Effective Competition in the Ground Handling Market – Is Trial and Error the Best We Can Do?

Dipl.-Ing. Hans Romeiser, ROUNT GmbH | Dr. Heinz-Peter Lindroth, bm-orga GmbH

Abstract

There are multiple surveys, papers, and studies investigating the success of the liberalization of the European Ground Handling (GH) market. While they conjointly see success in an overall decrease of prices for handling fees they fail to reflect on the interrelation of the effects of three main developments.

Firstly, they do not give an explanation why the price reduction fell far short of the expectations. Secondly, the studies do not reflect the accompanying macro economical effects and induced social problems (such as working conditions, wages, qualifications, etc.). And thirdly, they leave out effects of cost saving pressure on service level definitions involved in e.g. security and safety issues, which are of particular public interest.

This paper -as the initial of a series of papers on the GH market's situation - discusses the conditions and possible effects of an efficient competition in the GH market, points out to why airlines withdrew from the GH business and places particular focus on the coherence of price development, macro economy and service levels. Finally, it gives a rough sketch of what Working Time Management and Employee Logistics can do to find a way out of the currently applied method of Trial and Error.

. . .

Introduction

In 1996 the European Council implemented the Directive 96/67/EG (DIRECTIVE).¹ Its objective was to create a contestable market that allowed access to smaller GH suppliers to a formerly monopolized market. The directive was revised and extended with a substantial additional request in 2007: airports that exceed a certain number of passengers per year are now bound to hold available at least three different GH suppliers. The initiative was collectively supported by the European carriers, which were once more seeking lower GH fees. The far known fact, that the GH fees do not account for more than 5% to 8% of the airlines ticket prices, might be an indication of a highly evolved cost pressure due to razor-thin-margins throughout the whole airline business. Financial statements of the carrier companies, however, declare otherwise creating a healthy acting or at least robustly developing branch.

While the so called self-handling (meaning that a carrier provides its own handling services) had been dominating the GH market for decades, the airlines withdrew from this market shortly before the first DIRECTIVE was launched. The decision to refrain from self-handling created a rather monopolistic market situation in which the airlines depended on the handling services mostly exclusively provided by the airport itself or by its subsidiaries.² While the intentions of the protagonists seem to be intuitively comprehensible it is not obvious whether the European GH market is an effectively working competitive market at all.

Is there an effective competitive market?

An effectively working competitive market is based at least on six mandatory requirements. Without meeting them the competition is ineffective and thus unfair. These requirements are:

¹ Europäischer Rat (1996) *Richtlinie* und Europäischer Rat (1996) *Berichtigungen*

² See: Wolf, H. (2002)

1st Requirement: At least more than two suppliers with insignificant market shares³

With the airlines withdrawing from the GH market, especially in non-hub airports (i.e. airports where the airline is not a major participant), the number of the suppliers with insignificant market shares dropped initially. With the DIRECTIVE focusing only on the amount of GH service suppliers and not on their market shares, the subsequent developments showed that nearly every airport still catered a dominating GH supplier with a significant market share.

Two questions arise:

- Why did the airlines fail to continue the self-handling in a cost effective way?
- Why have the market shares not been distributed in the expected way among the new and the old competitors?

According to the principles of market economy market opening maneuvers it should have led to many suppliers with insignificant or at least fair amounts of market shares.

The primary objective to create a contestable market in the GH business was obviously ineffective and hence influenced the market-based mechanism of formation of prices. The undeniable consequence was that the GH suppliers became "price takers" instead of "price makers".

2nd Requirement: Equivalent service offers

In an effective competition the market must provide standardized and therefore comparable products that can function as equivalent substitutes for each other. Customers (airlines) consider the products to be identical or at least comparable.

A recent survey among German airports reveals that this has not been achieved at all:



Fig. 1 - Offered services at selected German airports

Source: Fokus:Zeit Benchmarkstudie 2009/2010

Fig.1 gives an overview of the GH services as defined in the supplement of the DIRECTIVE and lists the services being actually offered by the traditional GH services (offered directly: grey dots, offered by subsidiaries: green dots).

³ Bailey, E., Baumol, W. (1984)

As a matter of fact, new competitors entering an airport market concentrate on the most attractive services and leave the less attractive services to traditional suppliers.

3rd Requirement: Transparency of service prices

As the 2nd requirement providing perfect substitutes of services is not met, the only business driver for the airlines remaining is the price for certain services. In order to create an effective competition, prizes should be transparent for all market participants. However, customers as well as suppliers like to keep this information strictly confidential. Although all market participants conduct list prices, realized prices are kept confidential.

