

## 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 May 2016 with the aim of helping Japanese companies secure orders for overseas infrastructure systems totaling approximately JPY 30 trillion in 2020 (approximately JPY 10 trillion in 2010). The active implementation is incorporated in “Japan Revitalization Strategy 2016” (approved by the Cabinet in June 2016).

In May 2015, a quality infrastructure partnership incorporating the provision of 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 and other more specific measures for the Partnership for Quality Infrastructure would be carried out.

Prior to the G7 Ise-Shima Summit in May 2016, the Quality Infrastructure Export Expansion Initiative announced by Prime Minister Abe set out policies to expand the target area from Asia to the entire world, and to provide USD 200 billion of investments over the ensuing five-year period. The participants of the G7 Summit reached a consensus regarding the importance of the global community achieving a common understanding of the basic elements of Quality Infrastructure Investment, and agreed upon the G7 Ise-Shima Principles for Promoting Quality Infrastructure Investment.

## 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: (i) “upstream” planning and information sharing, (ii) mitigation of business risks, and (iii) overseas development of soft infrastructure.

## (i) ‘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 for foreign embassies in Japan, and taking advantage of opportunities at international conferences.

**(ii) 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 huge 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, and are seeking to provide multifaceted support to Japanese companies involved in the overseas development of infrastructure systems through the proactive use of JOIN, as well as through such means as the establishment of a hotline for overseas construction and safety measures to serve as a liaison to help resolve problems faced by companies that expand into overseas markets; the dissemination of updated information through databases of overseas construction, real estate markets and the like; support through mission dispatches and other efforts to help core, small and medium-sized construction companies expand into overseas markets; and support for expanding into third countries that collaborate with geopolitically important countries.

**(iii) 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) Top Sales Promotion**

In FY2016, the Minister of Land, Infrastructure, Transport and Tourism visited eight countries including Malaysia, Singapore and Indonesia, and engaged in top sales on 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 State Minister and Parliamentary Vice-Minister visited a total of twelve countries, including Kenya, Peru and the Philippines, 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 Sales****Column**

During FY2016, 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. Six case examples are introduced below.

**(1) Official trip to Malaysia and Singapore by Keiichi Ishii, Minister of MLIT**

In July 2016, Keiichi Ishii, MLIT Minister, held bilateral meetings with government officials in Malaysia and Singapore. In addition to engaging in dialogue regarding cooperation in the land, infrastructure, and transport sectors in reference to ports and harbors, urban development, and productivity improvement in the construction industry, the Minister brought attention to the advantages that the Shinkansen would bring to the Malaysia-Singapore high-speed rail project, and conveyed the Japanese government’s willingness to provide maximum support in the financial and human resource development aspects.

In addition to the above, Minister Ishii participated in the High-speed Rail Symposium in Singapore and introduced Japan’s Shinkansen system, with a focus on Japan’s excellent project management capabilities that ensure safety, sustainability, reliability, on-time delivery, and human resource development capabili-

ties. He also attended the Port of Yokohama LNG Bunkering Mini Seminar in Singapore hosted by the MLIT, and introduced the LNG bunkering initiatives of the Japanese government and private sector businesses in Japan.

## (2) Official trip to Thailand and Vietnam by Keiichi Ishii, Minister of MLIT

In August 2016, Minister Ishii held bilateral meetings with government officials in Thailand and Vietnam, promoting Japan's infrastructure systems in the railway, aviation, and urban development sectors. In Vietnam, Minister Ishii and his Vietnamese counterpart signed a memorandum of understanding on technical cooperation in the areas of water disaster prevention and water resources.

In Thailand, Minister Ishii and Mr. Arkhom Termpittayapaisith, Minister of Transport, signed a memorandum of cooperation in the Bangkok-Chiang Mai high-speed railway project, and marked a large step toward realization of the project by agreeing to formulate a specific cooperation scheme between the two countries, under the premise that the project will adopt Japan's Shinkansen system. The Thailand-Japan relationship was further strengthened by the signing of a memorandum of cooperation in the traffic safety sector.

## (3) Participation in TICAD-VI (Kenya) by Shinsuke Suematsu, State Minister of MLIT

In August 2016, Shinsuke Suematsu, State Minister of MLIT, attended the Sixth Tokyo International Conference on African Development (TICAD-VI) and the Africa-Japan Public-Private Conference for Quality Infrastructure, which MLIT co-organized with the Kenyan government as one of the TICAD-VI seminars. In the latter conference, State Minister Suematsu and African ministers in charge of infrastructure agreed to and signed the Leaders' Statement on Promotion of Quality Infrastructure Investment, toward promoting quality infrastructure investment in Africa.

State Minister Suematsu also took the occasion of TICAD-VI to exchange views with ministers from Kenya, Ethiopia, Mozambique, and Tanzania, on infrastructure projects that are being implemented in each country, including the projects for the development of Mombasa Port and Nacala Corridor, as well as on the possibility of utilizing Japan's technologies for those projects.

Meeting with Mr. Liow Tiong Lai, Malaysian Minister of Transport



Source) MLIT

Meeting and the signing of a cooperation memorandum with Mr. Arkhom Termpittayapaisith, Thai Minister of Transport



Source) MLIT

Leaders' Statement signing ceremony



Source) MLIT



#### (4) Official trip to Peru and Colombia by Yasutada Ohno, Parliamentary Vice-Minister of MLIT

In September 2016, Yasutada Ohno, Parliamentary Vice-Minister of MLIT, held meetings with government officials in Peru and Colombia, and inspected local transportation infrastructures.

The officials of the two countries expressed strong interest in Japan's experience and technologies, and agreed to deepen cooperation with Japan for the general development of national infrastructure. Discussions were also held on specific cooperation schemes for urban transportation development and the formulation of a port and harbor master plan in Colombia.

