Lufthansa

Private Airport Financing - the Munich example

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Recent Advances in Applied Infrastructure Research

TU Berlin

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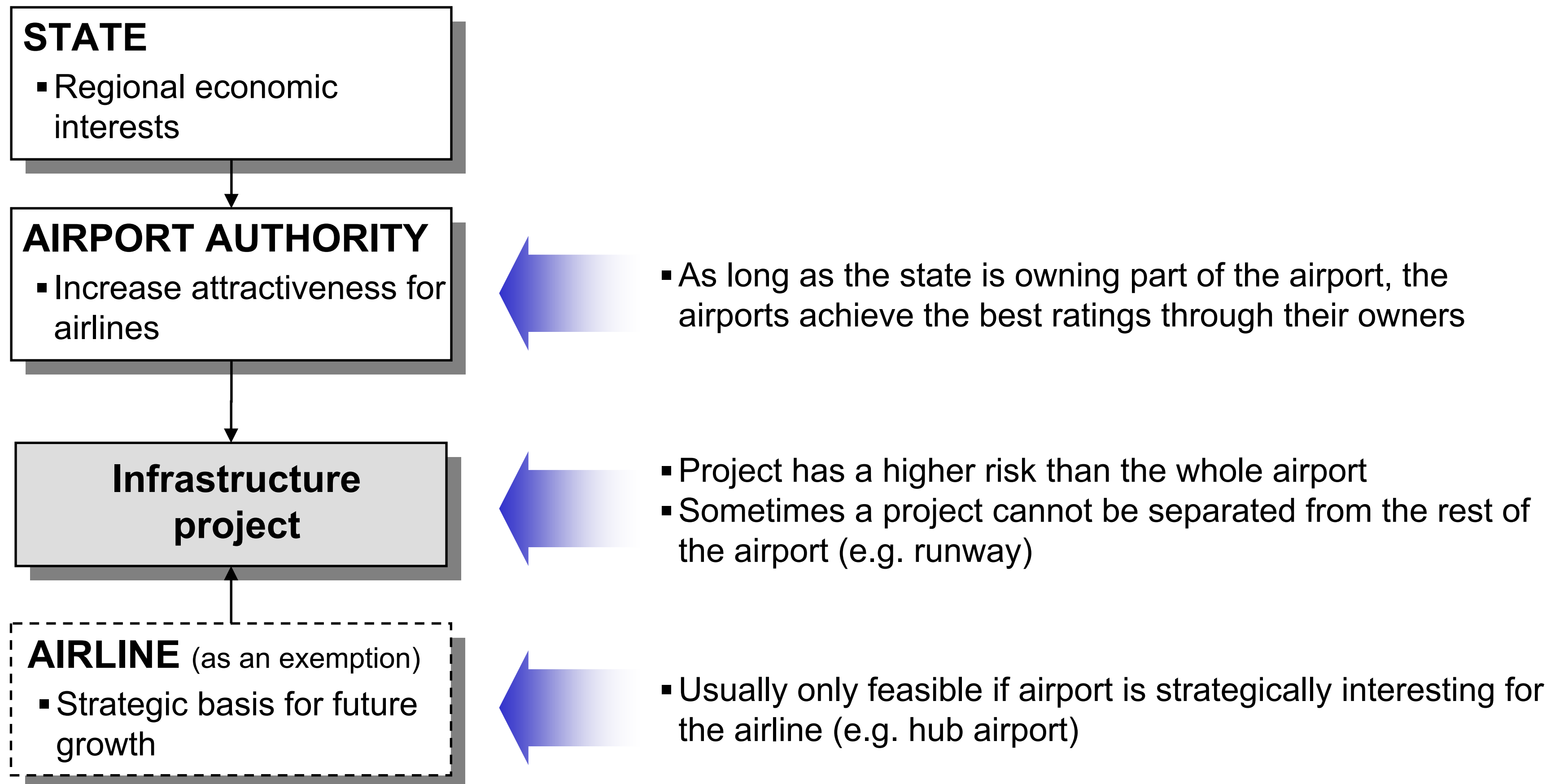
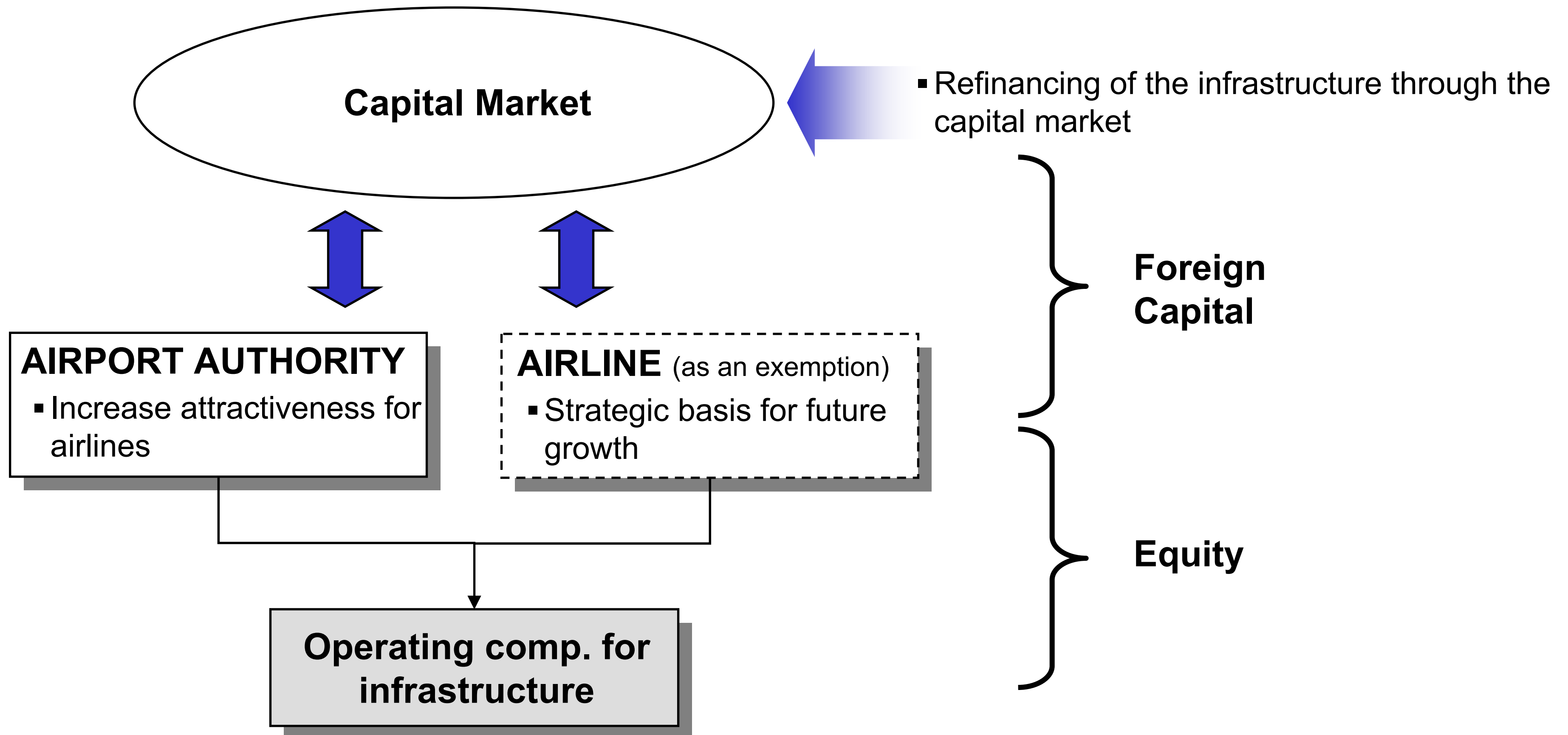
Since most airports are still state owned, the project should be financed through the airport owners



