
2013. 12

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This evaluation study was entrusted to Kookmin University by KOICA for the purpose of independent evaluation research. The views expressed in this report do not necessarily reflect KOICA's position.
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Result of Grade Evaluation
### Result of Grade Evaluation

#### 1. Project Title:

Project for Establishment of an E-procurement Pilot System in Vietnam

#### 2. Evaluation grade by criteria

- **Relevance**: 3, 2, 1 (very adequate)
  - Reasons for the grade: The national economic development plan 2011-2020 as a part of a grand Socio-Economic Development Strategies (SEDS) of the recipient country corresponds with the project. And so does the supporting plan for the recipient country and the Country Partnership Strategy (CPS) of the donor country, which emphasizes the utilization of administrative reform through ICT. In addition, appropriate steps were undertaken in the processes of project implementation suggested by OECD DAC evaluation criteria.

- **Efficiency**: 3, 2, 1 (partially effective)
  - Reasons for the grade: Implementation of the project was efficiently as originally planned. But there seems to be potential improvements in allocating project budgets in areas such as BPRs and policy consultations. Also, preparing budget for ex-post maintenance is strongly recommended because the project at hand incurred significant increase of unexpected expenditure after finishing the project. This was basically due to the additional requests from the recipient country, which should not be accepted (those were accepted by PMC, not by KOICA).

- **Effectiveness/Impacts**: 3, 2, 1 (50–80% of planned effectiveness)
  - Reasons for the grade: were accomplished. Most of the planned outputs were produced. e-Notice system is actively used, while e-bidding and e-contracting are not actively used as expected. Expanding the pilot system to all governments is delayed despite the eagerness of PPA and Prime Minister to
do so. Upgrading the capacity of the pilot system is also not implemented due to the lack of budget. Additional manpower training is not properly implemented due to the lack of ownership on the part of the recipient country.

○ Sustainability : 3, 2, 1 (sustainable after improvement)
  - Reason for the grade: Coexistence of positive and negative factors in such areas as administrative culture and environment, capability of project management and manpower for system maintenance, and willingness and actions of sustainable management and expansion of the system to government wide. It is expected that this project could be sustainable and expanded to all governments as originally planned when proper improvements are made.

3. Overall Grade : 9 out of 12, Successful.
Executive Summary
The e-Procurement pilot system had been provided to Vietnam by KOICA in 2008-09. Since the project was officially requested by the government of Vietnam in January 2007, an implementation survey team was dispatched in October 2007, and a Record of Discussion (R/D) was signed by both parties in June 2008. Samsung SDS was selected as the PMC of this project in November 2008, and the system was constructed in September 2009. The purpose of this ex-post evaluation study was to examine whether the project was well conducted and thus achieved the goals and expected outcomes, focusing on long-term effects.

According to the request of KOICA, an independent research team was selected through a process of open competition. As a result, a research team from the Kookmin Institute for Strategic Governance (KISG) of Kookmin University was formed to conduct the evaluation, which was undertaken in the second and third quarters of 2013. The KISG research team reviewed all the documents that were produced in the processes of implementing the e-Procurement Pilot system from the very beginning to the end. They also undertook field researches both in Korea and Vietnam, and have interviewed with those who actually undertook the project both in Korea, Vietnamese public officials who were in charge of the project, main beneficiaries of the project, and KOICA officials who worked in the local KOICA office in Vietnam during the period of project implementation.

Through this evaluation, the KISG team drew the following conclusions.

Overall, the e-Procurement pilot system was evaluated "successfully implemented" by getting 9 out of 12 points. It would be more appropriate to understand the meaning of "successfully implemented" as "it is highly
possible that the expected outcomes would be realized with some reservations regarding efficiency and sustainability of the impacts of the project.” A detailed discussion about the outcomes of evaluation is as follows.

From the "relevance' point of view, the project was evaluated as "very relevant" mainly because it was directly related to the Vietnamese long-term economic and social development strategy in 2011-2020. It emphasizes the importance of increasing administrative efficiency and public interests, to which e-Procurement system would contribute a great deal. The Country Partnership Strategy (CPS), which was formulated by the donor country (Korea in this case) also emphasized e-Government as a main area of concentration in ODA to Vietnam.

In terms of effectiveness and impacts, the project was evaluated "partly effective," in the sense that about 50-80% of expected outcomes were actually occurred. In fact, though the system was successfully installed and being used, the capacity for maintenance on the part of Vietnam was not fully developed. In addition, while e-Posting is actively used, e-Bidding and e-Payment systems are not used. These are the main reason the project was evaluated as "partly effective."

Regarding the efficiency standard, the project was evaluated as "partly efficient." The budget of the e-Procurement pilot project was spent as originally planned. But some interviewees pointed out that budgets for policy consultations and technology training should be increased for more efficient outcomes. In addition, the project was conducted without the necessary business process reengineering, which significantly increased the processing times. After the system was successfully installed and transferred to the Vietnamese government, the maintenance was supposed to be undertaken by the recipient country, which was not actually happened. This also affected the efficiency and effectiveness of the project negatively. Due the lack of ownership of the recipient
country, there were significant inefficiency in operating the e-Procurement system.

In terms of sustainability, the project was evaluated as "partly sustainable by improving problems." Although there were always possibility of corruption in public procurement, there were also increasing pressure for transparency and fairness from the international community such as donor countries. The recipient agencies (Ministry of Planning and Investment, Electricity of Vietnam, Vietnam Telecommunications, and Hanoi People's Committee) did not have enough capabilities to cope with potential problems occurring in the operation procedures. But high officials of the Vietnamese government expressed strong willingness to continue their efforts to expand e-Procurement to all governments, and this is directly related to various national development plans, which increased the sustainability of the pilot system.

The interests of the Vietnamese government, ordering public organizations, and companies applying public orders and supplying goods and services, are diverse. Thus expanding e-Procurement system to all governments should consider the political economic interactions among those who have diverse interests. Because of the delay of the expansion plan, Samsung SDS, the PMC of this project, decided to withdraw from the e-Procurement market of Vietnam.

To increase sustainability of the e-Procurement project, KOICA needs to support the efforts of the Vietnamese government to expand e-Procurement system government-widely. There should be more active policy consultations between the Vietnamese government, KOICA, and the Public Procurement Service (PPS) in Korea. From the planning phase, political, legal, and institutional factors should be considered more. As shown in many e-Government ODA projects, there was not a single project that failed due to the technological problems. In most cases, political, legal, and institutional factors have been critical in limiting the
effectiveness and efficiency of e-Government ODA projects.

Budget for maintenance should be included from the very beginning of the project. It would be better to reflect maintenance fees in the yearly budget of the recipient countries. This might be viewed as conditionality, but if the recipient country genuinely achieve the goals and expected outcomes of the ODA project at hand, showing the ownership of the recipient country by sharing maintenance budget would be meaningful to increase aid effectiveness. Since KOICA recently published a maintenance guideline for development consulting and project implementation to increase aid effectiveness, any following projects should keep the guidelines.

The evaluation team also recommends to link the results of ex-post evaluation to incentives to the recipient countries for the following ODA projects. By doing so, legal and institutional environment would be better off and so does the aid effectiveness of e-Government ODAs.
I. Background for Evaluation

1. Needs for Ex-post Evaluation for ODA Project
2. e-Government and ODA
3. Levels of e-Government
Chapter

I

Background for Evaluation

1. Needs for Ex-post Evaluation for ODA Project

- South Korea is recognized for its government agencies maintaining a higher level of informatization as the world's best e-Government realization state by the United Nations.

- e-Government-related business is steadily increasing in the area of ODA projects and the future of ODA is expected to grow as a core business area.
  - However, despite an increase in e-Government ODA projects, comprehensive inspections and post-evaluation are experiencing many difficulties since they did not function correctly.
  - Therefore, the post-evaluation related to e-Government ODA projects is an activity not only for the a single business, but is absolutely necessary in the next e-Government initiatives' continuous expansion.

