



## **Restructuring of the European Ground Handling Market after the EU Market Liberalization**

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**Abstract:** This paper examines the liberalization of ground handling services in the aviation industry after the implementation of the European Union Council Directive 96/97. We examined the market situation after the directive to determine the influence of the directive on competition, prices, and how the organization of the value chain has been affected in the light of transaction cost and institutional economics. This provides the basis for comment and discussion on the optimal organization of the value chain for the ground handling services and the future market structure in those markets that have not been fully liberalized, such as Germany

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## Introduction

Ground Handling Services (GHS) are divided into five main categories<sup>2</sup>: ramp handling, baggage handling, freight/mail handling, fuel/oil handling, passenger handling and other services, as depicted below.

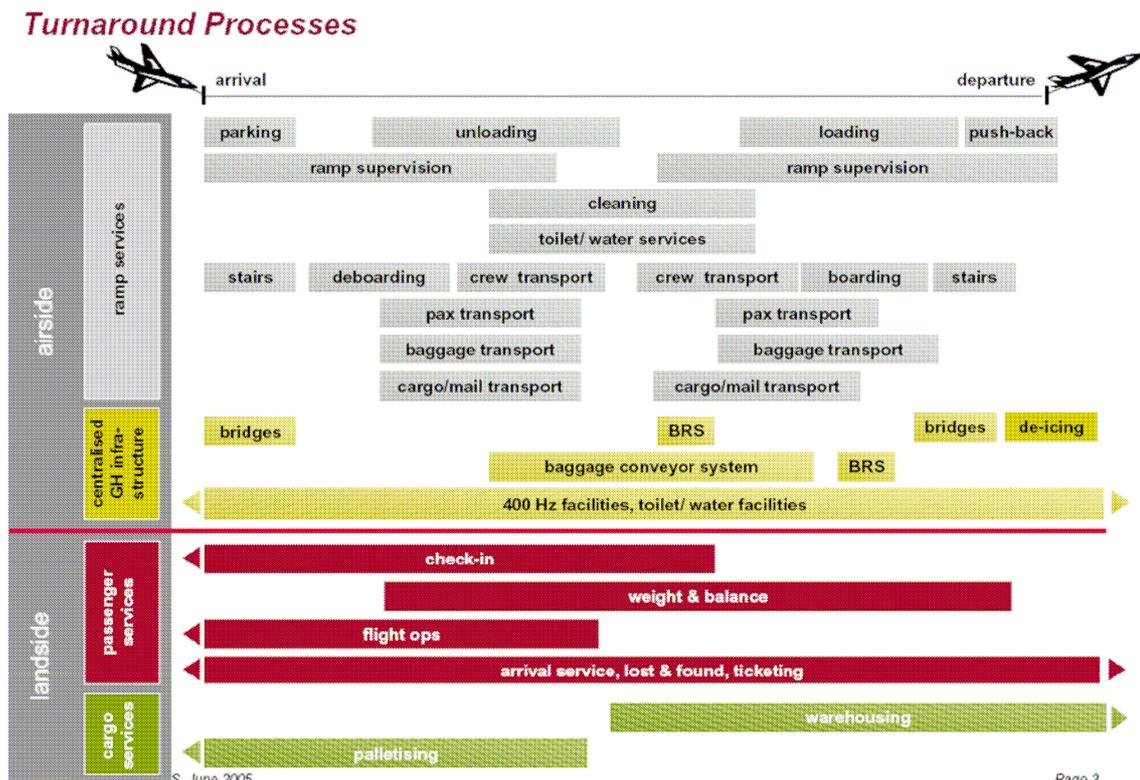


Figure 1. Ground Handling Activities: Overview (Source: Fraport)

These five activities can be performed by the airlines themselves (self-handling), by a third party, or a mixture of the two. The third party handlers can be airports, specialized ground handling companies or another airline, which serves as such. The monetary value of ground handling services accounts for about 5 to 8 percent of the airline ticket, depending on the type of airline being used. The global market for GHS was estimated to have a size of about 32bn € (Templin, 2007). Due to the size and importance of the market, the effectiveness of these services, their organization, and by whom they are performed, is a significant issue for all the stakeholders in the GH industry: airlines, infrastructure suppliers (airports), independent GH

<sup>2</sup> According to S&HE International Air Transport Consultancy (2003a)

service suppliers (handlers), customers, and the governmental authorities, who regulate the GHS market.

