

Tokyo Metro Lending a Hand to the Hanoi City Urban Railway Development Project

Michiyoshi Hasegawa

Tokyo Metro Co., Ltd. (Tokyo Metro) and Japan International Consultants for Transportation Co., Ltd. (JIC), in conjunction with the Japan International Cooperation Agency (JICA) have been awarded the 'Technical Assistance Project to Strengthen the Regulator Capacity and to Establish an Agency Managing the Operation and Maintenance of Metropolitan Railway Lines in Hanoi City, Viet Nam' (TA Project). Subsequently, Tokyo Metro entered into an agreement with JICA on 25 February 2013. Although Tokyo Metro has had experience dispatching employees overseas, this project is the first time the company has engaged in a full-fledged overseas assistance project.

Introduction

Past initiatives

Today, demands for construction of urban railways (subways) in emerging economies are on the rise. Viet Nam is one of these nations seeking various technological assistance for infrastructure development, including development of high-speed railways and urban railways, from both the public and private sectors of Japan.

Through JICA, Tokyo Metro has been offering tours and training to railway personnel from Viet Nam. In August 2011, Tokyo Metro hosted a 4-day tour for the then Head of Railway Bureau of the Hanoi City People's Committee to inspect various Tokyo Metro facilities. When Mr Thao, Chairman of the Hanoi City People's Committee visited Japan in March 2012, he took a ride on the Namboku Line and toured the operation control centre. Tokyo Metro has also been engaging in activities to promote understanding of Japan's superior urban railways, including giving presentations at various transport seminars in Hanoi.

Dispatch of Tokyo Metro Group employees

As assistance for Viet Nam gained momentum, Tokyo Metro did not stop at receiving visitors from Hanoi, but also dispatched employees to Viet Nam to provide general consulting services for construction of Hanoi City Urban Railway Line 2 and conduct a preliminary study (SAPI) for establishment of an operation and management company for the urban railways. The efforts led to the award of this

TA Project, which is to help consolidate regulatory agencies and establish an operation and management entity for Hanoi urban railways.

General Consulting Services for Hanoi Line 2

Urban railway development plan

Traffic congestion, deteriorating traffic safety, serious air pollution, and other problems have surfaced in Hanoi. The capacity of the current public transport (mainly buses) and the road network can no longer accommodate the rapidly rising traffic volume. In order to further develop the local economy and improve the investment environment, Viet Nam plans to construct nine urban railway lines (elevated railways and subways) with a target completion date around 2030. Among them, Japan is currently providing assistance to Line 2, with future plans to assist in Lines 1 and 5.

General consulting services for Hanoi Line 2

Line 2 is planned as a 35.2-km line from Noi Bai International Airport to Hanoi city centre, crossing the Red River. The general consulting services were for the construction portion of phase 1, which was an 11.5-km section from the south coast of the Red River to the city centre. The general consulting services included preparation of basic design documents for civil engineering works, railway systems, rolling stock procurement; bidding assistance; construction supervision; training of operation and maintenance personnel; technology transfer; environmental management; assistance in purchase of land; and so on. Viet Nam had high expectations for Japan's superior railway technology and expertise, as well as technical assistance provided to local personnel.

To prepare the above-mentioned basic design documents, Tokyo Metro dispatched three members to work on the operation plan and facilities maintenance plan, to design underground structures, and to coordinate among the railway system related departments. They have reviewed construction works, orders for related systems, detailed railway operation plans; summarized them into reports and work order documents; and made contributions to the overall progress.

