

Completion Report

Project Number: 49010-001

Technical Assistance Number: 8968

March 2018

People's Republic of China: Policy Study on the Development of Intercity Railway in the Beijing-Tianjin-Hebei Region

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Asian Development Bank



TA Number, Country, and Name:			Amount Approved: \$400,000	
TA 8968-PRC : Policy Study on the Development of Intercity			Revised Amount: N/A	
Railway in the Beijing-Tianjin-Hebei Region				
Executing Agency:		Source of Funding:	Amount Undisbursed:	Amount Utilized:
Ministry of Transport		TASF-other sources	\$66,758.09	\$333,241.91
TA Approval	TA Signing	Fielding of First	TA Completion Date	
Date:	Date:	Consultant:	Original:	Actual:
2 October 2015	4 November	8 January 2016	31 January 2017	31 May 2017
	2015			
			Account Closing Date	
			Original:	Actual:
			30 August 2017	16 August 2017

Description

The People's Republic of China (PRC) has a rapidly growing economy accompanied by rapid urbanization. The National Development and Reform Commission (NDRC) is working with municipal authorities and regional governments on a development plan to boost economic integration of Beijing and its surrounding provincial areas of Tianjin and Hebei provinces (known as BTH). To promote economic integration, the BTH region is starting to construct an intercity high-speed train network involving major investments and focusing on integrated transportation in the area. A coordinated program for intercity railway development in the BTH region is needed to promote sustainable transportation and contribute to economic development. A jointly owned company, the Beijing—Tianjin—Hebei Intercity Railway Investment Co. Ltd (JJJ) has been set up by the three BTH governments, together with China Railway Corporation (CRC) to plan, finance and invest in intercity railway construction. The ultimate network will consist of a series of north-south and east-west intercity railway lines. Since March 2013, the Ministry of Transport (MOT) has had comprehensive responsibilities for railway planning formerly undertaken by the Ministry of Railways. This technical assistance (TA) was developed upon request from MOT.

Expected Impact, Outcome, and Outputs

The expected impact of the TA was the development of sustainable intercity railway services in the BTH region while the expected outcome was a coordinated policy framework to enable integrated intercity railway services in the BTH region. The outputs included (i) improvement of intercity railway network planning for the BTH region; (ii) a multimodal hub plan for intercity railway stations; (iii) funding options for intercity railways; and (iv) a regulatory framework for intercity railways.

Delivery of Inputs and Conduct of Activities

The TA engaged three international and three national consultants who were fielded in January 2016. The consultants were experts in passenger railway planning and operations, multimodal station planning, and railway sector funding. The actual consulting services delivered a total of 10 person-months for three international consultants and 10 person-months for three national consultants. These were, respectively, 1 person-months more and person-months less than envisaged. Originally, four national consultants were envisaged, but there was difficulty in finding a suitable national railway funding expert after several advertisements, so, this position could not be filled.

The TA was extended for four months because of the delay in collecting data on railway financing, and railway network and hub plans to support MOT in its railway planning responsibilities. CRC took a long time in providing the necessary data for analyses due to confidentiality issues.

The consultants performed satisfactorily but were only able to produce three out of four outputs. The TA was launched with an inception mission to Beijing between 28 and 30 January 2016 and the inception report was submitted shortly after that. During January 2016-May 2017, the consultants collected data, organized two workshops and fielded a study tour to Japan, as envisaged. Data collection focused on BTH railway financial capacity and management structure, passenger demand, planning regulations, organizational structure, and railway hub and network plans. The consultants developed the railway planning model which was submitted to JJJ and MOT and various officials of provincial railway agencies. On 25 October 2016, together with the request for extension of the TA, a seminar in cooperation with the Beijing Jiaotong University (BJTU) was proposed to be able to strengthen the TA outputs. This seminar was held on 14 December 2016 to disseminate the railway planning model developed, and the preliminary outputs of the TA, in lieu of output 1. A study tour was organized on 15-19 January 2017 and six officials from MOT and JJJ participated to learn about passenger rail systems and multimodal station operations, and railway network and planning in Tokyo and Osaka, Japan. To cap off the TA, an intercity railway development forum was organized on 22-23 May 2017 to disseminate the final outputs of the TA and to gather feedback from different stakeholders. The consultants submitted their final report and they also prepared a technical note on railway institutional and regulatory issues which was submitted to MOT. They also applied many references and examples from international experience in their reports, providing valuable insights to CRC, JJJ, MOT, other provincial railway bureaus, and the academic community.

