ADFERSIT
associação portuguesa para o desenvolvimento dos sistemas integrados de transportes

European Airport Systems

Integrating newly privatized airports into multi-national airport groups

Presention by Dr. Andreas Kraus
Lisbon, February 20, 2013

Lufthansa Consulting
Your Business Runway

Agenda

1. **Introduction**

2. History of Airport Public Private Partnership (PPP) in Europe
   1. Types of PPP
   2. Airport PPPs in Europe and major players

3. Impact on a PPP on the ancient regime
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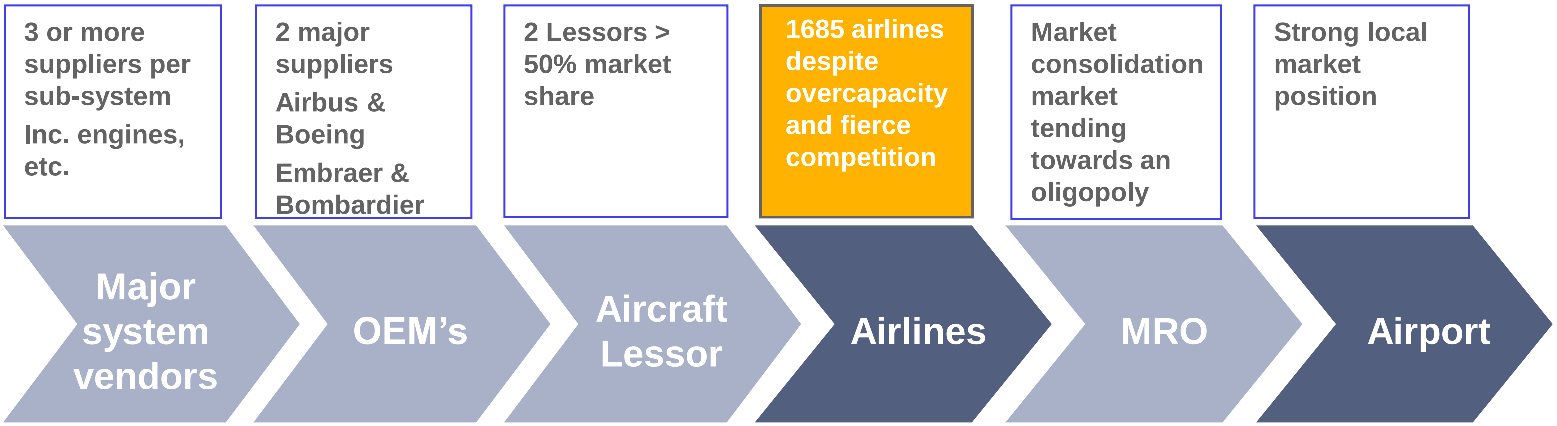
HOTEL KEMPINSKI

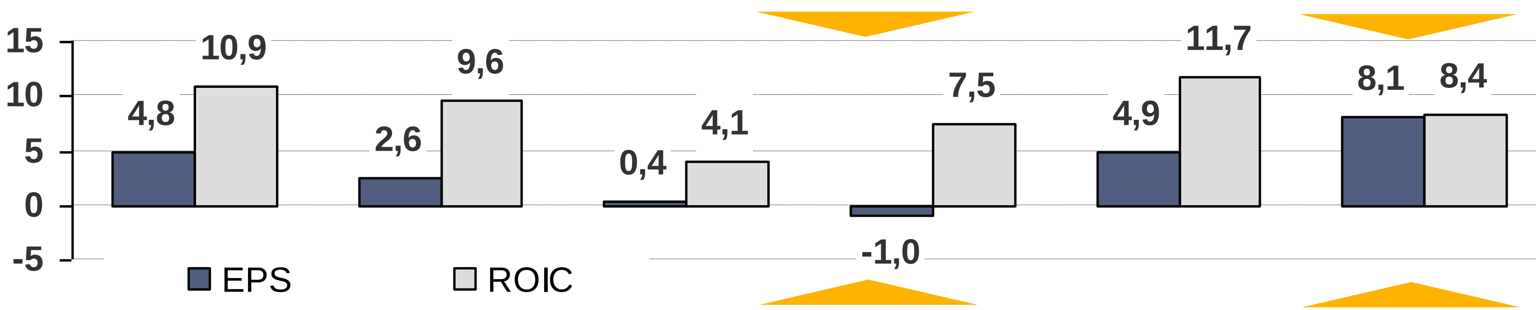
The European Airport Market in 2012 – Key facts

The airline sector shows relatively poor financial returns in the value chain and the highest level of fragmentation

Competitive dynamics in the value chain – concentration and profitability



Average financial performance (eps and ROIC)



Source: Thomson Financial (data taken from the latest annual reports/ results). Lufthansa Consulting Research.
EPS: Earnings per Share ROIC: Return on Invested Capital OEM: Original Equipment Manufacturer MRO: Maintenance Repair & Overhaul

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Balancing between public and private interest is key element of a successful privatisation

Privatisation rationale

Public Sector

- Reduction in risks to airport-related project development
- Transfer risk and/or responsibility in an operation
- Access to private sector financing freeing government budgets for social sectors
- Introduces operating efficiencies and savings for the public sector / government

Private Sector

- Growth in passenger traffic leading to improved profit margins resulting from economies of scale
- Little foreign exchange risk (when substantial revenues generated in “hard currencies”)
- Potential for improved airport amenities and increased airport revenues
- Potential real estate development and other non-aeronautical services

Through PPPs governments reduce risks, but loose control over their assets pending the type of PPP

*Source: Lufthansa Consulting

Today's example for potential risks:

Abertis Examines Sales Of Airports Division

February 19, 2013

Spanish infrastructure company Abertis is studying the possible sale of its airports division as part of its diversification strategy, chief executive Francisco Reynes said.

