Safety Society Environment

I-2 Relationship with Society

II-2-1 Life-style Business of JR East

The JR East Group operates a broad range of lifestyle businesses and provides services to support everyday lives of our customers in their various lifestyles and life stages. These services include retail stores within station buildings, hotels, office buildings and fitness clubs that benefit from their locations near stations, advertising in stations and on trains, childcare support in areas adjoining railway lines, and housing.

II-2-2 Strengthening Collaboration with Communities and Local Revitalization

The very existence of the JR East Group depends on the health of the east Japan area and of Japan as a whole. As a company responsible for a form of social infrastructure (i.e., railways), and as a member of the community, we work together with communities in order to take actions aimed at achieving their desired future. In addition, we actively implement community vitalization and tourism promotion measures that leverage the unique capabilities of our group, as well as pushing forward with the creation of appealing urban areas centering on train stations.

As a member of the local community, JR East has been working to build an energetic community with a strong interest in the community's future by promoting three town development perspectives of "development of large-scale terminal stations," "establishment of a lineside brand that will be chosen by customers" and "revitalization of core regional cities."

At Tokyo Station, we have developed Tokyo Station and areas surrounding the station by preserving/restoring Tokyo Station's Marunouchi station building, opening GranRoof, constructing a square in front of the Yaesu Exit, etc. under the concept of "Tokyo Station City" which envisions developing Tokyo Station into a complete city. Currently, the construction of a square in front of the Marunouchi Exit and areas surrounding the north passage are underway to create a station that will serve as a center that represents new cultures, while also serving as a spectacular gateway to Metropolitan Tokyo. At Shinjuku Station, we completed JR SHINJUKU MIRAINA TOWER in the Shin-Minami area in March 2016. We intend to contribute to creating further bustles in the Shinjuku area by transforming it into a place where various people gather and interact. At Sendai Station, we opened the east wing of S-PAL Sendai and widened the east-west free passage, thus creating space connecting towns on the east and west sides in continuity to allow people to gather and communicate, that can serve as a face of Sendai.

As to "establishment of a lineside brand that will be chosen by customers," we are establishing a lineside area where customers want to live by promoting development that looks at a railway line and the area alongside it as a unit rather than just as "points" (stations), such as the Keiyo Bayside Line Project (Keiyo Line) and a place of learning "Kurasu Class" (Nambu Line), in addition to promoting the Chuo Line Mall Project.

We are also cooperating with local governments in improving existing station buildings with free passages and other facilities in line with their city planning, based on requests from local governments, etc. We improved stations in line with construction of free passages at Isawa-Onsen Station on the Chūō Main Line, Adachi Station on the Tohoku Main Line and Yuzawa Station on the Ōu Main Line. With a tourist information desk, etc. (local government facility) built at Isawa-Onsen Station, Yuzawa Station and others, we have introduced local government facilities into a total of 101 stations (as of March 31, 2016) since our establishment in 1987.



Square in front of the Yaesu Exit, Tokyo Station



SHINJUKU MIRAINA TOWER



Yuzawa Station on the $\bar{\mathrm{O}}\mathrm{u}$ Main Line



Contribution of Railway Overpasses in Unifying Towns and Eliminating Traffic Congestion

JR East continues to cooperate with local governments in projects for railway overpasses near Inagi-Naganuma Station on the Nambu Line and Niigata Station on the Shin-etsu Main Line. These projects aim to unify towns that are split by railway tracks, eliminate traffic congestion, and improve the safety of both road and rail transportation.

In the project to construct a series of railway overpasses near Inagi-Naganuma Station on the Nambu Line, all 15 level crossings in the section subject to the project were removed by placing the railway on a viaduct in December 2013; and in the project to construct a railway overpass near Niigata Station on the Shin-etsu Main Line, we finished switching to temporary lines in November 2014 and are currently constructing the main structure.



Railway overpass construction project near Inagi-Naganuma Station on the Nambu Line



Railway overpass construction project near Niigata Station on the Shin-etsu Main Line

Improving and Developing Transfer Node Functions at Stations

Large numbers of people pass through stations where different transport services meet. To reduce urban area congestion and to make travel more convenient, we have been increasing the number of through services and improving our connections with other means of transport, in cooperation with national and local governments. We have also improved transfer nodes to other transport, such as to bus terminals (Busta Shinjuku) and taxi loading areas by constructing artificial ground above the railway tracks at Shinjuku Station, in collaboration with the Ministry of Land, Infrastructure, Transport and Tourism.

