Section 2 Specific measures

- I Creation of new prospective growing markets, enhancement of Local Abenomics, etc.
- 1. Realization of the fourth industrial revolutions
- (1) Progress in achieving KPIs
 - <KPI> "Aim for over 30,000 registered IT Security Support Providers by 2020."
 - * KPI newly set up by this year's edition.
 - <KPI> "Aim for 15 million subscribers to MVNOs (Mobile Virtual Network Operators) by the end of this year." (Approx. 9.54 million contracts as of March last year)
 - ⇒ December last year: Approx. 11.55 million contracts

(2) Specific new measures to be taken

The Government will establish control tower functions through cooperation among government, industry and academia to strategically push forward research and development of artificial intelligence (AI)-related technologies, a key to the fourth industrial revolution as well as industrialization taking advantage of Japan's strengths, while promoting national scale endeavor towards discovery and implementation of projects for data utilization and regulatory and system reforms.

As well, the Government will drive environmental development to support the fourth industrial revolution. To be more specific, it includes business renewal acceleration to keep pace with fast change, development of systems for human resources and education, promotion of IT utilization in mid-ranking companies and SMEs, facilitation of data distribution, and development of IT infrastructure such as infrastructural improvement of security and information and communications.

- i) Establishment of control tower functions to accelerate research and development, and practical implementation of AI-related technologies, a key to the fourth industrial revolution, and promotion of regulatory and system reforms and cross-business and cross-organizational data utilization projects
 - [1] Establishment of the "Council for Strategies for Artificial Intelligence Technology" with control tower functions concerning AI-related technologies under cooperation among government, industry and academia, and promotion of research and development, and practical implementation of AI-related technologies
 - The "Council for Strategies for Artificial Intelligence Technology" was established in April this year as a control tower to accelerate industrialization which leverages Japan's technological advantage in Alrelated technologies and the field of real business. While breaking all the barriers among the Government, government-affiliated research institutions, universities, and the public sectors, and making strategic cooperation with overseas research institutions as well, the Government

will engage the "Council for Strategies for Artificial Intelligence Technology" to draw up a roadmap defining objectives of research and development related to AI technologies conducted under cooperation among government, industry and academia, and industrialization thereof by the end of this fiscal year, in order to win through in the global competition concerning the fourth industrial revolution with concerted efforts. As well, to realize centralized promotion of research and development of technologies all the way to practical implementation thereof, the Government will specify measures necessary for world-class research and industrialization in this fiscal year, such as establishment of global research bases to conduct research and development in fields which integrate Japan's advanced technologies in robotics, advanced measurement and analysis, and fine processing with AI-related technologies; development of groundbreaking fundamental technologies; acceleration of practical AI implementation through provision and standardization of tools including AI-related software modules; and improvement of research environment.

Coupled with such efforts, the Government will promote continual discussion both inside and outside Japan with respect to establishment of international principles on matters to be noted (including transparency, controllability, etc.) upon development of AI based on the spread and networking of AI and its impact on society and humans, continual revisions of such principles, and other related social and ethical issues.

[2] Promotion of regulatory and system reforms and data utilization projects

[Development of a project-selection system]

- In order to deal with the fourth industrial revolution, where it is difficult to predict technological innovation and speed is valued more than ever, the Government will introduce a new mechanism to implement regulatory reforms this summer at the earliest, through which the public and private sectors share future image of business to be achieved by a specific date, from which they work backward to draw up a roadmap and implement specific reforms. [Discussed later.] (To be detailed in "II-1. Introduction of a new mechanism for regulatory and system reforms".)
- The first stage of the fourth industrial revolution was a race for data on the internet whereas, in the second stage, data from the real world, such as manufacturing which Japan is strong at, will be competed for. For this reason, the Government will enhance its efforts to develop business including identifying cooperative business fields where data can be collected, analyzed, and utilized as assets across different businesses and organizations through utilization of the "IoT Acceleration Consortium" and "Robot Revolution Initiative."
 - In order to accelerate creation of advanced business projects and practical implementation, the "IoT Acceleration Lab" will 1) provide assistance for short-term projects by individual companies in both financial and regulatory aspects (utilization of the System of Special

Arrangements for Corporate Field Tests and the System to Remove Gray Zone Areas), and at the same time, 2) work on environmental improvement including reforms of regulations and rules through demonstration projects (in the fields of smart houses, infrastructure, etc.) utilizing medium to long term projects by multiple companies. To form these projects, the Government will accelerate its efforts to promote cooperation among companies and local governments, as well as partnership with governments of Western, Asian, and Middle Eastern countries and international institutions with a purpose of establishing Japan as an IoT business hub and attracting the world's IoT business to the country. While working with local universities, research institutions and businesses as well, the Government will promote local governments' active efforts to establish "Local IoT Acceleration Labs" in order to conduct its project discovery program on a nation-wide basis.

Together with such efforts, in light of a shift from cloud-based centralized data management and processing structure to a distributed computing system, which will take place in a full-grown IoT era, the Government will propose technological strategies to realize distributed computing including cooperative AI and embedded software, in addition to virtualization technology which realizes all functions through software, while deliberating institutional issues towards utilization of blockchain technology in business and promotion of data distribution, thereby aiming to develop relevant policies this fall.

- ➤ By promoting venture companies' research and development by using test environment (testbeds) owned by the National Institute of Information and Communications Technology (NICT) through activities of "Smart IoT Acceleration Forum," the Government will provide assistance to create services in priority areas closely connected to people's lives and local revitalization, such as communications, broadcasting, agriculture, medical treatment, and cities/ housing.
- At the "Robot Revolution Initiative," the Government will carry out discussion on proposal for international standardization efforts in cooperation with Germany concerning business reform and smartification of manufacturing industry by use of IoT and big data, and deliberation for discovery and creation of model case efforts.

[Implementation and realization of individual projects] <Related to business fields of B to C>

- a) Further enhancement of healthcare and medical services by utilizing IoT In order to utilize information in fields of medical services, etc., the Next-Generation Medical ICT Infrastructure Council will deliberate on the "Agency Organization (tentative name)" system. Based on the results, the Government will take necessary legal measures sometime next year. [Discussed later.] (To be detailed in "I-2. Making Japan the world's most advanced country in healthcare".)
 - In order to realize provision of "individualized healthcare services" which cater to the needs of each single person, the Government will start by the end of this fiscal year a demonstration project which, under the consent of individuals, collects and analyzes medical practitioners' receipts for health insurance claim, and medical checkup information held by insurers and companies as well as health data which can be obtained regularly through wearable terminals, etc., and provides individual healthcare services. As for reform to enhance medical insurers' incentives for preventive healthcare and health management, the Government will design it so that incentives would be given to preventive healthcare and health management based on ICT including efforts for the said demonstration project. (To be detailed in "I-2. Making Japan the world's most advanced country in healthcare".)
- b) Development of environment for realization of advanced automated driving including unmanned automated driving
 - To realize transportation services by unmanned automated driving and automated driving on expressways by the 2020 Tokyo Olympic and Paralympic Games, the Government will develop systems and infrastructure enabling necessary demonstration projects by next year based on the "Public-Private ITS Initiative/Roadmaps 2016" (decided by the Strategic Headquarters for the Promotion of an Advanced Information and Telecommunications Network Society (hereinafter, referred to as the "IT Strategic Headquarters") on May 20, 2016). As well, to promote innovation in ITS including such automated driving, the Government will make efforts for research and development projects under the Strategic Innovation Promotion Program (SIP) by the Council for Science, Technology and Innovation, and will work on development and utilization of traffic database including vehicle detectors to be installed on streets based on the above roadmap.
 - By breaking the barriers between businesses, the Government will standardize specifications of automated driving maps, based on which it will propose an international standard sometime this fiscal year. As well, the Government will promote development of maprelated data through cooperation of public and private sectors, and aim to put them into practical use by as early as 2018.

- c) Development of environment for further business use of small drones
 - The Government will aim for realization of package delivery by drones in three years at the earliest as well as further use of small drones in a variety of fields including disaster-stricken areas for damage inspection, search, and rescue, management of infrastructure, surveying, and the agriculture, forestry and fisheries industries. For this purpose, the Government put together expertise of both the public and private sectors into "Summary of issues concerning a roadmap and system design for utilization and technological development of small drones" (decided by the Public-Private Council for environmental improvement concerning small drones on April 28, 2016). Based on this Summary, the public and private sectors will work together to realize the "industrial revolution in the sky" by developing evaluation standards for small drones' performance and an operation control system, providing assistance to technological development and demonstration for improvement of collision avoidance functions, and starting discussion on necessary measures (rules for operation control and collision avoidance of small drones) so that new safety-approved technology would be smoothly adopted for practical use. As well, by this summer, the Government will systematically organize and share safety measures based on application of the revised Civil Aeronautics Act, and will decide on the direction of system design for ensuring safety. Then, the Government will go on to discuss details of the system design. In addition, the Government will develop necessary systems by this summer to allow extension of bandwidth and increase in radio signal output available for drone operation and data transmission, and use of mobile phones up in the sky.

d) Realization of the world's most advanced smart factories

- The Government will aim to create more than 50 advanced cases of cross-organizational use of sensor-collected data among factories, between factories and headquarters, and among companies by 2020. Based on this, the Government will propose an international standard. As well, the Government will further enhance cooperation with other countries, including Germany with which Japan issued a joint statement in April this year.
- e) Promotion of utilization of next-generation robots
 - The Government will start deliberation on next-generation robots. Different from robots which have action patterns installed in advance and repeat accurate and fast actions on the basis of input data which are homogeneous to a certain degree, next-generation robots, which the Government will develop element technology for with an aim to put them to practical application, will have AI installed, thereby learning and acting autonomously. As well, while

cooperating in efforts for research and development/ industrialization of AI, the Government will push forward with technological development and demonstration for a wide range of fields such as transportation of people and goods including in an emergency, response to a disaster, and management of infrastructure in order to realize a new robot society where multiple robots recognize their surroundings and work together autonomously.

f) Smartification of industrial safety

- With regard to industrial safety, the Government will introduce a new system at the beginning of next fiscal year, which enables more flexible regulations according to the safety capabilities including application of regulatory positive incentives to businesses which are taking advanced voluntary safety measures, for example, by using IoT for continuous monitoring. At the same time, the Government will conduct demonstration experiment in plants to promote sharing and utilization of data across corporate boundaries, based on which the Government will revise the systems. In addition, the Government will promote development of new insurance products reflecting utilization of IoT, thereby encouraging plant owners to invest in efforts for smartification while leveraging implementation of an IoT-based smart safety system for export of Japan's infrastructure.

g) Promotion of utilization of IoT, big data, AI, and robots concerning prevention of and response to a disaster

- With regard to enhancement of countermeasures against natural calamities based on detailed simulation of a disaster by supercomputers, and utilization of IoT, big data, AI, and robots for disaster prevention and response including use of sensors, robots, and small drones in disaster-stricken areas for inspection, search, and rescue, the Government will take into account huge potential needs of such technological application and possibilities of future overseas implementation and actively push for technological development and demonstration as well as introduction and promotion thereof.

h) i-Construction

- In order to promote use of ICT in overall construction and production process from research/ survey to design, execution/ inspection, and maintenance/ renewal, including utilization of 3D data obtained by flying drones for earthworks such as raising and cutting the ground, the Government will start applying necessary standards to basically all large-scale national construction projects from this fiscal year. (Reducing the number of days for inspection and the amount of inspection documents to a fifth and a fiftieth respectively)

- i) FinTech [Discussed later.] (To be detailed in "II-2. System reform towards future investment".)
 - The Government will enforce the Act to Partially Amend the Banking Act to Deal with Environmental Change including Development of Information and Communication Technology, and prepare government ordinances and Cabinet Office ordinances required to deal with virtual currency and technological innovation as a result of IT development.
 - To strengthen international competitiveness of Japan's financial business, the Government will discuss issues related to FinTech and measures for them at the "Panel of Experts on FinTech Start-ups" and promote cooperation and integration of human resources from various fields as well as formation of a network with people from financial and IT industries in order to develop a FinTech ecosystem.
 - To promote development of environment to strengthen cooperation between financial institutions and financial IT companies, the Government will continue to discuss issues related to financial systems in the Financial System Council in light of further development of FinTech from the perspectives of promotion of innovation, user protection, fraud prevention, and ensuring of system security. In so doing, the Government will also discuss how the legal system should be in terms of the relationship between FinTech companies and financial institutions while getting the measure of future development of their cooperation and taking into account the relationship with the current bank agency service system.
 - To develop regulatory and system environment promoting innovation, the Government will provide new legal status to settlement agencies which have high technological capabilities and reliability in credit card business and take necessary legal measures to improve convenience of internet transactions by leveraging their original IT technologies.
- j) Promotion of big data utilization through the spread of cashless transactions
 - By accurately understanding the needs of increasingly diversified domestic consumers and foreign visitors to Japan through utilization of big data, the Government will aim to contribute to development of excellent products and services, provision of attractive tourism, and further stimulation of consumption by foreign visitors. To this end, the Government will make the following efforts.
 - ➤ The Government will promote necessary data standardization related to credit card settlement and purchasing information sometime this year.
 - As the Act on the Protection of Personal Information which was revised last year will come into force, the Government will promote development of rules concerning data anonymization at

- relevant trade associations in consideration of privacy.
- ➤ By using IT (non-contact electronic tags which can instantaneously read multiple pieces of tag data), the Government will develop environment to collect and utilize a variety of data obtained in supply chains.
- The Government will statistically analyze big data, and discuss its contribution to various statistics and surveys and its political use for the "Regional Economy Society Analyzing System (RESAS)".
- To promote development of environment where credit cards can be used safely, the Government will encourage smooth implementation of the "action plan" developed by companies related to credit card transactions and take necessary legal measures. [Discussed later.] (To be detailed in "II-2. System reform towards future investment".)

k) Realization of IoT-based hospitality services

- To realize "*Omotenashi* (hospitality)" which enables solo foreign tourists to walk around and enjoy comfortable stay, the Government will conduct demonstration projects for realizing various advanced services and settlement environment through utilization of attribute information obtained by IoT and cloud technology as well as cooperation among businesses, and will aim for their practical use by 2020.

