

## Chapter 9

## Strengthening Strategic International Expansion and Contributions

## Section 1 Promoting the Export of Infrastructure Systems

## 1 General Direction of Government Policy

The government established the “Infrastructure Strategy Economic Cooperation Meeting” in March 2013 and compiled the “Infrastructure System Export Strategy” based on deliberations carried out by relevant ministers, including the Minister of Land, Infrastructure, Transport and Tourism, regarding government policies in May of the same year. A revised version of this strategy was formulated in June 2015 with the aim of helping Japanese companies secure orders for infrastructure systems totaling approximately JPY 30 trillion in 2020 (approximately JPY 10 trillion in 2010). The active implementation of the 2015 revision of the “Japan Revitalization Strategy” was also approved by Cabinet in the same month.

In May 2015, a high-quality infrastructure partnership incorporating the provision of approximately 110 billion dollars of high-quality infrastructure investments in the Asian region over the next five years was announced by Prime Minister Abe. Through this partnership, the government aims to further mobilize private-sector funds and expertise to realize infrastructure investments that are sufficient in terms of both quality and quantity. In November of the same year, the Prime Minister announced that systemic improvements to yen loans and overseas investments and loans would be carried out, such that promotion of the further expansion of high-quality infrastructure would be a matter of policy.

## 2 Initiatives of the Ministry of Land, Infrastructure, Transport and Tourism

In accordance with the same strategy and by making the most of the aforementioned systemic improvements, MLIT will powerfully advance the overseas expansion of infrastructure systems in the land, infrastructure, transport and tourism sectors. In order to successfully overcome competition from foreign countries and win bids for Japanese companies, we must rely on Japan’s strengths, such as by building safe and reliable systems that combine structural and non-structural aspects, while addressing the needs of recipient countries with flexibility. Therefore, we are planning to promote three pillars of the applicable measures as follows: a. “upstream” planning and information sharing, b. mitigation of business risks, and c. Overseas development of soft infrastructure.

## a. ‘Upstream’ Planning and Information Sharing

In order to promote participation from the concept stage of each project (upstream), Japan will appeal its technology to foreign countries, especially how it provides safety, reliability, and superior cost-effectiveness on a comprehensive basis, including with respect to the operations stage. Japan will share these information by utilizing trade promotion activities carried out through joint efforts by leaders in the public and private sectors, organizing city tours and company tours for foreign ambassadors stationed in Tokyo, and taking advantage of opportunities at international conferences.

## b. Mitigating business risks

We established the Japan Overseas Infrastructure Investment Corporation for Transport and Urban Development (JOIN) in October 2014 to reduce business risks—such as the huge amount of initial investments, long-term maintenance requirements, and demand risks—incurred by companies expanding into downstream (management and operations) functions in the field of transportation and urban infrastructure. In addition to opening the Overseas Construction Hot Line consultation service in order to help solve problems encountered by companies that are expanding businesses abroad, we are seeking to provide multifaceted support to Japanese companies involved in the overseas development of infrastructure systems by dispatching small and medium-sized companies, sharing updated information through databases on overseas

construction and real estate markets, holding seminars, and supporting overseas development based on the use of intellectual property.

### c. Overseas Development of Soft Infrastructure

Various efforts are underway to create an environment ideal for Japanese companies to participate in projects, including international standardization of Japanese technologies and systems and/or become the “de facto standard” of partner countries, support for institutional development of partner countries to improve the business environment for Japanese companies, and support for training engineers and skilled workers that contribute to sustaining administration and maintenance of infrastructure in partner countries.

#### (1) Promotion of Top Sales

In FY 2015, the Minister of Land, Infrastructure, Transport and Tourism visited South Korea, Turkey, the Philippines, Malaysia, and Laos and engaged in top-level trade promotion activities for Japanese infrastructure systems by holding discussions and exchanging opinions with top officials and cabinet ministers in charge of the land, infrastructure, transport, and tourism sectors in these countries. In addition, the Vice Minister and Secretary visited a total of fifteen countries, including stops in Africa and Latin America, to promote Japan’s infrastructure systems to meet the infrastructure needs of these countries. Additionally, visits to Japan by foreign ministers and dignitaries, the hosting of seminars, and other such opportunities were actively used to tout the superiority of Japanese infrastructure systems.

## Column

### Strong promotion of top-to-top selling

During FY 2015, the Minister and the State Minister of MLIT and the Parliamentary Vice-Minister conducted sales promotion of Japan’s infrastructure systems to key government officials. Here, four examples around the railway sector are introduced.

#### (1) Official trip to Malaysia by Keiichi Ishii, Minister of MLIT

In November 2015, Keiichi Ishii, Minister of MLIT, had bilateral talks with each of the ministers of Transport of Malaysia, Singapore, and Thailand about cooperation in top-to-top selling of Japan’s Shinkansen system and, in the transport sector, using the occasion of the ASEAN-Japan Ministerial Conference on Transport. At the same time, while paying a courtesy visit to Malaysian Prime Minister Najib Razak, Ishii had talks with Abdul Wahid Bin Omar, Minister in the Prime Minister’s Department, and Syed Hamid, Chairman of the Malaysian Land Public Transport Commission, separately, on high-speed railways. In the meetings, Ishii explained the superiority of the Shinkansen systems and said that the Japanese government has the intention to provide maximum support financially and in human resources development.

A meeting with Malaysian Minister of Transport Liow.



Source) MLIT

**(2) Visit to Japan by Anthony Foxx, United States Secretary of Transportation**

In November 2015, Keiichi Ishii, Minister of MLIT, accompanying Anthony Foxx, United States Secretary of Transportation, took a test drive of the superconducting maglev in Tsuru-shi, Yamanashi. After the drive, Transport Secretary Foxx said, “A miracle of transportation has advanced the maglev this far. This is the fruit of research efforts by many people in Japan.”

At the meeting next day, Mr. Foxx, in addition to signing a joint statement to promote cooperation in the transport sector, agreed to have the Japan-U.S. conference on railways in which they exchange opinions about specific cooperation in the railway sector, especially high-speed railways.



Source) MLIT

**(3) Official trip to India by Junzo Yamamoto, State Minister of MLIT**

In October 2015, Junzo Yamamoto, Senior Vice-Minister of MLIT, held a seminar on Japan’s railway system in India to facilitate the understanding of Japan’s high-quality railways from the aspects of financial reasons, safety, sustainability, comfortability, etc. The seminar was well attended by about 150 participants, and some people had to stand. At the same time, Yamamoto met Suresh Prabhu, Minister of Railways, and encouraged the introduction of the shinkansen system to the Mumbai – Ahmedabad High-Speed Railway.



Source) MLIT

**(4) Official trip to the United Kingdom by Kiyoshi Ejima, Parliamentary Secretary of MLIT**

In November 2015, Kiyoshi Ejima, Parliamentary of MLIT, had a talk with Robert Goodwill, Parliamentary Under-Secretary of State in the Department for Transport in the UK (at the time), and promoted the introduction of Japan’s railway system into the high-speed railway plan (HS2) in the UK., besides the 29th session of the IMO.