Supporting the program to promote migration to regional cities

We are supporting programs of local communities that encourage people to move to regional cities from the Tokyo metropolitan area targeting members of the "Otona no Kyujitsu Club," a club for seniors operated by JR East with around 2 million members, with an aim to contribute to the revitalization of those local communities and of encouraging such migration. We are currently cooperating in promoting migration and exchange with Nagano Prefecture, Aomori Prefecture, Toyama Prefecture and Ishikawa Prefecture.

We conduct tours that offer people interested in moving away from the Tokyo area an opportunity to take part in seminars and to visit actual locations in order to dispel their misgivings about migration. By combining local community activities (seminars on living conditions, agricultural experience) with information about Shinkansen trains, we can support local government migration policies through our sales channels and media activities (Otona no Kyujitsu Club membership magazine, website and others).

Furthermore, since people moving to regional cities or making short stays there sometimes need support, especially in the aspect of transport, we offer support using our Group resources, such as long-term car rental discount plans for members of the Otona no Kyujitsu Club.



Area surrounding South Exit of Shinjuku Station



Migration trial tour



II-2-3 Rediscover the Region Project

Development of the Rediscover the Region Project

Under the "Create Together" strategy, which specifies enhanced cooperation between JR East and local communities, we are promoting the Rediscover the Region Project. The aim of the project is to create new potential markets that bring increased circulation of people and goods between the Tokyo metropolitan area and other regions and also attract overseas visitors to Japan. The JR East Group has railway networks, stations that serve as centers of local communities, business know-how, sales channels and advertising power that all radiate out from the Tokyo metropolitan area and more. The strategy utilizes JR's such unique abilities to discover traditional cultures, local produce and other tangible and intangible tourist resources as well as to promote the interactive exchange of information and to expand sales channels between the Tokyo metropolitan area and local communities.



Conceptual diagram of "Rediscover the Region Project"

In the Tokyo metropolitan area, in collaboration with destination campaigns and other marketing tools, we are hosting "Rediscover the Region Project: Farm Fresh Markets" at Ueno Station and opened a permanent shop, "NOMONO," where producers convey their products and local appeal to customers, and an online shop, "The NOMONO premium." Emphasizing products that are typical of the season, region and traditions, NOMONO opened at Ueno Station in January 2012 and at Akihabara Station in March 2014 as local produce shops. Then to further expand its brand, it opened "NOMONO Kitchen Ikebukuro East Exit Shop" in November 2015 and "NOMONO Izakaya 'Kayoiji Ueno shop'' in January 2016. Various efforts to expand demand for local products have been put forth across the business areas of JR East, and altogether 3,735 farm fresh markets were held amongst the group as well as many other events to revitalize communities in the fiscal year ended March 2016.

We intend to promote distribution of local products in the Tokyo metropolitan area by utilizing existing infrastructures such as our group's Tokyo metropolitan area logistics hub and trunks of highway buses, with an eye to developing the "Rediscover the Region Project." (Established "Regional Revitalization Logistics Limited Liability Partnership (LLP)" in April 2016)



Rediscover the Region Project "Farm fresh market"



NOMONO, the local produce shop at Ikebukuro East Exit



▶Nomono 1-2-3 Project

In order to further strengthen collaboration with regional communities, we feature products that combine highquality ingredients such as local produce with superior processing techniques. Through this initiative, the JR East Group encourages manufacturing that integrates regional primary, secondary, and tertiary industries. The Nomono 1-2-3 Project is a manufacturing project that supports the eastern Japan area via product development and sales in collaboration with regional farming, forestry, and fishing industries. Behind the project is our wish to promote manufacturing aimed at sextic industrialization, by us linking primary, secondary, and tertiary industries.