< Related to business fields of C to C: Promotion of sharing economy>

- To develop sound sharing economy, new economic activities using idle properties, based on innovative IT development, the Government will establish a council to hear from parties concerned, and will aim to put together necessary measures this fall. In so doing, to ensure safety of consumers while promoting innovation and creation of new business, the Government will discuss mutual evaluation systems between service providers and users and voluntary development of rules by private organizations in light of related existing laws and regulations, as needed.

ii) Development of environment to support the fourth industrial revolution [1] Development of environment towards promotion of data utilization

For thorough data utilization, a key for Japan to deal with the fourth industrial revolution, leverage its potential and increase its competitiveness at an accelerated pace, development of appropriate environment is of vital importance. To this end, the Government will eliminate silos and drive an integrated rule development effort especially for development of data platforms which enable cross-business, cross-organizational data collection and analysis, utilization of personal data, and formation of a safe and sound data distribution market.

- With regard to data platforms, the Government will clarify fields for competition and cooperation based on Japan's strengths, and will promote development of demonstration environment, systems and rules, and international standardization efforts so that the public and private sectors could work together for data collection, and that companies could share and utilize such data. As well, for creation of a data distribution market, relevant ministries and agencies will cooperate and smoothly start discussion on who will have rights and/or responsibilities among those who exchange data, and clarification of transaction rules, thereby encouraging prompt subsequent efforts.
- With regard to personal data, the Personal Information Protection Commission will develop general-purpose guidelines which will apply across all business fields regarding handling of personal information as well as necessary rules concerning handling of anonymized information sometime this year. As well, the relevant ministries and agencies will work together and discuss identification and scheduling of areas, where data utilization is expected in a separate manner and appropriate environment needs to be developed, based on information obtained through specific data utilization projects, then will arrive at conclusion by the end of this year. Based on the enactment of the Act on the Arrangement of Related Acts to Contribute to Creation of New Industries and Realization of Revitalized Economy and Society and Rich Lives of the People through Appropriate and Effective Use of Personal Information Held by Administrative Organs (Act No. 51 of 2016) (the Act for the Amendment for the Act on the Protection of Personal Information Held by Administrative Organs), the Government will provide cooperation to local governments, if they discuss revision of measures concerning protection of personal information in future, by providing necessary information to contribute to facilitating their deliberation.
- To promote safe and secure utilization of personal data whose traffic is on the rise in the era of IoT and AI, the Government will put together ideas on mechanism of personal involvement in data distribution, sound transaction market, and structure for individuals to use their own information for themselves or society by providing it to trusted entities, from aspects of technology and systems by the end of this year.
- The Government will ensure a necessary system is in place for the Personal Information Protection Commission, which was launched in January this year, from the perspectives of promotion of data utilization and development of environment for international data distribution.

[2] Promotion of speedy business renewal

- a) Promotion of business renewal and facilitation of business reconstruction in light of the fourth industrial revolution
- As business models change increasingly faster, the Government will discuss necessary measures to accelerate research and development to produce innovation, strategic investment in tangible and intangible assets to win global competitions, and business reconstruction based on

management strategies even faster by looking into the future, and will come to a conclusion including whether institutional measures are necessary by the end of this year. Then, the Government will take necessary measures with possibilities of introducing related bills early on, say, in the next ordinary session of the Diet.

- b) Development of financial and capital markets compatible with the fourth industrial revolution
- In the era of the fourth industrial revolution where sources of added value change intermittently depending on how data are used, open innovation and smooth replacement of business fields are gaining their importance. Under such circumstances, the Government will promote constructive dialogue between companies and investors/ shareholders in order to secure fairness and transparency in financial and capital markets, promote supply of growth funds, and make sure that the management and board of directors of companies could effectively fulfill their roles and responsibilities by successfully dealing with a change in management environment. As well, while discussing how to revitalize equity investment to promote innovation, the Government will encourage implementation of high-quality financial intermediation functions which will contribute to solutions of industries and businesses through financing based on business assessment and supporting core business. [Discussed later.] (To be detailed in "II-2. System reform towards future investment".)
- c) Promotion of strategies for intellectual property and standardization to win through in the fourth industrial revolution
- With easier collection, processing, and transmission of information at less cost, increasingly diversified use of information including copyrighted materials, and the advent of creation by AI, new challenges in systems have surfaced, that is, how intellectual property including copyright should be protected. By analyzing such challenges, the Government will aim for an early legal reform, possibly in the next ordinary session of the Diet, on provisions of the Copyright Act which flexibly limit rights to realize a next-generation intellectual property system compatible with the fourth industrial revolution, for which the Government will start detailed discussion on resulting effects and impact and take necessary measures. [Discussed later.] (To be detailed in "III-1. Enhancement of capabilities to create innovation ventures".)
- In the fields of social systems related to the fourth generation industrial revolution, and advanced technology where international technological competition grows increasingly severe, the Government will further promote international standardization of the country's excellent technology in light of increased efforts by its counterparts in Europe, US, China, and South Korea for the same purpose. As well, the Government will take the initiative in developing a system to promote international standardization by the end of this year. The new system will take on

planning and process management concerning projects for National Research and Development Agencies including the National Institute of Advanced Industrial Science and Technology (AIST). [Discussed later.] (To be detailed in "III-1. Enhancement of capabilities to create innovation ventures".)

- d) Accurate assessment of actual condition and strict law enforcement to ensure fair and free competition
- As the fourth generation industrial revolution progresses where advance in digital technology and the advent of new business models are drastically changing industrial structure including market power, relevant ministries and agencies will work together and conduct a survey to learn the realities of transactions in the digital market in order to ensure fair and free competitive environment in the market and promote innovation. As well, the Government will enforce relevant laws strictly and properly if it finds that businesses with market power are violating the Antimonopoly Act by inspecting whether they are not preventing fair and free competition in the digital market in light of change in economic environment and the market.

[3] Establishment of a system to develop and train human resources supporting the fourth industrial revolution

- Based on the "General initiatives for developing human resources geared at the fourth industrial revolution" announced on April 19 this year, the Government will create a system to develop and train human resources supporting the fourth industrial revolution, which has three layers: 1) development of top-level IT talent, 2) development of data scientists at universities, graduate schools, and technical colleges, and 3) IT training at elementary and secondary education to develop information literacy including programing capabilities. [Discussed later.] (To be detailed in "III-2. Development and securing of human resources through a multifaceted approach".)
- Based on the outlook of industry structure and employment structure produced by the fourth industrial revolution, the Government will hold a meeting of the "Council on Promotion of Human Resource Development for the Fourth Industrial Revolution" which examines skills and jobs/ types of work related to IT and data required in each industry, and uses the result for implementation of industry policy, employment/labor policy, and education policy, during this year. To this end, the Government will ask for participation in the Council and cooperation for implementation of specific measures from a variety of organizations, including relevant ministries and agencies, industrial circles, labor circles, and educational institutions, and will carry out specific consideration. [Discussed later.] (To be detailed in "III-2. Development and securing of human resources through a multi-faceted approach".)

[4] Influence of the fourth industrial revolution through promotion of IT/ robot utilization at mid-ranking companies and SMEs

- To accelerate investment by mid-ranking companies and SMEs in robots especially in the fields of manufacturing and services, the Government will realize cost reduction of more than 20% for small general-purpose robots and their installation, thereby accelerating introduction of robots to mid-ranking companies and SMEs. To this end, the Government will promote development of platform robots equipped with fundamental functions commonly exercisable in general tasks and procedures, while clarifying steps to adopt robots. As well, the Government will double human resources to support development and introduction of robot-based systems (system integrators) in five years (from current 15,000 to 30,000 in 2020).
- Coupled with such efforts, the Government will employ specialists of IT, Kaizen activities, and robot introduction to support more than 10,000 midranking companies and SMEs in the next two years in order to drive the fourth industrial revolution as a nation. In so doing, this year, the Government will also launch an effort to develop bases where midranking companies and SMEs can consult "Smart manufacturing assistance group" which supports Kaizen activities on their production sites and their introduction of IoT and robots.
- In addition, the Government will promote IT investment and labor-saving investment according to the business condition of each company including microenterprises' efforts to develop online sales channels, development of new products and services by SMEs and microenterprises from utilization of IoT and big data as well as facilitation of business cooperation across different industries.

[5] Structural change of IT industry to deal with the fourth industrial revolution

- Many companies in Japan's IT industry are oriented to contract development and operation of a business system, and still mired in one hundred percent subcontracting and multi-level subcontracting. In addition, IT engineers are mainly evaluated on work hours, thereby forced into long work hours, where it is hard to expect development of creative and promising talent. To get the IT industry out of such circumstances, the Government will set up a conference where people from Ministry of Economy, Trade and Industry [METI], Ministry of Health, Labour and Welfare [MHLW], IT industry associations, employer's associations, and labor unions to meet and share the actual condition of multi-level subcontracting structure and long work hours. The Government, then, will discuss improvement plans and make request to industrial circles accordingly. As well, the Government will improve skill standards to evaluate IT professionals compatible with the fourth industrial revolution.

[6] Ensuring of cybersecurity and IT utilization

- a) Ensuring of cybersecurity
 - In the era of IoT where everything will be connected to the internet, development of measures for cybersecurity is not "cost" but "investment in future" to support people's lives and smooth economic activities by businesses. From this perspective, the Government will promote efforts to turn cybersecurity into a growth industry. At the same time, the Government will drive efforts for development of human resources, measures for governmental agencies and key infrastructures, IoT-system measures, research and development, establishment of international rules in public-private partnership based on the Cyber Security Strategy (decided by the Cabinet on September 4, 2015) and the revised Basic Act on Cybersecurity enacted this year.
- With regard to human resources development, the Government will proceed with discussion in accordance with the "Comprehensive policy for enhancing cybersecurity human resources development" (decided by the Cyber Security Strategy Headquarters on March 31, 2016). In so doing, the Government will stimulate demand for human resources through developing intermediary talent required for promotion of corporate security measures, and raising awareness at the management level. As well, the Government will promote efforts to supply human resources through cooperation among industry, academia, and government in providing education and exercise, and establishing certification. The efforts include establishing a clear vision defining talent required in future and aim for more than 30,000 registered IT Security Support Providers by 2020. The Government will discuss efforts to link such measures for demand and supply of human resources to create a virtuous cycle, and incorporate them into the human resources development program of the next phase which is to be developed and announced sometime this year. As well, the Government will work towards radical enhancement of control tower functions of relevant ministries and agencies, ensuring and development of bridging security/ IT talent (department-trained experts), and reinforcement of human resources at relevant agencies.
- With regard to protection of key infrastructures, the Government will follow the "Roadmap towards revision of the third action plan concerning data security measures of key infrastructures" (decided by the Cyber Security Strategy Headquarters on March 31, 2016), and discuss "System enhancement against cyber-attacks," which covers enhancement of the management's efforts, information sharing, and internal control, as well as ensuring of security concerning operation of the My Number system; "Revision of protected area concerning key infrastructures," including revision of the range of information shared; and "Enhancement of cooperation among a variety of parties concerned," including human resource development through international cooperation, and partnership among industry, academia, and government. The Government, then, will reach a conclusion on revision of action plans by the end of this fiscal year. Still more, the Government will appropriately handle issues which

need to be addressed immediately without waiting for the revision of action plans. In particular, the Government will establish a system to develop security human resources and technology in key infrastructures and industries through cooperation among industry, academia, and government sometime next year in light of the 2020 Tokyo Olympic and Paralympic Games.

- b) Promotion of IT and the My Number system utilization (Promotion of IT utilization in administrative procedures and private sector transactions)
- With regard to the "complete enumeration of all procedures based on laws and regulations" (so-called complete survey), the National Strategy Office of Information and Communication Technology, Cabinet Secretariat (hereinafter, referred to as "ICT National Strategy Office") will release surveys and the state of response of relevant ministries and agencies in June this year, and then will study the results while the ministries and agencies will discuss future policies.

Based on the state of development of plans by relevant ministries and agencies to review administrative procedures and systems in accordance with the "Basic guidelines concerning IT utilization" (decided by the IT Strategic Headquarters on June 30, 2015), the ICT National Strategy Office will work with them to identify procedures deemed appropriate for earlier IT introduction than others from the perspective of private sector needs, decide the dates of introduction, and organize necessary legal and other measures by the end of this year.

For other administrative procedures as well, the ICT National Strategy Office will interview relevant ministries and agencies to find out necessary conditions for introduction of IT utilization, and inspect them based on technological innovation and private sector needs. The ministries and agencies, then, will incorporate the inspection results into the review plans which are to be developed by the end of December every year.

(Further promotion of a shift to IT and BRP in the central and local governments)

- With regard to operations and systems of the national administrative agencies, the Government will work on reducing cost of information system operation, and improving administrative services and operation efficiency to increase public convenience and public value. To this end, the Government will promote a shift to online digital service systems in the fields of Hello Work (public job placement offices), pension, national tax, registration and incorporation. As well, by taking advantage of the introduction of corporate ID numbers, the Government will promote cross-ministerial efforts to develop business-friendly environment. For this purpose, the Government will review procedures to realize simpler and faster services by removing the need of attaching certificate of registered matters which are currently required in various procedures

- when starting a business, as well as promoting use of online procedures. The new procedures will be included in the registration information system at the time of its renewal in FY2018.
- To make use of knowledge gained from past efforts by one local government in activities of others, the Government will discuss a new system to provide opportunities where central and local governments can exchange information and views, and will put together an idea by the end of this fiscal year from the perspective of promoting local governments' shift to IT and implementation of BPR.
- The Government will organize and classify results of deliberation and analysis of actual cases of "local government cloud computing services", and provide the outcome and advice to other local governments to contribute to their efforts in introducing cloud computing services in future. Through such efforts, the Government will aim to double the number of municipalities which have introduced cloud computing services, especially, "local government cloud computing services" to approximately 1,000 by the next fiscal year.
- The Government will aim to reduce the cost of relevant information systems in organizations that have not yet implemented local government cloud computing services by accelerating efforts to introduce those services while improving the sharing and standardization of operations. In addition, even if local government organizations have already implemented those services, efforts will be made to further improve the quality of local government cloud computing services such as by expanding the range of cloud operations through further improving the sharing and standardization of operations. As the national level "Roadmap for Reform of Government Information Systems" progresses, reform of local government information systems will also be promoted. Through such efforts, the Government will aim to reduce operation cost of information systems of local governments (by 30%).

(Promoting use of My Number cards and My Number Portal Sites)
With regard to the My Number system, launched this January, the
Government will give priority to winning the public trust through steady
issuance of My Number cards. The Government will also prepare for full
scale operation of My Number Portal Sites scheduled to be launched in July
next year while discussing ways to promote use of My Number cards and
My Number Portal Sites aimed at improving convenience of people's lives.