Figure 1 Outline of Route of Hanoi City Urban Railway Development Plan

QUY HOẠCH CHUNG XÂY DỰNG THỦ ĐÔ HÀ NỘI ĐẾN NĂM 2030 VÀ TẦM NHÌN ĐẾN 2050

The Ha Noi capital construction master plan to 2030 and vision to 2050

MẠNG LƯỚI TÀU ĐIỆN NGẦM (METRO) ĐƯỜNG SẮT ĐÔ THỊ

Orientation for metro and urban railway network

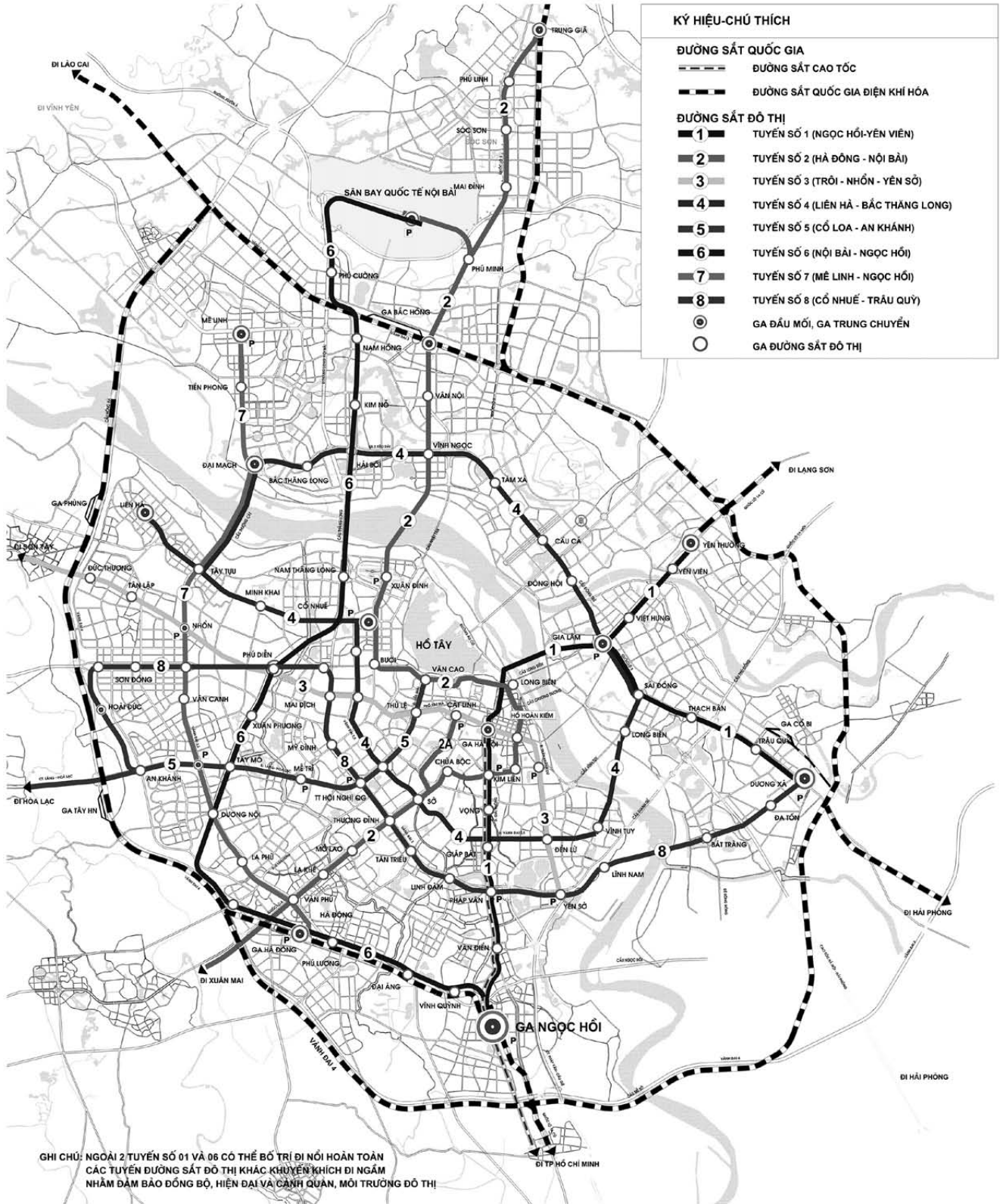
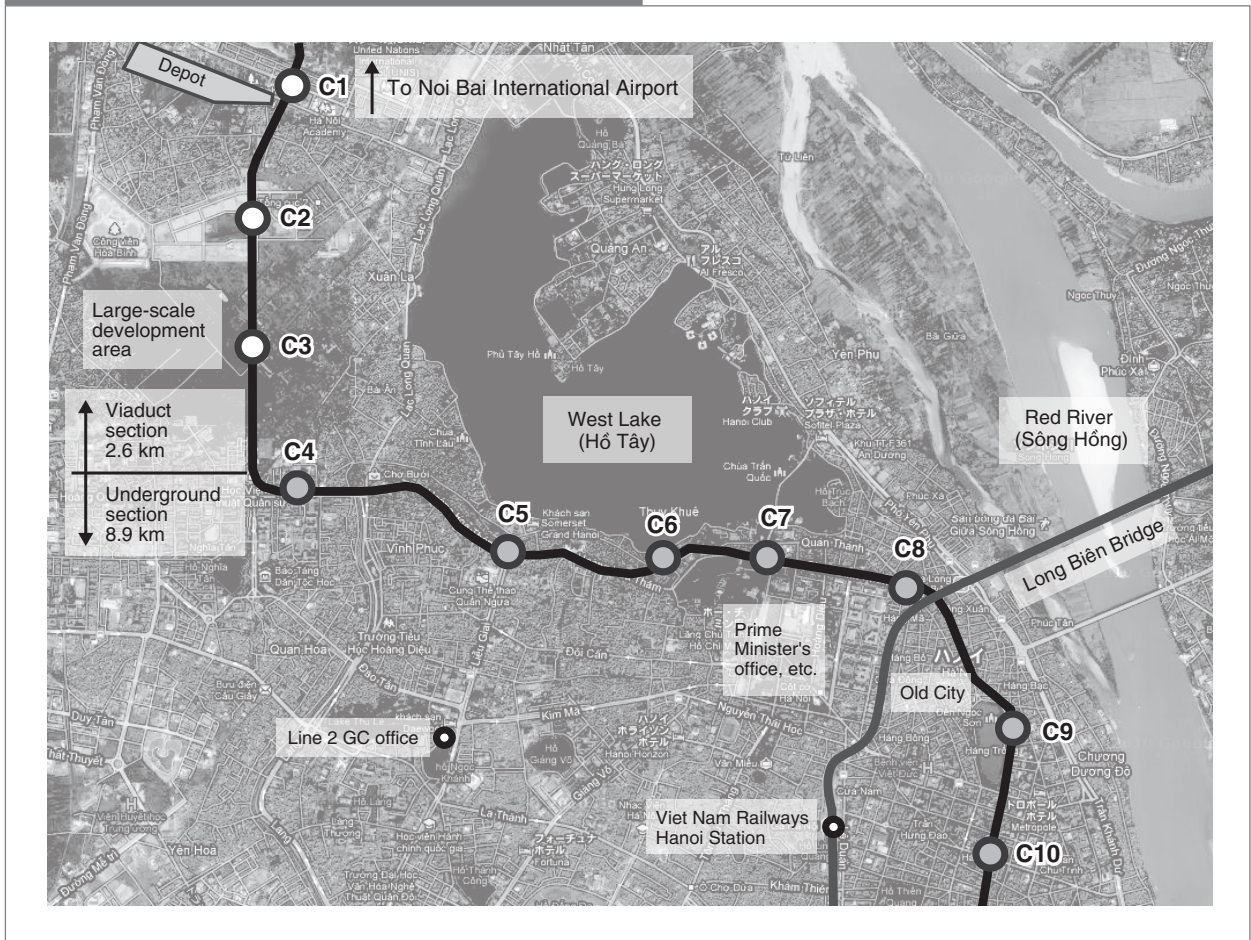


