

## Note

# Enlightened Regulation of Computerized Reservations Systems Requires a Conscious Balance Between Consumer Protection and Profitable Airline Marketing

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### TABLE OF CONTENTS

I Introduction .....	471
II History of Computerized Reservations Systems .....	471
III How Computerized Reservations Systems Operate .....	474
IV CRS Regulation Increased as Airlines Became Deregulated ..	476
V Concerns That Have Arisen From Airline Control of CRSs ....	479
A. New and Smaller Carriers Cannot Compete With Existing CRS Vendors, So They Must Accept Co-host Agreements. ....	480
B. Travel Agent Compensation and Incentives Encourage Shifting Sales to CRS Vendors. ....	481
C. CRS Vendors Capture Business Loyalty Through Corporate Discounts and Automated Travel Planning. ....	484
D. Undetected Bias Increases Sales to CRS Vendors. ....	485

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E.	Restrictive Lease Clauses Force Subscribers to Invest in the Sunk Costs of Investment in the CRSs. ....	487
F.	Regulation of CRSs Will Impact Domestic & Foreign CRS Vendors, Direct Access Vendors or Carriers. ....	489
G.	Public Policy Must Consider the Impact of Increasing Foreign Control of U.S. Airlines and CRSs. ....	490
VI	Recent Efforts to Ensure Fair But Profitable Competition Among CRSs in the U.S. Have Failed .....	491
A.	Antitrust Has Been an Ineffective Approach. ....	491
B.	Congress Has Not Enacted Effective Legislation. ....	493
C.	The DOT Imposed New But Not Enlightened Regulation of CRSs. ....	495
1.	Coverage of the Rules .....	495
2.	Contracts with Participating Carriers .....	496
3.	Display Bias .....	496
4.	Subscriber-Vendor Contract Terms .....	497
5.	Services, Software, and Hardware Use .....	498
6.	Provision of Information .....	499
7.	Enforcement .....	499
8.	General Comments .....	499
VII	Comparison With European Liberalization of Air Transportation .....	500
A.	The EEC Goal is a Fully Liberalized Air Industry. ....	502
B.	The Council Has Imposed a Code of Conduct for CRSs. ...	502
1.	Coverage of the Code .....	503
a.	Comparison .....	504
2.	Contracts with Participating Carriers .....	504
a.	Comparison .....	504
3.	Display Bias .....	504
a.	Comparison .....	505
4.	Subscriber-Vendor Contract Terms .....	506
a.	Comparison .....	506
5.	Services, Software, and Hardware Use .....	506
a.	Comparison .....	507
6.	Provision of Information .....	507
a.	Comparison .....	508
7.	Enforcement .....	508
C.	The Code of Conduct and the DOT Regulations are Compatible. ....	508
VIII	Strategies for Improved Regulation of CRSs .....	509
A.	Some Say De-Hosting is Necessary to Eliminate Incumbent Advantages that Restrain Competition and Consumer Benefits. ....	511

1993] *Computerized Reservation Systems* 471

B. Some Critics Say Regulatory Attempts Have Failed and Recommend Complete Divestiture.....	515
IX A Recommendation for Enlightened Regulation .....	515

## I. INTRODUCTION

Computerized Reservations Systems ("CRSs") evolved from a marketing tool for the airlines into global informational platforms. The United States government is now faced with a difficult choice of encouraging economic and technical development by aggressive world-wide competition and living with the consequences of a resulting oligopoly, or protecting consumers from the results of deceptive practices, unfair competition, and alleged antitrust violations in the air transportation industry.

Congress granted the administrative agencies, Civil Aeronautics Board ("CAB") and its successor, the Department of Transportation ("DOT"), authority to promulgate and enforce regulation of the airline industry. However, the most important period in airline history for monitoring and guiding the CRS industry was at the same time when proponents advocated deregulation of the airlines. Instead, a "laissez-faire" policy of the agencies contributed to a crisis in the industry. Now, more than ever, legislators, airlines, travel agencies, CRS owners and consumers debate where the balance should be set between allowing the industry to be solely driven by the profit motive in a free marketplace and safeguarding consumer protection.

A more important question is whether the government has finally achieved a conscious balancing of objectives through its new rules for CRSs, effective December 1992 ("1992 DOT Rules"). A comparison of the status of the CRS industry under the 1992 DOT rules with the European Community's Code regulating CRSs reveal that the DOT still has not achieved an optimal balance.

## II. HISTORY OF COMPUTERIZED RESERVATIONS SYSTEMS

Prior to 1978, the airline carrier, an interline partner, or a travel agent authorized by the Air Traffic Conference of America sold and distributed airline tickets. The CAB approved prices at levels which ensured that efficient carriers earned a reasonable rate of return. Travel agents soon accounted for slightly more than 50 percent of total sales.<sup>1</sup>

Beginning in the 1960s, efforts were made to provide travel agents with automated flight and ticket information. One promising program, Automatic Travel Agency Reservations System (ATARS), attempted to provide a CRS commonly sponsored by travel agents and the airlines.

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1. *Airlines Sue Over Reservations Squeeze*, AIRLINE BUSINESS, Jan. 1986, at 28.

ATARS triggered an investigation by CAB into the impact of an industry-wide, single system on the air transportation environment.<sup>2</sup> The CAB refused to grant antitrust immunity to facilitate the development of a CRS to be owned and operated by a consortium of 21 airlines in 1967.<sup>3</sup>

After 1976, American Airlines, Inc. ("American") and United Air Lines, Inc. ("United") each vertically integrated to tighten control of the passenger market and strategically reshape the transportation distribution system. To capture the lucrative market for air transportation services, travel agents and corporate travel departments became part of the air carrier's distribution system.

When the major airline carriers developed their CRSs, a new industry emerged. American's SABRE and United's APOLLO lead air transportation into a new era of computerized marketing. The American Society of Travel Agents, along with some airlines, initiated an effort to create an industry-wide system called Multi-Access Agent Reservation System, ("MAARS").<sup>4</sup> By 1983, SABRE commanded 43 percent, and APOLLO, 27 percent, of the domestic revenues from CRSs in all travel agencies. MAARS achieved only 2 percent of the market.<sup>5</sup>

The burgeoning air transportation market became dependent on the technological innovation of the CRS. By efficiently integrating the constant changes to accommodate marketing and pricing decisions, the CRS vendors effectively captured both consumer and business travel dollars. By 1987, 95 percent of all domestic travel agencies used CRSs and travel agents booked 92 percent of the domestic airline sales through them.<sup>6</sup> According to the U.S. General Accounting Office ("GAO"), there is a 13 to 18 percent greater likelihood that agents will sell products of the CRS vendor than of a competitive carrier.<sup>7</sup>

Today, the four U.S. airline-owned CRSs are: APOLLO, through Covia Partnership, Rosemont, IL;<sup>8</sup> SABRE Travel Information Network,

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2. MELVIN A. BRENNER, ET AL., AIRLINE DEREGULATION, 65 (1985).

3. Jerome Ellig, *Computer Reservation Systems, Creative Destruction, and Consumer Welfare: Some Unsettled Issues*, 19 TRANSP. L.J. 287, 289 (1991).

4. BRENNER, *supra* note 2. The information was prepared by the Department of Justice for a CAB Investigation in Docket 41686. The data was based on ATC reports and covered the period from July 1, 1982 to June 30, 1983.

5. *Id.*

6. Paul Stephen Dempsey, *The State of the Airline Industry*, Address to the Second Annual Conference on Airlines, Airports and Aviation (May 28, 1992) (on file with author), (citing U.S. Government Accounting Office, *Airline Competition: Impact of Computerized Reservations Systems*, (1986)).

7. *Airline Marketing and the Need for CRS Rules*, DEPT. OF TRANSP., (Sept. 22, 1992) (final admin. review accompanying specific CRS rule proposals to be codified at 14 C.F.R. pt. 255).

8. Joan M. Feldman, *Complicated Kinships*, AIR TRANSP. WORLD, Aug. 1992, at 50. Owners of the U.S. distribution firm for Covia and their percentage share were as follows: United, 80 percent; USAIR, 18.67 percent; and Air Canada, 1.33 percent. However, the owners of the new

Dallas/Fort Worth, TX; System One Corp., Houston, TX;<sup>9</sup> and Worldspan, Atlanta, GA.<sup>10</sup> Presently, APOLLO and SABRE have obtained 71 percent of the U.S. airline ticket sales.<sup>11</sup> It is estimated that the recently merged APOLLO will have 31.7 percent of its terminals world-wide; SABRE, 28.2 percent; Worldspan, 13.6 percent; Systems One, 10.4 percent; and foreign CRSs, 16.1 percent.<sup>12</sup> A brief description of these CRSs follows.

1. Covia Corp. ("Covia") markets through 25,000 travel agency locations.<sup>13</sup> In April, 1992, Covia agreed to merge with the European-based system, Galileo Distribution Systems in the United Kingdom.<sup>14</sup> The owners also hold a one-third interest in the Gemini Group.<sup>15</sup> Covia, earning about \$475 million in 1991, continues to aggressively add agency locations and CRTs to complete its global network.<sup>16</sup>

2. American Airlines solely owns SABRE. It has installed its CRS in over 22,000 agencies.<sup>17</sup> With estimated revenues in 1991 of \$655 million, SABRE continues to safeguard its domestic market share from Covia while it builds on its international base in Europe and Canada.<sup>18</sup>

3. System One, developed by Eastern Airlines, was subsequently

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Galileo International (resulting from the merger of Covia and Galileo) and their percentage ownership are: United, 38 percent; British Airways, 14.65 percent; Swissair, 13.22 percent; KLM, 12.09 percent; USAIR, 11 percent; Alitalia, 8.71 percent; Olympic Airways, 1.03 percent; Air Canada, 1 percent; Aer Lingus, 0.1 percent; Austrian, 0.1 percent; and TAP Air Portugal, 0.1 percent. *Id.*

9. Paul Stephen Dempsey, *Disintegration of the United States Airline Industry*, 20 *TRANSP. L.J.* 9, 38 (1991) [hereinafter Dempsey, *Disintegration*].

10. Feldman, *supra* note 8. Its owners and their percentage share are as follows: Delta, 38 percent; Northwest Airlines, 32 percent; TWA, 25 percent and Abacus, 5 percent. *Id.*

11. Senator Joseph Lieberman, comments at Mar. 4, 1992 press conference concerning the Airline Competition Enhancement Act, (S. 2312, 102d Cong., 2d Sess.).

12. Feldman, *supra* note 8.

13. *1992 Directory of Travel Management Information Systems*, CORPORATE TRAVEL in conjunction with the National Business Travel Association, May 1992, at 1, 32. Direct access vendors consist of more than 740 air carriers, 37 car rental companies and 21,000 individual hotel properties. *Id.*

14. *Between the Lines*, BUSINESS TRAVEL NEWS, May 25, 1992, at 76. As of December 31, 1991, Galileo linked 6,622 agencies with 23,959 computerized remote terminals (CRTs) to partner airlines' systems and earned almost \$126.7 million in revenues. *Id.*

15. Covia Corporate Marketing, *Apollo Solutions* (Apr. 6, 1992). "Between the Lines," *supra* note 14. Gemini, headquartered in Toronto, Canada, is the largest CRS in Canada. It has an estimated 3,000 agency locations and earned an estimated \$122.5 million in revenues in 1991. *Id.*

16. *Between the Lines*, *supra* note 14. In May 1993, APOLLO had over 44,000 terminals and 22,000 printers worldwide. APOLLO loaded over 2.5 million fare changes each day to support over 1.6 million flight segments booked daily. Interview with Gregory A. Conley, Vice President and General Counsel, Covia, in Denver, Colo. (May 27, 1993).

17. *1992 Directory*, *supra* note 13. The direct access vendors include 34 airlines, 55 hotels, 16 car rental agencies and 12 boarding pass carriers. *Id.*

18. *Between the Lines*, *supra* note 14.

acquired by Continental Airlines. It is installed in over 7,500 locations.<sup>19</sup> Amadeus Global Distribution<sup>20</sup> and Tarex are international affiliates. While System One earned an estimated \$378 million in revenues in 1991, it dropped in agency locations and number of CRTs, and lost 9 percent in revenues from the previous year.<sup>21</sup>

4. Worldspan is a combination of PARS, developed by Trans World Airlines ("TWA"), and DATAS II, developed by Delta.<sup>22</sup> The CRS is installed in 10,180 locations that have almost 42,000 CRTs.<sup>23</sup> Worldspan has international affiliation agreements with Abacus Distribution Systems Pte. Ltd. and Infini Travel Information.<sup>24</sup>

### III. HOW COMPUTERIZED RESERVATIONS SYSTEMS OPERATE

The airlines electronically load their fares through a clearinghouse, the Airline Tariff Publishing Company ("ATPCO"). This corporation was formed in 1965 "after having been the 'Tariffs' Department of the Air Transport Association of America for 25 years."<sup>25</sup> Three major departments—tariffs, computer services, and administration—enable the corporation to collect and disseminate rules, fares and rate information relative to air transportation on behalf of more than 200 domestic and international air carriers. The CRSs, travel agents, and airlines subscribe to the clearinghouse for passenger fares, rules, routings, cargo rates, and car rental rates on magnetic tape or by data line transmission.

The CRS vendors then supply their subscribers (usually travel agents) with a database and equipment, such as processors, monitors, and telecommunications links. A travel agent using a CRS "calls up" a screen display of airline schedules, fares, seat availabilities, and other

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19. 1992 Directory, *supra* note 13. It has 50 airlines, 23 hotels and six car rental agencies as direct vendors. *Id.*

20. *Id.* Amadeus, headquartered in Madrid, Spain, has about 12,557 agency locations.

21. *Between the Lines*, *supra* note 14.