- To lighten the burden of childcare, the Government will realize a one-stop online service based on the My Number system and My Number cards for registration related to pregnancy, childbirth, childcare, etc. as early as July next year. The service will be available for those who wish to use it and will save them from having to visit or send documents to local governments. To this end, the Government will discuss realization of the service while taking it account requirements of existing laws.
- The Government will deliberate on how information should be shared to assess the state of evacuation more effectively by using the My Number

- system and My Number cards, at the time of a natural disaster or following assistance for recovery of sufferers' livelihood, and will establish relevant policies by the end of this fiscal year.
- The Government will carry out consideration on various accessing methods and institutional measures to realize certification of authority in transactions between corporations based on the public personal authentication service in order to make it possible for persons delegated by the presidents of companies to draw up and submit electronic contracts, etc. by using My Number cards without documentation or meeting face-to-face. The Government, then, will submit relevant bills to the Diet as early as possible. Coupled with this, the Government will put into practice simplified procurement procedures based on My Number cards and corporate ID numbers from this fiscal year.
- The Government will make efforts to reduce cost concerning collection of corporation-related information by using corporate ID numbers, simplify various procedures for tax services and social security required when starting a business, and revitalize private businesses and make administrative affairs more efficient through implementation of an online one-stop procedure. Coupled with this, the Government will start making corporate information accompanied by corporate ID numbers accessible from January this year and launch "Corporation Portal (tentative name)" for operation next January.
- The Government will start deliberation on the following items including their pros and cons, and will put them into practice beginning from whatever is ready: continued use of an electronic certificate for a user certificate after one has moved out of Japan; increased information printed on the surface of a card including one's maiden name; utilization of My Number cards' My Key part (including public personal authentication functions) for access to public facilities, and effective and efficient use of local governments' point systems based on local governments' cloud computing services; and promotion of application of such points to local shopping streets.
- c) Promotion of open data in central and local governments

To realize open data for solutions, the Government will make efforts based on "Open Data 2.0" (decided by the IT Strategic Headquarters on May 20, 2016) while taking into account enhancement of Japan's industrial competitiveness and improvement of convenience of people's living. Around this summer, the Government will establish specific targets for the period of intensive initiatives by 2020 in focused areas including realization of the Dynamic Engagement of All Citizens. In so doing, the Government will work to increase machine-readable forms of data and content in other languages. Coupled with this, the Government will promote voluntary efforts by local governments based on their respective local characteristics as well as efforts in areas where they can work with private companies such as disaster prevention.

[7] Development of information and communication environment to support the fourth generation industrial revolution

- a) Promotion of competition in the field of mobile communications
- Based on the rule improvement on connection of mobile communication networks in the revised Telecommunications Business Act, enacted last year, the Government will improve competition environment in the mobile market by working toward liberalization of various functions including member management functions and popularization of MVNO by promoting discussion among companies concerning further enhancement of convenience of MVNO services. As well, the Government will promote foreign visitors' use of SIM cards issued in Japan and improve user environment in the mobile market.
- b) Advance in the information and communication infrastructure and securing of frequency bands to offer IoT services
- To advance networks for development of the information and communication infrastructure by 2020 to support data traffic in the era of IoT, the Government will conduct development and demonstration experiments in the next fiscal year to put optimum control technology into practical use to realize fast and effective connection of a huge number of IoT devices to networks by leveraging software and virtual technology. As well, the Government will discuss clarification of skills required for network operation and management based on these technologies, and how relevant certification should be. In addition, the Government will promote decentralization of data centers and research and development towards realization of ad hoc wireless networks. As well, the Government will develop systems required for introduction of exclusive numbers for M2M services, etc. to advance mobile networks sometime this year while making inspection every year to find out the progress of major mobile phone carriers' efforts to launch IPv6 services for smartphone users by the end of next year.
- In order to deal with new needs created by IoT and the Tokyo Olympic and Paralympic Games, the Government will promote frequency reallocation implementation and frequency sharing by multiple wireless systems as well as research, development, and tests for technologies to use frequency in an advanced and effective manner, and will secure frequency bands accordingly. In addition, based on the results of research and development, the Government will carry out advanced implementation of comprehensive demonstration of the fifth generation of mobile telecommunications technology (5G) from next fiscal year in places including provincial cities while preparing systems including development of technology standards aimed at a service launch around 2020.
- In order to realize Wi-Fi environment which is easy for foreign visitors to use at the time of travelling and a natural disaster, the Government will promote development of free Wi-Fi environment in priority locations in major sightseeing and disaster prevention bases (estimated 29,000

locations (*1)) by 2020 based on the national improvement project to be developed by the end of this year (*2). As well, with the "Council for promoting the development of free public wireless LAN," the Government will promote effective utilization of existing Wi-Fi access points by 2018, thereby developing systems of authentication cooperation to enable seamless Wi-Fi connection across different carriers in more than 200,000 locations.

(*1 Number of locations is subject to further examination in future.) (*2 The improvement project will be revised every fiscal year.)

c) Promotion of 4K and 8K

Aiming for approximately 50% of households in the country to watch through 4K/8K in 2020, the Government will promote the specifications by starting practical satellite broadcast based on them in 2018.

2. Toward a world leading healthcare country

(1) Progress in achieving KPIs

- < KPI> Extend the nation's healthy life expectancy by one year or more by 2020.
 - [70.42 years old for males and 73.62 years old for females (2010)]
 - \Rightarrow 2013: 71.19 years old for males and 74.21 years old for females
- <KPI> By 2020, reduce the number of citizens with metabolic syndrome (those subject to specific health guidance) by 25% from FY2008 [14 million (FY2008)].
 - \Rightarrow FY2013: Down by approx. 16.0% from FY2008
- <KPI> Eliminate the assessment lag of pharmaceuticals and medical devices to "zero" by 2020.
 - [Pharmaceuticals: 1 month, medical devices: 2 months (in FY2011)]
 - \Rightarrow FY2013: Drugs 0.1 year, medical devices 0 year

(2) Specific new measures to be taken

As the fundamental development of system design for health and preventive incentives for individuals, insurers, and employers progresses, new business is developing for health and disease prevention. The Government will make new efforts to lead this development to changing behavior of individuals for health enhancement as well as establishment of sustainable business models. In addition, the Government will not only aim for promotion of health by services outside public insurance, but, by leveraging technological innovation including ICT, robots, AI, and genome analysis, improvement of quality and productivity of medical and nursing services, and quality of people's lives, development and commercialization of innovative medical supplies and devices, and realization of the world leading healthcare country, thereby penetrating into the global market.

i) Promotion of use of services outside public insurance

[1] Development of frameworks involving medical and nursing service providers

The Government will develop frameworks where people involved in medical and nursing services and private businesses work together to provide services so that services outside public insurance could lead to specific change in individuals' behavior including lifestyle improvement through following health checkups and involvement of doctors, pharmacists, public health nurses, and national registered dietitians, and that services for care prevention and assisted living outside public insurance could be utilized as part of integrated communitycare systems. To this end, under the Headquarters for Healthcare Policy, METI and MHLW, in cooperation of medical service providers and private trade associations, will put together basic ideas for development of such frameworks. At the same time, from

relevant fields, the Government will identify fields where private businesses are expected to make substantial contribution while developing guidelines declaring joint development of sustainable models by the end of this fiscal year. Upon development of the guidelines, in order to facilitate local efforts, the Government will put together the ideas on, for example, the appropriate division of roles of private businesses, insurers, local governments, and medical institutions, in cases where seamless services need to be provided for those who have not undergone health checkups at the Next-Generation Healthcare Industry Council in cooperation with those concerned. Based on the guidelines, the Government will use local versions of the Next-Generation Health Care Industry Council and conduct demonstration projects for establishment of a model case from next fiscal year. The model case, where medical and nursing service providers and service providers outside public insurance work together in the same community to provide services, will be rolled out to other regions.

[2] Creation, development, and visualization of a market for non-insured services to support nursing care

The Government will create and develop a market for services not covered by insurance in the field of nursing care such as prevention of nursing care and dementia, assisted living and watching, and nursing meals, thereby providing the elderly more options which help them continue their lifestyles in their communities. In order to make sure that users, their families, local governments, care managers, and other parties concerned can appropriately access information on various services available in their community, the Government will supportlocal governments to promote their efforts to hold information and trial sessions on local non-insured services for care managers and the elderly in cooperation with the Chambers of Commerce and Industry and others. In addition, the Government will take advantage of networks of medical and nursing service providers and make efforts for spreading nursing food sometime this fiscal year.

As well, to help local governments and private businesses work together in their communities, the Government will use "Case studies of services outside public nursing insurance towards development of integrated community care systems (Guidebook for utilization of non-insured services)" (developed by MHLW, METI, and the Ministry of Agriculture, Forestry and Fisheries on March 31, 2016), thereby spreading knowhow while promoting to local governments the importance of utilizing private businesses as service providers.

[3] Development of a market for high-quality services based on evidence

To grow sound healthcare industry, the Government will develop systems to weed out products and services of a low evidence level from the market. With regard to healthcare services including exercise, the Government will promote certification systems for active leisure programs and health tourism while working together with public research institutions to start discussing ideal forms of data collection, accumulation, and evaluation contributing to

ensuring of service equality in order to develop the industry based on objective evidence. The Government then will start making specific efforts accordingly sometime next fiscal year and publicize the results. As for the health-related food market, the Government will build foundations to utilize big data covering food ingredients and information on dietary habits, thereby helping development of dietary support services according to individuals' lifestyles.

With regard to measures to make use of efforts in these fields in a comprehensive manner in the field of healthcare, the Government will discuss systems (for example a database of healthcare services on websites) where healthcare service providers register their information so that users could obtain information on service quality. The results of discussion will be developed into policies by the Next-Generation Health Care Industry Council by summer next year.

[4] Development of environment for voluntary creation of a new industry of extending healthy life expectancy

The Government will develop environment to facilitate sustainable and voluntary creation of an industry of extending healthy life expectancy. For this purpose, the Government will use the System to Remove Gray Zone Area of the Industrial Competitiveness Enhancement Act and clarify the scope of relevant laws' application in the fields of healthcare and medical services while organizing and publicizing cases of removal of gray zone area, in consideration of safety and public health, to be used as reference by new businesses expected to face the same issues. As well, the Government will work with the Regional Economy Vitalization Corporation of Japan (REVIC), private trade associations, and other organizations and event organizers, and organically connect supply of funds (Local Healthcare Industry Support Funds, etc.) required to create new businesses, supply of human resources to support establishment of business, and public commendation of excellent cases thereby creating an ecosystem in the field of healthcare. In addition, the Government will promote creation of business based on local resources such as food/ agriculture, tourism, and sports while carrying out consideration for promotion of discovery of causes of diseases peculiar to seniors, fundamental research into aging control, and implementation of social impact bonds to encourage local governments' efforts to develop an industry of extending healthy life expectancy.

[5] Further enhanced efforts for health and productivity management and data health plans through strengthening insurers' functions

The Government will enhance efforts of companies and insurers for healthcare and disease prevention through health and productivity management and data health plans. With regard to health and productivity management, the Government will continue the Health & Productivity Stock Selection for quality improvement and the spread of the idea, and review the selection method while analyzing and studying the relationship

between efforts for health and productivity management in individual companies and their business performance from the perspective of business administration studies sometime this fiscal year. As well, through Nippon Kenko Kaigi (*Japan Health Council*), the Government will aim to increase the number of companies implementing health and productivity management to 500 by 2020. For SMEs, the Government will launch a certification system for excellent enterprises implementing health and productivity management this fall while discussing a new system in cooperation with private businesses sometime this fiscal year to provide incentives to certified companies in financial and labor markets. In addition, the Government will provide knowhow through efforts to spread Advisors for Health and Productivity Management.

As well, to accelerate national expansion of data health plans, the Government will help insurers with data collection/ analysis, and implementation of joint health guidance programs so that insurers could obtain sufficient volume of data to fully leverage their functions while aiming to enhance their functions through utilizing ICT and big data based on discussion on how examination and payment agencies should be in the era of ICT. As well, with regard to insurers' efforts on data health plans, to help them use private healthcare service providers and make effective efforts for healthcare and disease prevention of the insured, the Government will use the Private Business Utilization Working Group of MHLW to work toward increased utilization of private businesses by assessing the current condition and sorting problems, will reach some conclusion by the end of this fiscal year on specific measures such as sorting matters requiring attention when insurers choose private businesses, developing efficient methods to choose a company, and coming up with the way information should be disclosed to improve quality of companies, and will start implementing such measures from next fiscal year. In addition, the Government will roll out the "Trade Fair for Data health/ Preventive Healthcare Service," held for the first time last fiscal year, to multiple cities across the country this fiscal year, thereby accelerating and expanding its efforts to match insurers/local governments and private businesses.

ii) Improvement of quality and productivity of nursing care by using technology such as robots and sensors

While working towards halving documents including forms required by administrative services, the Government will further promote its efforts to support development of easy-to-use robots catering to on-site needs and to introduce technology such as robots and sensors in the nursing site. As well, to collect and analyze outcome data on improved productivity of nursing sites due to introduction of robots, etc., the Government will decide on fields for demonstration projects quickly, and put them into commercial use from this fiscal year. Based on the results of data collection and analysis, the Government will carry out discussion on institutional policies to provide appropriate evaluation to nursing services using robots, including discussion

on revision of care payments and standards of personnel allocation and facilities to lighten the burden of frontline nursing care providers, while taking into account the need of incentives to facilitate on-site innovation and creativity. The Government, then, will reach a conclusion sometime next fiscal year.

As well, the Government will promote standardization of data related to nursing services, operation analysis/standardization of nursing records by using ICT, spread of appropriate care management methods, and evaluation of service quality.

Through these efforts, the Government will promote improvement of nursing care services and enhanced service quality by encouraging appropriate nursing services which contribute to support for independence of the elderly, while aiming to improve productivity of nursing care thereby, lightening the burden of care workers.

iii) Thorough utilization of ICT in the fields of medical and nursing services [1] Introduction of ID in the field of medical services

Based on the "Report by the Study Group concerning Utilization of the ID Number System in Fields of Medical Services, etc." (summarized by the same Study Group on December 10, 2015), with regard to online qualification confirmation of medical insurance, and introduction of an ID number system in medical services, etc., the Government will discuss specific systems and actual practice sometime this fiscal year and implement steady system development from next fiscal year, with the aim of launching gradual operation and full-fledged operation of the system from FY2018 and FY2020, respectively. In so doing, the Government will promote development while ensuring that introduction will be made the way the public feels safe and convenient by utilizing infrastructure for online qualification confirmation such as public personal authentication and My Number cards. At the same time, the Government will promptly carry out discussion from the perspective of ensuring appropriate operation of publicly funded medical treatment, and take necessary measures as early as possible. In addition, the Government will promote efforts for thorough digitization and necessary standardization of data in the field of medical services.

