Policy Dialogue on Infrastructure Financing Strategies for Sustainable Development in North and Central Asia

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PPP and regional infrastructure networks

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PPP and Cross-Border Projects

- Regional connectivity
  = priority of many countries seeking new drivers of growth

- Cross-border linkages have to be developed
  → Can PPP be used for transboundary projects?

- Little information is available
  - What has been the experience so far?
  - What challenges emerge from examining these projects?
  - What conclusions can be drawn for future policy actions?

- ESCAP produced a paper on the topic
  [link](http://www.unescap.org/sites/default/files/S4_PPP-for-Cross-Border-Infrastructure-Development_0.pdf)
Private investment in cross-border project

*Experience in Energy: Power Sector*

**Clear economic case with energy-rich countries and energy-deficient ones**

**Large track record of private investments in power generation through Power-Purchase Agreement (PPA) with independent power producers (IPP)**

- **Hydropower** (e.g. Lao/Thailand, Bhutan/India)
- **Paravani river HPP between Georgia and Turkey**

  $150 million project completed in 2014 sponsored by a Turkish conglomerate (includes a 32-km transmission line connecting to Turkey)

- **Other renewable energy sources possible as long as they offer a cost-efficient solutions**
- **Sufficient transmission capacity and grid interconnections among countries?**
  
  CASA-1000 project connecting Tajikistan-Kyrgyzstan with Afghanistan-Pakistan
- **Energy security  → Trust required**
Private investment in cross-border project

Experience in Energy: Oil and Gas Pipelines

$1.1 trillion required for oil and gas transport infra in Asia/Eurasia btw 2014-2035 (IEA)

- Long distance = high environmental and social risks + maintenance and security challenges
- Political risks with several countries involved
  - Baku–Tbilisi–Ceyhan (BTC) – Oil Pipeline (Azerbaijan / Georgia / Turkey)
  - Central Asia-China gas pipeline (Turkmenistan / Uzbekistan / Kazakhstan / China)

- Typical project structure: Strong off-takers needed

Host Gov. 1

Inter-Governmental Agreement

Host Government Agreement

Transportation Agreement

Project Company

Host Gov. 2

Lenders

Loan Agreement

Completion Guarantee Support

Sponsors

Equity

Shippers
Private investment in cross-border project

Experience in Transport

Few examples of cross-border projects (exception border crossing points, bridge, tunnels)

Regional transport networks are often combination of national infrastructure

- Road projects have attracted significant private interest (mainly toll roads)
  Traffic needs to be sufficient...

- Ports and airports national infra with clear regional dimension
  well-suited for private investments (operational efficiency &
  maximizing sources of revenues such as shops, hotels, etc.

- Rail projects more complicated due to low financial viability and
  lack of interoperability

Public funding will be required for the ambitious development in the region

Building missing links in the Trans-Asian Railway network = around $60 billion
Regional infrastructure projects
Example of railway regional networks

Map 1: Central Asia Regional Economic Cooperation Designated Rail Corridors

Source: CAREC Secretariat.
Sub-marine and terrestrial fiber-optic cables = Mainly private investments

- Usually gathers telecom companies from involved countries (easier for land acquisition and regulatory approvals + secure demand)

- Leveraging existing infrastructure (e.g. road and railway) ➔ reduce costs

- Example: The Diverse Route for European & Asian Markets (DREAM) - 8,700km high-speed fibre optic link connecting Europe and Asia through 5 countries implemented by MegaFon (Russia) in cooperation with Kazakhtelecom and Interoute (started in 2013)
## Regional infrastructure projects

**Typical risk allocation**

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<th>Energy</th>
<th>Transport</th>
<th>ICT</th>
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<tbody>
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<td>Planning</td>
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<td>Construction &amp; Operation Risk</td>
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<td>Private</td>
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<td>Land</td>
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### PPP & Cross-Border Projects

**Challenges and Policy Actions (1)**

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<tr>
<th>Challenges</th>
<th>Policy Actions</th>
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| **#1 Complex arrangements** | • Building institutional bridge  
• Supporting regional platforms  
• Addressing bottlenecks at border |
| **#2 Limited competition (large projects / SOEs)** | • Creating industry benchmarks  
• Moderating risk transfer  
• Leveraging SOE’s appetite for internationalization |
| **#3 Augmented political risk** | • Securing up-front political support  
• Strengthening risk coverage instruments  
• Reinforcing governance  
• Selecting sound projects |
## PPP & Cross-Border Projects
### Challenges and Policy Actions (2)

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<th>Challenges</th>
<th>Policy Actions</th>
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| **#4 Acute land, social and environmental challenges** | • Managing social and environmental impacts  
• Acquiring land |
| **#5 Disparate regulatory environments**         | • Enhancing national PPP frameworks  
• Establishing regional regulatory mechanisms |
| **#6 Intricate procurement process**             | • Developing guidelines for cross-border procurement |
| **#7 Unbalanced cost and benefit**               | • Aligning interests  
• Promoting dedicated financial instruments |
Cross-border infrastructure projects can be developed with private resources, notably when:

- Sufficient cash flow to pay back the investment
- Manageable level of risks
- Strong and stable political backing
- Limited administrative and technical barriers

Cross-border infrastructure projects rely beyond border zones on national infrastructure, which can beneficial from PPP structures.
Thank you


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