Use of Professional Procurement Agency & e-Procurement

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Kang-il Seo  |  Deputy Director, International Cooperation Division
             Public Procurement Service (PPS), the Republic of Korea
Use of Procurement Agency
### Use of Public Procurement Agency

#### Diverse Models of Using Procurement Agencies

<table>
<thead>
<tr>
<th>PA Type</th>
<th>Countries</th>
<th>Use of PA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Sector Agency</td>
<td>Canada</td>
<td>Mandatory for central govt.</td>
</tr>
<tr>
<td></td>
<td>Korea</td>
<td>Mandatory for central govt. Non-mandatory for local govt.</td>
</tr>
<tr>
<td></td>
<td>USA Turkey</td>
<td>Non-mandatory</td>
</tr>
<tr>
<td>Public Sector Agencies &amp;</td>
<td>Italy</td>
<td>Non-mandatory</td>
</tr>
<tr>
<td>Private Sector Agents</td>
<td>Chile Finland</td>
<td></td>
</tr>
<tr>
<td>Direct procurement</td>
<td>PRC</td>
<td>Product-specific</td>
</tr>
<tr>
<td>by each public entity</td>
<td>Japan</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Russia</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mexico</td>
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</tr>
</tbody>
</table>

- **Varying degrees of centralized procurement**
- **Decentralized procurement**
The Korean Model

Korea’s Public Procurement Model

Central Public Procurement Agency

- Public Procurement Service (PPS) under Ministry of Strategy and Finance
- Provides procurement services for all public entities
- Operates government-wide single e-Procurement portal (KONEPS) that covers entire procurement cycle

Centralized & Decentralized Procurement

- Central government entities are required to use PPS services for procurement above the threshold value
- Goods & Services: above $100,000
- Construction Works: above $3,000,000
- Local govt. entities and public enterprises may procure either autonomously or use PPS services
- All public entities should purchase from PPS’s MAS contracts* whenever applicable

* MAS contract: unit-price framework contracts for commercial products established by PPS. All public entities may place orders against MAS contracts.
The Korean Model

Centralized & Decentralized Procurement in Korea

Central Govt.
Centralized Procurement
PR (mandatory)
PPS
KONEPS
e-GP System operated by PPS
Decentralized Procurement
Local Govt. & Public Enterprises
PR (non-mandatory)

In 2012, centralized procurement through PPS was 36% (USD 36 billion) of Korea’s total public procurement (101 billion)

- Of PPS’s procurement, 53% was upon mandatory procurement request and 47% was upon non-mandatory procurement request
# The Korean Model

## Compromising Centralized & Decentralized Procurement

<table>
<thead>
<tr>
<th></th>
<th>Advantages</th>
<th>Disadvantages</th>
<th>E-Procurement</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Centralized Procurement</strong></td>
<td>• Economy of scale</td>
<td>• Complex and longer procurement process</td>
<td>• Streamlined online processing</td>
</tr>
<tr>
<td></td>
<td>• Accumulated expertise and data</td>
<td>• Limited choice for the procuring entity</td>
<td>• 340,000 products available for e-Shopping</td>
</tr>
<tr>
<td></td>
<td>• Focused monitoring &amp; high traceability</td>
<td>• Low professionalization</td>
<td></td>
</tr>
<tr>
<td><strong>Decentralized Procurement</strong></td>
<td>• Freer choices for public buyers</td>
<td>• Low standardization</td>
<td>• Data Support</td>
</tr>
<tr>
<td></td>
<td>• Shorter process time</td>
<td>• Loose monitoring – risk of moral hazard</td>
<td>- supplier data (credit rating, tax payment, past experiences, certifications, etc.)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- price data</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Information disclosure</td>
</tr>
</tbody>
</table>
Enhancing Procurement Efficiency

Concentrated expertise and professional workforce

- Accumulated Expertise from specialized work and experiences
- Price transparency from accumulated data and market survey
  - Reduces information asymmetry between suppliers and public buyers
- Economy of scale and greater bargaining leverage

Administrative efficiency

- Standardized processes, forms and specifications
- Reduced administrative cost from concentration of procurement workforce

Administrative cost per contract = (Labor cost + operational cost) / number of contracts
Efficiency through Central Procurement Agency

Saving budget through price/cost analysis

Budget review and revision through price analysis

- PPS analyzes procurement budget to ensure it reflects competitive market prices
- Analysis conducted by procurement specialists based on market survey and accumulated data from past transactions
- Bidding and awarding is based on the revised budget (estimated price)

Planned Budget (Public Org.) → Price/Cost Analysis (PPS) → Reference Price (PPS) → Estimated Price (PPS) → Bidding (PPS)

Procurement Request

Market price, past data analysis
Constr. design & cost review*

Applies to bid evaluation

* For construction works - the cost review includes constr. materials, labor, mgt. cost, etc.
Cost Savings through Professionalization

In 2012, PPS’s price analysis reduced procurement budget by **10.6%** for goods & services, and **5.1%** for construction works.