The vertical supply chain in ground handling starts with the airport, continues with the handler, and ends with the airline. Two organizational issues arise along this supply chain. The first is due to the necessary contract between the handler and the airport. This contract insures that a handler will be able to use the facilities in the airport for handling tasks. However, this issue disappears through forward integration by the airport, when the airport handles these services itself and the airline has to purchase them from the airport. This organizational form was commonly observed before the liberalization in most EU countries and is still dominant in Germany. The second organizational issue occurs because an airline can also enter into a contract with a handler to outsource this service; a solution would be backward integration by the airline, when the airline itself handles these services. What kind of market organization and governance structure is chosen by airlines, airports and handlers will normally be determined by transaction cost economics (TCE), given the regulatory framework set by the governmental authorities and the market structure in each activity level.

### **Effects of the European Council Directive 96/67/EC**

Historically, in each European country there had been a national carrier dominating the ground handling services market at its national hub airports and working closely with the airports. Because of this monopolistic situation, there was little chance for independent GHS providers to enter the market. Other carriers at these hubs had therefore little choice of handlers and were facing high GHS fees. The liberalization of the airline industry in turn placed airlines under significant competitive pressure which forced them to look for a reduction in costs, including GHS costs. Eventually, the European Council implemented Directive 96/67/EC, which enforced competition on the European GHS market, although allowing some exceptions<sup>3</sup>. The directive requires airports with more than 2 million passengers to open the market to outside suppliers and to license at least one independent handler. To avoid cross subsidization by the airports, separate accounts have to be kept. The proposed revisions of the Directive 96/67 in 2007 were going much further: they envisaged at

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<sup>3</sup> See Flohr, 2007

least three or four suppliers for airports above 10 or 20mill PAX and tighter control over cross subsidies, requiring separate subsidiaries for airports above 10 million passengers. Furthermore, airports that had their own subsidiaries would also have had to apply for entry.

#### **The ground handling market at six major European hubs<sup>4</sup>**

Following the study of Templin (2007), which covers London Heathrow (LHR), Paris Charles de Gaulle (CDG), Frankfurt (FRA), Amsterdam Schiphol (AMS), Madrid Barajas (MAD) and Rome Fiumicino (FCO), we can observe the developments of GHS at some of the major European airports after the market opening in 1998. All airports surveyed are the largest in their country and serve as hubs to the respective national carriers (British Airways, Air France, Lufthansa, KLM, Iberia and Alitalia). It shows that significant differences in the ground handling markets can be observed at these airports, indicating the different ways in which the value chain can be organized.

<b>Airport</b>	<b>LHR</b>	<b>CDG</b>	<b>FRA</b>	<b>AMS</b>	<b>MAD</b>	<b>FCO</b>
<b># of passengers</b> (2004, in mill)	67.3	51.3	51.1	42.5	38.7	28.1
<b>Market situation before the opening</b>	8 airlines doing self- and third party handling	Duopoly of the airport and the home carrier	Monopoly of the airport	Opened before the Directive	Monopoly of the home carrier	Monopoly of the airport
<b>Total # of handlers</b>	11	5	2	5	5	3
<b>Airport providing GH</b>	No	Yes	Yes	No	No	Yes
<b># of airlines doing GH</b>	7	1	0	2	5	2
<b># of independent handlers</b>	4	3	1	3	0	0

Table 1. Market organization for GHS at the six major EU airports (Source :Templin, 2007)

