BENJAMIN EDELMAN

Distribution at American Airlines (A)

The GDS Negotiation Team at American Airlines faced the formidable task of reducing American's ticket distribution costs. Ticket distribution was increasingly electronic—with more than 95% of tickets existing only in a database, never printed on paper or "distributed" in the physical sense. Yet American continued to pay hundreds of millions of dollars per year to Global Distribution Systems (GDSs)—computerized reservation systems that let travel agents book and confirm flights on American. If American simply refused to pay these costs, it would disappear from GDS listings—disrupting relationships with the travel agents whose corporate accounts were American's most profitable customers. But paying top dollar for database services was equally untenable, particularly as American struggled with rising fuel prices and increased competition from new entrants.

American had a proposed response to the high fees charged by GDSs: a Source Premium policy that would force travel agents to pay the extra cost incurred by American as a result of an agency's choice of GDS. Although this policy would reduce the airline's GDS expenses, travel agents were up in arms about it. If American pushed forward with the Source Premium policy, travel agents might steer passengers elsewhere, leaving American even worse off than under the GDSs' high fees.

The Structure and History of Airline Ticket Distribution

American Airlines' operations grew rapidly after World War II. In 1921, American's corporate predecessor had only five small airplanes for transporting airmail. But expansion was brisk: in 1946, American ordered 220 new planes.

Early logistics proved challenging, and even taking reservations could be complex. Initially, passenger listings were stored on paper records in reservations offices at each point of departure. To request a reservation, a passenger would call American or visit a "city ticket office" retail location. American staff would use a telephone or teletype machine to check with the departure city to assure that space was available on the specified flight on the specified day. A 1967 HBS teaching case described American's Chicago reservations office:

> A large cross-hatched board dominates one wall, its spaces filled with cryptic notes. At rows of desks sit busy men and women who continually glance from thick reference books to the wall display while continuously talking on the telephone and filling out cards. One man sitting in the back of the room is using field glasses to examine a change that has just been made on the display board. The chatter of teletype and sound of card sorting equipment fills the air.[1]

As American's network grew and passenger volume increased, paper passenger lists and telephone confirmations proved inadequate. In 1952, American introduced the Magnetronic "Reservisor" to help automate inventory control. Using a mechanical console installed on each desk, an agent pushed buttons to indicate the desired date and flight. If space was available, a light on the console would be illuminated. When a flight sold out, a staff person removed a wire from the master control board, breaking the circuit and disabling the agent's light on any future requests for that flight. The Reservisor offered major productivity improvements: A trial in the Boston reservations office served an additional 200 passengers daily, with 20 fewer reservations staff. Yet reservations remained complex: Processing a typical round-trip ticket required the efforts of 12 different people and took up to three hours from start to finish. With so many steps, errors were widespread, and reservation agent productivity was decreasing as itineraries became more complex.[2]

An improved alternative came from a chance meeting between American Airlines then-president C.R. Smith and IBM then-president Thomas Watson, Jr., on an American Airlines flight in 1956. Aviation historian Robert Serling recounts their conversation:

"What line of business are you in?" CR asked.
"Business machines, computers. How about you?"
"Airlines. This one, as a matter of fact."
"You must be having all sorts of problems these days. What's your biggest one?"
"Answering the goddamned telephone."[3]

American and IBM collaborated on the design of an improved inventory management system, ultimately called the Semi-Automated Business Reservations Environment (SABRE). IBM provided the hardware, while American and IBM jointly built the software. The initial investment was comparable to half a dozen Boeing 707 jet airplanes.[4]

Despite SABRE's cost, American viewed the program as a success. Customers would still call or visit American staff to book flights, but SABRE eliminated time-consuming checks with departure-city reservation lists. American reported that SABRE allowed a 30% reduction in reservations staff.