Abertis, which also controls toll road and telecoms assets, has hired Citigroup and AZ Capital to study options for the business, valued by analysts at about EUR€900 million (USD$1.2 billion).

"We're open to any option," Reynes said in an interview, while adding that the company would continue to study growth opportunities in Mexico and the United States without ruling out further investments in Spain.

The company's airport assets in Bolivia were nationalised by President Evo Morales on Monday, though Abertis said that the widely expected move had no impact on its results.

Abertis posted a 0.2 percent rise in full-year earnings before interest, tax, depreciation and amortisation (EBITDA) to EUR€2.46 billion (USD$3.28 billion) on Tuesday, with motorway traffic growth in Latin America offsetting declines in Spain and France.

The company has suffered from its exposure to Spain, where a deep recession and high unemployment have weighed on traffic and propelled its drive for international expansion.

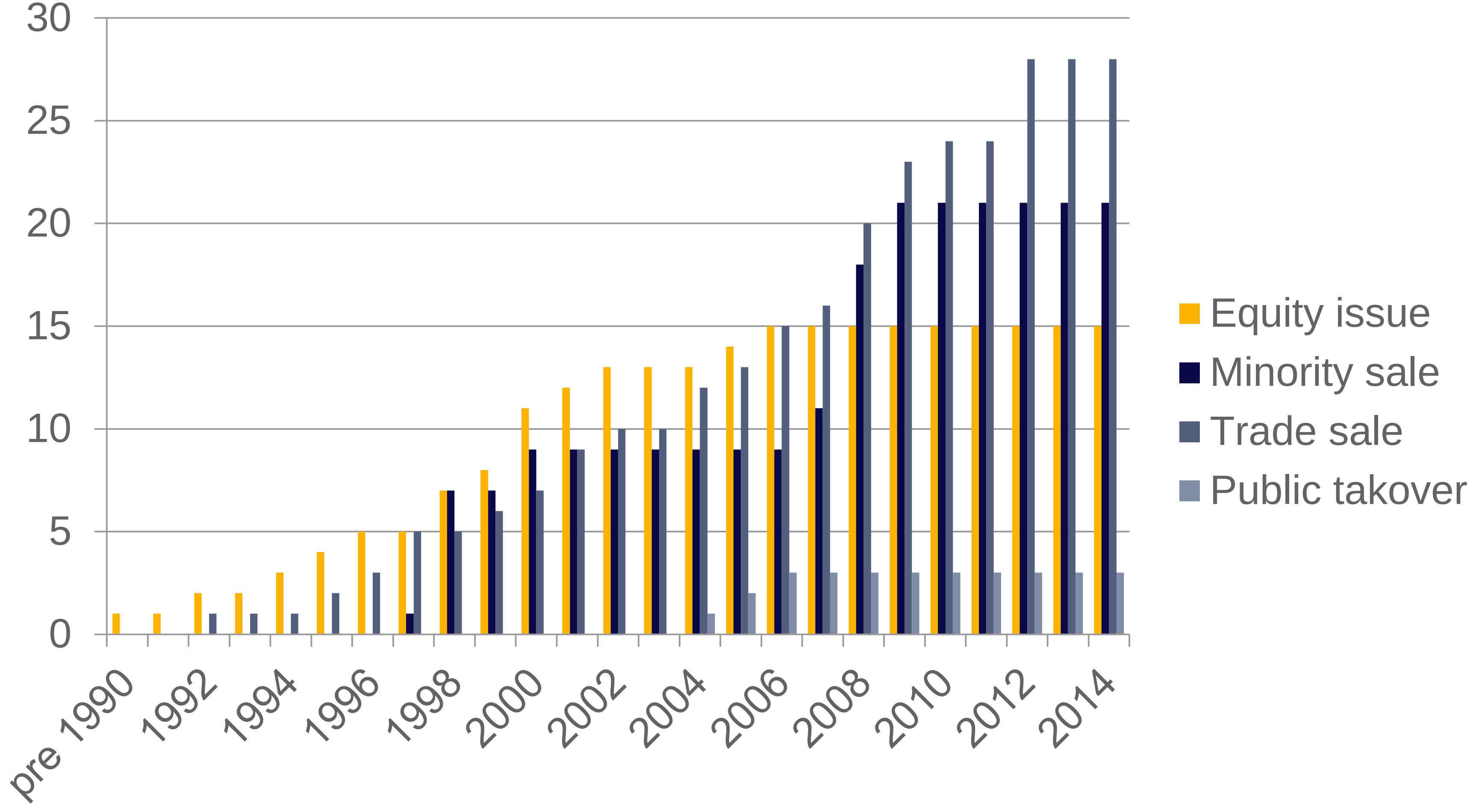
Last year it bought highway concessions in Chile and Brazil from Spain's OHL, with 60 percent of EBITDA now generated outside Spain.

The company said it is targeting EBITDA of EUR€3.1 billion in 2013 and sales of EUR€5.1 billion, up from sales of EUR€4 billion in 2012.

Net profit this year is expected to be about EUR€600 million, against EUR€613 million in 2012, with net debt targeted at EUR€14.3 billion, slightly more than 2012's EUR€14.1 billion.

