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People's Republic of China: Formulation of the Northeast Asia Logistics Information-Sharing Network Development Program and Organizational Mechanism

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TA Number, Country, and Name:			Amount Approved: \$400,000	
	ring Network Develo	ortheast Asia Logistics opment Program and	Revised Amount: N/A	
Executing Agency: Ministry of Transport		Source of Funding: TASF-Others	Amount Undisbursed: \$117,847.40	Amount Utilized: \$282,152.60
TA Approval Date:	TA Signing Date:	Fielding of First Consultant:	TA Completion Date Original: 31 Dec 2015	Actual: 30 Mar 2016
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Description

Sustaining trade growth within Northeast Asia requires a real-time, highly efficient and low-cost logistics system where freight can harmoniously move through ports, intermodal yards, and cities using logistics information exchanged through a common framework. Since container throughput within the region constitutes the biggest transport chain in Asia—accounting for 30% of the global total, inter-operability between freight data exchange standards becomes an important element for an effective regional logistics system.

Northeast Asia Logistics Information-Sharing Network Development Program (NEAL-NET), a transnational nonprofit cooperation mechanism for logistics information interchange, aims to develop into an information exchange platform and a tri-country standard in Northeast Asia. It is designed to connect the ports in the People's Republic of China (PRC), Japan and the Republic of Korea to strengthen regional cooperation. Besides NEAL-NET, there are existing logistics standards within each country established as internal freight platform. The PRC's National Transport Logistics Public Information Platform (LOGINK) which was developed in Zhejiang province is gradually being adopted in other provinces. Although focusing mainly on road transportation (bulk and container cargo), LOGINK has attracted 100,000 registered users with a daily average of 800,000 information interchanges as of 2013.

The development of NEAL-NET is consistent with PRC's Twelfth Five-Year Plan, 2011–2015 and is aligned with ADB's country partnership strategy 2011–2015 for the PRC seeking to improve transport efficiency through intermodal transport and related logistics services development. To address the need for improved logistics services in the region, the Government sought ADB's assistance to support the development of NEAL-NET based on international best practices. Connectivity with international information system is considered vital for the improvement of LOGINK's service level.

Expected Impact, Outcome, and Outputs

The impact of the technical assistance (TA) was improved logistics services in Northeast Asia. The achievement of this impact was to be demonstrated through the (i) development of standards allowing LOGINK/NEAL NET to interoperate with recognized global standards; (ii) expansion of the current scope of NEAL-NET beyond maritime transport and the Northeast Asia; and (iii) expansion of LOGINK beyond PRC. The outcome of the TA was the development of logistics information-sharing services. The development of an infrastructure architecture that would be compatible with other systems making connectivity between the LOGINK/NEAL-NET community and other stakeholders efficient and convenient. The envisaged outputs were (i) a report and recommendations on the common logistics information-sharing standard, and (ii) recommendations on a development strategy for NEAL-NET.

Delivery of Inputs and Conduct of Activities

A staff consultant specializing in regional cooperation was engaged for 2 person-months to hold initial consultations with NEAL-NET and develop the terms of reference (TOR) based on an assessment of project needs. The TOR showed a greater need for specialized international expertise and a limited requirement for national inputs. In March 2014, a minor change in implementation arrangement was approved to adjust the mix of national and international consultants' inputs leading to an increase in international person-months from 7 to 10 and decrease in national person-months from 14 to 4.

The TA consultants commenced services in mid-2014. During implementation, it was identified that there was a need for an additional international expert who specializes in designing service exchange system architecture with experience in technology mainframes and exchange platforms. An individual international expert was engaged in June 2015 for 4 personmonths.

To provide recommendations on expanding LOGINK and NEAL-NET globally, the experts participated in technical group meetings. The technical group meetings had representatives of all three countries of NEAL-NET (Japan, Republic of Korea and the PRC) and provided an opportunity for the experts to understand the specific systems in different countries and then provide recommendations for harmonization and development of a common information sharing platform. The experts also

conducted comparative/gap analyses with existing standards such as International Standards Organization (ISO), and parallels with international experience.

Two workshops were held to demonstrate approaches in developing the project components to the implementing agency, and solicit views from policy makers, logistics experts, service providers, and academicians. An international training for representatives from the Ministry of Transport's (MOT) Comprehensive Planning Department, Transport and Logistics Research Center of the Research Institute of Highway, and LOGINK was organized in France and Sweden between 23 February and 3 March 2016. During the international training, the representatives visited operational models of freight villages—which are freight hubs that facilitate efficient movement of goods. The team also discussed logistics information platform that would be optimally suited for Northeast Asia.

During implementation, the complexities of translating technical data slightly delayed the implementation of the TA. The final report in both English and Chinese was submitted in December 2015. ADB approved the extension of the TA by 3 months from December 2015 to March 2016, to accommodate the international training in support of the capacity building of the government.

The consultants produced the intended outputs and performed satisfactorily. Along with recommendations in the developmental process for NEAL-NET, they also (i) developed a draft standard that can be submitted by LOGINK to the ISO Technical Committee 204 (ISO TC204) together with a new ISO work item proposal developed by the experts for LOGINK/NEAL-NET standards to operate globally; (ii) performed a mapping exercise between LOGINK messages and data items, and ISO/IEC 19845 to determine how best to connect with the common interchange format for interoperability; (iii) established connectivity between LOGINK/NEAL-NET and e-Delivery infrastructures. The outputs were well received by the MOT and Asian Development Bank (ADB).

ADB's performance was satisfactory. ADB monitored the work progress of the individual consultants closely through its review missions, and provided strong guidance on the methodology and direction of the TA. The executing agency performed satisfactorily by providing access to data, arranging stakeholder consultation meetings, and providing comments and inputs to the reports produced.

Evaluation of Outputs and Achievement of Outcome

The TA delivered the outputs and outcome with savings from TA budget of \$100,000 and within the expected timeframe. The outputs included analysis and recommendations for a new logistics information standards. The outputs were disseminated through two workshops in which all relevant stakeholders participated. Printed copies of the outputs were distributed to relevant stakeholders and are available in English and Chinese to maximize audience reach. MOT officials were highly receptive to the recommendations of the TA and acknowledged the usefulness of the TA outputs in planning the improvements for the logistics information systems.

Overall Assessment and Rating

The TA is rated successful and delivered the outputs and outcome within the cost and with minimum delays. It produced a comprehensive analysis of the logistics information standards based on current domestic and international practices. Relevant international experience was effectively shared and documented in the outputs for wider dissemination. It is expected that the results of this TA will help the PRC in restructuring its logistics information sharing standards. The new standard is expected to build upon the existing standards and be suitable for various logistics nodes to adopt and implement.

Major Lessons

The TA benefited greatly from the involvement of leading experts that were hired as individual international consultants and resource persons. The international experts provided best practices and experience from United States and Europe which provided very useful and was appreciated by various stakeholders.

The use of four international individual consultants and one national consultant resulted in coordination issues. This should be carefully considered and planned for during preparation of the implementation plan of TAs. There is also a need to recruit specialized translation experts to ensure high quality translation of technical data and avoid delays in submission of final reports.

Recommendations and Follow-Up Actions

It is recommended that (i) ADB explore effective ways to bring the recommendations to the attention of relevant central government offices and pursue implementation of the recommendations presented for an improved logistics information sharing mechanism; (ii) similar TA projects in the PRC focusing on niche technical issues should be taken up as these offer more opportunities for value addition; (ii) implementation should be carefully planned to ensure effective coordination between experts and minimize delays owing to translation.

Prepared by: Sharad Saxena Designation and Division: Principal Transport Specialist, Transport Division