Public and Private Partnerships in Korea

April. 2011

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Public and Private Infrastructure Investment Management Center (PIMAC)
Korea Development Institute (KDI)
1. Legal Framework of PPP System
2. Procurement Methods
3. Value for Money Test (VfM)
4. Key Success Factors
5. KDI–PIMAC International Alliance
1. Legal Framework of the PPP System

- Hierarchy of legal and administrative framework of PPP System
  - PPP Act
    - PPP Act Enforcement Decrees
      - Basic Plans for PPP
        - PPP implementation guidelines
  - The Legal Status of the PPP Act
    - The PPP Act and the PPP Act Enforcement Decree are the principal components of the legal framework of PPP
    - The Act is a special Act that precedes other Acts
It clearly defines eligible infrastructure types, procurement methods, process, conflict resolution/termination mechanism, and the roles of the public and private parties, etc.

- Eligible facility types (48)
- Procurement methods: BTO, BOT, BOO, BTL, etc.
- Procurement procedure
- PIMAC, Infrastructure Credit Guarantee Fund, Infrastructure fund
- Government support, risk sharing measures

- Policy directions
- General guidelines for PPP project implementation
- BTL implementation guidelines

PPP Act, Enforcement Decree

Basic Plans for PPP
<table>
<thead>
<tr>
<th>Sector</th>
<th>Facility Types</th>
</tr>
</thead>
<tbody>
<tr>
<td>Road (4)</td>
<td>Road and related Facilities, Parking Facilities, Transfer Facilities and Intelligent Traffic System, Bicycle Road</td>
</tr>
<tr>
<td>Rail(3)</td>
<td>Railway, Railway Facilities, Urban Railway</td>
</tr>
<tr>
<td>Port(3)</td>
<td>Port, Fishing Port Facilities, New Port Construction Facilities</td>
</tr>
<tr>
<td>Communications(5)</td>
<td>Telecommunication Facilities, Information Communication System, Information Super-highway, Map Information System, Ubiquitous City Infrastructure</td>
</tr>
<tr>
<td>Water Resources(3)</td>
<td>Multi-purpose Dam, River-affiliated Ancillary Structures, Waterworks</td>
</tr>
<tr>
<td>Logistics(2)</td>
<td>Distribution Complex, Cargo and Passenger Terminals</td>
</tr>
<tr>
<td>Airport(1)</td>
<td>Airport</td>
</tr>
<tr>
<td>Culture and Tourism(8)</td>
<td>Tourist Site or Complex, Youth Training Facilities, Public Sports Facilities, Libraries, Museums and Art Galleries, International Conference Facilities, Culture Centers, Professional Training Facilities*</td>
</tr>
<tr>
<td>Military Housing (1)</td>
<td>Military Housing</td>
</tr>
<tr>
<td>Education and Science(2)</td>
<td>Schools, Science Centers</td>
</tr>
<tr>
<td>Forestry(2)</td>
<td>Natural Recreational Resorts, Arboretums</td>
</tr>
<tr>
<td>Public Housing (1)</td>
<td>Public Rental Housing</td>
</tr>
<tr>
<td>Welfare (4)</td>
<td>Child-care Facilities, Senior Homes, Medical Facilities, Facilities for the Disabled*</td>
</tr>
</tbody>
</table>

* Expected to be included in the 2009 revised PPP Act Enforcement Decree
2. Procurement Methods

- **BTO (Build-Transfer-Operate) Method**
  - Both solicited and unsolicited projects are eligible
  - Roads, seaports, and railway projects, etc
  - User-fees, Minimum Revenue Guarantee (MRG) for solicited projects

- **BTL (Build-Transfer-Lease) Method**
  - Only solicited projects are eligible
  - School, dormitory, military housing, etc
  - Government payments (Lease rent + operating costs)
  - Low risk-low return

- **Other Methods**
  - BOT (Build-Operate-Transfer)
  - BOO (Build-Own-Operate)
PPPs in Korea: KDI - PIMAC

Procurement Steps of BTL Projects

- Competent Authority: Selection of BTL Project
- Competent Authority/Procuring Ministry: VFM Test/Request of Investment Ceiling
- MOSF: Review and Establishment of Annual Aggregate Investment Ceiling
- National Assembly: Approval of National Assembly
- Competent Authority: Request for Proposals (RFP)
- Private Sector: Submission of Project Proposals
- Competent Authority: Evaluation/Selection of Preferred Bidders
- Competent Authority/Preferred Bidder: Negotiation & Contract Award (Designation of Concessionaire)
- Competent Authority: Approval of Detailed Implementation Plan
- Concessionaire: Construction and Operation

