Contents

1. Intermodal Strategy

2. Intermodal Products and Services

3. Market Effects

4. Carbon Emission
1. Intermodal Strategy

Central Location

Intermodality at Frankfurt Airport, Dr. Peter Pfragner, 2013
1. FRA’s Strategic Position
- The Rail Net: Good Connectivity into all Directions
1. Intermodal Strategy

Strategic Objectives of Intermodality

High Speed Traffic (Long distance trains):
1. Strengthen FRA’s hub function:
   – by developing German Rail as a feeder to FRA
2. Compete (hub-) airports and airline alliances
   – by enhancing FRA’s catchment area
3. Enlarge slot capacity
   – by shifting feeder flights to train

Long distance and regional trains/busses:
4. Develop best practice and reliable services
   – by ensuring accessibility to FRA & by developing intermodal services
5. Contribute to environment protection/carbon emission
   – by shifting traffic to public modes
1. FRA‘s Strategic Position - Big Passenger Potential
(dependent on land use patterns, population volumes and rail distances)

Within a radius of 200 km around the airport, FRA has a larger population potential even than other European hubs!

Intermodal Hubs in Europe

<table>
<thead>
<tr>
<th>Population (Mio.)</th>
<th>FRA</th>
<th>LHR</th>
<th>CDG</th>
<th>AMS</th>
<th>MUC</th>
</tr>
</thead>
<tbody>
<tr>
<td>40</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>35</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Catchment Area (2h / 200km)

Source: Area Observation of the BBR

Intermodality at Frankfurt Airport, Dr. Peter Pfragner, 2013
2. Intermodal Products and Services

History of Product and Service Development at FRA

1st Phase: Commuter & long distance trains
- 1972: Regional train station
- 1985: Long distance intercity trains
- 1982-1993: LH Airport Express

2nd Phase: High speed trains
- 1999: High speed train station
- 2003: High Speed Line Cologne-Rhine-Main
- 2004: New train schedule of German Rail

Intermodal Services
- 2000/2007: FRA’s AIRail Terminal

Sales (German Rail)
- since 1992: DB’s Rail&Fly - Ticketing for Airlines
- 2003/…/2007: Code sharing - Agreements
  DB with AA, ANA, CI, QF, TP
2. Intermodal Products and Services
   Overview

   – High Speed Train Station
     174 trains per day in 2012
     5.6 Mio. Pax in 2012

   – Regional train station
     223 commuter trains per day (2012), thereof 40 regional trains
     3.5 Mio. Pax in 2012

   – AIRail Terminal
     • Common Check-in (42 Airlines, handled by LH and by Fraport): MCT 45 min, 11.000 Pax per month
     • AIRail Service: MCT 60 min

Source: Fraport

Intermodality at Frankfurt Airport, Dr. Peter Pfragner, 2013
2. Intermodal Products and Services

THE SQUAIRE: An architectural milestone with far-reaching impact
2. Intermodal Products
THE SQUAIRE – Facts and Figures

Length 660 m
Height 45 m (9 Levels)
Width 65 m
Weight 350,000 tonnes
Total floor area 200,000 m²
Total rental space 143,000 m²

Office space 94,500 m²
Retail & catering trades 5,900 m²
Hotels 34,500 m²
Public Parking Positions 3100
Atria 13,000 m²
Total investment app. One billion euros
2. Intermodal Products
THE SQUAIRE – Range of Services

Overnight stay and relax
Hilton Frankfurt Airport
Hilton Garden Inn
Wellness
Fitness

Service Providers
Doctors
Day-care Centre
Concierge
Barber
Dry-cleaners
Bank house
Business- and
Conference Center
Supermarket
Drugstore
Jeweler
Perfumery

Catering
10 Full-Service
Restaurants
5 Cafés & Take Away
2. Intermodal Products and Services
The AIRail Terminal

- Fraport: Common Check-In
- Lufthansa: Common Check-In, Baggage Drop, Tracking & Tracing
2. Intermodal Products and Services

AIRail Check-in for 42 Airlines:

Lufthansa Passenger Service, check-in for LH and 21 partner airlines:

Air Moldova
China Eastern Airlines
Croatia Airlines
Cyprus Airways
Egypt Air
Kuwait Airways
LOT Polish Airlines
Luxair

MEA Middle East Airlines
SAS Scandinavian Airlines
Spanair
SunExpress
SWISS International Airlines
TAP Portugal
Tarom
Vietnam Airlines

SunExpress Deutschland
Rossavia
Air Algerie
Aegean Airlines
Adria Airways

Fraport Passenger Service, check-in for 21 airline partners:

Air Lingus
Air Berlin
Asiana Airlines
Belavia
China Airlines
Condor
Emirates
Ethihad Airways

Gulf Air
Korean Air
Malaysia Airlines
Niki Luftfahrt GmbH
Oman Air
Pakistan International Airlines
Qatar Airways
SATA International

Sri Lankan Airlines
STC Russia
Thai Airways International
Transaero Airlines
Yemenia Yemen Airways
2. Intermodal Products and Services
Rail & Fly Agreements DB and Tour Operators