(Reuters)

In the past PPPs started with equity issuing, but trade sales now dominate the PPP-activities over the past years



Source: Aviation Economics, GAD 2012

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Examples of significant PPP deals, which are owned by major players

- **BAA** (former): 10bn£ acquisition under the lead of Spanish Ferrovial, their stake now down to 33% and main activity on LON-Heathrow only
- **Budapest**, 1st BAA, now Hochtief AirPort lead private operator for 1,9bn€
- **TBI** (former Thomas Baily Investments), collected European medium-size airports in 1990s (Belfast, Cardiff, LON-Luton, Stockholm-Skavsta), acquired by Abertis (ADCL) in 2005
- **Copenhagen**, originally majority (53,7%) acquired by Macquarie, now majority shareholder Ontario Teachers Fund
- **Athens**, PPP with 45% private shareholding, in operation since 2001
- **Malta**, 50,1% owned by VIE-airport, SNC-Lavalin (CN construction); 30% Maltese private investors

Source: Momberger

Major European players today (operators, (institutional-) investors)

- ACDL (Airport concessions Development Ltd) – 90% Abertis Airports, 10% AENA (ES)
  - Belfast Intl., Cardiff, LON-Luton (GB), Skavsta (SE)
    - 3 Bolivia, 15 Mexico, 1 Colombia
- ADP Management (Aeroport de Paris, FR)
  - Paris (FR), TAV (38%/TR), Liége (25%/BE), Schiphol (8%/NL)
    - Numerous shares in international management and operation contracts
- Dublin Airport Authority (IR)
  - Dublin, Shannon, Cork (IR), Düsseldorf (20%/DE), Larnaca+Pafos (11%/CY)

Source: Momberger

Major European players today (operators, (institutional-) investors)

- Egis Avia (FR)
  - Larnaca+Pafos (20%/CY)
    - 3 Congolese airports and Aéroport de Tahiti
- Ferrovial Aeropuertos (ES)
  - BAA (<34%/UK)
    - Mexican ASUR (24,5%/MX)
- Fraport (DE)
  - Frankfurt, Hanover (30%/DE), Burgas+Varna (60%/BG), St.Petersburg (<36%/RU)
    - Numerous shares in international management and operation contracts

Source: Momberger

Major European players today (operators, (institutional-) investors)

- GIP (Global Infrastructure Partners, UK/US)
  - Edinburgh, LON-Gatwick (42%), LON-City
- Hochtief AirPort / Hochtief AirPort Capital (DE/Intl.)
  - Athens (40%/GR), Dusseldorf (30%/DE), Hamburg (49&/DE), Budapest (>50%/HU), Tirana (47%/AL)
    - Sydney (>12%/AU)

Source: Momberger

Major European players today (operators, (institutional-) investors)

- Keolis (FR)
  - 9 French regional airport (partially with partners)
- SAVE (IT)
  - 4 regional airport stakes (IT), Charleroi (28%/BE)
- Schiphol (NL)
  - Schiphol, Rotterdam/TheHague, Lelystad, Eindhoven (51%/all NL), AdP (8%/FR)
    - Some international management and operation contracts

Source: Momberger

Major European players today (operators, (institutional-) investors)

- TAV Airports Holding (TR)
  - Istanbul-Atatürk , Anakra, Alanya, Izmir(-Terminal) (all TR), Skopje, Ohrid (both MK)
    - Tblisi, Batumi (both GE), Riga (LT), Madinah (SA)
- Velolia (FR)
  - Perpignan, Carcassone, Beauvais (49%), Lille (34%) (all FR)
- VINCI Airports (FR)
  - 4 French regional airports (with Keolis), AdPM (3,3%) (all FR)
  - ANA (to be signed)

Source: Momberger

Major private airport owners play a leading role in economically strong European countries

Source: Momberger

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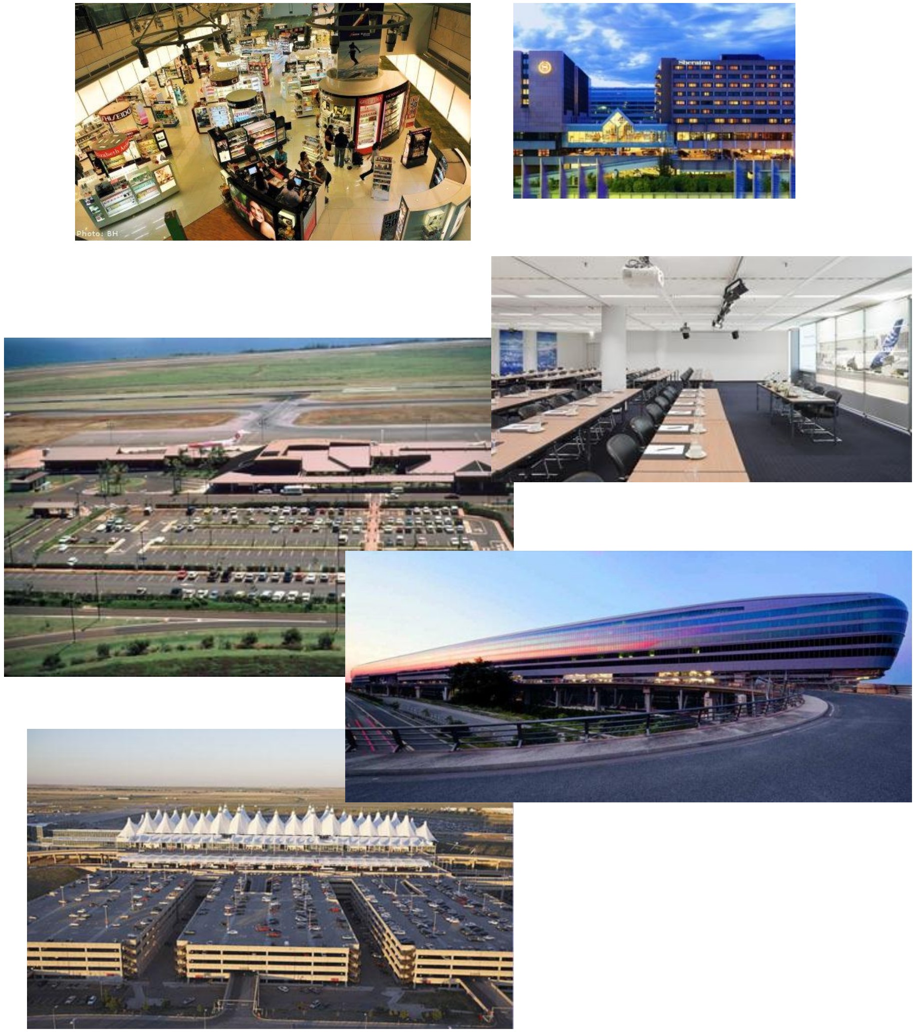
Airports can be characterized by separating them into two groups: Infrastructure provider vs. Revenue generator