Ejima Parliamentary Vice-Minister of MLIT Ejima of MLIT meets with Goodwill, parliamentary undersecretary to the UK’s Department for Transport.



Source) MLIT

**(2) Formulating a Ministry of Land, Infrastructure, Transport and Tourism Action Plan for the Overseas Development of Infrastructure Systems**

Demand for infrastructure in neighboring ASEAN countries and other overseas countries is rapidly rising, such that the competition for customers between Japan and her rivals is intensifying. In order to form high-quality infrastructure partnerships as announced by Prime Minister Abe, Japan is reinforcing initiatives launched by the government by expanding systems with the aim of promoting orders and otherwise. The role played by the MLIT in Japan’s overseas

development of infrastructure is huge. Existing initiatives will need to be continued and reinforced, the best possible use should be made of the expansion of systems, and new initiatives to deal with current changes in conditions must be undertaken. To this end, the MLIT formulated an action plan (Action Plan for the Overseas Development of Infrastructure Systems). This action plan applies not to different sectors separately but rather on a cross-sectoral basis by region and country. In addition to substantiating and specifying details to a greater degree, such as clarifying priority projects, clarifying the timing according to which actions are to be taken and otherwise, this action plan also incorporates specific measures, such as those pertaining to international standardization, support for Soft Infrastructure (including human resource development and support for the construction of systems), the promotion of participation in PPP projects, the enhancement of strategic promotions, and the overseas deployment of small to medium-sized companies. The MLIT shall strategically carry out the overseas development of high-quality infrastructure systems in line with this action plan according to a schedule deemed to be most effective.

### (3) Proactive engagement in PPP projects

The world infrastructure market is projected to continue growing due to rapid urbanization and rapid economic growth in emerging countries. In particular, we are seeing more cases in which infrastructure is being developed through public-private partnerships (PPP) based on the use of private-sector funds and in which the concession method is being adopted for the operations of existing public transportation services. These cases represent a huge business opportunity for private companies. However, transportation and urban development projects are characterized by long-term development windows, demand risks during the operations stage, and the exercising of influence by local government organs, such that participation by only private-sector players is challenging.

For this reason, the MLIT established the Japan Overseas Infrastructure Investment Corporation for Transport and Urban Development (JOIN) in October 2014 to carry out capital investments and participate in projects on an integrated basis in accordance with demand risks in order to help Japanese private companies participate in overseas markets for transportation and urban development. To date, JOIN has decided that it would provide support for three different projects. In September 2015, it organized the First International Seminar on the Overseas Development of the Infrastructure Business jointly with the MLIT and the Japan Bank for International Cooperation (JBIC). In FY 2016, JPY 90 billion was posted to the Fiscal Investment and Loan Program (JPY 38 billion for industry investments and JPY 52 billion for government guarantees). JOIN will continue to be proactively utilized.

## Column

### Overseas development of infrastructure systems

#### [Matters decided by Japan Overseas Infrastructure Investment Corporation for Transport & Urban Development (JOIN)]

As for matters decided by the Japan Overseas Infrastructure Investment Corporation for Transport & Urban Development (JOIN) in the period from October 2014, when JOIN was founded, to the end of December 2015 (approved by the Minister of MLIT), the outlines and the importance of the support are introduced here.

#### (1) Management and operation of Thi Vai International Port near Ho Chi Minh, Vietnam

An investment (approximately 1.2 billion yen) is made to participate in the project of management and operation of the port terminal for importing ferrous scrap in Thi Vai International Port near Ho Chi Minh.

This is the first time for a Japanese port transportation company to participate in port operations in Vietnam and is expected to benefit Japanese-owned companies in Vietnam and contribute to economic development within the country.

Handling of ferrous scrap (illustration).



Source) MLIT

## (2) Texas High-Speed Railway Project

An investment (approximately 4.9 billion yen) is made to participate in the project to connect the two cities of Dallas and Houston in the state of Texas by a high-speed railway with travel time of about 90 minutes.

A private company in the United States is advancing the project on the assumption of introducing Japan's shinkansen system (N700-I Bullet), so the investment by JOIN will support the use of the system and enhance the feasibility of the project. In addition, the project will serve as a showcase of the shinkansen system in the United States, which is not yet familiar with the high-speed railway, and will substantially contribute to promote Japan's shinkansen technology outside of Japan.

## (3) Project of management and operation of urban railways in Brazil

At three cities including Rio de Janeiro in Brazil, an investment (up to approximately 5.6 billion yen) is made to participate in the collective plan consisting of four projects of a suburban railway, subway line, and two light rail transits.

Japan's investment in the overseas passenger railway project and its full-fledged participation in the operation of the project involving Japanese railway enterprises will realize safe and stable transportation by urban railways through the consignment of Japanese engineers to provide training for local engineers and will contribute to the improvement in urban problems of traffic congestion and environmental pollution.

(Reference) Japanese bullet train system (N700 Series Shinkansen).



Source) MLIT

Rail service on the outskirts of Rio de Janeiro (railway vehicles in motion).



Source) MLIT

## (4) Promoting Strategic Publicity

In order to further advance the overseas development of infrastructure systems, initiatives for strategic publicity shall be promoted, such as by producing and effectively highlighting publicity to convey the concept of a *high-quality infrastructure*, a salient feature of infrastructure systems in Japan, in an easy-to-understand manner. In addition to producing videos to specifically convey the concept of high-quality infrastructure and utilizing these videos for top-level trade promotion activities and when dignitaries visit Japan and seminars are held, we will harness online broadcasting channels and transmission media to reach broad audiences in targeted countries and regions.

## (5) Initiatives in Different Countries and Regions

In addition to the aforementioned initiatives, public-private partnership-based infrastructure conferences are held to promote greater understanding of high-quality infrastructure investments advocated by Japan as a way to create opportunities to advance the overseas development of infrastructure systems through public-private partnerships. Overseas public-private partnership councils have also been established in different fields of infrastructure—namely eco-cities, water, roads, disaster prevention, rail, ports and harbors, and aviation—to facilitate the sharing of information on Japanese infrastructure.

For example, in developing Talks for Cooperation in Disaster Prevention in the pursuit of solutions for an emerging country dealing with disaster-prevention issues in collaboration with academic, business, and government circles in both countries, Japanese technologies would be introduced and proposed to the government of the other country through a partnership with the Japan Disaster Prevention Platform, an organization building a cooperative framework among academic, business, and government circles established in June 2014. In order to promote such projects as those involving participation in the development and operations of ports and harbors in Myanmar, Kenya, and Mozambique and the introduction of technical standards applicable to ports and harbors in Vietnam, the development of human resources is being enriched, and opinions and data are being exchanged through the Overseas Port Logistics Projects Council. In addition, public-private partnership initiatives are being carried out through the Japan Conference on Overseas Development of Eco-Cities and other such bodies tasked with promoting urban development overseas, and support has been provided for the organization of MIPIM Japan – Asia Pacific 2016 (slated to be held in Osaka in September 2016), a Japanese version of MIPIM, an international real estate show for professionals.