In a 1976 innovation, American's marketing department began providing SABRE terminals to interested travel agencies. American anticipated strategic advantages from travel agents use of the terminals: SABRE would make it particularly easy for agents to browse and confirm American flights. SABRE was installed at 130 travel agents locations within the first year, and hundreds more the next.[5] American reported that the first 200 travel agent installations of SABRE yielded $20.1 million of annual incremental passenger revenue, a 500% return on investment.[6] Seeing American's success, competing airlines scrambled to implement similar systems of their own: United offered travel agents Apollo while TWA offered PARS, DELTA offered DATAS II, and Eastern offered System One.

The Rise of Competing Global Distribution Systems

Although multiple reservation systems were available to travel agencies, most chose computer terminals from a single provider. Because each terminal used different commands to perform the same tasks, installing multiple providers added complexity, particularly in the duplication of accounting records. Travel agencies therefore sought systems that could book flights on multiple airlines. In response, airlines upgraded their offerings to allow bookings on competing carriers. For example, a travel agent with American Airlines' SABRE could use SABRE to book flights on United, while an agent with United's Apollo could equally book flights on American. This multi-carrier approach was initially called a Customer Reservation System (CRS), and later a Global Distribution System (GDS).

Yet the rise of GDSs created the prospect of opportunistic behavior. For example, each airline that owned a GDS could configure it to show that airline's own flights first—even if others offered a lower fare or a more direct routing. Furthermore, airlines that owned GDSs could charge other airlines for preferred placement in GDS listings. From 1983 to 1987, a series of cases challenged these "display bias" tactics, and in 1984 the Department of Transportation established a set of regulations to standardize GDS operations. In particular, regulations forbade GDSs from ranking flights based on carrier identity, e.g., giving a higher ranking to some flights merely because they were operated by a preferred carrier. Additional rules prohibited GDSs from charging discriminatory booking fees or from unreasonably limiting travel agents' ability to switch GDSs or use multiple GDSs. Finally, GDSs that were owned by airlines had to provide non-owner airlines with information and capabilities as accurate and reliable as those provided to the owner. Conversely, in a rule often referred to as "mandatory participation," airlines that owned GDSs had to offer service in all other GDSs as well. (**Exhibit 1** presents excerpts of these rules.)

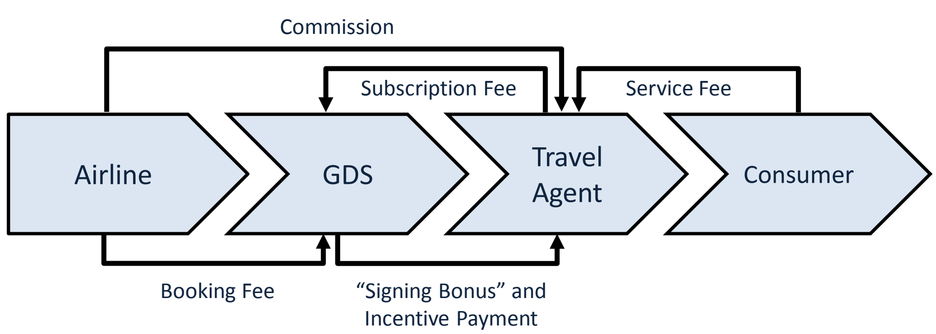
Initially, travel agents were of limited importance because travelers directly contacted whatever airline they wished to use. But the 1978 deregulation of U.S. air travel brought major changes: Airlines could set their own schedules, fares, and routes without government oversight. Suddenly, travel agents played a key role in helping travelers find the best choices in an increasingly competitive marketplace. By 1989, more than 80% of tickets were booked through travel agents.[7]

Payments and Competition under Global Distribution Systems

Initially, airlines had paid all the costs of the GDSs they created. But as airlines and GDSs began to keep each other at arm's length, GDSs formalized the fees they charged to airline participants. In particular, when a GDS issued a ticket for a flight on a particular airline, the GDS would charge the airline a fee for each flight segment in the passenger's itinerary. In 2002, an airline paid a GDS $4.25 per flight segment, on average. The average ticket includes multiple flight segments, and the average booking fee per ticket was $11. At United Airlines, GDS fees totaled 3.3% of revenue for tickets sold through GDSs.[8]