In order to run the facility, separate operating companies are being founded



There are several possibilities to ease access to foreign capital for infrastructure projects

Special credit facilities

- Long term (ca. 30 years)
- Supportive Intention (e.g. through subsidized low interest credits)

- KfW - Kreditanstalt für Wiederaufbau
- Asia Investment Bank
- Weltbank
- Europ. Investment Bank
- Europ. Bank for Recovery and Development
- etc.

Banks

- Classical long term financing (ca. 30 years)

- Landesbanken
  - WestLB
  - BayLaBa
  - etc.
- IKB Industrie Kredit Bank
- etc.

Special Instruments

- Tax Exempt Special Facility Revenue Bonds

Similar Instruments
- Qualified Technological Equipment Lease (Flight Simulators etc.)
- Japanese Operating Lease (Aircraft etc.)

If airlines are involved in the project, airports significantly lower their risk

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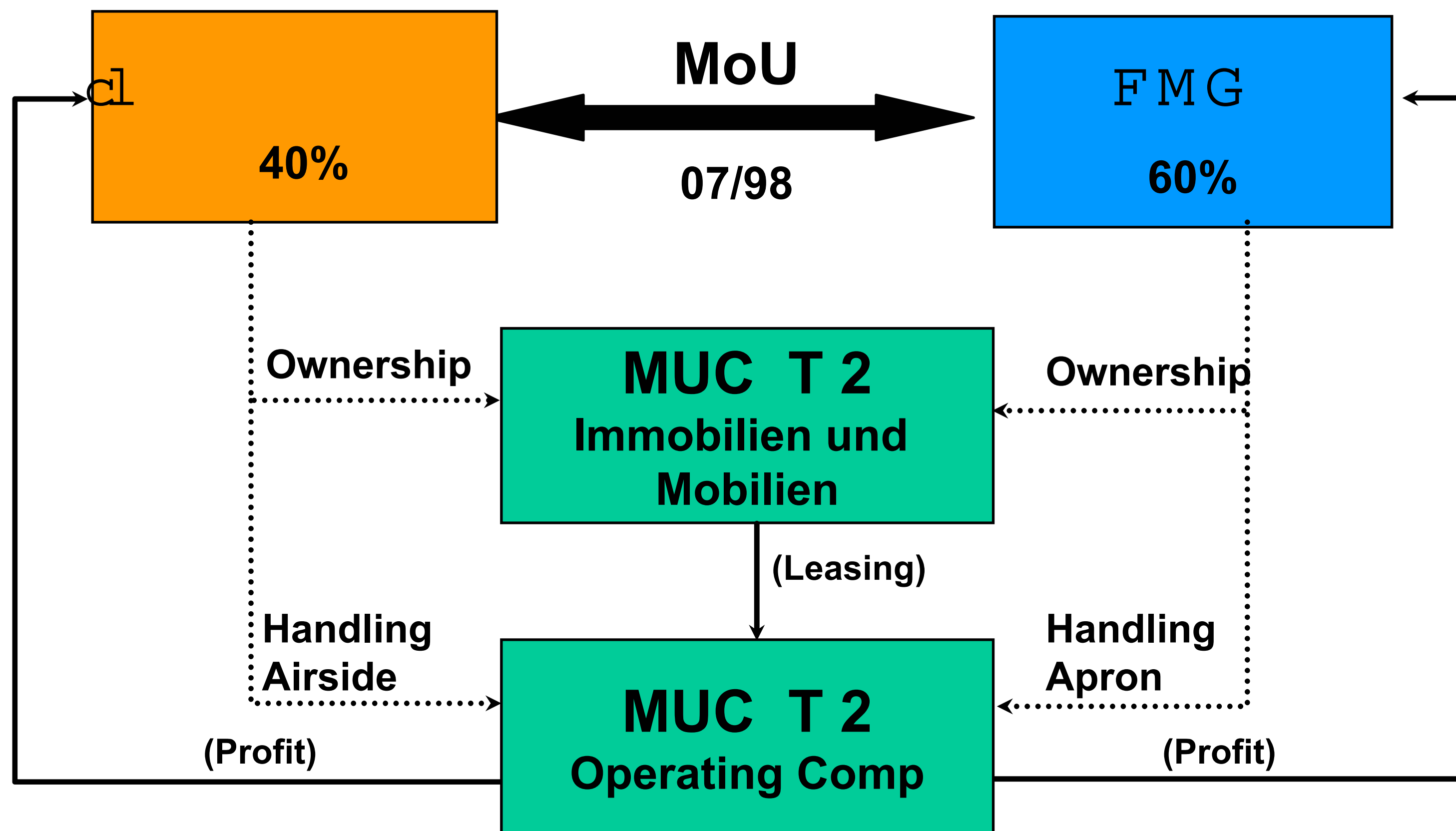
Facts (I)

Investors	Joint Venture FMG / DLH
Investment	1,2 bn €
Start of constr.	Apron/Tunnel: October 1999 Terminal: March 2000
Opening	29. June 2003
Capacity	25 Mio. Passengers p.a.

