

# ICT Master Plan: Essential for Customs and Tax Reforms and Modernization

**M**ost modernization programs on revenue administration include the adoption of information and communication technology (ICT) to integrate traditional manual customs and tax processes and procedures into a unified automated information system (UAIS). This requires a holistic and integrated ICT master plan to guide the revenue administration's strategic investment and usage of ICT.

The ICT master plan should be developed within the broader context of the customs and tax reform and modernization master plan. Experiences in the Republic of Korea and Singapore show that having an ICT master plan is crucial in ensuring the success of customs and tax administration.

The ICT master plan aims to define the directions of revenue administration through UAIS, and subsequently address the gap between the current situation and the desired state, based on a comprehensive assessment and a diagnostic study of the current situation.

**Components.** The components of an ICT master plan include the (i) UAIS architectural design, (ii) legal framework, (iii) se-

curity, (iv) implementation strategy, (v) maintenance plan, and (vi) other elements.

**UAIS architecture.** The ICT master plan should describe clearly the overall proposed UAIS architecture, with detailed functional and technical specification of key modules of customs and tax regimes, and how automation will benefit the revenue administration and trade community.

**Legal framework.** The master plan should address issues such as the legality of electronic data, elimination of paper documents, and manual signatures and stamps. It should also assess the current legislation pertaining to acceptance and recognition of electronic data, and propose changes, if needed.

**Security.** The master plan should ensure that (i) data sent across and stored in the system are protected, (ii) users are authenticated, (iii) data confidentiality and integrity are preserved, and (iv) non-repudiation is achieved.

**Implementation strategy.** An implementation plan should include (i) phased implementation that will prioritize functions that get implemented, (ii) change management that will identify whose and what concerns have to be addressed first;

(iii) interim measures to achieve the full plan; and (iv) proposed timetable or scheduled targets.

**Maintenance plan.** Systems are implemented and left to use and deteriorate in some cases without support, upgrade, and enhancement to meet business environment changes. To prevent this, a maintenance plan should be in place for (i) hardware maintenance by making available parts and back-up equipment; and (ii) software with vendor support (on-site/off-site) to fix bugs/resolve problems, helpdesk/call center support, scalability, and support for system software upgrades such as a new version of the database or operating system.

**Other elements.** Depending on the situation and sensitivity of the systems, a business continuity plan or disaster recovery plan may have to be included to address full data duplication, and the timeframe within which the system must be recovered in degraded or full operational mode.

## Singapore's experience

Singapore's track record in harnessing ICT, particularly, TradeNet and E-Customs Management, resulted to significant improvements in the (i) efficiency of customs inspection and risk management procedures, (ii) turnaround time for processing trade documentation, and (iii) approval of applications submitted by shippers and freight forwarders.

Singapore has deployed an automated immigration clearance system using smart cards and biometrics at key immigration and customs checkpoints. Recently, the Government has commissioned the development and operation of Trade Xchange, the next-generation ICT platform for trade and logistics to facilitate information exchange among commercial

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**RAPID GROWTH MOMENTUM** Trade facilitation is promoted through a mega-port, export-oriented economic zone and integrated customs clearance system in Shanghai, PRC's Waigaoqiao port. **Inset** Tuas Checkpoint officer demonstrates the automated vehicle screening system implemented in Singapore during the forum in January 2006

# Improving Investment Climate through CAREC's Trade Facilitation Program

All participating countries of the Central Asia Regional Economic Cooperation (CAREC) Program are in transition from a centrally planned to market and private sector-led development. A critical element to improving the investment climate is developing an enabling trade environment through trade policy reforms and trade facilitation measures, as pursued by CAREC participating countries.

Trade facilitation through measures—such as (i) simplified cross-border procedures, (ii) “one-stop” and “single electronic window” services, and (iii) concerted customs reforms and modernization—help enhance the investment climate by reducing transaction costs and corruption, and improving overall competitiveness of businesses in the region.

## Simplified procedures

Simplification and harmonization of customs procedures have been achieved principally through reforms of the customs legal frame-

works in line with the International Convention on the Simplification and Harmonization of Customs Procedures, commonly known as the Revised Kyoto Convention. To date, three participating countries (Kazakhstan, Kyrgyz Republic, and Tajikistan) have revised their Customs Codes, and several others drafted their Customs Codes for consultation.

The adoption of modern customs techniques such as joint customs control and risk management has accelerated the reform process. Joint customs control, being pilot-tested by Kazakhstan and the Kyrgyz Republic, further simplifies bilateral customs procedures. Moreover, all CAREC participating countries support risk management to move to a new paradigm of selective inspection and informed-compliance by the business community.

## Information systems

Developing information systems for automated customs services is another major ini-

tiative to help improve efficiency and governance practices of customs services. A major source of revenue loss and corruption at border posts is direct contact between traders and customs officers, and lack of technological capacity to capture importers' data entry for customs declaration in a centralized place for calculating duties and taxes and validating the entry. With financial assistance from the Asian Development Bank, the Kyrgyz Republic and Tajikistan jointly launched a Regional Customs Modernization and Infrastructure Development Project to automate customs services and improve border-post facilities. These efforts have been improving the business climate by reducing corruption and transparency of customs services.

## Transit development

Promoting transit development is another key area for CAREC's trade facilitation program since the majority of CAREC's participating countries are landlocked economies and transit trade is a major part of international trade. The CAREC Program has been supporting transit development by assisting the People's Republic of China's accession to the Transport International Routiers Agreement (TIR) Convention and the effective implementation of the TIR Customs Transit System by other participating countries.

Over the last 3 years, most Central Asian countries witnessed significant increase in the issuance of the TIR Carnets, signaling improved business environment for transit trade in the region.

## Trade Logistics Development

Broad-based participation and public-private partnership are two key factors of an integrated and effective trade facilitation program. In this effort, ADB spearheaded two studies on trade logistics development for Mongolia and Xinjiang Uygur Autonomous Region of the PRC to cement trade facilitation initiatives by private and public sectors and embrace a broad trade facilitation approach to promote an enabling business environment. ■

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entities and government agencies that will enable more efficient movement of goods within, and in and out of Singapore.

The success of Singapore's ICT master planning and e-trade and customs initiatives is attributed to a strong partnership among government agencies, private industry, academia, research institutes, community groups, and civic and voluntary organizations.

Each player will contribute toward developing the initial concept of the ICT master plan and refining the strategies and plans.

## Promoting ICT master planning through regional activities

The development of customs ICT master plans is a key activity for the participating countries of the Central Asia Regional Economic Cooperation Program. Currently, the Asian Development Bank is supporting the Kyrgyz Republic and Tajikistan in line with

the implementation of the regional customs modernization and infrastructure development project; and jointly with the Government of the Republic of Korea, the development of ICT master plans for Azerbaijan and Mongolia customs. The Government of Korea likewise supports the customs ICT master plan for Kazakhstan.

Since the 4<sup>th</sup> Customs Cooperation Committee Meeting in September 2005, two regional activities have been organized in the Republic of Korea and Singapore to provide training and raise awareness of customs and tax officials on the ICT master plan. Specifically, these training programs aimed to (i) help officials in preparing and implementing their revenue modernization master plans, (ii) assist them in embarking on broader trade facilitation reforms, and (iii) provide training on broader integrated trade facilitation strategies and practices. ■