<sup>4</sup> *Much of this discussion is based on Templin, 2007.*

Eight years after the implementation of the EU Directive<sup>5</sup>, only two of the six airports analyzed by Templin, London Heathrow and Amsterdam Schiphol, had a completely deregulated market without any entry restrictions. There we find a lot of self-handling by airlines as evidence<sup>6</sup>. The airport operators of Madrid Barajas, London Heathrow and Amsterdam Schiphol do not offer ground handling themselves. However, Paris Charles de Gaulle, Frankfurt and Rome Fiumicino still do. Frankfurt even is the only airport where there is not a single self-handling airline present, not even the national carrier Lufthansa. Still forward integration of the GH service by the airport is the norm at those airports. (The proportion of third party handling is the largest in Frankfurt, at 100 percent, and the lowest in Madrid at 27 percent.) We see that self-handling dominates the market at all airports, but also that Frankfurt and some independent handlers had significant market shares in 2004.

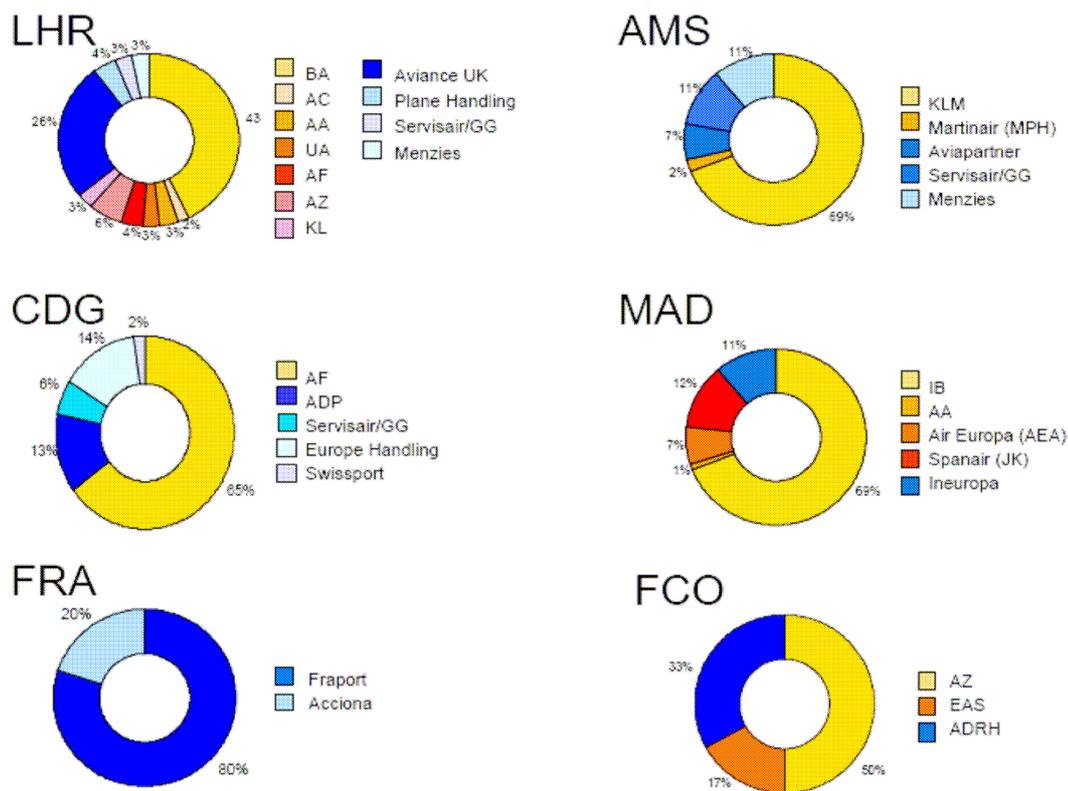


Figure 3. Market shares at the six hubs in 2004 (Source: Templin, 2006)

<sup>5</sup> Figures for 2004 from Templin's study

<sup>6</sup> Only on these two airports, some of the self-handling airlines do not offer also third party handling