[2] Utilization of big data for promotion of innovation, and application to the medical front and policies.

With regard to a national database related to the medical service field, the Government will steadily make efforts for long-term tracking of patients' data, coordination between databases of the Project for infrastructural development of Medical Information Database Network (MID-NET) and the Project for development of networks for collection of pediatric and pharmaceutical information, and promotion of private use thereof in accordance with the schedule summarized in the "Program for Utilizing Data in Health Care and Similar Fields" (developed by the Next-Generation Medical ICT Infrastructure Council on March 30, 2016).

As well, the Government will establish the "Agency Organization (tentative name)," new foundations to widely collect treatment and checkup data, and securely manage and anonymize them for safe use in order to promote research and development for drug design and treatment based on data from the medical service field while taking into account the relationship with existing laws. To this end, the Government will carry out discussion on systems concerning the "Agency Organization (tentative name)" at the Next-Generation Medical ICT Infrastructure Council, the results of which will be reflected in necessary legal measures to be implemented next year. In so doing, the Government will make sure that relevant ministries and agencies work together and discuss to create a system which both medical service providers and patients find beneficial, for example, a system to realize support for evidence-based consultation in the medical front by utilizing an enormous amount of data collected by the "Agency Organization (tentative name)."

In addition, the Government will use the Round Table for ICT Utilization Promotion in the Fields of Health and Medical Services to deliberate this fiscal year on ideal common infrastructures and platforms and how to realize them for medical information of next generation, where frontline workers in the medical service field will play a key role in developing an autonomous database valuable to patients, the public, and the medical front, in order to make the most of these infrastructures while aiming to provide patient- and the public-oriented medical services based on ICT, realize sustainable medical systems, conduct joint research and development, and create new services by academy, industry, and government. The Government, then, will take necessary measures through MHLW, etc.

[3] Integral use of individuals' medical- and health-related information

As new forms of information collection through wearable computers are available, advancing the ways medical- and health-related data are collected and managed, the Government will develop necessary environment in anticipation of creation of a new market for services including those for health management taking advantage of creativity of the private sectors. In order to realize provision of "individualized healthcare services" which cater to the needs of each single person, the Government will start by the end of this fiscal year a demonstration project which, under the consent of individuals, collects and analyzes medical practitioners' receipts for health insurance claim, and medical checkup information held by insurers and companies as well as health data which can be obtained regularly through wearable terminals, etc., and provides individual healthcare services. At the same time, the Government will roll out this project to SMEs and communities. As for reform to enhance medical insurers' incentives for preventive healthcare and health management, the Government will design it so that incentives would be given to preventive healthcare and health management based on ICT including efforts for the above demonstration project. As well, to develop

a system called Personal Health Record (PHR) to enable patients themselves to obtain their medical information over time in their life, the Government will take into account discussion at the Next-Generation Medical ICT Infrastructure Council and start a research into smooth data distribution and development of business operation models sometime this fiscal year. At the same time, to ensure that efforts to provide the various health management services will contribute to promotion of people's health and better life quality and will see sound development, the relevant ministries will carry out necessary discussion on mutual coordination of efforts and rules to be established under the direction of the Headquarters for Healthcare Policy.

To expand the regional medical information sharing network across the country, a goal to be achieved by FY2018, the Government will provide financial support for network creation in order to specialize and coordinate sick bed functions via the Fund for Comprehensive Securing of Regional Medical and Nursing Care, and utilize evaluation of ICT-based information sharing in remuneration for medical services while providing information on systems for developing mutually accessible networks and related knowhow sometime this fiscal year. In addition, the Government will discuss this fiscal year on development of a system to enable the severely mentally and physically handicapped, who highly need medical care, to receive reliable emergency medical care wherever they are in Japan.

iv) Development and commercialization of high-quality medical supplies and equipment originated in Japan, capture of a global market, and international contribution

[1] Promotion of research and development in the field of medical services

Through the Japan Agency for Medical Research and Development (AMED), launched on April 1 last year, the Government will provide integral management and support for seamless research from fundamental research to practical implementation, thereby promoting research and development to create Japan's original and innovative medical supplies and equipment. To be more specific, efforts will be accelerated and focused in each field including creation of medical supplies, development of medical equipment, bases for creating innovative medical technologies, regenerative medicine, personalized genome medical care, cancer, psychoneurologic diseases, emerging and re-emerging infectious diseases, and intractable diseases. For emerging and re-emerging infectious diseases, the Government will promote development of new vaccines, antimicrobial agents, and antiviral agents. As well, the Government will develop legal frameworks related to clinical research, and enhance systems of the Pharmaceuticals and Medical Devices Agency (PMDA) while promoting high-quality clinical research and tests of world standards.

In so doing, for a smoother handover of academic drug discovery to companies for development, the Government needs to enhance its support functions for development of new drugs based on companies' strategies.

More specifically, the Government will promote development of a system to provide private-public joint support according to the development phase of drug discovery seeds and a strategic system to grant intellectual property rights.

[2] Promotion of innovation through development of clinical innovation networks

The Government will promote development of "Clinical Innovation Networks," creating a network of disease registration systems developed by the National Research Center for Advanced and Specialized Medical Care (NC) and academic societies, thereby improving environment for efficient clinical development.

As well, to realize effective medical treatment taking advantage of advanced medical technique through early detection and treatment of diseases, individualized medical treatment taking into account differences among individual patients, and state-of-the-art technology such as regenerative medicine, the Government will provide support for system development to facilitate consultation based on AI, IoT, and highdefinition video technology realized by collaboration of medical institutions, companies, research institutions, etc., and will develop technique and systems to evaluate performance and safety, a key to such technologies upon implementation. In so doing, the Government will publicize the "Guidance related to application for approval of medical equipment programs" (announced on March 31 this year), which will apply to medical diagnosis support systems based on AI as well, thereby encouraging practical implementation while providing support for development of manufacturing technology for regenerative, cellular therapy and gene therapy products, and biopharmaceuticals, as well as early diagnosis technology.

In addition, the Pharmaceuticals and Medical Devices Agency (PMDA) will provide enhanced support for promotion of practical implementation through pharmaceutical affairs strategic consultation, and start making experimental efforts from this fiscal year for development of new indices and methods for drug efficacy assessment, based on data analysis using big data including results of clinical tests, establishment of guidelines, and development by companies based on the instructions. Then, the PMDA will establish the Regulatory Science Center in 2018 to go into full-scale efforts. Based on such efforts, the PMDA will aim to enhance safety measures through analysis of consultation data of MID-NET and disease registration information of NC, etc., and promotion of MID-NET use at companies and medical institutions.

[3] Realization of genome medical care with secured confidence, etc.

In the fields of cancer, intractable diseases, and rare diseases where practical application of genomic information to medical treatment is underway, the Government will promote development of a system to provide genome medical care involving medical institutions which have

advanced technologies related to genomic tests/ analyses, and reading, while discussing solutions for challenge of promoting new products and technologies using genome data for clinical treatment.

As well, to realize application of genetic examination business for consumers to promotion of health, the Government will endeavor for sound development of the business, by conducting quality and precision management on genetic tests, providing information based on scientific evidence, protecting personal information, and so forth.

[4] Development of an ecosystem involving companies from other industries and venture startups

To develop and commercialize high-quality medical equipment catering to the needs of the medical front, the Government will support entrants from other industries, and their development of product concepts, intellectual property strategies, human resources development, and sales channel development by making use of private funds while strengthening networks of the medical front, medical equipment developers, entrants from other industries, and local support agencies (networks to support medical equipment development). As well, the Government will work together with the medical frontline workers, and strengthen systems to pick up and analyze their needs effectively and efficiently. In so doing, to expand and develop local clusters, the Government will enhance its efforts to develop human resources, including those in SMEs working on innovation, who can create medical equipment while considering an exit strategy including insurance application and international expansion.

In addition, at an advisory panel related to promotion of ventures aiming for medical innovation, with regard to support for medical ventures from future visions and fundamental research to application for pharmaceutical approvals, the Government will discuss enhancement of research support for ventures, support for securing of human resources, enhancement of consultation support on pharmaceutical affairs and prices, and ensuring of venture support systems by MHLW, etc. Based on proposals obtained in the discussion, the Government will take support measures for medical ventures, thereby accelerating practical implementation of seeds for high-quality medical supplies discovered by universities and research institutions. By making such efforts, the Government will promote support according to the development phase of drug discovery seeds and technologies and accelerate innovation.

Through these efforts, the Government will develop an ecosystem for development of high-quality medical supplies and equipment, and contribute to extension of healthy life expectancy and improvement of medical treatment quality.

[5] Capture of a global market, and international contribution

To promote medical and nursing care and medical equipment originated in Japan in a global market, the Government will encourage development of medical equipment catering to the needs of countries and regions where it is used in terms of performance and a price level. As well, the Government will aim to make Japan the first country to propose a practical evaluation method concerning medical equipment, and promote it to be accepted and used as an international standard.

With regard to promotion of "outbound" international expansion among all the international development of medical and nursing care, the Government will utilize the Medical Excellence JAPAN (MEJ) and the Japan External Trade Organization (JETRO) and provide various supports such as support for establishment of local medical institutions (Japanese style medical bases) operated by Japanese medical institutions overseas, and support for sales channel development and project organization for effective medical and nursing services which also package human resources development and system development of individual countries as well as medical equipment and supplies. To further promote market development for medical equipment, the Government will promote development and enhancement of maintenance systems for medical devices.

With an aim to seize the initiative in rule development concerning international health by strengthening cooperation with international institutions in anticipation of regulatory preparation at various countries, the Government will work on establishment of a control tower for human resources strategies which takes charge of developing human resources for international health policies. At the same time, the Government will promote understanding of regulations and systems for Japan's medical supplies and equipment through training provided by the Asian Training Center for Pharmaceuticals and Medical Devices Regulatory Affairs of the PMDA, thereby developing environment for exportation of Japanese systems to other Asian countries. In addition, through cooperation with various international conferences and agencies, the Government will promote Japan's systems to the world and work towards other countries' employment of Japan's experience, expertise, and technologies when dealing with health issues.

Based on the "Basic Plan on Strengthening Countermeasures for Infectious Diseases that Pose a Threat to Global Society" (decided by the Meeting of the Ministerial Council on the Response to Infectious Diseases that Pose a Threat to Global Society on February 9, 2016), the Government will promote various measures such as developing frameworks of coordination and response by international agencies at the time of infectious disease crisis, support for the "Global Fund to Fight AIDS, Tuberculosis and Malaria" which provides financial assistance to the World Health Organization (WHO) and developing countries, establishment of systems to develop and delegate human resources, implementation of measures to provide medical supplies to developing countries in a comprehensive and effective manner, enhancement of systems and measures to control a crisis of a domestic infectious disease, enhancement of research capabilities and functions concerning infectious diseases, and international joint research. As well, based on the "National"

Action Plan on Antimicrobial Resistance (AMR)" (decided by the same Meeting on April 5, 2016), the Government will establish international common clinical assessment guidelines concerning drugs for treating AMR infectious diseases, and discuss measures to promote new drug development for AMR infectious diseases, which may involve implementation of new systems, and ways of handling in the field of animals. For new drug development including vaccines to deal with "Neglected Tropical Diseases (NTDs)" in developing countries, the Government will provide necessary support by leveraging excellent research and development capabilities of Japan's pharmaceutical industry.

In addition, as promotion of "inbound" tourism, the Government will create necessary environment to provide medical treatment to foreign visitors to Japan (for example, medical treatment provided to those visiting Japan for advance medical treatment as well as tourists).

Through these efforts, the Government will contribute to solutions to local challenges including improvement of health and medical standards of other countries while capturing a global market which is expanding especially in emerging nations.

v) Realization of "Business Alliances through a New Healthcare Corporation System"

The bill for "Partial Amendment to the Medical Service Act to Incorporate the Creation etc. of the 'Business Alliances through a New Healthcare Corporation System" (Act No. 74 of 2015), which enables integrated management of multiple medical corporations, etc., has passed. Ahead of its enforcement in April next year, to ensure the system's easy application, the Government will work on development of government and ministerial ordinance while providing information effectively so that there would be a variety of cases of better medical and nursing service cooperation in communities, optimum business operation of medical institutions, coordination with various healthcare services, and enhancement of research and development foundation for medical supplies and equipment. As well, with regard to spinoff of hospitals which want integral management with other hospitals but are currently attached to universities, the Government will aim for a smooth start to be made at the same time as the launch of the "Business Alliances through a New Healthcare Corporation System." To this end, the Government will conduct necessary regulatory reform sometime this year while making steady preparation in cooperation with relevant parties.

3. Promote proactive agriculture, forestry and fishery, as well as reinforce export

(1) Progress in achieving KPIs

<KPI> "Increase the ratio of farmland used by business farmers to 80% in the next 10 years (ending in 2023)." (48.7% as of the end of FY2013)

⇒End of FY2015: 52.3%

<RPI> "Reduce the cost of rice production by business farmers by 40% in the next 10 years (ending in 2023) compared with the current national average cost, including through efforts by industry on aspects of materials and distribution." (National average cost of rice production in 2011: ¥16,001/60kg)

⇒The cost of rice production by business farmers in 2014:

- ➤ Individual management* ¥11,558/60kg (28% reduction from ¥16,001/60kg)
- ➤ Incorporated organizational management** ¥11,885/60kg (26% reduction from ¥16,001/60kg)
- * Among certified farmers, individual management bodies in which agricultural income per agricultural worker from rice-farming is equivalent to income from other industries (with the cropping acreage of paddy rice no less than 15 ha)
- ** Incorporated organizational management bodies whose sales amount of rice is the highest

(Average cropping acreage of rice: about 27 ha)

- <KPI> "Increase the number of corporate farmers four-fold from the 2010 level to 50,000 in the next 10 years (ending in 2023)." (2010: 12,511 corporations)
 - **⇒** 2014: 15,300 corporations
- <KPI> "Expand the market size of agriculture based on collaboration among the primary, secondary and tertiary industries ("AFFrinnovation (sixth industrialization)") to \mathbb{1}0 trillion in 2020."