Discussions, collaborations, and other initiatives promoting the overseas development of infrastructure systems and undertaken with different regions and countries in FY 2015 are outlined below.

#### (i) ASEAN Region

With the establishment of the ASEAN Economic Community (AEC) at the end of 2015, the reinforcement of regional connectivity in this region, which is evolving into a giant single market, is important. In FY 2015, three verification projects—including the introduction of a verification project for the introduction of an overland hub-and-spokes logistics system in the Mekong area—were undertaken as pilot projects for Asian logistics with a view to ultimately facilitating the overseas deployment of high-quality Japanese logistics systems.

In order to form a foundation to facilitate the advancement of Japanese companies into the ASEAN region through the use of the framework provided by the ASEAN-Japan Transport Partnership (AJTP), joint research on paving technologies and overload management technologies in support of global road networks commenced with its acceptance at the ASEAN Transport Ministers Meeting (ATM+Japan), which was held in November 2015. With a focus on spreading superior Japanese infrastructure-related technologies, joint research has been conducted with Indonesia and Vietnam concerning the production of standards applicable to transportation safety and environmental paving. As part of these efforts, a joint workshop featuring technical discussions and the exchanging of opinions on research cooperation was held in Indonesia in FY 2015.

##### - Indonesia

At the Japan-Indonesia Summit Meeting held in March 2015, it was agreed that a new cooperative framework known as PROMOSI: Japan-Indonesia Investment and Export Promotion Initiative would be launched. Accordingly, the first meeting of the Infrastructure Development Council was held in June where opinions on future infrastructure development projects to be undertaken by and between both countries were exchanged.

In June of the same year, the ninth Indonesia-Japan Conference on Construction was held for the purpose of providing support to companies in the land and construction industry sectors as they strive to enter overseas markets.

In December of the same year, the sixth meeting of the Japan-Indonesia Senior Transport Officials was held in the city of Nagoya. At this meeting, opinions were exchanged on solutions to issues and the future direction of cooperation between the two countries concerning cooperation and recent challenges in different areas of collaboration, including rail, automobiles, ports and harbors, maritime traffic, and aviation. Indonesian officials introduced a new concept of maritime traffic and matters concerning the development of ports and harbors and expressed a high level of interest in the use of IT technology for sustainable traffic networks in major metropolitan areas and in Japanese insight on this topic. Both countries verified that they were committed to continued efforts to promote close ties of cooperation and coordination.

In February 2016, the third meeting of the Japan-Indonesia Senior Construction Officials was held in Tokyo. Information concerning initiatives, issues, and technologies relevant to both countries with respect to three themes—strategic land and infrastructure development, the strategic use of PPP, and ground subsidence and the sustainable and comprehensive management of water resources—was exchanged at the general meeting and information concerning initiatives, issues, and technologies relevant to both countries with respect to roads, water resources, sewage systems, dwellings, and cities was exchanged at individual working meetings. In March of the same year, public-private workshops organized with Indonesia were held as part of the Talks for Cooperation in Disaster Prevention. With the aim of promoting the spread of

Japanese road management technologies, a pilot project concerning asset management was launched. In order to mitigate traffic jams in the Special Capital Territory of Jakarta, cooperation based on a framework of proposed solutions was provided through surveys on actual traffic conditions.

#### - Thailand

In May 2015, Minister Ohta of MLIT met with Minister Pluajin of the Thai Ministry of Transport and signed a memorandum of understanding incorporating a policy on the adoption of Japanese bullet train technology in connection with a high-speed rail project linking Bangkok with Chiangmai and the commencement of a detailed feasibility study to be undertaken for the rapid implementation of this project and discussions on the applicable business scheme and other pertinent matters. In November, Minister Ishii of MLIT met with Minister Arkhom of the Thai Ministry of Transport and signed a memorandum of understanding dealing with the development and upgrading of railway facilities in the Southern Economic Corridor, railway transportation of cargo, the development of human resources, and other pertinent matters.

#### - Vietnam

In March 2015, a memorandum of cooperation was concluded between the Department of Surveying and Mapping in Vietnam and the Geospatial Information Authority of Japan to reinforce technical cooperation in the geospatial information sector. In June of the same year, the first senior meeting involving Vietnam's Vice-Minister of Construction was held with Vietnam's Ministry of Construction. Announcements were made and discussions were undertaken on urban development, the development of human resources, and quality-control matters. An eighth intergovernmental meeting was scheduled for October 2015 in accordance with a memorandum of cooperation concerning the sewerage sector that was concluded in 2010 (renewed in March 2014). Support has been provided for the enactment of standards for the pipe-jacking method used for sewage systems, the development of legal systems relating to sewage systems, and the dissemination of pipeline regeneration methods.

In October of the same year, JOIN determined that support would be provided for a project for the development and operations of Thi Vai Port on the outskirts of Ho Chi Minh.

In December of the same year, public-private workshops organized with Vietnam were held as part of the Talks for Cooperation in Disaster Prevention.

In March 2016, the ninth Vietnam-Japan Seminar on Expressway Development was held and Japanese road technology was showcased at this event.

#### - Malaysia and Singapore

In May 2015, Prime Minister Najib of Malaysia and his wife, as well as the Minister of Transport Liow and others, visited Japan to participate in a summit meeting and gained first-hand experience of riding a bullet train.

In July of the same year, Chairman Hamid of Malaysia's Land Public Transport Commission paid a visit to Japan where he sought to secure the support of Minister Ohta of MLIT for the adoption of a bullet train system.

In November of the same year, Minister Ishii of MLIT visited Malaysia where he met with Prime Minister Najib, Chairman Hamid, Minister of Transport Liow, Wahid, a minister in the Office of the Prime Minister, Singapore's Minister for Transport Khaw, and others and engaged in top-level trade promotion activities concerning high-speed rail plans.

#### - Myanmar

The third Japan-Myanmar Vice-Ministerial Level Meeting on Construction was held in January 2016 in Myanmar to exchange information regarding the initiatives, challenges, and technologies of both nations as they pertain to the road, city, and housing building and construction industry sectors. At the same time, a comprehensive memorandum of cooperation concerning an urban policy on housing was concluded with Myanmar's Ministry of Construction.

#### - Cambodia

In June and November 2015, intergovernmental talks were held in Cambodia to introduce relevant systems and case studies in Japan for the development of a business environment for construction and real estate companies in emerging countries.

In June of the same year, a Public Housing Seminar was held as requested by Cambodia and adjustments for the implementation of JICA training by country were undertaken.

In August of the same year, an Urban Transport Seminar was held in Cambodia to promote the overseas expansion of urban transportation systems. In December of the same year, the Cambodia-Japan Expressway Seminar was held to introduce track records and technologies pertaining to Japanese expressways.