Figure 2 Planned Route of Line 2 (phase 1 construction)



Hanoi Project SAPI

Current state

Among the railway lines in the urban railway development plan, construction of Line 1, Line 2, Line 2A, and Line 3 is currently underway in Hanoi. Railway facilities are being constructed and rolling stock is being procured to prepare for railway operation.

Hanoi City will operate Line 2, Line 2A, and Line 3. It needs to identify the appropriate headquarters functions for its operation and management entity and determine proper ways to set up field offices because it does not have adequate knowledge and experience in operating urban railways.

Project SAPI

In view of this situation, Japan recommended the Viet Namease Ministry of Transport and the Hanoi City form an operational entity that can manage all the lines in an integrated fashion in order to achieve efficient management and enhance the convenience for railway users. Mr Tadayoshi Tohama, the Senior Managing Director of

Tokyo Metro, visited Hanoi in April and November of 2010 and Mr Akiyoshi Yamamura, the General Manager of the Railway Headquarters, also visited Hanoi in February 2011 to explain how Tokyo Metro manages nine railway lines in an integrated fashion and to express the company's intention to extend technical support for establishment of the operation company.

Against this backdrop, Project SAPI was launched in August 2011 with the objective of making plans for establishment of an entity to operate urban railways in Hanoi. The work involved in this project was to gather and analyze information necessary for establishment of the operation entity, verify relevant regulations and procedures, formulate a framework for the operation entity, put together a schedule up to establishment of the operation entity, and prepare detailed operation contents. Tokyo Metro dispatched two members for the project. Utilizing Tokyo Metro's experience and expertise in actual operation and management of multiple railway lines, the two members worked with the Hanoi Metropolitan Railway Transport Project Board (HRB) and other organizations to prepare for establishment of the operation entity, and verify and

evaluate personnel and education and training plans for developing the various lines, bringing concrete results.

Hanoi TA Project

TA Project

The 2-year TA Project is at establishing an entity to operate and manage the various urban railway lines in Hanoi and consolidate functions of supervising authorities. Tokyo Metro has a wealth of knowledge in operation of urban railways accumulated over 85 years and JIC is experienced in providing consulting services to overseas railway operators. They are providing joint assistance for establishment of an entity to operate and manage the Hanoi City Urban Railway Line 2, Line 2A, and Line 3, with a view to creating a convenient system welcomed by Hanoi citizens.

Strategies

The two companies worked on the following four strategies to win the TA Project:

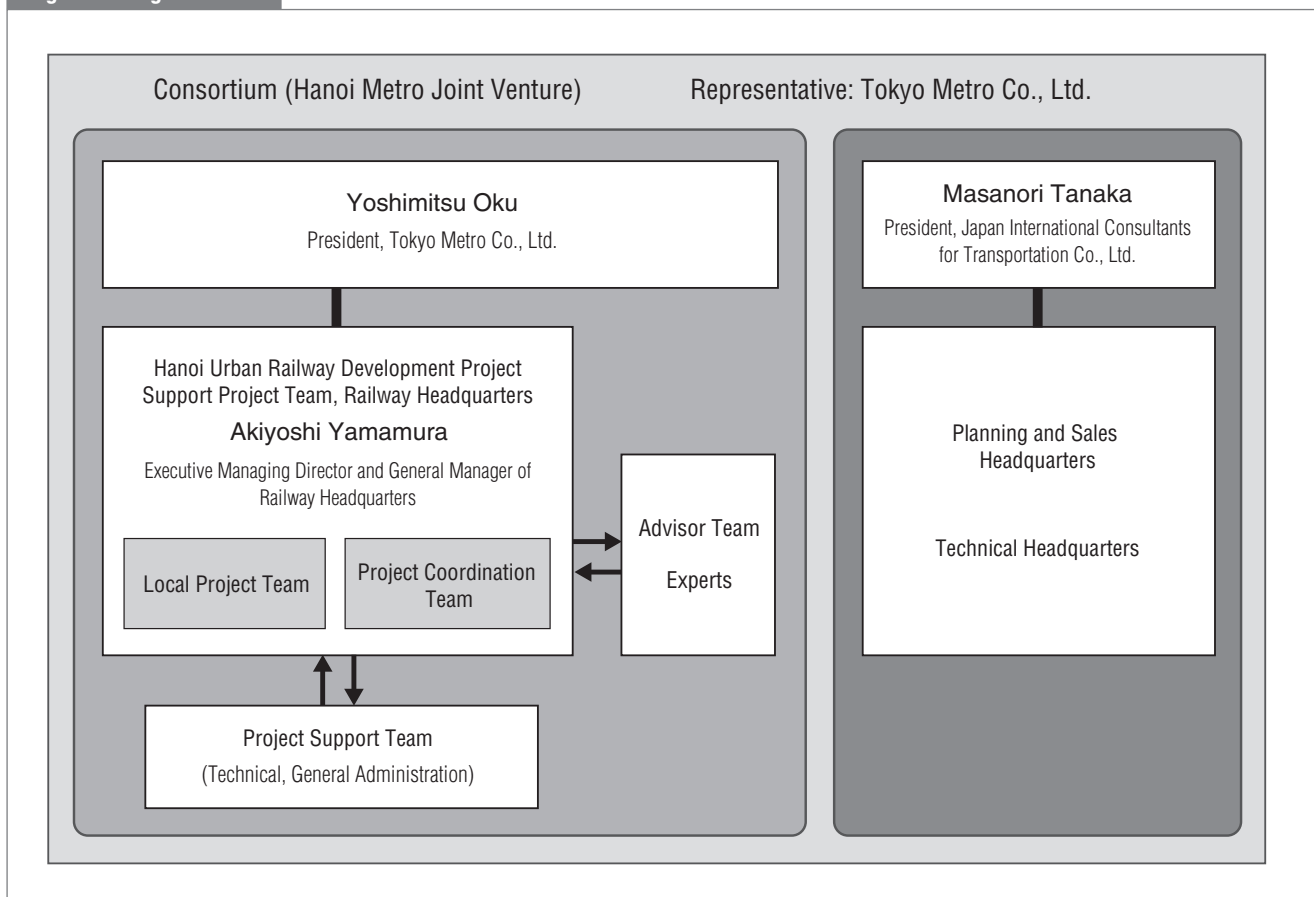
- Pursue the project utilizing the expertise of Tokyo Metro in operating urban railways over the years and the knowledge of JIC in various areas of overseas consulting (experiences from Hanoi Project SAPI, Ho Chi Minh TC Project, Hanoi Line 2 GC Project, etc.)

- Create an integrated implementation system consisting of Tokyo Metro company-wide project team, made up of 'local project team' and 'project support team'
- Deliver high-quality services with the cooperation and guidance of an 'advisor team' formed by experts and experienced personnel
- Achieve the project objectives through a nationwide coordinated effort by sharing information among JICA, the Japanese Ministry of Land, Infrastructure, Transport and Tourism (including local embassies), relevant railway operators, Japanese consultancies, and other related organizations.

Implementation structure

Since this cross-sectional project involves multiple departments and a considerable amount of work is expected to be done both in Viet Nam and Japan, a special 'Hanoi City Urban Railway Development Support Project Team' (Hanoi PT) was set up at Tokyo Metro's Railway Headquarters on 25 February 2013. Hanoi PT is currently composed of 16 members, with Executive Managing Director and General Manager of the Railway Headquarters Akiyoshi Yamamura as the officer in charge. A project team is usually composed of only a 'local project team' when providing a consulting service. However, as Tokyo Metro has no experience in

Figure 3 Organization



overseas consulting projects, it set up a 'project support team' mainly consisting of managers in charge of administration sections to make use of the organizational strengths of the entire Tokyo Metro Group.

With the assistance of experts including Dr Shigeru Morichi, senior professor at the National Graduate Institute for Policy Studies, an 'advisor team' was set up to provide various advice in going forward with the TA Project.

