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Fraport

Benchmarking of Ground Handling Services at major airports

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ebs European Business School, Supply Management Institute

Bianca Gaida, Fraport AG

Vienna, 25th of November 2005

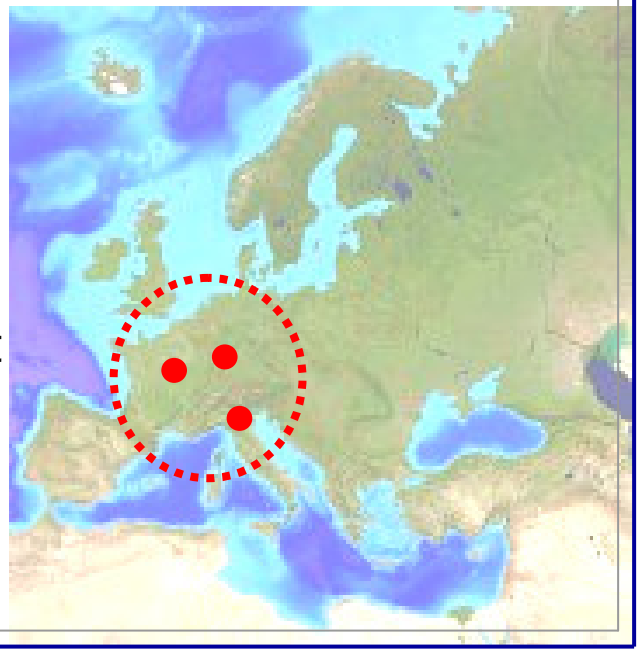
Fraport Ground Services – Leading provider of ground handling services

- Total staff of more than 5,600 employees
- Large customer base: 200 airlines
- 192,000 aircraft handlings in 2002
- Full service provider
- Revenues of € 608 m. in 2004
- Guaranteed minimum connecting time of 45 minutes
- Acknowledged high quality standard
- Growing international business (e.g. Austria, Spain, Portugal)

The largest independent ground handling agent at a single site worldwide

Agenda

- Objectives
- Academic partner: ebs European Business School
- Current benchmark partners
- Project approach
- Motivation to participate in benchmarking project



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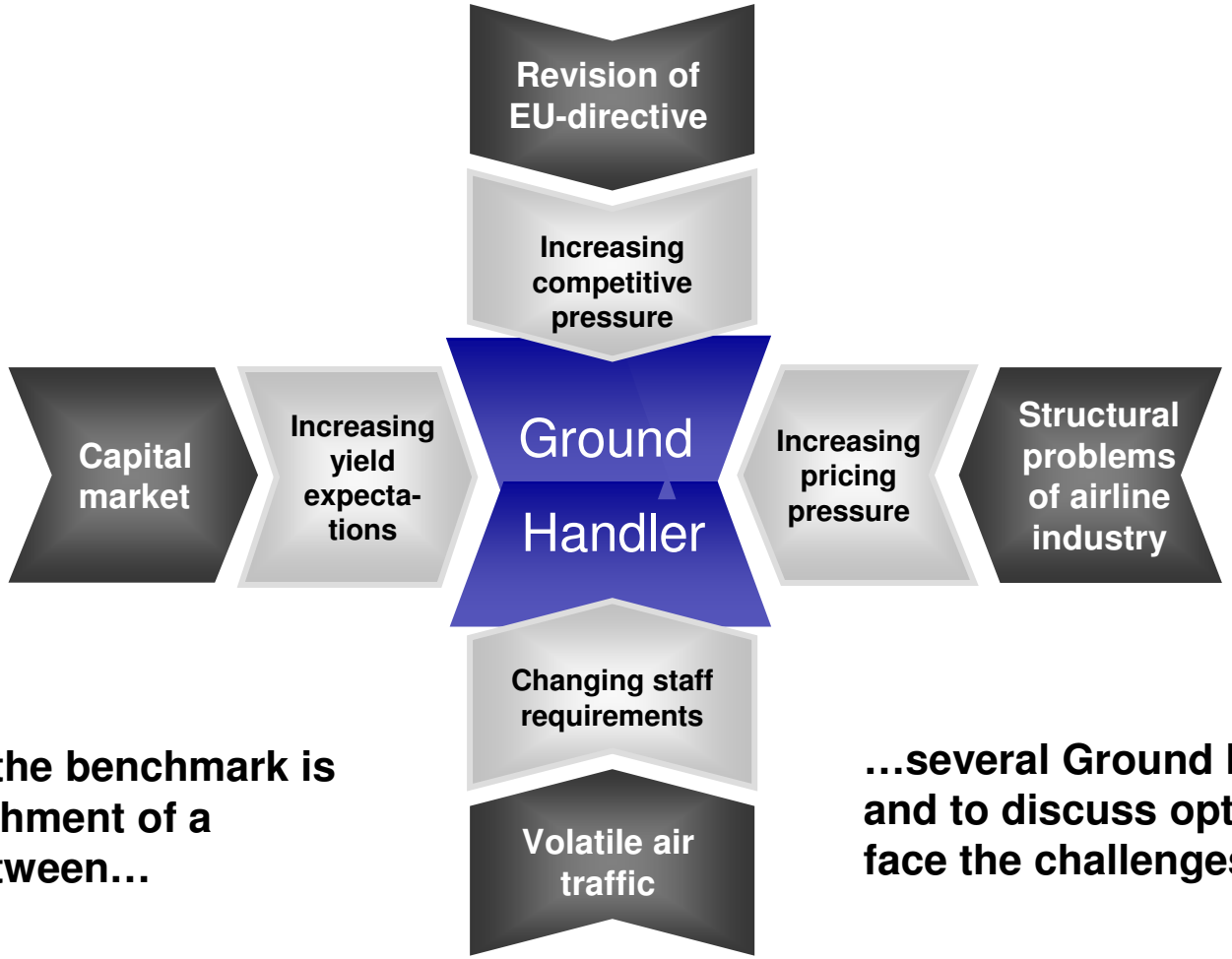
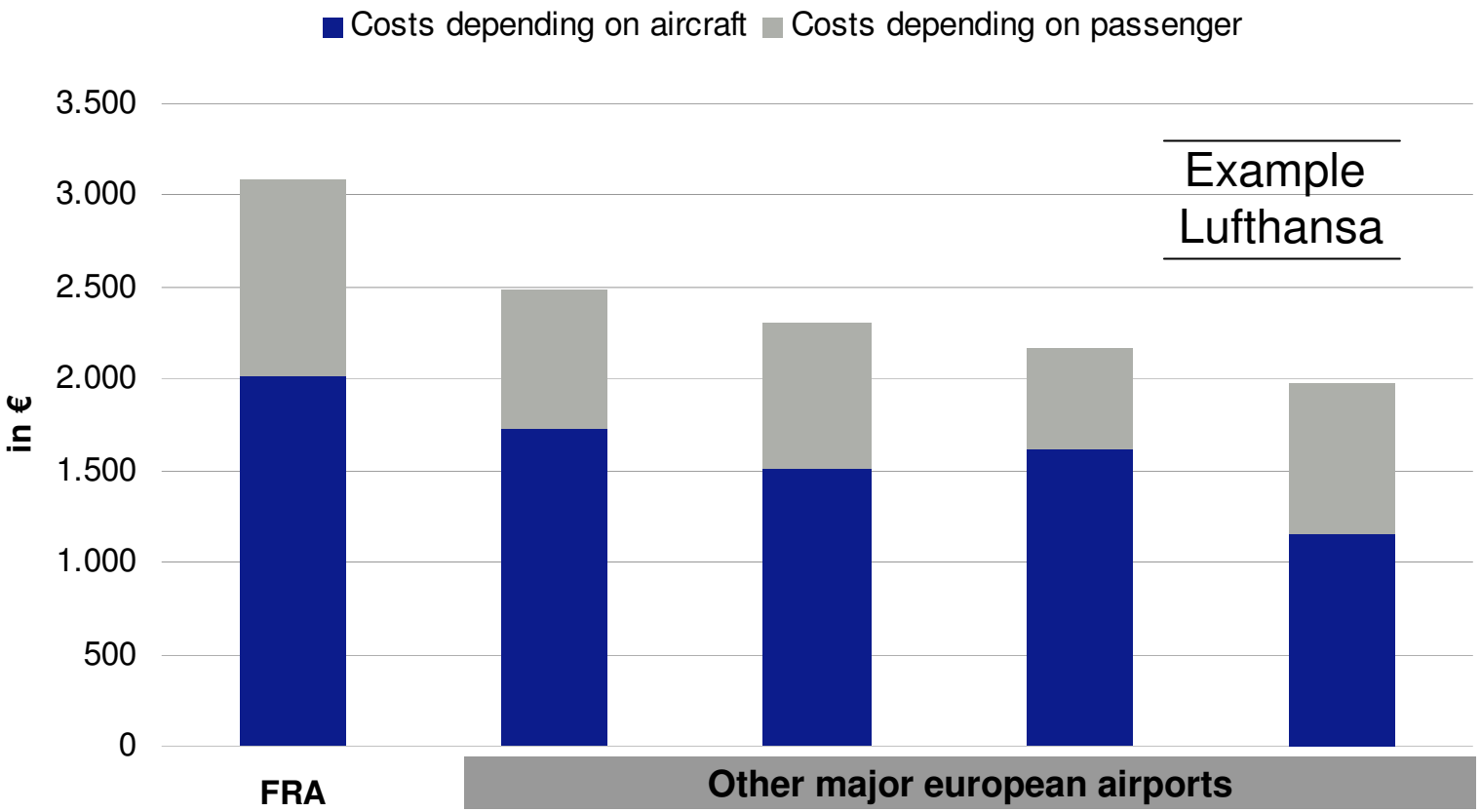
Besides the pressure through airlines, Ground Handlers have to cope with further challenges