### **Effects of the liberalization on prices and quality**

To assess the effects of the directive the European Commission hired the consultancy “SH&E” for a survey on 33 European airports (all data is from 2002). Some airports reported no price changes. But most of them, including the six largest airports studied by Templin, acknowledged price decreases, with Lyon, Lisbon and Athens recording the largest (up to 50 percent). Amsterdam, which had already opened the market before the directive came into force, reported decreases of only about 5 to 10 percent. In Frankfurt the airport authority reported a 5 to 15 percent decrease in prices, after Acciona, one of the independent handlers, had entered. The effects of the directive seem to have been the strongest in Paris and Rome, where decreases of 20 to 30 percent were observed. An interesting case is London where airport authorities refused to comment on prices. But some airlines reported 10 to 40 percent lower prices. Swissport, one of the largest independent handlers, said that prices fell 25 to 30 percent. It exited the market in 2004. As expected, prices fell most in countries where the markets were completely closed before. Countries with already liberalized markets did not experience significant changes, as did those that opened only gradually, as seen in the case of Frankfurt. Many market participants therefore argued that prices fell mostly due to the development of increased competition in the airline industry and not just due to the directive. So who captured the benefits of the price decrease? We expect that the airlines - being the driving force behind the market liberalization - gained from lower prices of ground handling services. Other winners from the liberalization are the independent handling companies.

These companies are now able to expand their business operations because they can enter new markets across Europe, achieving further economies of scale and scope (since some of them were already in the logistics and freight business and were now able to enter easily into related business areas). The former monopolists have, as expected, experienced significant losses of market share. For the airports considered above, these ranged from 11 percent (Madrid) to 67 percent (Rome)<sup>7</sup>. This loss in market share is coupled with increased pressure on working conditions and significantly lower wages for employees. Since labor costs

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<sup>7</sup> See Templin, 2007

constitute about 80 percent of total costs in the industry, they have to bear the brunt of the adjustment. (A large part of the independent handlers' cost advantage is due to the fact that they pay up to 30 percent lower wages and have a much more flexible labor force). This is one of the reasons why several countries have tried to protect the GHS activities of the airports and their ground-handling employees, i.e. slowing down the process of liberalization and supporting the political initiatives of the trade unions and airports against a further strengthening of the European directive that was to come into force in 2008<sup>8</sup>. Some of the regional governments who operate airports, have been willing to support their airports financially, who have suffered financial losses as a consequence of liberalizing the markets for GHS.

### **Transformation of ground handling in Germany**

Before the implementation of the directive German airports had typically provided ground handling by themselves. Since the directive became a national law in 1997<sup>9</sup>, significant structural changes have taken place. While entry for independent service providers has been difficult, their market share now ranges between 10 and 20 percent of the liberalized airside market. In addition, the airlines are under increasing competitive pressure and are therefore looking at all options for cost savings, also in ground handling. The airports see the inevitability of opening up this market further and are getting ready through restructuring, streamlining and outsourcing in order to prepare themselves more effectively for the current and future competition.

There are 13 airports with a passenger volume above 2 million that have been opened up as a consequence of the directive. The maximum number of service providers allowed for each service (usually not more than 2) could be increased up to 3 or more, as we have seen in the UK and Italy. But at the moment, the market for the airside services in Germany, such as ramp handling (which includes luggage handling, mail, refuelling, push out and other ramp services), is still quite protected. Market entry is on the one hand controlled through the criteria for the selection of service providers or self handlers, and on the other hand through

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<sup>8</sup> We also noted, that the service directive that was to apply to harbors was also withdrawn by the commission, due to heavy political opposition.

<sup>9</sup> Verordnung der Bodenabfertigungsdienste auf Flughäfen, BADV

the administrative rules to obtain a licence set down by the regional regulator and the airport user council involved in the selection procedure. Nevertheless, the EU directive and the national implementation via the BADV changed the character of the market significantly. Since 2001 these airports were required to reorganize their service provision and now have to confront at least one competitor. This also led to lower prices, and some of the airports incurred heavy financial losses in ground handling, as they tried to keep their market shares and employment levels, with the support of the political owners.