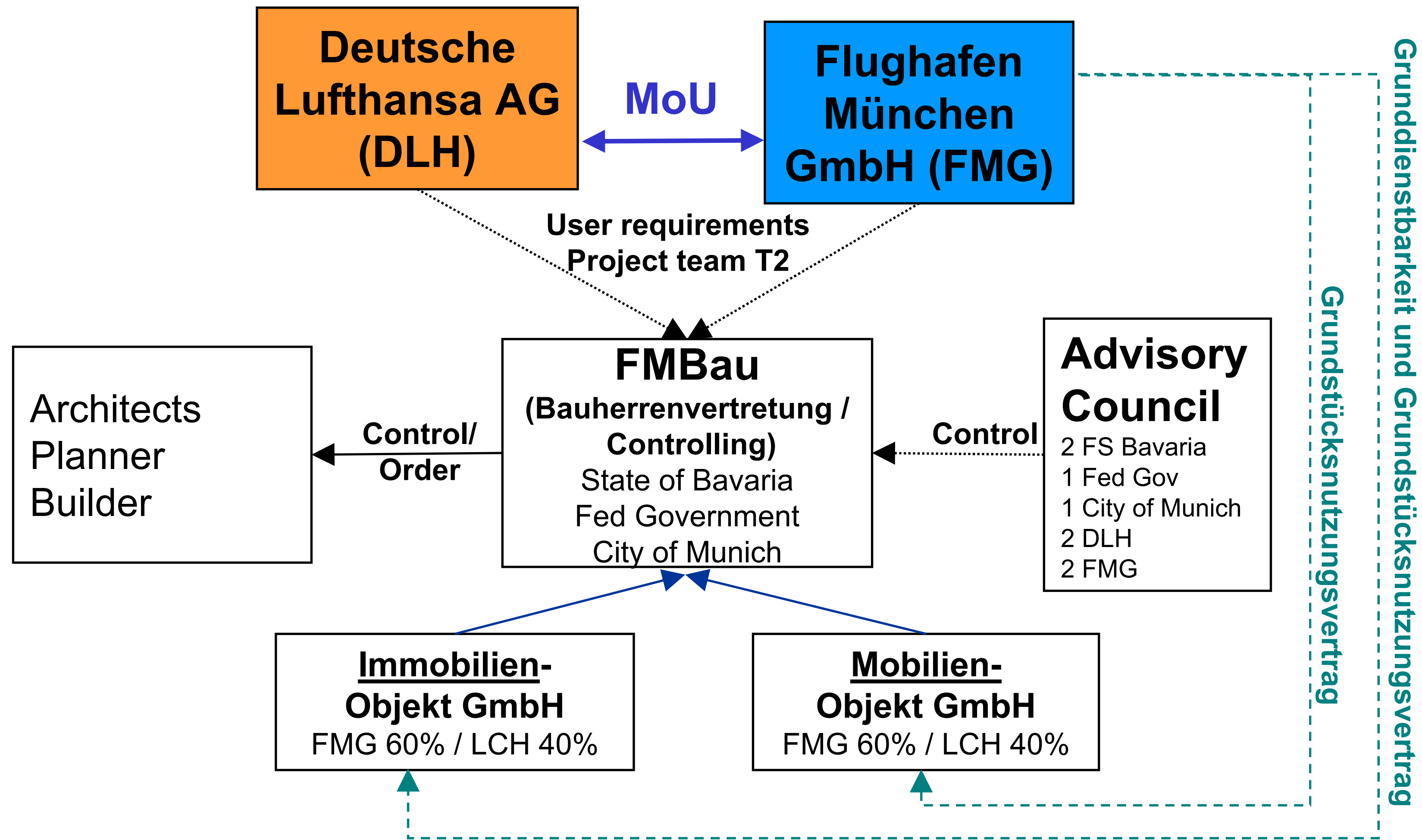
Facts (II)

- MoU	between DLH and FMG (15. July 1998)
- Goal	Joint Planning,Operating and Financing of the new terminal
- Shares	FMG 60% ; DLH 40%
- Invest	
- Terminal	ca. 950 mill € (DLH-share ca. 380 mill €)
- Apron /Parking Roads	ca. 250 mill € (100 % FMG)