- In general, the Korea International Cooperation Agency's (KOICA) post-assessment activities, related to a concluded business, are being conducted by checking processes and outcomes systematically while conducting limited ODA budgets' efficient enforcement and on the improvement of aid effectiveness for its purpose.

- ex-post evaluation about the KOICA's e-Government ODA projects is undertaken in order to monitor the prolonged impacts and sustainable outcomes of the already provided ODA projects.
Currently, KOICA has provided various e-Government ODA projects. In order to increase the performance of such projects, various types of actions are undertaken such as interim and final evaluations, follow-up maintenance, and ex-post evaluation as was done in this report.

Upon the request of Vietnam, KOICA provided an e-Procurement Pilot System for the Vietnamese government with the budget of $3 million (2008-2010).

- Since 2006 when Vietnam became a WTO member, there has been increasing demand for transparency and effectiveness in administrative processes, especially in public procurement.

2. e-Government and ODA

- e-Government is defined as a form of government in the era of the information age, in which information and communications technology (ICT) is widely adopted and utilized in public administration. Generally speaking, the adoption of ICT in public administration allows a dramatic increase of efficiency and productivity in providing administrative services. It also increases overall transparency within governments, and allows interactive services for citizens’ demands.

- Utilizing ICTs within governments can be divided into three categories: public services, government support services, and common technology services in terms of e-Government as shown in <Figure 1>.
○ e-Government ODA is one of the new areas of ODAs, which began to receive more attention from the international community in recent years.
  • Since the digital divide is viewed as one of the main reasons for the huge income disparity among sub-Saharan African countries, many developing countries began to consider having more ODAs in the field of e-Government.
  • e-Government programs have a purpose to improve the efficiency of public services, transparency, and reliability.

○ e-Procurement system is one of key e-Government systems that has a huge potential for administrative reform in developing countries.
  • Public procurement is a process of acquiring goods and services needed to governments. Due to the nature of the process, there are lots of face to face contacts between public officials and private companies, in which huge possibilities of corruption exist. e-Procurement system makes all activities of public procurement, e.g., notice, bidding, contracts, and payments, etc., online. By doing this, there would be no direct face to face contacts between bidders and public employees who are in charge of the bidding process.
3. Levels of e-Government of Donor and Recipient Countries

- According to the e-Government survey\(^1\) by the United Nations (UN), South Korea has been named as one of the highest developed countries regarding e-Government, while Vietnam has maintained a lower-middle level of e-Government. Korea was ranked in 5th place (0.8727) in 2005, but it quickly moved to the 1st place (0.9283) in 2012. Vietnam, on the other hand, was ranked in 105th place (0.3640) in 2005, 91st place (0.4558) in 2008, and moved up to 83rd place (0.5217) in 2012.

< Table 1 > UN e-Government Index of Korea and Vietnam, Selected Years

<table>
<thead>
<tr>
<th>Country</th>
<th>E-Government 2012</th>
<th>Rank 2012</th>
<th>Rank 2010</th>
<th>Rank Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Singapore</td>
<td>0.8474</td>
<td>10</td>
<td>11</td>
<td>1</td>
</tr>
<tr>
<td>Malaysia</td>
<td>0.6703</td>
<td>40</td>
<td>32</td>
<td>-8</td>
</tr>
<tr>
<td>Brunei</td>
<td>0.6250</td>
<td>54</td>
<td>68</td>
<td>14</td>
</tr>
<tr>
<td>Vietnam</td>
<td>0.5217</td>
<td>83</td>
<td>90</td>
<td>7</td>
</tr>
<tr>
<td>Philippines</td>
<td>0.5130</td>
<td>88</td>
<td>78</td>
<td>-10</td>
</tr>
<tr>
<td>Thailand</td>
<td>0.5093</td>
<td>92</td>
<td>76</td>
<td>-16</td>
</tr>
<tr>
<td>Indonesia</td>
<td>0.4949</td>
<td>97</td>
<td>109</td>
<td>12</td>
</tr>
<tr>
<td>Laos</td>
<td>0.2935</td>
<td>153</td>
<td>151</td>
<td>-2</td>
</tr>
<tr>
<td>Cambodia</td>
<td>0.2902</td>
<td>155</td>
<td>140</td>
<td>-15</td>
</tr>
<tr>
<td>Myanmar</td>
<td>0.2703</td>
<td>160</td>
<td>141</td>
<td>-19</td>
</tr>
<tr>
<td>Timor-Leste</td>
<td>0.2365</td>
<td>170</td>
<td>162</td>
<td>-8</td>
</tr>
</tbody>
</table>

\(^1\) e-Government Survey of UN Economic and Social Council have examined the levels of e-Government of 190 UN member countries since 2002. The results of the evaluation has been announced in the form of “e-Government Development Index,” which consists of an online service index, telecommunication infrastructure index, and human capital index.
II. Overview of the Project

Being Evaluated

1. Background for Requesting e-Procurement Pilot System
2. Overview of the e-Procurement Pilot System
Overview of the Project Being Evaluated

1. Background for Requesting e-Procurement Pilot System

- After 2006 when Vietnam joined the WTO, Vietnam aggressively entered into the capitalist market economy. In order to fasten economic development, the Vietnamese government actively adopted expanding infrastructures such as roads, ports, and highways, including ICT infrastructures.

- In 2005, the Vietnamese government began to push advancement in public procurement by amending procurement-related laws and made plans to modernize the public procurement system.
  
  - The Vietnamese government signed an MOU with PPS of Korea and began to benchmark KONEPS (Korea ON-line E-Procurement System).
  
  - In 2007, the Vietnamese government officially requested an ODA for e-Procurement pilot system, and Korea accepted the request and decided to provide the system.
2. Overview of the e-Procurement pilot system

- The details of e-Procurement pilot system to Vietnam was shown in the table below. Project budget was $3 million with the project period of 2008-2010.
  - Main contents of the project was to install e-Procurement pilot system based upon the KONEPS of PPS of Korea. The project included installation of the pilot system, providing equipment and service, dispatching experts, providing necessary training by inviting those who would be in charge of the system management, and some miscellaneous management fees.
  - Main beneficiaries were identified as Ministry of Planning and Investment (MPI), Electricity of Vietnam (EVN), Vietnam Telecommunications (VNPT), and Hanoi People's Committee (HPC).

<Table 2> Overview of the e-Procurement Pilot System Project

<table>
<thead>
<tr>
<th>Classification</th>
<th>Main Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project purpose</td>
<td>• Installing e-Procurement pilot in the Vietnamese government (focusing on e-posting and e-bidding systems)</td>
</tr>
<tr>
<td>Size/Period</td>
<td>• $3 million / 3 years (2008–2010)</td>
</tr>
<tr>
<td>Project place</td>
<td>• Hanoi, Vietnam</td>
</tr>
<tr>
<td>Goals</td>
<td></td>
</tr>
<tr>
<td>Upper development goal</td>
<td>• Transferring KONEPS, including systems as well as operating experiences</td>
</tr>
<tr>
<td>Project goal</td>
<td>• Reform public procurement in Vietnam by improving efficiency and transparency of procurement process through installing KONEPS</td>
</tr>
<tr>
<td></td>
<td>• Providing e-Procurement infrastructure for the future of Vietnamese e-Government system</td>
</tr>
<tr>
<td>Main outputs</td>
<td>• e-Bidding System</td>
</tr>
<tr>
<td></td>
<td>• server room and equipment for e-Procurement</td>
</tr>
<tr>
<td></td>
<td>• capacity building for system operating and human resource development</td>
</tr>
</tbody>
</table>
### Main beneficiaries
- MPI (Ministry of Planning and Investment)
- EVN (Electricity of Vietnam)
- VNPT (Vietnam Telecommunication)
- HPC (Hanoi People’s Committee)