Shinshu Jibie Venison Burger using venison from Shinshu



Sendai Kinako (ground soybean) Series using soybeans from Miyagi



Dried Sweet Potato Farmer's White Pudding using dried sweet potatoes from Ibaraki

Furthermore, in order to find solutions to issues in the primary industry and to enhance appeal of food through agricultural produce, we entered agribusiness in collaboration with local farmers. We are using high-quality tomatoes produced at a sunlight-based plant factory of "JR Tomato Land Iwaki Farm" in Iwaki City in Fukushima Prefecture for processing at the adjacent sextic industrialization facility and for food served at our group companies. "JR Niigata Farm" in Niigata City is an agricultural corporation established by taking advantage of the status of Niigata as a National Strategic Special Zone. It plays a role in developing Niigata's sake culture through production of rice suitable as an ingredient of sake. We will work to increase the nonresident population and revitalize regional communities by stably producing safe and secure agricultural produce and enhancing the appeal of the communities.





JR Tomato Land Iwaki Farm



JR Niigata Farm (image)



Safety Society Environment

For Regional Revitalization \sim "Oyatsu TIMES" \sim

About Oyatsu TIMES

"Oyatsu TIMES" is a series of snacks developed with an aim to revitalize regions by expanding the market for local produce in collaboration with local producers encountered through NOMONO, local produce shops that sell tasty produce from all over eastern Japan. The series has seen steady sales growth by selling roughly 55,000 items (roughly 3 times initial shipment forecast) in the first two weeks after launch in March 2016, and expanding stores handling the products from the Tokyo metropolitan area to all areas in eastern Japan. Furthermore, it has garnered the favor of a new group of local produce fans as 63% of purchasers were females in their 20's to 40's who were previously not very familiar with local produce.



Traditional local produce: POS data by NOMONO Ueno, Jan. 20, 2012~Nov. 6, 2013 Oyatsu TIMES: POS data by NewDays, March 29, 2016~April 12, 2016

Contribution to regional revitalization

In the "Oyatsu TIMES" project, the "NOMONO Direction Unit", which comprised food professionals from all groups, was involved in planning products that would suit the Tokyo metropolitan area market while discussing with producers. Also, three group companies established "Regional Revitalization Logistics LLP" to lower the hurdles of starting business operations in the Tokyo metropolitan area for local producers by organizing a logistics system at each step of the process, such as through reducing logistics costs to onethird by utilizing unused space on highway buses. Among collaborating local producers, some established a new business channel for retail products as well as for business products through the "Oyatsu TIMES" project, showing the formation of a business model for regional revitalization by taking advantage of the local produce market in the Tokyo metropolitan area. This also led local produce to be acknowledged locally, as seen in the case of produce from Chiba selling about 15 times more in Chiba than in any other area.

Voice of a producer

Noboru Okazaki, Representative Director, Okasyo Co., Ltd. (Fukushima City, Fukushima)

We started producing semi-dried peaches and apples after the Great East Japan Earthquake. We are very glad that "Oyatsu TIMES" items with these products are wellaccepted by customers. The sales and factory utilization have significantly increased and we would like to contribute to local agricultural promotion through these products using fruits locally produced in Fukushima.







Fukushima Semidried apple

Safety Society Environment

VOICE

Expansion of local produce market contributes to increase in tourists

Natsumi Abiko

Life-style business development headquarters, Business strategy division, General affairs and planning group



When involved with the local produce market "NOMONO," we encounter a lot of appealing local produce. Our wish to familiarize customers with this appeal led to the creation of the local produce snack brand "Oyatsu TIMES". However, there is a large sensibility gap between the local markets with their products of strong local flavor and the Tokyo metropolitan area market, and we were afraid that the efforts of the producers and logistics companies would simply not be enough to bridge the gap.

So we came up with an idea to overcome this challenge: Make the products a private brand, expanding the market while lessening producers' burden by putting JR East Group in charge of developing products and securing marketing channels. First, we formed the "NOMONO Direction Unit," a professional product development group, to bridge the gap between the production areas and the Tokyo metropolitan area.

These efforts worked well and "Oyatsu TIMES" has hit a sales record larger than expected within six months from its release, and this has brought success to both regional producers and the JR East Group. The producers could discover people's tastes in the Tokyo metropolitan area, and were happy because it not only increased their sales but also led to regional revitalization. The JR East Group could also open up a new market of local produce targeting people in their twenties and thirties. I was very glad when I found out that "Oyatsu TIMES" became a hot topic on the internet.