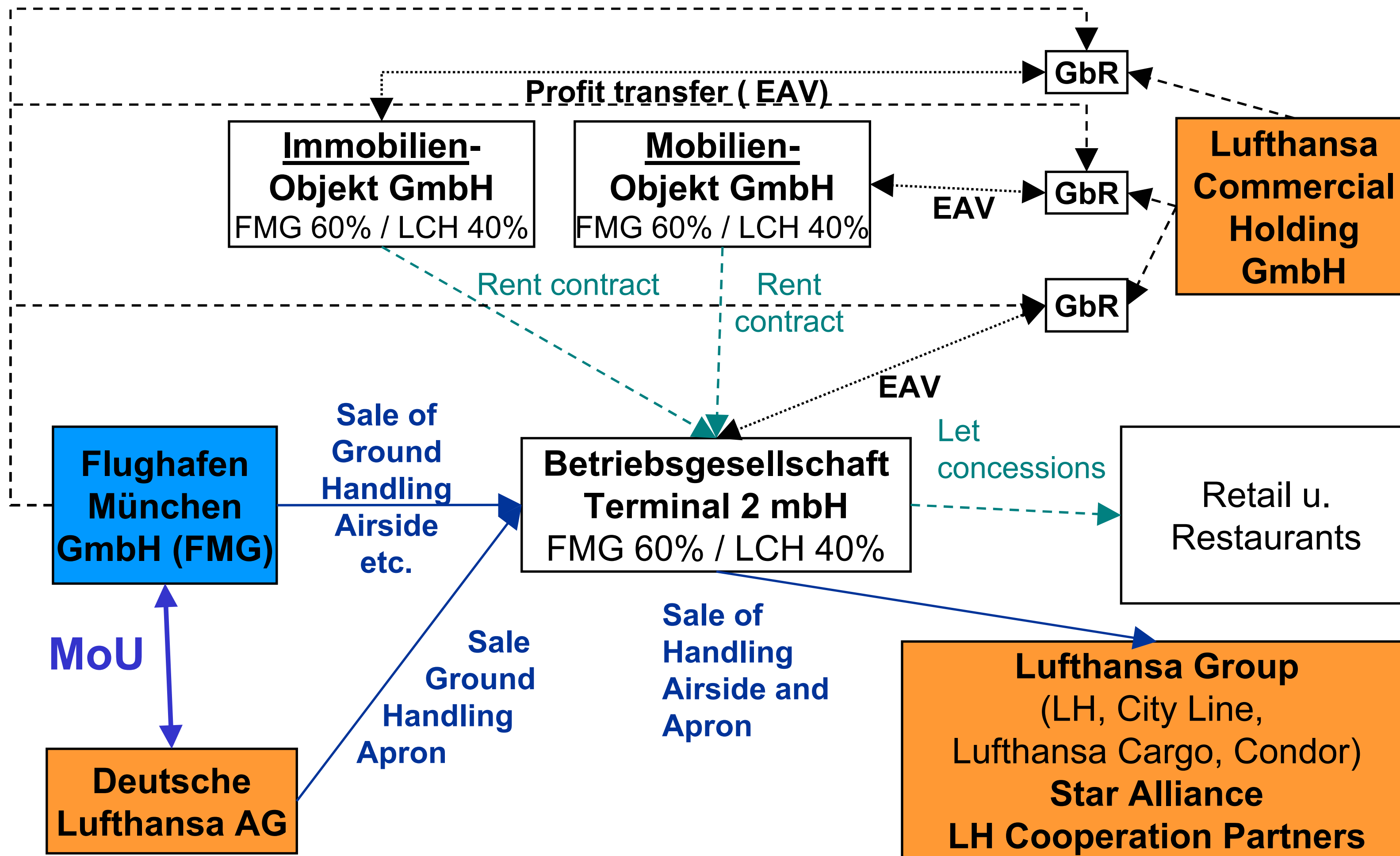
Joint Planning, Financing and Operation



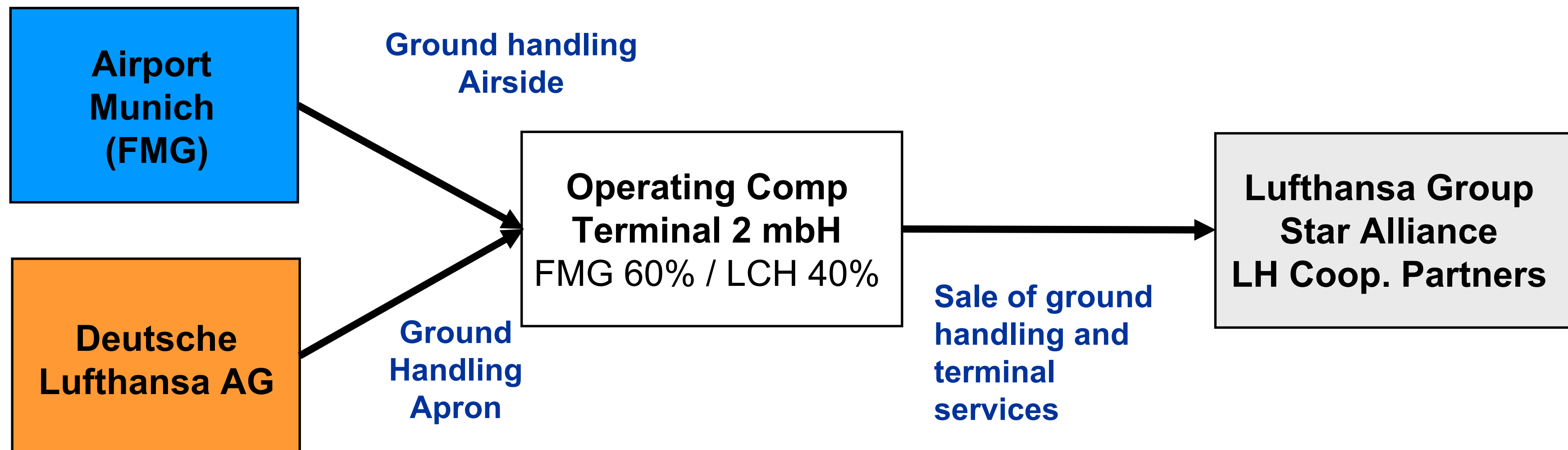
The cooperation started already in the planning phase...



… and will be continued in the operating phase



The operating company buys mostly from DLH and FMG

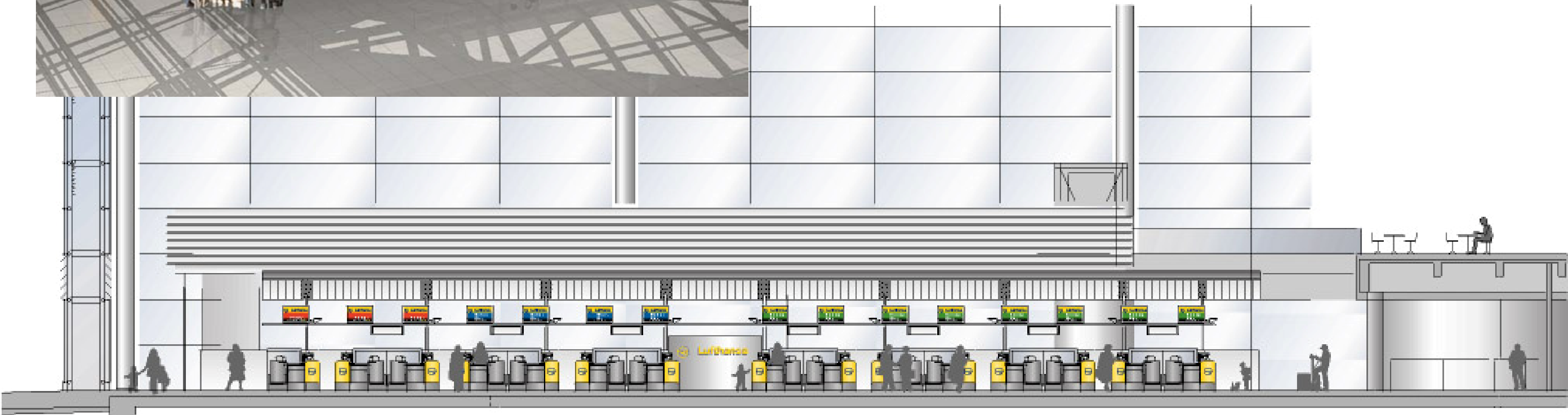


- Managing Directors delegated from DLH and FMG
- Purchasing on market based conditions
- Services are being offered to all airlines operating from T 2

This concept has a couple of advantages

- **Financing and Tax advantages**
  - Leasing saves Taxes (Gewerbesteuer)
  - Fast depreciation possible
- **Public partners are involved in the construction company**
  - State can assume the task of infrastructure provision
  - Securing political support
- **Fast start of construction**
  - The detailed concept for the operating company was hammered out after starting the construction
  - Joint planning team ensures that user requirements are being met

Munich Terminal 2



Key factors for success

- **Optimal Layout saves 20% of operating costs:**
  - Single Control Center
  - Single Customer Information
  - Single Array of back offices, canteens etc.

