, therefore, simply to allow the CRS rules to sunset.

APPENDIX I
RSP CHECKLIST
CRS Regulations

Element	Agency Approach	RSP Comments
1. Has the agency identified a significant market failure?	<p>DOT proposes to remove and modify regulations of Computer Reservation Systems in response to changes in the airline industry. The main factor that caused DOT to adopt the 1992 CRS regulations—the alleged unfair leverage of the airlines’ market power in the airline distribution business—is no longer valid.</p> <p>Grade: C</p>	<p>DOT, in revisiting these regulations, seems disposed to lifting previous encumbrances on the air travel industry, though in only a piecemeal fashion. The ability to effectively regulate prices and contract terms is at best ineffective (as industry participants innovate along non-regulated margins), and at worst counterproductive (as costs are raised and air travel is thereby made less attractive). Given the changes in the airline industry, it may prove easier, and far less socially costly, if DOT simply allowed the CRS rules to sunset.</p>
2. Has the agency identified an appropriate federal role?	<p>Grade: A</p>	<p>A federal role is appropriate for two reasons: (1) Airline activity falls under the interstate commerce clause of the Constitution, (2) only through federal rulemaking can DOT modify or eliminate existing regulations on CRS.</p>
3. Has the agency examined alternative approaches?	<p>In some cases, DOT offers alternative approaches for achieving its goals.</p> <p>Grade: C</p>	<p>DOT should examine the option of allowing all the components of the 1992 rule to sunset.</p>

Element	Agency Approach	RSP Comments
4. Does the agency attempt to maximize net benefits?	Grade: C	While DOT uses cost-benefit language in the preamble, it offers no systematic attempt formally to weigh costs against benefits.
5. Does the proposal have a strong scientific or technical basis?	Some economic research is cited. Grade: C	The proposal would benefit from a more thorough review of the economic literature, including for example, Boudreaux and Ellig's research on the screen bias issue, and Liebowitz and Margolis's evidence that markets are quite dynamic at avoiding lock-in and path-dependency.
6. Are distributional effects clearly understood?	The preamble focuses mainly on impacts on travel agents and occasionally airlines. Grade: D	DOT should focus on the effects of rules restricting competition on the ultimate consumer – the traveling public. Many of the proposed and existing restrictions are likely to make consumers worse off compared to allowing contracts and competition to work.
7. Are individual choices and property impacts understood?	DOT proposes to restrict the ability of airlines, CRS, and travel agents to enter into contracts to serve their customers. Grade: F	It is difficult if not impossible in a large and fragmented market like air travel for the Department to specify the appropriate contract terms under all economic circumstances and with respect to all available resource allocations. The Department should recognize that self-interests of the various contracting parties will lead to outcomes that are <i>at least as efficient</i> as those that could be designed by regulation.

OST-97-2881, OST-97-3014, and OST-98-4775