All of these 13 airports offer ground-handling services either directly or through subsidiaries. By creating subsidiaries, the German airports already seem to have anticipated some of the provisions of the proposed revisions for the EU directive, where a separate subsidiary requirement is envisaged to better control cross subsidy. However, this reorganization had more to do with getting out of restrictive public service employment contracts and the associated compensation rules. In the past most German airport employees had in the past been more or less treated like public services employees and had similar labor contracts. Their promotion was mainly based on age and family structure. Since the new service providers had no such contract restrictions, they could pay their employees significantly lower wages, similar to those in the logistics or cleaning sector, or generally low skilled positions.

A further disadvantage arose from pension provisions. The German state pension fund, VBL (Versorgungsanstalt des Bundes und der Länder), requires significant provisions (about 6,45 percent of salaries, plus 20 percent payroll tax on top), which is above what is paid in the private sector. This “flight out of BAT and VBL” is therefore often stated by the airports as one of the most important motives, with more flexible labor rules being another, for creating separate subsidiaries. The airports of Hamburg, Hannover und Düsseldorf were early movers in creating own subsidiaries<sup>10</sup>, while the airports of Cologne and Frankfurt continue with their current organizational arrangement, in which GHS are fully integrated in the core airport organisation. It seems that some of the subsidiaries have lower wages, more flexible working rules and lower pension requirements than others. Also the treatment of “old “ employees differs, depending on how dynamic their wage adjustments are according to the old BAT or new contract. During the transition, which can last up to 20 years, “old” and “new” employees

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<sup>10</sup> Some as early as 1996

were working side-by-side under quite different payment schemes. This is one of the issues we would like to study further, to see how long the “old” employees will remain active and at what point the new subsidiaries will eventually have competitive working conditions, similar to those under which the new entrants operate.

### **New entrants**

The major competitors in the German and European market are international service providers like Acciona, Swissport, Avia Partner, Securicor, Menziees, or local service providers, such as Losch<sup>11</sup>, or specialized regional cleaning services. The international service providers are often parts of a larger conglomerate, active in the logistics sector, and employ the benefits of scale and scope by enlarging their presence in this sector. They also have the scale benefits of multiplant economies and network effects through multiple station operations. This allows them to make one contract with an airline which is active at several German airports. These are benefits that the individual airport operators cannot achieve. This is one of the reasons why AHS was created, a service company owned by several airports active in landside services like check-in.

What about self service by the hub airlines? We found that self-service has been mainly applied by the dominant airlines at their own hub. Within airline alliances, this service will then be offered to their alliance partners. Our interviews in Germany suggest that under the current institutional and regulatory arrangement self-service is not likely to become as important as it has in the other countries. Furthermore, the long tradition of outsourcing GHS to the airports, which are now under increased competitive pressure to get better prices and perhaps even better quality, could be another argument why we have not yet seen signs of self handling appearing in Germany. It seems that the airlines, by using the potential threat of competition, mainly aim to get better service conditions, rather than trying out independent service providers. Still, what we observe at the moment is only a transitory phenomenon. For airport operated GH services surviving the increased competitive pressure means requiring significant adjustments in wages and labor flexibility. There is still some cross subsidization going on from other airport services to cushion this effect, but this will not be tolerated by the

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<sup>11</sup> Losch has 275 employees and acted in three airports, with a license to operate in Stuttgart. It has tried unsuccessfully to enter the market at other airports, the so it applied several times

owners forever<sup>12</sup>. Those airports, which have early pursued a policy of creating separate subsidiaries in order to get better wage conditions and working flexibility, find now, that these subsidiaries could be sold off or can enter into a joint venture with a logistics company. They are no longer seen by some as part of the core business of running an airport. So the German airport model of high vertical integration may come to an end. In the long run it is very likely that we see a similar organization arrangement of the value chain as in the other countries, but at the moment we see only a few signs for a slow movement in that direction.

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<sup>12</sup> We have also seen, that airports, that had been partially privatized (like Hamburg, Hannover, and Duesseldorf) have moved much faster on this front, with Fraport being the exception because of the specially strong role of the public-sector unions there.