…target of the benchmark is the establishment of a network between…

…several Ground Handlers and to discuss options how to face the challenges in the future

The pricing pressure of major airlines was one reason to initiate the benchmarking project



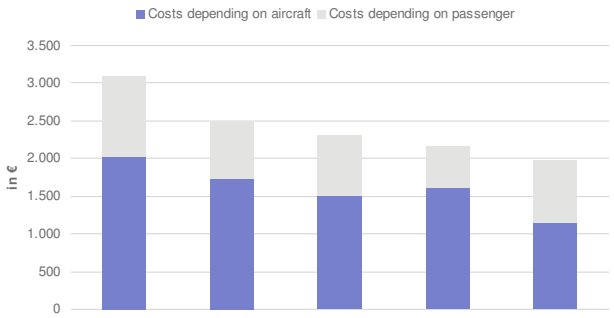
* Source: LH internal Benchmark with predefined fleetmix and premises for particular route-mix, SLF, arrival and departure times, terminal position etc.

First we focus on a resource based approach, which can be extended into a cost based benchmark

Step 1:
Resource/process based benchmark

Step 2:
Cost based benchmark – depending on cooperation/results of step 1

Confidence building with benchmark partners



?

time

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Four objectives have been identified for the resource/process based benchmarking project

Objectives

- **Preparation of a comparative resources framework of ground handling services for the selected airports**
- **Illustration of the specific core processes and their resources drivers for the selected airports**
- **Identification the differences regarding resources structure and processes between the airports being compared**
- **Assessment of best practices in selected key ground handling processes**