GDSs, in turn, spent a portion of this fee on payments to travel agents: The more money a GDS offered a travel agent, the more likely that travel agent was to choose that GDS rather than a competitor. By 2002, fewer than half of travel agencies paid monthly fees for GDS services, and 60% of travel agents received a signing bonus for joining a GDS. In addition, GDSs paid travel agents "incentive payments" of $1 to $1.70 per segment.[9]

A European Commission diagram[10] summarized the resulting payment flow:



Because travel agents did not pay booking fees, they had no direct incentive to use the system that charged airlines the lowest fees. Instead, a travel agent would typically choose whichever GDS offered the travel agent the largest incentive payment.

Most travel agents still used only one GDS. Accessing multiple GDS required more training, more equipment, and considerable accounting complexity.

In general, airlines participated in all leading GDSs. Airlines recognized that for the most part, each travel agent could access only one GDS, and no airline wanted to turn away travel agents that might book its tickets.

U.S. GDS Deregulation

By 2000, comprehensive GDS regulation was increasingly viewed as unnecessary. Although major airlines still obtained 58% of their bookings from "brick-and-mortar" travel agencies, 10% of bookings came from airlines' own websites, and these bookings did not need to pass through a GDS. Furthermore, 15% of bookings came from new online travel agencies such as Expedia and Travelocity. These bookings did use GDSs. (For example, Travelocity used SABRE, and Expedia and Orbitz used Worldspan.) But a new set of "direct connect" systems were expected to let online travel agencies bypass GDSs and work directly with airlines.[11]

Meanwhile, by 2002, American had sold SABRE and United had sold Apollo. Airlines' divestitures of their GDSs reduced concerns about a GDS favoring its parent airline.

After a series of consultations, the Department of Transportation in 2002 decided to remove most regulation of GDSs. After a brief transition period, the regulations shown in **Exhibit 1** would no longer apply; instead, airlines and GDSs could negotiate privately to establish the parameters of their relationship. These changes went into effect in January 2004.[12]

In 2003, on the eve of full deregulation, airlines and GDSs entered their first round of comprehensive negotiations. Thanks to revised regulations, airlines were no longer required to submit all of their fares to all GDSs. Thus, some airlines introduced "web fares"—lower prices available only to customers who booked tickets directly with an airline, typically on the airline's website. The GDSs, however, wanted to provide airlines' lowest prices to their travel agents and their travel agents' passengers. As of 2003, if an airline guaranteed that it would provide a GDS with access to all of its fares, then the GDS would typically offer the airline discounts (averaging 12%) on the fees the GDS charged the airline.[13] The Department of Transportation applauded this result: "As we predicted, the airlines' control over access to their webfares has led some of the [GDS] systems to offer airlines discounted booking fees in return for the ability to sell those fares."[14]

(**Exhibit 2** presents GDS market shares as of 2003.)

Booking Travel after GDS Deregulation

Despite lowered prices from GDSs, not all airlines used GDSs. As of 2004, Southwest participated only in SABRE. Furthermore, Southwest offered limited functions (for example, it did not offer immediate booking confirmations), and SABRE could sell only Southwest's highest fares. JetBlue also limited its use of GDSs. For example, in 2004 JetBlue withdrew from SABRE, reporting that most of its customers did not require GDS services.[15] In lieu of GDSs, these airlines encouraged passengers to book directly—e.g., by telephone or online.[16]

In contrast, other airlines still obtained most of their bookings through GDSs. For example, as of 2004, 70% of American's tickets were booked through travel agents.[17] (See **Exhibit 3**, which tabulates distribution channel prevalence by year.) American's 2001 operations included 112,400,000 flight segments booked through GDSs; for these bookings, American paid more than $424 million of GDS fees.[18] GDSs, in turn, earned high profits compared with airlines. (See **Exhibit 4**, which compares profits at SABRE and Amadeus with profits at American and United.)