We also participated in a FY 2015 detailed survey on the formulation of a plan with a view to implementing the JICA

Project for Reforming the Administrative System Concerning the Vehicle Registration and Inspection Program as requested by Cambodia.

#### (ii) India

In October 2015, a rail seminar organized through a public-private partnership was held, and it was agreed that a bilateral agreement on a Japan-India joint statement entitled Japan and India Vision 2025 would be issued at the time of the Prime Minister's visit to India in December of the same year. In addition, memorandums of cooperation were concluded by and between the Japanese government and the Indian government on high-speed rail and by and between the Japanese MLIT and India's Ministry of Railways on technical cooperation in the railway sector. An agreement was concluded with the Indian government on the introduction of bullet train technology to be applied to a line connecting Mumbai and Ahmadabad.

In May of the same year, the second meeting of the Japan-India Joint Workshop Group on Road and Road Transport was held. Policies and technologies concerning alpine roads were discussed.

#### (iii) United States of America

In April 2015, a rail seminar organized through a public-private partnership and at which the governor of the state was able to experience a bullet train simulator was held in California. In November of the same year, JOIN decided that it would provide support for a high-speed rail project for which construction is proceeding on a link between Dallas and Houston, Texas. In the same month, United States Secretary of Transportation Foxx visited Japan and participated in a linear trial run and it was agreed that a Japan-United States Rail Cooperation Council would be established. Domestically in the United States, an application to subsidize the Maglev Deployment Program (MDP) in Maryland was approved by the federal government to constitute an example of an initiative concerning a high-speed rail project in the United States.

In March 2016, an infrastructure seminar was held in the Philippines to promote the deployment in a third country of infrastructure fields for which the American government and companies are collaborating with one another.

#### (iv) Middle East

As part of the Talks for Cooperation in Disaster Prevention, the Japan-Turkey Disaster-Prevention Cooperation and Technology Fair was held in May 2015 and featured an exhibition and announcements of disaster-prevention technologies by private companies in both countries.

In January 2016, the Turkey-Japan Seminar on Bridge Technologies was held to showcase Japanese bridge technologies for the implementation of bridge projects in Turkey. In March of the same year, the Japan-Turkey Quake-Resistant Construction Seminar was held in an attempt to promote the spread of quake-absorbing and quake-damping technologies.

#### (v) Russia

Based on a memorandum of cooperation in the field of transportation that was signed by and between the MLIT and Russia's Ministry of Transport, a second senior officials' meeting of the Japan-Russia Working Group on Transportation was held in November 2015 to exchange information on such topics as improvements to and the modernization of the rail system and other transportation infrastructural elements in Russia and safety measures for passage through shipping routes through the Arctic Ocean. Cooperation on urban environmental issues in Russia is being advanced through the Japan-Russia Urban Environment Working Group. The third general meeting was held in June 2015, and the fourth general meeting was held in December, 2015. In these meetings, Japan and Russia decided to jointly support flagship businesses selected by both countries. Also, the two countries agreed to establish the "Japan-Russia Urban Development Platform" as a place for sharing information on urban development businesses and matching Japanese and Russian companies.

#### (vi) Central Asia

Around the time of the Prime Minister's visit to the central Asian region in October 2015, public-private infrastructure conferences were held in Uzbekistan in September of the same year and in Kazakhstan in November of the same year. In addition to promoting an understanding of high-quality infrastructure investments in the central Asian region, initiatives to support local inroads and business development by companies with ties to Japanese infrastructure were advanced.

Furthermore, Minister Ishii of MLIT signed a memorandum of cooperation for the purpose of promoting infrastructure development, technical cooperation, and private-sector business across all transportation sectors with Kazakhstan's Ministry for Investments and Development in the same month.

(vii) Latin America

In December 2015, JOIN determined that it would provide support concerning projects for the development and operations of urban railways in three cities of Brazil (Rio de Janeiro, Sao Paolo, and Goiania).

(viii) Africa

In advance to the TICAD VI to be held in the summer of 2016, MLIT organized public-private infrastructure conferences in Ethiopia and Kenya in July 2015 and in Mozambique and Tanzania in January 2016. Along with promoting an understanding of high-quality infrastructure investments, initiatives to support infrastructure business development of Japanese companies in the target countries were advanced.

## Column The international real estate exhibition was staged in Japan for the first time as MIPIM JAPAN

The international real estate exhibition, MIPIM (Marche International des Professionnels de l'Immobilier), which has been held in Cannes, France, over a quarter-century since 1990, was staged in Tokyo for the first time as MIPIM JAPAN over the two days of May 20 and 21, 2015, under the auspices of the MLIT, the Tourism Agency, and the Financial Services Agency.

MIPIM provides the opportunity for investors, developers, design companies, manufacturers, and municipalities to get together to collect information and have business negotiations on urban and real-estate development, discover new markets, and promote cities. In Cannes in March 2015, there were approximately 23,000 participants from 89 countries and regions around the world, which is said to be the world largest event related to real estate.

The first MIPIM JAPAN involved over 2,500 participants from 30 countries and regions worldwide and consisted of more than 40 conferences, exhibitions by 56 companies and local governments within and outside Japan, and networking events to expand connections among participants. In the keynote speeches, Hiromichi Iwasa, Chairman of the Real Estate Companies Association of Japan and the Association for Real Estate Securitization, and Yoichi Masuzoe, Governor of Tokyo, conveyed messages to encourage investment in Japan.



In the opening party, Minister Ohta of MLIT (at the time) said that he would turn Japan's cities into stages for international exchanges and that he was certain that Japan's technology and expertise in urban development would contribute to the improvement of cities in the world.

In September 2016, MIPIM JAPAN—ASIA PACIFIC 2016 is scheduled for Osaka. MLIT will continuously make efforts to firmly establish international MICE (Meeting, Incentive tour, Conference or Convention, and Exhibition) on the subject of real estate.



Source) Tokyo office of Reed MIDEM.



## Section 2 Promotion of International Cooperation and Negotiations

### 1 Initiatives in the Field of Economic Partnerships

#### (1) Trans-Pacific Strategic Economic Partnership (TPP) Agreement

The TPP Agreement constitutes an economic partnership agreement forming the basis of rules governing trade and economic activities in the Asia-Pacific region, which accounts for forty percent of global GDP, as well as a pillar for a Japanese growth strategy to help the Asia-Pacific region grow. Japan participated in negotiations in July 2013 and a broad outline of the TPP Agreement was agreed to in October 2015. The key provisions of the agreement as it affects the land, infrastructure, transport, and tourism sectors entailed an agreement to promote the international harmonization of environmental and safety standards for automobiles without lowering domestic standards. As for government procurement activities, general competitive bidding will be newly mandated in Malaysia, Vietnam, and elsewhere, a change that is expected to lead to the promotion of the overseas development of Japanese infrastructure systems. In November of the same year, the government compiled a comprehensive set of TPP-related policy principles to directly tie the TPP to economic revitalization and the emergence of regions in Japan.