### Main input items

<table>
<thead>
<tr>
<th>donor (Korea)</th>
<th>recipient (Vietnam)</th>
</tr>
</thead>
</table>
| - pilot system for e-Procurement ($1,142 thousands)  
  - e-posting, e-bidding, user management, e-bidding portal, and user manual  
  - equipments (25 items, $1,106 thousands)  
  - dispatching experts (7 areas, $430 thousands)  
  - training courses by inviting Vietnamese experts (2 courses, $215 thousands)  
  - local repairs and maintenance ($20 thousands)  
  - project management ($87 thousands) | - equipments: tariff-free customs services, provide server room  
- inviting trainees: selecting trainees, and locate them after training  
- dispatching experts: offices and data services to Korean experts  
- Others: secretarial services and assisting local training  
- System maintenance and operation after completion of the project (including budget and manpower) |


III. Evaluation Methodology

1. Overview of Evaluation
2. Models for Evaluation
3. Evaluation Matrix
4. Evaluation Methods
5. Field Research
Evaluation Methodology

1. Overview of Evaluation

○ The ex-post evaluation research team was consisted of three experts, all majoring in e-Government and evaluation. All of them has hyper expertise for the ex-post evaluation of e-Government ODAs.
  • PM: Sung Gul Hong, Professor and Director, KISG and Kookmin University
  • Researchers: Jae Sin Park and Byung Joon Kim, Professors at Kookmin University

○ Major activities and time schedule for the evaluation has been provided the table below.

< Table 3> Main Activities Undertaken

<table>
<thead>
<tr>
<th>Main Activities</th>
<th>Period</th>
<th>Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preparing and Designing Field Research</td>
<td>21 May – 10 June</td>
<td>Schedule setting</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Contract with local specialists</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Launching the project</td>
</tr>
<tr>
<td>Field Research in Korea</td>
<td>11 June – 11 July</td>
<td>Interviews with PMC people</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Literature review</td>
</tr>
<tr>
<td>Field Research in Vietnam</td>
<td>12 August - 16 August</td>
<td>Visit and conduct interviews</td>
</tr>
<tr>
<td>Analyzing Outcomes of Field Research</td>
<td>16 August - 9 Sept.</td>
<td>Summarize research outcomes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>and draw implications</td>
</tr>
<tr>
<td>Mid-term report</td>
<td>10 Sept.</td>
<td>Mid-term presentation</td>
</tr>
<tr>
<td>Revising Evaluation Outcomes</td>
<td>11 Sept. - 10 Oct.</td>
<td>Final presentation of field research outcomes</td>
</tr>
<tr>
<td>Final Report</td>
<td>11 Oct.</td>
<td>Writing final report</td>
</tr>
<tr>
<td>End of Project</td>
<td>30 Oct.</td>
<td>Printing final report</td>
</tr>
</tbody>
</table>
2. Models for Evaluation

- The logical model has been applied widely to ODA project evaluation based upon the value chain of evaluation activities. These activities are; inputs, activity, outputs, outcomes, and impacts.
  - Inputs: financial, human, material resources that are put into ODA projects
  - Activity: financial or technological supports to produce an output.
  - Outputs: a product as a result of ODA project, referring either a commodity or service and including byproducts as well
  - Outcomes: achieved or achievable outcomes from outputs
  - Impacts: relatively long-term, either positive or negative impacts which directly or indirectly caused by ODA projects

<Figure 2> Performance Reference Model (PRM) Framework

- Since the e-Government ODA projects have some uniqueness due to its nature of ICT applications to provide public services, evaluation of e-Government ODA projects are usually undertaken by the so-called Performance Reference Model (PRM). PRM has the following components and factors in its evaluation framework.
Since the project is an e-Government ODA in nature, the evaluation team devised a new model to evaluate the Project, which combined OECD DAC evaluation criteria with PRM as shown in <Figure 3>.

**<Figure 3> Evaluation Model for e-Government ODA projects**

3. Evaluation Matrix

- Evaluation matrices are consisted of a series of questions that are categorized into the evaluation model as shown in the <Figure 3>.

- OECD DAC criteria for evaluation (relevance, efficiency, effectiveness, impacts, sustainability, and cross-cutting issues) and factors and areas of evaluation of PRM are served as key groupings for evaluation matrices in combined ways. Detailed criteria, areas, and questions included in the evaluation matrices are provided in the Appendix.
4. Evaluation Methods

- The ex-post evaluation was carried out by using various methods to examine the actual outcomes, impacts, and sustainability of the Project. In particular, we have engaged in an intensive literature review, which include virtually all documents that have been created in the process of project implementation. Intensive field interviews with those who have participated in the Project, both from donor and recipient countries. In addition, the researchers actually visited most government ministries which are the main beneficiaries of the Project, and observed how the outcomes of the Project are being utilized in actual field setting. By cross-examining the outcomes of these three different investigation, the researchers draw conclusions for this ex-post evaluation.

- The literature investigations from the research team started out writing the necessary bibliography in accordance with the evaluation purposes.

- Literature reviews were started out by gathering all the documents published before, during, and after the implementation of the Project. Documents that are reviewed are as follows.
  - Project Feasibility Study and the Results Report
  - Project Consultation Report
  - Record of Discussions
  - Project Execution Plan
  - Project Action Plan
  - Project Equipment Details
  - Interim Assessment Report
  - Project Completion Report
  - Exit Assessment Report
  - Country Partnership Strategy on Vietnam
  - Others (documents from KOICA and Vietnamese government, beneficiaries and so on)
○ Literature on indicators of ODA evaluation and literature on evaluation methods include the following:
  - Methodologies of Project Planning, Monitoring and Evaluation (2009)
  - Glossary of Assessment and Performance Management (2010)
  - Guidelines for Considering Environmental Factors in ODA (2010)

○ Domestic interview methods were conducted with main stakeholders.
  - Domestic interviewees and main questions asked were summarized in the table below.

<Table 4> List of Domestic Interviewees and Main Contents of Questions Asked

<table>
<thead>
<tr>
<th>Name</th>
<th>Organization</th>
<th>Roles</th>
<th>Questions</th>
</tr>
</thead>
</table>
| Dong Hyun LEE | KOICA Vietnam office  | Vice-director assisting final assessment | • background/goals  
  • relevance, efficiency, effectiveness, etc.  
  • satisfaction of the recipients  
  • ex-post maintenance and status of following projects  
  • things that must be careful in ex-post evaluation |
| Jong In SONG    | Samsung SDS          | dispatched expert                     | • relevance, efficiency, effectiveness, etc.  
  • satisfaction of the recipients  
  • assistance from the recipient country and organizations  
  • effectiveness of expert-dispatching and invited training programs |
<table>
<thead>
<tr>
<th>Name</th>
<th>Organization</th>
<th>Role</th>
<th>Things to be careful in ex-post evaluation</th>
</tr>
</thead>
</table>
| Kyung Sook YOO        | PPS, Korea    | conducting final assessment | • ex-post maintenance and status of following projects  
|                       |               |                       | • things that must be careful in ex-post evaluation  
|                       |               |                       | • background/goals  
|                       |               |                       | • relevance, efficiency, effectiveness, etc.  
|                       |               |                       | • satisfaction of the recipients  
|                       |               |                       | • impacts and sustainability  
|                       |               |                       | • assistance from the recipient country and organizations  
|                       |               |                       | • effectiveness of expert-dispatching and invited training programs  
|                       |               |                       | • ex-post maintenance and status of following projects  
|                       |               |                       | • things that must be careful in ex-post evaluation  
|                       |               |                       | • mutual cooperation and impacts of both donor and recipient countries  
| Youn Chil OH          | PPS, Korea    | conducting final assessment | • ex-post maintenance and status of following projects  
|                       |               |                       | • things that must be careful in ex-post evaluation  
|                       |               |                       | • mutual cooperation and impacts of both donor and recipient countries  

**5. Field Research**

- Field research in Vietnam was conducted with the following purposes:
  - To confirm the data and information that the research team gathered in literature review and domestic interviews.
  - To observe and check the current situation of e-Procurement pilot system in actual field setting.
  - To have interviews with the users and stakeholders in the recipient country.
  - To find out the willingness and actual policies that are being adopted by the Vietnamese government in order to expand the e-Procurement system to all governments.
The field research for visiting Vietnam was scheduled from August 5th (Sunday) to August 10th (Friday) for the first round, and the second round was from October 17th (Wednesday) to October 20th (Saturday).