4th Requirement: Equal access to resources

Right after the inauguration of the national laws subsequent to the DIRECTIVE there had been a number of legal proceedings regarding special fees for the use of airport installations or the right of admission itself, which were imposed in order to protect the airports' own GH suppliers. Eventually, after 15 years lasting development, equal access to resources can be considered a fact nowadays.

5th Requirement: Barriers to entry and exit the market

To provide ground handling services at a given airport, the DIRECTIVE requires a licensing process and allows the airports the definition of minimum quality standards that need to be considered in a tender process.

For "traditional" GH suppliers to leave an existing business it is necessary to compensate the German state pension fund since many of the "traditional" suppliers existed in the form of a public service enterprise. For these depths the owner (often the airport itself) will be held responsible whereas positive cross subsidies are prohibited by the DIRECTIVE and the subsequent national laws.

As a consequence, a barrier free market with regard to entry and exit does not exist.

6th Requirement: No externalities in production and consumption

For an effective competition it can be assumed that no constraints exist so that no difference between private and social costs and benefit arise. Since many of the traditional GH suppliers have evolved out of former public service or public-service-like enterprises with the majority of their employees is still employed in restricted and less flexible (and therefore expensive) public service employment contracts. New GH providers enter the market with a complete new workforce not organized in trade unions or collective agreements.

Ineffective competition

In consequence, at least the German GH Market has to be considered as an ineffective area of competition. This consequence is independent of decreased prices for GH services or the increased number of GH suppliers. In the current situation it seems inevitable that the resulting conflict of conditions for an effective competition and the special situation of the service industries in the GH market stay an unsolved problem. And, furthermore, they seem to point to a structural problem in the conception of the basic requirements of the DIRECTIVE itself.⁴

Proof can be given easily with a simplified example taken out of everyday GH business (managing a turnaround) and projecting it to a real scenario at one of the large airports in Germany.

⁴ See: Fritsch, M, T. Wein, H.-J. Ewers (2005)

"Shared downtime is multiplied downtime"⁵ – extending inefficiency by decree

The two intentions to create effective competition are:

- ensure that companies lower or eliminate their profit in favor of a decrease in their GH fees
- ensure the most effective operation available

None of the traditional suppliers realize remarkable profits. But there is a large scale of effective operation in the GH market. As labor costs determine about 80% of total costs in the GH industry Working Time Management, salaries and handling standards account for the vast effects.

Working standards (headcount + qualification level mix x by time required to handle a defined task) are mostly determined by the airline and can be considered fixed parameters in the comparison of traditional and new suppliers. The same applies for the salaries, as even traditional ground handlers nowadays hire new employees for approximately the wages of a new supplier, close to the German minimum salaries.

This leaves Working Time Management as the only susceptible cost driver remaining.

In short: If an eight hours (paid) attendance of an employee can only be used for 5 hours of billable services, the productivity (effectiveness) of 8 hours paid labor in favor of 5 hours billed services is approximately 63%. The remaining 3 hours are called "downtime". The ratio is responsible for the efficiency of the overall operation and therefore for the service fees.

Impact of distributed service tasks

In order to outline the general contribution of Working Time Management in the GH industry one of the basic impacts is usually described as 'butterfly effect'.

Example: Butterfly effect

At a small airport two airlines A and B accomplish one turnaround per day. Each turnaround (time between arrival and departure) lasts 45 minutes. The turnaround requires 4 employees for the GH services at a time.



Fig. 2 - Employee requirements for airlines A and B

While airline A requires service from 08:30 to 09:15h, airline B turns around between 09:30 and 10:15h. All relevant services therefore have to be provided in a 45 minute time interval. If both

⁵ All figures taken from Fokus:Zeit Benchmarkstudie Aviation 2009/2010.

airlines were served by a single ground handler, both could be handled within a single 3 hours shift of the required employees:



Fig.3 - Shift coverage of the given tasks (monopoly scenario)

If two competing GH service providers shared the local market, the turn-around of airline A would be handled by 4 different employees, as well as the turn-around of airline B. Given the fact that constraints such as collective agreements or labor laws impose a minimum shift length of 3 hours per employee, this will necessarily result in services needed for coverage that look far less effective:



Fig. 4 - Shift coverage by separate GH service providers (shared scenario)

Whereas a single GH service provider was be able to sell 90 minutes out of 3 hours of paid employee labor, in the shared scenario both GH service providers could only bill for 45 minutes out of the same amount of labor (3 hours). Due to the butterfly effect, productivity is diminished by 50% (50% down to 25% per company).