Setting up local field office

A local field office was set up in Hanoi to drive forward the TA Project, and Tokyo Metro President Yoshimitsu Oku visited Hanoi on 1 March 2013 to attend the opening ceremony.

At the ceremony, he stated, 'As a good partner of the Hanoi Metropolitan Railway Management Board (MRB), we will use our experience to establish an operating company befitting Hanoi and to train officers together with Hanoi so that they can take over operation and maintenance. We will make this project a success with the guidance and advice from JICA and the Ministry of Land, Infrastructure, Transport and Tourism. This year marks the 40th anniversary of friendship between Japan and Viet Nam, so I hope this project leads to further friendship between the two countries'.

MRB Director Nguyen Quang Manh also attended the ceremony as a guest and expressed his expectation for the

project's success to improve the transportation situation in Hanoi.

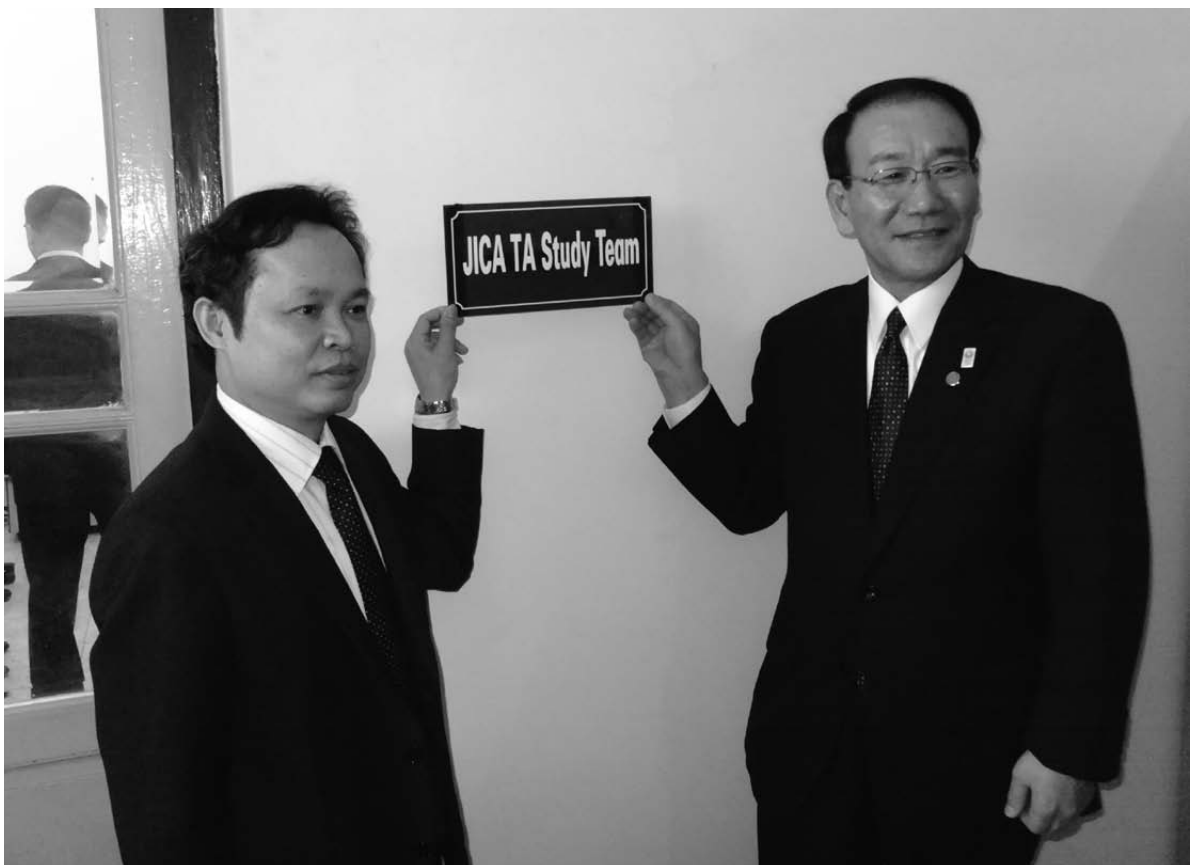
Specific contents of TA Project

The TA Project supports MRB (counterpart organization of this project) in conducting the following activities, so that the Hanoi City urban railway regulatory authorities and the operation and management entity for Hanoi City Urban Railway Line 2, Line 2A, and Line 3 can start the works stipulated in their organizational regulations:

