TRANS-EUROPEAN NORTH-SOUTH MOTORWAY (TEM)

Workshop: Functioning and financing of national road management

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Ministry of the Sea, Transport and Infrastructure
Croatia
Croatia – simple facts:

- Area: 56.594 km²
- Population: 4.4 million
- EU member: since 2013
- Capital: Zagreb
Croatia – geography:

- Land borders: 2.237 km
- Costal line: 1.777 km
- Most of Croatia is lowlands (north)
- High elevations (costal and south region)
Territorial organization:

- 20 counties
- City of Zagreb
- 26 public road operators
Croatia road network:

PUBLIC ROADS:
- Highways – 1,419 km
- State roads: - 7,097 km
- Regional – 9,498 km
- Local – 8,937 km

TOTAL: 26,951 km

HIGHWAYS:
- HAC – 1,091 km
- AZM – 61 km
- ARZ – 126 km
- BINA Istra – 141 km

TOTAL – 1,419 km
(1,000 km from 2000)
Overview of the road sector financing:

• Basic document for financing of public roads is „Road act”
  - highway national operator (HAC)
  - state road national operator (HC)
  - county road operator (21 ŽUCs)

• Basic document for financing of concessionary companies are concession agreement
  - highway road operator (ARZ) – 100 % state owned
  - highway road operator (AZM) – 51 % private owned
  - highway road operator (Bina-Istra) 1995.g. – 56% private owned
## Income of public roads sector:

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</thead>
<tbody>
<tr>
<td>Fuel tax</td>
<td>€ 405.024</td>
<td>€ 384.412</td>
<td>€ 306.716</td>
<td>€ 317.861</td>
<td>€ 315.617</td>
<td>€ 1.324.607</td>
</tr>
<tr>
<td>Tolls</td>
<td>€ 279.008</td>
<td>€ 294.533</td>
<td>€ 302.210</td>
<td>€ 320.363</td>
<td>€ 325.022</td>
<td>€ 1.242.128</td>
</tr>
<tr>
<td>Registration tax</td>
<td>€ 103.644</td>
<td>€ 114.367</td>
<td>€ 118.297</td>
<td>€ 122.096</td>
<td>€ 111.516</td>
<td>€ 466.275</td>
</tr>
<tr>
<td>Exceptional transport charges</td>
<td>€ 2.611</td>
<td>€ 2.658</td>
<td>€ 3.922</td>
<td>€ 2.438</td>
<td>€ 2.867</td>
<td>€ 11.886</td>
</tr>
<tr>
<td>State budget funds</td>
<td>€ 28.424</td>
<td>€ 50.891</td>
<td>€ 49.749</td>
<td>€ 47.711</td>
<td>€ 50.157</td>
<td>€ 198.508</td>
</tr>
<tr>
<td>Other incomes</td>
<td>€ 37.962</td>
<td>€ 46.865</td>
<td>€ 36.213</td>
<td>€ 24.744</td>
<td>€ 26.571</td>
<td>€ 134.392</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>€ 869.690</strong></td>
<td><strong>€ 906.459</strong></td>
<td><strong>€ 830.589</strong></td>
<td><strong>€ 847.755</strong></td>
<td><strong>€ 844.609</strong></td>
<td><strong>€ 3.429.412</strong></td>
</tr>
</tbody>
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TRANS-EUROPEAN NORTH-SOUTH MOTORWAY (TEM)
## Expenditure of public roads sector:

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</thead>
<tbody>
<tr>
<td><strong>HIGHWAYS</strong></td>
<td>€ 592.935</td>
<td>€ 636.233</td>
<td>€ 140.947</td>
<td>€ 172.151</td>
<td>€ 182.331</td>
<td>€ 140.803</td>
</tr>
<tr>
<td>Construction (CAPEX)</td>
<td>€ 403.347</td>
<td>€ 340.248</td>
<td>€ 69.962</td>
<td>€ 91.180</td>
<td>€ 104.517</td>
<td>€ 74.589</td>
</tr>
<tr>
<td>Heavy maintenance (CAPEX)</td>
<td>€ 54.584</td>
<td>€ 158.761</td>
<td>€ 36.450</td>
<td>€ 46.911</td>
<td>€ 43.585</td>
<td>€ 31.815</td>
</tr>
<tr>
<td>Periodic maintenance (OPEX)</td>
<td>€ 135.003</td>
<td>€ 137.225</td>
<td>€ 34.536</td>
<td>€ 34.061</td>
<td>€ 34.228</td>
<td>€ 34.400</td>
</tr>
<tr>
<td><strong>STATE ROADS</strong></td>
<td>€ 872.514</td>
<td>€ 1.251.483</td>
<td>€ 229.708</td>
<td>€ 295.260</td>
<td>€ 362.791</td>
<td>€ 363.723</td>
</tr>
<tr>
<td>Construction (CAPEX)</td>
<td>€ 352.443</td>
<td>€ 761.507</td>
<td>€ 105.575</td>
<td>€ 175.719</td>
<td>€ 240.859</td>
<td>€ 239.353</td>
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<tr>
<td>Heavy maintenance (CAPEX)</td>
<td>€ 302.915</td>
<td>€ 286.871</td>
<td>€ 74.800</td>
<td>€ 69.295</td>
<td>€ 70.681</td>
<td>€ 72.095</td>
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<tr>
<td>Periodic maintenance (OPEX)</td>
<td>€ 217.155</td>
<td>€ 203.105</td>
<td>€ 49.333</td>
<td>€ 50.246</td>
<td>€ 51.251</td>
<td>€ 52.276</td>
</tr>
<tr>
<td><strong>COUNTY AND LOCAL ROADS</strong></td>
<td>€ 373.285</td>
<td>€ 377.976</td>
<td>€ 99.763</td>
<td>€ 90.605</td>
<td>€ 93.363</td>
<td>€ 94.244</td>
</tr>
<tr>
<td>Heavy maintenance (CAPEX)</td>
<td>€ 123.997</td>
<td>€ 132.019</td>
<td>€ 38.828</td>
<td>€ 29.208</td>
<td>€ 31.618</td>
<td>€ 32.364</td>
</tr>
<tr>
<td>Periodic maintenance (OPEX)</td>
<td>€ 241.994</td>
<td>€ 232.902</td>
<td>€ 56.729</td>
<td>€ 58.583</td>
<td>€ 58.888</td>
<td>€ 58.701</td>
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<tr>
<td><strong>CAPEX</strong></td>
<td>€ 1.244.580</td>
<td>€ 1.692.460</td>
<td>€ 329.820</td>
<td>€ 415.128</td>
<td>€ 494.118</td>
<td>€ 453.394</td>
</tr>
<tr>
<td><strong>OPEX</strong></td>
<td>€ 594.153</td>
<td>€ 573.232</td>
<td>€ 140.599</td>
<td>€ 142.889</td>
<td>€ 144.367</td>
<td>€ 145.377</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>€ 1.838.733</td>
<td>€ 2.265.692</td>
<td>€ 470.419</td>
<td>€ 558.017</td>
<td>€ 638.485</td>
<td>€ 598.771</td>
</tr>
</tbody>
</table>
Structure of expenditures
2013. - 2016.

- Periodic Maintenance: 32%
- Heavy Maintenance: 26%
- Construction: 42%


- Periodic Maintenance: 25%
- Heavy Maintenance: 26%
- Construction: 49%

TRANS-EUROPEAN NORTH-SOUTH MOTORWAY (TEM)

**STATE ROADS**
- **EU PROJECTS**: 39%
- **BUILDING**: 22%
- **HEAVY MAINTENANCE**: 23%
- **PERIODIC MAINTENANCE**: 16%

**COUNTY AND LOCAL ROADS**
- **HEAVY MAINTENANCE**: 35%
- **PERIODIC MAINTENANCE**: 62%
- **BUILDING**: 3%

**TRAN-S-EUROPEAN NORTH-SOUTH MOTORWAY (TEM)**
# Public roads sector debts

<table>
<thead>
<tr>
<th>ROAD OPERATORS</th>
<th>Debt (€)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hrvatske ceste d.o.o.</td>
<td>1,242,570,477</td>
</tr>
<tr>
<td>Hrvatske autoceste d.o.o.</td>
<td>2,915,562,534</td>
</tr>
<tr>
<td>Autocesta Rijeka-Zagreb d.d.</td>
<td>813,948,547</td>
</tr>
<tr>
<td>Autocesta Zagreb - Macelj d.d.</td>
<td>299,528,106</td>
</tr>
<tr>
<td>Bina Istra d.d.</td>
<td>534,117,214</td>
</tr>
<tr>
<td><strong>TOTAL:</strong></td>
<td><strong>5,805,726,878 €</strong></td>
</tr>
</tbody>
</table>
Public-private partnership (PPP)

- Road sector 2 PPPs projects:
  - Bina-Istra highway - ongoing, y 1997, 32 y duration, 140 km
  - AZM highway - ongoing, y 2003, 28 y duration, 60 km
  - Zagreb – Goričan - failed, y 1995, 425 m. €, (HR lost 37 m €)
  - Tunnel Sv. Ilija - failed, y 2003, 40 m. €
- Zagreb airoport - ongoing
- Dubrovnik cruise ship port - in process
PPP: Bina Istra

- 141 km of highways
- 1995 y, first PPP, CA for 32 years
- Concession agreement / Phases of project:
  - 1A (Rogovići-Vodnjan), 50 km, 1998-2002, 115 m. €, IR 7-12%
  - 1B (Medaki-Umag i Vodnjan-Pula), 2003, 210 m. €, IR 5,5-8%
  - 2A (full profile of 1A nad 1B ), 305 m. €, 2007-2010, IR
  - 2B1 (Rogovići – Tunnel Učka), upgrade 30km, 170 m.€ - preparation
  - 2B2 (tunnel Učka) – in future
  - 2B3 (tunnel Učka-Matulji) – in future
Discussion

Please be ready to discuss:

– How to get balance between capex and opex within road sector?
– Do we need special policy in terms of funding allocation?
– How to split funding between national and regional roads?
– How we can support our decision making process?
– PPP – real alternative?
Thank you for attention!

Questions?

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