For leisure customers, direct web-based bookings were increasingly common. But business customers continued to favor bookings through travel agencies. Many companies required that their employees use travel agents in order to assure compliance with corporate travel policies, facilitate streamlined payment and accounting, and receive personalized assistance with complicated itineraries or to make changes to trips.

The 2006 GDS Negotiations

In 2006, American Airlines faced the impending expiration of its three-year contracts with the four then-existing GDSs. American had achieved some cost reductions in 2003, but it still considered GDSs' fees excessive. American sought to reduce fees further through the contracts it would establish in 2006.

By July, American had reached agreements with Worldspan and Galileo. Under these agreements, Worldspan and Galileo would offer additional services to travel agents—"Worldspan Super Access" and "Galileo Content Continuity." If a travel agent chose one of these new services, it would be able to view and book all of American's fares. However, by entering one of these agreements, the agent would accept a reduction or elimination of its incentive payment from the GDS. For example, a Galileo Content Continuity travel agent would give up $0.80 of its GDS incentive payment.[19] At the same time, for tickets booked through these new services, American's GDS payment would be approximately $0.60 per segment. In contrast, SABRE and Amadeus held firm in charging American GDS fees of more than $4 per segment.[a]

On July 12, 2006, American announced its Source Premium policy. Effective September 1, American would charge travel agents a $3.50 "source premium" fee per segment, for all segments booked through GDSs other than those that American had designated as "competitive booking sources." Worldspan Super Access and Galileo Content Continuity were designated as competitive, and hence were not subject to the fee. Any travel agent who chose one of these services would not pay the source premium fee. However, the source premium would apply to all SABRE and Amadeus bookings, and to all Worldspan and Galileo bookings other than those made through the Super Access and Content Continuity programs. (**Exhibit 5** shows excerpts from the Source Premium Policy.)

Travel Agents' Response

Some travel agents reacted negatively to American's proposed policy. Just one day after American's announcement, the American Society of Travel Agents (ASTA) issued a press release condemning American's approach. ASTA CEO Kathryn Sudeikis complained, "American's announcement tells every travel agency in America: if you want to sell us, run your business the way we tell you or you'll be forced to pay us for the privilege of booking our services. This policy of shifting still more costs off of American's financial statements onto the backs of travel agents and their customers is unconscionable. American is trying to use its market power to impose its costs on other market players, as a condition to providing what travel agents clearly require to do business efficiently."[20]

Travel agents objected to the Source Premium policy in part because GDS incentive payments were the major remaining form by which airlines paid most travel agents. By 2002, airlines had largely eliminated ordinary travel-agent commissions. Without GDS payments, most travel agents

[a] American did not disclose specific fees, but publicly available sources provide some information. See, *e.g.*, note 18.

would receive no payments from the airlines whose tickets they sold—making it increasingly difficult for travel agents to offer services to customers without a separately itemized charge. (However, most travel agents had already begun to charge customers for each ticket issued.)

Travel agents also suggested that American's move was improper, unjustified, or even unfair. Airlines had always paid GDSs to distribute airlines' tickets, and most travel agents saw little reason for change. American's surcharges on SABRE-issued tickets were particularly hard for travel agents to understand because American had created SABRE and because American had previously encouraged travel agents to install and rely on SABRE terminals.

In particular, travel agents who specialized in expensive corporate tickets thought they were not getting appropriate credit for the high revenues they provided. "Whether the fare is $1,800 or $180, a roundtrip of non-stops booked through one of AA's non-preferred channels still would generate a $7 fee," commented travel industry newsletter *The Beat*, citing industry sources.[21]

Additional complications came from travel agents' long-term contracts with GDSs. American's July announcement offered just seven weeks until implementation. But most travel agents had long-term contracts with GDSs; the average such contract lasted three years.[22] So, even if a travel agent wanted to move to a different GDS at American's suggestion, the travel agent would need some time to do so. Travel agents faced further complications from their relationships with many airlines: If each airline came to favor a different GDS, a travel agent might be forced to pay extra fees no matter which GDS it chose.