- Infrastructure provider
  - Main purpose: to provide facilities to allow entrepreneurs to reach its business locations in order to produce a positive economic effect within the region
  - Public owner benefits directly through tax payments/income
  - Airport economics do not necessarily need to be positive as it is „cross-subsidized“ through expected higher tax income
  - Private organization and management reduces need to „cross-subsidize“
  - Long-term interest in airport
- Example: Munich Airport

Source/copyright: Flughafen München

Airports can be characterized by separating them into two groups: Infrastructure provider vs. Revenue generator

- Revenue generator
  - Main purpose: to produce a „Return of Investment“ for mostly private- and/or public-private-operator
  - Private owner benefits through direct airport economics
  - Strong interest in optimizing CAPEX and OPEX
  - Focus on increased revenue generation
  - Productivity increase
  - Often short- to mid-term interest in airport (see previous slides)



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Which consequences are to be expected from a public private partnership for a former sole operator

- Former secondary goal to generate a direct return, will be translated into the primary goal
  - Increasing revenue
    - Aeronautical, if possible
    - Non-aeronautical to internationally recognized 50% revenue share
  - Optimizing expenditures
    - CAPEX to be „streched“ – time-wise
    - OPEX to be reduced directly
      - Examples: Cleaning, Energy, **Headcount!**

- Important: Government has to safeguard the safe and secure operation of the airport
    - Negative example: former British rail network

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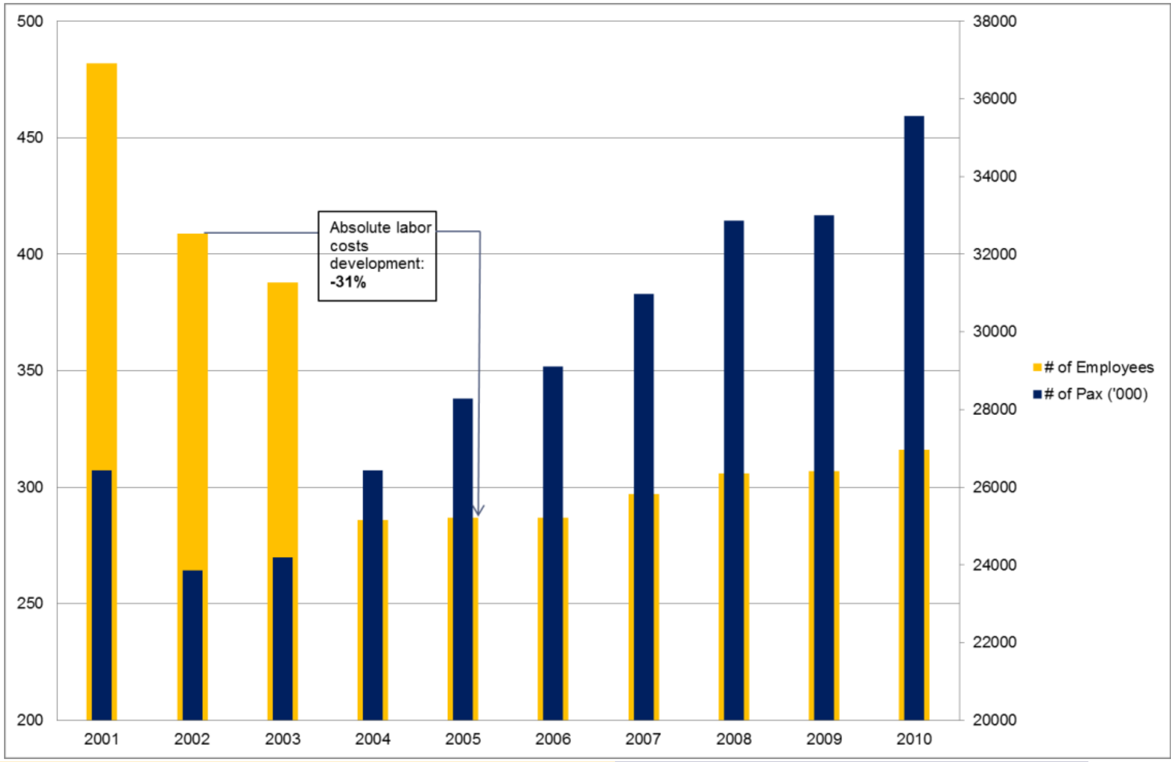
A re-organization bears a high potential to reduce the operational expenditure significantly