22. 1992 Directory, *supra* note 13. PARS has 45 airlines, 29 hotels and 10 car rental agencies, while DATAS II has 35 airlines and 29 hotels as direct access vendors. *Id.*

23. *Id.*

24. *Between the Lines*, *supra* note 14. Abacus, jointly owned by several airlines including Singapore Airlines and Cathay Pacific, has 2,400 agency locations. Infini, owned by Japan, has about 1,881 agency locations. *Id.*

25. AIRLINE TARIFF PUBLISHING COMPANY, (ATPCO): *Online Tariff Systems and Data Subscription Services*, (1992). The corporation is located at Dulles International Airport in Washington, D.C. with a branch in London. It is owned by airlines including Air Canada, Air France, Aloha Airlines, Inc., American Airlines, Inc., British Airways, Continental Airlines, Inc., Delta Air Lines, Inc., Flying Tiger Lines, Inc., Hawaiian Airlines, Inc., Iberia Air Lines of Spain, Japan Air Lines, KLM Royal Dutch Airlines, LA Helicopter, Inc., Lufthansa German Airlines, Northwest Airlines, Inc., Reeve Aleutian Airways, Inc., Scandinavian Airlines System, Swiss Air Transport Company, Ltd., Trans World Airlines, Inc., United Airlines, Inc. and USAIR, Inc. *Id.*

coded information concerning flights. The CRS expedites the functions of looking for options, booking travel, and storing information for travelers.

Reservations are made by automatically routing booking information to the central data base of the CRS vendor which in turn, if necessary, relays the information to the computer of the air carrier on which the seat is being assigned. Both reservations and sales confirmations are communicated through ARINC, a communications switching center, or by a dedicated communications link between a CRS vendor and a participating carrier.<sup>26</sup>

The CRS technology is essential to manage effectively frequent changes in prices, schedules, and restrictions. In a typical day, domestic carriers change about 133,000 fares and more than 3,000 flight schedules. Carriers adjust discount seat allocations at least 12 times during the life of a typical flight.<sup>27</sup> Complementary to the CRS services, the travel agencies or third-party vendors have developed compatible software for trip planning, pre-travel quality control, pre-travel reporting, remote ticketing, travel management reporting, and accounting and expense management to further facilitate the reservation function.

Travel agents, as experts in travel and tour planning, efficiently book flight reservations using leased CRSs in a manner similar to airline personnel using the carrier's internal reservations systems. Agents subscribing to a particular airline's CRS, "choose that airline 41 percent of the time for business travelers and 55 percent of the time for leisure travelers."<sup>28</sup>

By annexing travel agents as a partner in the airline distribution system, the revenue stream for the CRS vendors has been lucrative. Income is generated through: a) installation and operation fees from subscribers (agents) for terminals and other equipment leased to them, b) fees for each flight booked on the CRS paid by participating carriers, and c) incremental revenues gained by the airlines owning the CRS. Therefore, fierce competition in the airline industry is now fought electronically through the CRSs. More airline failures will, "prove that mega-airlines' CRSs, slot control, and frequent flyer programs are more effective 'regulators' [of the airline industry] than the former federal regulatory body, [the CAB]."<sup>29</sup>

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26. BRENNER, *supra* note 2.

27. SYSTEM ONE, *The Business of Travel*, (advertisement, undated).

28. U.S. GENERAL ACCOUNTING OFFICE, Report No. GAO/RCED-90-127, *Airline Operating & Marketing Practice*, 65 (1990), (citing *The 1987 Travel Agency Market Study*, at 28, 45). The survey, conducted by Louis Harris and Associates for TRAVEL WEEKLY, included 702 travel agents in the 48 contiguous states. *The 1987 Travel Agency Market Study*, TRAVEL WEEKLY, 1987, at 28, 45.

29. Melissa Abernathy, *Empty Skies*, CORPORATE TRAVEL, Aug. 1992, at 27.

## IV. CRS REGULATION INCREASED AS AIRLINES BECAME DEREGULATED

Economists widely believed that deregulation of the airline industry would improve society's economic welfare. Some economists predicted positive results in socially optimal levels of fares and quality of service to consumers. "Social optimality requires that fares and service quality, or in this case, frequency of service, be set to maximize the sum of travelers' and carriers' welfare."<sup>30</sup>

Proponents of the Airline Deregulation Act of 1978<sup>31</sup> based their arguments on an assumption that an absence of economies of scale would ensure a large number of competitors in the airline industry. The markets that were naturally monopolistic or oligopolistic would become competitive due to low barriers to entry and an absence of sunk entry costs.<sup>32</sup> "The one point on which all of the pro-deregulation economists, policy makers, and interest groups agreed was that a government-enforced airline cartel was bad for the airlines' customers and bad for the national economy."<sup>33</sup>

When American and United announced their intentions to develop separate CRSs in 1976—just two years before deregulation—the economists failed to predict the amount of power that an airline, individually, would ultimately be able to wield in the air transportation and reservation markets. American and United invested over \$1 billion to produce SABRE and APOLLO, respectively.<sup>34</sup> Delta followed by developing DATAS II; Eastern, SODA; Northwest, PARS; and Texas Air, System One.<sup>35</sup> As more efficient marketing and distribution channels evolved, the CRSs facilitated "real-time" travel services through the use of state-of-the-art information technology.

It was alleged that the CRS vendors substantially reduced airline competition through their sophisticated marketing and pricing structures and that they became a barrier to the entry of new airlines because of the high capitalization required to create and maintain the CRS technology. The CRSs gathered a plentitude of data from which the CRS owners developed astute business strategies. Through an analysis of the booking history of participating carriers and travel agencies, CRSs had the capa-

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30. STEVEN MORRISON & CLIFFORD WINSTON, *THE ECONOMIC EFFECTS OF AIRLINE DEREGULATION* 53 (The Brookings Institution 1986).

31. Pub. L. No. 95-504, 92 Stat. 1705 (1978) (codified as amended to 49 U.S.C.).

32. PAUL STEPHEN DEMPSEY, *FLYING BLIND: THE FAILURE OF AIRLINE DEREGULATION* 46 (Economic Policy Institute Series 1990) [hereinafter *FLYING BLIND*].

33. Donald J. Boudreaux and Jerome Ellig, *Beneficent Bias: The Case Against Regulating Airline Computerized Reservation Systems*, 57 J. AIR L. & COM. 567, 569 (1992).

34. Bert W. Rein, *DOT's Continuing Regulatory Oversight of the Airline Industry*, PRACTICING LAW INSTITUTE, PLI Order No. A4-4193 (1987).

35. Pam Fair, Comment: *Anti-Competitive Aspects of Airline Ownership of Computerized Reservation Systems*, 17 TRANSP. L.J. 321, 328 (1989).

bility to skew information provided to the travel agents to their benefit without detection.

As the CRS became the cornerstone of a blossoming automated industry, profitability became even more dependent on producing, distributing, and retrieving timely and accurate information. Prior to airline deregulation, travel agents booked less than 40 percent of all tickets. Currently, at least 70 percent of all airline tickets are sold by travel agents<sup>36</sup> and 95 percent of travel agencies use one of the CRSs.<sup>37</sup> Abusive competitive practices by CRSs and affiliated travel agencies would result in denial of complete, accurate, and impartial information on all available airline services to the travelling public.<sup>38</sup>

The marketing innovation for airline services increased the accessibility of information and contributed to higher profits for both travel agencies and CRS owners. Airline deregulation allowed greater flexibility in changing fares and establishing conditions and restrictions to meet the needs of the marketplace. As the participating airlines changed flight schedules, fares, or travel limitations, this information was automatically integrated by the CRS. As the carriers grew, the economies of scale improved and the learning curve for automating the travel agencies decreased. The CRS functioned as a cost-reducing innovation that, when operating at optimal levels, could almost approach Pareto-efficiency. At this level, allocative efficiency necessary to meet consumer needs is maximized.

Although many economists have continued to support the notion that the CRS industry should be free from regulation to allow the marketplace to achieve social welfare maximization, both Congress and the Executive branch became increasingly concerned about the concentration of market power in the hands of a few CRS vendors. Beginning in 1983, the CAB, under pressure from Congress and the Department of Justice, investigated the CRS market domination and alleged abuses.<sup>39</sup>

On July 27, 1984, CAB identified the five CRSs as barriers to new

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36. Transp. Research Bd. Nat'l Research Council, *Winds of Change*, Special Report 230, 146 (1991).

37. Dempsey, *Disintegration*, *supra* note 9, at 18.

38. *Airline Marketing*, *supra* note 7.

39. BRENNER, *supra* note 2. In 1983, in the 29 urban markets with air travel revenues exceeding \$100 million, SABRE captured Anchorage (92 percent of the market share), Dallas-Ft. Worth (88 percent), Cincinnati (84 percent), Phoenix (69 percent), Boston (69 percent), Rochester (69 percent), Houston (68 percent), San Diego (54 percent), Detroit (53 percent), and Washington D.C. (51 percent). APOLLO captured Denver (72 percent), Portland (66 percent), Cleveland (64 percent), Milwaukee (57 percent), Sacramento (52 percent) and Salt Lake City (52 percent). *Id.*

airline entry and adopted regulations addressing them.<sup>40</sup> "The 1984 rules provide[d] only basic competitive protection, outlawing overt 'display bias' in favor of particular airlines and the most objectionable practices in contracts with travel agents."<sup>41</sup> After promulgating rules for CRS operation, the CAB stated that,

We cannot measure precisely the extent or duration of the market power or the limitations on it . . . . Our proposed rules should be sufficient to alleviate the major problems that we have identified, but still give CRS owners great latitude in the design and marketing of their systems.<sup>42</sup>

On December 20, 1985, the Department of Justice reported to Congress that CRS vendors continued to possess market power and that their pricing practices for participating airlines were discriminatory. In May 1986, the GAO reported<sup>43</sup> to Congress that the potential for anti-competitive practices, such as the generation of incremental revenues by CRS vendors existed. A House bill<sup>44</sup> providing for binding arbitration to resolve participating carrier and subscriber disputes with CRS vendors, was introduced on February 2, 1987. Contemporaneous with this congressional action, the DOT, as successor to the CAB, announced it would again review allegations of abuse of market power.<sup>45</sup> In spite of more stringent rules finally promulgated by DOT in 1992, abuses of market power and anti-competitive practices by CRS vendors continued to be alleged.

The laissez faire policy followed by the DOT concerning CRSs has not produced the results that deregulation proponents promised. In response to the announcement by the DOT in 1989 that it again intended to change existing rules in effect since the mid-1980's, the president of a large international travel agency proposed allowing the existing rules to expire without replacement. He stated:

Let the marketplace dictate competition in the airline and agency automation business. The issue is not whether a rule is good or bad, the issue is whether the government should at all be involved in regulating business . . . [The DOT] acted irresponsibly during this whole rulemaking process. . . The waste in time and money has been enormous . . . The expenditure in legal

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40. Rein, *supra* note 34, (pursuant to ER 1385 (14 C.F.R. Part 255), effective Nov. 14, 1984).

41. Michael J. Roberts & John R. Mietus, Jr., *Update on Airline Regulation for the Twenty-Fifth Transportation Law Institute*, 25th TRANSP. L. INST. 2, 1992.

42. *CAB Moves Ahead With Rules to Address Computer Bias*, AVIATION DAILY, June 1984.

43. U.S. GENERAL ACCOUNTING OFFICE, *Airline Competition: Impact of Computerized Reservation Systems*, Report No. GAO/RCED-86-74 (May 1986).

44. H.R. 1217, 100th Cong., 1st Sess. (1987) (introduced by Rep. Norman Mineta, Chairman of the House Aviation Subcommittee).

45. Rein, *supra* note 34.

fees alone by all parties involved has probably been over \$1 million.<sup>46</sup>

The CRS industry has now attained productive efficiency. A new industry of third-party vendors has developed. Firms are flooding the market with new software, hardware, and methods to satisfy consumer wants. They are continuously researching more effective and user friendly means for travel agencies to inform consumers of their expanding choices. The competitive edge of enhancements to the CRS has become so short that vendors have even supported efforts of these third-party vendors. One CRS marketing director said, "If we can't do it in six months, we start all over."<sup>47</sup> A motivation for continued innovation is based on the need to further increase efficiency leading to higher profits. "Congress, courts and regulatory agencies must first take into account the economics of entrepreneurship and innovation if they seek to design CRS rules that maximize consumer welfare."<sup>48</sup>

Likewise, the CRS industry has increased allocative efficiencies, lowered costs to consumers, lowered transaction costs to travel agents, decreased transaction time, expanded accessibility to information, and satisfied consumer needs while air carriers, travel agents and CRS vendors continue making profits.

#### V. CONCERNS THAT HAVE ARISEN FROM AIRLINE CONTROL OF CRSs

This author believes that simply because alternative distribution systems can not effectively compete against CRS vendors is not a sufficient basis to justify tight-fisted regulation that could squelch future investment to expand and improve the CRS innovation. Measures that simply decrease profits without preventing deceptive practices may cause undue harm to both the airline and travel industries without improving consumer welfare. Yet, the many concerns voiced by Congress, airlines, travel agents, and travelers must be properly addressed by the DOT. A discussion follows regarding the concerns of: barriers to entry into the CRS industry, incentives to shift sales to CRS vendors, the effect of corporate discounts and incentives, display bias, restrictive contract clauses, the regulatory impact on domestic and foreign direct access vendors, CRS vendors and carriers, and the impact of foreign control.

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46. *Agent, Airline Groups Submit Comments on CRS Rules*, TOUR & TRAVEL NEWS, Mar. 9, 1992, at 14.

47. Feldman, *supra* note 8, at 51.

48. Ellig, *supra* note 3, at 295.

A. *NEW AND SMALLER CARRIERS CANNOT COMPETE WITH EXISTING CRS VENDORS, SO THEY MUST ACCEPT CO-HOST AGREEMENTS.*

Proponents of deregulation have agreed with their critics that "the major airlines through their extensive network of affiliated travel agents and CRSs can make it difficult for new entrants and smaller airlines to enter new markets."<sup>49</sup> The lead time, level of technology, scale of economy and investment required to develop a competitive CRS prevent new entrants from easily developing their own CRSs.

While direct booking by the airline could circumvent dealing through travel agents and joining a CRS,<sup>50</sup> extensive multi-media advertising over a long period of time is necessary to attain sufficient name recognition to generate consumer demand. Small carriers do not have a sizeable advertising budget that would be required to overcome the industry practice of locating flights using the CRS. Instead, these carriers enter into co-host agreements with at least one of the major CRS vendors as a more viable and less costly opportunity—at least in the short term—to marketing their own services.