Those critical of American's Source Premium policy often cited the fate of Northwest's August 2004 Shared GDS Fee. Northwest had proposed to charge travel agencies $7.50 for each round-trip ticket and $3.75 for each one-way ticket issued via a GDS.[23] Northwest's fee prompted an uproar from travel agents and GDSs, and Northwest dropped the fee just two weeks later.[24]

Travelers' Perspective

The Business Travel Coalition (BTC), an association of companies buying air travel, weighed in largely against GDS fees. The BTC's key concern was obtaining access to all fares without the exclusion of airlines' lowest fares.

The BTC also expressed concern about the overall secrecy of airlines' dealings with travel agents. The BTC claimed that corporate travel managers "have been somewhat in the dark about the depth of the financial arrangements between the GDSs and TMCs," adding that "never has there been a process involving industry structural change that has been so cloaked in secrecy."[25]

American's Approach

Despite these challenges, American staff insisted that the Source Premium policy was the right way forward. "We need to help travel agents understand how expensive some channels can be," explained Cory Garner, Manager of Distribution Strategy. "Right now, an agency chooses a GDS and the airline pays the bill. If an agency is protected from the financial consequences of its choice of GDS, how can it be expected to make the most economical decision on behalf of the customer?"

Seeing the struggle between American, GDSs, and travel agents, one source called the negotiation a "poker game."[26] Another industry insider pondered the competitive implications, particularly at American hub cities: "What if the other carriers say nothing until after September. [L]ook for market share swings, especially in O'Hare and Dallas/Fort Worth, not to mention other big AA markets?"[27]

By mid-August, American had largely reached agreement on key pricing terms with remaining GDSs SABRE and Amadeus. But American's Charlie Sultan, managing director of Sales, Planning and Analysis, explained that other issues remained unresolved. Particularly controversial were potential future agreements in which American might seek to communicate directly with travel agents or large customers, without routing bookings through a GDS at all. Sultan told *The Beat*: "We were not willing to sign up for [an agreement] that said, 'We cannot sit down with our travel agency partners or corporate partners and figure out how the two of us can do business if it involves potentially not booking through Sabre.' That is not pro-consumer, or pro-agency or pro-supplier. That is only pro-Sabre."[28]

As September 1 neared, Charlie Sultan and co-lead negotiator Chris Degroot had a choice to make. American could follow through in implementing the Source Premium policy—reducing GDS expenses, but risking losing business as travel agents encouraged customers to choose other carriers. Or American could cancel the Source Premium policy—preserving travel agent relationships, but making little headway on distribution costs.

Exhibit 1 Excerpts from Regulation of GDS Relationships (as of 2002)

§255.7—System owner participation in other systems.

(a) Each system owner shall participate in each other system (to the extent that such owner participates in such an enhancement in its own system) if the other system offers commercially reasonable terms for such participation. Fees shall be presumed commercially reasonable if: (1) They do not exceed the fees charged by the system of such system owner in the United States, or (2) They do not exceed the fees being paid by such system owner to another system in the United States.

(b) Each system owner shall provide complete, timely, and accurate information on its airline schedules, fares, and seat availability to each other system in which it participates on the same basis and at the same time that it provides such information to the system that it owns, controls, markets, or is affiliated with. If a system owner offers a fare or service that is commonly available to subscribers to its own system, it must make that fare or service equally available for sale through each other system in which it participates.

§255.8—Contracts with subscribers.

(a) No subscriber contract may have a term in excess of five years. No system may offer a subscriber or potential subscriber a subscriber contract with a term in excess of three years unless the system simultaneously offers such subscriber or potential subscriber a subscriber contract with a term no longer than three years. No contract may contain any provision that automatically extends the contract beyond its stated date of termination, whether because of the addition or deletion of equipment or because of some other event.

§255.9—Use of third-party hardware, software and databases.

(a) No system may prohibit or restrict, directly or indirectly, the use of:

(1) Third-party computer hardware or software in conjunction with CRS services, except as necessary to protect the integrity of the system, or

(2) A CRS terminal to access directly any other system or database providing information on airline services, unless the terminal is owned by the system.