Tour of Medellín, Colombia by Parliamentary Vice-Minister Ono

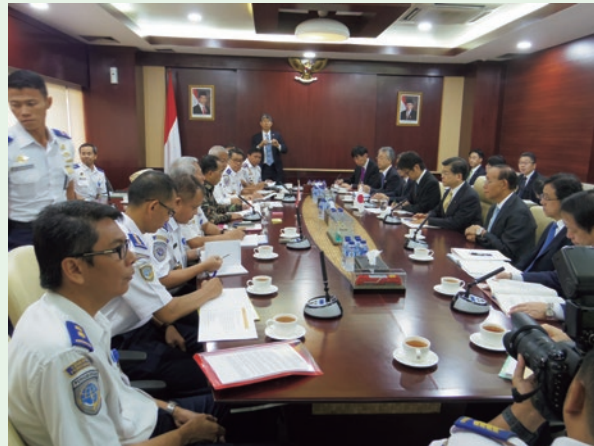


Source) MLIT

#### (5) Official trip to Myanmar and Indonesia by Minister Ishii

In December 2016, Minister Ishii held bilateral meetings with governmental officials in Myanmar and Indonesia. He exchanged views regarding railways, ports and harbors, disaster prevention, roads and urban development in Myanmar, as well as the Patimban Port and the North Java trunk railway line in Indonesia, while signing a memorandum of cooperation with Myanmar's Ministry of Construction and Indonesia's Ministry of Public Works and Housing, respectively.

Meeting with Mr. Budi Karya Sumadi, Indonesian Minister of Transport



Source) MLIT

#### (6) Official trip to Uganda and Zambia by State Minister Suematsu

In January 2017, State Minister Suematsu held a Public-Private Conference for Quality Infrastructure in Uganda and Zambia, accompanied by member companies of the Japan-Africa Infrastructure Development Association (JAIDA), which was launched in September 2016. In the conference, State Minister Suematsu and his counterpart signed a memorandum on the promotion of Quality Infrastructure Investment with the continuation of the cooperative relationship between Japan and the two countries, agreeing to launch a Quality Infrastructure Dialogue for continued talks after the conference.

State Minister Suematsu and the delegation of Japanese companies also paid courtesy calls on Mr. Ruhakana Rugunda, Prime Minister of Uganda, and Mr. Ronald Chitotela, Zambian Minister of Housing and Infrastructure Development, exchanging views on the Kampala Flyover Construction & Road Upgrading Project, along with other such projects that seek the cooperation of Japanese companies.

Memorandum signing ceremony in the Zambia-Japan Public-Private Conference for Quality Infrastructure



Source) MLIT

## (2) Formulating Action Plan 2017 of the Ministry of Land, Infrastructure, Transport and Tourism for Overseas Expansion of Infrastructure Systems

The demand for infrastructure has rapidly increased in various countries including neighboring ASEAN member countries, and the heightened competition of winning orders has been getting fiercer. The government as a whole has strived to achieve the “Partnership for Quality Infrastructure” delivered by Prime Minister Abe through, for example, fundamental institutional expansion to win more orders. The role of the MLIT is large in Japan’s overseas expansion of infrastructure, and this must be further promoted through new activities which are also responding to changes in the present situation in concert with national diplomacy strategies while continuing and strengthening current efforts and making most of institutional expansion. For this purpose, an action plan of the MLIT (Action Plan of the MLIT for the Overseas Expansion of Infrastructure Systems) was launched in March 2016, and revised in March 2017. In this revision in particular, six cross-project promotional measures to be strengthened were added to make MLIT’s efforts more effective: Strengthening competitiveness to win bids amidst severe competition, reinforcing the promotional system for the overseas expansion of infrastructure systems, increasing private investment in the overseas expansion of infrastructure, using new technology for renewal of the overseas expansion of infrastructure, getting actively involved in the upstream planning phase including national and regional land development plans and master plans, and promoting bilateral cooperation for expansion into third countries. The MLIT shall strategically carry out the overseas development of quality infrastructure systems in line with this action plan according to a schedule deemed to be most effective.

## (3) Further Use of Private-sector Funds for the Overseas Development of Infrastructure Systems

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 requests for development and operation of infrastructure through public-private partnerships (PPP) based on the use of private-sector funds. However, transportation and urban development projects are characterized by long-term development windows, demand risks during the operations stage, and local government organs exercising their influence, meaning that participation by private-sector players only is sometimes 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 (with the authorization of the Minister of the MLIT) to provide support on six projects involving ports and harbors, railways, urban development and logistics. In addition, in light of the Quality Infrastructure Export Expansion Initiative announced by Prime Minister Abe in May 2016, we have implemented further systemic improvements for the export of quality infrastructure, such as revising ordinances and relaxing the “biggest investor standard.” Furthermore, we have concluded memorandums of understanding with private companies and relevant government organizations from Singapore, Argentina and other countries. In FY2017, JPY 113.7 billion was posted to the Fiscal Investment and Loan Program (JPY 64.9 billion for industry investments and JPY 48.8 billion for government guarantees). JOIN will continue to be proactively utilized.

## (4) Promoting Outbound 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 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 quality infrastructure and utilizing these videos for top-level trade promotion activities and when dignitaries visit Japan and seminars been 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 and bilateral dialogues are being continued to promote greater understanding of 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, Indonesia, Kenya, and Mozambique, the introduction of overseas port EDI system in Myanmar 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 Japan Conference on Overseas Development of Eco-Cities and other such bodies tasked with promoting urban development overseas, and support was provided for Japan to have an exhibition booth at MIPIM, an international real estate show for professionals (held in Cannes, France in March 2016) and for the organization of MIPIM Japan – Asia Pacific 2016 (held in Osaka in September 2016), a Japanese version of MIPIM.