⇒FY2014: 5.1 trillion yen*

- * Total market size of seven areas which are expected to grow (processing and direct sale, export, interactions between cities and villages of agriculture, forestry and fishery etc.); it was compiled as the market size of "AFFrinnovation (sixth industrialization)" by the Council of Food, Agriculture and Rural Area Policies
- <KPI> "Increase the number of projects to promote collaboration among the primary, secondary and tertiary industries with regard to dairy farming to 500 by 2020." (2014: 236 projects)

⇒As of the end of April 20115: 284 projects

<KPI> "Increase the value of exports of agricultural, forestry and fishery products and foods to \(\frac{\pma}{1}\) trillion yen earlier than 2020, the initial target year." (2012: \(\frac{\pma}{4}449.7\) billion)"

⇒2015: ¥745.1 billion

(2) Specific new measures to be taken

To promote growth of community-based industries of agriculture, forestry and fisheries, their preservation and development as key industries, thereby improving income of those engaged in this sector, the Government has worked on promotion of rice policy reform and agricultural cooperative reform as well as consolidation of farmland through establishment of the Public Intermediate Organization for Farmland Consolidation based on the "Japan Revitalization Strategy." As a result, an unprecedented scale of operation with more than 100ha of farmland is developing, and the Government needs to accelerate this trend. As well, "aggressive measures for agriculture, forestry and fisheries industries" are becoming ever more critical because TPP, which will materialize a market of 800 million people, is a huge opportunity to these industries.

For this purpose, while steadily implementing reforms included in the "Japan Revitalization Strategy" and measures based on the "Comprehensive Policy Principles Related to TPP" (decided by the TPP Task Force on November 25, 2015), the Government needs to promote thorough efforts for productivity improvement by increasing sales and reducing a production cost and intermediary margin through collection and use of excellent expertise from production sites by taking advantage of cooperation among industrial circles, IT systems and big data.

Accordingly, efforts will be made in the following areas: i) Enhancement of production sites through development of management bodies, ii) Creation of a value chain through promotion of the "AFFrinnovation (sixth industrialization)", iii) Strengthening export capabilities to capture a global food market, iv) Development of forestry into a growth industry, and v) Development of fisheries into a growth industry.

i) Enhancement of production sites

[1] Strengthening the functions of the Public Corporation for Farmland Consolidation to Core Farmers through Renting and Subleasing (Farmland Bank)

Last fiscal year's results (of borrowing and subleasing) of the Public Corporation for Farmland Consolidation to Core Farmers through Renting and Subleasing (Farmland Bank) tripled from the first year (FY2014). To put the Corporation on track in all the prefectures, the Government needs to further promote improvement. To this end, the Government will take following measures.

- To improve the Corporation's performance, prefectural governors' strong leadership is indispensable. Aiming to increase prefectures' incentives for use of the Corporation, the Government will introduce a system to give consideration to prefectures with good results in various measures. To be more specific, the Government will promptly announce budget items covered by the system and a budget allocation policy according to business performance of the Corporation. At the same time the Government will take into

- account the Corporation's business performance and allocate budget, which is to be allocated after announcement of the Corporation's last year business performance, based on the said allocation policy. With regard to a system for considerate measures after that, the Government will review budget to be covered and ways of allocation as needed while examining effects of allocation.
- To promote discussion for greater farmland liquidity among farmers in the same community, while releasing farmland information efficiently, the Government will request the Corporation, etc. to develop a system of officials by further employing agricultural corporation owners and business owners, enhance local coordination activities including more cooperation with land improvement associations with a track record of expansion of farmland partitions, and agricultural committee members including those who promote optimization of farmland utilization, publicize measures for tougher taxation on unused farmland, and utilize measures for lighter taxation on farmland leased to the Corporation for consolidation purposes. The Government will find out and publish the status of implementation accordingly.
- Based on concerns that inheritance of farmland without registration is partially hindering the use of the Corporation, the Government will conduct a national survey to assess the situation, and discuss improvement measures including government-wide promotion of registration upon inheritance.
- The Government will further strengthen its development effort for greater farmland partitions in areas where farmland consolidation is underway by the Corporation. Through such effort, the Government will further promote land improvement projects. The Government will also push forward with the Japanese agricultural direct payment system while trying to improve profitability of hilly and mountainous areas, which have disadvantageous production conditions, according to the local characteristics.

[2] Steady implementation of rice policy reform

- Revitalization of paddy field farming competition requires environment that enables farmers to choose their crops based on their management decision. For this reason, the Government will properly implement the process for the reform of rice production adjustment program, aimed at rice to be produced in 2018. As well, in this process, the Government will review the past policy and examine a potentuial future policy that will encourage farmers to make further efforts and achieve self-sustaining management.
- With regard to rice, an KPI has been set up to improve productivity of rice as a staple diet and rice for feed, and the Government will make sure to achieve it through implementing PDCA cycles. With regard to feed rice, the Government will research and publish production cost by this fall as a prerequisite for PDCA cycle

implementation while promoting the production cost reduction manual, which was developed based on progressive approaches, and making sure that farmers are well informed on it.

[3] Development and securing of management bodies aiming to improve their productivity

- a) Development of farmers with business capabilities
 - The Government will provide and enhance learning opportunities for willing farmers through local governments, universities and private institutions so that farmers could study sales, finance, organizational management, and other necessary subjects for management, including by taking online courses, while continuing farming.

b) Enhancement of management bodies

- The Government will further promote incorporation of selfemployed farmers while supporting management improvement of corporations. To this end, the Government will push for prefectural efforts to further engage licensed tax accountants, Small and Medium Enterprise Management Consultants, and other business management professionals in the field of agriculture by holding networking events to put them in touch with people from agriculture, and organizing training workshops to promote knowhow sharing among business management professionals.
- Because it is technically and financially difficult for individual farming businesses to have their own research and development divisions, the Government will make sure that research results by universities and research organizations will be released the way they are accessible from farmers, and will establish a system to enable universities, research organizations, businesses, and farmers to work together and conduct development of advanced technologies and onsite demonstration based on clear development goals.

c) Securing of next-generation human resources

- To encourage the youth to become and remain as professional farmers in the long run, the Government will review the past measures and discuss new measures for investment in the rising generation.
- To promote involvement and entry by agriculture-related ventures providing new technologies and services which will lead to improvement of farmers' income, the Government will establish an award system.

d) Development of a safety net

- Regarding the introduction of income insurance for farmers conducting business management properly, which covers their whole agricultural income and functions as their safety net, the

- Government will consider its structure and relevant systems (e.g. an agricultural mutual relief system) while conducting a feasibility study. Consequently, the Government will take the necessary legislative action.
- To contribute to securing of employment for people who have given up farming due to the advent of large-scale farm management, the Government will create employment in rural areas by revising the Act on Promotion of Introduction of Industry into Agricultural Regions (Act no. 112 of 1971).

[4] Supply of necessary funds for growth

- To make it possible for management bodies to smoothly borrow money required in their growth stage without having to excessively rely on a personal guarantee, the Government will start from April next year inspection and evaluation on the state of implementation of financing based on business assessment, which Japan Finance Corporation has been working on in earnest since February this year, and the Government will make necessary improvement.
- Aiming to revitalize agricultural financing by private financial institutions, the Government will hold workshops for private financial institutions to promote their learning of agricultural knowledge and exchange with farmers, while strengthening cooperation between Japan Finance Corporation and private financial institutions, thereby promoting transferring of agricultural financing knowhow. Also, the Government will review the guarantee system so that the credit-guarantee system would be widely available to farmers when they borrow money from private financial institutions.
- In order to respond to efforts of motivated agricultural corporations aiming for development of large-scale operation, an upper limit of an investment ratio allowed to an investor in an investee will be raised through "Development program for investment in agricultural corporations,",.

[5] Accumulation and utilization of excellent expertise from production sites

- a) Cooperation with industrial circles
 - To improve productivity by leveraging knowledge from outside agriculture through increased cooperation between agricultural and industrial circles, the Government will promote joint development of cutting-edge model technologies with companies which have advanced technologies, and new products in cooperation with local Chambers of Commerce and Industry and Societies of Commerce and Industry.
 - To help agricultural corporations employ people with knowhow and experience from other industries and apply their knowledge to further business development, the Government will work together

with industrial circles to create a human resource matching system while discussing a practical human resource development program based on the actual condition in the field of agriculture in order to promote career development of employees.

- b) Revision of a price formation system for production materials With regard to agricultural production materials (agricultural machinery, fertilizers, feed, agricultural chemicals, etc.), the Government will develop a price formation system which will lead to improvement of farmers' income. To this end, the Government will discuss the following items and put together specific policies this fall.
 - Measures to enable farmers themselves to select and procure production materials at a lower price
 - Efforts of production material manufacturers to provide products catering to farmers' true needs and to reduce production cost
 - Efforts and measures to heat up competition among distributors in order to provide production materials at a lower price for farmers whether distributors are affiliated to agricultural cooperatives or commercial organization
 - Measures to ensure fair and free competition when seeking to develop procurement methods for inexpensive production materials
- c) Realization of Japanese Food Valley through collaboration of industries and universities
 - In the light of cases from Dutch Food Valley which came up with an innovative greenhouse production system which has strong international competitiveness, the Government will conduct Japan's original research and development through open innovation. To this end, the Government will use the "Council for cooperation among industry, academia, and government," established April this year, to conduct research under six themes including global expansion of Japanese food and food industry, creation of a health promotion industry, and creation of a new bio ingredient industry, and will bring promising research results for new business and products.
- d) Drastic productivity improvement through introduction of innovative technologies
 - To remove growth restrictions from labor shortage, the Government will promote use of a GPS-based automated driving assistance device, which enables inexperienced operators to drive a tractor as skillfully as seasoned drivers. To this end, the Government will promote joint technological development by manufacturers and universities to make products available at a markedly cheaper price than imported products by 2018 when a system of four quasi-zenith satellites will be put in place.
 - By employing night driving, multiple driving, and automated driving, the Government will put an automated tractor driving

- system to practical use. The system will use geospatial information (G-spatial information) including high-definition GPS information which will remove a scale limit of land-extensive farming under the current technical system. For this purpose, with regard to an unmanned system enabled in fields under a human surveillance system, the Government will assist industry-university joint research to make sure that products will be available by 2018 while developing guidelines for securing safety by the end of this fiscal year. As well, to realize an unmanned automated driving system through remote monitoring by 2020, which will be applied to cases including a trip between fields, the Government will develop relevant systems while promoting joint research even more.
- To encourage advance in IT systems, which are becoming popular in the field of agriculture, and utilization of big data, the Government will promote standardization of various names and specifications used in agricultural IT systems and will put them into practical use. For this purpose, based on the "Standardization" Roadmap concerning Agricultural Information Creation/ Distribution Promotion Strategies" (developed by the Agricultural Subcommittee of the Special Research Committee for Promotion of New Strategies, the IT Strategic Headquarters on March 31, 2016"), the Government will make efforts to roll out and promote across the country individual guidelines concerning names of farm work and environmental data items (the version for full-swing operation), developed last fiscal year, and a rule guide for standard use while developing individual guidelines concerning names of farm produce and an agricultural data exchange interface (the version for fullswing operation) this fiscal year.
- To make a rapid improvement in productivity by using AI and IoT, the Government will work on the "AI future agriculture creation project (tentative name)," thereby developing robots to reduce manual labor and make it more efficient, and conducting social experiments on distribution efficiency improvement through sharing.
- To promote sustainable farming through the spread of soil making technologies incorporating passed-down wisdom and scientific knowledge, and ensure that fine technical instructions are fully available to producers and production groups in order to cater to customer needs for organic crops, the Government will promote efforts for soil making provided by cooperation of external "soil making experts" and local promotion organizations.
- With regard to development of production infrastructure, the Government will promote introduction of labor-saving technologies for water management by use of ICT.
- e) Promotion of farming as a new industry in cities.
 - As the Basic Act on Urban Agricultural Promotion (Act No. 14 of

2015) is enforced, the Government will develop necessary legal systems to secure farmland, the place for new endeavor, and to encourage entry by new farmers and companies with venture spirit in order to promote new farming created from various fresh angles found only in cities. As well, to develop urban agriculture into a growth industry, the Government will discuss farming based on ICT.

ii) Creation of domestic value chains

[1] Realization of distribution and processing structure which enables stable transactions under conditions in favor of producers

To improve farmers' income, the Government will develop a system for establishing distribution and processing industry structure where producers can make stable transactions under favorable conditions. To this end, the Government will discuss the following matters, and develop specific measures this fall.

- Measures to create distribution structure where farmers are given various options to decide buyers and prices on their own
- Efforts by organizations related to agricultural cooperatives, various farmer groups and distributors, and wholesale markets to develop sales channels where farmers can sell farm produce at the highest price and increase their earnings
- Measures to make pricing and fees in various distribution channels easy to understand and reasonable from farmers' perspectives
- Measures to secure fair and free competition when promoting produce sales under favorable conditions to farmers

[2] Reform of raw milk production and distribution structure

It is necessary to deal with change in raw milk supply and demand structure after the introduction of the designated milk producer group system, and diversified consumer needs of recent years, and strengthen Japan's dairy farming infrastructure while further improving dairy farmers' income.

For this purpose, to evaluate and inspect various functions of the current designated milk producer groups and realize development of Japan's dairy farming and its immediate response to final consumers, the Government will discuss and reach a conclusion by this fall on pros and cons of the designated milk producer group system and who should be eligible for the current subsidy in order to implement radical reform aimed at improving added value through cultivating dairy farmers' business mindset, and making production and distribution more flexible.

[3] Promotion of collaboration among the primary, secondary and tertiary industries (AFFrinnovation (sixth industrialization))

- To ensure that the Agriculture, forestry and fisheries Fund corporation for Innovation, Value-chain and Expansion Japan (A-FIVE) appropriately performs its role as an incubator supporting growth of businesses in agriculture, forestry and fisheries through

making sufficient investment, the Government will discuss measures to provide direct support to agricultural corporations working on "AFFrinnovation (sixth industrialization)" without creating a separate corporation. As well, to realize speedy business operation, the Government will request greater on-site discretion on project examination and management while also asking for further utilization of direct investment by A-FIVE to make smooth project formation for "AFFrinnovation (sixth industrialization)" cutting across different prefectures. While checking on the results of such measures and assessing the progress, the Government will discuss further improvement of systems and operation including expansion of investment targets.