* Review by PIMAC is required
## PPPs in Korea: KDI - PIMAC

### SOC Investment by Type (2010)

<table>
<thead>
<tr>
<th></th>
<th>'95~00</th>
<th>'02</th>
<th>'04</th>
<th>'06</th>
<th>'08</th>
<th>'09</th>
<th>'10</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Budget Procurement</strong></td>
<td>96.3</td>
<td>93.0</td>
<td>91.1</td>
<td>86.4</td>
<td>84.4</td>
<td>86.7</td>
<td>90.3</td>
</tr>
<tr>
<td><strong>PPP Projects</strong></td>
<td>3.7</td>
<td>7.0</td>
<td>8.9</td>
<td>13.6</td>
<td>15.6</td>
<td>13.3</td>
<td>9.7</td>
</tr>
</tbody>
</table>

### PPP by Type (Dec. 2010)

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>number (amount)</td>
<td>percent</td>
<td>completed</td>
<td>under construction</td>
</tr>
<tr>
<td><strong>BTO</strong></td>
<td>85</td>
<td>30.0 (77.4%)</td>
<td>49 (29.5%)</td>
<td>25 (12.6%)</td>
</tr>
<tr>
<td><strong>amount</strong></td>
<td>(52.9)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>BTL</strong></td>
<td>203</td>
<td>70.0 (22.6%)</td>
<td>62 (2.8%)</td>
<td>114 (9.2%)</td>
</tr>
<tr>
<td><strong>amount</strong></td>
<td>(15.4)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## PPPs in Korea: KDI - PIMAC

### BTO: Geo-ga Grand Bridge Project (2010)

<table>
<thead>
<tr>
<th>Total Length (km)</th>
<th>Construction Month</th>
<th>Project Costs ($)</th>
<th>MRG</th>
<th>Travel Saved</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.2</td>
<td>72</td>
<td>1,890 mils (private 68%)</td>
<td>90% → 77%</td>
<td>140km → 60km (2hr → 80min)</td>
</tr>
<tr>
<td>Tunnel: 3.7</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bridge: 4.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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- **Construction Month:** 72
- **Project Costs ($):** 1,890 mils (private 68%)
- **MRG:** 90% → 77%
- **Travel Saved:** 140km → 60km (2hr → 80min)
### BTL: Jung-Ri Elementary School Project (2006~2009)

<table>
<thead>
<tr>
<th>Facilities</th>
<th>Project</th>
<th>Size</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Area</td>
<td>Costs ($ mils)</td>
</tr>
<tr>
<td>Class</td>
<td>Elementary</td>
<td>8.608 m²</td>
<td>7.5</td>
</tr>
<tr>
<td>Complex</td>
<td>Library</td>
<td>1,058 m²</td>
<td>0.9</td>
</tr>
<tr>
<td></td>
<td>Recreation Center</td>
<td>3,340 m²</td>
<td>3.6</td>
</tr>
<tr>
<td></td>
<td>Underground Parking</td>
<td>1,454 m²</td>
<td>–</td>
</tr>
</tbody>
</table>
PPPs in Korea: KDI - PIMAC

BTL: Jung-Ri Elementary School Project (2006~2009)
3. Value for Money Test (VFM)

- Determine whether a project is suitable to be implemented by PPP
  - Comparing private finance initiative (PFI) with the public sector comparator (PSC)
  - Quantitative VFM compares the life-cycle costs of PSC with PFI for same level of output
  - Qualitative VFM compares the level of service quality

- Introduce since the amendment of the PPP Act in 2005
  - PIMAC performs VFM tests for Unsolicited projects
  - VFM test of a BTL project is performed by competent authority and reviewed by PIMAC
  - PIMAC published a manual for conducting VFM test

- Three phases of VFM test
  - First phase: Feasibility study → Decision to Invest
  - Second phase: VFM assessment → Decision to Implement by PPP
  - Third phase: Formulating a PPP alternative
4. Key Success Factors

- Solid legal framework corresponding to int’l standards
  - Clear & consistent implementation procedure regulated by PPP Act & implementation guidelines
  - Fair & equal treatment of domestic & foreign investors

- Strong government commitment & support
  - Construction subsidy, MRG, compensation on termination, etc.
  - Technical assistance provided by PIMAC
    - VFM test, Review of RFPs & concession agreements, assistance in project evaluation & negotiation, research for PPP policies & guidelines.

- Central role of MOSF as budget Authority
  - Develop national PPP policies, guidelines, & fiscal rules
  - Coordinates sectoral PPP plans & establish comprehensive investment plans
  - Review & approve national management projects
    - MOSF hosts PPP Review Committee when necessary
5. KDI – PIMAC efforts for International Alliance

- Strengthen international alliance
  - KDI/ADB/ADBI/WBI Conference: "Knowledge Sharing on Infrastructure Public-Private Partnership in Asia" ('09.5)
  - ASEM Conference on Public-Private Partnerships in Infrastructure: "The Impact of the Global Financial Crisis on PPPs" ('09.10)

- Providing training and educational program of PPP to several countries
  - training of the government officials from Thailand, Indonesia, Vietnam, Sri Lanka, Myanmar, and Bangladesh

- Sharing and disseminating knowledge
  - PIMAC-ADB research project on PPPs system
  - development and sharing information of Korean PPP thru PIMAC website