In addition, we have implemented verification projects regarding the modernization of agricultural product logistics systems in Myanmar and the promotion of the use of freight railways in India as a logistics pilot project for the overseas development of Japanese quality logistics systems.

Discussions, collaborations, and other initiatives promoting the overseas development of infrastructure systems and undertaken with different regions and countries in FY2016 are outlined below.

#### (i) ASEAN region

In the ASEAN Economic Community (AEC), which was launched at the end of 2015 in pursuit of the realization of a giant single market, emphasis on economic development through the reinforcement of regional connectivity and other efforts have produced expectations of increased activity in the movement of people, goods and other items in the future.

In FY2016, we implemented the following bilateral efforts with the respective ASEAN member states.

##### - Indonesia

In October 2016, JOIN decided (with the authorization of the Minister of the MLIT) to provide support for a project to develop detached housing and commercial facilities in the suburbs of Jakarta. Furthermore, in January 2017, JOIN decided (with the authorization of the Minister of the MLIT) to provide support for a project to establish and operate refrigeration and cold storage warehouses in the suburbs of Jakarta.

In December 2016, the seventh meeting of the Japan-Indonesia Senior Transport Officials was held in the city of Medan, Indonesia. 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 railways, automobiles, ports and harbors, maritime traffic, aviation, and logistics. Indonesia has expressed great interest in Japanese support for the improvement of its transportation infrastructure. In addition, introductions have been made regarding concepts and challenges in land, air and sea networks and the improvement of airports and other infrastructure, and Japan and Indonesia are interested in working together closely in various fields in the future.

That same month, Minister Ishii of the MLIT held discussions in Jakarta with key people in the Indonesian government at which they exchanged opinions regarding cooperation and other efforts in ports and harbors, railways, airports, urban development and other infrastructure and transportation fields, and the two sides concluded a memorandum of cooperation to further enhance cooperation on social infrastructure development.

In February 2017, the fourth meeting of the Japan-Indonesia Senior Construction Officials was held in Jakarta in conjunction with the Indonesian Ministry of Public Works and Public Housing. The overall meeting was broken down into two themes: of public-private partnership and national/regional planning. The fields of roads, urban areas, housing, buildings, sewage systems, human resource development, and construction were discussed in individual work groups; the two sides exchanged information about efforts, challenges, technology and other matters in both countries; public-private

workshops organized with Indonesia were held as part of the Talks for Cooperation in Disaster Prevention; and efforts were made toward public-private cooperation to enhance disaster prevention in both countries.

#### - Thailand

In August 2016, Minister Ishii of the MLIT traveled to Thailand to participate in bilateral discussions with Minister Arkhom Termpittayapaisith of the Thai Ministry of Transport regarding railways, urban development, transportation safety and other fields. In addition, Minister Ishii signed a new memorandum for railway cooperation, which sets out details about bilateral cooperation and other matters under the assumption of the further development of Japanese Shinkansen technology for the high-speed railway from Bangkok to Chiang Mai, and attended the opening ceremony for the Bangkok MRT Purple Line, which is one of the first projects in which Japanese railway operators were tasked with total maintenance regarding rolling stock and above-ground facilities. Furthermore, Minister Ishii signed a memorandum of understanding pledging cooperation in using Japanese knowledge and experience in Thailand's efforts toward transportation safety.

#### - Vietnam

In May 2016, a meeting between the Japanese and Vietnamese vice ministers of construction was held in Tokyo with Parliamentary Vice-Minister Ejima in attendance, and participants discussed the themes of construction management, sewage systems and human resource development, and confirmed that both countries will continue to promote cooperation in the construction sector.

In June of that year, Parliamentary Vice-Minister Miyauchi visited Vietnam, and confirmed the intent to further enhance the cooperative relationship between the two countries regarding urban development, roads, sewage systems, railways, airports and other infrastructure projects and human resource development and the like.

In accordance with a memorandum of cooperation concerning the sewage sector concluded in 2010 (renewed in March 2014), the ninth and tenth intergovernmental meetings were held in July 2016 and March 2017, respectively, and support has been provided for the enactment of standards for the pipe-jacking method used for sewage systems and the diffusion of pipeline regeneration methods. In August 2016, Minister Ishii of the MLIT visited Vietnam, where he promoted trade regarding airports, urban development, railways and other sectors to key people in the government, and concluded a new memorandum of understanding regarding technical cooperation for water disaster prevention and water resources.

In September, the sixth Vietnam-Japan Conference on Construction was held to promote mutual understanding between construction-related sectors in the two countries and to improve Japan's presence, among other aims. In addition, the MLIT worked together with the National Graduate Institute for Policy Studies to implement training for Vietnamese government personnel to support the improvement and diffusion of land-related systems.

In December, MLIT and Ministry of Agriculture and Rural Development (MARD) organized a Disaster management Collaborative Dialogue workshop to enhance disaster prevention in both countries under public-private cooperation.

#### - Malaysia and Singapore

In April 2016, State Minister Yamamoto of the MLIT visited Malaysia and Singapore, approached key people in each country's government about introducing the Japanese Shinkansen system into their plans for high-speed railways, and attended a symposium on high-speed railways in Malaysia. In July of that year, Minister Ishii of the MLIT visited Malaysia and Singapore, made a second approach regarding the introduction of the Japanese Shinkansen system, and in Singapore attended a symposium on high-speed railways and a mini seminar on LNG bunkering in the Port of Yokohama.

In August of that year, the Malaysia-Japan Road Disaster Prevention Technology Seminar was held, and Japanese road disaster prevention technology was showcased at this event.

In September of that year, Singaporean Minister of State Josephine Teo, who is responsible for the prime minister's office, foreign affairs and transport, visited Japan, and listened to Minister Ishii of the MLIT make a pitch for the introduction of the Shinkansen system.