#### (2) Japan-EU EPA and other Economic Partnership Agreements and Free Trade Agreements (EPA/FTA)

Japan is strategically promoting economic partnerships with the Asia-Pacific region, the East Asia region, Europe, and elsewhere. As of March 2016, EPAs with fifteen countries and regions (excluding the TPP) have been put into effect, signed, or are otherwise under negotiations with a view to eventually being concluded, examples of which include the Japan-EU EPA and the Regional Comprehensive Economic Partnership for the East Asia region (RCEP). These arrangements will serve to strengthen the international competitiveness of Japan's transport, construction, and other industries, promote international development and the opening of the service sector in partner countries, including by way of the abolition or deregulation of foreign capital restrictions, and promote the expansion of participation opportunities relating to government procurement.

It was decided that negotiations for a Japan-EU EPA would be commenced in March 2013. Fifteen negotiation sessions have been held as of March 2016. At a meeting of the EU heads of state or government in November 2015, all parties agreed to continue making maximum efforts to secure an agreement, in principle, on the major elements before the end of

the year and, in the event that no such agreement could be secured, to aspire to agree in principle on the major elements as early as possible in the following year. The entire Japanese government, including the MLIT, has thus accelerated its efforts to facilitate the conclusion of an agreement at the earliest possible point in time.

Sixteen countries, including the countries of the ASEAN bloc, China, South Korea, and Australia, are participating in negotiations with respect to the RCEP. These negotiations began in May 2013 and eleven negotiation sessions have been held as of March 2016.

### (3) World Trade Organization (WTO)

Discussions among like-minded countries and regions, including Japan, have been undertaken with a view to enacting a new Trade in Services Agreement (TiSA) in order to further liberalize trade in service sectors. Negotiations began in June 2013.

## 2

## Contributions to and the Strategic Use of International Organizations

### (1) G7 Transport Ministers' Meeting in Karuizawa, Nagano

In 2016, Japan will preside over the G7 Summit. In addition to hosting the Summit at Ise-Shima in May, we will be holding ten relevant ministers' meetings at different locations across the country.

The MLIT is slated to host a meeting of the G7 Transport Ministers in Karuizawa, Nagano Prefecture, in September of the same year. At this meeting, discussions on *developing and disseminating the latest technologies concerning automobiles and roads* and *basic strategies for dealing with the development and obsolescence of transportation infrastructure* are expected to be undertaken based on discussions that took place at the meeting of the G7 Transport Ministers held in Germany in September 2015.

### (2) Asia-Pacific Economic Cooperation (APEC)

APEC is a framework for economic cooperation through which activities to promote trade and investment liberalization, business facilitation, economic and technical cooperation, and other such objectives are carried out to promote the sustainable growth and prosperity of the Asia-Pacific region. The MLIT is proactively involved in ministers' meetings and working groups that pertain to APEC's transportation and tourism sectors.

In the transportation sector, meetings of the transportation ministers to facilitate the flow of goods and people and support trade and investment within the given area are held. At the eighth APEC Transport Ministers' Meeting held in Tokyo in September 2013, the topic of enhancing connectivity through high-quality transportation within the APEC region in terms of basic themes was discussed. As proposed by Japan, the ministerial joint statement that was released at the time came to incorporate three concepts constituting the keys to the development of transportation in the APEC region: enhancement of connectivity, development of a transportation infrastructure based on the use of private funds, and deployment of high-quality transportation. At the ninth APEC Transport Ministers' Meeting held in the Philippines in October 2015, Japan presented a report on three initiatives that resulted from discussions that were held at the eighth APEC Transport Ministers' Meeting: (i) connectivity map; (ii) sharing of best practices for infrastructure investing, financing, and operations for which the experiences of member countries and regions are brought to bear; and (iii) high-quality transportation vision with a focus on convenience, safety, and environmental protection.

### (3) Association of Southeast Asian Nations (ASEAN)

The MLIT is involved in various cooperative projects under the "ASEAN-Japan Transport Partnership," a cooperation framework in the transport sector founded between Japan and ASEAN in 2003. The "ASEAN-Japan Ministerial Conference on Transport" is held every year to monitor the progress of current projects and to discuss new projects and future direction.

At the "13 ASEAN-Japan Ministerial Conference on Transport" held in Malaysia in November 2015, approval was granted for the ASEAN-Japan Transport Partnership Work Plan 2015–2016, a specific implementation plan for the ASEAN-Japan Transport Partnership, as well as for four new cooperation projects: (i) a new ASEAN-Japan environmental action plan in the transport sector, (ii) Joint Research on Road Technologies for ASEAN Cross-Border Corridors, (iii) cooperation with respect to maritime safety (VTS human resources development and cooperation project), and (iv) a new

ASEAN-Japan cooperation program concerning comprehensive transportation safety and environmental measures, including with respect to automobile standards and certification systems. Four documents were also approved as the result of projects implemented to date: (i) a document compiling positive case studies of transportation safety and disaster prevention, (ii) a document compiling positive case studies of PPP, (iii) a report on a survey for the realization of a land bridge, and (iv) a green logistics vision and action plan.

At the twenty-seventh ASEAN Summit held in November 2015, a declaration announcing the year-end establishment of an ASEAN Community that includes the ASEAN Economic Community (AEC) made and a new action plan setting forth 2025 as the new target year for integration was adopted. A new action plan for the transportation sector effective between 2016 and 2025 was also approved at the twenty-first ASEAN Transport Ministers' Meeting held in November of the same year.

#### (4) Organization for Economic Co-operation and Development (OECD)

The MLIT participates in the activities of multiple OECD organizations, including the International Transport Forum (ITF), the Council Working Party on Shipbuilding, the Regional Development Policy Committee (RDPC), the Tourism Committee, as well as the Joint Transport Research Centre, which was jointly established by OECD and ITF.

The ITF is an international framework in which transport ministers from 57 countries play a central role in annual meetings to facilitate high-level and open discussions with world-renowned experts and business persons regarding transport policy. Previous topics discussed include climate change in the transport sector and globalization. At a ministers' meeting in May 2015, discussions based on a theme of transportation, trade, and tourism were held with an exploration of various different perspectives. Participants discussed how the global increase in demand for transportation caused by rising trade volumes and numbers of tourists should be handled and how transportation capable of accommodating environmental and other socioeconomic burdens should be configured.

In order to ensure fair competitive conditions in the shipbuilding market, the OECD Council Working Party on Shipbuilding strives to enhance policy transparency by conducting reviews of the shipbuilding policies of different countries and producing policy support tables. Discussions on resolving the recent problem of excess supply that constitutes a factor behind the cutthroat competition that can be seen in the global shipbuilding market are being held through the exchange of information on policies taken by each country.

The RDPC proactively conducts reviews of the policies of member countries with respect to land and regional policies, studies on urban policies in the context of green growth strategies, and surveys on sustainable urban policies and resilient cities in an aging society. In addition, a second review by country was conducted on Japan's land and regional policies over FY 2014–2015. This review positively recognized that Japan, a society that is undergoing a population decline and is aging at the same time, is attempting to convert this crisis into an opportunity through a long-term, comprehensive land plan and was adopted by the RDPC in November 2015.