- The Government will promote efforts to overcome challenge which farmers face when they work on not only production but also processing and sales based on a market-oriented approach, by employing the help of experts from other industries who are familiar with the area concerned.

[4] Development of environment to leverage brand power

- The Government will discuss workable measures to introduce mandatory labelling of origin of ingredients in all processed foods so that businesses in agriculture, forestry and fisheries industries could leverage their own brand power and compete appropreately with both domestic and foreign competing producers, and that it could help secure opportunities for consumers to make an autonomous and rational choice of foods.
- With regard to agricultural, forestry and fishery products and foodstuffs with distinctive characteristics of their locality, the Government will promote registration of Geographical Indications (GI) based on the Act on Protection of the Names of Specific Agricultural, Forestry and Fishery Products and Foodstuffs (Act No. 84 of 2014). The Government will also support the protection of GI outside Japan by mutual GI protection with other countries, thereby advancing the "Made in Japan" brand overseas.
- The Government will radically strengthen a national movement for reduction of so-called food loss and waste, food still edible but disposed of, through cooperation among food businesses, consumers and public administration. As well, the Government will promote Food Bank activities which deliver unused food products, generated during production, distribution, and at home, to people and facilities in need.

[5] Preparation of measures for the 2020 Tokyo Olympic and Paralympic Games

- Aiming to utilize the 2020 Tokyo Olympic and Paralympic Games as an opportunity to promote Japanese food culture and Japanese foodstuffs at home and abroad, the Government will cooperate so

that the food procurement standards instituted by Tokyo Organizing Committee will be based on characteristics of Japanese agricultural and fishery production. In addition, as fundamental preparation, the Government will introduce GAP (Good Agricultural Practice) and HACCP (a management system in which food safety is addressed through the analysis and control hazards in the manufacturing process), and the spread and enlightenment of sustainable farming including organic farming. As well, with regard to GAP and HACCP, the Government will accelerate efforts for international standardization, starting to implement the certification system for internationally-acceptable standards during this fiscal year.

iii) Enhancement of export capabilities

The Government will strengthen export capabilities of Japan's agriculture, forestry and fisheries industries and expand sales channels of this sector's products and food to capture the world's food market expanding especially in Asia. To this end, the Government will provide support for efforts by willing businesses in agriculture, forestry and fisheries industries and food companies based on the "Strategy to strengthen the exports of agricultural, forestry and fishery products" (developed by the Headquarters on Creating Dynamism through Agriculture, Forestry and Fishery Industries and Local Communities on May 19, 2016), and will deal with regulations in other countries which cannot be addressed by the private sectors.

In particular, the Government will promptly start working on the following "seven actions" newly presented in the Strategy.

- 1) Send all the information related to export such as local needs, obtained from various routes including overseas diplomatic facilities, local offices abroad, relevant ministries and agencies, etc. to the Japan External Trade Organization (JETRO), and provide it to businesses in agriculture, forestry and fisheries industries and food companies through websites and email newsletters.
- 2) Promote quality of Japanese foodstuffs around the world by the following measures.
- Discuss systems to guarantee quality and characteristics of Japanese products by using Japan Agricultural Standards (JAS).
- Expand efforts to enable foreign travelers to experience agricultural, mountain and fishing villages and Japanese food and food culture through coordinated use of "inbound" tourism measures.
- Push Japanese foodstuffs including Japanese tea as part of Japanese culture and food culture.
- Develop and sell travel products under the themes of "Food" and "Farming".
- Use overseas diplomatic facilities and Japan House as promotion base for Japanese products and foodstuffs.
- 3) Make strategic sales and promotion of Japanese foodstuffs by the following measures.

- Plan and implement integral strategic promotion in the Strategic Planning Council under the Export Strategy Executive Committee through cooperation between public and private sectors while leveraging functions of JETRO.
- Develop a system of relay shipment and annual supply to establish the Japan Brand.
- Start developing the "National/ regional event calendar" from this summer which includes event information a year or longer later to enable removal of overlapping fairs and coordination between different events.
- Promote and develop transportation technologies to keep freshness which enable low-cost mass transportation.
- 4) Provide support for efforts of businesses in agriculture, forestry and fisheries industries to establish sales bases overseas by themselves and directly export perishables and primary-processed products as part of efforts to develop various sales channels.
- 5) Develop domestic wholesale markets into export bases by the following measures.
- Promote opening of wholesale market facilities to foreign buyers and exporters.
- Ease regulations so that foreign buyers and wholesalers could make direct transactions and that intermediate wholesalers, with request from foreign buyers, could directly trade with producers.
- Develop container yard for export on the premises of wholesale markets.
- 6) Establish the "Export regulation handling team (tentative name)" by this summer, which is comprised of staff from relevant ministries and agencies and aims to accelerate easing and removing restrictions of other countries concerning export including food safety, radioactive substances, quarantine, and customs formalities through negotiation supported by a wide variety of options found across Japan.
- 7) Simplify and accelerate domestic procedures related to export by the following measures.
- Expand the area where NACCS (Nippon Automated Cargo and Port Consolidated System, Inc.) can provide centralized processing of certificates by the end of this fiscal year.
- Provide flexible animal and plant quarantine services early morning, late night, Saturdays and Sundays, and national holidays in places other than major seaports and airports.

As well, the Government will promote the "National/ regional export expansion strategies" and "Directions of efforts for enhancing export capabilities by item" ("Two messages"), defined by the Strategy, through holding seminars across the country and using websites and SNS.

Through these efforts, the Government will set up new export targets for agriculture, forestry and fisheries products and food by this fall with an aim to achieve 1 trillion yen, the target for 2020, as early as possible.

iv) Transforming forestry into a growth industry [1] Creation of new wood demand

- The Government will promote construction of wooden buildings and wood use in public buildings, commercial buildings, and midto-high-rise buildings, such as the New National Stadium to be reconstructed for the 2020 Tokyo Olympic and Paralympic Games with much wood as a showcase of modern technology in wood use, in addition to houses. For this purpose, the Government will promote design and construction know-how which make actual worker such as home builders easy to practice, human resource development in wooden building, improving production systems of new wood products and further research and development including demonstration of aseismic performance, in addition to CLT (Cross Laminated Timber) as building materials based on the bulletin published by April this year in accordance with the Building Standards Act (Act No. 201 of 1950) to promote use of new wood products including CLT and wooden fireproof materials. Moreover the Government will study further measures to promote construction of wooden building and wood use in building which have not been used much wood yet, including review the "Act for Promotion of Use of Wood in Public Buildings (Act No 36 of 2010)".
- In addition, the Government will promote use of woody biomass, research and development for international standardization and commercialization of cellulose nanofiber (nanosized cellulose fibrils which are as strong as steel while weighing a fifth as much), and research and development of higher value added products using lignin, a component, which accounts for approximately 30% of wood.

[2] Building of a stable roundwood supply system

To improve the current small-scale and decentralized supply systems of domestic roundwood, and make stable, efficient large-lot supply possible, the Government will continue its promotional effort for identification of forest owners and forest boundaries, grasping forest information by using geospatial information (G-space information) and ICT, development of the networks of forest roads, the development and introduction of advanced forestry machinery, and planned forest development (including a shift to forests with less pollen aimed at realizing "Zero hay fever society"). In so doing, the Government will publicize and utilize the Act to Partially Amend the Forest Act (Act No. 44 of 2016), which requires local municipalities to establish forest land registers and has just made it legally possible to fell jointly owned forests even if whereabouts of some of co-owners are unknown, thereby accelerating consolidation of forestry practices. In addition, to enable large-scale sawmills and plywood mills to procure roundwood in large lots in a timely and appropriate manner, the Government will promote efforts to share

- information the way between suppliers (upstream sector) and distributors/ processors (midstream and downstream sector)directly.
- The Government will choose and selectively foster a dozen of model "districts for transforming forestry into a growth industry" across Japan, where businesses from upstream to downstream, especially sawmills, plywood mills, and facilities using woody biomass, are connected by a value chain, thereby realizing high profitability.

v) Development of fisheries into a growth industry

To develop fishing and aquaculture industries into sustainable and highly profitable operation systems as well as revive Japan's marine products industry through promotion of fishery processing and distribution and expansion of consumption, the Government will take the following measures.

- The Government will help fishing communities directly work with food companies, distributors, and the Chambers of Commerce and Industry, and adopt a market-oriented approach, thereby improving fishery operators' income and reducing cost. Through this measure, the Government will accelerate establishment of the "Fishing Village Revitalization Plans" which aim to implement structural reform of fisheries and fishing villages, and will achieve 600 cases of adoption, accounting for approximately 70% of a national fish haul, by the end of this fiscal year (from 551 cases as of the end of last fiscal year). As well, the Government will triple the target number of cases of adoption of "Wide-Area Fishing Village" Revitalization Plans," which aim for market integration and functional reorganization in wide areas and development of core supporters through cooperation of multiple fishing communities, and will aim for adoption in 170 communities and types of business by the end of next fiscal year.
- The Government will aim to further expand marine products export through advance in quality and sanitation control at base ports and promotion of HACCP compatibility at fishery processing facilities.
- To drive fishing industry's efforts for high-value added operation based on a market-oriented approach by using IT and connecting fishing districts and consumers, the Government will promote efforts for distribution based on consumers' needs.
- The Government will further promote sophistication of resource management and aim to stabilize and strengthen fishing business. To this end, among all resource management plans developed by voluntary efforts of fishery operators, the Government will pick 1,400 of them, whose 5th year ended during last fiscal year, and will complete revision and improvement based on evaluation and inspection by the end of this fiscal year. As well, to consider phased introduction of the Individual Quota scheme (IQ scheme) of fish catches in light of various actual conditions of Japan's fishing

- operation, the Government will make an interim assessment of the IQ verification test being conducted on chub mackerels during this fiscal year, and will put together improvement measures for the next fiscal year's verification test. In addition, the Government will start talks with fishery operators from this fiscal year for increase in types of fish, including Pacific cods, subject to the total allowable catch system based on the Act on Preservation and Control of Living Marine Resources (Act No. 77 of 1996).
- With regard to the aquaculture industry, the Government will lower the industry's dependence on natural resources for feed and seedlings, and realize more advantageous sales through cost reduction and year-round stable shipment. To this end, the Government will provide support with cost measures for assorted feed and measures for stable supply of live bait for aquaculture while promoting development and use of assorted feed with a lower rate of fish meal, including by using insects, as well as utilization of artificial seedlings through breeding of premium pedigree. As well, the Government will promote keeping production record, which could lead to further export.

4. Realization of Japan as a tourism-oriented country

(1) Progress in achieving KPIs

<KPI> "Increase the annual number of foreign visitors to Japan to 40 million in 2020 and 60 million in 2030."

⇒ 2015: 19.74 million (2012: 8.36 million)

<KPI> "Aim for foreign visitors to spend 8 trillion yen in 2020 and 15 trillion yen in 2030."

⇒ 2015: 3.4771 trillion yen (2012: 1.846 trillion yen)

(2) Specific new measures to be taken

The number of foreigners who visited Japan last year was 19.74 million and they spent 3.4771 trillion yen during their stay. These numbers have more than doubled and tripled respectively in the past three years.

Tourism is the ace in the hole for "regional revitalization," and a pillar of the Growth Strategy aiming to achieve GDP of 600 trillion yen. Therefore, the Government will promote the overall tourism with both "inbound tourism" and "domestic tourism" in light of its economic ripple effect over large areas, while spreading both Japanese and foreign tourists, who tend to concentrate in particular regions, across Japan.

For this purpose, the Government will raise the current targets, and add new targets as follows, and will develop tourism into one of Japan's key industries by aiming to achieve such targets and striving to make Japan a tourism-oriented country in a comprehensive and strategic manner.

- Number of foreign visitors to Japan:

40 million in 2020 and 60 million in 2030

- Consumption by foreign visitors to Japan:

8 trillion yen in 2020 and 15 trillion yen in 2030

- Total number of nights foreign tourists stay in regional areas:

70 million in 2020 and 130 million in 2030

- Number of foreign repeat tourists:

24 million in 2020 and 36 million in 2030

- Consumption by Japanese domestic tourists:

21 trillion yen in 2020 and 22 trillion yen in 2030

To this end, the Government needs to ensure that Japan's abundant and various tourism resources are well maintained by proud people and that their value is communicated to both Japanese and foreigners in a plain manner. As part of such efforts, the Government will open the State Guest House and other attractive public facilities to the public, promote regional efforts to attract tourists by leveraging local tourism resources including nature, farm products, food, traditional culture, and scenery, help develop sightseeing tour routes catering to the needs of foreign travelers including improvement on wide-area tourism excursion routes to meet world standards, and seek to further increase foreign tourists' spending through expanding consumption-tax-free stores.

Moreover, to create regional employment and develop human resources

through tourism and eventually develop Japan's tourism into a highly-productive and internationally-competitive industry, the Government will help establish and foster Japanese-style DMOs (Destination Management/ Marketing Organizations) across the country, and improve productivity of tourism by developing and reinforcing managerial talent for tourism and revising old regulations related to hotel business and tour guides licensed for guiding foreigners in Japan. In addition, to contribute to promotion of "sharing economy" which utilizes and shares idle properties effectively, the Government will develop rules related to accommodation services offered at private residences.

Furthermore, with regard to receiving environment including CIQ, accommodation facilities, communications, transportation, settlement, etc., the Government will utilize regional liaison committees established in March last year with an aim to enhance systems to accept foreign visitors to Japan, and will promptly take necessary measures to each of regional issues by clarifying the deadline to do so and the body in charge of implementation. As well, the Government will realize more comfortable travel by completing a "corridor for vitalizing local regions" which leverages high-speed transportation networks including the Shinkansen and expressways. In addition, the Government will promote efforts to smooth out tourism demand fluctuations by encouraging exercise of annual paid leave and staggered holidays.