In October of that year, in conjunction with an international bunkering conference held in Singapore, eight representatives of port authorities from seven countries concluded the Memorandum of Understanding on Cooperation on the Development of LNG as a Marine Fuel in an effort to establish a global network of LNG bunkering ports.



In addition, in November of that year, we held the Urban Development Seminar to support Japanese companies' participation in the formulation of an urban planning master plan and urban development projects for the Jurong Lake District, which is the planned Singapore-side terminus of the high-speed railway between Malaysia and Singapore.

#### - Myanmar

In June 2016, a meeting of Myanmar-Japan Senior Transportation Officials was held in Myanmar, and participants shared information and exchanged opinions about efforts, challenges, technology and other matters regarding railways, air transport, ports and harbors and other transportation sectors in both countries. In addition, in October of the same year, Minister Thant Sin Maung of the Myanmar Ministry of Transport and Communications was invited to Japan, where he and Minister Ishii of the MLIT concluded a memorandum of cooperation regarding the transportation sector.

In July of that year, JOIN decided (with the authorization of the Minister of the MLIT) to provide support for an urban development project that calls for the construction and operation of a landmark complex near Yangon Central Railway Station.

In August of that year, the minister of the Myanmar Ministry of Construction was invited to Japan, and met with Minister Ishii of the MLIT, participated in on-site inspection tours toward the formulation of future infrastructure projects, and exchanged opinions with private companies.

In September of that year, the MLIT helped host the Myanmar-Japan Construction Round Table to facilitate practical discussions regarding highly detailed and urgent issues in the construction sector.

In addition, in December of that year, we organized priority matters regarding the alleviation of traffic, transportation safety measures and maritime transportation, which are the most pressing urban transportation issues in the Yangon region, into action plans to be taken within the next year and within the next three years. During that month, Minister Ishii of the MLIT visited Myanmar, where he promoted trade regarding airports, roads and bridges, railways, urban development and other sectors introducing their companies and products to key people in the government, and renewed a memorandum of cooperation regarding the housing and urban sectors with Minister Win Khaing of the Ministry of Construction to clarify support regarding home financing. In addition, we implemented a structural earthquake resistance seminar in Yangon.

In February 2017, we held Talks for Cooperation in Disaster Prevention with the Myanmar Ministry of Agriculture, Livestock and Irrigation, the Ministry of Transport and Communications, and the Ministry of Social Welfare, Relief and Resettlement, and exchanged opinions regarding cooperation concerning disaster prevention policy in both countries.

In addition, in March of that year, the fourth meeting of Myanmar-Japan Senior Construction Officials was held, and participants participated in policy discussions regarding roads, the construction industry, urban development and housing. That same month, we organized a report of a project identification and formulation survey for the eastern section of the outer ring road of Yangon, and made a report to our counterpart.

#### - Cambodia

In June 2016, Parliamentary Vice-Minister Miyauchi visited Cambodia, where he promoted trade regarding roads and bridges, automobiles, ports and harbors, sewage and other sectors to key people in the government.

In August of that year, the Japan International Cooperation Agency (JICA) began implementing a three-year plan entitled The Project for Modernization of Vehicles Registration and Inspection Administration System, and the MLIT has dispatched one expert from its ranks and has engaged in other efforts to proactively provide technical assistance. During that same month, JICA began implementing a three-year Country-Focused Training plan entitled Housing Policy in response to a request from the Cambodian government, and has implemented Technical Training in Japan (August) and seminars in Cambodia (December).

In January 2017, Cambodian Senior Minister Chea Sophara, who is also the Minister of Land Management, Urban Planning and Construction, was invited to Japan, and met with Minister Ishii of the MLIT. They concluded a comprehensive memorandum of cooperation between the ministries, and participated in on-site inspection tours toward the formulation of future infrastructure projects.

In February of that year, the Director-General of the Cambodian Ministry of Public Works and Transport visited Japan, where he met with State Minister Suematsu and concluded a memorandum of cooperation between the ministries regarding the sewage sector.



## (ii) South Asia

## - India

In July 2016, the ninth Japan-India Joint Working Group on Urban Development was held, and participants shared information and exchanged opinions about urban transportation, urban development and aquatic environments.

In November of that year, a Japan-India summit meeting was held with Indian Prime Minister Narendra Modi, who was in Japan on a visit. Prime Minister Modi announced the goal to open a high-speed railway between Mumbai and Ahmedabad by 2023, which represents the first project to be implemented as a total package for the Japanese Shinkansen system, and also visited a Shinkansen rolling stock plant.

Furthermore, in October of that year, the third meeting of the Japan-India Joint Working Group on Road and Road Transport was held, and participants discussed the improvement of roads in mountainous areas, bridge technology and ITS/transportation safety policy.

## - Sri Lanka

In June 2016, the MLIT hosted the Sri Lanka-Japan Construction Industry Round Table to provide Japanese technology, know-how and experience as a way to help promotion of the Megapolis and Western Development Conceptual Plan.

## (iii) United States of America

In June 2016, Robert Lauby, the Deputy Associate Administrator of the United States Federal Railroad Administration, and others visited Japan, and the first Japan-U.S. Conference on Cooperation for Railways was held. Participants discussed the ideal state of high-speed railway maintenance and other matters. In August of that year, the Japanese government and the state of Maryland concluded a memorandum of cooperation that confirmed cooperation for maglev trains and for other areas. In September of that year, Minister Ishii of the MLIT met with United States Secretary of Transportation Anthony Foxx, who was visiting Japan for the G7 Summit for transportation ministers, and they confirmed their intent to enhance the cooperative relationship between the two countries toward the development of specific projects regarding maglev and high-speed railway plans.

