Rail strategy of the Port of Barcelona

November 2013
1. Port’s rail strategy

1. Rail port infrastructures
   - Adaptation of port infrastructure to UIC and 750 m
   - Construction of new rail terminals
   - Enlargement of existing terminals
   - New railway accesses to the port

2. Efficiency
   - Tariff discounts up to 40%
   - Traffic management unit (ADIF & APB)
   - Electronic rail management tools (PortIC)
   - General rules for prioritization between services and loading operators. ...

3. Port network
   - Hinterland strategy based on intermodal corridors and inland terminals
1.1. Rail port infrastructures: improvement of the internal rail port network

Construction of new terminals, expansion of existing ones, upgrading the internal port network to UIC gauge and construction of new railway sections


- MOLL SUD RAIL TERMINAL (TCB)
  - 1 track 550 m (IB + Metric)

- MOLL COSTA RAIL TERMINAL
  - On going enlargement works. 2014
  - 6 tracks of 750 m (UIC + IB)

- MOLL ENERGIA RAIL TERMINAL
  - 3 tracks from 650 to 685 m (IB + UIC) 
  - 2 tracks 90 m (IB + UIC)

- MOLL CONTRADIC RAIL TERMINAL
  - 8 tracks of 750 m (UIC + IB)

- MOLL ENERGIA RAIL TERMINAL
  - 3 tracks from 532 to 607 (IB + UIC + Metric)

- RAIL TERMINAL PRINCEP D’ESPANYA
  - 3 tracks from 532 to 607 (IB + UIC + Metric)

- RAIL BEST TERMINAL
  - 8 tracks of 750 m (UIC + IB)

- CAN TUNIS (R/E)
  - 1 track 550 m (IB + Metric)

- RAIL CAR TERMINALS
  - Campa Z: 2 tracks 280 m (UIC + IB)
  - Darsena Sud: 4 tracks 270 m (IB)

- MOLL ENERGIA RAIL TERMINAL
  - 2 tracks 350 m (Metric)
  - 2 tracks 340 m (IB)

- MOLL ENERGIA RAIL TERMINAL
  - 3 tracks from 650 to 685 m (IB + UIC)

- MOLL CONTRADIC RAIL TERMINAL
  - 8 tracks of 750 m (UIC + IB)
1.2. Rail port infrastructures: new railway freight access to the Port of Barcelona

Total investment: 100 M € (50% Port of Barcelona, 50% Ministry of Public Works)
End date: 2015
2. Managing the infrastructure and operations within the Port

- Creation of a traffic management unit (ADIF & APB)
- Development of electronic rail management tools (Portic)
- Regulation of traffic and operations within the port
- Tariffs discounts
3. Hinterland strategy: Port network

Hinterland strategy based on intermodal corridors and inland terminals

Objectives of the rail strategy

1. To enlarge the hinterland
2. Customer loyalty & loyalty of large volumes
3. Development of door-to-door offers
4. Improving the competitiveness of transport corridors
   + transport offer more diversified
   + price reduction
3.1 Inland terminals connected to the Port

- Platform services
  - Depot containers
  - Logistics handle
  - Distribution transport
  - Custom services

- Transport services
  - Road transport
  - Rail transport

- Brand services
  - PortIC
  - Standards
  - Promotion SAC

Managed by Port de Barcelona or Port operators and partners

tmZ: Intermodal Platform of transport and logistic services integrated in the port network
3.2. Rail services from the Port of Barcelona

