High Speed Rail in Poland – plans & activities

UN ECE TER Project
Workshop
Master Plan for the future
High Speed Rail network in Central and Eastern Europe
Timisoara, 10 – 14 September 2012

Ministry of Transport, Construction and Maritime Economy
Republic of Poland

Jerzy Kleniewski
Republic of Poland:

- area 312 575 km²
- > 38 mln population, polycentric settlements
- 177 years of railway tradition
- among European leaders – volume of transported cargo
- over 41% of land borders with different gauge systems – 1435 mm / 1520 mm
- EU member since 2004
- North and majority of East border – the EU border
- 20 299 km railway lines used;

AGC & AGTC lines – 5 447,824 km
TEN-T network – 5 243,007 km

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Some rail transport figures...

- > 200 mln t of cargo
- ~ 262 mln passengers
- Daily services:
  - ~ 6 900 trains
  - 3 732 passenger
  - 1 878 cargo
  - 821 single locomotives
  - 301 „duty” trains
  - 245 „technological” trains
On-going main improvements:
- modernisation of E-65
- Warszawa-Gdańsk $v = 200-220$ km/h;
- CMK $v = 230$ km/h (+ ETCS level 1 installation)

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Significant goals and railway infrastructure priorities...

- Economic growth stimulation – national and regional level, by transport accessibility increase
- Creation of integration opportunity for railway, air and city passenger subsystems
- Increase of regions investment attractiveness
- Enabling of interoperability within pan-European transport corridors (opportunity of free train passage within different networks in different states)
- Efficiency improvements of rail lines converging in rail nodes

- Modernisations of lines
- HSL introductory works
- Construction of municipal access lines to airports
- Rehabilitation investments
- Rail stations modernisation
Speed in 2030 perspective ...

Prędkość w roku 2030
- do 80 km/h
- 81-100 km/h
- 101-120 km/h
- 121-140 km/h
- 141-160 km/h
- 161-200 km/h
- powyżej 200 km/h
- linia LHS (80 km/h)
Preliminary HSL concept – up to 2050

- HSL – 2030 horizon
- HSL – further horizon
- HSL to be agreed internationally
- Other modernised conventional lines
- Basic network

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Preparing HSL
Warszawa – Łódź – Poznań / Wrocław

- On-going HSL feasibility studies
- Connections with conventional lines

Parameters:
- $V_{\text{max}}$ – 350 km/h
- Power supply – 2 x 25 kV AC, 50 Hz
- Standard – European (TSI HS)
- Trip durations:
  - Warszawa – Łódź: 35 ’
  - Warszawa – Poznań: 1h 30 ’
  - Warszawa – Wrocław: 1h 50 ’
### HSR expectations and context ~2030

**Amendment to the European map – extensions from Poland (Poznań - Berlin & Wrocław – Prague) ~ 2030 horizon; TEN-T framework**

**European HS Network**
- Forecasting 2025
- `v ≥ 250 km/h`
- `v ≥ 260 km/h Planned`
- `180 ≤ v < 250 km/h`
- `Other lines`

<table>
<thead>
<tr>
<th>Connection</th>
<th>Present journey time</th>
<th>Expected HSR journey time (including journey time on modernised conventional lines)</th>
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<tbody>
<tr>
<td>Warszawa – Łódź</td>
<td>1:30</td>
<td>0:35</td>
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<tr>
<td>Warszawa – Poznań</td>
<td>2:45</td>
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<td>5:00</td>
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<td>Łódź – Poznań</td>
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<td>1:00</td>
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<tr>
<td>Łódź – Wrocław</td>
<td>4:00</td>
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<td>Kraków – Poznań</td>
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Declaration of infrastructure ministers of Visehrad Group - HSR network in Central Europe, 20 April 2010

Further actions:
• consultations with Czech Republic, Slovakia and Germany and Hungary
• development of common studies to choose final route of new lines
• application of proposal to extend chosen lines into TEN-T core network
High Speed Railways are our common challenge and chance ...

Thank you for your attention

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