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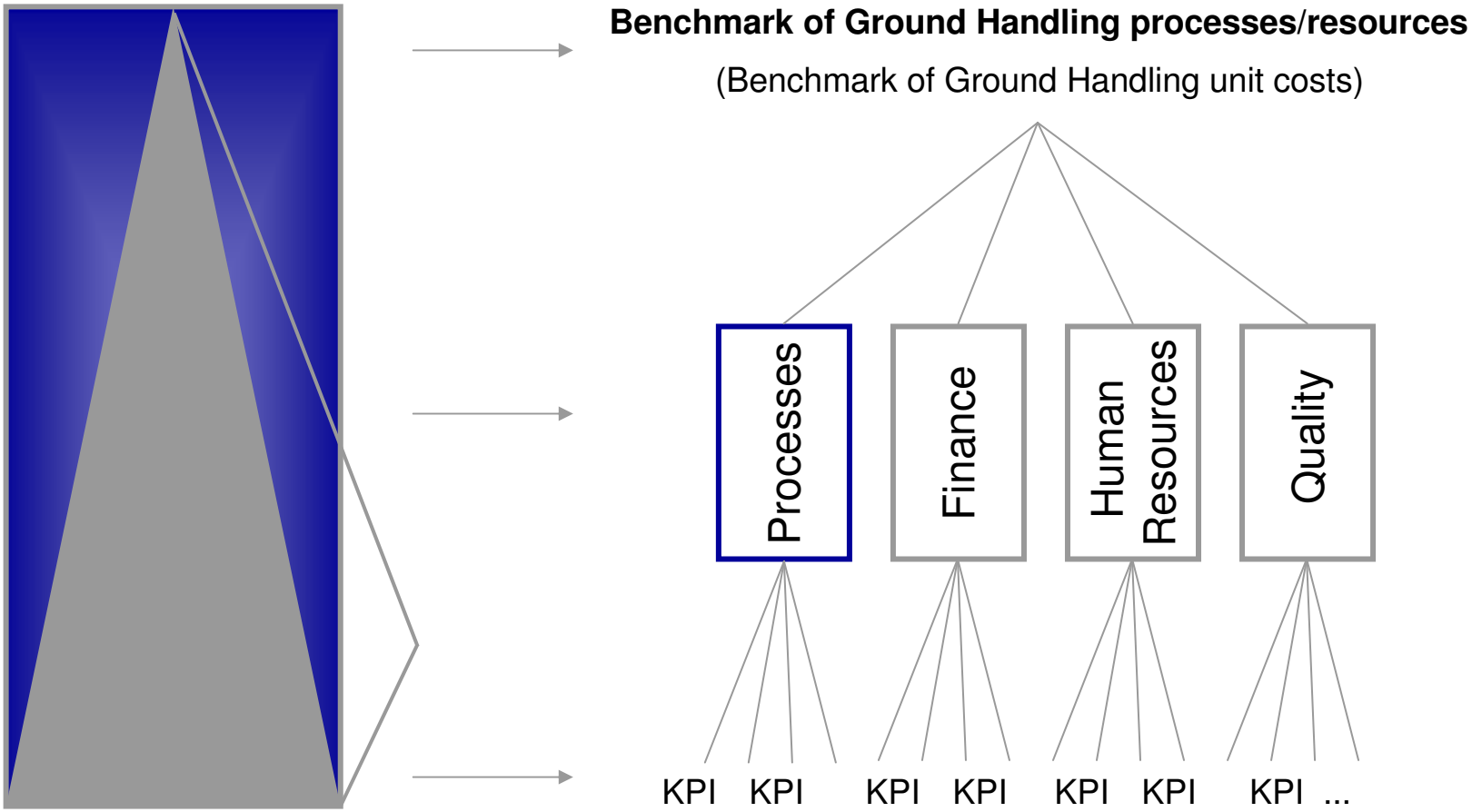
To reach the main project target, all necessary data is collected in successive levels



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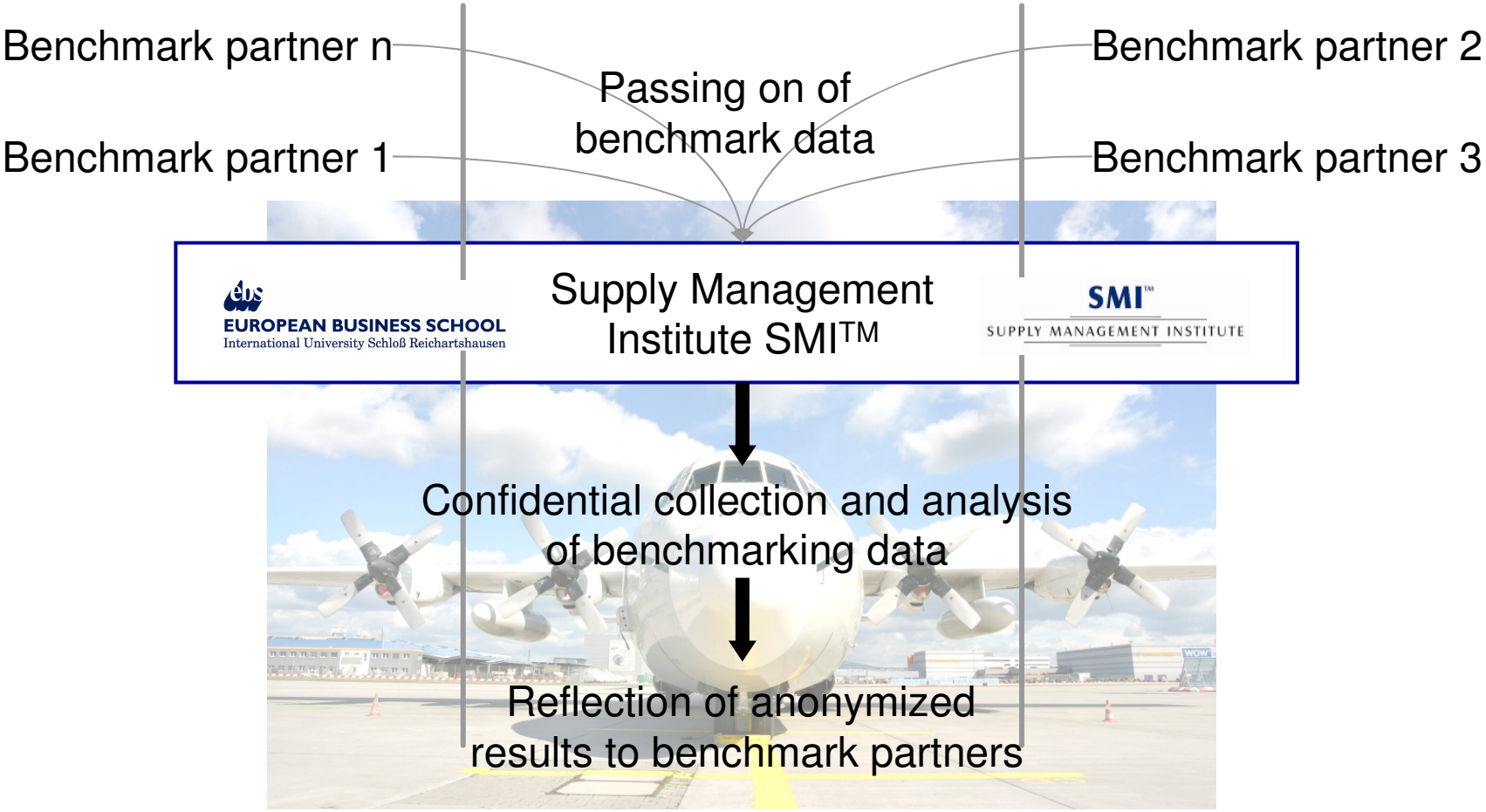
To ensure confidentiality for all benchmark partners, the interposition of an academic partner was indispensable