## (iv) Middle East

After international economic sanctions were lifted in January 2016, a meeting of Iran-Japan Senior Transportation Officials was held in July of that year, and the participants shared information, exchanged opinions and signed a memorandum of cooperation regarding infrastructure projects in the transportation sector.

In addition, in January 2017, Minister Ishii and Vice Minister Tanaka of the MLIT visited Turkey, where they met with President Recep Tayyip Erdoğan, Prime Minister Binali Yıldırım, and Minister Ahmet Arslan and Vice Minister Coskunyurek of the Ministry of Transport, Maritime Affairs and Communications, and promoted trade regarding the Çanakkale Strait Bridge Project, which includes the construction of a bridge with the longest center span in the world.

## (v) Russia

The MLIT drove cooperation in the urban environment and transportation infrastructure sectors based on the Cooperation Plan for Russia Living Environment Superpower, Industrial/Economic Reform, which is a comprehensive policy of the Russian government. We are driving forward with cooperation for Russia's urban environment through the Japan-Russia Urban Environment Issues Working Group, which works toward the realization of creating comfortable, clean cities that are easy to live and move about in, which is one of the eight items in the Cooperation Plan. The fifth general meeting was held in May 2016, and the sixth was held in November of that year. We are moving forward with efforts such as formulating urban environment development standards and a pilot project to make Voronezh and Vladivostok model cities.

In addition, the third senior officials' meeting of the Japan-Russia Working Group on Transportation was held in August of that year, and the participants exchanged opinions about railways, ports and harbors, air transport and other sectors. In addition, in December of that year, a meeting of Japanese and Russian port authorities, as well as public-private seminars were held based on the memorandum of understanding for the ports and harbors sector concluded with the Russian Ministry of Transport in August of that year.

## (vi) Central Asia

In light of the Prime Minister's visit to the Central Asia region in October 2015, we held public-private infrastructure conferences at which we encouraged understanding of Quality Infrastructure Investment in the Central Asia region in Uzbekistan and Kyrgyz in October 2016. In addition, as a follow-up to these conferences, we are hosting sector-focused conferences in Uzbekistan and other places and driving forward with other efforts to provide support for Japanese companies involved in infrastructure to expand and develop business in this region. That same month, Minister Ishii of the MLIT signed a memorandum of cooperation for the purpose of promoting infrastructure development, technical cooperation, and private-sector business across all transportation sectors with the Kazakh Ministry for Investments and Development.

In January 2017, State Minister Tanaka visited Georgia, and, among other things, discussed policy regarding cooperation in the transportation infrastructure sector.

## (vii) Latin America

In April 2016, when President Juan Carlos Varela of the Republic of Panama visited Japan, we provided on-site inspection tours of the Tama Toshi Monorail Line to promote Japanese monorail technology.

In September of that year, Parliamentary Vice-Minister Ono visited the Republic of Peru and the Republic of Colombia, where he discussed specific methods of proceeding with cooperation regarding the improvement of urban transportation in both countries, and the development of a master plan for ports and harbors in Colombia.

In light of the Prime Minister's visit to Cuba that same month, in February 2017, we held a public-private infrastructure conference in Cuba, at which we encouraged an understanding of Quality Infrastructure Investment and provided support for Japanese companies involved in infrastructure to expand and develop business in this region.

## (viii) Africa

Based on the ministerial declaration adopted at the Japan-Africa Public-Private Infrastructure Conference held in August 2016 to coincide with TICAD VI, we founded the Japan-Africa Infrastructure Development Association (JAIDA) for the purpose of proactively disseminating information to the nations of Africa regarding Japanese technology and experience in supporting Quality Infrastructure, and of building relationships with both public and private entities and partner countries.

In January 2017, JAIDA accompanied us on a trip to Uganda and Zambia to hold public-private infrastructure conferences, which to that point had been held in six African countries (Kenya, Ethiopia, Mozambique, Tanzania, Côte d'Ivoire and Nigeria). We agreed with the partner countries to launch Quality Infrastructure Dialogues (QID) as a way to continue the good relationships built at the conferences and to provide regular opportunities for the people concerned to exchange opinions.

In February of that year, we hosted an Urban Transportation Seminar in Mombasa, Kenya, to promote the overseas development of Japanese urban transportation systems.

## (ix) Australia

The joint statement made at the Japan-Australia Summit Meeting in December 2015 included a pledge to launch regular high-level meetings to include matters related to urban transportation and high-speed railways; in light of this pledge, the MLIT hosted the first meeting of Japan-Australia Senior Transportation Officials in November 2016. The MLIT, the Australian Department of Infrastructure and Regional Development and Australian state and territorial governments exchanged opinions regarding the ideal state of urban railway and high-speed railway improvements, measures to promote the use of public transportation, public transportation-oriented development and other issues shared by the two countries.

## 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. The agreement was signed in February 2016, and in December of that year, the Diet approved it and drafted related bills. In January 2017, we notified the depository (New Zealand) of the completion of domestic procedures.

#### (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. Seventeen negotiation sessions have been held as of March 2017. Given that both Minister Kishida of MOFA and European Commissioner Cecilia Malmström agreed to strive for a broad agreement as soon as possible in December 2016, 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 seventeen negotiation sessions have been held as of March 2017.

#### (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 presided over the G7 Summit. In addition to hosting the summit at Ise-Shima in May, 10 relevant ministers' meetings were held at different locations across the country.

The MLIT hosted a meeting of the G7 Transport Ministers in Karuizawa Town, Nagano Prefecture, in September of the same year. At this meeting, discussions on the two themes of developing and disseminating the latest technologies concerning automobiles and roads, and basic strategies for dealing with the development and obsolescence of transportation

infrastructure, were undertaken based on discussions that took place at the meeting of the G7 Transport Ministers held in Germany in September 2015, and ministerial declarations were issued for each.