- “Major initiatives undertaken during the year included the implementation of a company wide organization restructure which resulted in a 28 per cent reduction in full-time employees from 399 to 286. The restructure contributed towards the improved control of costs and provides a flatter, more flexible business model.”*
- Although Sydney Airport grew by ~50% passenger growth over 8 years (2002-2010), employment figures increased only by ~ 10% over 6 years (2004-2010)

Max Moore-Wilton



*Source: Sydney Airport Annual Report 2004, CEO Max Moore-Wilton statement

A re-organization bears a high potential to reduce the operational expenditure significantly

- PPP-airport Düsseldorf did not cut total employee numbers, but
  - outsourced numberous activites, e.g. ground handling, security, freight operations, etc.
  - stopped to staff vacant posts in its organization, thus reducing employee figures through fluctuation, while growing

- **Re-organization often means**
  - **little change for the general airport employee**
  - **significant change for middle- and top-management**

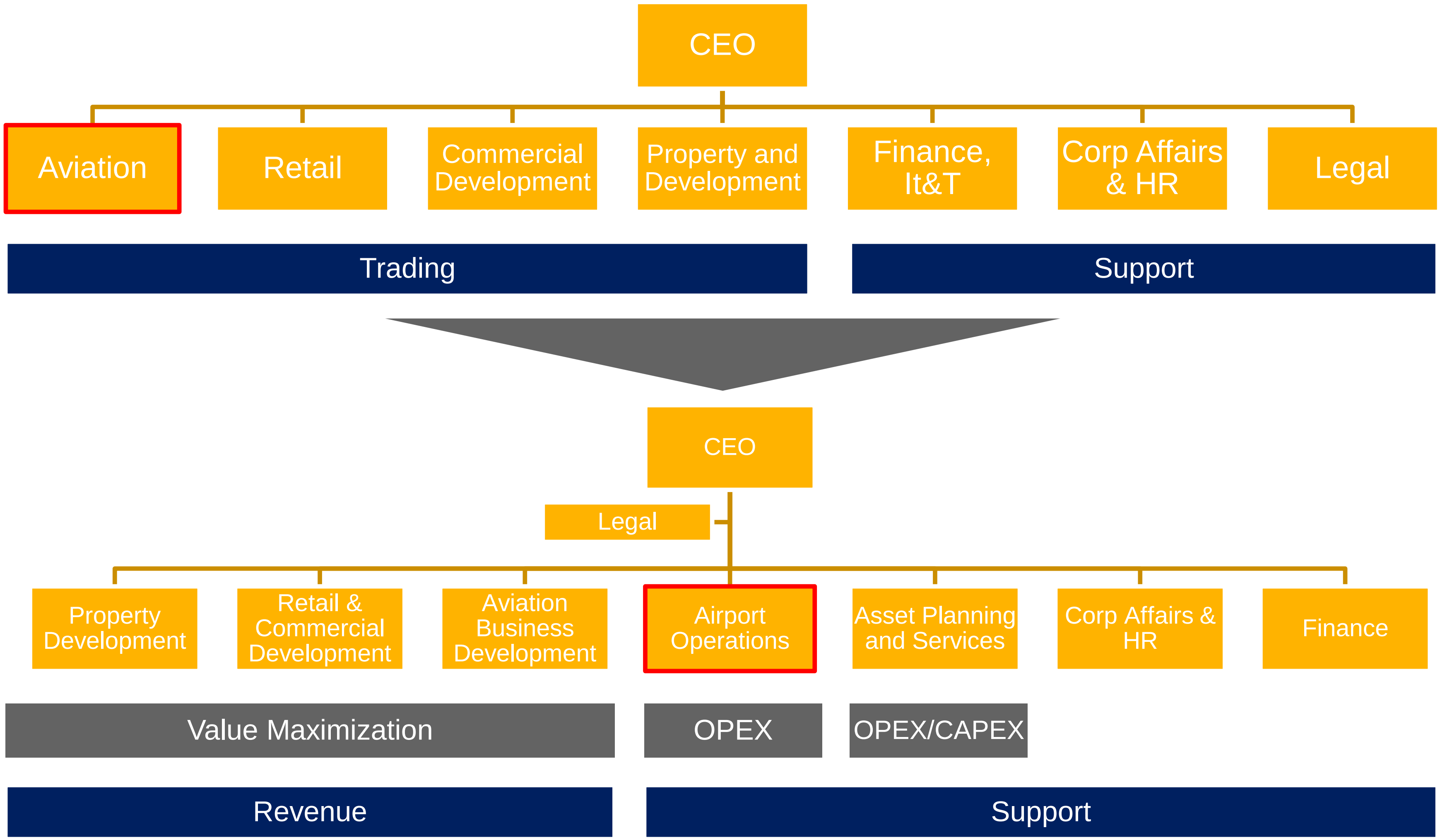
Konzern

Flughafen Düsseldorf GmbH
50% Landeshauptstadt Düsseldorf
50% Airport Partners GmbH (40% HOCHTIEF AirPort GmbH, 20% HOCHTIEF AirPort Capital GmbH & Co. KGaA, 40% Aer Rianta PLC)