- The survey schedule, main interviewees, and organizations were listed in the table below.

<Table 5> Schedule and Activities of Field Research

<table>
<thead>
<tr>
<th>Date</th>
<th>Schedule and Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.11(Sun.)</td>
<td>• Incheon → Hanoi</td>
</tr>
<tr>
<td>8.12(Mon.)</td>
<td>AM  • Meeting officials in KOICA Hanoi Office</td>
</tr>
<tr>
<td></td>
<td>• EVN-Hanoi: Ms. Nguyen Thu Hien, Director of Procurement</td>
</tr>
<tr>
<td></td>
<td>• Hai Ba Trung Electricity Company: Mr. Le Xuan Luong, Phong Ke Toan Vat Tu</td>
</tr>
<tr>
<td>8.13(Tues.)</td>
<td>AM  • Public Procurement Agency in MPI: Mr. Nguyen Son, Deputy Director General of PPA</td>
</tr>
<tr>
<td></td>
<td>• Server room and call center, PPA: Mr. Mai Lam, Deputy Director, Division of e-Procurement Management &amp; staff members</td>
</tr>
<tr>
<td>8.14(Wed.)</td>
<td>AM  • VN Petroleum Institute: Ms. Nguyen Thi Phuong, Quan ly Dau tu</td>
</tr>
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<td></td>
<td>• Vietnam Telecoms National: Mr. Nguyen Tri Kien, Ban Dau tu</td>
</tr>
<tr>
<td></td>
<td>• Toji Company, a private company: Interview Mr. Cuong, CEO</td>
</tr>
<tr>
<td>8.15(Thurs.)</td>
<td>• Preparing report and meeting with local KOICA officials</td>
</tr>
<tr>
<td>8.16(Fri.)</td>
<td>AM  • Hyundai Information Technology Vietnam: Mr. CHA, Sang Yong, Director</td>
</tr>
<tr>
<td></td>
<td>• Reporting the outcomes of field research at local KOICA office</td>
</tr>
<tr>
<td></td>
<td>• Hanoi → Incheon</td>
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</tbody>
</table>
IV. Major Findings and Results of Ex-Post Evaluation

1. Relevance
2. Efficiency
3. Effectiveness
4. Impacts
5. Sustainability
6. Cross-cutting Issue
7. Overall Grade
The period of evaluation covers between 2007 to present (2013). The project was requested by the Vietnamese government to the Korean government in 2007, the system was established in 2009, and the evaluation for project completion was undertaken in 2011. We examined and evaluated not only all activities of above time period, and other inputs and outputs related to this project after 2011 up to the present (August 2013).

As discussed in previous chapters, this evaluation was conducted based on entire official documents (feasibility study, mid-term evaluation report, final evaluation report, field reports with Vietnamese government, Korean governmental agencies, Samsung SDS) and a number of interviews with the users (private companies) of Vietnamese e-Procurement system and all related agents and representatives. The framework for evaluation used in this report was prepared by combining the OEDC/DAC standards with factors in PRM.

- In addition, this report includes the table of ranked evaluation which provides numeric scores of the evaluation result (score range: 1-3) and four level of overall evaluation of the project.
1. Relevance

### Evaluation: 3, 2, 1

<table>
<thead>
<tr>
<th>Evaluation standards</th>
<th>definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>• If it match development goal, purpose and plan</td>
<td>very adequate</td>
</tr>
<tr>
<td>• If it match with police that strengthen the ownership of recipient country</td>
<td>partly adequate</td>
</tr>
<tr>
<td>• If it match with means of living and cultural background</td>
<td>adequate</td>
</tr>
<tr>
<td>• If it was proper to solve a development issue in a technical way.</td>
<td>inadequate</td>
</tr>
</tbody>
</table>

- Vietnamese government set the improvement of administrative effectiveness and transparency as a primary objective through establishing e-government system in order to fulfill the mission of the national economic development plan 2011-2020 as a part of a grand Socio-Economic Development Strategies (SEDS 2011-2020).
  - Since 2006 when Vietnam joined as a member of WTO, there has been higher need for enhancing transparency of administrative process and improving effectiveness of governing process in procurement system in public institutions.
  - Vietnamese government considered the international aid as the most important assets for the future of their development so that they cannot ignore the donor countries’ requests: solving corruption problems in the public sector, improving governmental responsibility as well as enhancing transparency of governance. Thus, the Vietnamese government set the utilization of the e-Procurement system as one of the highest priority task to reform government.
  - This project was expected to contribute to reforming government so that other international organizations including World Bank showed their
interests on this project.

- This project was conducted on the right timing and had high relevance as a KOICA project as judging based on the year 2011 Vietnamese government report on the three major governmental reform tasks (reforming finance, public cooperation, and public investment).

○ This project was a part of five major projects of KOICA. It was under the category of ‘public administration support project’ and ICT project in the category of the ‘cross-cutting issue.’

- According to the 2011-2015 CPS for Vietnam, which was a product of cooperation among related ministries and departments in 2011, the introduction of ICT is important to enhance the effectiveness of governmental agencies and to build their capacity so that it should be highlighted.

- Internationally Korean e-Government is recognized as the top country. Therefore, this project has high relevancy in terms of spillover effect. If e-Procurement system is implemented appropriately in Vietnam and KOICA support them via various of training programs such as invited workshops and field training to build their own capacity of operation, this project can be the successful story of official development aids.

- This project also has high strategic relevance because it is well matched with KOICA strategic plan for supporting developing countries based on the CPS and the pursuing goal, which is to reform government agencies by utilizing ICT.

○ This project was started by accepting the request from Vietnam government in January 2007. The brief timeline of the project were as follow:

- A team for project initiation visited Vietnam → An evaluation committee was formed → The Ministry of Foreign Affairs approved the project → A negotiation team visited Vietnam → Tuned the details of project between
Korea and Vietnam several times, and the Public Procurement Service (PPS) Agency signed the R/D document → MOU exchanged → a PMC was selected and the project began → PMC and PPS conducted BPR/ISP → PMC and PPS implemented consulting projects on law and regulation system of procurement in Vietnam → Mid-term evaluation was conducted and confirmed the progress → e-Procurement pilot system established → experts visited Vietnam three times for ex-post maintenance → Final evaluation was conducted

- This process is evaluated as relevant, and fulfilled the appropriate procedure described in KOICA’s guidelines to find a new ODA project.

○ In reviewing the planning stage, yearly budget plans, time schedule of the entire project, major activities of each project stage, project management plans, details on project plans and guidelines were all well constructed and implemented. The span of project and the goals targeted were evaluated as very relevant.

- The report submitted by the negotiation team (2007. 12) and the implementation plan submitted by the PMC adequately pointed out the importance of participation of BPR/ISP experts, and should conduct a gap analyses and consultations on the process of procurement, detailed guidelines and managing system, laws and regulations, etc.

○ At the implementation stage, experts were appropriately involved, budget was implemented as originally planned, and activities on each step of project were implemented properly.

- Public Procurement Service (PPS) of Korea has proper ability and put appropriate human capital into this project to consult policy and institution for Vietnamese government. KOICA headquarter as well as Vietnam Office were involved this project with well trained man power. And Samsung SDS has top quality experts for this project. All in all, the implementation was
successful in terms of human capital.

- Although there was a delay (about 4 weeks) in installing the system, it was mainly due to a sabotage of the Vietnamese workers on overtime payments, etc. In response to this, PMC developed a systemic personnel management system, increased overtime payments and provided IT training courses. With this reaction, there were no long sabotage or delay on the part of Vietnamese workers, and PMC could finish the project on time.