For example, because American Airlines dominates the Dallas/Ft. Worth hub, any airline serving the Dallas/Ft. Worth region and utilizing travel agents who are already on the SABRE system must pay an access charge. A similar incentive for carriers to access Covia's APOLLO system exists for hubs dominated by United. "[T]he advantage of being listed in the computer as an 'on line' connection with one of the major airlines has led 48 of the 50 small air carriers to affiliate themselves with the megacarriers" through co-host agreements.<sup>51</sup> Therefore, the CRS vendors do not have to rigorously compete for participating carriers.

As part of the agreement, the participating air carriers pay booking fees to the CRS vendor based on the flights reserved through the system. The booking fee consists of an established amount charged for each segment of a flight. For example, a round-trip flight from Denver to Honolulu may require a stop and change of plane in San Francisco. In this example, the carrier would have to pay the CRS vendor four "segment fees" (i.e., Denver-San Francisco, San-Francisco-Honolulu, Honolulu-San Francisco and San Francisco-Denver). Prior to 1984, some airlines were not charged for being listed by the CRS. Presently, it is alleged that the least-favored carriers pay as much as \$3 per booking while other participating carriers pay as little as thirty cents.<sup>52</sup> The differential of segment

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49. Transp. Research Bd., *supra* note 36, at 40.

50. Boudreaux and Ellig, *supra* note 33, at 581.

51. FLYING BLIND, *supra* note 32, at 22.

52. *Airline Marketing*, *supra* note 7.

fees is allegedly based on whether the carrier directly competes with the CRS owner.

The GAO concluded in its September 1988 testimony "that CRSs earn profits exceeding those that could reasonably be expected to be earned in a competitive market."<sup>53</sup> Through booking fees that substantially exceed the transaction costs, "the non-CRS carriers are financing American's and United's dominance of the air transportation industry."<sup>54</sup> Booking fees produce a rate of return on invested capital of 50 percent for United and 75 to 90 percent for American.<sup>55</sup> The mega-carriers owning CRSs make over \$300 million per year from the weaker airlines.<sup>56</sup>

The disfavored carriers allege that they receive poor service and the screens, prepared by the CRS vendor, showing their flights, are subject to display bias. These participating carriers allege that they receive inadequate billing information from the CRS vendors, impairing their ability to audit its accuracy.

Since the profitability of a carrier's service in any market can be radically changed by the addition or loss of a few passengers on its flights in that market, no carrier can afford to lose sales from any significant group of agencies, so each carrier must participate in each system.<sup>57</sup>

When selecting a CRS, travel agents "prefer a system offered by a carrier with a large airline market share in the agency's city, since a large proportion of the agency's business will be with that carrier."<sup>58</sup> In effect, each CRS vendor creates a geographic marketing niche around the hubs of its CRS owner that results in oligopolistic power over other carriers who seek business in the same areas where the CRS vendor has contracted with a significant number of travel agents. In turn, co-host agreements with participating carriers serving in the region make the CRS vendor even more attractive to the travel agents also serving the same region.

#### *B. TRAVEL AGENT COMPENSATION AND INCENTIVES ENCOURAGE SHIFTING SALES TO CRS VENDORS.*

In 1977, the year before airline deregulation, all domestic travel

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53. U.S. GENERAL ACCOUNTING OFFICE, *Competition in the Computerized Reservation System Industry*, Report No. GAO/RCED-88-62 (Sept. 13, 1988). See also *Airline Competition: Impact of Computerized Reservation Systems*, Report No. GAO-RCED-86-74 (May 9, 1986).

54. Paul V. Mifsud, *Computer Reservations Systems and Automated Market Distribution in a Deregulated Aviation Industry*, 1 J.L. & TECH. 143 (1986).

55. Hearing on the Airline Competition Enhancement Act of 1992 (H. R. 5466), 119 Cong. Rec. H. 8,093 (daily ed. of Aug. 12, 1992) (statement of Rep. Oberstar) [hereinafter Hearing].

56. Dempsey, *The State of the Airline Industry*, *supra* note 6.

57. *Airline Marketing*, *supra* note 7.

58. *Id.*

agents sold \$4.4 billion dollars worth of tickets.<sup>59</sup> In contrast, in 1991 just the top ten travel agencies generated almost \$12 billion dollars in air sales.<sup>60</sup> Currently, agents on performance contracts book about 65 percent of SABRE's business, 66 to 75 percent of Covia's tickets and 25 percent of the System One's reservations.<sup>61</sup> Since subscriber success is measured by the number of bookings, commission payments and other incentives are structured to encourage agencies to shift more bookings to the CRS vendor.

Essentially, airlines offer four basic types of volume incentives to travel agents. Approximately 75 percent of the agents enjoy at least one type of incentive.<sup>62</sup> First, agents enjoy override commissions based on the volume of business booked with the airline offering this bonus. Second, agents may be given membership in the airline's VIP club, providing a special waiting area and additional services for members. Third, while flights may appear on the CRS screen to be completely booked, agents have overbooking privileges on the carrier that owns the CRS. This privilege is particularly useful to agents who must reserve last-minute trips—generally for their business customers. Finally, airlines provide free tickets through an award system similar to frequent flyer plans for their passengers. Airlines will also offer sales incentives through free or reduced fare tickets to employees of travel agents.

Based on a study, the GAO projects that 41 percent of travel agents nationally use free tickets, 11 percent enjoy free VIP club memberships, 36 percent get overbooking privileges, and 52 percent earn override commissions.<sup>63</sup> These incentives allow high-volume travel agencies to hire better employees by providing a more attractive benefits package and to fly employees to sales meetings less expensively than their competitors.<sup>64</sup> The CRS vendors routinely provide account sales assistance and training to improve their subscribers' productivity. Travel agencies may also receive supplementary funding for advertising to increase their customer base.<sup>65</sup>

The CRS vendors offer productivity-based contracts that provide

59. Mifsud, *supra* note 54.

60. *Between the Lines*, *supra* note 14, at 12. The top ten travel agencies, in order of sales generation, include: American Express, Carlson Travel Network, Thomas Cook Travel, Rosenbluth Travel Agency, USTravel, Maritz Travel Co., IVI Travel, Wagons-lits Travel USA, Omega World Travel, Inc. and World Travel Advisors. *Id.*

61. *Focus on User Productivity Vs. Winning Clients*, BUSINESS TRAVEL NEWS, May 25, 1992, at 80.

62. U.S. GENERAL ACCOUNTING OFFICE, *Airline Operating & Marketing Practice*, *supra* note 28.

63. *Id.*

64. Paul S. McGreen, *Airline Industry— Re-regulate?*, DEF. TRANSP. J., June 1992, at 18.

65. *Id.*

pricing incentives to travel agencies for using their automation efficiently. Depending on the number of bookings made in the previous year, agencies can obtain a discount of 60 percent or more as a standard ticket rate.<sup>66</sup> Although discounts and override commissions vary with average ticket price, account size, set-up, location, and destination mix, this practice has the effect of discouraging agencies from using direct links to another carrier's internal reservations system or using other databases or systems that do not provide the extra benefits.

The tying of travel agent commissions to bookings by a carrier not only affects competition among the CRS vendors, the travel agencies and airlines, but it also ultimately impacts the consumer. While travel agents can offer significant benefits to their customers by saving time in researching the available alternative schedules and rates, some travel agents, with an eye to earning extra commissions, steer passengers toward more expensive tickets offered by their CRS-affiliated airlines.<sup>67</sup> When agencies shift a disproportionately large share of their bookings to the CRS, its vendors gain "incremental revenues." Some agents admit that they can influence 25 percent of all business travelers and 50 percent of all leisure travelers to choose a particular airline.<sup>68</sup>

In a recent poll taken of lead travel agents during the period from 1991 to 1992, commission overrides increased in every travel product category, including domestic air tickets, international air tickets, car rentals, cruises, tour packages and hotel rooms. An agent in a leading travel network estimated that 85 percent of her total annual sales volume generated override commissions, that the highest override generators are airline tickets, furthermore, another leading travel agency reported that 90 percent of its airline ticket sales generate overrides.<sup>69</sup>

When the average ticket price for air travel decreases, travel agencies must work harder for fewer dollars. During the month of June, 1992, travel agency commissions totaled over \$590 million for processing an annual high of over 23 million tickets, however, the average commission per ticket plummeted to only \$25.30—a 19 percent reduction from average commissions in June 1991.<sup>70</sup> Prolonged lower airfares not only shrink overrides for individual travel agents but can also damage the travel agency industry's financial stability. The Airline Reporting Corp. reported that from 1990 to 1991 travel agency defaults and voluntary closures increased 43 percent, while 11 percent fewer retail locations

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66. *Airline Marketing*, *supra* note 7.

67. *Transp. Research Bd.*, *supra* note 36.

68. *Airline Marketing*, *supra* note 7.

69. *More Sales Directed To Suppliers With Overrides*, TOUR & TRAVEL NEWS, July 13, 1992, at 32 (quoting an agent in the Carlson Travel Network).

70. *Travel Index, DOT U.S. Airline Update*, TOUR & TRAVEL NEWS, Aug. 17, 1992, at 7.

opened.<sup>71</sup> Therefore, neither the airlines nor the travel agents have incentives to promote savings to consumers through low airfares.

C. *CRS VENDORS CAPTURE BUSINESS LOYALTY THROUGH CORPORATE DISCOUNTS AND AUTOMATED TRAVEL PLANNING.*

Over 40 percent of the typical corporate travel and entertainment budget is spent on air travel.<sup>72</sup> From 1990 to 1991, business fares increased 21 percent, while the average leisure fares decreased by 4 percent during the same year.<sup>73</sup> In reaction to this discrepancy, businesses contain their costs by continuing to reduce their travel and by working with travel agencies or their own travel departments to capture the shrinking quantity of lower, restricted fares.

While frequent flyer mileage programs lock in the carrier loyalty of corporate employees travelling on business, company discounts with airline carriers ensure repeat business. Corporate discount packages are typically valid for six to twelve months. Because domestic carriers offer corporate discount percentages based strictly on how much incremental market share it provides, savings shrink when business travel is reduced. Corporations having a high volume of business travel can negotiate a discount of about 50 percent off published full-coach fares, as well as a waiver of the conditions on restricted fares. Businesses with smaller volumes can expect a 20 to 40 percent discount. Sometimes carriers will offer a flat discount at the time of ticketing or a "meetings fare deal" applying to travel by ten or more people to the same destination at one time.<sup>74</sup>

It is alleged that carriers quickly terminate negotiations with a corporation if it is found engaging in comparative shopping. In negotiating contracts with airlines, one business executive pointed out that "[a]irlines are now actually looking for hard copies of our MIS [reports] from our agency . . . [t]hey want to know what their market share is, and what additional new business I can guarantee them."<sup>75</sup> The CRS vendors compare their internal data with corporate- and agency-produced usage information before establishing a discount rate. Regardless whether firms agree to provide the data, the "[a]irlines hosting a CRS] devote people and time to scoping out particular deals. It's like intelligence work . . . They can see

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71. *CRS Market Ranking Continue to Hold Steady*, BUSINESS TRAVEL NEWS, May 25, 1992, at 78.

72. *The Official Business Travel Handbook, Working with Airlines*, BUSINESS TRAVEL NEWS, Mar. 9, 1992, at 64.

73. *Avg. Fare Paid Drops 4% From '91, But Restrictions Tighten*, CORPORATE TRAVEL, Mar. 1992, at 8.

74. *The Official Business Travel Handbook*, *supra* note 72, at 66.

75. *Airlines to Firms: Turn Over Your Data!* CORPORATE TRAVEL, Oct. 1992, at 19.

what's being booked [through the screens provided by the CRS vendor]."<sup>76</sup>

"The carriers are tightening up on companies that have loose policies or don't mandate use of their contracted rates."<sup>77</sup> CRS vendors also retain the right to unilaterally terminate fare contracts with a 30-day notice. Although the CRS vendors implement various safeguards to "lock in" businesses, there are strong incentives for corporate loyalty. "Airlines often give free tickets to agents to distribute to its corporate customers."<sup>78</sup> These free tickets, along with all expense paid trips for the agent or corporate travel manager, help solidify his or her loyalty to the CRS vendor.

Additionally, as a subscriber to a CRS, corporate department managers can monitor employee travel regularly to ensure that the most convenient schedules at attractive rates have been booked. Large travel agencies offer similar software to their corporate clients to track employee travel selections. This information helps the corporation ensure that employee travel selections are based on reduced costs rather than on the advantages of frequent flyer mileage to its employees.<sup>79</sup>

The irony is that each year businesses award major contracts to travel agencies that assure that travel decisions are based on the lowest cost. Many of these agencies, however, only have one leased CRS and are motivated to support that particular CRS vendor to obtain productivity-based incentives.

#### D. UNDETECTED BIAS INCREASES SALES TO CRS VENDORS.

The CRS vendors can increase incremental revenues through both architectural and display bias. Architectural bias refers to the use of "faster and more reliable computer procedures and communications links that result in agents obtaining more accurate information on vendor airline services or recording bookings with greater speed and certainty."<sup>80</sup> Display bias results when the information seen by its subscribers on their screens is incomplete, distorted or inaccurate. Display bias may take various forms, such as:

- 1) omitting or delaying display of information on fares;
- 2) omitting information on all the connecting services at a given hub;

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76. *Id.*

77. *Air Discounts Survive*, BUSINESS TRAVEL NEWS, Apr. 6, 1992, at 1.

78. McGreen, *supra* note 64.

79. *Announcing Air Planner Plus— A Thomas Cook Exclusive*, FREQUENT FLYER, 1 (Apr. 1987) (advertisement).

80. *Airline Marketing*, *supra* note 7.

- 3) displaying "change of gauge" flights using a single flight number for an entire trip, rather than indicating stops or changes by the aircraft, at which time other connecting flights could be booked;
- 4) limiting the amount of information provided for competitive carriers;
- 5) padding displays by listing code-sharing flights for the carrier operating the flight and again by its partner that shares the code;
- 6) establishing an advantage by an algorithm for editing and ordering the displays;
- 7) providing inadequate or skewed information on connecting services for each city to protect dominance of a hub; and
- 8) displaying the CRS vendor's flight information on the first screen or requiring use of secondary displays which provide preferential treatment to the carrier.