Tochtergesellschaften	
Flughafen Düsseldorf Cargo GmbH	(100 % FDG)
Flughafen Düsseldorf Ground Handling GmbH	(100 % FDG)
Flughafen Düsseldorf Energie GmbH	(100 % FDG)
Flughafen Düsseldorf Immobilien GmbH	(100 % FDG)
Flughafen Düsseldorf Objekt Eins GmbH	(100 % FDG)
Flughafen Düsseldorf Verwaltungs GmbH	(100 % FDG)
Flughafen Düsseldorf Security GmbH	(100 % FDG)
Flughafengesellschaft Mönchengladbach GmbH	(70,03 % FDG)
Grundstücksverwaltungsgesellschaft mbH	(70,03 % FDG)
SITA Airport IT GmbH	(30 % FDG)
BISAWA Objekte Airport-Düsseldorf GmbH & Co. KG	(100 % FDG)
ESTAMIN Grundstücksverwaltungs GmbH & Co Vermietungs KG	(100 % FDG)
Japon Grundstücksverwaltungsgesellschaft mbH & Co. Vermietungs KG	(100 % FDG)

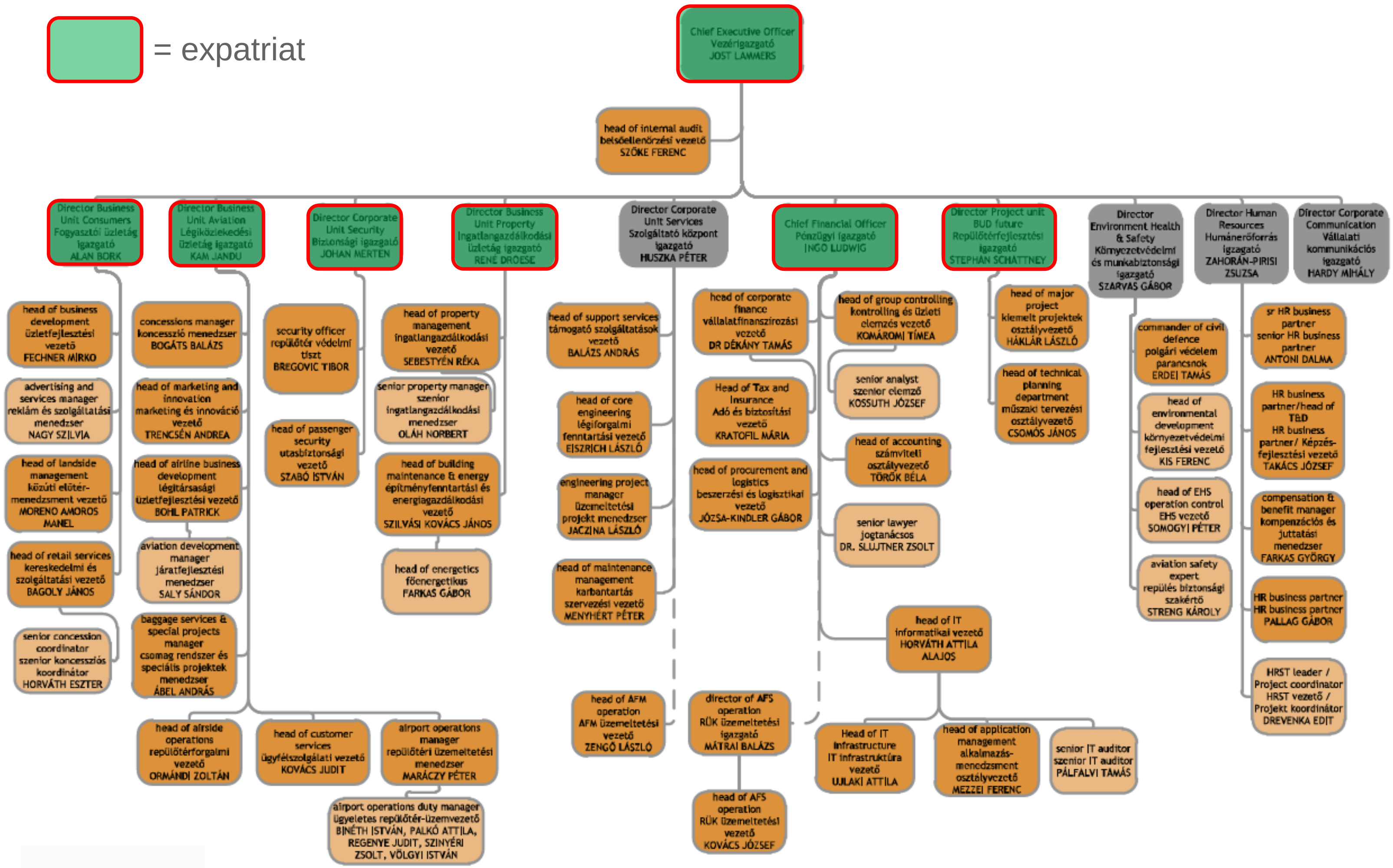
Source: Flughafen Düsseldorf

Example of an organization before and after implementing an airport PPP, i.e. SYD shows that airport operation becomes a support function



Source: Sydney Airport annual reports 2002/2004

In addition and in order to reach management loyalty, new owners install own personnel on top management level, e.g. BUD