<table>
<thead>
<tr>
<th>Containers</th>
<th>Cars</th>
<th>Bulks</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Coruña</td>
<td></td>
<td>Potash from Barcelona area (Súria and Sallent)</td>
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<tr>
<td>Vigo</td>
<td></td>
<td>Bleach from Barcelona area (Martorell)</td>
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<tr>
<td>Porto</td>
<td></td>
<td>Corn bean from Tarragona</td>
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<tr>
<td>Lisboa</td>
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<td></td>
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<td>Sevilla</td>
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<td>Tànger</td>
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<tr>
<td>Madrid</td>
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<td>Bilbao</td>
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<td>Vitoria</td>
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<td>Burgos</td>
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<td>Noain</td>
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<td>Selgua</td>
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<td>Zaragoza</td>
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<tr>
<td>Zaragoza</td>
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<tr>
<td>Barcelona</td>
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<tr>
<td>Le Boulou</td>
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<tr>
<td>Tarragona</td>
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<tr>
<td>Martorell</td>
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<tr>
<td>Vigo</td>
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<tr>
<td>Pamplona</td>
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<tr>
<td>Barcelona</td>
<td></td>
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<tr>
<td>Pilot train to Germany</td>
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<tr>
<td>M/X by road</td>
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<tr>
<td>Origin/destination port terminals</td>
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<td></td>
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<tr>
<td>Morrot services</td>
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</tr>
</tbody>
</table>

Weekly services, in each direction:
- Origin/destination port terminals
- Morrot services
- Short Sea Shipping services

Projects 2014: Perpignan/ Toulouse
3.2 Rail connections and rail terminals from the Port of Barcelona

Success stories

**Rail service for SEAT cars (group VW)**

- Exclusive 3-4 daily railway service for vehicles from SEAT factory to the Port of Barcelona (FGC gauge).
- Efficient and reliable connection: Absorbs 70% of vehicles transported between the factory and the port.
- Additional service to Barcelona Zona Franca for car parts on Spanish rail gauge.

**tmZ: Zaragoza maritime terminal**

- Traffic: 118,596 TEU 2011 (+39%).
- Maritime containers.
- Diversification of the transport offer and triangulation with other destinations (Madrid, Navarra,…)
- Reduction of transport prices.
- Daily 2-3 rail connection from the Port of Barcelona.
3.2 Positive evolution of rail traffic results

<table>
<thead>
<tr>
<th>Cargo</th>
<th>Rail traffic</th>
<th>% var. 2011</th>
<th>% market share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Containers</td>
<td>148,926 TEU</td>
<td>+1.5%</td>
<td>11.3%</td>
</tr>
<tr>
<td>Cars</td>
<td>179,563 Un.</td>
<td>+8.6%</td>
<td>32.6%</td>
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</table>

Evolution of rail market share in the Port of Barcelona 2006-2012

Port of Barcelona, rail port traffic by corridors:

- **72% Iberian corridor**: Barcelona- Zaragoza-Madrid
- **26% North of Spain**: Barcelona- Pamplona-Burgos

But... Only 2% International
II. Reasons for success
Integration of rail in the supply chain

<table>
<thead>
<tr>
<th>Operators</th>
<th>Value added services</th>
<th>Rail efficiency improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Container terminals</td>
<td>Direct rail transport and triangulations</td>
<td>+ Reliability</td>
</tr>
<tr>
<td>(TCB, Best)</td>
<td>Knowledge of the needs of importers, exporters, freight</td>
<td>+ Productivity</td>
</tr>
<tr>
<td>Shipping companies</td>
<td>forwarders and logistics operators</td>
<td>+ Competition</td>
</tr>
<tr>
<td>(MSC, etc)</td>
<td>Management of <em>empties</em></td>
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<tr>
<td>Truck companies</td>
<td>Customs formalities</td>
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<tr>
<td>(Transp. Portuarios)</td>
<td>Haulage</td>
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<tr>
<td></td>
<td>Depot</td>
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Consolidation of Rail Logistic Operators

Substantial improvement of the level of service and customer orientation
III. Challenges for the future

1. Complete liberalization (among traction providers and rail logistics operators)

2. Infrastructure improvements:
   - 750 m Barcelona-Zaragoza-Madrid
   - Connection Spain-France

3. Reduction of costs to compete with decreasing road prices

4. Increase mixed trains and combination of traffics
   - Among customers/competitors (car industry)
   - Among destinations and origins (rail hubs)
   - Between typologies (continental/maritime, swap bodies-tank containers, etc.)