- Overall, this project was properly implemented and the evaluation on the relevance can be graded as 3 out 3.

- There were a number of comments on the need of increasing policy consultations and business process reengineering (BPR) on legal, institutional and administrative systems in a series of interviews. We will discuss those issues under the evaluation criteria of efficiency and effectiveness.
2. Efficiency

Evaluation: 3, ②, 1

<table>
<thead>
<tr>
<th>evaluation criteria</th>
<th>definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Efficiency</td>
<td>efficient (managed within 100%)</td>
</tr>
<tr>
<td>• Whether evaluation target was managed efficiently</td>
<td>partly efficient (managed within 100~150%)</td>
</tr>
<tr>
<td>• If it resulted better outcomes with same amount of resources</td>
<td>inefficient (managed over 150%)</td>
</tr>
<tr>
<td>• Whether there was other options at lower cost</td>
<td></td>
</tr>
<tr>
<td>• Its economic value compared to other options</td>
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</table>

○ This project expenditure was used properly as planned ways so that the efficiency on the project budget could be evaluated as a high grade.

• Total budget was $3,000,000 (System development cost: $1,142,104; the cost of equipments: $1,106,373; training cost: $214,621; payment to experts: $429,965; maintenance cost: $20,000; and project management cost: $89,936).

• According to interviews with Samsung SDS managers and the final report of this project, the budget was implemented by the plan and the efficiency of utilizing the planed budget could get a high grade.

• There were unexpected costs such as cost for managing unproductive manner of Vietnamese employees, cost for opening additional IT training workshops due to lacks of basic IT knowledge among employees, cost for increasing security of server room etc. These unexpected costs were covered by the PMC’s own cost (Samsung SDS). Samsung SDS considered these extra costs as an investment for future business opportunity in Vietnam because this was a pilot project. However, as the main project was delayed until recently, Samsung SDS decided to withdraw from Vietnamese market.
○ About the allocation of the project budget, there were comments on the need of increasing or allocating more budget for consultations to reform legal, institutional and administrative systems and expanding IT training budget. In particular, without appropriate business process reengineering (BPR), that is, transforming current ways steps of procurement system into proper ways of operating with new e-Procurement, there would be two types of inefficient management problems.
  • First, simple digitalizing the offline documents that have many pages of paperwork to online does not promise the increase of efficiency.
  • Second, allowing the offline ways of procurement would cause of burden for users to prepare both online and offline paperwork. Thus, there was a need to distribute more resources to improve above issues to improve the efficiency of resource allocation.

○ This project was a turn-key based contract with Samsung SDS (PMC). This type of contract improved the PMC’s responsibility on the project, coherent management system and streamlining the administrative process. Thus, it can increase the level of efficiency of this project.
  • The overall process of project was well implemented as planned by the turn-key way from November 13, 2008 (the beginning of the project of establishing systems) to at the end of October, 2009 (the end of the project) by Samsung SDS. Establishing a master plan, developing the system, supporting equipments, training the employees, sending experts to the field etc. were conducted efficiently.

○ Communications among KOICA, PPS agency and the local KOICA office in Vietnam occurred efficiently. Headquarter of KOICA orchestrated overall stages of the project well, PPS provided proper experts for this project and local KOICA office in Vietnam discussed issues on the project with Vietnamese agencies appropriately. Thus, communications as well as overall operations
were efficiently conducted.

- Generally speaking, many ODA projects have a problem of overlapping among agencies. However, this project is a good example of overcoming the problem through active collaboration among related agencies and institutions.

- There was a delay of about 4 weeks. However, the reason for the delay was not due to the PMC or KOICA, but to the situation of the Vietnamese government agencies. After this delay, the project team reformed their management system and solved this issue and met the deadline of project in a proper way and on time.
- The mid-evaluation report pointed this issue well in timely manner, and contributed to solve the problem with a proper way.

- The cost efficiency was accomplished at the end stage of project. However, the Vietnamese government requested additional supports after completing the project in order to run the e-Procurement system. KOICA accepted this request so that PMC (Samsung SDS) conducted a post-management project with about $70,000 budget. PMC sent experts three times to Vietnam to help managing the system.
  - The purpose of this post-management was for the future main project for establishing e-Procurement system in all segments of the Vietnamese government. However, the budget for this project was actually used to manage the pilot system of e-Procurement such as training employees, and covering maintenance cost on the pilot system. Thus, the cost of post-management should be treated as a part of the main project. This means that there were additional costs for this project.
  - In interviews with PMC managers and field visits on Vietnamese agencies, we found that there were problems with human capital development. Right now, only two original staffs are working for this system, and only
four staffs are full time and other five staffs are part-timers. Thus, we found that Vietnamese agencies still has problems with keeping proper personnel for maintaining e-Procurement system.

- Above issues was beyond the responsibility of PMC. However, if there was systems such as Vietnamese agencies’ cost reimbursement contracts or a monitoring system via EVNIT, those inefficiency could be reduced.

- In addition, after three additional experts, the Vietnamese government keeps requesting free additional experts and system maintenance services.
  - PMC has tried to take those requests and provided services; however, they would not be able to continue responding to these unrealistic requests. So far, PMC has provided remote support in order to minimize personnel and costs and provide informal quarterly visits and supports.
  - Regarding the additional requests on technical training for system operating personnels, Vietnam PPS needs to build their own capabilities of operating and maintenance (O&M) or needs to pay on that training service. This means that lack of ownership on the part of the recipient country is a critical issue to increase efficiency of ODA projects.

- Overall, the evaluation on the efficiency criterion can be considered as efficient level (2 out of 3).
3. Effectiveness

Effectiveness evaluation: 3, 2, 1

<table>
<thead>
<tr>
<th>Evaluation Criteria</th>
<th>Definition</th>
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<tbody>
<tr>
<td>Effective</td>
<td>planned effectiveness over 80%</td>
</tr>
<tr>
<td></td>
<td>planned effectiveness between 50–80%</td>
</tr>
<tr>
<td></td>
<td>planned effectiveness under 50%</td>
</tr>
<tr>
<td>Achievement level</td>
<td>of planned goal, purpose and product</td>
</tr>
<tr>
<td>Changes caused by</td>
<td>specific project (not by external effects)</td>
</tr>
</tbody>
</table>

- The project implementation plans for all part of the e-Procurement system met all the requirements on system functions; thus, the goal of plan was achieved.
  - Portal/user management system: the system provides appropriately 1) notice management, FAQ, Q&A, and menu management for operators, 2) notice management, FAQ, Q&A, menu management, bidding information, master registration, login capability for general users, and 3) approval of the master properties services for the operator and registration approval services for users.
  - e-Bidding system: the system provides properly 1) bidding notification uploading, posting, selecting services for registered agencies, and 2) notice, search, selection result, verification for procurement companies.

- Dispatching experts and inviting training programs were performed as originally planned. Dispatched experts were all recognized their technical expertises, and most of trainees have expressed medium and/or high level of satisfaction on the program although there were some comments on extending the training period.
  - According to the report on evaluation of the education and training courses, the participants evaluated the course as 79.5 points out of 100.
points (almost close to satisfactory level) on the case management-training course (25 people participated in 21 days). On the course of system development course, they gave 89 out of 100 points (close to very satisfactory level) on their instructors. In the evaluation on the content and operation about the education programs, they scored 88.5 (close to very satisfactory) and 93.6 (very satisfactory) respectively.

○ Current e-Procurement pilot system of hardware and software is as follow (See the <Figure 4> and <Figure 5>).

○ Through field investigations, this post-Ex evaluation team found and confirmed that the hardware and software of pilot system was working normally and properly.