Source: Budapest Airport/Lufthansa Consulting

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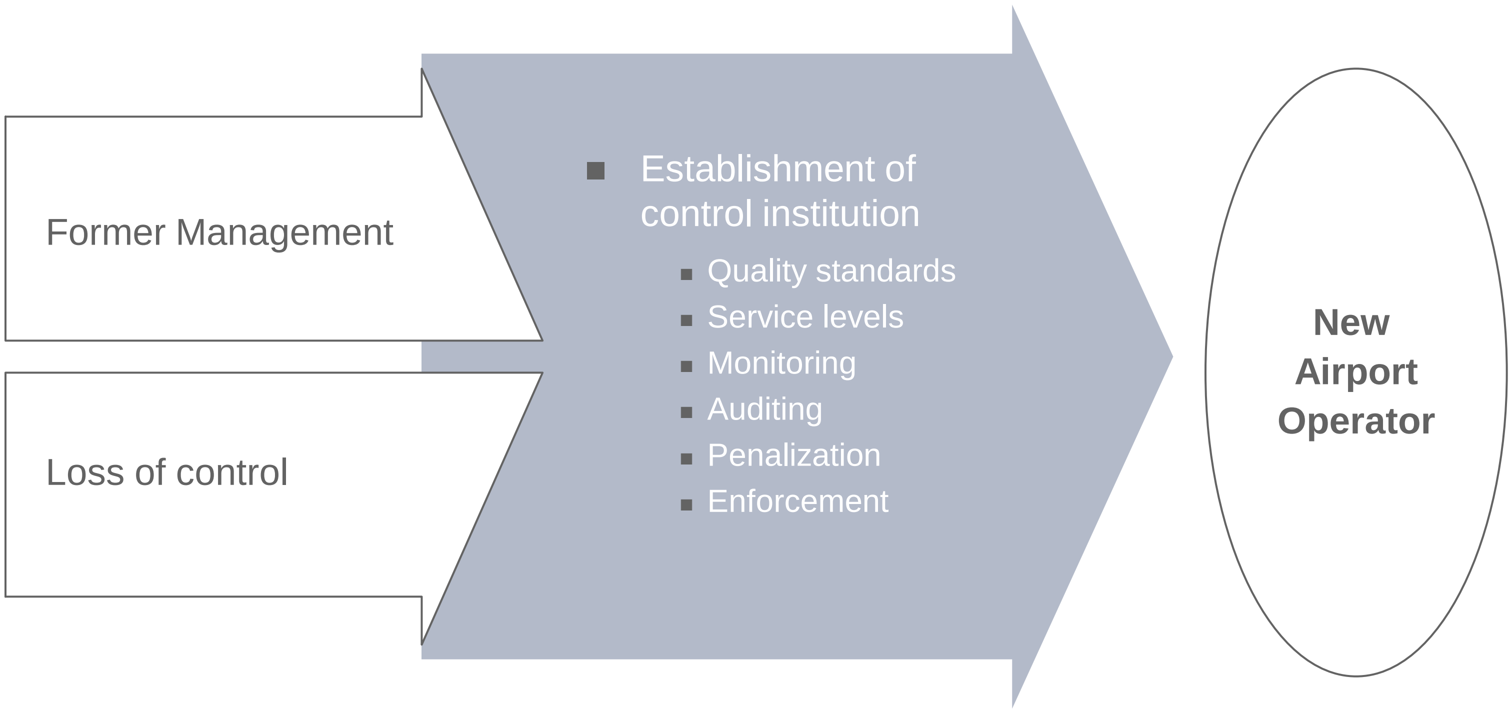
The potential loss of control over the airport and the potential availability of highly qualified managers shall be used for the benefit of the airport



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Lufthansa Consulting‘s PPP experience has helped PPP initiators to maintain control and to safeguard the investments for the future

- Specialized advisory services to the Hellenic Republic in relation to the privatization of the regional airports of Greece
- Reorganization of the “Agence National de l’Aviation Civile”, Congo
- Preparation and Implementation of an Airport Concession, Republic of Congo
- Implementation of a PPP of public airports, Mali
- Technical Assistance to Jordan Civil Aviation Authority, Jordan
- Privatization of Guayaquil Airport, Ecuador

Specialized advisory services to the Hellenic Republic in relation to the privatization of the regional airports of Greece

HELLENIC REPUBLIC ASSET DEVELOPMENT FUND

Hellenic Republic Asset Development Fund
02/2012 - ongoing

Project description

The Hellenic Republic considers PPP arrangements for up to 37 regional airports, among them major international airports like Thessaloniki and Heraklion, prominent tourism gateways like Rhodes, Corfu, Kos, Mykonos, Santorini as well as smaller airports.

The Lufthansa Consulting-led consortium provides aviation and technical expertise towards establishing successful business, operational and service quality concepts under the future airport management era.

Furthermore effective regulatory measures are being developed to incentivize airport performance.

Our services

- National Airports Policy for the federal government
- Market Potential Analysis and scenario-based air traffic forecast
- Infrastructure and facilities assessment, facts sheets
- Commercial due diligence and viability conclusions
- Clustering investigations
- Airports infrastructure development and capital expenditure program
- Tender process documentation
- Airport performance framework for the bid selection process
- Action planning for smooth transition

Benefit for the client

- Written Aviation Policy for the Hellenic Republic
- Airport user perspective driven technical and commercial expertise
- Innovative business model for aeronautical and non-aeronautical development accounting for the airports' customer diversity
- One-stop-shop for technical, commercial and operational solutions, reflecting tailored strategies for the airports portfolio
- State-of the art privatization methodology offered by Lufthansa Consulting

Reorganization of the “Agence National de l’Aviation Civile”, Congo

Government of Congo
April 2008 – December 2008

Project description

Driven by the implementation of a concession to operate the main airports in Congo ANAC needed to be reorganized. ANAC gave up responsibility operating the main airports which tremendously impacted the financing scheme of ANAC.

Lufthansa Consulting signed a contract with the government of the Republic of Congo in order to define the new role of ANAC, develop a new organizational structure and recommend a new financing mechanism.