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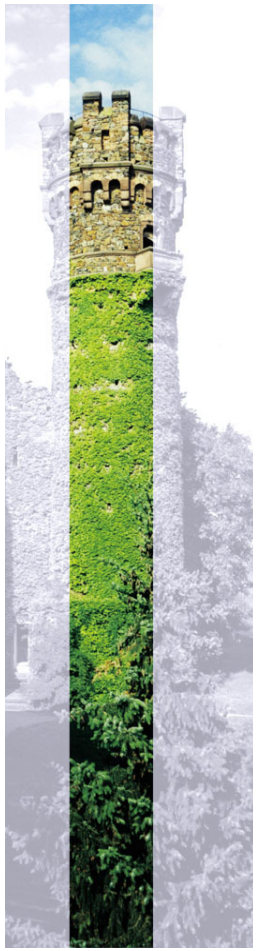
The Supply Management Institute SMI™ at the ebs European Business School

- **The ebs European Business School as one of the top 3 business schools in Germany follows a general management approach in cooperation with universities worldwide**
- **The SMI is to be the no. 1 in Europe in research, primary university education and professional management training in the areas of purchasing and supply management**
- **In logistics and supply chain management the SMI is positioned among the top 5 universities in Europe**



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The Supply Management Institute SMI™ combines education, research and training in close collaboration with the industry

Research

- Cooperation with 8 of 30 DAX companies
  - Competence Centers (specific topics for different companies)
  - Focus Groups
  - Case Study Center
  - Specific Studies
  - Publications

Education

- Integrated lecture program with an emphasis on Purchasing, Supply Management, Logistics und SCM
- International cooperation and exchange programs
- Bachelor and master program, doctoral studies

Training

- Executive Master in Purchasing & Supply Management
- Certified Purchasing or Logistics Master (ebs)
- Intensive training programs purchasing & logistics
- In-house-Seminars (with certificate)

International Knowledge Transfer

- Executive Roundtables
- Knowledge platform: www.supplylab.com
- Newsletter/Book series

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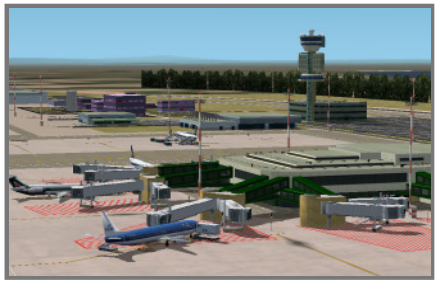
The project started with three benchmark partners – the search for additional participants is ongoing

Frankfurt Airport

- Benchmarking Partner: **Fraport**
- **Third Party Handler** for: Ramp Services, Passenger Services, Cargo&Mail Services

Paris Airport - CDG

- Benchmarking Partner: **Alyzia**
- **Third Party Handler** for: Ramp,-Passenger-Services and Baggage Handling



Milan Malpensa Airport

- Benchmarking Partner: **SEA Handling**
- **Third Party Handler** for: Ramp-, Passenger Services, Cargo&Mail

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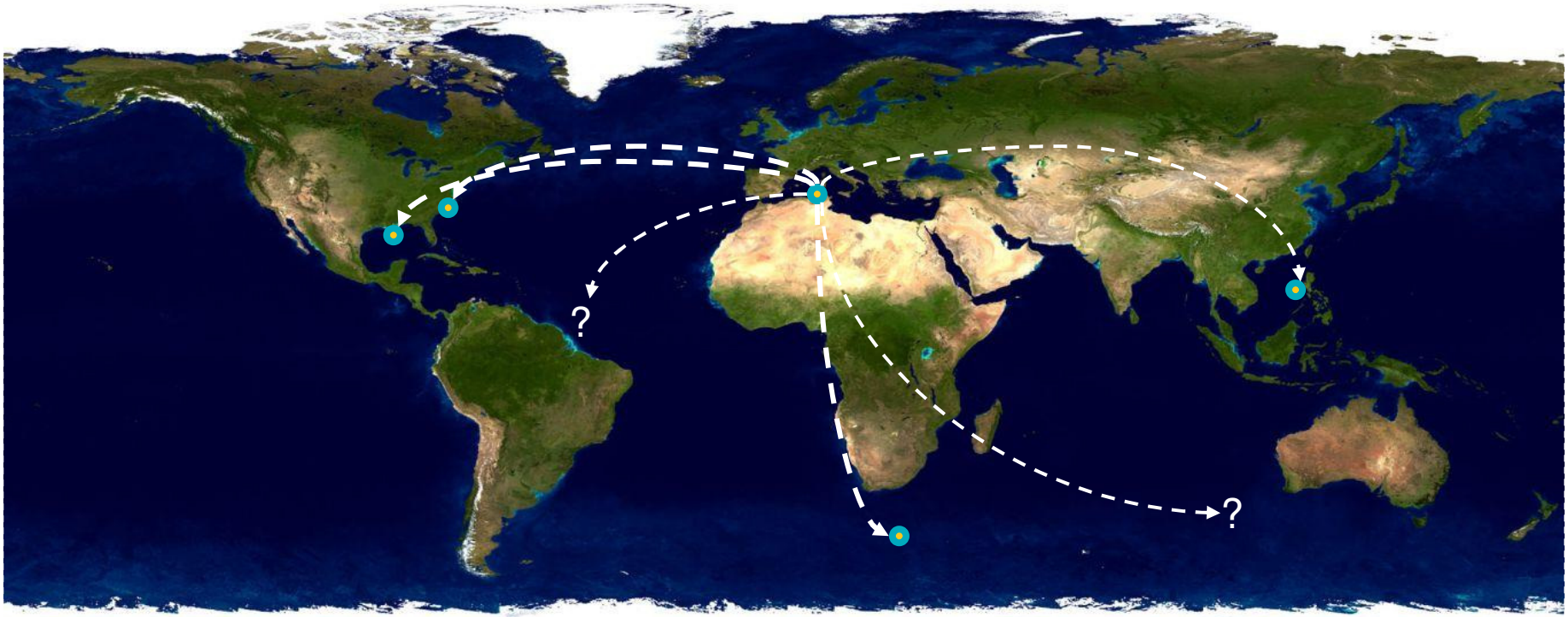
The search for further benchmark partners is not restricted to the EU – potential partners have been contacted worldwide