Because the travel agents work under significant time pressure, they are more likely to book flights that are listed on the first screen rather than scrolling through subsequent screens. Ninety percent of the agent's reservations are booked from the first screen of the video display.<sup>81</sup> More than 50 percent of the tickets are sold for the first flight listed on the screen that matches the customer's basic requirements.<sup>82</sup> The CRS vendor stacks the first screen with flight information favoring its airline by establishing an algorithm with various weights for departure time, arrival time, equipment types, connecting city pairs, maximum connecting time, and other criteria. By placing its own information on the first screen, United estimated that use of this type of bias increased its revenues by 13 percent.<sup>83</sup>

A spokesman for American recently contended that SABRE "presents information on all flights of all airlines equally . . . . Smaller carriers actually benefit from [the CRS] . . . because their flight schedules are included."<sup>84</sup> Even if flight schedules are presented fairly, bias can occur, such as when American delayed displaying Continental's new discount fares for several months. "If the reservation information is not accurate, it has a domino effect and will impact the traveler, accounting, management reports, and vendor negotiations."<sup>85</sup>

Although the CRS vendors can generate marketing, booking, or

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81. Mifsud, *supra* note 54.

82. Note: *The Legal and Regulatory Implications of Airline Computer Reservation Systems*, 102 HARV. L. REV. 1930 (1990).

83. *Airline Marketing*, *supra* note 7.

84. Suzy Hagstrom, *Beauvais Calls for Federal Probe of Airlines*, THE DENVER POST, May 6, 1992, at 3C.

85. Kathy Preziose, *Yes, Agents Still Need Automated Quality Control*, CORPORATE TRAVEL, 19 Oct. 1992, at 19.

sales data from the reservations made on their systems, the participating carriers cannot access similar data generated from the travel agency's bookings. Unless agencies can construct their own database interfaces or will take the time to compare flight information from various CRSs for each transaction, neither the subscriber nor the participating carrier can easily determine the extent to which any display or other residual bias exists. Subscribers are not required to disclose their relationships with particular CRS vendors, nor the nature of their productivity overrides to their customers. Therefore, customers cannot readily ascertain whether an agent failed to select the best flight for their needs or if changes in the availability of seats and fares by the carrier precluded their obtaining the "best deal."

*E. RESTRICTIVE LEASE CLAUSES FORCE SUBSCRIBERS TO INVEST IN THE SUNK COSTS OF INVESTMENT IN THE CRSs.*

The CRS vendors compete by targeting travel agencies with the greatest potential to produce, regardless if they are located beyond their hub cities. Because most travel agencies now have contracts with a CRS, the vendors must encourage agencies to convert to their system, rather than simply developing new accounts. The incumbent vendor, therefore, cuts favorable leasing deals with the travel agents for booking additional flights on its host airline.<sup>86</sup> The other vendors lure an agency to switch CRSs by paying that agency the amount of liquidated damages due to the incumbent CRS for breaking the current contract.

Once an account is secured, the usual contract term prior to the 1992 DOT rules was five years. This period was approved by the DOT in 1984 to allow the CRS owner to realize an investment tax credit. Although such tax credits are no longer available in 1993, the tradition of a five-year period continues since the new DOT rules allow for a voluntary five-year option.

Targeted travel agencies often receive CRS services at minimal or no cost.<sup>87</sup> The pricing structure rewards the mega-travel agencies since the heaviest users pay the least amount. In contrast, agencies that are not large producers pay fees for CRS services in the form of monthly lease charges. Further, new or smaller agencies lack the track record or bargaining power to negotiate a more favorable contract. Once contracted, the liquidated damages clauses do not allow these agencies to easily switch to another CRS. Prior to the 1992 DOT rules, such clauses required that agencies pay remaining lease payments, as well as installa-

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86. McGreen, *supra* note 64.

87. *Airline Marketing*, *supra* note 7.

tion and other costs, if the subscriber switched systems prior to expiration of its contract.

Prior to the 1992 DOT rules that eliminated minimum-use clauses in the contract, such clauses deterred subscribers from booking a substantial amount of business on other systems. The CRS vendors often required a subscriber to book at least 50 percent of its flights on its system.<sup>88</sup> These clauses also served as a basis for ascertaining damages resulting from a breach of a subscription agreement.

When the major carriers leased their CRSs prior to the 1992 DOT rules, the vendors locked the travel agency into exclusively using their equipment that accessed only their systems. Roll-over clauses were also used to condition the automatic renewal of the contract upon the agency's agreement to upgrade to new equipment or to open a new location. When the agency received one new piece of equipment, the agency's contract was renewed for all of its CRS equipment. The contract term was then extended accordingly. The new DOT Rules have eliminated this restriction.

Through what might be considered a modification of tying restrictions and exclusive dealing clauses, the CRS vendors require subscribers to obtain the vendor's consent before using equipment or software acquired from third-party firms in conjunction with use of the CRS. Lease clauses continue to prohibit the use of leased equipment to access other CRSs from a single terminal belonging to a CRS vendor. Such clauses have effectively resulted in hindering smaller CRS vendors and third-party vendors of computer hardware or reservations systems from entering existing markets.

Even if multiple CRSs were affordable, most small to medium size travel agencies cannot afford the cost of installation, space requirements, and training costs associated with acquiring additional special-function equipment; nor are agents willing to take the time to switch to several, separate terminals to access information on different CRSs concerning various carriers to determine the best possible services for their customers. The profitability of the reservations industry remains fixed by the number of completed transactions. Therefore, maximizing the use of existing equipment and saving time are the primary business objectives of subscribers.

Most subscribers prefer to use their own personal computers ("PCs") as their CRS terminals. With their own PCs, agents can improve efficiencies by increasing their technical capabilities. While the large agencies have several CRSs and their own monitoring programs, most agents want a single box that can quickly and reliably process multiple

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88. Ellig, *supra* note 3, at 291.

databases linked directly with the internal reservations systems of carriers. They want to re-design screen displays and automate additional travel agency functions through application of their own or third-party hardware and software in conjunction with the CRS. However, this improvement is still not readily available to subscribers.

*F. REGULATION OF CRSS WILL IMPACT DOMESTIC & FOREIGN CRS VENDORS, DIRECT ACCESS VENDORS OR CARRIERS.*

More complex reservations systems and linkages are evolving to not only increase convenience for customers, but also to expand the marketing reach of carriers and direct access vendors throughout the world. "Tighter regulation of computer reservation systems would penalize the leading firms for being the first to recognize and develop the tremendous potential of their information-processing technology."<sup>89</sup> Regulation to remove biased, discriminatory, or deceptive practices may prove unworkable if regulators do not understand how the role and function of the CRSs expand globally as technology improves. CRSs "are both complex and constantly undergoing change. Innovation is the lifeblood of the CRS industry and is the reason that the United States currently leads the world in this industry."<sup>90</sup> Further, the DOT rules will impact upon multiple industries that facilitate the global travel and tourism.

For example, because of the advances in technology and computer software, about 7 percent of the major hotel chains over the last two years have loaded their corporate negotiated rates into airline CRSs, and as one vice president of sales claimed "we are showing the greatest-ever increases in reservations through the CRSs."<sup>91</sup> Booking hotel reservations on the CRSs makes it easier to track room-usage because all the information is in one database.

Third-party vendors have upgraded the CRS database to allow input of more tiers of rates. Now direct access vendors can use the CRS as an inexpensive marketing channel to expand sales. For example, the Radisson Hotels International is encouraging travel agents to use CRSs through a contest that rewards them based on the frequency and value of their bookings. The agents earn points that can be redeemed for merchandise, travel prizes and free stays at the hotels. "Of all reservations made with the Radisson, 28 percent are booked through travel agents and 72 percent of that total comes through the CRS."<sup>92</sup> Travel agents now have

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89. Boudreaux and Ellig, *supra* note 33, at 595.

90. Hearing, *supra* note 55, (statement of Rep. Tim Valentine).

91. Rene Babich Dumas, *Guess What's Showing Up in the CRSs?*, BUSINESS TRAVEL NEWS, Sept. 28, 1992, at 15.

92. *Radisson Runs Contest To Promote Agent Use of CRSs*, TOUR & TRAVEL NEWS, Oct. 5, 1992, at 4.

additional incentives to steer business to the CRS vendor that has established alliances with hotels, properties, and car rental agencies that are compatible with their client's preferences.

Foreign carriers and direct access vendors seek inclusion in travel packages and frequent flyer programs that offer greater sales and more effective marketing than advertising in the U.S. Recently, Asian airlines bought into hotel businesses so they could feed passengers into their own hotels. As examples, Japan Airlines owns Nikko Hotels, All Nippon Airways has ANA Hotels and Garuda Indonesia owns Aerowisata.<sup>93</sup> Within the last year, seven major Asian hotel chains and properties have developed alliances with the CRS vendors. As already discovered by their European counterparts, Asian hoteliers are finding that, "[t]ying in with airlines is one of the best ways to sell to the American corporate market," as well as capture the leisure stop-over programs.<sup>94</sup>

Foreign airlines are developing marketing partnerships and alliances to expand sales opportunities. For example, Delta Air Lines, Singapore Airlines and Swissair, each of which owns an equity interest in the other, have connected their in-house automation systems. Now their passengers may update their reservations through any of the three carriers' city ticket offices, check-in counters, or reservations centers.

*G. PUBLIC POLICY MUST CONSIDER THE IMPACT OF INCREASING  
FOREIGN CONTROL OF U.S. AIRLINES AND CRSS.*

"Foreign alliances with U.S. airlines began in the 1980s with shared frequent flyer programs, then entered computer reservations systems, and now have turned to outright equity ownership."<sup>95</sup> Section 101(16) of the Federal Aviation Act provides that foreign equity ownership be limited to 25 percent of the voting interest in U.S. airlines and the president and at least two-thirds of its board of directors and other managing officers must be U.S. citizens. However, as former DOT Secretary Samuel Skinner interpreted the statute, the 49 percent equity ownership of Northwest Airlines by KLM in 1989 was within the law.<sup>96</sup> Prior to Covia's merger with the newly formed Galileo International, Covia was 39 percent foreign-owned.

Stimulated by the need for additional capitalization and cooperative service providers both domestically and abroad, U.S. CRS vendors are participating in complex global alliances. Three examples of such alliances include: 1) KLM owns about 12 percent of Galileo (Covia) and has

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93. Anne M. Masterton, *Hotel-Airline Relationships Take a Different Direction*, BUSINESS TRAVEL NEWS, Sept. 28, 1992, at A5.

94. *Id.*

95. DEMPSEY, *Disintegration*, *supra* note 9, at 37.

96. *Id.*

an alliance with Northwest which owns 32 percent of Worldspan of which Abacus owns 5 percent; 2) Delta owns 38 percent of Worldspan that has alliances with Singapore Airlines, also owned by Abacus; and 3) Air France owns 33 percent of Amadeus, an affiliate with System One and partners with Sabena. Sabena was a Galileo owner.<sup>97</sup>

Many proponents of deregulation and laissez-faire support foreign ownership of domestic airlines as a means of mitigating the U.S. industry's economic crisis. However, when considering that "most foreign airlines are owned, in whole or part, by their governments," others fear that foreign ownership, code sharing and marketing alliances will allow "control" by foreign governments over a basic U.S. infrastructure industry—the domestic air transportation industry.<sup>98</sup>

CRS carriers are now merging resources and negotiating joint marketing strategies. As the result, the CRS industry will likely be dominated by only a few global CRS vendors. Because of the ongoing technological improvements, the CRSs have already evolved from being simply a marketing tool for individual airlines to a cooperative, world-wide "information platform."<sup>99</sup> "As the global economy enters the information age, it would indeed be unfortunate if the DOT started penalizing American firms for launching dramatic innovations in information management."<sup>100</sup> Policy-makers must recognize the impact of foreign investment and its influence on the management and operations of the CRS industry or else face the potential of creating mega-airlines and mega-CRSs that are not U.S. controlled.

#### VI. RECENT EFFORTS TO ENSURE FAIR BUT PROFITABLE COMPETITION AMONG CRSs IN THE U.S. HAVE FAILED.

Recent efforts have been aimed at eliminating alleged abuses by the CRS vendors. These approaches include anti-trust suits by individual airlines, congressional proposals, and the DOT promulgation of new rules. Only the latter has brought some satisfactory results. However, it appears that there are still gaps that the DOT must fill.

##### A. ANTITRUST HAS BEEN AN INEFFECTIVE APPROACH.

Section 411(a) of the Federal Aviation Act authorizes the DOT to in-

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97. Feldman, *supra* note 8, at 49. The following is another example in the South Pacific. "In 1989, Qantas and American created Fantasia—a company that markets SABRE in the South Pacific. Australian and Ansett formed Southern Cross to market Galileo in the region. The merged Qantas-Australian and Ansett will own TIAS II which will contain both Fantasia and Southern Cross." *Id.*

98. *Id.*

99. *Id.*

100. Boudreaux and Ellig, *supra* note 33, at 595.

investigate and determine whether any air carrier or ticket agent has been or is engaged in unfair or deceptive practices or unfair methods of competition. However, the DOT historically has failed to pursue this function aggressively. "Nor is it clear that traditional antitrust remedies are socially desirable in cases, such as air transport, where there are significant real economies of size, scope, and density."<sup>101</sup>

During its recent review for adopting new rules, the DOT found that a CRS vendor does not have a monopoly of the market in a conventional sense. However, CRS vendors have substantial market power "to force a purchaser to do something that he would not do in a competitive market,"<sup>102</sup> as defined by the Supreme Court.<sup>103</sup> Because of the small number of CRS vendors and the presence of sunk costs, a CRS vendor could use its control to eliminate competition in an individual hub, even if it is unable to make an impact nation-wide.

The DOT supports the applicability of the "essential facility doctrine" to a CRS.<sup>104</sup> This doctrine follows the antitrust theory that a firm controlling a facility must give its competitors access on reasonable terms if the facility is essential for competition and cannot be feasibly duplicated by a competitor.<sup>105</sup> However, this doctrine permits "competitors to avoid all the risks and yet reap all the fruits of the CRS owners' investments."<sup>106</sup>

The U.S. Supreme Court denied certiorari of a seven-year antitrust action filed against SABRE and APOLLO for monopolizing interstate trade and commerce in the Ninth Circuit.<sup>107</sup> The plaintiffs—Alaska Airlines, Northwest Airlines and Southwest Airlines—complained that internal bias and discriminatory pricing for CRS services constituted illegal behavior under the Sherman Antitrust Act. "American and United, however, persuaded the court that there was lack of proof that the smaller airlines had been harmed by the CRS practices."<sup>108</sup> The Ninth Circuit rejected the "monopoly leveraging theory," that a firm may not illegitimately use its monopoly power in one industry to acquire unfair competitive advantage in another industry.