Our services

- Review of existing organizational structure
- Analysis of human resources and recommendations for a training plan
- Definition of future vision, mission and detailed responsibilities
- Recommendation of new organizational structure and financing mechanism
- Preparation of indicative business plan with budget estimate
- Definition of road map for implementation of new structure

Benefit for the client

- Lufthansa Consulting developed an organizational structure, including task description and manpower estimates, which will comply with ICAO SARPs.
- In addition, a new financing mechanism was developed, based on an indicative budget over 5 years.

Preparation and Implementation of an Airport Concession, Republic of Congo

Airports in the study:

1. Brazzaville
2. Pointe Noire
3. Dolisie
4. Ouesso
5. Impfondo
6. Ollombo

DGGT – Délégation Génerale des Grands Travaux
January 2007 – December 2009

Project description

Over a period of 3 years Lufthansa Consulting prepared and implemented an airport concession in the Republic of the Congo.

Lufthansa Consulting has managed the tender process for the concession to operate Brazzaville, Pointe-Noire and Ollombo airports. The tender was launched in June 2008 and the concession agreement has been signed in December 2009.

Our services

- Review and update of traffic forecasts for 6 airports in Congo
- Technical analysis of 6 airports including site inspections
- Preparation of investment plans
- Preparation of financial model and strategic concept
- Preparation of tender documents
- Management of tender process
- Evaluation of proposals
- Negotiation of concession contract

Benefit for the client

- The main objective of the government was to ensure a professional management of its airports that can properly maintain the new facilities and also improve service levels.
- Lufthansa Consulting has prepared and implemented the concession to operate the airports of Brazzaville, Pointe-Noire and Ollombo.
- The strategic partner identified for the concession is an experienced airport operator with a sound financial capacity, who is in a position to fulfill the government’s objectives.

Implementation of a PPP of public airports, Mali

Projet d'Appui à la Croissance (PAC), Republique du Mali
June 2009 – March 2012

Project description

PAC contracted Lufthansa Consulting, Gide Loyrette Nouel and Axeclium to support the Government to establish a PPP for the operation of Bamako-Sénou airport. The objective of the project was to develop a PPP-strategy and to organize and implement a PPP-process for the Government in order to reduce its degree of participation in airport investments in the future and to safeguard that a private investor maintains the value of current and planned investments. Due to force majeure the project was cancelled just before contract signature.

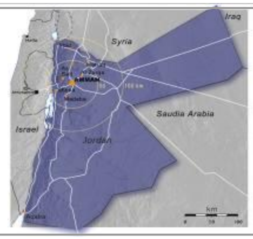
Our services

- Airport technical and operational status quo analysis
- Market potential analysis and forecast for 9 airports
- Capital and operational expenditure program
- Development of a new tariff system including development fees
- Development of a strategy for a PPP of the airports of Mali
- Info Memorandum, RfP, Data Room
- Evaluation of offers of shortlisted and preferred bidders

Benefit for the client

- Thorough analysis to build the most solid financial, legal and technical basis for a PPP process
- PPP strategy development with the most realistic chance to be realized
- Quick and reliable PPP process realization
- Safe and maximum return for the Government of Mali

Technical Assistance to Jordan Civil Aviation Authority, Jordan



Jordan Civil Aviation Authority
June 2004 – December 2009

Project description

The project was funded by the EU. Lufthansa Consulting was contracted in cooperation with EgisAvia and the Irish Civil Aviation Authority. The objective was the restructuring of the Jordan civil aviation sector including:

- Separation of airport operation from regulatory functions and subsequent privatization of Jordan Airports Company (JAC)
- Modernization of management, employment and business practices
- Enhancement of aviation safety and security

Our services

- Project management
- Policy and regulatory advice
- Assistance in financial management of CAA
- Short-term technical assistance in legal expertise in civil aviation legislation, information technology systems, user fees and charges, organization and human resources development, competition regulation and market design, technical regulation, economic regulation, strategy and commercial planning, aviation security assessment and training in air safety

Benefit for the client

- Enhanced aviation safety and security system according to ICAO and EU standards
- Seamless transition in the new and independent structure of the Civil Aviation Regulatory Commission of Jordan (CARC)
- State-of-the-art processes with regard to HR management and business planning of the CARC
- Build up of sustainable know-how management within the CARC
- Enforced structures enabling a long-term business planning of the CARC, ANS and JAC

Privatization of Guayaquil Airport, Ecuador

A.A.G.
Autoridad Aeroportuaria de Guayaquil
Fundación de la M.I.Municipalidad de Guayaquil

AAG – Autoridad Aeroportuaria de Guayaquil
CONAM – Consejo Nacional de la Modernización del Estado
February 2002 – February 2004

Project description

The federal government of Ecuador had transferred the ownership of the airport of Guayaquil to the city of Guayaquil.
A consortium had been contracted by CONAM to support the city of Guayaquil in the preparation and implementation of an airport concession.
The objective of the project was to find a private airport operator / investor for the operation and investment either for the development of the existing airport or, if feasible, a new airport for the city of Guayaquil.

Our services

- Preparation of traffic forecasts
- Development of an upgrade / expansion concept for Simon Bolivar Airport
- Estimation of an investment program for the new airport at Daular
- HR audit of entities involved in the airport management
- Development of a financial model
- Development of technical and economic input for tender documents
- Evaluation of pre-qualification and final bid documents

Benefit for the client

- The concession was successfully awarded in early 2004
- The priority investment program was implemented over the first 60 months – as defined in the concession contract
- The private operator has transferred considerable concessions fees to a municipal fund designated for the construction of the future new airport in Daular

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