<Figure 4> Status of Vietnam pilot e-Procurement Hardware System

Source: Vietnam pilot e-procurement system for government service system development, PMC’s completion report, Samsung SDS, 2009.
○ Since the project was implemented as planned, the PPA which is underneath the Vietnam Ministry of Strategy and Finance was able to encourage three public institutions (EVN, VNPT, HPC) that have participated in this pilot system and other public agencies to use the system to provide bidding information, to find the bidding, and to know the results of unsuccessful or successful bidding. Thus, the original plan was achieved most of its expected outcomes effectively.

○ Functions of e-Procurement pilot system for electronic notification of bidding information were actively used. This utilization could be an enabler role for improving efficiency and transparency of public procurement. However, the system mainly utilized for posting bidding information and purchasing simple items for public institutions so that the operations of the system were not used in its full capacity.
• One of major problems is that there has been limited efforts for improving capacity of the system. There are lack of efforts to improve the system capabilities, law and regulations, BPR etc. Thus, the effectiveness of this project had to be limited in the long-run.

○ Main causes of the above problem are as follows:
  • Without simplifying administrative process and necessary BPR, just simple digitalization of offline methods of procurement cannot be expected the creation of high value-added in e-Procurement system, in other words, the effectiveness of e-Procurement system cannot be created.
  • In 2009, immediately after e-Procurement pilot system was installed, the Vietnamese government tried to provide a legal basis through #17 of government orders (Circular 17/2010/TT-BKH, July 22, 2010). However, the government order allows using offline submissions of public procurement. Due to this, the diffusion of e-Procurement system would not occur as expected.
  • The success of e-government project cannot be guaranteed without reforming entire administrative systems and laws. The e-Procurement for Vietnam is a typical case in point.
  • There were different interests and thoughts on the diffusion of this pilot project among PPA, public agencies and private vendors in private sector. To overcome this issue, more closed communication and collaboration are needed among these parties.

○ The total number of participants in the system has been increased due to the encouragements of Prime Minister of Vietnam and Ministry of Strategy and Finance after the final evaluation on pilot system. Other public institutions joined in using the system along with the three original public agencies. Thus, more private delivery vendors are participated in this system and access more than before to take part in bidding process.
• 8,748 companies are registered (1,812 are approved companies) and 2,908 public agencies (1,475 are approved agencies) are participated in the system. However, each company and agency can get multiple accounts so that actual numbers can be less than these figures.

○ There were requests of increasing the system capacity from users (private companies and public agencies that are participated in this e-Procurement system) after installing the pilot system. However, the lack of capability on manpower, information technology and organizational supports in the Vietnamese government blocked the improvement or upgrading the system. Thus, a simple day-to-day operation of maintaining the system and helps were provided to users.

• The e-Procurement system is internet-based so that should consider the user IT environment and interoperability of IT and accessibility. Thus, these issues were raised among users, but the appropriate modification or improvements are not performed properly.

○ The utilization of the e-Procurement system was low until the end of 2011 after finishing the final evaluation. However, the Vietnamese government encouraged to use the system so that the usage rate increased impressively thereafter.

• Vietnam Power Corporation (EVN): From 2011 to 2013 (up to August 2013), the frequency of its use has increased (35 bids in 2011, 49 in 2012 and 33 in August 2013).

• The following table shows the current utilization data of e-procurement pilot system. Comparing the data of December 2011 (the final evaluation date), the usage rate has been increased.
There were different interests on the utilization and diffusion of e-Procurement system among the Vietnamese government (PPA), public institutions (offering orders), private companies (delivering & providing goods and services).

- Ministry of Planning and Investment and PPS: They have tried to work hard improving the level of transparency in the process of procurement to show donor countries and other public agencies and departments. Despite their high willingness to spread of e-Procurement system, they are struggling to establish relevant law and administrative system as well as securing funding sources to maintain and improve the e-Procurement system.

- Public agencies (Users): Due to the encouragement/enforcement of government, more agencies use the pilot system. However, they are not able to evaluate the effectiveness of system and they are responding to the encouragement passively. There was a lack of motivation on the diffusion of e-Procurement.

- Private vendors (Users): They are following the orders from agencies. Even though they can be the most beneficiary group, in fact, they are hassling with double preparations (both online and offline bidding) of participating procurements. Thus, they are not active and stay passive in dealing with this issue.
○ Users can be divided into three groups. PPA and three public firms which participated in the initial pilot test, and other participating public agencies, and private vendors.

○ The survey results on e-Procurement to users, which was conducted by MPI and PPA are as follows:
  - 95% of users agree that the internet-based online bidding system is the best investment of building IT infrastructures.
  - 96% of users agree that the online bidding notice is very convenient and easy to access bidding notice.
  - 84% of users agree that the bidder registration is easier than before. However, they commented there were still complicated multi-steps that should be simplified.
  - 90% of users agree that bidding announcement is convenient and easy.
  - 70% of users agree that electronic bidding and decision is easy to use.

○ However, the field research we have undertaken, including interviews with public authorities and private vendors, reveals that the level of satisfaction on e-Procurement system is not high. Most of users agree that the direction and vision of government policies on e-Procurement are right. But, they evaluated the current status of system is not effective enough and thought this is a transition period.
  - They have been pleased about the electronic bidding notice, which is faster than traditional methods (e.g., newspaper).
  - However, due to the small size of attached files, bidding for construction contracts or consulting services which have big data such as high volume documents and drawings cannot be processed through online. Due to this limit, the effectiveness of e-Procurement system was negatively affected. In fact, there are redundant workloads for submitting many documents, drawings etc. In addition, there is also functional limitation such as users cannot modify system when they had experienced technical difficulties in
using the system.

- In particular, current weakness of Vietnam’s e-Procurement pilot system include the following: 1) the system configuration is mainly (or too much) based on Internet Explorer (IE) system. Thus, other systems such as Firefox and Chrome do not support such systems; 2) the problem of IE basis is that users need to start again from the beginning when they had system errors or functional problems; and 3) the maximum size of the attached files should not exceed a total 22–25 MB and each file cannot exceed 4.5 MB. So if users have large files such as drawings or pictures, they cannot use the online system (One of unofficial solutions that a private vendor is post the files into private web-hard drive or website and link them into the submitting documents. However, it cannot be solutions for every vendor. Most companies do not have enough IT capacity and current system allows to submit their bidding via offline ways)

- According to a specific example from an interview with one of private vendor, if the contract documents is more than 50 pages long including pictures, drawings, power of attorney, and certifications that would take easily over 25 MB. The vendor showed the typical amount of the bid documents on current existing project, which are around 1500-2000 pages (simple project also can be over 500 pages). Half of the submitted documents are to show vendor’s past performance, which must be stamped (it means these documents are official). Thus, they should scan the documents. Simply, showing the financial capability of the private vendor is over 100 pages.

- Private vendors said that genuine benefits of the e-Procurement system would be realized in 5 to 10 years because IT technology and systems as well as problem-solving skills of public agencies in Vietnam is low. Without the assistance of PPA, government organizations cannot solve their own e-Procurement system problems. Thus, it will be expected to take a long time.
Overall, we can evaluate that the purpose of this project is to achieve the planned goal about 50–80%. Thus, it can be scored 2 out 3.

4. Impacts

- Evaluation score on the impact is not supposed to be provided independently. It was measured as a part of effectiveness.

- It is premature to say that this pilot operation and utilization of the system has been significantly contributed to increase efficiency and transparency of public procurement in Vietnam.
  - Due to the allowance of offline submission, the level of transparency as well as efficiency of online submission (e.g., both offline and online submissions cause double workloads) could not be fully realized, which might significantly limit the impacts of the pilot system.

- Regarding the bidding notice via online system, we can evaluate that the pilot system certainly contributed to increase efficiency and transparency of public procurement. Though newspapers and e-notices are used at the same time, total number of online notice continues to grow and there is no hassle to access the system to get necessary information.