Not “savings” in itself, but prevents possible budget waste by screening excessive budget and setting more competitive reference price for bidding.

For construction works directly contracted by local governments, PPS also provides cost analysis service to help them save budget.

Budget Reduction from PPS Review

- **Total Budget for PPS-conducted Procurement**
- **Total Estimated Price after PPS’s Review**

- Goods & Services:
  - Before: **8,057**
  - After: **7,206**
  - Reduction: **10.6%**

- Construction Works:
  - Before: **10,203**
  - After: **9,681**
  - Reduction: **5.1%**

Reference year: 2012

Unit: USD Million
Framework contracts (unit-price based) for frequently purchased commercial products

Contracted by PPS, available for all public entities for e-ordering

Favorable price terms due to opportunities for to sell to all public entities (economy of scale)
Online Shopping Mall

KONEPS Online Shopping Mall

Excellent Government Supply Products

Green Products

Technology Certified Products
Strengthening Professional Workforce

PPS’s Missions in Training Procurement Workforce

- Effectiveness of public procurement agency relies on professional procurement workforce
- In Korea’s public procurement environment, PPS need to:
  - Develop highly professionalized workforce within PPS
  - Provide procurement training for autonomous public buyers (local govt., public enterprises, etc.)

Public Procurement Education Institute (PPEI)

- Professional Development Institution under PPS
  - manages training programs for PPS procurement officials, procurement officials from other public organizations, and suppliers
- Manages 3rd party professional training for PPS professionals
- Administers Public Contracting Officers’ Certification program
**Strengthening Professional Workforce**

**PPEI Training Programs for Public Officials**

- PPEI offers in-class procurement training curricula for procurement officials across the public sector

  [2012 PPEI training curricular for public sector procurement officials]

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Target</th>
<th>No. of courses</th>
<th>No. of trainees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic</td>
<td></td>
<td>1</td>
<td>120</td>
</tr>
<tr>
<td>Purchasing</td>
<td></td>
<td>8</td>
<td>1,200</td>
</tr>
<tr>
<td>Construction Works</td>
<td>Procurement Officials from Public Entities</td>
<td>4</td>
<td>1,080</td>
</tr>
<tr>
<td>Foreign Procurement</td>
<td>✓ central govt.</td>
<td>1</td>
<td>60</td>
</tr>
<tr>
<td></td>
<td>✓ local govt.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>✓ public enterprises</td>
<td>2</td>
<td>200</td>
</tr>
<tr>
<td></td>
<td>✓ educational institutes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asset Mgt.</td>
<td></td>
<td>2</td>
<td>240</td>
</tr>
<tr>
<td>Real Property Mgt.</td>
<td></td>
<td>2</td>
<td>240</td>
</tr>
<tr>
<td>e-Procurement</td>
<td></td>
<td>1</td>
<td>560</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>19</strong></td>
<td><strong>3,460</strong></td>
</tr>
</tbody>
</table>

- PPEI also offers cyber training on 5 courses for 5,700 trainees in 2012
### Strengthening Professional Workforce

**PPEI Specialized Programs for PPS Officials**

For procurement officials at PPS, PPEI offers additional professional courses

[2012 PPEI additional courses for PPS officials]

<table>
<thead>
<tr>
<th>Level</th>
<th>Course</th>
<th>Target</th>
<th>No. of trainees</th>
</tr>
</thead>
<tbody>
<tr>
<td>General</td>
<td>Entry course</td>
<td>new PPS employees</td>
<td>60</td>
</tr>
<tr>
<td></td>
<td>PPS MBA</td>
<td>prospectant middle managers</td>
<td>60</td>
</tr>
<tr>
<td>Specialized</td>
<td>Goods &amp; Services (Intro)</td>
<td>PPS employees</td>
<td>60</td>
</tr>
<tr>
<td></td>
<td>Goods &amp; Services (adv.)</td>
<td></td>
<td>60</td>
</tr>
<tr>
<td></td>
<td>Construction Works (Intro)</td>
<td></td>
<td>60</td>
</tr>
<tr>
<td></td>
<td>Construction Works (adv.)</td>
<td></td>
<td>60</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td></td>
<td><strong>360</strong></td>
</tr>
</tbody>
</table>
Strengthening Professional Workforce