Rail&Fly - Unsere Partner-Reiseveranstalter

- 1-2-Fly
- 5 vor Flug
- AIDA Kreuzfahrten
- Airtours
- Aldiana
- Alltours
- ATT Touristik
- Attika Reisen
- Berge & Meer
- BigXtra
- Bucher Reisen
- BUHLD Naturschutz
- Clevertours
- Club Méditerranée
- Clubreisen Stumböck
- DERTOUR
- Dökan Air
- Dr. Koch Reisen
- Dynarest UG
- ECC Studienreisen
- Eccoreisens GmbH
- ETI Express Travel Int.
- Fox Tours
- F T I
- FTS Fly & Travel Service GmbH
- GeBeCo / Tiggé
- GBFR Reisen
- Hanseat Reisen
- H&H TUR Touristik
- Hermes Touristik
- Holiday & Co.
- ITS Reisen
- ITC International Travel Concept
- Jahn Reisen
- Kopp Tours
- Leiserowitz Reiseagentur GmbH
- Lerndee Erlebnisreisen
- LTUR
- Linzgau Reisebüro Pfullendorf
- Marco Polo Reisen
- MariLit Hotel-Reisedienst GmbH
- Medico Wettreisen
- Mediplus
- Meier’s Wettreisen
- Miller-Reisen
- MISR Travel Ägyptische AG
- MSC Kreuzfahrten
- Neckermann Reisen
- New 2 go
- OFT Reisen
- Öger Tours
- Pep Express
- Phoenix Reisen
- Pul Express GmbH
- Reisekulturen
- Schaulnand-Reisen GmbH
- Sprachcaffe Reisen
- Studien Kontakt Reisen
- Studiosus Reisen
- Team Ferrereisen GmbH
- Thomas Cook Reisen
- Tjaereborg
- Tour Vital
- TUI
- Urlaubshop GmbH
- Vestschar Reisedienst
- Vikinger Reisen
- Wolters Reisen
2. Intermodal Products and Services

Rail & Fly Agreements  DB and Airlines

- Aeroflot
- Aerosvit Ukrainian Airlines
- Air Astana
- airberlin
- Air China
- Air India
- Air Malta
- Air Mauritius
- Air Moldova
- Air Namibia
- Air Transat
- Alitalia
- American Airlines
- ANA
- Asiana
- Belavia
- Bulgaria Air
- Cathay Pacific Airways
- China Airlines
- China Eastern Airlines
- Condor
- Croatia Airlines
- Cyprus Airways
- Deutsche Lufthansa
- Egyptair
- El Al Israel Airlines
- Emirates
- Ethiopian Airlines
- Etihad Airways
- Finnair
- Germanwings
- Gulf Air
- Hainan Airlines
- Iberia
- Icelandair
- Iran Air
- Japan Airlines
- JAT Airways
- Korean Air
- Kuwait Airways
- LAN Airlines
- Mahan Air
- Malaysia Airlines
- MIAT Mongolian Airlines
- Middle East Airlines
- Oman Air
- Pakistan International
- QANTAS Airways
- Qatar Airways
- Rossiya Airlines
- Royal Air Maroc
- Royal Jordanian Airlines
- SATA Internacional
- Siberia S 7
- Singapore Airlines
- South African Airways
- SriLankan Airlines
- Syrian Arab Airlines
- TAM Linhas Aéreas
- TAP Portugal
- Tarom
- Thai Airways
- Transaero
- TUifly.com
- Tunisair
- Turkish Airlines
- Ukraine International
- US Airways
- Uzbekistan Airways
- Vietnam Airlines
- Yemenia

Rail & Fly Amsterdam:
- China Airlines
2. Intermodal Products and Services:
AIRail Service/Code Sharing LH-flight number for „Flight on Level Zero“
### 3. Market Effects

*Market Share of HST-Passengers (Modal Split)*

**PAX in % from originating traffic (Modal Split)**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>50</td>
<td>Car</td>
<td>49</td>
<td>41</td>
<td>39</td>
<td>33</td>
</tr>
<tr>
<td>5</td>
<td>Car Rental</td>
<td>5</td>
<td>7</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>18</td>
<td>Taxi</td>
<td>18</td>
<td>17</td>
<td>17</td>
<td>19</td>
</tr>
<tr>
<td>5</td>
<td>Bus</td>
<td>5</td>
<td>7</td>
<td>4</td>
<td>2+4</td>
</tr>
<tr>
<td>14</td>
<td>Commuter train</td>
<td>13</td>
<td>11</td>
<td>13</td>
<td>14</td>
</tr>
<tr>
<td>7</td>
<td>Long distance train</td>
<td>6</td>
<td>7</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>High speed long distance train</td>
<td>3</td>
<td>8</td>
<td>20</td>
<td>22</td>
</tr>
<tr>
<td>1</td>
<td>Other</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>100</td>
<td>Originating pax volume</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

*Source: Fraport, Intraplan*
3. Market Effects

Intermodal Traffic Figures

- 23,000 daily train passengers
- 16,500 public parking positions
- 72,000 employees
- 150,000 daily flight passengers
## 3. Market Effects

- **Passenger Numbers 2011 at FRA’s Railway Stations**

<table>
<thead>
<tr>
<th></th>
<th>Abs.</th>
<th>2011</th>
<th>2011/2012 in %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. ICE High Speed Train Station:</td>
<td>5,622 Mio.</td>
<td>5,604</td>
<td>0.3</td>
</tr>
<tr>
<td>2. Regional Train Station:</td>
<td>3,529 Mio.</td>
<td>3,404</td>
<td>3.7</td>
</tr>
<tr>
<td>3. Total:</td>
<td>9,151 Mio.</td>
<td>9,008</td>
<td>1.6</td>
</tr>
</tbody>
</table>

*Intermodality at Frankfurt Airport, Dr. Peter Pfragner, 2013*
4. Effects on Carbon Emission: Results for 2020

1. Effects on Modal Split in FRA

   Shift from car to train: Reduction of CO²: - 4.800 t per year
   Shift from flight to train: Reduction of CO²: - 80.600 t per year

2. Effects on Catchment Area of FRA
   (balance between FRA and airports in Germany & neighbouring countries)

   Reduction of CO²: - 89.500 t per year

3. Sum of Effects 2020 for FRA

   Reduction of CO²: -174.900 t
Thank You for Your Attention!

p.pfragner@fraport.de