- In terms of bidding and successful bid, the impacts at this time are not quite clear because of the lack of legal bases, limited capacity of the pilot system, and poor administrative improvement.
  - However, we found that the direct and indirect impacts of the pilot system would be increased slowly but significantly. This has been the case because the usage of the pilot system is increasing as time goes by, and the possibility of extending the e-Procurement to all government is also
increased due to strong willingness of the Prime Minister and central government. If they can reform entire public procurement system to adopt e-Procurement properly, we can expect positive impacts in the future.

○ Overall impacts of this pilot project are evaluated positively among donor countries and institutions such as World Bank, multilateral and bilateral aid donors. In particular, World Bank has emphasized the importance of transparency in public procurement so that the establishment of e-Procurement system in Vietnam is considered as an important positive step toward transparency.

○ Vietnamese Prime Minster also stressed the importance of e-Procurement system and encouraged to use the system more. Therefore, the diffusion of e-Procurement system is irreversible. This pilot system was bringing positive impacts to establish the base of transparent and efficient public procurement system.

○ In short, this project can be determined as level of positive impact one (2 out 3 level)
5. Sustainability

Evaluation: 3, 2, 1

<table>
<thead>
<tr>
<th>Evaluation criteria</th>
<th>definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>• If it match with recipients priority and demand</td>
<td>sustainable after improvement</td>
</tr>
<tr>
<td>• Ownership level of project target</td>
<td>very sustainable</td>
</tr>
<tr>
<td>• System and organizations to manage effectively</td>
<td>sustainable</td>
</tr>
<tr>
<td>• Financial capacity to maintain the outcome of project</td>
<td>unsustainable</td>
</tr>
</tbody>
</table>

○ Overall evaluation score on the sustainability of this project: 2 out of 3 (sustainable but need to solve some problems)

○ There are both positive and negative elements for evaluating whether this project is sustainable or not. This section examines the sustainability of the e-Procurement pilot system in terms of four aspects, 1) cultural and environmental aspect, 2) operation and maintenance aspect, which is mainly related to professional competency issue, 3) willingness of continued operation and expansion of e-Procurement project, and 4) actions of continued operation and expansion of the project.

○ In Vietnam, there is still the possibility of corruption and the resistance on transparency and fairness can affect the sustainability of e-Procurement adversely.

○ However, the recipient countries should utilize aid funds through their public procurement system so that international aid donors have strongly asked to high level of transparency and fairness in public procurement. Thus, Vietnamese government knows about this demand so that the expansion and
sustainability of e-Procurement systems is promising.

- There are a number of requests from pilot system users (ordering public agencies and supply companies) related to using the system. However, PPA staffs’ competency and abilities are not enough to cope with those requests. This can be the negative factor in sustainability.

- In particular, despite expert dispatch, invited training, and continued support from KOICA and PMC, high turnover rates of the trained staffs to private firms accelerated the seriousness of the lack of manpower. To enhance the sustainability of the e-Procurement, Vietnam the recipient country should actively seek solutions. It can be a serious problem.
  - Currently only four (including a dispatched person) staffs worked in PPA for this e-Procurement system. Initially, there were eight dedicated staffs (public officials), however, now they only have four. Also, there are other five temporary staffs in PPA. In terms of sustainability, it is negative factor and cannot accumulate the capacity of e-Procurement.

- This project is linked to the key challenges of Vietnamese public reform, and various government plans include the improvement of efficiency and transparency of administrative process through e-Procurement. Thus, this factor contributes to increase the sustainability of this project positively.
  - In addition, both Prime Minster and Deputy Prime Minister emphasized the importance to e-Procurement system and the head of MPI also expressed willingness to expand the system. These works positively with the sustainability of this system.
  - Deputy Director of PPA mentioned there would be amendment on public procurement, which contains the use of e-Procurement as a mandatory at the end of this year (2013). This movement also affect positively on the sustainability.
  - On the other hand, PPA tried to improve the capacity of the system.
However, they did not have strong efforts to use their own budget instead of relying on international aids and supports. They made a plan to expand the e-Procurement system by using a Public-Private Partnership (PPP) approach, but there was no clear plan on the PPP, that could affect negatively on sustainability.

- PPA has continued to provide education and promotion on using the system, and strongly encouraged public agencies and public companies in Hanoi and local public governments to use the system. In every three months, PPA sent memorandums to public agencies to encourage the use of e-Procurement system. It contributes to sustainability positively.

- The existence of the Directive government order #17, which provides a legal basis for using the system, is a positive factor for the substantiality of e-Procurement system. However, it permits to use offline methods as well so that it delays the increase of usage on e-Procurement. It can be a negative factor.

- Although, PPA emphasizes the expansion of e-Procurement system, they could not get their own budget to upgrade the capacity of the pilot system and extended the period of pilot tests due to low utilization. The ambition of PPA to expand this system is high but their actions are not well matched.
  - If the transitional stage of pilot test persists for too long, the complaints from users can be increased due to inconvenience and inefficiency of functional capacity of the system. Thus, Vietnamese government should develop their policies to improve systems before negative public opinions are spread.

- Nevertheless, IT-based business planning and development of Vietnam include e-Procurement project as an important program with other projects such as e-Trade business plans. In addition, PPA conducted feasibility study (F/S) to prepare the expansion of e-Procurement system. This affects positively on the
sustainability of e-Procurement system in Vietnam.

○ Expectation and proliferation of the system to overall government in Vietnam are as follows:
  • There are multiple needs to expand e-Procurement system: 1) e-Procurement is linked with higher-level government plans, 2) ODA donors emphasize the need of e-Procurement expansion, and 3) the intention of Prime Minister and related public officials is high.
  • They are pursuing PPP way of expansion, but many challenges are expected such as the lack of experience, issues of how to guarantee private partners’ profits, challenges of securing their own budget, and different interests among compelling agencies and departments.

○ In sum, in terms of sustainability criterion, we can evaluate this project as partly sustainable. However, above-mentioned negative factors should be resolved.

6. Cross-cutting Issue

○ This e-Procurement pilot project is based on the IT expertise in donor countries to develop computer applications, to support computer-related equipment, and to let the recipient country public officials use provided systems. Thus, this project is not directly related to the issue of gender equality and/or environmental considerations.

○ Government officials in Vietnam also confirmed that this IT project is not directly related to the gender equality issues and the environmental issues.
7. Overall Evaluation

- According the above results, we evaluate the e-Procurement pilot system project as "successful" as shown below.

<table>
<thead>
<tr>
<th>Rank</th>
<th>Relevance</th>
<th>Effectiveness/Impact</th>
<th>Efficiency</th>
<th>Sustainability</th>
<th>Total</th>
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<tr>
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</table>
V. Implications and Policy Suggestions

1. Implications of the post-implementation evaluation
2. Suggestions for Sustainable Ex-Post Management
1. Implications of Ex-post Evaluation

- There is no doubt that PPA has high willingness to expand the e-Procurement system to all governments. But it seems that PPA does not have strong power enough to realize its intention. Public organizations in developing countries do not have high motivation of enhancing transparency and expansion of e-Procurement. Finally, private companies, which are the biggest beneficiaries of the e-Procurement system, are usually passive because of the traditional hierarchical nature in public-private relationship in developing countries. Thus, there are varying interests among main actors in expanding the e-Procurement system.

- Instead of expanding the e-Procurement at once, a gradual approach would be more appropriate for the follow-up process of this project. If the Vietnamese government takes this intermediate step of expansion, KOICA can consider further ODA supports (the size and plan can be determined later).

- KOICA should examine the potential effects of the withdrawal of Samsung SDS from the Vietnamese e-Procurement business in order to continue related ODAs.

- In order to make ICT ODA projects effective, a simple installation of e-Government systems is not enough. More fundamental factors for increasing aid effectiveness such as legal, institutional, and reforming administrative
systems are critical. Without proper BPRs and redesigning the whole administrative processes in digital environment, any e-Government project, e-Procurement in particular, cannot produce effective and efficient outcomes.

- In addition, political environment of the recipient country should be analyzed from the early stage of e-Government ODA such as feasibility study and planning stage.