Coupled with these measures, the Government will promote efforts to realize Japan as a tourism-oriented country based on the "Tourism Vision to Support the Future of Japan" (decided by the Council for the Development of a Tourism Vision to Support the Future of Japan on March 30, 2016), and the "Tourism Vision Realization Program 2016 (Action Program toward the Realization of Tourism Vision 2016)" (decided by the Ministerial Council on the Promotion of Japan as a Tourism-Oriented Country on May 13, 2016). As part of the efforts, particularly, the following specific measures need to be taken to achieve KPIs.

i) Creating the most appealing tourism resources that will serve for regional revitalization

[1] Opening highly-appealing public facilities/infrastructures to the public without hesitation

- Aiming at widely introducing historic and traditional facilities at home and abroad, State Guest House, Akasaka Palace is opened to the public since this April as long as it does not pose any problem on hospitality reception events. The government is planning to specially open Japan's best "hospitality" space to the public around the 1st quarter in this fiscal year as long as it does not pose any problem on hospitality reception events. By doing so, the government will start "special public opening" on a trial basis and widely introduce highly attractive facilities to make visitors experience such "hospitality" space.
- Based on the result of the trial public opening from April 28 to May 9, 2016, the government is planning to start public opening of Kyoto State Guest House on the full year basis around the late July as long as it does not pose any

problem on hospitality reception events. Paying due attentions to special public opening of State Guest House, Akasaka Palace, the government will actively examine feasibility of special public opening of Kyoto State Guest House as well.

• Policymakers will actively open to the public any other public facility if it yields value as tourism resources.

[2] Branding Japanese national parks as the world-class "national parks"

- Aiming at branding Japanese national parks as the world-class "national parks" and systematically and intensively carrying out multiple projects, such as employing private-sector's insights and funds under "National Park Full-Enjoyment Project" in order to launch/support high-quality plans enjoyable for foreign visitors, provide high-quality feeling at national parks and intensify information services bound for overseas markets, the government will start attracting more foreign tourists to national parks by developing "National Parks Step-up Program 2020 (tentative name)" for 5 national parks at first.
 - In addition to enhancing public relation efforts to spread out and promote ecotourism, the government will provide support to ecotourism promotion projects that will improve quality or encourage diverse use of regional natural tourism, such as fostering high-quality human resources with a wide variety of guidance techniques, developing highly-attractive programs that make use of high-quality natural landscapes, geoparks, spas or other natural resources, or coping with inbound tourists by fostering tour guides for foreign visitors.

[3] Encouraging utilization of cultural assets as tourism resources

• Aiming at putting more emphasis on "providing support to comprehensive utilization of local cultural assets," shifting away from traditional "preservation-oriented support" programs, the government will work on some 200 tourism spot projects, with focus on Japan Heritages and other cultural assets, and also work on approximately 1,000 projects by the year 2020, such as providing user-friendly multi language information services or wide-area regional cluster projects incorporating cultural assets, rather than simply utilizing cultural assets separately, in accordance with "Cultural Assets Utilization/Understanding Promotion Strategic Program 2020."

[4] Creating better tourist spots by preserving/utilizing highly-scenic tourism resources

• To develop landscape plans for major tourism spots around 2020, the government will encourage development of landscape plans nationwide and push ahead with creating highly-attractive tourism spots by preserving/utilizing highly-scenic tourism resources. Aiming at creating more appealing tourism spots, preserving historic streetscapes and revitalizing traditional festivals or other local cultures, policymakers will push ahead with eliminating utility poles mainly in priority areas as set forth in "Act on Maintenance and Improvement of Traditional Scenery in Certain Districts

(Act #40 in 2008, so-called "Historical Community Development Act")" by utilizing PPP/PFI approaches.

[5] Establishment of certain rural areas as the best places to be

• The government will certify tourism promotion plans of certain rural areas to attract tourists, especially those from foreign countries, in the light of savoring the fresh and fantastic delicacies and rich agricultural cultures. Such plans should center on local dishes and agriculture, forestry and fishery sectors as source of them, which will make it very enjoyable to take a trip in beautiful rural areas and Japanese nature and lifestyle. By promotion of integrally branding certified plans above, the government will forcefully convey attractiveness of local dishes as our pride to the people of the world.

[6] Taking advantages of tourism demand in local shopping avenues and expanding consumption of traditional artifacts

- Aiming at developing streetscape projects at the total 50 shopping avenues, inner city areas and tourism spots and providing better environment for foreigners at the total 1,500 shopping avenues, inner city areas and tourism spots by the year 2020, policymakers will enhance local community's revenue-earning capabilities and revitalize local economies by providing support to: Setting up tax-free procedure desks, establishing appropriate Wi-Fi environment, providing cashless terminals, providing alien concierge services to foreigners, indicating multi-language guidance and enhancing shop hospitality services at shopping avenues, inner city areas and tourism spots striving to draw on inbound demand nationwide. In addition, the government will collect and spread out information on shopping avenue's efforts to win inbound demand, aiming at emergence of spillover effect on other shopping avenues.
- Aiming to increase the number of traditional artifacts producing districts to at least 100 by the year 2020, the government will attract more foreign visitors to traditional artifacts producing districts so that they will see and experience the production site and actually feel highly appealing traditional artifacts. By doing so, policymakers will stimulate foreign wealthy class's consumer appetite and provide information on highly appealing traditional artifacts from foreign people's perspectives by inviting overseas experts and enhancing public relations efforts.

[7] Providing better and the world-class wide-area sightseeing tour routes

- By sending expert teams to wide-area sightseeing tour routes (parachute teams), policymakers will intensively develop landscaping or experience programs.
- The government will hold competition session at an early timing in this fiscal year to choose and intensively support eco-tourism, sake brewer tourism, location tourism and other sightseeing routes that utilize theme-based highly-attractive tourism resources at each local community.
- By selecting "Urban Tour Mini Routes" among wide-area sightseeing routes, policymakers will revitalize historic roads, set up rest rooms and other rest facilities, and encourage local community building activities on the package

basis.

- To provide better tourism spots and cope with stronger inbound demand in the future, policymakers will work with local communities and public transport operators to wisely use capacities/space of existing roads or parking lots and enhance quick-impact countermeasures on traffic jams by making use of big data.
- By creating foreign tourists flow data that indicate flow of foreign tourists among domestic spots and actual conditions on how they use public transport system, the government will encourage using such data for developing widearea tour routes and planning/reexamining strategic promotional projects.

[8] Restoring tourism demand in Tohoku area

• To boost the number of foreign visitors at hotels in Tohoku 6 prefectures to 1.5 million in the year 2020 (3 times as many as the 2015 level), the government will invite foreign travel vendors or media staff, improve transport all-access-pass programs, encourage formation of wide-area tour routes, revitalize Japanese inns and conduct Tohoku promotional efforts as Japan's first destination campaign on the world-wide basis.

ii) Reforming and enhancing competitive edge of tourism industry to serve as Japan's core sector

[1] Forming/fostering the world-class DMOs

To form 100 world-class DMOs nationwide by the year 2020, the government will especially work on the following projects.

- The government will register Japanese-style DMO candidate corporations and work with related ministries/agencies to provide these corporations with one-stop services including intensive support programs or counseling services.
- By developing new system tool "DMO Cloud" that makes it possible for anyone to easily and efficiently manage/market tourism spots, the government will provide such new tool to stakeholders that form DMOs.
- To improve productivity of the service industry, policymakers will collect municipality-based foreign visitor accommodation/attribute data and tourism resource big data to spread out and diffuse "Tourism Forecasting Platform" to the public so that anybody is able to analyze data.
- The government will create human resources development programs suitable to Japan's needs by employing foreign insights, provide training sessions and establish appropriate framework in which human resources developed will be able to play active roles nationwide, rather than simply serving for a certain local community.
- To quickly address a human resource shortage that poses problems for local communities, the government will provide matching services between local communities and marketers with professional knowledge and comprehensively provide support to package projects incorporating actual human dispatching services.
- Related ministries/agencies will work one another to effectively use local revitalization promotion subsidies to provide comprehensive support to Japanese-style DMOs, ranging from startup of new organization to

autonomous organization management.

• The government will set up new framework that encourages collaboration/participation of public-private funds, related organizations, wide-area DMOs and some other stakeholders on ad hoc basis, reach out to competent organizations for regulatory reforms and provide support to private-sector projects worth 1 trillion yen.

[2] Fostering and strengthening tourism managers in line with industrial circle's needs

- To provide graduate school-level (including MBA) permanent programs for top-level managers that play leading roles in the tourism sector, the government will start developing practical and professional educational programs in government-industry-academia in line with industrial circle's needs.
- For enhancing development of human resources that play core roles in regional tourism, policymakers will study or look into feasibility of developing standard curricula with an eye on curriculum reform at existing university's tourism schools.
- As for creating appropriate framework for new higher education institutes that
 provide practical vocational training programs, the Central Council for
 Education will draw its conclusion by the middle of this year for opening up
 new schools around FY2019 in order to take necessary systematic actions this
 year.
- For fostering human resources that support local tourism sector and cope with tourists' diverse needs, education institutions including specialized training colleges and the industrial circle will work together to improve and upgrade educational programs.

[3] Continuously deploying "Tourism Spots Revitalization Fund"

• To revitalize spa resort areas or some other districts with some common elements and strongly make use of tourism spot potentials, the government will work with public-private funds and related organizations as necessary to examine feasibility of creating new framework capable of stably and continuously providing tourism community building-related investment knowhow or human resources development capabilities even after completing fund formation by Regional Economy Vitalization Corporation of Japan (REVIC), paying due attentions to activities of their "Tourism Spots Revitalization Funds (tentative name)" with an eye on continuously launching "Tourism Spots Revitalization Funds" on the nationwide scale.

[4] Quickly eliminating an accommodation facility shortage and providing accommodation facilities in line with diverse needs

• The government will work on eliminating an accommodation facility shortage by mitigating floor-area ratio to provide inns, hotels or other accommodation facilities at an appropriate level and by granting financial assistance through community building funds that employ regional financial resources for renovation projects that will turn old houses into accommodation facilities. • The government will work on inbound demand encouragement projects for accommodation facilities (providing a half (1 million yen at maximum) of necessary cost of establishing Wi-Fi environment, providing multi-language services and setting up TV international broadcasting facilities, such as NHK World TV). By doing so, policymakers will provide more user-friendly environment for foreign visitors to Japan in order to eliminate an accommodation facility shortage, encourage providing accommodation facilities in line with diverse needs, and improve productivity in the hotel sector through pushing ahead with cloud or other ICT solutions and reexamining operational framework, such as introduction of multi-task operations.

[5] Strategically mitigating visa requirements

- Among the 20 priority countries/regions in the Visit Japan program, the government-wide efforts will be made to strategically mitigate visa requirements for 5 countries that need visas for visiting Japan (China, the Philippines, Vietnam, India and Russia) along with improving visibility through promotional efforts and providing better environment for tourists.
 - The government will relax visa issuance requirements for China (expanding multiple entry visa for commercial purpose, cultural worker and intellectual persons, extending the effective term to 10 years at maximum, and simplifying visa application procedures for students at certain universities) by this summer based on the decision to do so.
 - It will also ease multiple entry visa issuance requirements for Russia (expanding commercial purpose, cultural worker and intellectual person eligibilities and extending the effective term to 5 years at maximum) at an early timing.
 - The immigration authority will mitigate visa issuance requirements for India (simplifying visa application procedures for students at certain universities) at an early timing.
 - Coping with increased foreign tourists visiting Japan, the government will enhance physical/human resources related with visa examination at diplomatic establishments abroad so that foreign tourists will be able to smoothly apply to the Japanese authority for their visa.
 - It will intensively work on promotional efforts in the nations where strategic visa requirements are relaxed.

[6] Comprehensively reexamining tourism-related regulations/schemes

The government will reexamine the following schemes from the viewpoints of coping with increased foreign tourists visiting Japan from neighboring Asian countries, providing safe trips in accord with the lessons learned from Karuizawa skiing bus accident and fostering/enhancing highly-competitive core industries.

- To cope with diverse tourist needs and expand supply quantity of interpreterguide services, the government will reexamine interpreter-guide program, including "service monopoly schemes" while keeping the service quality.
- To prevent providing excessively profit-oriented, low-quality or less safe tour

- products, the authority will introduce land operators registration program to identify their actual conditions and examine feasibility of new program to appropriately guide/supervise problematic operators.
- The government will strive to provide appropriate framework in which type 3 travel agencies, accommodation facility operators or other local-based operators will be able to easily plan/provide destination-type travel products.

[7] Addressing private accommodation services

- So-called "private accommodation services," accommodation services that use all or a part of a house (single-family house, condominium/apartment, etc.), are needed to revitalize local communities and cope with rapidly increasing needs of foreign tourists visiting Japan and tight accommodation demand-supply in urban areas. On the other hand, it is also necessary to create appropriate rules by paying attentions to preventing spread of infections, appropriately managing anti-terrorism efforts and preventing possible troubles with local residents. In this context, "Review Meeting on Appropriate Private Accommodation Services" held by Ministry of Health, Labour and Welfare and Japan Tourism Agency will coordinate its final report around this June by continuing to examine feasibility of setting up two accommodation service provider categories ("landlord residence-type" and "landlord absence-type") to push ahead with certain satisfactory private accommodation services under appropriate regulatory framework. By doing so, policymakers will quickly work on setting up necessary legal framework in line with the said report.
- By verifying actual operations of "National Strategic Economic Growth Areas Foreigners' Accommodation Facilities Operation Program," the government will identify specific problems and examine possible further utilization of the said program.

[8] Strategically upgrading promotion for foreign tourists visiting Japan and enhancing information services on diverse appealing points

- With target set at tourists from Europe, the United States and Australia as well as at wealthy class, Japan should be branded as travel destination. To this end, the government should have major opinion leaders in Europe, the United States and Australia who actually have special experiences in Japan and strongly broadcast their motion pictures from overseas key stations. In addition, it will annually invite 100 overseas major magazines/media firms and overseas travel agencies that handle tour plans for wealthy class to introduce Japanese traditions/cultures with certain stories, and encourage creation of Japan tours highly appealing to the said target.
- The government will support overseas information services by registering "host towns" among local governments that have mutual interactions with participant nations/regions of 2020 Tokyo Olympic/Paralympic Games. It will also examine feasibility of launching "Olympic/Paralympic Ambassadors (tentative name)" program that fosters/supports volunteers that show ways in foreign languages to athletes/tourists visiting the local community during the Games.