## Column

### G7 Transport Ministers' Meeting in Karuizawa, Nagano

The MLIT hosted the G7 Transport Ministers' Meeting in Karuizawa, Nagano from September 23 to 25, 2016, under the chairmanship of Minister Keiichi Ishii. Members from the G7 countries included Mr. Marc Garneau (Canadian Minister of Transport); Mr. Francois Poupard (French Director General for Infrastructure, Transport and the Sea); Mr. Alexander Dobrindt (German Federal Minister of Transport and Digital Infrastructure); Mr. Graziano Delrio (Italian Minister of Infrastructures and Transport); Mr. Chris Grayling (British Secretary of State for Transport); Mr. Anthony Foxx (American Secretary of Transportation); and Ms. Violeta Bulc (European Commissioner for Mobility and Transport). Following the first and previous meeting, which was hosted by Germany in September 2015 in Frankfurt, this was the second meeting, held in Japan for the first time. The ministers discussed two important themes, "Development and widespread utilization of advanced technology for vehicles and roads" and "Basic strategy for developing new transport infrastructure and renovating aging and/or deteriorated transport infrastructure," and issued a G7 Transport Ministers' Declaration for each.

A significant achievement of holding this second G7 Transport Ministers' Meeting in Japan was that an ongoing framework was able to be established for discussing and cooperating in addressing important transport issues common to the G7 countries. With hopes that this framework will continue to provide a significant forum for advanced discussions on global transport issues, Japan will continue to make an active contribution to future G7 Transport Ministers' Meetings.

Opening session



Source) MLIT

Session on "Development and widespread utilization of advanced technology for vehicles and roads"



Source) MLIT

Welcome reception hosted by the MLIT and the local community (raising glasses in a toast)



Source) MLIT



## (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 best practices for infrastructure investing, financing, and operations; and (iii) a vision for high-quality transportation.

The 10th APEC Transport Ministers' Meeting is scheduled to take place in Papua New Guinea in October 2017.

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

In an effort to further promote quality transportation in ASEAN, the MLIT is implementing various cooperation projects for overland, maritime and air transport under the ASEAN-Japan Transport Partnership, a cooperative framework for the transportation sectors in Japan and ASEAN established in 2003. The projects include joint research on paving technologies and overload management technologies in support of global road networks, joint research regarding port and harbor technology, re-surveying of channels and improvement of nautical charts for the Singapore Strait and Strait of Malacca, and support for air transport security systems. The "ASEAN and Japan Transport Ministers Meeting" is held every year to monitor the progress of current projects and to discuss new projects and future direction.

At the 14th ASEAN and Japan Transport Ministers Meeting held in the Philippines in November 2016, the ASEAN-Japan Transport Partnership Work Plan for 2016-2017, which is a specific implementation plan of the ASEAN-Japan Transport Partnership, was approved, as well as four new cooperation projects: Implementation of the New ASEAN-Japan Action Plan on Environment Improvement in the Transport Sector, Project for Encouraging the Use of Environmentally Friendly Ships in ASEAN, and Implementation of the Green Logistics Vision and Action Plans and Regional Action Plan on Port Security (RAPPS) 2017 under ASEAN-Japan Maritime Security Transport Programme. In addition, ASEAN models of the Audit Training Programme and Maritime Security Training of Trainers (ToT) Programme was approved as a project output.

## (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 (WP6), the Regional Development Policy Committee (RDPC), the Tourism Committee, and the Joint Transport Research Centre (JTRC) of the 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 2016, discussions based on a theme of eco-friendlier, universally accessible transportation were held, with an exploration of various perspectives. Participants discussed matters such as plans for the realization of the Paris Agreement adopted at COP21, the realization of universally accessible transportation, and the effects of the use of new technologies and big data.

In order to foster normal competitive conditions in the shipbuilding industry, WP6 works towards to increase transparency by conducting reviews of the shipbuilding policies of each country and Inventory of subsidies and other support measures. In light of excessive government interference in the shipbuilding industry through massive financing by government and public bodies for struggling shipbuilders in some countries in recent years, WP6 has discussed the disciplines

on public support to avoid the market distortion.

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 resilient cities, and in April 2016, the decision was made to implement projects involving the improvement of productivity in urban and regional areas. In addition, a second review by country was announced for Japan's land and regional policies in the same month. 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.

The JTRC conducts surveys and research on policy issues commonly applicable to member countries. Japan also participates in a working group focused on smart road use methods proposed and adopted by Japan.

## (5) United Nations (UN)

### (i) International Maritime Organization (IMO)

IMO is a specialized agency of the United Nations that establishes international rules on safety and environmental measures of ships. Japan actively participates in the activities of this organization as a global leader in shipping and shipbuilding. In FY2016, Japan actively contributed to discussions promoting measures to reduce ships' greenhouse gas emissions and the enforcement of a convention for the control and management of ships' ballast water, the revision of passenger ship safety standards, the development of interim guidelines on maritime cyber risk management, and the development of interim recommendations for carriage of liquefied hydrogen in bulk.

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

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 states FY2016 and Japan, as a Governing Council state under PART I (States of chief importance in air transport), actively participates in various ICAO activities and contributes to the development of international civil aviation.

In particular, regarding global greenhouse gas emissions reduction programs using market mechanisms that have been discussed to date, Japan has pledged to voluntarily participate since the inception of the programs and has made efforts to lead the discussion, which resulted in an agreement at the ICAO Assembly held in September and October 2016.

### (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.

The 3<sup>rd</sup> United Nations Conference on Housing and Sustainable Urban Development (Habitat III) was held in Ecuador in October 2016 in an effort to resolve issues involving human settlement, namely issues brought about by the rapid urbanization that is progressing throughout the world. At the conference, the New Urban Agenda was adopted. The agenda sets out indicators for global efforts toward the development of national land in balance with national land plans and quality infrastructure investment for sustainable urban development, both of which were emphasized by the Japanese government, as well as for resolving issues involving urbanization and human settlements over the next 20 years in terms of disaster prevention, national land resilience improvement and other factors.

