Strengthening Security and Inter-operability along Euro-Asian Inland Transport Corridors

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Leading network operator in combined transport

926,000 road consignments
1,720,000 TEUs
   130 trains per day
   526 employees
   6,900 rail platforms
100% low-noise wagon fleet
CHF 580 million turnover
EUR 500 million turnover
## Hupac Group companies – Market presence

<table>
<thead>
<tr>
<th>Hupac Ltd</th>
<th>Chiasso</th>
<th>Parent company</th>
<th>Asset Management</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Hupac Intermodal Ltd</strong></td>
<td>Chiasso</td>
<td>Sales &amp; operations</td>
<td>Terminal operations</td>
</tr>
<tr>
<td><strong>Termi Ltd</strong></td>
<td>Chiasso</td>
<td>Terminal construction</td>
<td>Facility management</td>
</tr>
</tbody>
</table>

| **Hupac SpA**    | Busto Arsizio | Terminal operations | Railway operations |
| **Fidia SpA**    | Milano       | Terminal operations | Warehouse logistics |
| **Centro Intermodale SpA** | Milano | Terminal construction | Facility management |
| **Terminal Piacenza Intermodale Srl** | Piacenza | Terminal operations |
| **Piacenza Intermodale Srl** | Piacenza | Facility management | Warehouse logistics |
| **Termi SpA**    | Busto Arsizio | Terminal construction | Facility management |

| **Hupac Intermodal Italia Srl** | Busto Arsizio | Sales |
| **Hupac Intermodal NV** | Rotterdam | Service provider |
| **Hupac Intermodal BVBA** | Antwerp | Terminal operations | Facility management |
| **Hupac GmbH** | Singen | Service provider |
| **Hupac Maritime Logistics GmbH** | Duisburg | Maritime service |
| **ERS Railways BV** | Rotterdam; branch office Hamburg | Maritime services |

| **Hupac Terminal Brwinów** | Warszawa | Terminal construction |
| **Intermodal Express LLC** | Moscow | Sales & operations |
| **Hupac LLC** | Moscow | Rolling stock management |
| **Hupac International Logistics (Shanghai) Co.** | Shanghai | Sales & operations |

### Switzerland
- Hupac Intermodal Ltd
- Termi Ltd

### West Europe
- Hupac SpA
- Fidia SpA
- Centro Intermodale SpA
- Terminal Piacenza Intermodale Srl
- Piacenza Intermodale Srl
- Termi SpA
- Hupac Intermodal Italia Srl
- Hupac Intermodal NV
- Hupac Intermodal BVBA
- Hupac GmbH
- Hupac Maritime Logistics GmbH
- ERS Railways BV

### East Europe & Far East
- Hupac Terminal Brwinów
- Intermodal Express LLC
- Hupac LLC
- Hupac International Logistics (Shanghai) Co.
Hupac Group – combined advantage for logistics
European network connecting the Eurasian railways network

Main connections after Slawkow
- Slawkow ⇄ Antwerp: 2
- Slawkow ⇄ Ludwigshafen: 2
- Slawkow ⇄ Duisburg: 2
- Slawkow ⇄ Busto: 2
- Slawkow ⇄ Rotterdam: 2
- Slawkow ⇄ Barcelona: 2
- Slawkow ⇄ Le Havre: 2

Main connections after Brest/Sestokai/Pruszkow
- Pruszkow ⇄ Antwerp: 3
- Pruszkow ⇄ Ludwigshafen: 3
- Pruszkow ⇄ Duisburg: 3
- Pruszkow ⇄ Busto: 5
- Pruszkow ⇄ Rotterdam: 3
- Pruszkow ⇄ Barcelona: 3
- Pruszkow ⇄ Le Havre: 2
New Connections via Kaliningrad
Connections Europe ⇄ Japan/South Korea
Rolling stock maintenance in Busto Arsizio

<table>
<thead>
<tr>
<th>Rolling stock availability in %</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Graph showing rolling stock availability from 2010 to 2017." /></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Workshop</th>
<th>Wheelset refurbishing center</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Opening</strong></td>
<td><strong>September 2012</strong></td>
</tr>
<tr>
<td><strong>Area</strong></td>
<td><strong>9,000 m²</strong></td>
</tr>
<tr>
<td><strong>Activity</strong></td>
<td><strong>Wheelset reconditioning and non-destructive testing</strong></td>
</tr>
<tr>
<td>Repair and preventive maintenance of medium level</td>
<td></td>
</tr>
<tr>
<td><strong>Investment</strong></td>
<td><strong>EUR 8 million</strong></td>
</tr>
<tr>
<td>EUR 7.5 million</td>
<td></td>
</tr>
<tr>
<td><strong>Operator</strong></td>
<td><strong>RIFER</strong></td>
</tr>
<tr>
<td><strong>Max. output</strong></td>
<td><strong>45 wheelsets per work shift</strong></td>
</tr>
<tr>
<td>30 wagons a day</td>
<td></td>
</tr>
</tbody>
</table>
Strategy 2016-2020: Hupac invests CHF 280 million