In an effectively working competitive market the shared scenario would either lead to decrease the employee's salary by 50% or to raise the service fee by 100% for both the airlines.

In the past, when airlines were practicing self handling they argued for a service fee increase. In the light of the sketched interdependencies the decision to widely withdraw from the GH market (at non-hub airports) becomes comprehensible. That airlines nowadays argue for cutting the employee's salary by 50% is likewise comprehensible but also reflects a further instance of an ineffective competition.



Actual demand profile at a German airport

Fig. 5 – Example of an average working time demand profile of a German airport

That the schematic example is not as exaggerating as it seems in the first place, can be proved by the above visualization. The already volatile situation even for a single ground handler (the peaks of the demand profile are more than double the height of the lows) gets worsened if the offered services are being split amongst more ground handlers. This would have the described impact on either the service fees and/or the salaries of the employees.

Projection

Recently, the dependencies between the number of airlines respectively flights handled and cost effectiveness (productivity) of the GH service provider has been investigated within a benchmark study of all major German airports:





A significant number of the German GH suppliers are currently operating in striking distance to the vicinity of a critical limit. Any more market losses would result in a remarkable decrease of productivity and as a consequence result in pressure on wages and working conditions.⁶

Conclusion

If the GH services of an airport are shared among too many GH suppliers, all of them will only be able to provide their services at a much higher ratio of labor costs due to increases in downtime. Despite the objective of the DIRECTIVE the consequence would either be a further dumping of wages or an increase in the ground handling fees. Both effects were documented already by independent studies: they describe an unpredicted increase of pressure on working conditions as well as the fact that the actual price cuts did not meet the projected level.

The airlines discovered this before the initiative for the DIRECTIVE started. They withdrew from the market because their self-handling in non-hub destinations ranged far beyond the critical limit for a cost effective operation.

In an economically unstable surrounding such as the aviation industry's, where one finds a large number of companies being on the losing side with only a few winners, continuing the method of trial and error regarding the number of GH suppliers at an airport is the worst reference book. Latest fact finding on one of the most successful aviation business models⁷ showed impressively that an effective aviation model consists in an integration of airport and GH supplier. Multiplying the GH suppliers, however, would result in rising costs and a dropping productivity.

Since not all the assumptions for a perfect completion can be met and even the only optimization potential within an effectively working competition turns out to be contradictive, the concept of enforced market liberalization in the GH branch in its present state needs to be reconsidered.

⁶ See also: Schmitz, P. (2004)

⁷ See Oxford Economics: Explaining Dubai's Aviation Model. June 2011

References

ADV (2005): "Das EuGH-Urteil zur Bodenabfertigung berücksichtigt nicht die Interessen der Flughäfen und ihrer Arbeitnehmer", Pressemitteilung 7/2005.

Bailey, E., Baumol, W. (1984): "Deregulation and the theory of contestable markets", in: Yale Journal on Regulation, 1, 111-137.

Boston Consulting Group (2004): Airports – Dawn of a new era: Preparing for one of the industry's biggest shake ups.

Doganis, R. (2002): Flying off course: the economics of international airlines. 3. Aufl. London.

Einem, A. v. (2000): Die Liberalisierung des Marktes für Bodenabfertigungsdienste auf den Flughäfen in Europa. Frankfurt (Europäische Hochschulschriften).

Europäischer Rat (1996): Richtlinie 96/97/EG des Rates, 15. Oktober 1996, über den Zugang zum Markt der Bodenabfertigungsdienste auf den Flughäfen der Gemeinschaft. Abl.EG Nr. L 272, 25.10.1996, 36-45.

Europäischer Rat (1996): Berichtigung der Richtlinie 96/97/EG des Rates, 15. Oktober 1996, über den Zugang zum Markt der Bodenabfertigungsdienste auf den Flughäfen der Gemeinschaft. Abl.EG Nr. L302, 26.11.1996, 28.

Fokus:Zeit GmbH: Benchmarkstudie Aviation 2009/2010.

Fritsch, M., T. Wein, H.-J. Ewers (2005): Marktversagen und Wirtschaftspolitik: Mikroökonomische Grundlagen staatlichen Handelns. 6. Aufl. München.

KPMG (2002): Handling pressure: A snapshot of the aviation ground handling industry.

Oxford Economics: Explaining Dubai's Aviation Model. June 2011.

Schmitz, P. (2004): "Liberalisierung der Bodenverkehrsdienste um jeden Preis?", in: Internationales Verkehrswesen", 56/6, 276-278.

Wolf, H. (2002): Privatisierung im Flughafensektor: Eine ordnungspolitische Analyse. Berlin.