

The Government E-Procurement System in Korea

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INTRODUCTION

Korea launched a national e-procurement system on September 30, 2002. The adoption of the e-procurement system in the government of Korea has been acknowledged as successful. This article presents a case study describing the public e-procurement system of Korea, analyzing the development process, and determining factors in the successful adoption of the system. The Government E-Procurement System (GePS: www.g2b.go.kr) is a portal site providing information on public procurement and an application service provider for public procurement as a whole. GePS advances procurement services by reducing paper work and red tape, expanding the range of commodity selection, and standardizing services. Government-wide support, including that of the president, had an instrumental role towards the successful adoption of GePS. The high capacity of information technology and institutional collaboration among public agencies were other foundations for the successful establishment.

BACKGROUND

Electronic procurement (e-procurement) has become more significant in both public and private organizations. For example, “The Advantage System” of the United States General Service Administration has been assessed as a “limited success” and been recommended for development in terms of a “comprehensive business strategy” by the General Accounting Office (GAO, 2003). The Integrated Acquisition Environment of the U.S.—the federal government’s e-procurement initiative anticipates creating a single Web-based portal site (Drabkin & Khi, 2003). The Commonwealth of Virginia’s e-procurement solution, eVA has been identified as a good e-procurement system (Eakin, 2002). Yet, it is very hard to find good e-procurement models at the federal level, especially the national level including local governments and state-owned enterprises.

A number of components characteristic to fully developed electronic government procurement systems have been specified (Talero, 2001). In e-procurement systems,

e-tendering has more phases—registering, opening a bid, contracting, documenting, and tracking—whereas e-purchasing is based on transaction modules, which are rather compact processes, like e-catalogues (World Bank, 2003). Experts on procurement systems have paid more attention to tendering methods because they deal mostly with high value and low volume goods and services—blue collar MRO (Maintenance, Repair and Operation), which is believed to be more important (Neef, 2001).

The new paradigm of public procurement, e-procurement, is a managerial innovation of the government. It is not only a technical adoption but also an organizational change—from meetings arranged to personally conduct a transaction through to electronic transactions.

It was the same in Korea. Public Procurement Service (PPS) already had started to digitalize procurement services by adopting EDI in the late 1990s based on its own plan. PPS had much interest in improving transparency and efficiency of the public procurement, as the centralized procurement agency in the Korean government, which shares 30% of entire public procurement. PPS completed its own system in 2001 including e-bidding, e-contracting, e-purchasing (e-catalogues), e-payment, and so forth. But the system was not the integrated e-procurement services for all suppliers and buyers at that time. Therefore, the Korean government decided to establish a nationwide e-procurement system to overcome this weakness.

DEVELOPING GePS IN KOREA

The development of GePS was initiated as a national project of e-government policy and is now a part of the national IT policy. Recent government policies were introduced in the Master Plan for Informatization Promotion from 1996 to 2000 and “Cyber Korea 21” from 1999 to 2002 (NCA, 2003). The Special Committee for E-Government selected 11 e-government projects, including GePS. The benefit of GePS is expected to cross over into all public agencies and the private sector. On the other hand, the experiences and achievements of PPS were thought to be the success factors for the project.

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Those are the reasons the special committee selected GePS as a major project for e-government. Without the initiation and supports from the special committee, it might be hard and take longer to develop GePS. For the business process reengineering (BPR) of GePS, three government ministries were involved—the Ministry of Planning and Budgeting (MPB), the Ministry of Information and Communication (MIC), and the PPS. The BPR/ISP (Information Strategy Plan) report outlined the strategies for e-procurement system build-up, the result of procurement service innovation, standardization of documents and catalog, e-procurement system plans, and recommendations on legislation for e-procurement (Seong & Lee, 2004).

All expenses for the development of GePS were financed through the Informatization Promotion Fund (IPF, Special Committee for e-Government, 2003) based on the Framework Act on Informatization Promotion of 1996. The special committee for e-government, MPB, MIC and NCA concluded that the development of GePS should be funded by IPF rather than solely PPS as the project was expected to reap the government-wide benefits.

One important strategy for implementing e-procurement system in government is how to institute legal and accountability mechanisms (Moon, 2002). In order to increase the number of transactions through the e-procurement system and to prevent abusive and fraudulent transactions, laws and regulations on public procurement should be revised. The digital signature is one of the good examples. The electronic documents including bids with digital signature have the same validity with the paper documents with the signatures.

The most significant change is that procurement laws require most public agencies to account for bids through GePS. As a result, most information on public purchases and contracts can be collected onto GePS and the number of participants in public procurement via GePS has increased.

MAIN FUNCTIONS AND ACHIEVEMENTS

GePS provides information on public procurement for both of centralized and decentralized procurement. GePS is a public cyber-marketplace, whereby a single focal point allows a variety of suppliers and buyers to simultaneously meet and conduct a range of electronic business types. The main services of GePS include (1) helping public organizations' procurement in terms of contract request, bid, contract, payment request and follow-up management; (2) serving as a single point of business registration for entering the public procurement; (3) pro-

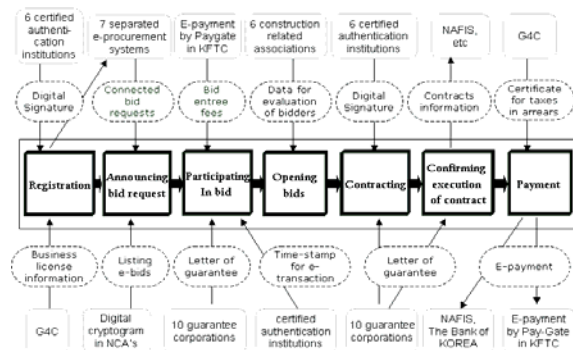
viding information on companies regarding business ID certificate, national tax payment certificate and qualification; (4) reporting contract performance; (5) issuing various notices related to procurement; (6) managing an e-shopping mall for PPS's supply of contracted products; and (7) sending procurement requests from public organizations to PPS (PPS, 2003).

GePS is a secure and convenient universal system designed to assist both public institutions and businesses with all public procurement tasks. The systems of 53 other institutions such as the Ministry of Government Administration and Home Affairs are linked with GePS to share information. The Government for Citizen Systems (G4C) of the Ministry of Government Administration and Home Affairs provide tax records and necessary information for registration. The National Finance Information System (NAFIS) provides real-time information on the finances of government agencies. Six construction-related associations are connected for obtaining information on contract bidders; ten guarantee corporations are involved for receiving contract deposits; six certified authentication institutions assist in verifying digital signatures; the Korea Financial Telecommunications & Clearings Institute provides services for e-payment with fifteen commercial banks; and the National Computerization Agency (NCA) provides public key infrastructure for e-bid cryptography.

PPS has eliminated or reduced the need for submission of all documents by sharing information such as business registration certificates and financial information online. Contracts can be established electronically and contractor payment can be made via online banking.

The general workflow of e-procurement through GePS is described in Figure 1, though procuring processes differ slightly depending on the object to procure—goods, services, or facilities.

Figure 1. Workflow of e-bidding and links with other systems



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