- **Optimal operating processes (e.g. bridges operated by gate staff)**

- **Advantages for the customer:**
  - Central Check-in, Security, Immigration
  - Central and easy accessible Lounge
  - Lean Boarding Gates
  - Transfer center
  - Short distances through linear 3 Level concept

Lessons learnt

- Possible conflict between private engagement and public interests
- Possible conflict between efficiency and regional aims for representative buildings
- Airports are still a local monopoly - innovative fee models to be developed
- Lessons to be carried over to possible partnerships with Air Traffic Services Providers

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The Tax Exempt Special Facility Revenue Bond is the preferred way to finance infrastructure in the US

The US Tax Law makes zero interest credits for infrastructure financing possible

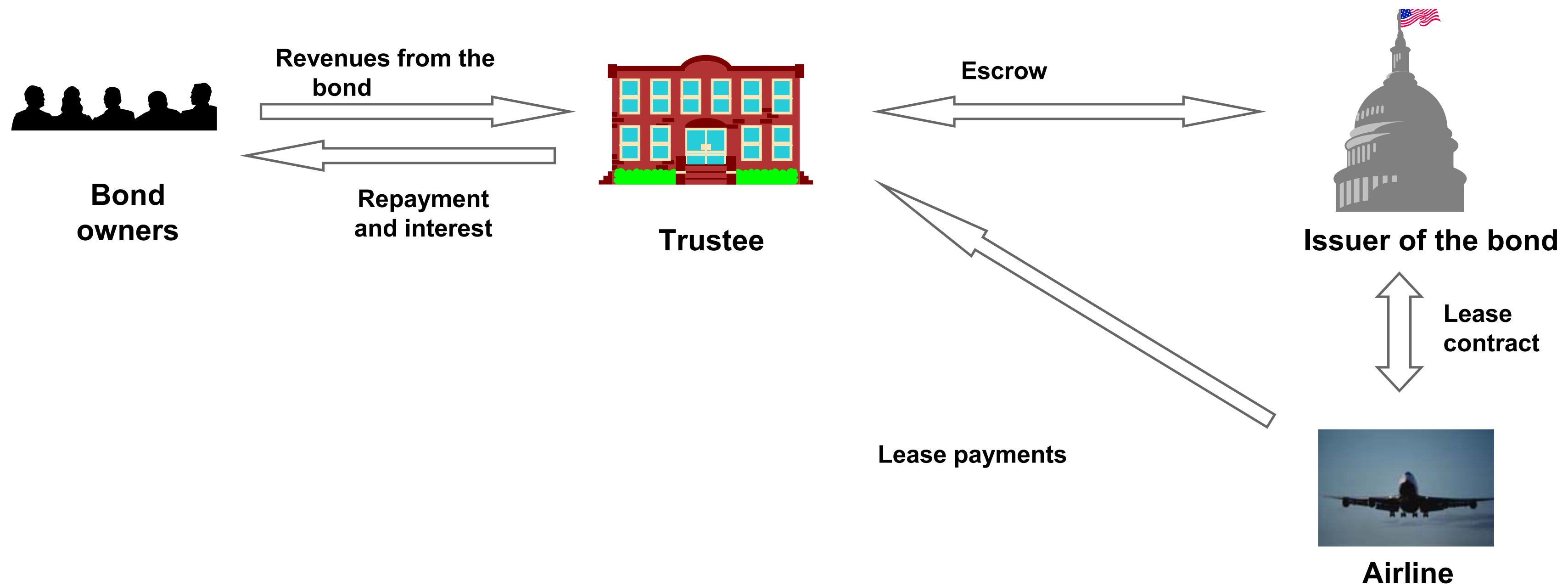
- Terminals
- Cargo Facilities
- Catering Facilities
- MRO Facilities
- Training Center
- Fuelling Facilities

So Airlines can get the lowest capital cost in the US industry

- Long Term ca. 80% to 90% of the corresponding Treasury Bond
- Short Term ca. 65% to 85% of 30 days LIBOR

Structure of a Special Facility Revenue Bond

- The zero interest bonds are issued by a government agency on behalf of the airline
- Repayment of the bond is done entirely through the airline with no government obligation
- The bond is secured through lease arrangements of the airline



Case Study: Terminal One in New York

- Beginning of the 90ies Lufthansa, Air France, Korean Air and Japan Airlines agreed to build Terminal One in New York
- So the four Airlines founded the Terminal One Group Authority, L.P. Project where each Airline holds 25%
- The financing of the mill $450 was achieved through the issue of a mill. $ 434 Special Facility Revenue Bond.

