Transportation Infrastructure as a Key Instigator to the Recovery and Development of the Greek Economy

Sustainability Mobility and Privatisation

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The Challenge

• Transport will play a critical role in the emergence of Greece from the current crisis.

• It does, however, give rise to significant environmental costs.

• Sustainable mobility will require a new transport system.

• How can we use /control the privatisation process to deliver sustainable mobility?
Transport and Socio-economic Development

- Provides for the carriage of people and goods and in so doing
  - facilitates the operation of the economy.
  - promotes competitiveness.
  - supports social inclusion and integration.

- This applies not just within the Greek state but also across Europe and Globally.
Different Modes have Different Environmental Impacts

- Air: CC, carbon fuels, noise.
- Shipping: CC, carbon fuels, air quality.
- Rail: Land use, noise.
- Road: Land take, noise, air quality
Sustainable Mobility

- EU Concept – Recognises the particular threats of:
  - Climate Change (1/3 CO2 emissions from transport)
  - Peak Oil (alternative fuels for transport system)
  - Air Quality health effects (alternative fuels/more public transport)

- Development of inter-modal, integrated public transport network and systems to encourage use of the environmentally appropriate mode.
The Specific Hellenic Challenges

- Geographic Isolation
- Island communities
- Limited rail links
- Economic
Choices

• International/ National – Air, HSR, Rail.

• Regional (island) – Air, boat.

• Local – Rail, road.

• Infrastructure planning investments.
• Equipment and vehicle investment.
Privatisation

• A politically sensitive issue.
• Major risks.
• Many examples of failures.
• An inevitability?
• A provider of opportunities:
  – If lessons learned.
  – If used to deliver sustainable mobility.
Privatisation Risks

- Airports route development
  - commercial interests v regional development.
- Profit v. Accessibility
  - Community - bus services
  - Islands – boat services.
- Inter-modal investor competition:
  - Air v high speed rail
  - Air v shipping
  - Road freight v rail freight
Privatisation Risks #2

- **Cost**
  - London tube (£10.20)
  - Manchester to London (£357)
  - Athens to Thessaloniki (£50)

- **Shareholder profits v investment**
  - Ability to deliver a sustainable transport system
  - Inter-modal integration
Privatisation Can Provide

• Access to capital for
  – Infrastructure
  – Vehicles
  – Operating systems

• The restructuring of organisations and management systems

• Cost controls

• If properly managed it can support development of sustainable mobility.
Pre-requisite to Privatisation

- A vision of a sustainable transport system.
- The prioritisation of needs (accessibility).
- The prioritisation of modes?
Adapting to a Changing Climate
Effects of a Changing Climate

• The climate is changing.

• Within 50 years CC will necessitate new transport infrastructure.

• This also needs to be factored into the privatisation process.
### The Changing Climate

<table>
<thead>
<tr>
<th>Implications of Climate Change</th>
<th>Certainty</th>
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<tbody>
<tr>
<td>Sea-level rise</td>
<td>Virtually certain</td>
</tr>
<tr>
<td>Temperature rise (particularly in Arctic regions)</td>
<td>Virtually certain</td>
</tr>
<tr>
<td>Late onset of freeze, early thaw</td>
<td>Virtually certain</td>
</tr>
<tr>
<td>Increase in very hot days</td>
<td>Virtually certain</td>
</tr>
<tr>
<td>Increase in heat waves</td>
<td>Very likely</td>
</tr>
<tr>
<td>Increased extreme rainfall events</td>
<td>Very likely</td>
</tr>
<tr>
<td>Increases in droughts in some areas</td>
<td>Likely</td>
</tr>
<tr>
<td>Changes in rainfall patterns, seasons, flooding</td>
<td>Likely</td>
</tr>
<tr>
<td>Increases in hurricane intensity</td>
<td>Likely</td>
</tr>
<tr>
<td>Increased intensity of cold-season storms, increases in winds, waves, and storm surges</td>
<td>Likely</td>
</tr>
</tbody>
</table>
Changes in Demand

- Temperature rise
- 30-40 years
- Changes in tourism
Ability to Meet Demand

- Sea level Rise
- 50 – 70 years
- Impact on ports
- Role of air v boats in providing accessibility to islands?
Ability to Meet Demand

- Temperature rise
  - Runway length

- Less rainfall
  - Water recycling, storage
  - Desalination

- Temperature Rise
  - Increased energy demand
  - Retrofitting of low energy infrastructure
Incorporate CC Risk Assessment into Privatisation?

- **UK Government Airport CC Adaptation Order**

- Requires 7 largest English (and Scottish) airports to:
  - use Met Office CC forecasts to assess the risk of CC for their ‘statutory functions’.
  - bring forward adaptation proposals in 2011.
The Key Question

- How can the privatisation process be used to support the development of sustainable transport infrastructure and maximise social benefit for the people of Greece?
Social Return on Investment

- Investors should be asked to indicate how they would maximise the social benefits and environmental sustainability of their proposals.
Recommendations

• Policy papers - for each transport sector.

• Strategic Planning Studies?
  – Sustainable mobility infrastructure.
  – Implications of climate change.

• Application of social return on investment assessment methodology to projects.
The MMU Hellenic Portal

A web based hub facilitating knowledge transfer and research partnerships, linking the MMU knowledge base to academic institutions, Government bodies and industry in Greece to support socio-economic development and job creation.

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