The "monopoly leveraging theory" has been accepted as a valid antitrust principle in the Second and the Sixth Circuit Courts.<sup>109</sup> It has been argued that "antitrust is an inadequate substitute for responsible eco-

101. FLYING BLIND, *supra* note 32, at 48.

102. *Airline Marketing*, *supra* note 7.

103. *Jefferson Parish Hospital v. Hyde*, 466 U.S. 2, 14 (1984).

104. *Airline Marketing*, *supra* note 7.

105. *Aspen Skiing Co. v. Aspen Highlands Skiing Corp.*, 472 U.S. 585 (1985).

106. *The Legal and Regulatory Implications*, *supra* note 82.

107. *Alaska Airlines v. United Air Lines*, 948 F.2d 536 (9th Cir. 1991), *cert. denied*, 112 S.Ct. 1603 (1992).

108. *End of the Road For CRS Suit*, BUSINESS TRAVEL NEWS, Apr. 20, 1992, at 6.

109. *Berkey Photo, Inc. v. Eastman Kodak Co.*, 603 F.2d 263 (2d Cir. 1979), *cert. denied*,

conomic regulation in protecting public interest values of assuring a healthy competitive environment and advancing social objectives. . . ."<sup>110</sup> Generally, the courts have declined to find CRS vendors guilty of monopolization, attempted monopolization, or unreasonable restraint of trade.

In the Second Circuit,<sup>111</sup> a plaintiff claimed that restrictive clauses in its contract supported APOLLO's attempted monopolization of its CRS market. However, this U.S. Court of Appeals upheld APOLLO's rollover, minimum use and liquidated-damage provisions when the plaintiff travel agent switched to System One. In subsequent cases, the courts have declared that the CRS market is competitive.<sup>112</sup>

Further, it appears that the antitrust laws do not provide adequate protection against pricing discrimination in service industries. The Robinson-Patman Act addresses the sales of goods. It has been argued that it may be "time to consider either amending the Robinson-Patman Act to prohibit discrimination in the sale of services, or reestablishing the regulatory mechanism for its prohibition."<sup>113</sup>

#### *B. CONGRESS HAS NOT ENACTED EFFECTIVE LEGISLATION.*

The "Air Passenger Protection Act of 1987,"<sup>114</sup> if passed by Congress, would have protected passengers from losing unused tickets of bankrupt airlines. An 18-member commission was to study the impact of deregulation, including the CRS industry.

In 1989, the "Airline Competition Enhancement Act"<sup>115</sup> was introduced based upon a review by the Senate's Aviation Subcommittee of several studies prepared by the DOT and the GAO. One of the provisions of the Act required divestiture of the CRSs by the mega-carriers to non airline companies. This bill was tabled.

Senator McCain introduced the "Airline Computer Reservation System Availability Act of 1991"<sup>116</sup> that would have required that "after January 1, 1992, no air carrier or air carrier affiliate shall own, operate, or control a computer reservations system." The reasons given for recommending divestiture were the continued discriminatory practices by the major CRS vendors and the significant incremental revenues they enjoy

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444 U.S. 1093 (1988); *Kerasotes Michigan Theatres, Inc. v. National Amusements, Inc.*, 854 F.2d 135 (6th Cir. 1988), *cert. dismissed*, 490 U.S. 1087 (1989).

110. FLYING BLIND, *supra* note 32, at 48.

111. *United Air Lines, Inc. v. Austin Travel Corp.*, 867 F.2d 737 (2nd Cir. 1989).

112. *In re "Apollo" Airline Passenger Computerized Reservation System*, 720 F. Supp. 1061, 1079 (S.D.N.Y. 1989).

113. FLYING BLIND, *supra* note 32, at 53.

114. S. 1485, 100th Cong., 1st Sess. (1987).

115. S. 1741, 101st Cong., 1st Sess. (1989).

116. S. 839, 102d Cong., 1st Sess. (1991).

from these practices.<sup>117</sup>

In the same year, a three-part act, "Airline Competition Enhancement Act of 1991"<sup>118</sup> proposing improved competition, was unsuccessful. Part 1 addressed airport slots and Part 2 increased the allowable foreign ownership of U.S. airlines from 25 percent to 49 percent of the voting stock. Although Part 3 did not require divestiture, it would have capped participant fees to an "arbitrary," fair, and reasonable figure. Senator McCain later introduced the "Airline Competition Equity Act of 1991,"<sup>119</sup> a comprehensive piece of legislation which also required divestiture of the CRSs.

The U.S. Senate considered the "Airline Competition Enhancement Act of 1992,"<sup>120</sup> a bill to enhance competition in essential air service. Provisions in the bill mandated all CRS vendors within one year to serve all participating carriers equally in function, timeliness, completeness, accuracy, or efficiency, commonly referred to as "equal functionality."<sup>121</sup> Within three years, airlines owning a CRS would be required to separate their internal reservations system from the CRS, commonly referred to as "de-hosting" CRSs. The bill proposed to limit travel agency automation contracts to two years, to limit liquidated damages clauses, to bar minimum-use requirements, and to provide for arbitration of participant fees. In July of 1992, Senator McCain proposed an amendment to this bill which dropped the "dehosting" requirement and allowed use of third-party software on CRSs.<sup>122</sup>

The House of Representatives considered the Airline Competition Enhancement Act of 1992<sup>123</sup> in tandem with the Senate bill and passed the House bill with a vote of 230 to 160. The purpose of the Act was to "enhance competition among air carriers by prohibiting air carriers who operate a CRS from discriminating against other air carriers participating in the system and among travel agents which subscribe to the system."<sup>124</sup> Effective September 30, 1994, the provision would have prohibited vendor discrimination through the CRS integrated displays and through restraint

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117. 137 Cong. Rec. S4623 (1991) (statement by Sen. John McCain).

118. H.R. 1435, 102d Cong., 1st Sess. (1991).

119. S. 1628, 102d Cong., 1st Sess. (1991).

120. S. 2312, 102d Cong., 2d Sess. (1992).

121. *New CRS Bill Is Introduced*, TOUR & TRAVEL NEWS, Mar. 23, 1992, at 16.

122. S. 7610, 102d Cong., 2d Sess. (1992).

123. H.R. 5466, 102d Cong., 2d Sess. (1992).

124. The Airline Competition Enhancement Act of 1992, H.R. 5466, was introduced and referred to the House Public Works and Transportation Committee on June 23, 1992. It was approved without amendment by the Aviation Subcommittee on June 25, 1992. An order was reported with amendment by the Committee on July 1, 1992. On August 5, 1992 a rule granted the amendment, H. Res. 541. As amended, H.R. 5466 was passed by the House (230 to 160) on Aug. 12, 1992.

clauses in the subscriber contracts, including liquidated damages. The proposed bill established a reporting and monitoring system effective no later than March 31, 1993.

In response to these legislative efforts, American Airlines president, Robert Crandall, criticized the congressional efforts for placing a penalty to American and United "which have achieved leadership in the CRS industry." Covia president, Allan Z. Loren, stated that the bill "won't help airlines compete better or be more profitable or save money . . . . It will do the exact opposite by creating additional automation costs that airlines eventually will be asked to pay for."<sup>125</sup>

### C. *THE DOT IMPOSED NEW BUT NOT ENLIGHTENED REGULATION OF CRSs.*

The 1984 DOT regulations of the CRS industry were originally scheduled to expire on December 31, 1990. After Congress proposed the two recent bills to enhance competition among air carriers and after three years of solicited comments and research and postponed deadlines before announcing a readoption of rules governing the CRSs, the DOT issued new rules effective December 11, 1992, to govern the CRS industry until December 31, 1997.<sup>126</sup>

Some agencies are critical of the DOT because the rules do not address airline divestiture, retention of discounts, and other sales incentives based on productivity-based performance by subscribers, elimination of contractual liquidated damages clauses, nor de-hosting of CRSs.<sup>127</sup> However, the DOT's new provisions address nondiscriminatory fees among participating carriers, display bias, subscriber vendor contract terms, software and equipment use, and the provision of information by the CRS vendors.

#### 1. *COVERAGE OF THE RULES.*

The rules apply to a "system," defined as a CRS, offered by a carrier or its affiliate to subscribers for use in the U.S. that provides both airline information and a booking and ticketing capability "if it charges any other carrier a fee for system services."<sup>128</sup> The rules apply only to domestic or foreign, airline-affiliated CRSs used by travel agencies in the U.S. System owners are defined as a carrier and/or its affiliate(s) which hold at least 5 percent of the equity of the CRS.

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125. "House Approves Revised CRS Rules; Senate Fight Ahead, TOUR & TRAVEL NEWS, Aug. 17, 1992, at 8.

126. *DOT Issues New CRS Rules*, TOUR & TRAVEL NEWS, Sept. 21, 1992, at 1.

127. *Agencies Win and Lose With New CRS Rules*, TOUR & TRAVEL NEWS, Sept. 21, 1992, at 45.

128. 49 Fed. Reg. 1381 (to be codified at 14 C.F.R. pt. 255.3) (proposed Sept. 22, 1992).

In dealing with a foreign carrier that engages in discriminatory practices, the CRS vendors are not required to comply with the obligations "14 days after it has given DOT and such foreign carrier written notice of its intent to deny such foreign carrier any or all of the protections of this part of the rules."<sup>129</sup> Systems used by hotels, car rental agencies, other modes of transportation, or for tour products, as well as corporate travel departments and home computer users, are not covered by the regulations. Although the rules do not apply to a carrier's internal reservations system, if a travel agent accessed it through a direct link that enabled it to function as a CRS, it would then become subject to the rules if the carrier charged for its services.

## 2. *CONTRACTS WITH PARTICIPATING CARRIERS.*

The rules prohibit CRS vendors from discriminating among participating carriers in booking fees.<sup>130</sup> Although differing fees for the same or similar levels of services will be presumed to be discriminatory, the DOT does not establish a standard for participation fees based on the costs of the transaction or overall service. Participating carriers must "ensure that complete and accurate information" is provided to each system in a form such that the system is able to display its flights in accordance with the display requirements.<sup>131</sup>

## 3. *DISPLAY BIAS.*

The DOT readopted rules that prohibit biased integrated displays constructed by vendors to show schedules, fares, rules, and availability of all participating carriers. "[H]owever, the proposal leaves it open for travel agencies to construct their own potentially biased secondary displays."<sup>132</sup> Major provisions of the rules require the following.<sup>133</sup>

- The CRS vendors may order the information, including connecting flights, on the basis of any service criteria as long as they do not use any factors directly or indirectly relating to carrier identity.
- The CRS vendors must provide, upon request, the current criteria used in editing and ordering flights, including connecting flights.
- A CRS vendor shall apply the same standards of care and timeliness in loading information concerning participating carriers as it applies to the CRS owner.
- In constructing connecting flights for display, participating carri-

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129. 14 C.F.R. pt. 255.11 (1992).

130. *Id.* at pt. 255.6.

131. *Id.* at pt. 255.4(6)(f).

132. *DOT's CRS Rulemaking Proposal Draws Cheers, Jeers*, AVIATION DAILY, Mar. 27, 1991, at 568.

133. 14 C.F.R. pt. 255.4.

ers are entitled to request up to five connect points (and double connect points); the CRS must use at least 15 points and after September 15, 1993, six double connect points unless there are fewer points that meet the service criteria.

— The display shall indicate when a flight requires a change in aircraft at a point before the final destination.

— Within 10 days after the CRS vendor receives information concerning on-time performance from the participating carriers or third parties, the CRS must display such information in accordance with the rules.

#### 4. *SUBSCRIBER-VENDOR CONTRACT TERMS.*

Subscribers will have more flexibility in diversifying their CRS use, and there will probably be less incentive for CRS vendors to pursue converting travel agencies to use their systems. The prohibition against minimum-use clauses eliminates any revenue guarantees upon which attractive buyout offers by other CRS vendors were previously based. Instead, to safeguard their revenues, CRS vendors may increase targets in their productivity-based pricing agreements with current subscribers or even establish artificially high rack rates. The DOT determined that commission overrides calculated upon productivity should continue to encourage efficient use of the system, even though it may deter agencies from using other sources of travel information or means for booking services.

While it did not ban liquidated damages clauses, the DOT weakened the basis for calculating lost booking fees by prohibiting the CRS vendor from requiring subscribers to use the system for a minimum volume of transactions. Since the DOT permits productivity pricing, CRS vendors still have an avenue to obtain adequate compensation for services and damages in the event of a breach of contract because it, in effect, shifts the burden of risk from the CRS vendor to the travel agent.<sup>134</sup> For example, if the market declines and the agent cannot book the sufficient number of tickets to earn its rack rate, it will still be bound to pay a monthly equipment fee to the CRS vendor. This fee could serve as a basis for estimating liquidated damages.

Other DOT rules concerning contracts provide that:<sup>135</sup>

— The maximum contract term will be reduced from five years to three years, although a CRS vendor may also offer a voluntary five-

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134. Telephone Interview with Barry Roberts, Roberts and Huntermark, Washington D.C. (Nov. 3, 1992).

135. 14 C.F.R. pt. 255.8 (1992).

year option. (Therefore, most contracts will probably continue to have five year terms).

— The CRS vendors are prohibited from using minimum-use clauses, rollover clauses, and limitations on the number of other CRS terminals that an agency may use. These provisions will be invalidated in existing contracts.

#### 5. SERVICES, SOFTWARE, AND HARDWARE USE.

Corporations and large travel agencies will benefit most from the greater flexibility in automation planning afforded by the new DOT rules. Subscribers with the technical resources can now establish: a) multi-access systems that directly link the agent's workstation to a particular carrier's internal reservations system and then deliver more information to points of purchase; b) economies in purchasing and training by standardized booking procedures across multiple locations; and c) preferred vendor agreements in all segments which will allow bookings to be made directly on the supplier's system at proprietary rates that will not be displayed in the CRSs. Under this arrangement, suppliers will not have to pay a booking fee to the CRS vendor.<sup>136</sup> A summary of specific DOT rules follows:<sup>137</sup>

— If a CRS vendor offers a service enhancement to its owner or a participating carrier, it shall offer it to all participating carriers on a non-discriminatory basis.