Another big challenge was how to deliver the products. Long-distance delivery from production location to each store is necessary to sell local produce in the Tokyo metropolitan area. The problem was solved by utilizing open space in the trunks of highway buses operated by the JR East Group. In addition, producers only needed to bring products to the bus stop, and JR East took charge of sorting and delivery afterward. The system cuts the time and effort of producers for delivery to each store and enables them to expand their marketing channels to as many stores as their production capacity allows, which I believe was a big advantage for them.



Behind the reason why regional producers want to expand their marketing channels in the Tokyo metropolitan area lay their hope to increase tourists to the region and their anticipation that if they could cooperate with the JR East Group, which handles the local produce although its main business is railway transport, customers would come. In fact, data shows that about seven percent of customers who used "NOMONO" actually visited the region. We expect that the more a local produce market expands, the more customers will visit the region.

We think "Oyatsu TIMES" was a big step for local produce to penetrate the Tokyo metropolitan area. In the future, we would like to contribute to regional revitalization in various ways, such as by developing collaborative relationships with producers in other regions from the perspective of earthquake disaster reconstruction as well, and developing new signature products in various regions while organizing events that make customers eating the products feel like visiting the place of production.



II-2-4 Childcare Support Services HAPPY CHILD PROJECT

JR East Group is promoting the "HAPPY CHILD PROJECT" to create communities where children can be raised free of worry. Opening childcare support facilities such as nursery schools near stations to aid active livelihoods for working ages as well as opening community cafés for parents and children to support formation of local communities and holding various events that both parents and children can enjoy are among such initiatives.

► Childcare Support Facilities — Support for Working Parents

JR East has opened childcare support facilities such as "nursery schools near stations" located in easily accessible areas usually within a five-minute walk from stations in order to support the combination of childcare and commuting to work. A total of 93 childcare support facilities were opened from 1996 through April 2016, and JR East is continuing to increase the number of these facilities. These nursery schools near stations provide added convenience as they allow parents to drop off and pick up their children on the way to and from work. As evidenced by children who are accompanied to nurseries by their fathers, our childcare support encourages paternal participation in childcare as well.



Nursery school under elevated railway tracks (Ichikawa Doronko Nursery)



Children playing in nursery school (Global Kids COTONIOR Kichijoji)

Events for Supporting Childcare

Children's Train Craftwork Exhibition

This exhibition, displaying craftworks produced by children attending our nursery schools adjacent to stations, is held regularly in the Railway Museum (Saitama City, Saitama Prefecture). With "trains" as its theme, original, creative and fantastic works created by children are enjoyed by many visitors. It also provides a space for displaying the activities of nursery schools and observing child development.



Sixth Children's Train Craftwork Exhibition

Paper-craft Class

Hoping that "children will become more familiar with railways and make many memories with their parents," we are holding "Shinkansen Paper-craft Class," a workshop for parents and children in various locations.



Image of completed paper-craft work



Safety Society Environment

II-2-5 Development of COTONIOR

We have opened complexes for childcare support and eldercare themed with multigeneration interaction.

COTONIOR is a coined word from "kodomo (children) + to (and) + senior (senior)" and three COTONIOR facilities have been opened in Kichijoji, Akabane and Nishi-Funabashi. With a well-thought-out facility layout, seasonal events and such, COTONIOR has created a heartwarming place that brings together a wide range of generations.



COTONIOR Kichijoji



COTONIOR Nishi-Funabashi

II -2-6 Cultural Activities

East Japan Railway Culture Foundation

In order to continuously utilize its management resources for social contributions, in 1992 JR East established the East Japan Railway Culture Foundation, which became a public interest incorporated foundation in April 2010. This organization has successfully promoted local culture, studied and researched railways, and taken part in international cultural exchanges through our railway business. The Foundation's major activities include operating the Railway Museum, Tokyo Station Gallery, the Old Shimbashi Station building and Old Manseibashi Station, sponsoring local cultural activities and accepting trainees from railway operators in Asian countries.

The Foundation provides information on its website (http://www.ejrcf.or.jp/english/index.html).

The Railway Museum

On October 14, 2007, Railway Day, the Railway Museum based on three major concepts was opened in Saitama City. It was designed to be a museum that systematically conducts surveys and research using railway-related heritage and reference materials, a history museum that depicts the history of railways focusing on exhibits of locomotives and cars, and an educational museum where visitors can learn about railway principles, systems and technologies through hands-on experience. Since its opening, The Railway Museum has proved to be a great success, attracting about 850,000 visitors in the fiscal year ended March 2016. Going forward, with planned renewal work of building interior and construction of a new building, section by section opening will take place followed by a grand opening scheduled in summer 2018.