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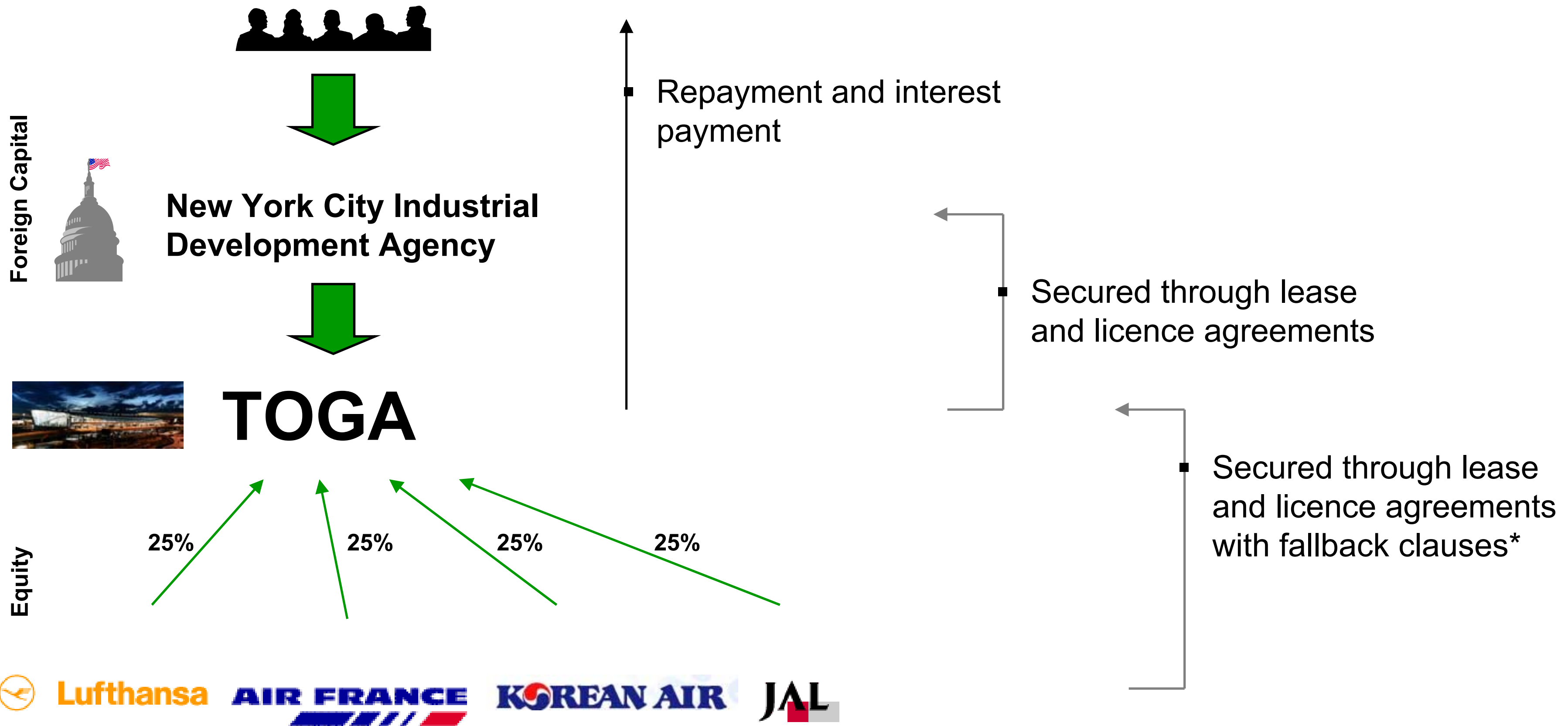

*Should one carrier quit, the other would have to step in