The JTRC conducts surveys and research on policy issues commonly applicable to member countries. Japan also participates in a working group focused on Safe System Implementation to dealing with road traffic safety concerns. A program on the sensible uses of roads as proposed by Japan for 2016 and beyond was adopted and put into effect in March 2016.

#### (5) United Nations (UN)

##### (i) International Maritime Organization (IMO), and International Labor Organization (ILO)

In the maritime sector, in addition to responding to the IMO global agenda, bilateral talks were held at the Director level. A Japanese official served as Secretary-General of the IMO (until the end of 2015) and Japan itself proactively participates in the activities of this organization as a leading shipping and shipbuilding nation in the world. In FY 2015, we proactively contributed to discussions on measures to reduce greenhouse gas emissions from ships and on putting the International Convention for the Control and Management of Ships' Ballast Water and Sediments into effect, the enactment of standards applicable to ships navigating the Arctic Ocean and other polar seas in response to focus placed on the adoption of new routes, the enactment of requirements for the training of onboard crewmembers, and the enactment of safety standards applicable to ships that use natural gas, which is characterized by a low environmental load and excellent economic efficiency, for fuel.

Efforts have also be undertaken to ensure appropriate compliance with stipulations governing appropriate onboard

working and living conditions as prescribed by the ILO Maritime Labor Convention of 2006, which came into effect in Japan in 2014.

#### (ii) International Civil Aviation Organization (ICAO)

The ICAO is a specialized agency of the United Nations that has set forth certain rules and other stipulations for the safe and orderly development of international civil aviation and the sound and economic operations of international air transportation. Japan's financial contributions are second among member countries and Japan, as a Governing Council country under PART I (States of chief importance in air transport), actively participates in various ICAO activities and contributes to the development of civil aviation.

As part of a task force that formulates recommendations on the establishment of a system for reducing greenhouse gas emissions in the field of international aviation, Japan has made a number of proactive contributions, such as by way of the appointment of a co-chairperson in March 2014.

#### (iii) UN-Habitat

UN-HABITAT is a UN funding and planning agency specializing in human settlement issues. Japan has been an active council participant since the foundation of UN-HABITAT, and has taken advantage of its knowledge and record of accomplishment on improving land, regional, and residential environments to contribute to improving human settlement issues worldwide, with particular focus on the Asian population explosion and rapid urbanization.

In October 2016, Habitat III, a UN summit that has been held every twenty years and that involves discussions on international initiatives on human settlements and a summarization of the global agenda in this field, is slated to be held in Ecuador. Japan established a domestic council (co-chaired by the Ministry of Foreign Affairs and MLIT) in April 2014 and has submitted a country-by-country report summarizing Japanese efforts and proactively shared information on its knowledge and experience with respect to land and regional policy during preliminary talks.

#### (iv) United Nations Special Thematic Session on Water and Disasters

The United Nations Special Thematic Session on Water and Disasters is a high-level session attended by top officials of United Nations agencies and cabinet ministers from different countries. This session is organized to discuss initiatives of the international community in hopes of advancing water-related disaster countermeasures as adopted by each country. At the second high-level panel debate for this session, which was held in the United States (New York) in November 2015, Minister Ishii of MLIT spoke of the Great East Japan Earthquake, numerous floods, and other such events experienced by Japan and of the water-related disaster countermeasures that we have put into place based on the lessons that we learned through these events. He also emphasized how important it is for each country to regularly secure opportunities to share experiences and knowledge on water-related disasters and learn from one another if we are to reinforce water-related disaster countermeasures around the world. With respect to the High-Level Expert Panel on Water and Disasters, which aims to fortify water-related disaster initiatives undertaken by different countries, we participated in the fifth (April 2015) and sixth (November 2015) sessions and shared information on measures for adapting to climate change and other pertinent matters.

#### (6) World Bank (WB)

The MLIT and WB jointly hosted an international conference on "Sustainable development through Quality Infrastructure Investments" in January 2016 in order to effectively share knowledge on Quality Infrastructure Investments with infrastructure officials in other countries. In addition, based on a chair summary of the Japan-OECD Policy Forum Concerning Urban Development and Green Growth (October 2014), MLIT and WB jointly hosted online seminars on Transit Oriented Development (TOD) in June and October 2015 to share knowledge on Japanese urban development with other Asian countries.

### 3 Multilateral and Bilateral International Negotiations and Collaborative Initiatives in Different Sectors

#### (1) National Land Policy Sector

Director-general-level talks are regularly held with South Korea, and information concerning similar issues affecting both countries, such as in terms of national land policy, regional policy, and land policy is exchanged. The twentieth such meeting was held (by Japan) in August 2015. Opinions on national land policy and regional development policy are exchanged with France through the Secretariat (CGET, former DATAR, National Land Development and Regional Competitiveness Agency) of the French Land Equality Commission. Preparations for quickly concluding a technical cooperation agreement with Kuwait are being made in accordance with a memorandum of agreement to promote policy dialog pertaining to the formulation of a new national development plan, which was concluded with that country in 2013.

#### (2) Water Sector

The Minister of Land, Infrastructure, Transport and Tourism chaired one of the Ministerial Roundtable titled ‘Integrated Water Resources Management’ under 7th World Water Forum, which was held in Republic of Korea in April 2015. In this and other ways, we have proactively engaged in discussions concerning water issues at various international conferences and have issued statements on reinforcing initiatives concerning water, sanitation, and disaster prevention.

Furthermore, Japan is coordinating efforts with the United Nations Educational, Scientific and Cultural Organization (UNESCO) and Network of Asian River Basin Organizations (NARBO) to contribute to the dissemination and promotion of Integrated Water Resources Management (IWRM).

Bilateral meetings pertaining to rivers, sediment control facilities, and water resource management have been held with the United States, China, and South Korea to promote information exchange, technical cooperation, and other such outcomes.

In addition, the Water and Environmental Solution Hub, an alliance of local governments; the Japan Sewage Works Agency; the MLIT; and others has provided expertise on sewage works to developing countries through seminars, training, and other programs.

#### (3) Disaster Prevention Sector

To reduce the occurrences of water disasters in the world, in addition to disseminating Japan’s experiences and technology, efforts are being made to establish solidarity regarding the strengthening of water disaster prevention measures in order to build an international consensus that disaster prevention is the key to sustainable development. The International Centre for Water Hazard and Risk Management (ICHARM), which was founded by a national research and development corporation known as the Public Works Research Institute, has engaged in the development of an integrated flood analysis system (IFAS) and rainfall-runoff-inundation (RRI) model, research on risk management, the cultivation of human resources through the use of the results of the foregoing, and the provision through UNESCO and Asian Development Bank projects of technical cooperation and international assistance for countries and regions susceptible to water damage.