The Railway Museum

Safety Society Environment

II-2-7 Developing Our Business around the World

► Global Development

In the context of increased awareness of global environmental issues and the economic growth of emerging nations, there is growing interest around the world in railways as an environmentally friendly form of public transportation. At present, railway projects are being considered in many parts of the world, and the global railway market is expected to grow in future by an average of 2.5% per year, expanding in size to around 22 trillion yen in 2020. Given these circumstances, JR East will pursue the global development of our business by collaborating with both domestic and foreign companies while leveraging our expertise in the fields of operations and maintenance (planning, management, support, and implementation relating to train operation, facility maintenance, etc.). In particular, we have identified Asia, which is experiencing dramatic growth, as a priority region and are engaged in railway projects in various countries there. With the aim of collecting information and so forth for these projects, we have established overseas offices in five locations: New York, Paris, Brussels, London, and Singapore.

We are pursuing our global business development by working together as one group. In November 2011, partnering with a domestic railway company which possesses an extensive track record and expertise relating to high-speed railways, urban railways, and freight railways, we launched Japan International Consultants for Transportation Co., Ltd. (JIC) to handle our railway consulting business around the world. JIC is currently actively developing international railway consulting projects. In addition, Japan Transport Engineering Company (J-TREC) was added to the group in April 2012. We are working to expand our share of the international market by aiming to participate in various railway projects around the world while collaborating with both domestic and foreign companies.

Locations of International Railway Projects and Overseas Offices





International Cooperation

Based on requests and commissions from the Ministry of Land, Infrastructure, Transport and Tourism, the Japan International Cooperation Agency (JICA), and others, JR East is developing international cooperation initiatives, such as dispatching railway experts to Asian countries, introducing the technology and expertise we have built up over time, and receiving trainees from developing nations to provide them with specialized training. Moreover, JR East actively offers railway-related professionals from overseas the opportunity to observe our operations; in FY2016, we hosted some 1,400 observers from around 50 countries worldwide. These observers included government and railway representatives from various nations as well as researchers from foreign universities and organizations. Their visits play a valuable role in promoting mutual understanding.



Exchange program with Deutsche Bahn (Tokyo General Rolling Stock Center)



Tour for ambassadors to Japan and foreign media (Shinkansen General Rolling Stock Center)

Global Contribution through International Institutions

In addition to actively collecting and providing information through international conferences and publications by the International Union of Railways (UIC), the International Association of Public Transport (UITP), Community of European Railway and Infrastructure Companies (CER), the Association of American Railroads (AAR), the American Public Transportation Association (APTA), and other international railway organizations to which JR East belongs, we have been working toward the global development of railways and the resolution of railway-related issues through serving as chair of the UIC Asia-Pacific regional assembly since January 2013 and President and Director of the UITP Policy Board since June 2015, and other activities.

In order to showcase features of Japanese railway systems to overseas railway-related parties, we have been actively participating in overseas trade shows, seminars and so on as well as extending invitations for international conferences. In July 2015, we held the "UIC World Congress on High Speed Rail," the world's largest international conference and exhibition focusing on high-speed railways, in Tokyo in collaboration with UIC.



June 2015: Vice-Chairman The 9 Ogata appointed as President of UITP (Italy)

The 9th UIC World Congress on High Speed Rail (Tokyo, July 2015)



▶ Providing Technical Support to Overseas Railway Operators

In Jakarta, the capital of the Republic of Indonesia, there is extreme traffic congestion, and public transportation infrastructure is being developed to address this issue. Since the carrying capacity of existing railways also needs to be enhanced and there is an urgent need for new rolling stock to be introduced, we are transferring rolling stock that has been withdrawn from service in the Tokyo metropolitan area to the railway company that operates the Jakarta metropolitan area's MRT (PT KAI Commuter Jabodetabek), as well as providing technical support for rolling stock maintenance and training crew. In the three years since 2013, we have transferred a total of 476 trains to PT KAI Commuter Jabodetabek—most recently, 205-series trains previously used on the Saikyo Line. As a result, around one-half of the rolling stock owned by the company is now 205-series trains transferred by JR East.