— A CRS vendor must offer its system enhancements, such as seat maps and boarding passes, to other systems under commercially reasonable terms.

— CRS vendors must allow agencies who now own their own computer terminal to access other CRSs and informational databases on the same equipment.

— Agencies may now use compatible software and hardware from third-party vendors in conjunction with their CRS's services. Further, the CRS vendor is allowed to certify third-party products without causing undue delay or unnecessary testing. However, the CRS vendor is not required to let agencies access other systems from equipment that the CRS owns.

— The CRS vendors must make available to third-party vendors non-proprietary information concerning architectural specifications and other technical information; but are not required to develop or supply hardware, software or services to support third-party prod-

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136. *CRS Rules Open Things Up For Corps., Agencies*, BUSINESS TRAVEL NEWS, Sept. 28, 1992, at 26.

137. 14 C.F.R. pt. 255.5, 255.7, 255.9.

ucts. (This means each subscriber must work out the details with all of its information suppliers).

#### 6. *PROVISION OF INFORMATION.*

A stipulation<sup>138</sup> that U.S. carriers may acquire international marketing information from the CRS vendors will expand their present capability to design agency override commissions based on their international market share. Foreign airlines whose countries do not reciprocate with data "will find it difficult to compete with U.S. carriers' marketing programs."<sup>139</sup> The DOT rule specifies that:

- The CRS vendor shall make available to all participating carriers on a non-discriminatory basis, all marketing, booking and sales data related to carriers that it elects to generate from its system.
- The CRS vendors must make available any data they generate concerning international bookings to U.S. airlines and to foreign carriers on a reciprocal basis.

However, the DOT supported the view that the CRS vendors are entitled to take advantage of the systems' ability to improve their yield management and pricing control programs and to use data concerning domestic marketing acquired from the CRSs for their competitive positioning. With use of detailed market data, the CRS vendors can more quickly respond to price cuts by a competitor with a capacity-controlled discount fare. Because the DOT supports the notion that the CRS owners should enjoy the fruits of their investments, the market dominance by SABRE and Covia will not be limited by the DOT rules.

#### 7. *ENFORCEMENT.*

Pursuant to Section 411(a) of the Federal Aviation Act, the DOT upon its own initiative or upon receipt of a complaint may conduct investigations and hearings. Upon finding unfair or deceptive practices, the DOT shall issue a cease and desist order or assess civil penalties for each violation.

#### 8. *GENERAL COMMENTS.*

Although the DOT did not propose regulations on all of the measures requested by travel agencies and a group of suppliers headed by Worldspan,<sup>140</sup> they were encouraged by the rules that were proposed. Worldspan stated that "[w]e think it recognizes some basic changes that are

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138. *Id.* at pt. 255.10.

139. *CRS Rules Open*, *supra* note 136.

140. The Worldspan group included Alaska Airlines, America West Airlines, Association of Retail Travel Agents, the Aviation Consumer Action Project, British Airways, Consumer Federa-

needed in the industry. Generally, it will increase competition in the industry and be to the benefit of travel agents and consumers."<sup>141</sup> A vice president of Information Systems for a travel agency pointed out that "[t]he rules will make the CRS and the airline industry more competitive, but not the way the DOT intended . . . . They'll make the big stronger yet, and rapidly force the smallest out."<sup>142</sup>

A representative from SABRE noted that "[w]e find it ironic that DOT is proposing new CRS regulations when it has not even sought to enforce the present rules."<sup>143</sup> One observer remarked, "even once the rules are adopted, there will undoubtedly have to be modifications."<sup>144</sup> Based on DOT's pattern of being slow to change and its reputation for "hands-off administration," the rules may be coming too late to properly address some of the problems.

#### VII. COMPARISON WITH EUROPEAN LIBERALIZATION OF AIR TRANSPORTATION

In March 1957, a Treaty creating the European Economic Community ("EEC") was signed in Rome.<sup>145</sup> The EEC's goal was to establish a single internal market by 1992. Although the EEC has established many common policies, the goal of a genuine, barrier-free internal market has yet to be achieved.

There is a single passport for EC citizens and no restrictions on the movement of tourists or workers within the Community. The customs union was completed in 1968, so tariffs on non-EC goods are identical in each Community country (and free to each other) . . . . Under the "1992" legislative program, more progress has been made . . . in deregulating ground, air and water transportation . . .<sup>146</sup>

The 1987 Single European Act<sup>147</sup> streamlined the decision-making process and facilitated the development of a united European market by amending and adding new provisions to the Treaty of Rome. The EEC Commission drafts directives that may be adopted by the Council of Min-

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tion of America, Continental Airlines, Delta Air Lines, KLM Royal Dutch Airlines, Northwest Airlines, System One Corp. and Trans World Airlines.

141. *DOT's CRS Rulemaking*, *supra* note 132.

142. *CRS Rules Open*, *supra* note 136.

143. *Id.*

144. James Weiss, *Computer Reservation Systems*, 20 *TRANSP. L.J.* 1, 172 (1991).

145. Treaty Establishing the European Economic Community, (signed in Rome on Mar. 25, 1957 and generally referred to as the Treaty of Rome). art. 2, 298 U.N.T.S. 11. The original member countries were Belgium, France, Federal Republic of Germany, Italy, Luxembourg and Netherlands. In 1973, Denmark, Ireland and the United Kingdom (U.K.) became members; in 1981, Greece joined; and in 1986, Spain and Portugal became members.

146. BUREAU OF PUBLIC AFFAIRS, U.S. DEP'T OF STATE, *Europe 1992: A Business Guide to U.S. Government Resources*, (rev. Jan. 1990) at 6.

147. Single European Act, 1 *Common Mkt. Rep.* (CCH) para. 101.15 (1978).

isters by a qualified majority vote. Although the European Parliament has the power to amend or reject legislation approved by the Council, the Council may overrule Parliament by a unanimous vote. The Parliament also amends or rejects the budget and approves its adoption. By 1990, the preliminary EEC budget was about \$56 billion, "financed by a customs duty, 1.4 percent value added tax collected on goods and services consumed in member states and a percentage donation based on each member countries' gross national product."<sup>148</sup>

The Commission, headquartered in Brussels, consists of 17 commissioners appointed by their national governments. It oversees the implementation of the EEC treaties, prepares the EEC budget, and proposes EEC policy to the Council and Parliament. By late 1989, the Commission formally proposed 386 directives and regulations to harmonize market conditions for an EEC-wide gross domestic product of \$4 trillion.<sup>149</sup> Once a directive is adopted, the member countries must bring their domestic legislation into conformity with the objectives of Community law by a specified date.

The U.S. government addresses the trade and investment aspects of the EEC's "1992 program" through an Interagency Task Force. The Task Force, established in 1988, is located in Washington, D.C. Seventeen federal departments and agencies, including the DOT, comprise the Task Force, which also works closely with the private sector. Eleven working groups focus on specific program aspects, including Civil Aviation, and report to the Task Force. Although each agency is the contact point for information concerning its constituencies, the U.S. Mission to the European Communities ("USEC") located in Brussels and U.S. diplomatic missions located in the 12 EEC member countries provide information and analysis of EEC developments and represent U.S. interests.<sup>150</sup>

"Thousands of differing national regulations are being replaced by a few hundred European rules . . . . Business travelers will be affected most by new rules deregulating the airline industry, and by rules and policies regarding customs."<sup>151</sup> Independently, the Association of Car Rental Industry Systems Standards<sup>152</sup> has obtained informal EEC approval of rules standardizing CRS listings of car rental products involving eight car-class categories. "New hotel regulations are few, but moves to standardize value-added taxes ("VAT") are under way and should make that line

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148. BUREAU OF PUBLIC AFFAIRS, *supra* note 146, at 11.

149. INT'L TRADE AD., U.S. DEP'T COMMERCE, *EC 1992: Growth Markets*, 1989, at 9.

150. BUREAU OF PUBLIC AFFAIRS, *supra* note 146, at 10.

151. Richard D'Ambrosio, *BUSINESS TRAVEL NEWS*, Nov. 16, 1992, at 26.

152. Members include Avis Europe, Budget Rent a Car Corp., EuroDollar International, EuropCar InterRent and Hertz Corp. Thrifty Car Rental in Europe, Africa and the Middle East, although not a member of ACRISS, plans to adopt the same standards.

on a hotel bill more readily recognizable."<sup>153</sup> The EEC required member nations' VAT to be a minimum of 15 percent, although higher prevailing rates in other EEC nations will remain.

A. *THE EEC GOAL IS A FULLY LIBERALIZED AIR INDUSTRY.*

While Articles 85 and 86 of the Treaty of Rome established the pertinent rules of competition, it was not until December 1987 (three decades after their promulgation) that the EEC passed its first package of regulations addressing competition in scheduled air transport, air fares, flight capacity allocation and group exemptions among the 12 EEC countries.<sup>154</sup> In November 1990, the second legislative package increased liberalization of air fares and allocation of routes while enforcing competition regulations and adopting new regulations concerning intra-EEC air transportation.<sup>155</sup> In July 1991, a third package was adopted by the Commission but it must still be approved by the Council and Parliament. The proposed legislation will reduce bureaucracy and further equalize the EEC market.

Sir Leon Brittan, Vice President of the EEC Commission in charge of Competition Policy, summarized the EEC's goal for a fully liberalized air transportation industry by the end of 1993 as, "[w]hat we need is less regulation, less bureaucracy, more competition, and cheaper fares."<sup>156</sup> Unlike how the U.S. administered the 1979 airline deregulation, Brittan explains:

The antitrust authorities in the United States have been criticized for failing to oppose even a single merger or to challenge a single suspected case of predatory pricing. This kind of laissez-faire policy is not one that we intend to adopt in the Community. Anti-competitive behavior by dominate airlines will have to be strictly controlled . . . The challenge for the Community will be learn from the U.S. experience and avoid the pitfalls encountered there.<sup>157</sup>

Both the Commission and the Association of European Airlines ("AEA") are "determined to avoid American-style deregulation, which they believe would lead to the emergence of competition-killing giants."<sup>158</sup>

B. *THE COUNCIL HAS IMPOSED A CODE OF CONDUCT FOR CRSS.*

In July 1989, the Council adopted a Code of Conduct for Computer-

153. D'Ambrosio, *supra* note 151.

154. Council Reg. on the Application of the Competition Rules, Council Reg. (EEC) No. 3975/87 of 14 Dec. 1987, 1987 O.J. (L374).

155. *Id.* at 2342/90 and 2343/90.

156. Stan Humphries, *Fully Liberalized: The E.C.'s Goals for Europe's Airline Industry*, EUROPE, Dec. 1991, at 8.

157. *Id.*

158. *Europeans Threatened by American Giants?*, TRANSPORT EUROPE, Jan. 26, 1992, at S14.

ized Reservations Systems ("Code").<sup>159</sup> In December 1990, the Commission adopted a block exemption for CRSs from the exclusivity and non-competition clauses pursuant to Article 85(3) of the Treaty of Rome until December 31, 1992.<sup>160</sup> This exemption applies to agreements concerning joint purchase or development of a CRS; creation of CRS vendors to market and operate a CRS; and regulation of distribution facilities to display flight information to subscribers of the CRS or distributors.<sup>161</sup>

On September 23, 1992, the Commission proposed a new Code (COM 92/404) that will eliminate some obstacles to competition that U.S. CRS vendors have faced in Europe.<sup>162</sup> Subject to approval by the Council, the Code is scheduled to take effect January 1, 1992, and to expire on December 31, 1997. A summary of the provisions of the current and proposed Codes is provided below.

### 1. COVERAGE OF THE CODE.

The proposed rules expand the scope of the Code to include charter flights along with the scheduled air service. However, the charters must be clearly identified and travel agents may choose to display only the scheduled flights.<sup>163</sup> The proposed Code has clarified that it also applies in the CRS vendor's own travel agencies, although it will "be exempted from the provisions on the listing and presentation of other companies' flights on their CRS screens."<sup>164</sup>

The Code currently covers any domestic or foreign system providing airline information used in the EEC for the distribution and sale of air transport products, regardless of the source of information used, the location of the central processing unit or the geographical location of the air transport product concerned.<sup>165</sup> System vendors are defined as any entity and its affiliates which are responsible for the operation or the marketing of a CRS. A CRS refers to:

A computerized system containing information about air carriers' schedules, 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.<sup>166</sup>

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159. Council Reg., *supra* note 154, at 2299/89 of July 24, 1989.

160. Comm'n Reg. No. 83/91, 1991 O.J. (L10/9).

161. Berend J.H. Crans and Mark B.W. Biesheuvel, *EC Aviation Scene*, 25 AIR LAW 133, 136 (1991).

162. Mary Brisson, *EC Moves to Boost CRS Competition In Europe*, BUSINESS TRAVEL NEWS, Oct. 19, 1992, at 17.

163. *Air Transp.: Proposal on Computerised Reservation Systems*, EUROPEAN REPORT, Sept. 26, 1992 at § IV, No. 1798.

164. *Id.*

165. Council Reg., *supra* note 154, at art. 1.

166. *Id.* at art. 2(b).

A. *COMPARISON*

The scope of the EEC Code and the 1992 DOT rules is limited to systems providing airline information. The Code applies to a wider classification of entities, while the DOT regulations narrowly focus on airline-affiliated CRSs. The 1992 DOT rules apply only to carriers and/or affiliates which own at least 5 percent equity in the CRS. The CRS vendor must provide airline information on other carriers, have ticketing capabilities and charge a fee for its services. In contrast, the Code applies to system vendors that are also responsible for the marketing or operation of CRSs made available to subscribers for selling air transport products.

2. *CONTRACTS WITH PARTICIPATING CARRIERS.*<sup>167</sup>

The CRS vendor must allow any carrier the opportunity to participate on an equal and non-discriminatory basis and without unreasonable conditions, subject to capacity and technical constraints. A carrier may belong to multiple CRSs and may terminate its contract with a CRS vendor without penalty upon giving six months prior notice after completion of its first year. While the Code does not attempt to establish a standard, "[participation] fees must be non-discriminatory and reasonably related to the cost of the service provided and used."<sup>168</sup> Fees must be the same for the same level of services.