Further benchmark partners will be contacted

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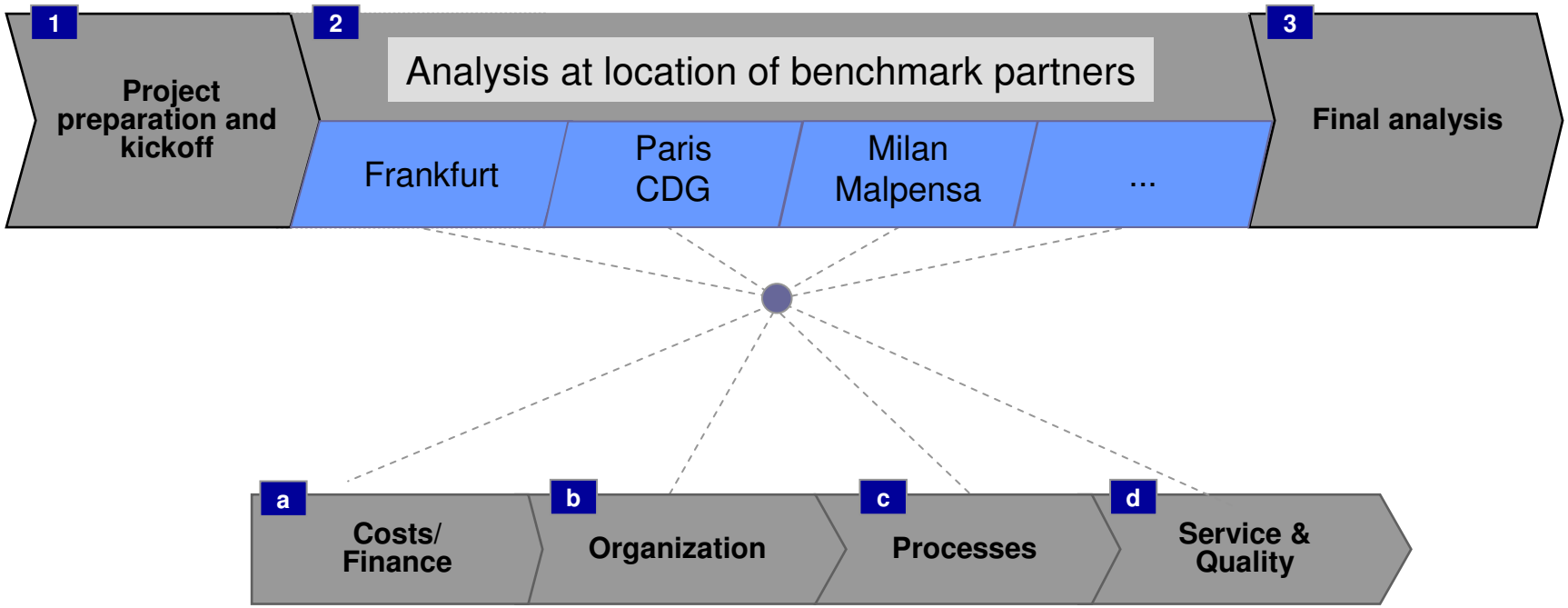
The benchmarking study consists of three modules – the analysis is subdivided into four working packages



1

To reduce the complexity, five representative aircrafts are compared – based on different premises

747-400

A 320

*Container/ULD

737-300

767-300

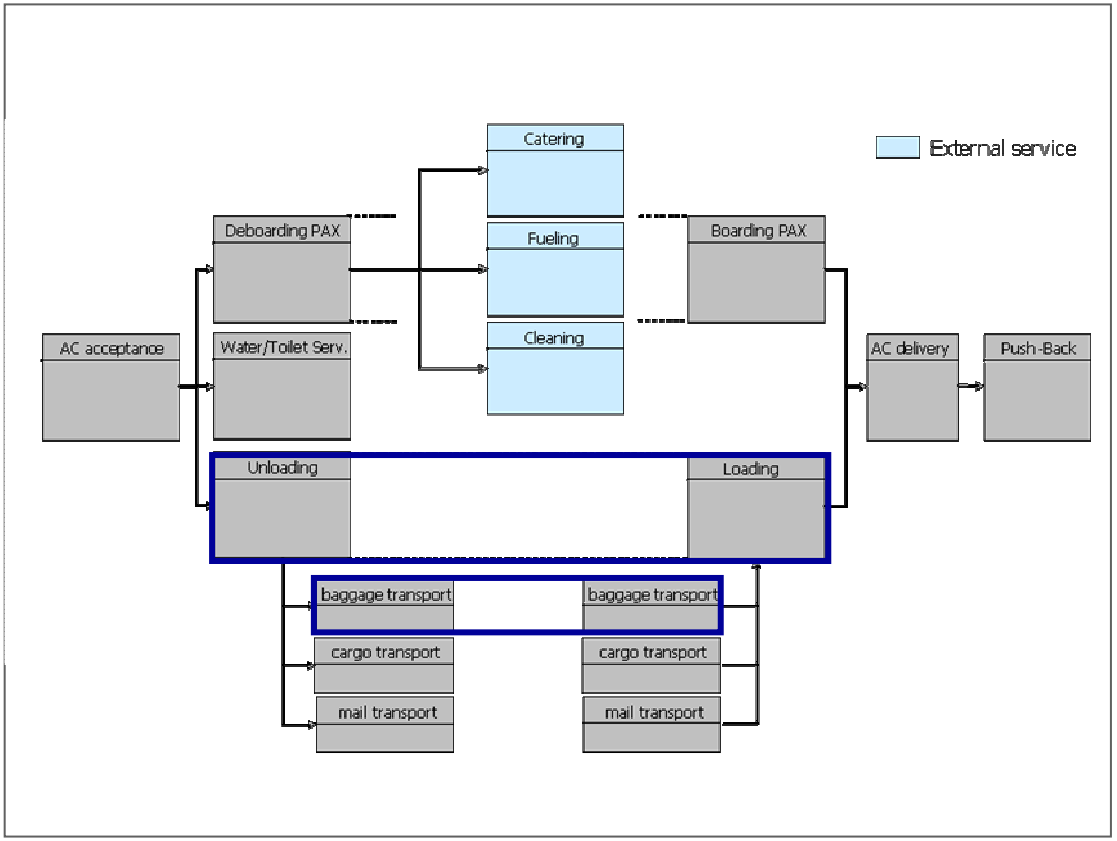
CRJ 100

We mainly focus on Ground Handling Services, which are offered to the Home Carrier of each benchmarking partners hub.