Similarly to Indonesia, since 2007 we have also been transferring rolling stock to Myanmar Railways, which operates passenger trains and transports freight throughout the Republic of the Union of Myanmar. In 2015, we transferred 19 diesel railcars (Kiha 40 series/Kiha 48 series) that had been used in the Tohoku and Niigata areas. At the same time, we dispatched employees to Myanmar to provide maintenance-related technical support that would ensure stable operation of the transferred rolling stock.



Transferred 205-series train



205-series train in service in Jakarta following transfer to PT KAI Commuter Jabodetabek



Technical support from crew



Diesel train transferred to Myanmar

▶ Participation in Thailand's Purple Line Project

We are also involved, along with Marubeni and Toshiba, in a project to provide comprehensive maintenance for rolling stock and ground installations for the MRT Purple Line being constructed in Bangkok, Thailand. The Purple Line is a railway line in Thailand's capital of Bangkok intended to link the Bang Sue district in the northern part of the city to the Bang Yai district in the northwestern suburbs, which began operation in August 2016. In

December 2013, through a joint investment with Marubeni and Toshiba, we established the maintenance company Japan Transportation Technology (Thailand) Co., Ltd. (JTT) in Bangkok. It will provide maintenance services for a tenyear period, including the rolling stock, signals, tracks, power systems, platform doors, automated fare collection system, and rail yard facilities. In addition, Japan Transport Engineering Company (J-TREC) has manufactured stainlesssteel rolling stock for use on the Purple Line, delivering a total of 21 train-sets (63 cars).



The first day of operation



Bangkok Urban Transportation: Route Map



▶ Participation in International High-Speed Rail Projects

With the aim of participating in high-speed rail projects in various countries, we are working through publicprivate partnerships to promote the safety, reliability, and comfort of Japan's Shinkansen and winning contracts. The U.K. is currently developing the High Speed Two (HS2) high-speed rail project. Announced by the U.K. Department for Transport in January 2009, HS2 is a new high-speed railway project with a total length of 530 km, with construction of a the Phase One (the section linking London and Birmingham) and the Phase Two (Y-shaped section linking Birmingham to Manchester in one direction and Leeds in the other direction) planned. We provided consulting on administrative and technical issues and the creation of an operating plan to HS2 (High Speed Two Ltd.), which is the main development company.

▶ Participation in Indian High-Speed Rail Project

On December 12, 2015, the governments of Japan and India, based on the summit meeting between Prime Minister Abe and Prime Minister Modi and joint declaration published the same day, signed a Memorandum of Understanding between the Government of Japan and the Government of the Republic of India for cooperation relating to the development of a high-speed railway system, which agreed that Japan's Shinkansen technology would be adopted for a high-speed rail project between Mumbai and Ahmedabad. At present, the governments of Japan and India are discussing matters relating to an Indian high-speed railway, such as the specific development plan. Through a publicprivate partnership arrangement, JR East is providing technical support for these discussions, based on our extensive experience as a Shinkansen operator.

In addition, in March 2016, one of the companies in our group, Japan International Consultants for Transportation (JIC), was commissioned by JICA to provide consulting services relating to the formulation of high-speed rail technical standards through the Indian High-Speed Railway-Related System Development Support Project, which is currently ongoing. We have also enhanced our internal organization through measures such as appointing executives with responsibility for the Indian high-speed rail project.

Safety Society Environment

VOICE

Realizing the high expectations of people in other countries for Japanese rolling stock.

Akihito Takeshiro

International Business Promotion Department, International Business Division Japan Transport Engineering Company



In the domestic projects that I have been involved in to date, our work as a maker of rolling stock finished when the trains we manufactured were delivered to the railway company. However, in the case of the Purple Line Project, since it is a newly opened railway in another country, it required serious alignments between rolling stock and related facilities, such as ground installations (stations, tracks, etc.) and rail yards. It was my first experience of this kind of work. In the past, I had only needed to think about rolling stock when doing my work, but on this project, I was reminded that rolling stock operates as part of various systems, including ground installations.

The work I am in charge of is mainly on-site coordination and drafting of plans. I observe the unloading of rolling stock from the ship at the dock in order to verify its condition, conduct tests on site after it is transported from the dock to the rail yard, and handle coordination and negotiation with the companies responsible for constructing ground installations and rail yards. In addition, while our company is a rolling stock manufacturer, we also handled work such as shunting of rolling stock inside rail yards and maintenance, so I formulated plans for rolling stock shunting and test runs on the main line, based on the maintenance plans.