In accordance with a letter exchanged in March 2013 between the EU’s General Office on Disaster Prevention and the MLIT, working level talks were held in December 2015 for the purpose of enhancing disaster prevention measures in place in both Japan and the EU. In November of the same year, the fourth Japan-Brazil Joint Committee on Cooperation in Science and Technology (Tokyo) was held. Superior sediment control technology possessed by Japan was introduced and information and opinions were exchanged. In addition, experts dispatched by MLIT have been providing technical advice on understanding disaster conditions and future countermeasures.

#### (4) Road Sector

Japan has been proactively participating in various technical committees of The World Road Association (WRA) and spearheading the formulation of a future policy. At the twenty-fifth World Road Congress held in Seoul, South Korea, in November 2015, Initiatives for the Smart Use of Roads based on the use of ETC2.0 were introduced as part of a new Japanese road policy.

### (5) Housing and Building Sector

Japan attended the world conference of the Inter-Jurisdictional Regulatory Collaboration Committee (IRCC) and exchanged information with partner countries concerning trends in building codes.

Bilateral talks were held with China, Germany, Myanmar, and Indonesia concerning housing policy, energy-saving buildings, and housing for the elderly.

Broad technical cooperation was provided to Myanmar through the dispatching of JICA experts and other measures. Public housing seminars were held in Cambodia as requested by minister of Cambodia.

### (6) Automotive Sector

In November 2015, the “ASEAN-Japan new cooperative program on comprehensive vehicle safety and environment measures including development of technical regulations and establishment of a type approval system for vehicles” was endorsed at the thirteenth ASEAN-Japan Transport Ministers Meeting in order to expand the scope of the existing cooperation program. Accordingly, the Public-Private Joint Forum for the Asian region was held in November of the same year. In the forum, information about the activities for the global harmonization of vehicle regulations and mutual recognition of type approvals were exchanged. In December of the same year, the 6th Japan-China Automobile & Traffic Exchange Promotion Meeting was organized together with China and opinions were exchanged on various topics, including safety management by road transportation operators and the vehicle inspection system for commercial automobiles.

### (7) Maritime Sector

In the maritime sector, in addition to responding to the IMO global agenda, bilateral talks were held at the director level. In FY 2015, talks at the level of directors-general were held with India, the United States, the EU, and South Korea, at which time information was shared and opinions were exchanged with respect to ship recycling, measures to reduce greenhouse gas emissions, ballast water management, cyber-security, and other pertinent issues. The Joint Hydrographic Surveys of the Straits of Malacca and Singapore began to update electronic navigational charts in October 2015. A model route survey for cruise ships was carried out in accordance with the ASEAN-Japan Cruise Promotion Strategy that was approved at the ASEAN-Japan Transport Ministers Meeting in 2014.

### (8) Ports Sector

The latest information on the administration of ports and harbors is being exchanged and measures to promote cruise ship operations and the overseas deployment of Japanese technical standards are being carried out through various international conferences, such as the Northeast Asia Port Director-General Meeting, meetings of APEC’s Transportation Working Group, and meetings of the World Association for Waterborne Transport Infrastructure (PIANC).

### (9) Aviation Sector

In April 2015, the first meeting of the Japan-France Cooperative Working Group was held in accordance with a memorandum of understanding concerning technical cooperation in the civil aviation sector that had been concluded with France. It was decided to advance cooperation including regular meetings to be held in the future.

At the fifty-second Conference of the Directors General of Civil Aviation in the Asia and Pacific Regions held in October of the same year, we exchanged opinions on various initiatives being undertaken by different countries in the Asia and Pacific regions concerning aviation in general, including with respect to the expansion of air traffic capacity, environmental measures in the aviation sector, and the education and training of aviation specialists.

### (10) Logistics Sector

Trilateral cooperation among Japan, China, and South Korea is being advanced in the logistics sector in accordance with an agreement reached at the fifth China-Japan-Korea Ministerial Conference on Transport and Logistics held in August 2014, such as by way of studies into the expansion of the mutual transiting of chassis, the expansion of ports and harbors in Japan, China, and South Korea that are subject to the Northeast Asia Logistics Information Service Network (NEAL- NET), and the expansion of such ties to ASEAN countries and other partners.

Discussions on enhancing the logistics environment are also being carried out in the context of bilateral policy dialog

under the framework of the ASEAN-Japan Transport Partnership. Dialog sessions on logistical policy were held in Cambodia and Laos in October 2015 and Malaysia in February 2016. In March 2016, students were provided with development training in Vietnam to help secure exceptional human resources in the ASEAN region.

#### (11) Geospatial Information Sector

In addition to dispatching staff members to the United Nations Committee of Experts on Global Geospatial Information Management (UNCE-GGIM) and contributing to adaptation of UN General Assembly resolution on the establishment of a Global Geodetic Reference Frame (GGRF), we have dispatched a staff member as President to the Regional Committee of UN-GGIM for Asia and the Pacific (UN-GGIM-AP) and made contributions to the development and utilization of geospatial information for the region.

#### (12) Meteorological and Earthquake/Tsunami Sector

Under the framework of the World Meteorological Organization (WMO), Japan has provided various information including tropical cyclone forecasts taking advantage of its advanced technologies as well as exchanged meteorological data and technical information with the world meteorological community. Also, under the framework of the United Nations Educational, Scientific and Cultural Organization (UNESCO) Intergovernmental Oceanographic Commission (IOC), Japan has provided the Northwest Pacific Tsunami Advisory to various countries in the region to contribute to tsunami disaster mitigation.

#### (13) Coast Guard Sector

Coordination and cooperation among coast guard organizations in various fields—including search and rescue as well as maritime security measures—are being actively promoted through partnership of the North Pacific Coast Guard Forum (formed by six countries consisting of Japan, Canada, China, South Korea, Russia, and the United States), the Heads of Asian Coast Guard Agencies Meeting (19 Asian countries and one region), and bilateral top-level meetings, as well as joint exercises.

Japan is also proactively participating in various international organizations by formulating standards concerning the production of nautical charts through committees of the International Hydrographic Organization (IHO), coordinating for the Northwest Pacific Ocean region through the Cospas-Sarsat Programme, conducting investigations into AIS development through committees of the International Association of Marine Aids to Navigation and Lighthouse Authorities (IALA), and dispatching staff members of the Japan Coast Guard to the Information Sharing Center based on the Regional Cooperation Agreement on Combating Piracy and Armed Robbery against Ships in Asia (ReCAAP). In addition, international contributions are being made through different initiatives, such as those that help improve the capabilities of the coast guard sector in developing countries.

#### (14) International Transportation

The eighth Japan-China High-Level Talks on Transportation were held for the first time in four years in Beijing, China, in January 2016 to facilitate policy dialog at a vice-ministerial level between Japan and China on issues facing both countries in the transportation sector. It was decided that cooperation through the bilateral exchange of information would continue to be advanced with respect to initiatives for ensuring safety in the transportation sector, responses to large-scale disasters, and the maintenance and securing of transportation and logistical services in the region. In the maritime sector, it was agreed that the importance of cooperation through activities sponsored by the International Maritime Organization (IMO) would be confirmed and that talks at the level of maritime bureau directors-general would be held.