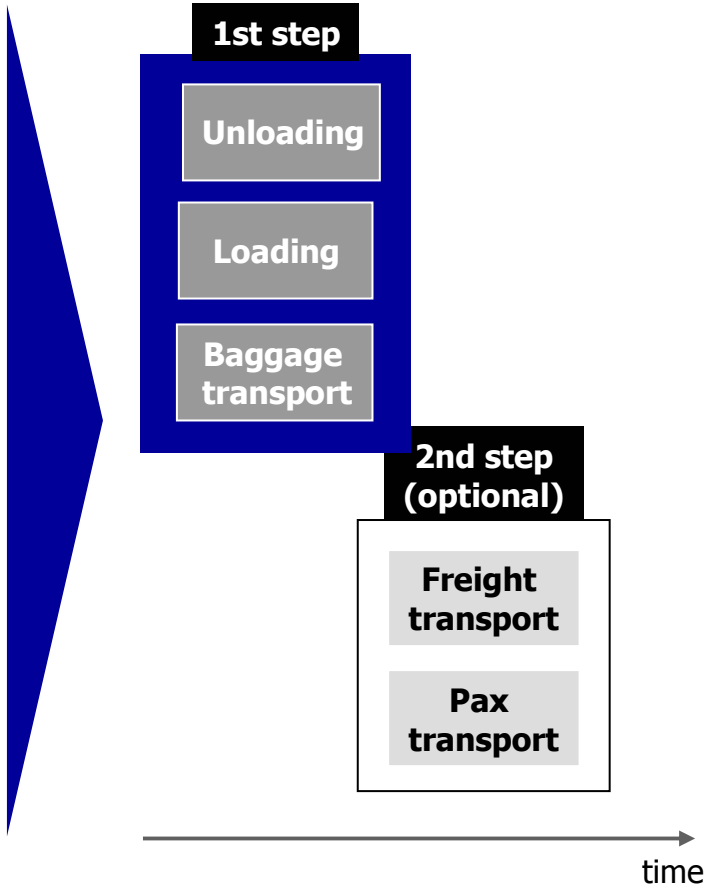
*ULD: Unit Load Device

1

Three core processes were selected as a first step, further processes can be added at any time



Portfolio of Ramp Services in Frankfurt



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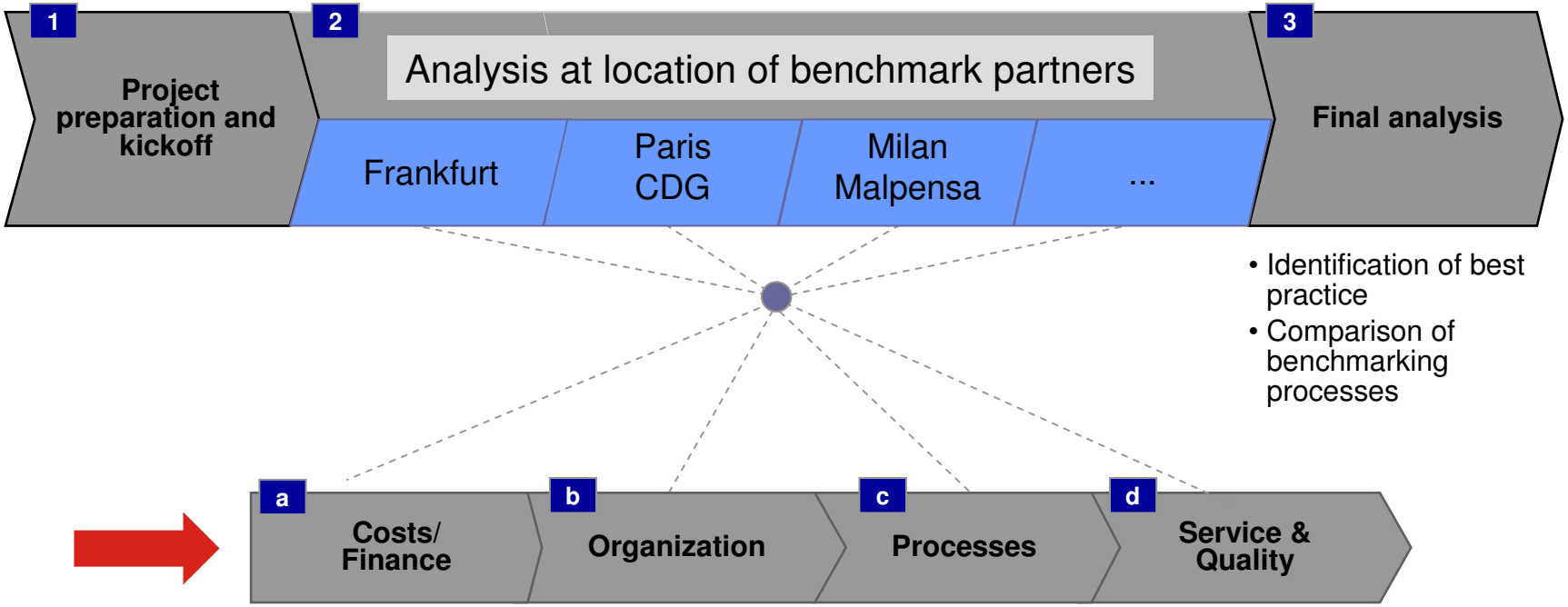
For each working package, a workshop with all benchmark partners was held to define details of each topic



- Identification of best practice
- Comparison of benchmarking processes

- Finance: Transparency of existing cost centers

- Organization: Overview of organization and personnel assignment

- Illustration and comparison of representative core processes
- Resource comparison for selected processes