(b) This section prohibits, among other things, a system's:

(1) Imposition of fees in excess of commercially reasonable levels to certify third-party equipment;

(2) Undue delays or redundant or unnecessary testing before certifying such equipment . . . .

§255.10—Marketing and booking information.

(a) Each system shall make available to all U.S. participating carriers on nondiscriminatory terms all marketing, booking, and sales data relating to carriers that it elects to generate from its system. The data made available shall be as complete and accurate as the data provided a system owner.

Source: Excerpted from 14 CFR Ch. 11.

Exhibit 2 GDS Market Shares (as of 2003)

	USA/Canada	Central/South America	Europe/ Middle East	Asia / Pacific	Worldwide
Amadeus	9%	38%	49%	15%	26%
Galileo	21%	6%	31%	15%	22%
SABRE	42%	50%	13%	4%	24%
Worldspan	28%	6%	8%	4%	24%
Abacus				19%	4%
Topas				4%	1%
Infini				4%	1%
TravelSky				36%	8%

Source: Adapted from MetaGroup estimates based on casewriter interviews with GDSs and airlines.

Exhibit 3 Distribution Channel Prevalence

	1999	2002	2005
Airline websites	3%	13%	38%
Airline call centers	26%	24%	
Online travel agents	4%	17%	
Traditional travel agents	67%	46%	

Source: Adapted from General Accounting Office. "Airline Ticketing: Impact of Changes in the Airline Ticket Distribution Industry." July 2003; European Commission Directorate-General for Energy and Transport. "Consultation Paper on the Possible Revision of Regulation 2299/89 on a Code of Conduct for Computerised Reservation Systems." February 23, 2007.

Exhibit 4 Profits at Airlines and GDSs—Net Profit Before Special Items

Year	American Airlines	United Airlines	All US Airlines (Collectively)	SABRE	Amadeus
1999	$985	$1,235	$5,400	$331	$117
2000	$813	$50.0	$2,500	$144	$129
2001	($1,800)	($2,145)	($8,300)	$31.1	$110
2002	($3,500)	($3,212)	($11,300)	$214	$156
2003	($1,200)	($2,808)	($3,600)	$83.3	$200
2004	($751)	($1,721)	($9,100)	$190	$294
2005	($857)		($1,143)	$172	

Source: Compiled from SEC 10-K filings of American Airlines, United Airlines, and SABRE; IATA Economics Briefing, December 7, 2005; and Amadeus financial statements.

Note: Amounts in millions of dollars of profit and (loss). Amadeus values have been converted from euros to dollars for each year.

Exhibit 5 Source Premium Policy (as of August 31, 2006)

American Airlines wishes to provide all agencies access to full schedule, fare and inventory content through the distribution source of their choice, on terms that allow American to compete with its low-cost rivals.

To achieve this end, American has negotiated full content access deals with many distribution providers that offer new, cost-effective products. These products are referred to as “Competitive Booking Sources.” Travel agencies that use Competitive Booking Sources to create bookings will have access to full American content.

American recognizes that some travel agencies or corporate travel departments may value the use of certain GDS providers that do not qualify as Competitive Booking Sources. Accordingly, American currently intends to preserve flexibility for these agencies and corporations by providing full content access through other presently available providers, referred to as “Other Booking Sources,” although these sources are more expensive to American. In exchange for the flexibility to choose Other Booking Sources, agencies that use these sources will be required to bear a portion of the cost of content distribution via these sources. Also, American, consistent with any applicable contractual obligations, may eventually withhold content from Other Booking Sources, particularly if an Other Booking Source fails to display American content on neutral terms as compared with other airlines.