The Code places an obligation on participating carriers and other information providers to "ensure that the data submitted are comprehensive, accurate, non-misleading, and transparent . . . [CRS vendors must] load and process data provided by participating carriers with equal care and timeliness," subject to the constraints and formats of the system.<sup>169</sup>

A. *COMPARISON*

Both the EEC Code and the 1992 DOT rules prohibit discrimination by the CRS vendor against participating carriers. The Code bases the "reasonableness" of participation fees on costs, while the DOT employs a free market standard based on same or similar levels of services. Both regulations place an obligation on participating carriers to provide accurate and complete information to the CRS vendor.

3. *DISPLAY BIAS.*<sup>170</sup>

The Code prohibits in the principal display any inaccurate or misleading information and bias based on carrier identity. Although the Commis-

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167. *Id.* at art. 3.

168. *Id.* at art. 5(1).

169. *Id.* at art. 4(1),(3).

170. *Id.* at art. 5.

sion published a Sample Display in its explanatory note,<sup>171</sup> the proposed rules further clarify how flights are to be ranked. For example, when carriers sell seats on the same flight on the same plane pursuant to a "blocked space arrangement, "each carrier may display the same flight, while the competitors' flights may be listed on the second page. However, if a joint-venture flight has the same code for both carriers (i.e., "code sharing"), it may be listed only once. Although the Code requires a minimum of 9 connecting points for constructing connecting flights, the Commission stated that it might be worth while for the EEC to increase its maximum to 15 as required in the 1992 DOT rules "to achieve, as far as possible, globally accepted common rules on CRSs."<sup>172</sup>

The Code recognizes the need for agents to meet their customer's preference and allows subscribers to either use alternative displays or reorder the data in the principal display in any single transaction.<sup>173</sup> For example, the Code allows agents to create secondary displays for information and booking purposes based on an express request by a company for booking its employees only on a specific airline.<sup>174</sup> In effect, this provision permits "travel agents to bypass the principal display and use biased secondary displays when bias is not the feature the customer asked for."<sup>175</sup>

However, the Code places the burden on the CRS vendor, if it is aware or should be aware of inaccurate or misleading information, to [e]nsure, 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 CRSs in a manner that would lead to inaccurate, misleading or discriminatory presentation of information to consumers.<sup>176</sup>

#### A. COMPARISON

Although there are differences, both the EEC Code and 1992 DOT rules attempt to eliminate bias based on carrier identity on displays constructed by the CRS vendor. The DOT further requires the CRS vendor to publish its display criteria. The Code places the burden on CRS vendors to ensure unbiased displays are used. While the Code also attempts to place some obligations on subscribers to use unbiased displays, it permits agencies to create secondary displays based on carrier identity if a customer requests bookings with a particular carrier. However, because

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171. *Id.* at Explanatory Note, 1992 O.J. 90C 184, no. 11.

172. Lisa Gaines, *EC Members Mull CRS Code Changes*, TRAVEL WEEKLY, Mar. 19, 1992, at 21.

173. Crans and Bieshevel, *supra* note 161.

174. Council Reg., Explanatory Note, *supra* note 171.

175. Gaines, *supra* note 172.

176. Council Reg., *supra* note 154, at art. 9(5).

subscribers may not be compensated based on productivity-based agreements, there is less incentive to create and consistently use biased secondary displays.

In contrast, the DOT determined not to adopt regulations concerning travel agency displays, nor require agencies to provide notice to customers that they use a CRS affiliated with one or more carriers and that such affiliation could affect the information provided. Therefore, it is possible for either the subscriber or a third-party vendor to create and regularly employ "back-door" biased displays without detection.

#### 4. SUBSCRIBER-VENDOR CONTRACT TERMS.<sup>177</sup>

Under the Code, the CRS vendors must not discriminate in making services and enhancements available to subscribers. Subscriber contracts must be nonexclusive and without unreasonable conditions. Subscribers may terminate the contract without penalty upon three months prior notice after completion of the first year. A carrier may not require use of any specific CRS, nor link commissions or other incentives for the sale of tickets for any of its air transport products.<sup>178</sup>

##### A. COMPARISON

While both the EEC Code and the 1992 DOT rules prohibit exclusivity and minimum-use clauses, DOT permits productivity-based pricing. Although the DOT weakened the basis for damages available to CRSs, under the permitted liquidated damages clauses and, in effect, continued five-year contract terms, subscribers are still essentially locked into their contracts with U.S. CRS vendors. In contrast, European subscribers enjoy a greater freedom to switch vendors.

#### 5. SERVICES, SOFTWARE, AND HARDWARE USE.

The Code allows subscribers to use technical equipment offered by third-party vendors, as long as it is compatible with the CRS. However, CRS vendors may "not impose any obligation on a subscriber to accept an offer of technical equipment."<sup>179</sup> The CRS vendors must make available to interested parties the details of current procedures, fees, systems facilities, editing, and display criteria used. However, the CRS vendors are not required to provide proprietary information such as software programs.<sup>180</sup> Neither a parent carrier nor a participating carrier may require an agent to use any specific CRS for any sale or issuance of tickets or

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177. *Id.* at art. 9(1),(2),(3),(4).

178. *Id.* at art. 8(1),(2).

179. *Id.* at art. 9(6).

180. *Id.* at art. 10(3).

other transport products that such carrier may provide either directly or indirectly.<sup>181</sup>

#### A. *COMPARISON*

Both the EEC Code and the 1992 DOT rules permit third-party vendors to enter the CRS market and respect the proprietary information of CRS vendors. Neither regulation completely clarifies the responsibilities, liabilities, or allocation of costs for certifying the compatibility of products offered by third-party vendors. As the result of this ambiguity, the subscriber must establish its own specifications and coordinate with product suppliers without knowing for sure that the CRS will certify the planned expansion.

However, European manufacturers, in close cooperation with the travel industry, "have already established the standards and norms necessary to ensure the smooth and reliable flow of information."<sup>182</sup> For example, one manufacturer offers personal computers "with text processing capabilities in all nine official EEC languages using a single keyboard."<sup>183</sup> Accordingly, European CRS vendors have a certification process and have already developed different pricing structures for subscribers using their own equipment, equipment from third-party vendors, and for those who will lease equipment from the CRS vendor.

#### 6. *PROVISION OF INFORMATION.*

The Code provides that, upon request, CRS vendors must reveal the "details of current procedures, fees, systems facilities, editing and display criteria used."<sup>184</sup> The Code recognizes the privacy of specific statistical or other types of information by requiring consent by the consumer, air carrier concerned, or carriers participating in a specified service covered by a booking, aggregated or anonymous marketing data. When such information is requested by any carrier, it must "be offered to all participating air carriers on a nondiscriminatory basis."<sup>185</sup>

#### A. *COMPARISON*

Both the ECC Code and the 1992 DOT rules require the CRS vendor, upon request, to offer marketing data to other participating carriers on nondiscriminatory terms. However, the DOT regulations limit the flow of information to domestic carriers unless foreign carriers are willing to re-

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181. *Id.* at art. 8(2).

182. Siemens Niedorf, *Synergy at Work*, EUROPEAN AFFAIRS, Aug./Sept. 1991 (advertisement).

183. *Id.*

184. Council Reg., *supra* note 154, at arts. 5(1),(2),(3).

185. *Id.* at art. 6(b).

ciprocate with comparable data and the CRS vendor must provide written notice to the participating carriers concerning this exchange.

### 7. ENFORCEMENT.

The Commission may act on its own initiative or upon receipt of a complaint from an aggrieved party<sup>186</sup> and initiate investigations and hearings.<sup>187</sup> To remedy an infringement, the Commission may exercise its discretion in imposing fines upon infringers "up to a maximum of 10 percent of the annual turnover for the relevant activity of the undertaking concerned."<sup>188</sup> Such fines may be appealed to the European Court of Justice.<sup>189</sup>

To safeguard against blatant anti-competitive behavior, the Council conditioned the benefits of the block exemption accorded to an European carrier upon compliance with the Code. Since many European airlines are owned, "flag carriers" for their governments, heavily subsidized by their governments and/or operated as a joint venture, the sanction of removing the block exemption could have the effect of terminating operations.<sup>190</sup> The Code also contains a "third-party" clause that releases the European CRS vendors from meeting the obligations of the Code in dealings with a non-EEC country's carrier that engages in discriminatory or deceptive practices.<sup>191</sup>

#### C. THE CODE OF CONDUCT AND THE DOT REGULATIONS ARE COMPATIBLE.

Europe has followed the lead of U.S. deregulation of the airline industry. One European commentator explained,

The main difference between European liberalization policies and U.S. deregulation is the time scale: Europe has not been willing to adopt the U.S. big bang approach. But the end result will eventually be the same.<sup>192</sup>

Governmental ownership "can be viewed as an extreme form of government regulation . . . . Privatisation can therefore be considered a form of deregulation, even though the change in ownership itself may not affect competition."<sup>193</sup> Since most European airlines have been at least substantially government-owned, the time frame necessary to achieve com-

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186. *Id.* at art. 11.

187. *Id.* at arts. 13, 19.

188. *Id.* at art. 16.

189. *Id.* at art. 17.

190. *Airline Industry Round Table*, EUROPE, Dec. 1991, at 12.

191. Council Reg., *supra* note 154, at art. 7(1), (2).

192. Stephen Wheatcroft, *Europe's Airlines in the Year 2000*, EUROPEAN AFFAIRS, Aug./Sept. 1991, at 66.

193. Eric Lacey, *The Sectoral Impact of Deregulation*, OECD OBSERVER, Apr. 1992, at 9.

plete liberalization is dependent on whether EEC member countries privatize their airlines. For example, British Airways was once controlled by the U.K. government, but it now is fully privatized. The German government has reduced its interest in Lufthansa from more than 70 percent to slightly more than 50 percent.<sup>194</sup> KLM, Swissair, and SAS still retain a small government ownership. Presently, there are over "40 airlines throughout the world in which full or partial privatization has been completed or is under consideration."<sup>195</sup>

The withdrawal of governments from owning airlines is clearly the ideological trend. However, until economic disengagement is complete, the EEC block exemptions will continue to be necessary. Additionally, the European airlines believe that additional protection is necessary to level the playing field with the "Big Three"—American, United, and Delta. The president of the AEA, Mr. Bisignani, stated, "seen like this, group exemptions should be of indefinite duration."<sup>196</sup> Because the European airlines are permitted to collaborate jointly in specified areas, both the U.S. air transportation industry and the Commission must watch these activities to discover if any anti-competitive and discriminatory practices are also established.

Although there are differences in opinion as to what a "level playing field" means, it appears that the EEC Code is "close enough to the DOT's new requirements . . . that an owner airline complying with one set of rules would meet the other as well."<sup>197</sup> The DOT noted "that the major foreign systems—Amadeus and Galileo—operate under the more stringent European rules; so they should be able to comply with our rules without difficulty."<sup>198</sup> For example, Air France accused American of delays in posting schedule changes and a Dallas travel agency of making at least 1,152 false reservations on Air France flights in March and April, 1992, using SABRE to prevent real passengers from obtaining seats on the flights. European commentators concerning this dispute apparently would agree with the DOT. They say that under the Code, European CRS vendors would not be able to commit such violations.<sup>199</sup>

#### VIII. STRATEGIES FOR IMPROVED REGULATION OF CRSS

Since the 1970s, the government has reviewed the results of regula-

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194. *Airline Industry Round Table*, *supra* note 190.

195. Wheatcroft, *supra* note 192.

196. *Airlines: Europeans Threatened by American Giants?*, TRANSPORT EUROPE, Jan. 26, 1992, at 14.

197. Brisson, *supra* note 162.

198. *Airline Marketing*, *supra* note 7.

199. *Air Transp.*, *supra* note 163.

tory regimes against their objectives with some disappointment.<sup>200</sup> Some regulations were designed to guarantee the supply of a particular service by requiring its subsidy by profitable activities. The result often was the oversupply of uneconomic services at excessive costs and at standards exceeding what consumers were willing to pay.

However, liberalization has not always been a panacea. For example, the deregulation of financial services increased consumers' choices of suppliers and services. However, anti-competitive practices emerged and new entrants found that national markets were difficult to penetrate.<sup>201</sup> Similarly, because of the quasi-public utility nature of the transportation industry, perhaps "[e]lightened regulation can provide an equitable balance of public interest objectives with market imperatives in those singular cases where the market alone produces socially undesirable results."<sup>202</sup> Where free market conditions are not adequate to perpetuate expanded competitive markets, some form of regulation may be required to address prices or profits but not to discourage competition and efficiency.<sup>203</sup>

Over the last five years, both the Senate and House of Representatives have sent a clear signal to improve government policy by proposing legislation directed at enhancing competition in the CRS industry. While the sponsors of the bills concerning the CRS industry have not advocated re-regulation of the airline industry, they have attempted to level the playing field between the major CRS vendors and other airline carriers through regulation.<sup>204</sup> "The absence of full-bodied CRS competition translates into diminished airline competition, with consumers paying the price."<sup>205</sup> One CRS vendor accurately pointed out that the DOT efforts, thus far, have simply not been enough:

[D]espite seven years of DOT regulation, despite aggressive market initiatives by smaller CRS vendors, despite litigation and threats of legislation, and despite rafts of government and private studies detailing the adverse consequences of the CRS duopolists' practices.<sup>206</sup>

The 1992 DOT rules potentially strengthen governmental oversight of the CRS industry and attempt to weaken the grip of CRS vendors over the information they provide to their subscribers. The DOT correctly observes that vendors have continued to invest large sums into their CRSs and

200. Lacey, *supra* note 193, at 13.

201. *Id.*, at 11.

202. FLYING BLIND, *supra* note 32, at 49.

203. Lacey, *supra* note 193, at 12.

204. Senator John McCain, comments at Mar. 4, 1992 press conf. concerning the Proposed "Airline Competition Enhancement Act," (S. 2312, 102d Cong., 2d Sess.).