- Understanding / overview of offered services and quality to customers

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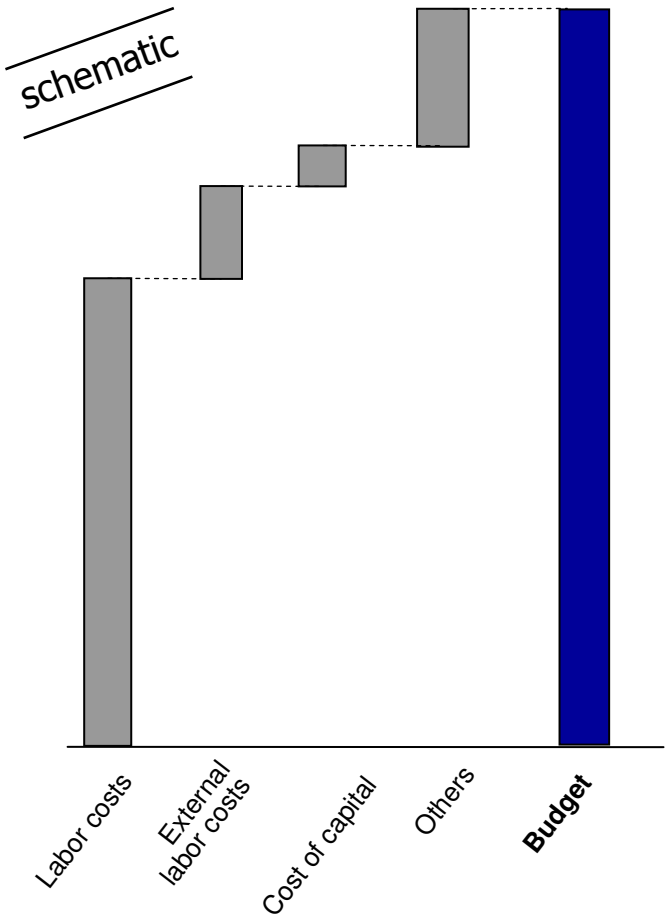
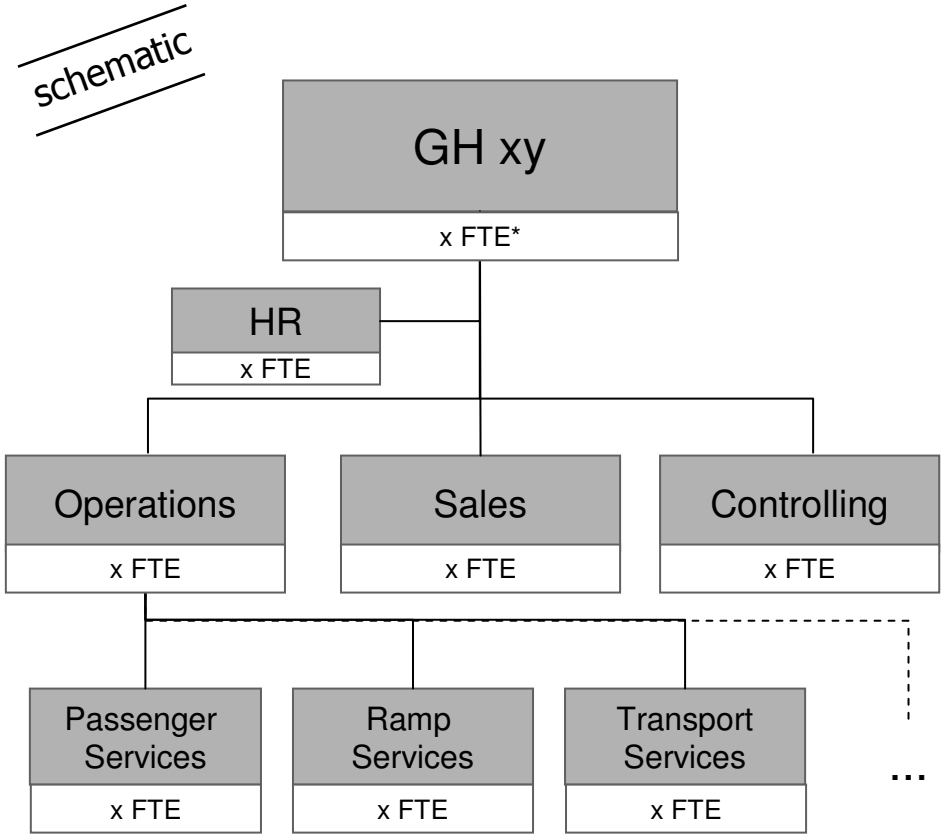
2 a
2 b

Information about each benchmark partners cost drivers and organizational structure build the basis of the project

Cost drivers
- in % -



Organizational structure



*FTE=Full Time Equivalent

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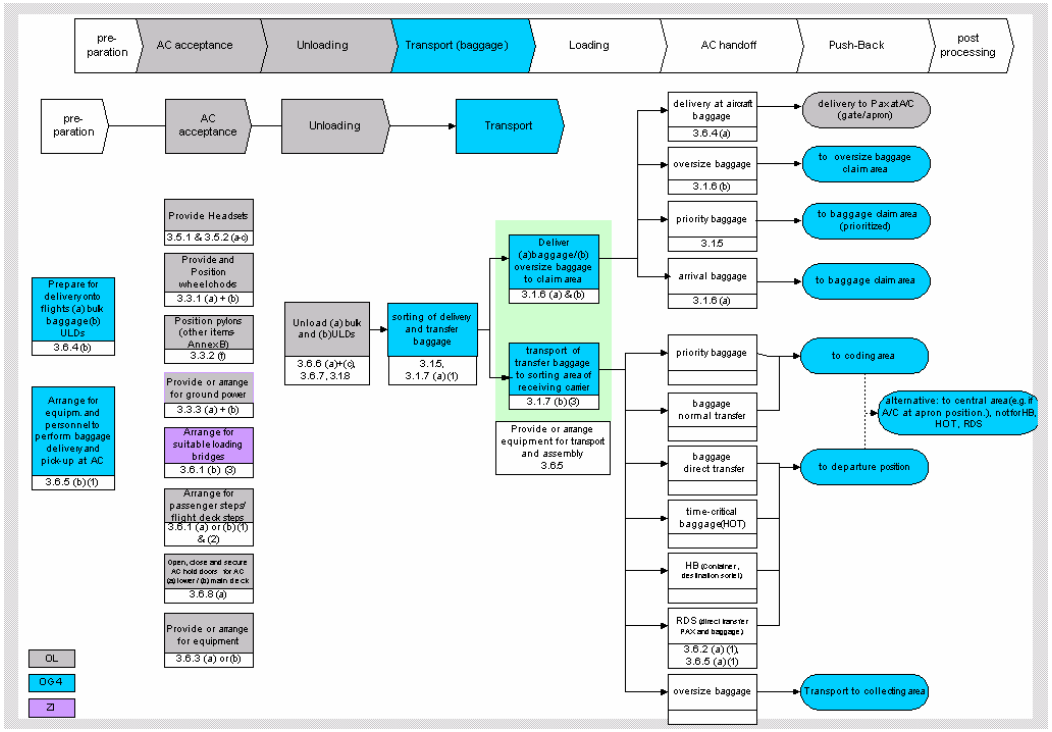
2 c

The core processes of all benchmark partners were analyzed in detail and linked to IATA AHM 810

Detailed analysis of the processes



link to IATA
AHM 810

2 d

Quality factors with impact on a ground handling turn-around are determined and examined

- Minimum Connecting Time
- Percentage rate of misrouted baggage
- Minimum Ground Time
- Delays (IATA delay code)
- Punctuality of Ground Services
- ϕ-loading of aircraft type (baggage, cargo, mail etc.)
- ...