○ The Vietnamese government has requested additional training for maintaining the e-Procurement system. So far, Samsung SDS have provided a number of additional training opportunities even after finishing the pilot project.
  - Samsung SDS did this because it expected to have additional business opportunities in Vietnam. However, the Vietnamese government decision to expand government-wide e-Procurement system delayed for a while, and it viewed it would not be possible in the years to come.
  - Thus if KOICA views Vietnam as a strategically important partner, additional training sessions may be provided to increase capabilities of human resources.

○ In terms of the expansion of e-Procurement project, the additional supports can be considered, however, without the recipient country's efforts such as sharing the cost of manpower training etc, additional supports are not recommendable.

○ For successful e-Government ODAs, one needs to create efficient coordinating mechanisms in government organizations, both donor and recipient countries. In particular, orchestrating ODA projects is important to reduce the problem of duplication of aid projects.
  - Single project cannot bring maximum effects so that the holistic approach will be more effective. That is, we should consider and execute not only system establishment but also BPRs on legal, institutional and administrative process related to e-Government ODA projects.
2. Suggestions for Sustainable Ex-Post Management

A. Suggestions for Establishing Ex-Post Management System for e-Procurement Pilot System

○ KOICA should support the Vietnamese government's efforts of expanding the e-Procurement system actively.
  • It should emphasize political and economic benefits of the e-Procurement system through policy dialogue between Korea and Vietnam.
  • The Korean government can share its own know-hows on the PPP approach to Vietnam. Also, supports via relevant organizations in Korea can be provided to Vietnam.

○ KOICS can suggest the Vietnamese government to upgrade and improve the capacity of the pilot system.
  • Currently the level of user satisfaction is relatively low due to insufficient capacity of the system and functional limitations. Upgrading the functions and capacity of the pilot system should be conducted either by the Vietnamese own budget, or by ODAs from donors.

B. Suggestions for Ex-post Management for e-Government ODAs

○ First and foremost, allocation of budget for ex-post management from the very beginning stage of project is essential. It would be better to specify the method and schedules for ex-post management and the roles of the donor and recipient countries.

○ KOICA already realized the need for improving the ex-post management of ODA project in general so that it has developed ‘Ex-post Management Criteria
According to the criteria, at the beginning stage of the project, ex-post evaluation schedule and methods should be planned, and decided additional supports based on the result of the ex-post evaluation.

The maximum length of ex-post management is 7 years of period (in the case of the project-based program) and 10% of main project budget can be used for the ex-post management.

Finally, it is necessary to develop incentives and/or penalties based on the final evaluation results to let the recipient country assume its own ownership on the project.
Appendix
<Appendix 1> Vietnam e-Government Project Evaluation Matrix

<table>
<thead>
<tr>
<th>Valuation Criteria</th>
<th>Evaluation Range</th>
<th>Evaluation Questionnaires</th>
<th>Survey Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Related Issue</td>
<td></td>
<td>• Did establishing a e-Procurement Pilot project reach its goal?</td>
<td>inquiry</td>
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<tr>
<td></td>
<td></td>
<td>• Did system establishment set the partial requirement</td>
<td>interview</td>
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<tr>
<td></td>
<td></td>
<td>• Is the mid-long term plan arranged for establishing the e-Procurement Pilot project?</td>
<td>survey</td>
</tr>
<tr>
<td>Information Technology</td>
<td></td>
<td>• Did the list and quantity of the equipment/system appropriate for the goal?</td>
<td>inquiry</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Did the equipment/system operate properly?</td>
<td>interview</td>
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<tr>
<td></td>
<td></td>
<td>• Did the equipment/system composed properly?</td>
<td>survey</td>
</tr>
<tr>
<td>Human Resource</td>
<td></td>
<td>• Did the contents of invited training program appropriate for the goal and purpose of the</td>
<td>interview</td>
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<tr>
<td></td>
<td></td>
<td>project?</td>
<td>survey</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Did the capacity of the trainee appropriate for the job performance?</td>
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<tr>
<td>Human Resource</td>
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<td>• Did dispatching the expert appropriate for the goal of the project?</td>
<td>interview</td>
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<tr>
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<td>• Did ability of dispatched expert appropriate for job performance?</td>
<td>survey</td>
</tr>
<tr>
<td>Related Issue</td>
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<td>• Did supporting the business process for recipient country appropriate for the goal of the</td>
<td>interview</td>
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<td></td>
<td></td>
<td>project?</td>
<td>survey</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Did business process time appropriate for recipient country?</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>• Did supporting budget of business process appropriate for recipient country?</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>• Did supporting man power appropriate for recipient country?</td>
<td></td>
</tr>
<tr>
<td>Valuation Criteria</td>
<td>Evaluation Range</td>
<td>Evaluation Questionnaires</td>
<td>Survey Method</td>
</tr>
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<td>--------------------</td>
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<td>---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
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</tr>
</tbody>
</table>
|                    | Process          | • Did establishing time of system and communication network efficient?  
• Did establishing budget of system and communication network efficient?  
• Did establishing labor of system and communication network efficient? | data-research interview survey |
| Efficiency         | Process          | • Did invested budget of providing equipment/system efficient?  
• Did process of providing equipment/system efficient? | data-research interview survey |
|                    | Process          | • Did the time of invited training program efficient?  
• Did the budget of invited training program efficient?  
• Did the man power organization of invited training program efficient? | data-research interview survey |
|                    | Process          | • Did the time of dispatching expert efficient?  
• Did the budget of dispatching expert efficient?  
• Did the man power of dispatching expert efficient? | data-research interview survey |
|                    | Process          | • Did the process of supporting the project efficient for recipient country? | interview survey |
| Related Issue      | Related Issue    | • Did the establishment of the system well designed for use and result? | interview survey |
| Effectiveness      | Information Technology | • Did outcome of providing equipment/system appeared high? | interview survey |
|                    | Human Resource   | • Did the outcome of invited training program appeared high? | interview survey |
|                    | Human Resource   | • Did the outcome of dispatching expert appeared high? | interview survey |
|                    | Process          | • Did the effectiveness of supporting recipient country's business process appeared high?  
• Did the legislation and operation guideline that supports e-Procurement Pilot system appropriate? | interview survey |
<p>| Impact             | Mission          | • Is the e-Procurement Pilot system rate spreading in Vietnam? | inquiry interview |
|                    | Mission          | • Is test-operated institution's usage record of electronic bidding increasing? | interview survey |
|                    | Customer         | • Did the participant of invited training increasing in Vietnam? | interview survey |</p>
<table>
<thead>
<tr>
<th>Valuation Criteria</th>
<th>Evaluation Range</th>
<th>Evaluation Questionnaires</th>
<th>Survey Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer</td>
<td>• Does the related field experts increasing in Vietnam?</td>
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<td>Mission</td>
<td>• Is the base of e-Procurement Pilot system prepared?</td>
<td>data-research interview</td>
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<tr>
<td>Mission</td>
<td>• Did the system provided conveniently for maintenance control?</td>
<td>interview</td>
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<tr>
<td>Customer</td>
<td>• Was there any follow-up education training for invited training participant?</td>
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<td>Customer</td>
<td>• Did the self-rearing the expert took place after dispatching the expert?</td>
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<tr>
<td>Mission</td>
<td>• Was the self-maintenance control of the business product possible?</td>
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<tr>
<td>Related Resource</td>
<td>• Was the system established considering the gender factor?</td>
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<tr>
<td>Related Resource</td>
<td>• Was the system established considering the environmental factor?</td>
<td>interview</td>
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<tr>
<td>Related Resource</td>
<td>• Was the system established considering the minority factor?</td>
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<td>• Was equipment/system provided considering the gender factor?</td>
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<td>Cross-cutting Issue Human Resource</td>
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<td>Cross-cutting Issue Human Resource</td>
<td>• Was the invited training participant selected considering the minority factor?</td>
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<td>• Did the dispatched expert performed considering the gender factor?</td>
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