		Source Premium per Net Booked Segment
Competitive Booking Sources	Worldspan Super Access Product	NONE
	Galileo Content Continuity Program	
	All G2 Switchworks GDS Products	
	All Farelogix GDS Products	
Other Booking Sources	Any Amadeus GDS Product	$3.50
	Any SABRE Product	
	Any Other Worldspan Product	
	Any Other Galileo/Apollo Program	

The Source Premium will be applied to all Other Booking Source net bookings originated or changed on or after September 1, 2006.

Source: American Airlines, http://www.aa.com/agency.

References

[1] R.F. Meyer. "American Airlines SABRE (A)." Harvard Business School Case No. EA-C 768 (1967).

[2] Copeland, Duncan, Richard Mason, and James McKenney. "SABRE: The Development of Information-Based Competence and Execution of Information-Based Competition." *IEEE Annals of the History of Computing*. Vol. 17, No. 3, 1995.

[3] Serling, Robert, 1985. "Eagle: The Story of American Airlines." New York: St. Martin's Press.

[4] Copeland, et al.

[5] Ibid.

[6] U.S. District Court, Central District of California. "Memorandum from T.G. Plaskett to A.V. Casey." American Airlines documents AA080713–AA080714, January 17, 1977.

[7] Labich, Kenneth. "Should Airlines Be Reregulated?" *Fortune*. June 19, 1989.

[8] CRS Regulations, Final Rule, RIN 2105-AC65, January 7, 2004. Citing United reply comments.

[9] CRS Regulations, Final Rule, RIN 2105-AC65, January 7, 2004. Citing SABRE comments. See also, Promedia.travel. "The Evolving Managed Travel Distribution Chain in 2006." http://www.thebeat.travel/blog/downloads/promedia-GDS-guide.pdf.

[10] European Commission Directorate-General for Energy and Transport. "Consultation Paper on the Possible Revision of Regulation 2299/89 on a Code of Conduct for Computerised Reservation Systems." February 23, 2007.

[11] CRS Regulations, Final Rule, RIN 2105-AC65, January 7, 2004. Citing Galileo Comments and Guerin-Calvert, Jernigan & Hurdle Declaration.

[12] CRS Regulations, Final Rule, RIN 2105-AC65, January 7, 2004.

[13] Alamardi, Fariba. "The Future of Airline Distribution." *Journal of Air Transport Management* 12 (2006): 122–134.

[14] 67 FR 69381.

[15] Kontzer, Tony. "JetBlue Pulls Out of SABRE, As Web Sales Rise." *Information Week*. December 20, 2004.

[16] CRS Regulations, Final Rule, RIN 2105-AC65, January 7, 2004. Citing SABRE comments.

[17] CRS Regulations, Final Rule, RIN 2105-AC65, January 7, 2004. Citing American comments.

[18] See, *e.g.*, George Nicoud III, Associate General Counsel, American Airlines. "Follow-up to June 12, 2002 Testimony." http://govinfo.library.unt.edu/ncecic/other_testimony/american_letter.pdf.

[19] "Interview: Travelport SVP Kurt Ekert." *The Beat*. July 31, 2006.

[20] American Society of Travel Agents. "American Airlines Announcement Threatens to Throw Industry into Chaos, Says ASTA." July 13, 2006.

[21] "Galileo Reveals Incentive Cut Amid AAngst." *The Beat*. July 13, 2006.

[22] CRS Regulations, Final Rule, RIN 2105-AC65, January 7, 2004.

[23] "Northwest Airlines to Charge for GDS Bookings." *M-Travel Travel Distribution News*. August 24, 2004.

[24] Karantzavelou, Vicky. "ACTA Welcomes Northwest Decision to Drop Shared GDS Fees." *Travel Daily News*. September 6, 2004.

[25] "BTC Attacks Airlines, Cites AA-Sabre PNR Issue." *The Beat*. August 9, 2006.

[26] "80 Cent: Galileo Matches Sabre Number in Fee, Not Cut." *The Beat*. July 14, 2006.

[27] "Galileo Reveals Incentive Cut Amid AAngst." *The Beat*. July 13, 2006.

[28] "Interview: AA Exec Details Sabre Impasse." *The Beat*. August 10, 2006.