With respect to relations with South Korea, vice-ministerial talks have been held for the purpose of coordinating policy at a high level in the transportation sector in accordance with an agreement concluded at The Japan-Republic of Korea Ministerial Meeting held in 1999. In March 2016, the 11th Meeting of Japan-Korea Transport Cooperation Conference were held in Matsuyama City, Ehime Prefecture, where opinions were exchanged on various topics, including initiatives and issues concerning the realization of automated driving operations, the expansion of and logistics concerning the Internet mail order market, enhancing the convenience of public transit, and regional revitalization.

## Section 3 Initiatives Towards International Standardization

### (1) Efforts for International Standardization

To promote high safety and environmental performance automobiles early and cost efficiently, Japan is actively participating in activities of the World Forum for Harmonization of Vehicle Regulations (WP.29) to promote the international harmonization of safety and environmental regulations, and is also promoting the international spread of Japanese automobiles with superior safety, and environmental features, and new technology through participation in these activities. In order to promote such activities, the “Action Plan for the Internationalization of the Regulation and Certification System” with its four pillars of: 1) Strategic international standardization of Japanese technology and regulations, 2) Realization of international whole vehicle type approval system (IWVTA), 3) Promoting participation of Asian countries in international harmonization of regulations, and 4) Establishing a framework to handle globalization of regulations and certification, is being steadily realized to promote the internationalization of automobile regulation and certification systems.

### (2) Internationalization and Other Initiatives in the Railway Sector

As Europe actively promotes the international standardization of European standards, the possibility of significant obstacles arising in the overseas expansion of railway systems is increased if Japan’s superior technology is excluded from the scope of international standards. Because this will affect global competitiveness in the railway sector, it is important to actively promote international standards in railway technology. For this reason, the Railway Technical Research Institute’s Railway International Standards Center, which is the centralized organization that handles railway-related international standards, works proactively to further advance railway safety and the expansion of the railway industry.

As a result, Japan has played a central role in contributing to the proposals of individual standards and committee activities in the Technical Committee for Railway Applications (TC269) of the International Organization for Standardization (ISO), and secured successful results. As this country’s profile in various international conferences, including those organized by ISO/TC269 and the Technical Committee for the Railway Sector (TC9) of the International Electrotechnical Commission (IEC), has risen, efforts have been directed at promoting international standardization with respect to railway technology. The National Traffic Safety and Environment Laboratory (Independent Administrative Institution), the first domestic certification body of international standards in the railway sector, has acquired solid certification experience following the establishment of the Certification Office, and contributed to the international expansion of Japan’s railway systems.

### (3) International Standards Regarding Ships and Mariners

In order to aim to mitigate the environmental impact and increase the safety of shipping and help disseminate superior Japanese energy-saving technologies, Japan has spearheaded discussions in the context of the formulation of standards under the SOLAS Convention <sup>Note 1</sup>, MARPOL Treaty <sup>Note 2</sup>, and STCW Convention <sup>Note 3</sup>, all of which have been adopted under the auspices of the International Maritime Organization (IMO). In terms of support for the ASEAN region, we have helped improve and harmonize ship-safety regulations in the ASEAN region, such as by working to have the conclusion of a memorandum of agreement that includes the use of guidelines on safety regulations provided by Japan agreed to among member countries.

Moreover, the Japan Coast Guard has participated in discussions on international standards applicable to nautical charts, nautical publications, and navigation warnings as hosted by a working group operating under the auspices of the International Hydrographic Organization (IHO). In order to ensure the safety of vessel traffic and increase the operating efficiency of vessels, we have invited international conferences to Japan and otherwise spearheaded the international standardization of VDES <sup>Note 5</sup>, a next-generation AIS <sup>Note 4</sup>. In February 2016, the Japan Coast Guard invited workshops

**Note 1** International Convention for the Safety of Life at Sea.

**Note 2** International Convention for the Prevention of Pollution from Ships.

**Note 3** International Convention on Standards of Training, Certification and Watchkeeping for Seafarers.

**Note 4** Automatic Identification System used for identifying and locating vessels.

**Note 5** VHF Data Exchange System.

organized by the International Association of Marine Aids to Navigation and Lighthouse Authorities (IALA) to Japan in order to proactively incorporate Japanese opinions into the draft plans for performance standards applicable to VDES.

#### (4) International Harmonization of Standards and Certification Systems in the Civil Engineering and Building Sectors

In the civil engineering, building, and housing sectors, we are working to promote the international harmonization of standards and certification systems by operating programs for certifying imported building materials in terms of performance and for approving rating agencies, obtaining technical cooperation from organizations like JICA, and participating in the establishment of ISO standards for design and construction technology. Likewise, as part of the efforts to incorporate Japan's accumulated technology in international standards, discussions are in progress to develop and revise domestic technical standards by taking into account trends in the creation of international standards.

#### (5) International Standardization of Intelligent Transportation Systems (ITS)

In order to promote the development of efficient applications, international contributions, and the development of related industries in Japan, the international standardization of ITS technology is progressing within international standardization bodies, including ISO and the International Telecommunication Union (ITU).

In particular, we are participating in the Technical Committee on International Standardization of the ITS (ISO/TC204) and have been engaged in standardization activities concerning the use of probe data gathered with the ETC2.0 service. Japan has spearheaded the formulation of international regulations governing automatic driving, such as by co-chairing the Intelligent Transport Systems and Automobile Driving Informal Working Group and Automatically Commanded Steering Function Informal Working Group, which were established under the United Nations' World Forum for Harmonization of Vehicle Regulations (WP.29) and proposing regulations for automatic steering to enable automatic driving on expressways.

#### (6) Standardization of Geographic Information

For the purpose of ensuring compatibility for the interoperability between Geographic Information System (GIS) with differing geospatial information, Japan is actively participating in the formulation of international standards by the ISO technical committee for Geographic information/Geomatics (ISO/TC 211). Likewise, initiatives are taking place to standardize domestic geographic information.

#### (7) Mutual Recognition of International Technical Qualifications

The APEC Engineer Mutual Recognition Project aims to provide mobility to qualified technical personnel based on the mutual recognition of technical qualifications among participating countries and regions. Within the APEC Architect Project (system for registering architects), Japan signed bilateral memorandums of understanding for mutual acceptance with Australia in July 2008 and New Zealand in July 2009 to promote the mobility of persons qualified to produce architectural designs.

### (8) Sewerage Sector

Based on the Intellectual Property Strategic Program, strategic international standardization is being promoted for the purpose of creating an international market where Japanese companies looking to expand internationally in the sewerage sector can be highly competitive. Presently, we are promoting the formulation of international standards to ensure the proper recognition of relevant Japanese sewage technologies through our proactive and leading participation in the Technical Committee on the Re-Utilization of Water (ISO/TC282), Technical Committee on Sludge Recovery, Recycling, Treatment, and Disposal (ISO/TC275), and Working Group on Rainwater Management (ISO/TC224/WG11).