- Create a system for determining train fares and subsidies
- Create a system for operation planning and safety management
- Establish an operation and management company
- Establish departments for railway operation (sales and marketing department, train operation department, rolling stock maintenance department, etc.)

Progress

So far, in order to solidify the foundation of the operation and maintenance company, we have formulated the job distribution and regulations for each department in the company, and also have introduced each specific duty to be performed. This was done in cooperation with members from the counterpart, MRB, based on Tokyo Metro's organization,



Left: Director Manh, Right: President Oku

(Tokyo Metro)



MRB Director Nguyen Quang Manh and Tokyo Metro President Yoshimitsu Oku Shaking Hands after Signing Ceremony

(Tokyo Metro)

and laws in Viet Nam. Additionally, some training courses have been provided for members of the counterpart who were not as knowledgeable regarding urban railways and corporate management. Training included visits to Tokyo Metro facilities and hands-on work experience in August 2013 in Tokyo, and also instruction on corporate operation, which was conducted by the Vietnam Japan Human Resources Cooperation Centre (VJCC) in December 2013 in Hanoi. Such training was provided so that business operations could be taken over promptly after the company is established. Moreover, seminars on urban railways were held in Hanoi in August and December 2013 and June 2014. These seminars helped officials from Viet Nam's national government and Hanoi City government to deepen their understanding of urban railways. Based on that knowledge, consideration of regulatory authorities, fare policies, train operation plans, etc., was made for urban railways in Hanoi.

Through these efforts, the national government and Hanoi City government approved the establishment of an operation and management company in November

2014. Currently, preparations such as a general meeting of stakeholders and corporate registration, are ongoing. After the company is established, plans are to verify that rules, systems, and the like, are functioning and to prepare to support accepting facilities for Line 2A, which is being prepared by another project.

Signing of memorandum of friendship and cooperation with MRB

On 18 February 2014, MRB and Tokyo Metro held a ceremony and signed a memorandum of friendship and cooperation, deepening our understanding and strengthening friendship, with the aim of contributing to development of the Hanoi urban railway project.

We hope this will help in establishing friendly cooperative relations with the Hanoi urban railway operation company, planned to be established in the future. Also, we will work hard so that this can contribute to development of Hanoi and Viet Nam, and can strengthen the friendship between Japan and Viet Nam.



Swarm of Motorcycles in Hanoi

(Tokyo Metro)

Extension of Contract

The contract for the Hanoi TA Project was initially for 2 years from 25 February 2013 to 24 February 2015, but was extended for an additional 1 year to 24 February 2016. This was because the scheduled opening of Line 2A (supported by China), the first line to be opened in Hanoi, has been delayed to December 2015 and establishment of the company was changed to April 2015 or later.

Conclusion

Among emerging economies in Southeast Asia today, Hanoi, the capital of Viet Nam, in particular, has experienced remarkable economic growth, rapid population increase, and expanding urban areas. The population reached 6.44 million in 2009. The road traffic volume in urban areas increased drastically, leading to chronic traffic congestion and other problems. The population of Hanoi is expected to grow to 8 million by 2020. These urban transportation problems are expected to worsen in the future; therefore, there is an urgent need to develop rapid urban railways, providing the infrastructure for sustainable urban development.

To maintain and further develop our friendly relationship with the Hanoi City, Tokyo Metro is committed to providing

assistance and contributing to the construction of a convenient urban railway system welcomed by the citizens of Hanoi. We also hope that by conducting this project, we can increase our corporate value and develop human resources. ■

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