- Terminals: CHF 130 million
- Rolling stock: CHF 130 million
- IT & others: CHF 20 million
Terminal KTL
When Industry logistics and railway meets for intermodal terminal infrastructures
### Milano Smistamento
- In attesa di inizio lavori
- Stato del progetto: definitivo
- Capacità massima annuale: ca. 390.000 UTI
- Finanziamento della fase 1 confermato dall'Ufficio Federale dei Trasporti (UFT)

### Piacenza
- Possibile inizio lavori: 2016
- Stato del progetto: in fase di valutazione
- Capacità massima annuale: ca. 190.000 UTI
- Presentazione domanda di finanziamento all'UFT: 2015

### Brescia
- Possibile inizio lavori: 2018
- Stato del progetto: in fase di valutazione
- Capacità massima annuale: ca. 190.000 UTI
- Presentazione domanda di finanziamento all'UFT: 2017
Six steps help get the digital transformation going together with customers

1. Start from the customer: Prioritize key customer journeys and digitize end to end
2. Break your functional silos: Build a cross-functional team with a clear mandate and digital talent
3. Create measurable targets: Develop quantitative targets for each team/projects
4. Translate digital ambition into resource allocations and budgets: Significantly reallocate investments
5. Focus on talent: Infuse new leaders into organization; retain existing digital talent
6. Maximize value of two-speed IT: Digitally enable your legacy infrastructure

Source: McKinsey Analysis
New Digital concepts and solutions

- **Train run and ETA/ETP** are collected from the RUs, Terminals and other sources (EDIGES or semi-automatic)
- Train's **current position** is shown regularly via a GPS receiver every ten minutes (Nexiot)

- Hupac **data centers** receive data related to the trains in real-time
- **Big data architecture** support the data collection
- Hupac WOLF core software **analyzes and transforms** the data into useful business information

- This is then made **available** on a WOLF online portal, via CESAR or via EDIGES data interfaces
- **Integration** with the customers and partners
Combined transport – future-oriented system

**EU target:** transportation > 300 km on rail or ship; 2030 = 30%, 2050 = 50%

**Transiberian route Target:** 2 Mio. Teus in transit within 2025

<table>
<thead>
<tr>
<th>Standardized system</th>
<th>Advantages for all</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt; Hundreds of thousands of standard loading units (containers, swap bodies, semi-trailers)</td>
<td>&gt; 5.9 billion EUR turnover</td>
</tr>
<tr>
<td>&gt; 700 terminals and ports</td>
<td>&gt; 41,000 jobs</td>
</tr>
<tr>
<td>&gt; 60,000 rail platform</td>
<td>&gt; 18.1 million tons CO₂ reduction</td>
</tr>
<tr>
<td>&gt; 2,000 cargo locomotives</td>
<td>&gt; 2.2 billion EUR less external costs</td>
</tr>
<tr>
<td>&gt; Long-term system commitment</td>
<td></td>
</tr>
</tbody>
</table>

Source: UIC Report on Combined Transport 2014
The usage of new railway infrastructures and the readiness for new ones
Increase of the productivity of Multimodal transport

Infrastructure
➔ Longer and heavier trains: in addition harmonisation in Europe as well as between 1435 EU, 1520 and in China

Simplification of communication among the railways in the Eurasian platform
➔ Telegraph......among all the railways.....solutions to overtake this system

➔ Customs clearance operations: please just one language and one form.

Cost of empty positioning
➔ A reduction of costs for empty container and empty wagon positioning

Harmonization of rules
➔ Harmonization among all railway networks
Solutions

All stakeholders from the market shall cooperate to push Chinese Railways and Railway Ministry to follow the standard of the international agreements that they accepted:

1. Acceptance all the ISO CERTIFICATE OF TANK and any tank certified.
2. Opening of all terminal for transportation of tank for Domestic and International connections
3. Accepting the mixed loaded of box and tank container in the international block trains
4. Recognized the international MSDS paperwork
5. Finally authorize the transport of DG Cargo according to SMGS General Terms and RID.

WE NEED TO BE TOGETHER –
ANY LEVEL OF THE LOGISTICS SUPPLY CHAIN INCLUDING CARGO SHIPPERS AND OWNER
WE NEED TO WORK TOGETHER

THE ONLY WAY FOR A STANDARDIZATION OF THIS TRANSPORT TECHNOLOGY.
Thank you for your attention!