I am currently employed at a rail yard, where my work involves collaborating with many different companies, such as the operator Bangkok Expressway and Metro Public Company Limited (BEM) and the maintenance company Japan Transportation Technology (Thailand) Co., Ltd. (JTT). Since this is the front line of train operations, unlike in the past, when my job was done entirely on the premises of the rolling stock manufacturer, I now need to think about safety and precision from a train operation standpoint while doing my work. If some kind of problem occurs, I immediately coordinate with JTT as well as the operator BEM to share information in a timely manner.

When test runs began in earnest in Thailand, a grand ceremony attended by the Prime Minister and various government officials was held. Everyone who observed the rolling stock or went on board commented on its spacious, bright, clean interior and said that they hoped it would be ready for operation soon. I was reminded that people in other countries hold Japanese rolling stock in high regard.

The project finally entered into service after overcoming various challenges. I have been working



on it for three years, and the time seems to have flown by. Now that the line has begun operation, various further actions will be required, such as maintenance, and we will do our best to fully leverage the cumulative experience of the JR East Group to ensure that the people of Bangkok continue to view Japanese trains as special. Moreover, in the future, we plan to draw on the experience we have gained while working on this project to participate in new projects being planned around the world.

Akihito Takeshiro (second from left)

Society

Safety Society Environment

VOICE

Using Japan's railway technology to resolve social issues in other countries.

Takeshi Omori

Project Director Japan Transportation Technology (Thailand) Co., Ltd.



In Thailand, where economic growth is proceeding at a rapid pace, traffic congestion in the capital of Bangkok is a serious problem, and development of an environmentally friendly, reliable MRT system is a pressing issue. The MRT Purple Line, which leverages our group's comprehensive technical capabilities in the areas of rolling stock manufacturing and maintenance, was opened in August 2016. We are confident that the Purple Line can make a definite contribution to resolving Thailand's traffic problem. It is not just a railway line that has opened; condominiums, large-scale shopping centers, and so on are being developed along the line in Bangkok at the same time, while the establishment of park-and-ride facilities at multiple stations has increased transportation efficiency. As a result, the Purple Line may be expected to not just ease traffic congestion but also contribute to the region's economic growth.

Japan Transportation Technology (Thailand) Co., Ltd. (JTT), where I work, is a joint venture established in Bangkok by JR East along with Marubeni and Toshiba that provides comprehensive maintenance services for rolling stock and ground installations on the Purple Line. It is the first case of a Japanese consortium including a railway operator participating in a railway project overseas. As of August 2016, 16 employees (including me) had been assigned to JTT from JR East. During the nearly three years since the company was founded, we have prepared for the opening of the line in various ways, such as reviewing maintenance details, creating operating manuals, and recruiting, educating, and training local personnel.

What I have really noticed through my day-to-day work is that when there is an assumption of tacit understanding on our part, it leads to misunderstandings and accidents. It is therefore necessary to create a huge number of documents that specify all kinds of information. I am now also conscious of the need to explain things clearly on a regular basis. In addition, unlike Japan, where there is a strong tendency for workers to stay with one company for a long time and advance their career within it, workers in Thailand tend to pursue career advancement by moving to different companies. We have therefore adopted a systematic approach using manuals as the basis for employee training while still retaining the benefits of Japan's employee training system, which emphasizes onthe-job training. Since the Purple Line project has a complex structure, such as separate contracts for rolling stock operation and maintenance work, a lot of effort was required to coordinate the many people involved.

The personnel dispatched from JR East to JTT are mostly mid-level employees, and while it is a struggle to adapt to an unfamiliar system and deal with non-Japanese manufacturers, there is also a sense of fulfillment and personal growth when you realize "I can do something today that I couldn't



do yesterday" or "I understand something now that I didn't understand before." What's more, I feel that the experience I have acquired through this project will improve my ability back in Japan.

Going forward, we will continue to take advantage of this outstanding opportunity to give the people of Thailand a favorable impression of Japan and make it our mission to leverage the technology developed by the JR East Group and Japan's railways, along with Japan's excellent on-site capabilities.