Variables to evaluate the processes and the need of resources

2

In a last workshop, all gathered KPIs of the single workshops will be discussed and coherences will be pointed out

Cost Structure Performance Indicators
• Profit contribution to total revenues • Total revenues to target costs • Total revenues to MTOW • EBITDA margin • EBIT margin • Personnel expense rate • Personnel expense intensity

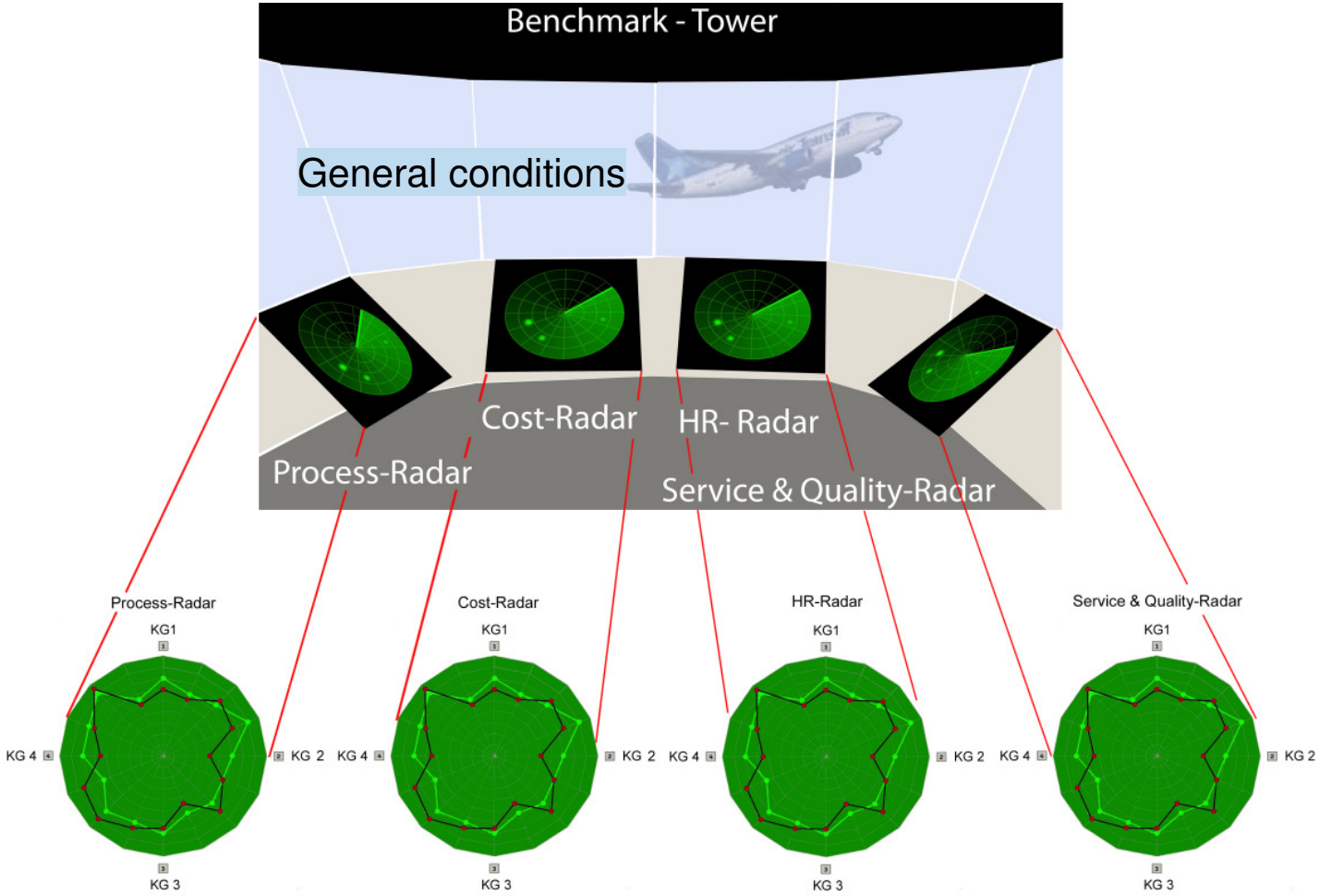
Organizational Structure Performance Indicators
• "Gross Demand Multiplier" • Rate of external/ internal staff • Available working hours • Absences (vacation, sickness, training,… rate) • Output productivity • Average labor costs

Process Performance Indicators
• Set-up/ tear-down-time for un-/ loading • Set-up/ tear-down-time for baggage transport (apron) • Man minutes per AC (un-/ loading/ baggage trans.) • Machine minutes per AC (un-/ loading/ baggage transport apron) • Different resource drivers (for un-/ loading/ baggage transport apron)

Service & Quality Performance Indicators
• Left behind index LBI (in general and for airline) • Misconnected Bags • Delays due to baggage processing • Delays due to Un-/ Loading • Delays due to service equipment • Delays due to damages at aircraft • Minimum connecting time

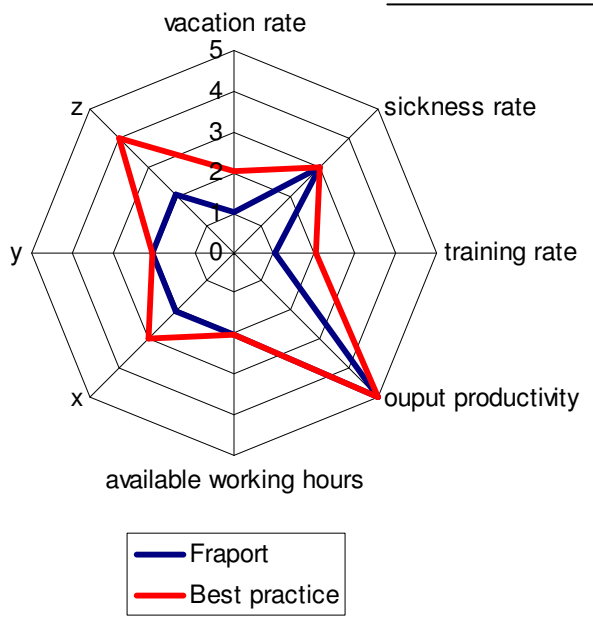
3

The KPI's of all benchmark partners will be compared in four clusters in a benchmark tower



Deviations from one benchmark partner to another will be identified and later on discussed with experts

Schematic example



Identification of improvement potentials

- Identify each benchmark partners' position to other benchmark partners.
- Develop a strength and weakness analysis based on best practice comparison.
- Derive reasons for detected gaps.
- Expert discussions

Action plan workshop to discuss first improvement needs

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Benefits of the project for benchmarking partners

- The vision is to become a member of the first worldwide benchmark database for Ground Handling Services
- The benchmarking study creates transparency and thus promotes a better understanding of benchmark partner's processes and structures; areas of improvement can be identified
- Each benchmark partner will have the opportunity to find out his position compared to best practice in the current competitive environment
- The participants are part of a benchmarking platform, which delivers the opportunity of a worldwide knowledge network and exchange within this community

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If you are interested in joining the project, please feel free to contact the SMI™ or Fraport

ebs European Business School

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