Table 11.5. Major global distribution systems (GDSs) as of 1998.[a]

GDS	*Shareholders*	*Outlets Number*	*Outlets %*	*Terminals Number*	*Terminals %*
AMADEUS	Iberia Air France Lufthansa Continental SAS	33,293	26.3	93,147	23.1
GALILEO	United Airlines BA Swiss KLM USAirways Aer Lingus Air Canada	30,161	23.82	115,454	28.62
SABRE	American Airlines	29,277	23.13	119,546	29.64
WORLDSPAN	Delta Airlines Northwest TWA	14,102	11.14	45,104	11.18
AXESS	Japan Airlines	6,195	4.89	11,340	2.89
ABACUS	Singapore Airlines Thai Airways Cathay Pacific	4,200	3.32	10,500	2.6
INFINI	All Nippon Airways	6,195	4.89	7,700	1.9
GETS	SITA	3,150	2.49		

[a] *Source:* "Logistical Systems in Combined Transport", Working Document, Transport Series, TRAN 102, 1998.

need to communicate directly with the GDS, but more often, the RM system communicates only with the firm's own host reservation system.

Prior to the forecasting and optimization run, the RM system needs to download the total current reservations and remaining capacities. Table 11.7 shows some sample data tables from a hotel PMS used by a RM system. Similar, albeit more complex, tables exist in an airline CRS. Most PMS vendors license their data dictionaries to interface with RM systems. Table 11.8 shows the fields of a bid price implementation of a hotel PMS. The RM system periodically updates this table with new values. For interfaces, there has been an industry push recently to XML and other open messaging standards. This trend parallels the emergence of Internet sales channels. Internet travel sites may either query a GDS for availability or interface directly with the firm's CRS or PMS.