MOT's performance as the executing agency was generally satisfactory. However, MOT was not sufficiently able to support the consultants in providing data from CRC needed for detailed analyses, particularly on financial aspects and station design, an issue recognized by the MOT itself as being restrictive in exercising its role as national railway planning authority. Furthermore, MOT showed interest in knowledge-sharing events (workshops and study tour), while a more intensive, regular dialogue with consultants could also have been a fruitful additional means to learn from international experience.

Asian Development Bank's (ADB) performance was satisfactory. The project team undertook timely recruitment of the consultants who were fielded soon after TA signing. It closely monitored the work progress of the consultants through one inception mission, one review mission, and provided strong guidance and direction of the TA.

Evaluation of Outputs and Achievement of Outcome

The TA delivered three outputs out of four. A strategy and prioritized plan to support MOT and JJJ was not fully developed because the consultants were not able to test different scenarios of network locations and operations due to limited access to data and unwillingness of CRC to share data on network and hub plans, and railway operational finances. In spite of this limitation, the comprehensive planning model, based on guiding principles of rail network planning and prioritization, provided a helpful hands-on tool not only to the BTH-related authorities, but to several provincial railway bureaus as well. In addition, the regulatory and institutional guidelines also provided inputs to MOT for their planning framework.

The TA is considered efficient as it was completed within the budget and within the extended completion time. Through the workshop and forum conducted, the development of intercity railway in the BTH region was explained and received by stakeholders. Issues on ownership and financial structures were identified. An overview of railway development in the BTH region and the PRC was presented in the reports as well as in the workshops. The study tour provided the delegates with much needed insight on railway planning, management and ownership structure, and railway financing practices in Japan. Analysis undertaken as part of the TA indicates that the proposed BTH network includes routes that should be sufficiently profitable to pay back all their capital costs over a 20-30-year period, while other routes should be able to operate profitably provided most of the initial investment cost is contributed by central or local government. Proposed recommendations for the BTH intercity railway are: (i) BTH railway should be operated as one or more vertically integrated railways with the infrastructure financed constructed and owned by a consortium consisting of the relevant municipalities and the Hebei province together with the railway itself and made available to the railway operator on a lease or concession basis; (ii) Private railways would be profitable in the BTH, particularly if the initial capital cost is shared with the local governments: (iii) Guidelines should be adopted so that planning and design of multimodal hubs carefully balances the requirements of each mode of transport, the flows within the hub. and the urban environment to provide not only good level of service to commuters, but also leverage the hub's transportation activity to create a vibrant urban node, including important civic spaces and high-value commercial development. Rigorous planning and design practices are critical to ensure hubs are successful not just on opening day, but in the long term. (iv) Public-private partnerships are a valid way of attracting finance and operation of railways in the BTH to bring private sector expertise with the motivation to make the project successful. MOT accepted these recommendations and acknowledged that these were useful in the development of an integrated intercity railway.

The TA was effective as it achieved its intended outcome through good quality outputs and reports, well organized workshops, and a very successful study tour. The TA is relevant as it is aligned with the PRC's railway development plans, but it is less than likely to be sustainable as it did not generate the level of commitment and support necessary to adopt all the recommendations of the TA.

Overall Assessment and Rating

The TA is rated successful because it made a useful contribution to support MOT and JJJ in planning the BTH railway network. Even though it was not able to deliver output 1 and TA efforts could have received stronger involvement of the EA, it still contributed in disseminating railway planning practice to a wider audience of officials from various provinces with similar rail sector development plans.

Major Lessons

Access to information and expected engagement of the client should be considered in TA design as both are crucial to provide meaningful, in-depth assistance, and to make optimal use of the international experience provided.

Recommendations and Follow-Up Actions.

Considering the recommendations, BTH railway funding options through public-private partnerships could be explored further by the Office of Public–Private Partnership.