**(iv) UN efforts regarding water and disaster prevention**

The secretary-general of the United Nations and the president of the World Bank convened and in 2016 the High-Level Panel on Water (HLPW) with the heads of state and government as a framework for discussing policy regarding future water issues in the global community. The Japanese government worked together with HLPW Special Advisor Dr. Han Seung-Soo, UN Secretary-General Special Envoy on Disaster Risk Reduction and Water, to contribute to the formulation of future action plans for the water-related and disaster management. In addition, MLIT participated in the seventh (May 2016) and eighth (November 2016) meetings of the High-level Experts and Leaders Panel on Water and Disasters (HELP), which aims to enhance the efforts of each country to combat water-related disasters, and have made policy recommendations regarding the importance of financing in the water and disaster management sectors, infrastructure maintenance by the public sector and various service provision by the private sector.

**(v) Sustainable development goals (SDGs)**

Given the adoption of sustainable development goals (SDGs) at the UN Summit in September 2015, the Japanese Sustainable Development Goals Promotion Headquarters, which is chaired by Prime Minister Abe, determined indicators for implementing SDGs in Japan (SDG implementation indicators) in December 2016. To realize sustainable development inside and outside Japan, the MLIT will also implement efforts toward the achievement of SDGs through related measures such as the promotion of Quality Infrastructure Investment.

**(6) World Bank (WB)**

The MLIT and WB jointly hosted an international conference on “Sustainable development through Quality Infrastructure Investments” in February 2017 in order to effectively share knowledge on Quality Infrastructure Investments with infrastructure officials in other countries. In addition, in May 2016 and February 2017, we introduced Japanese national land plans and our knowledge of urban development at invitational events held by the World Bank for key people involved in urban development in various countries.

**(7) Conference on African Development (TICAD)**

In August 2016 at TICAD VI, the first TICAD conference held in Africa, the Nairobi Declaration, which mentioned the importance of Quality Infrastructure Investment, was adopted. In light of this declaration and the Leaders’ Statement for the Promotion of Quality Infrastructure Investment adopted by cabinet ministers from Japan and various African countries at the Japan-Africa Public-Private Infrastructure Conference held to coincide with TICAD VI, we will continue to promote efforts such as these public-private infrastructure conferences to promote Quality Infrastructure Investment in Africa.

**3 Multilateral and Bilateral International Negotiations and Collaborative Initiatives in Different Sectors****(1) National Land Policy Sector**

We regularly hold bilateral director-level conferences with South Korea at which we exchange information concerning similar issues affecting both countries regarding national land policy, regional policy and land policy. In light of the growing need for national plans in Asian countries dealing with rapid economic growth and urbanization, and international agreements from Habitat III regarding the strategic promotion of national land policy, we will proactively promote the overseas deployment of Japanese national land policy and regional policy.

**(2) Urban Sector**

In FY2016, we held the 17th Japan-China Conference on Urban Planning and Urban Development at which government officials and companies from both countries gave presentations.

In response to a request from the Myanmar Ministry of Construction, we provided support for the development of urban and regional development planning legislation and an enforcement ordinance for that legislation, and also implemented technical cooperation through the dispatch of JICA experts and the like.

### (3) Water Sector

Based on the common understanding of water problems as global-scale problems, discussions toward the resolution of these problems are taking place at international conferences and other venues. We are participating in discussions at international conferences such as the ASEAN +3 Water Ministers' Forum held in Singapore in July 2016, and the IWA World Water Congress held in Australia in October of that year, and have disseminated messages regarding Japanese water resource management policy and the like.

In addition, Japan is coordinating efforts with the Network of Asian River Basin Organizations (NARBO) to contribute to the dissemination and promotion of Integrated Water Resources Management (IWRM).

Furthermore, we have cooperated with the United States and South Korea to host bilateral meetings pertaining to rivers, sediment control facilities and water resource management at which we have shared information about the current circumstances in each country, pioneering efforts and the like.

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.

### (4) Disaster Management Sector

To reduce the damage of water disasters around the world, MLIT disseminated Japan's experiences and technology, made efforts to establish international solidarity in order to build consensus that disaster prevention is the key to sustainable development. The International Centre for Water Hazard and Risk Management (ICHARM), which was founded in the Public Works Research Institute, has provided technical cooperation and international assistance for countries and regions vulnerable to water related disasters through various efforts such as developing the integrated flood analysis system (IFAS) and rainfall-runoff-inundation (RRI); researching the risk management; implementing human resource development programs; participating in UNESCO and Asian Development Bank projects; and handing the International Flood Initiative (IFI).

In accordance with a MOV exchanged in March 2013 between the European Civil Protection and Humanitarian Aid Operations (ECHO) and the MLIT, working level talks were held in December 2016 for the purpose of enhancing disaster management measures in place in both Japan and the EU. In addition, in the sediment control sector, we have hosted bilateral conferences regarding sediment control technology with Italy, South Korea, Switzerland and Austria, and have implemented technical cooperation through the dispatch of JICA experts and other efforts for warnings and evacuation from landslide disasters, land-use regulations and the like in Brazil and Sri Lanka.

### (5) Road Sector

Japan has been proactively participating in various technical committees of the World Road Association (PIARC) and spearheading the formulation of a future policy. In addition, at the PIARC Annual Council Meeting held in Cape Town, South Africa, in September 2016, we introduced our traffic safety efforts focusing on how we provide sudden braking movement and acceleration data collected through ETC 2.0 for local governments to identify black spots in advance and implement effective measures through big data.