205. Computer Reservation System (CRS) Regulations-Notice of Proposed Rulemaking, Docket No. 46494, June 24, 1991, at 4 (Comments of Worldspan) [hereinafter Worldspan].

206. *Id.*

should be allowed some return on these improvements that also produced great benefits for consumers, travel agencies, and the airline industry. Accordingly, the DOT chose not to propose new rules that could impose undue burdens on the CRS owners that could outweigh the benefits to the consumer.

However, the GAO recently endorsed the equal functionality concept. It has called for yet another study on architectural bias.<sup>207</sup> The critics of the 1992 DOT rules say the new measures have not gone far enough to ensure competitive markets in the travel reservation, CRS, and airline industries. Staff aides in the House and Senate aviation subcommittees said that because the 1992 rules failed to ease congressional concerns, there is a "strong sentiment . . . for a bill to address anticompetitive practices . . ." <sup>208</sup> One smaller CRS vendor points that "[t]he regulatory issue, therefore, should not be whether to eliminate host advantages [of the two major CRS vendors], but how to do it." <sup>209</sup> The following is the author's assessment of two strategies that continue to be suggested for improved regulation of the CRS industry in spite of the promulgation of the 1992 DOT rules. These strategies are dehosting and divestiture.

A. *SOME SAY DE-HOSTING IS NECESSARY TO ELIMINATE INCUMBENT ADVANTAGES THAT RESTRAIN COMPETITION AND CONSUMER BENEFITS.*

The smaller CRS vendors have proposed "a mandatory 'no-host' CRS environment in which CRSs would be separated from the airline vendor's internal reservations systems."<sup>210</sup> Both SABRE and APOLLO are hosted by a single computer system that includes their internal reservations system and their CRS operations. The smaller CRS vendors claim that hosted systems will always continue to enjoy incumbent, competitive advantages, as well as greater accuracy, better functionality, and less keystrokes to confirm bookings.<sup>211</sup> Regardless of the delay and inconveniences that may be experienced by subscribers of hosted systems, proponents of de-hosting agree with the DOT that mandatory no-hosting is essential in guaranteeing equal functionality for all carriers.<sup>212</sup>

What is required to create a de-hosted environment is primarily a redesign of the system using new software. Although falling short of com-

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207. U.S. GENERAL ACCOUNTING OFFICE, *Computer Reservation Systems: Action Needed to Better Monitor the CRS Industry and Eliminate CRS Biases*, GAO/RCED 92-130 (Mar. 1992).

208. *Proposed Rules on CRS Operations Fail to Ease Congressional Concerns*, AVIATION WK. & SPACE TECH., Apr. 8, 1991, at 37.

209. Worldspan, *supra* note 205.

210. Roberts and Mietus, *supra* note 41, at 3.

211. Telephone Interview with Al Lenza, General Counsel to System One (Nov. 3, 1992).

212. *Id.*

plete functionality, American is offering "seamless connectivity," which means that "SABRE users will have automatic transparent access to other data bases for the purpose of obtaining information and confirming reservations."<sup>213</sup> While hosted CRSs may initially lack efficiency because of the time required to develop such software, proponents believe that as long as the CRS has its own internal reservations system attached, it will continue to enjoy an agency preference that yields lucrative incremental revenues.

Proponents of de-hosting assert that architectural bias of a hosted environment causes agents to prefer booking customers on flights of the CRS carrier for three reasons. First, the information in the system has greater reliability. Second, the communications links offer faster and more accurate transmission. And third, there is greater ease of completing the transaction with fewer keystrokes. For example, a CRS serves as a big message center, listing pricing information and available seats. A hosted CRS provides not only overbooking privileges to its subscribers, but also more accurate information on its seat inventory and last seat availability. No additional keystrokes are necessary for a travel agent using APOLLO's "Inside Link" to confirm whether the seat information on a United flight is accurate. The complete procedure for an APOLLO agent to book a round-trip consisting of four flight segments is 74 keystrokes.

In contrast, if the same agent were requested by the customer to book the same trip on TWA and the screen displayed no seats available, APOLLO's "Inside Link" would not provide last seat availability in the primary display for nonhost carriers. Therefore, assuming the communications link between the CRS and TWA functions properly, the agent must enter 18 percent more keystrokes to check the "real" flight inventory and obtain a seat on the nonhost flight.<sup>214</sup>

Proponents of de-hosting assert that while a few more keystrokes and a small delay in communication time may be seemingly insignificant, the overall savings of time translate to faster customer service and greater agency revenues. Others correctly point out that the newest enhancements of CRS software is still in its infancy. As improvements are made and hardware and communication links function more quickly, excess keystrokes will be eliminated as all the systems completely attain equal functionality.<sup>215</sup>

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213. Computer Reservation System (CRS) Regulations-Notice of Proposed Rulemaking, 1991, at 25-268, (Comments of American Airlines).

214. Computer Reservation System (CRS) Regulations-Notice of Proposed Rulemaking, Docket No. 46494, Aug. 8, 1991, at 10, (Declaration of Martha Zalkind, Vice President of Mainframe Development—Worldspan).

215. Interview with Gregory A. Conley, Vice President and General Counsel, Covia, in Denver, Colo. (May 27, 1993).

Smaller CRS vendors claim that the owners of hosted CRSs gain incremental revenues resulting from their direct access capability. Worldspan estimated that American and Covia "would each gain \$200 million or more in additional airline revenues each year if architectural bias caused each carrier to get one more booking per week from each CRS terminal used by its system's subscribers."<sup>216</sup> Certainly, the two dominant CRS vendors do not want their systems turned into neutral boxes that will cause the loss of extra owner-airline sales and that will deny the fruits of their investment in continuously enhancing the capabilities of their CRSs.

However, improvements in technological capabilities by the smaller CRSs, such as System One's "look and book" direct access features, are eroding the effects of alleged architectural bias.<sup>217</sup> "The architectural bias is being worked out of every system in operation today."<sup>218</sup> Further, airlines have found ways to circumvent the CRS. For example, British Airlines "uses public lines for agent videotext displays to sell tours at fares unavailable on CRS screens . . . . All CRSs are developing automated tour programs."<sup>219</sup> One airline owning Abacus predicts that "[t]he next wave, from an airline point of view, is how to bypass your CRS."<sup>220</sup>

Presently, the CRSs link directly with the internal reservations systems of all participating carriers that can afford it. "What results are several multiaccess systems, paid for several times instead of just once."<sup>221</sup> Both the time for transmission and cost of transactions can be significantly reduced if the CRSs simply link to each other. Although the technology is expensive, integrated availability expands the CRSs' direct access capabilities. "When a subscriber request comes in, CRSs will identify the airlines, ask them individually what availability they want to display, and produce an integrated response—all in 3 seconds."<sup>222</sup> "Eventually, CRSs will act simply as giant switching systems."<sup>223</sup>

Further, the DOT determined that the cost of applying a no-host rule affecting primarily only SABRE and APOLLO could not be justified without "solid evidence that such a rule would provide substantial benefits."<sup>224</sup> American reported that de-hosting will cost over \$215 million over a three-year period and "will require substantial increases in booking fees

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216. *Airline Marketing*, *supra* note 7.

217. *Id.*

218. Hearing, *supra* note 55 (statement by Rep. Preston Geren).

219. Feldman, *supra* note 8, at 52.

220. *Id.*

221. *Id.*

222. *Id.*

223. *Id.*

224. *Airline Marketing*, *supra* note 7.

and subscriber charges."<sup>225</sup> Galileo and Amadeus have begun "weaning subscribers away from CRSs provided largely by national carriers and onto mainframes at new central computer sites."<sup>226</sup>

Northwest estimates that it will cost about \$50 million and take about 30 months to achieve dehosting.<sup>227</sup> Worldspan is evaluating whether to create a hostless system to replace PARS and DATAS II,<sup>228</sup> but it has estimated its one time programming costs to permit equal functionality to be \$3.5 million.<sup>229</sup> System One is a hostless system because its original owner, Eastern Airlines, went bankrupt. It reported that "a carrier would have to spend \$5 million to participate in the upgraded functionality required by an equal functionality rule."<sup>230</sup>

Meanwhile, American and fourteen carriers associated with Amadeus have agreed to "undertakings" required of the EEC that include nondiscriminatory provisions requiring, in essence, equal functionality. The EEC undertaking is an interim measure to govern the conduct of CRS operations in Europe until the EEC issues its new rules. Unlike Amadeus and Galileo (Covia's European counterpart), SABRE is a hosted CRS. Therefore, American will need to develop some new software or at least an enhancement to its "seamless connectivity" to provide real time availability for its primary display to be used in Europe. This author queries whether the same software can be modified by American to ensure completely equal functionality in the U.S. market.

Proponents of de-hosting claim that even the hundreds of millions of dollars transferred from carriers to the two giant CRS owners does not adequately describe the degree of market power wielded by the megaCRSs. "Of even greater importance is the cost to consumers steered to less convenient and less efficient services, possibly at higher fares, because of bias. These costs pale in comparison to the cost of eliminating host preferences."<sup>231</sup>

This author questions to what extent the DOT has enforced its own rules against unfair competition. Despite an antitrust analysis by the DOT and the increased empirical evidence of restraint of trade and barriers to entry caused by CRSs, frequent flyer programs and other marketing techniques, the DOT continues to maintain a hands-off approach. This author recommends that the DOT take immediate and affirmative action based

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225. *Id.*

226. Gaines, *supra* note 172.

227. *Id.*

228. Telephone Interview with Douglas Abramson, Vice-President, General Counsel and Secretary to Worldspan (Nov. 2, 1992).

229. Worldspan, *supra* note 205, at 16.

230. *Airline Marketing*, *supra* note 7.

231. Worldspan, *supra* note 205, at 16.

upon the multitude of studies and comments supplied to it during its recent rule-making procedure. Unfair host preferences can be minimized and software can be modified or enhanced to meet the required "equal functionality" concept defined in the 1992 DOT rules.<sup>232</sup> The DOT must, however, properly monitor CRS operations to detect deviations from the regulations and then take affirmative action to enforce the penalties provided in the rules.

*B. SOME CRITICS SAY REGULATORY ATTEMPTS HAVE FAILED AND RECOMMEND COMPLETE DIVESTITURE.*

Some travel agencies, travel associations, and domestic and foreign carriers believe that the DOT cannot effectively issue and monitor appropriate government regulation that will enhance sufficient competition to relax the grip of the CRS vendors. Some critics recommend that "[d]ivestiture of CRS owned by the airlines should also be considered, for opportunities for anti-competitive conduct of their owners are, quite simply, excessively abundant."<sup>233</sup> Champions of divestiture warn that unless no-host CRSs are mandated by regulated divestiture, only a few mega-airlines will control a mega-CRS industry serving the world.

More cautious commentators point out that divestiture will deprive the mega-CRSs from benefiting from their investment in innovation. They present the concern that while divestiture may prevent the motivation for display bias, it will not remove functional bias resulting from good business relationships between a vendor and its customer. Nor will divestiture guarantee the elimination of market power. Further, foreign ownership of CRSs will now complicate divestiture rules.

The idea of divestiture has been bandied about for years, however, and has never gathered much support. Even if it caught on now, legal battles would probably last years. Smaller carriers fear that by then it may be too late.<sup>234</sup>

IX A RECOMMENDATION FOR ENLIGHTENED REGULATION

Currently, the travel and tourism industry is the world's biggest and fastest growing business activity. In 1991, the industry generated over \$3 trillion in gross output, of which 50 percent was spent in goods and services for other industries. The travel and tourism industry contributed \$400 billion in direct, indirect, and personal taxes. By 1992, the industry will have employed over 130 million people or one in every 14 workers

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232. Telephone Interview with Darryl Jenkins, TravelTechnics, Ltd. (Nov. 8, 1992).

233. FLYING BLIND, *supra* note 32, at 54.

234. Francis C. Brown III, *Air Travel Remedies Sound Good But May Not Treat Deeper Illness*, WALL ST. J., Dec. 2, 1987, at 29.

worldwide.<sup>235</sup>

However, the travel and tourism industry is conscious of the leisure traveller's dwindling discretionary income. Even corporations have initiated cost control measures concerning business travel. To be profitable, companies in the travel industry—including CRSs, participating carriers, and travel agents—must offer products and services that are competitively priced, as well as appropriately packaged, to genuinely meet the needs of their targeted marketing niches.

If the costs of divestiture, de-hosting, equal functionality, or other changes required by regulation of CRSs are to be added to the price of air transportation products, the demand for required services will be decreased or, at best, supplanted by less expensive options. The overall effect will be a negative impact upon the travel and tourism industry. Accordingly, regulations must allow incentives for CRS owners to continue their investment in enhancements and innovation, yet restrain them from passing all of the costs of changes necessary to enhance competition to the customer. The Chief Executive for British Airways, Sir Colin Marshall, summarizes the problem to consumers:

The [travel and tourism] industry is a soft target for government treasuries . . . . There are, for example, more than 500 ticket, airport or disguised user charges/taxes plaguing travelers around the world. In most cases there is no apparent justification for the imposition of taxes on travellers. The transient passenger, who does not have the normal taxpayer's right of a vote in the countries visited, is easy prey for unscrupulous treasuries.<sup>236</sup>

The marketplace without intervention by the DOT has not effectively provided countervailing forces to ensure that CRS vendors do not prejudice the competitive environment. However, the harsh remedy of divestiture would unfairly deprive the megaCRSs from any benefit from their risk taking and investment in initially creating the CRS innovation and continuously expanding its capabilities. A requirement for de-hosting may needlessly impose additional costs and interference with management decisions in response to domestic and foreign market forces.

This author recommends more enlightened regulation and monitoring of both the CRS and travel agency industries; and then, more active enforcement on the part of the DOT. Some vigilance must be initiated to frustrate CRS vendors from using their systems to create an unfair advantage in the marketplace over competitor carriers and to ensure that travel agents provide their customers complete and impartial information concerning air transportation services. Enlightened regulation must encourage improved customer service and promote the transformation of

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235. Geoffrey Lipman, *Reshaping Travel and Tourism Policy*, EUROPEAN AFFAIRS, Aug./Sept. 1991, at 60.

236. *Id.*

1993]

*Computerized Reservation Systems*

517

the CRSs from an airline marketing tool into an independent industry that serves as an information platform for travel, tourism, and other industries.