Contracting Official’s Certification Program

- Certification program operated by PPS
  - Introduced in ’04 for PPS staff, opened to other public officials since 2007
- Categorized into Advanced & Intermediate Professional Contact Officer and Cost Analysis Officer

<table>
<thead>
<tr>
<th>Grade</th>
<th>Certification</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Procurement Specialist</td>
</tr>
<tr>
<td></td>
<td>Contracting Officer – domestic procurement</td>
</tr>
<tr>
<td></td>
<td>Cost Analyst – domestic procurement</td>
</tr>
<tr>
<td>2</td>
<td>Contracting Officer – foreign procurement</td>
</tr>
<tr>
<td></td>
<td>Contracting Officer – construction works</td>
</tr>
<tr>
<td></td>
<td>Cost Analyst – construction works</td>
</tr>
</tbody>
</table>

Certificate Holding Ratio among PPS Employees

- Grade 1 (10) - 592 Certified, 69% of Grade 1
- Grade 2 (582) - 270 Certified, 31% of Grade 2

Certified | Uncertified
e-Procurement in Korea
e-Procurement in Korea

KONEPS (Korea On-line E-Procurement System)

- Single public e-Procurement Portal
- KONEPS processes the **entire procurement cycle**
  - Interconnected with 140 database systems for minimal paperwork
e-Transformation – Before & After

One Stop Service through Data Integration

- KONEPS exchanges data with 140 external info systems for supplier information, bid evaluation, bonds and payment, minimizing paper document submissions.
KONEPS exchanges data with 140 external info systems for supplier information, bid evaluation, bonds and payment, minimizing paper document submissions.
In 2012, Over 66% of Korea’s total public procurement ($101 billion) was conducted through KONEPS

User Registration
- 45,000 government agencies
- 244,000 registered businesses

e-Bidding
- 93% of all bids are conducted online
- 24M bidders participated in 292T e-bidding
- Total transaction value: $42 billion

e-Contracting & e-Payment
- 657T contracts are electronic (99% of all contracts)
- 100% of all payments are electronic

Online Sopping mall
- 500T Purchase Orders issued online (99% of all POs)
- Total e-Mall transaction value: $12.5 billion
Impact of e-Procurement

Increased Transparency

- Real-time information disclosure
  - Bidding results and contract details disclosed to the public on-line
  - Peer monitoring on fair results

- Objectivity in bid evaluation
  - Bid evaluation based on objective, validated data

- Informed decision-making
  - Traceable prices and specifications
  - Reduced risks of biased decisions from information asymmetry
KONEPS is saving **transaction costs** of **USD 8 billion** annually

- Private Sector: **USD 6.6 billion**
- Public Sector: **USD 1.4 billion**

**Increased efficiency**

- Receiving bids, validating related docs. and selecting the winning bid

<table>
<thead>
<tr>
<th>Before</th>
<th>over 30 hrs</th>
</tr>
</thead>
<tbody>
<tr>
<td>After</td>
<td>less than 2 hrs</td>
</tr>
</tbody>
</table>

- Reduction of 7.8 million pages of paper documents per year

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Transaction Cost Savings

- Reduced visits
  - Reduced labor costs

**$ 6,600 million**

**$ 1,400 million**
THANK YOU
Apendices
Government-owned Goods Mgt. System

Government-owned Goods Mgt. using RFID

- PPS monitors public entities’ management of govt. owned goods
- PPS’s RFID-based management system ensures efficient mgt. of government-owned goods
  - Service years, price, spec, etc.
  - inventory survey: 15 days → 2 days

Govt. purchased goods are delivered with RFID (radio frequency identification) tags attached

Govt. Owned Goods Mgt. with RFID

- Standard API (Mobile RFID SDK)
- Web Portal (PPS)
- RFID Reader
- Server Data
- Inventory

- Synchronized data on govt. owned goods
- Fast, easy inventory management