### (6) Housing and Building Sector

We hosted the world conference of the Inter-Jurisdictional Regulatory Collaboration Committee (IRCC) in Tokyo, and made other efforts to exchange information with relevant countries concerning global trends in building codes and the like.

We hosted bilateral meetings with Germany, France, India, Indonesia and Myanmar at which we exchanged information about housing policy, energy-efficient construction, home financing and other matters.

Broad technical cooperation was provided to Myanmar and Cambodia through the dispatching of JICA experts and other measures based on the memorandums between both countries.

### (7) Automotive Sector

Based on 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 endorsed at the 13th ASEAN-Japan Transport Ministers' Meeting in 2015, in October 2016, we hosted a Public-Private Joint Forum for the Asian region, at which we exchanged information about activities for the global harmonization and mutual recognition in the Asia region. In addition, continuing from last year and based on the program, we implemented and exchanged pertinent information and opinions regarding a program in Malaysia to improve their automobile transportation safety and environmental conservation policy formulation process.

### (8) Maritime Sector

In the maritime sector, in addition to the IMO global agenda, Japan has undertaken bilateral talks to address international issues. In FY2016, Japan held Director-General-level conferences with the United States at which they shared information and exchanged opinions about the facilitation of the entry into force of the Hong Kong Convention on ship recycling, the problem of excess supply capacity in the shipbuilding market, measures for the reduction of greenhouse gas emissions, ballast water management, cybersecurity and other matters. In addition, the joint hydrography survey of the Strait of Malacca and the Singapore Strait was approved in July of that year as a Japan-ASEAN Integration Fund project, and we hosted a seminar targeting travel agencies in Singapore and Thailand based on the ASEAN-Japan Cruise Promotion Strategy approved at the ASEAN-Japan Transport Ministers' Meeting in 2014.

### (9) 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).

Based on the memorandum on cooperation in development of the national technical standards for port and harbor facilities of the Socialist Republic of Viet Nam, we held meetings with administrative officials and experts.

### (10) Aviation Sector

In March 2016, the second meeting of the Japan-France Cooperative Working Group was held in Toulouse, France, in accordance with a memorandum of understanding concerning technical cooperation in the civil aviation sector that has been concluded with France, and it was decided to advance cooperation including regular meetings to be held in the future.

In addition, in August, Sri Lanka hosted the 53rd Conference of the Directors General of Civil Aviation in the Asia and Pacific Regions, on the theme of "Fostering safe, secure and effective aviation system in an eco-friendly environment with no country left behind," and where we exchanged opinions on various initiatives being undertaken by respective countries in the Asia and Pacific regions concerning aviation in general.

### (11) 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 sixth China-Japan-Korea Ministerial Conference on Transport and Logistics held in July

2016, such as by way of studies into the expansion of the mutual access of chassis, the expansion of covering ports 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 logistics policy dialogue under the framework of the ASEAN-Japan Transport Partnership, sessions were held in Myanmar in October 2016 and Thailand in January 2017. In March 2017, Logistics Human Resource Development program was conducted in Lao PDR, to help secure exceptional human resources in the ASEAN region.

### (12) Geospatial Information Sector

In addition to dispatching staff members to the United Nations Committee of Experts on Global Geospatial Information Management (UN-GGIM) and contributing to implementation of UN General Assembly resolution on 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.

Further, the MLIT is dispatching experts and making other efforts to implement technical assistance toward the establishment of an integrated GNSS Continuously Operating Reference Stations (CORS) network in Thailand based on the Japan-Thailand joint press statement from the Japan-Thailand Summit Meeting held in February 2015.

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

Under the framework of the World Meteorological Organization (WMO), Japan has provided the world meteorological community with various information including tropical cyclone forecasts taking advantage of its advanced technologies as well as exchanged meteorological data and technical information. 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 16 countries in the northwest Pacific region to contribute to tsunami disaster mitigation.

### (14) 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.

The Japan Coast Guard 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 VDES<sup>Note</sup> development through committees of the International Association of Marine Aids to Navigation and Lighthouse Authorities (IALA), and dispatching staff members from 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.

## 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 auto-

**Note** Abbreviation of VHF Data Exchange System

mobiles 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 of the National Agency for Automobile and Land Transport Technology (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 Railways 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).

Moreover, the Japan Coast Guard has participated in discussions on international standards applicable to nautical charts, nautical publications, and navigational 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 are leading the discussion in the International Association of Marine Aids to Navigation and Lighthouse Authorities (IALA) e-Navigation Committee regarding the international standardization of VDES, a new maritime data communication system.

### (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.

**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.

### (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 different Geographic Information Systems (GIS) dealing with 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, we are working on standardizing domestic geographic information.

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

Within the APEC Architect Project and the APEC Engineer Project, we have conferred mutual designations on people qualified to produce architectural designs and qualified engineers within APEC who have satisfied certain requirements. Within the APEC Architect Project, we are promoting the mobility of persons qualified to produce architectural designs through our signing of bilateral memorandums of understanding for mutual acceptance with Australia and New Zealand, and efforts such as our participation in the APEC Architect Central Council.

### (8) Sewage Sector

Presently, our proactive and leading participation in the Technical Committee on the Water-reuse (ISO/TC282), Technical Committee on Sludge Recovery, Recycling, Treatment, and Disposal (ISO/TC275), and Working Group on Stormwater Management (ISO/TC224/WG11) represents efforts to promote the deployment of high-quality Japanese sewage technology overseas.

### (9) Promotion of the International Standardization of Logistics Systems

We are promoting the standardization and international standardization of Japanese logistics systems, thereby contributing to improved logistics environments in Asian distribution networks and strengthening the international competitiveness of Japanese logistics companies, based on the services and know-how those companies have, which is of the world's highest level, including cold chain and delivery services.