[9] Encouraging invitation of MICE

- "MICE Promotion-related Ministries/Agencies Liaison Conference (tentative name)" will be set up within this year to take the following actions and examine MICE support programs that provide government-wide support.
 - The government will support upgrading of marketing efforts of global MICE enhancement cities in order to enhance international competitive edge and capabilities to invite convention bureau's MICE programs.
 - To encourage further utilization and diffusion of unique venues, the authority will sort out any gap/problem between facility operator and user needs and share information on such problems with facility operators.
- Integrated resorts (IRs) are expected to contribute to tourism revitalization, local revitalization and industrial promotion. However, as the related ministries/agencies need to examine creation of new schemes to prevent possible problems from the perspectives of crime prevention, security enforcement, youngster healthy development and addiction prevention, they will examine IR projects, paying due attentions to IR promotion legislation bill* and IR-related nation-wide arguments.
- * IR promotion legislation bill: "Bill on Promoting Setting up Specified Integrated Tourism Facilities Areas"

iii) Providing appropriate environment in which all tourists will be able to fully enjoy comfortable sightseeing trips without feeling any stress

[1] Achieving innovative immigration services that utilize state-of-the-art technologies

- To shorten airport immigration service waiting time to 20 minutes or shorter in this fiscal year by introducing the world's first immigration service package and utilizing the best technologies in the world, and to achieve innovative immigration services, the government will push ahead with several projects, such as acquiring personal ID data beforehand through introduction of bio cards, achieving pre-clearance services (pre-confirmation) at an early timing, introducing automatic gate program for trustworthy travelers (trusted travelers), introducing the world's best facial recognition technologies and expanding utilization of automatic gates for foreigner's embarkation procedures.
- To mitigate passenger's burdens related with departure airport security check and provide stricter but smoother inspection services, the government will introduce advanced security check equipment (voice scanners) that gains high popularity in Europe and the United States.

[2] Establishing "regional revitalization corridor" by utilizing bullet trains, expressways or any other high-speed transport network

- Although "Japan Rail Pass" is only available at limited overseas travel agents before travel departure, the government will start demonstration experiment in this fiscal year so that foreign tourists will be able to buy the pass after arriving in Japan. It will also set up inexpensive and sustainable aviation network connecting between gateway to local area and between local areas.
- · For providing better access to tourism spots, the government will

comprehensively check up tourist's behaviors against actual transport conditions near tourism spots and existing common railway tickets for each local area. Then, it will strive to enhance transport services and create/improve common railway tickets near tourism spots in line with tourist needs, provide effective information services in foreign languages and make promotional efforts.

- To enhance expressway bus network, policymakers will create service areas, parking areas or other transit spots, push ahead with park-and-ride at expressway bus stops, encourage private-public collaborative projects with railway sector through expansion of grade seperation road scheme and enhance connection between transport modes (modal connect). For improving user-friendliness of local bus services, the government will also push ahead with private-public collaborative projects, such as improving town mobility management and bus service waiting conditions, creating roadside station demand bus and car-sharing transit spots, and achieving better transport efficiency and labor-saving through BRT.
- The government will utilize the "National Strategic Special Zone Act" framework to expand effective use of private passenger cars so that foreign tourists and other sightseeing visitors to Japan will conveniently and smoothly move at sparsely-populated areas.
- Expressway companies will work with the central/local governments and car rental service operators to provide discount services, such as flat-rate tourtype drive pass for foreign tourists usable for multiple times at local expressways.

[3] Enhancing gateway capabilities of local airports, etc.

- To enhance local airport gateway capabilities and revitalize wide-area tourism services, the government will push ahead with integrated operations of multiple airports in Hokkaido (Public facilities operating right scheme, etc.).
 - To invite international flights to local airports and create new flow of "local-in, local-out," policymakers will mitigate international flight landing fees at local airports in collaboration with local efforts to invite international flights.
- To enhance airport capabilities in the Tokyo metropolitan area, the government will put the top priority on expanding airport capabilities to accommodate additionally some 80,000 flights by the year 2020, such as deciding its basic stance for reexamining Haneda Airport flight routes in this summer at latest by paying attentions to environmental impacts. It will also work with related local governments to examine specific approaches for expansion of airport capacities, including drastically enhancing Narita Airport capabilities from the year 2020 onward.
- To improve business jet acceptance capacities at airports in the Tokyo metropolitan area, the government will expand aircraft parking spots at Haneda Airport and examine feasibility of improving acceptance capacities at Narita Airport. It also aims to accept more business jets with collaboration between Haneda and Narita Airports.
- To invite increased tourists to Hokkaido, New Chitose Airport will significantly expand international flights departure-arrival slots in the winter flight

- schedule effective from the late October of this year and is planning to increase per-hour departure-arrival slots in the summer flight schedule effective from the late March of the next year onward.
- Kansai Airport will expand its immigration desks at the 1st terminal and set up LCC-dedicated new terminal. Chubu Airport will also start setting up LCCdedicated terminal to serve as a new LCC hub.

[4] Accepting increased cruise vessels to increase the number of cruise passengers visiting Japan to 5 million in 2020

- The central government (Ports and Harbours Bureau, Ministry of Land, Infrastructure, Transport and Tourism) will launch matching services between cruise vessel operators seeking for anchorage port and port administrators (local governments) wanting to accept cruise vessels, give cruise vessel operators information on available piers, prevent port administrators from refusing cruise vessel's port calls, and push ahead with accepting increased cruise vessels to Japan.
- To cope with increased and larger cruise vessels, the government will utilize existing facilities, provide quay wall bitts, fenders, dolphins and piers, and grant interest-free loans for passenger terminal building projects incorporating private-sector's innovations and wisdoms, aiming to form international cruise hubs with CIQ areas and commercial capabilities.

[5] Reforming public transport user environment

- To enhance capabilities to accept rapidly increasing foreign tourists visiting Japan, the regional bloc liaison meetings, as mainly set up last March by regional bureaus of Ministry of Land, Infrastructure, Transport and Tourism, will issue their reports in each bloc around the end of this year on further policy actions for coping with increased foreign tourists visiting Japan and strongly addressing problems by utilizing "Urgent Program to Improve Foreign Tourists Acceptance Environment.
- For setting up hands-free tourism desks at all major traffic hubs by the year 2020 to establish hands-free tourism core network, policymakers are planning to double the number of counter desks (currently around 80) by the end of this fiscal year.

[6] Significantly improving cashless environment

- While three mega banks are planning to increase the number of their overseas cards-compatible ATMs to the total 3,000 (a half of their total ATMs installed) by the year 2020, but the government will request them to drastically accelerate such a move (to install most of these ATMs in 2018). In addition, it will provide data useful for installing ATMs, encourage strategic projects for installing high propriety ATMs with stronger needs, and follow up how much these efforts are progressing.
- The authority will encourage diffusion of credit card- and IC-compatible terminals to achieve "100% credit card payment" and "100% IC-compatible terminals" by the year 2020 at major commercial facilities, accommodation facilities and tourism spots for foreign tourists.

[7] Drastically improving communications environment and providing appropriate environment in which anybody is able to walk outside alone

- To create Wi-Fi environment easily accessible by foreign tourists at the time of their sightseeing trip or disaster, the government will push ahead with creating charge-free Wi-Fi environment at high priority major tourism/disaster prevention locations by the year 2020 (including the estimated 29,000 locations*1, such as schools designated as evacuation center or shelter) in line with the facility improvement plan*2 developed by the central government in this year. By utilizing "Charge-free Public Wireless LAN Promotion Council" to push ahead with effective utilization of existing Wi-Fi access points by the year 2018, the government will create seamless Wi-Fi connectable authentication cooperation scheme among service providers accessible from more than 200,000 locations. In addition, it will accelerate elimination of mobile phone "out of service" areas in bullet train lines.
- *1: Further scrutiny is needed to check out the number of locations in the future.
- *2: This plan is scheduled to be revised every fiscal year.
- Towards the target of societal implementation by the year 2020, the government will steadily push ahead with "Global Communication Plan" to attain free, global human interactions without "language barriers" in the world. To this end, policymakers aim to improve accuracy of multilingual speech translation technologies and spread out these technologies to travel conversation, disaster reduction/prevention and daily life areas. In addition, demonstration experiment will be conducted at local commercial facilities and tourism spots, aiming at improved visibility and further diffusion of multilingual speech translation systems.
- To indicate traffic rules in an easily understood manner for foreign cyclists, the government will standardize pictograms and road surface signs and create safe and comfortable bicycle traffic environment.

[8] Enhancing foreign patient services capable of coping with urgent patients

• To provide Japan's safe and secure medical services to foreigners, the government will increase the number of "medical institutes that accept foreign patients" to 40 in this fiscal year, aiming to set up such medical institutes at 100 locations by the year 2020, 5 times as many as the present level, with focus on foreigner's highly-populated areas, through assisting deployment of medical interpreters or medical coordinators, supporting multilingual services on hospital internal documents and increasing hospitals accredited with the "Japan Medical Service Accreditation for International Patients" (JMIP) program.

[9] Reforming leave of absence programs

Through increasing the percentage of annual paid holidays actually taken to 70% and diversifying vacation timings by the year 2020, the government will take the following actions to encourage tourism sector through increased days off.

- Lawmakers should pass Labor Standards Act Amendment Bill at an early timing, which requires employers to allow their workers to take at least 5 days long annual paid leaves.
 - Policymakers will work on intensive public relations for taking annual paid leaves in holiday seasons in which continuous days off are easily taken and encourage workers to systematically take annual paid leaves in line with their local events.
 - From the viewpoint to enhance family learning opportunities in local communities, the government will further encourage education boards and schools to push ahead with various efforts for flexibly designating school nonworking days in each local area.
 - The government will encourage family trips on weekdays by urging the industrial circle to increase annual paid leaves by 3 days in line with flexible nonworking days at education institutes.
 - Policymakers will encourage central government's civil servants to take their annual leaves in line with school nonworking days.

[10] Pushing ahead with universal designs for 2020 Tokyo Olympic/Paralympic Games

- To push ahead with better universal designs and mental barrier-free at tourism spots and public transportations in the wake of the 2020 Tokyo Olympic/Paralympic Games, the authority will work on community building and mental barrier-free projects on the nationwide scale in line with "Tokyo 2020 Accessibility Guideline." By doing so, it will draw on potential demand for travels in Japan among disabled persons at home and abroad and create comfortable travel environment for elderly persons and child-rearing generations to encourage their consumption behaviors. To this end, the government will conduct hearing sessions for disabled persons organizations, incorporate their opinions and coordinate interim report around this August to issue final report as "Universal Design 2020" within this year.
- The government will revise traffic barrier-free standards, examine improvement in wheelchair user environment, provide support to bus/taxi barrier-free financed with license plate donations, give support to addition/installment of elevators and platform doors at 2020 Tokyo Olympic/Paralympic Games-related railway stations, set up barrier-free environment at Narita/Haneda Airports and main passenger vessels terminals, create continuous and wide-area barrier-free environment including roads surrounding stadiums or tourism spots.

5. Changing sport/culture to growth industries

5-1. Pioneering the future for the sport industry

(1) Progress in achieving KPI

<KPI> "Aim to expand the sport market size (5.5 trillion yen in the preceding year) to 10 trillion yen by the year 2020 and 15 trillion yen by the year 2025"

* KPI newly set out this time

<KPI> "Aim to boost the percentage of adults that play sports at least once a week from the current 40.4% to 65% by the year 2021"

* KPI newly set out this time

(2) Specific new measures to be taken

A rise in sport-related consumption and active investment mindset among Japanese citizens and private-sector firms as well as stronger overseas attentions to Japan is anticipated in the wake of the 2020 Tokyo Olympic/Paralympic Games. Taking advantages of this opportunity, the government will revitalize the sport industry from 2020 onward and turn it into Japan's core industry.

i) Reform of stadiums and arenas (changing cost center into profit center)[1] Developing new guidelines on stadiums and arenas

To make athletic fields, gymnasiums or other sport spectating locations more attractive and profitable facilities (stadiums/arenas) that spectators would like to visit repeatedly, the government will coordinate new maintenance/operational guidelines on facility location/access, size, ancillary facilities or services by the end of this fiscal year. Public-private collaboration council (tentative name) will be set up at an early stage to create new guidelines and to maintain/operate specific facilities under public-private collaboration.

[2] Providing support to actualize pioneering cases of multi-functional facilities based on "smart venue" concept

Taking domestic or overseas pioneering cases into consideration, the central government will quickly examine and actualize support measures such as dispatch of experts to local governments setting up sport facilities as sustainable exchange facilities with multiple functions to combine public facilities or commercial facilities including surrounding area management (such sport facilities are so-called "smart venues"), rather than sport facilities with a single function. In this process, policymakers will disseminate best practices to make use of PPP/PFI and provide support such as giving knowhow for actualizing pioneering cases of multi-functional facilities including the consession system of public facilities.

ii) Enhancing management of sport contents holders and encouraging creation of new businesses

[1] Setting up an appropriate domestic framework for promoting university sports

Ministry of Education, Culture, Sports, Science and Technology and Japan

Sports Agency will play central roles in advancing the discussion and drawing a conclusion by the end of this fiscal year on feasibility of a multi-university and multi-sport umbrella organization (Japanese-style NCAA (National Collegiate Athletic Association)), which aims to utilize potential of sport resources of Japanese universities (production of high-skilled human resources, economic revitalization, regional contribution, etc.) and to establish appropriate organizational management practices and sound university sport business.

[2] Establishing a new platform that fosters and utilizes sports business managers

Aiming at providing work-ready business managers to improve management including organizational operation, profitability and governance of sport-related organizations, the government will work with professional leagues, sport-related organizations, private-sector firms, education institutes and some other stakeholders to examine creating "Sports Business Manager Platform (tentative name)" that provides professional/practical skills and matching services for a wide variety of human resources inside/outside the sports circle, and draw a conclusion by the end of this fiscal year.

iii) Strengthening industrial competitive edge of the sport circle [1] Creating new sport media business

To create new sport media contents market by making best use of values of Japan's sport contents including professional, amateur or student sports, the government, academic and industrial circles will start working together from this fiscal year (Sport Media Review Meeting (tentative name)) to examine effective utilization of broadcasting technologies, encouraging tapping into overseas markets and identifying possible approaches on new rights business, while paying due attentions to pioneering cases in foreign countries.

[2] Creating new businesses through collaboration with other sectors

To support and expand collaborations between sports and other sectors including health, foods, tourism, fashion, culture and art as well as enjoyment of sport as "athletes" or "spectators," policymakers will aim at creating new values in sports by integrating sports with technologies, introducing wearable devices based on digital technologies (IT), developing/utilizing new sports goods and encouraging sport-related data flow. To this end, towards creation and expansion of new sport markets, the government will work with competent ministries/agencies to examine possible support measures, such as business matching for collaboration with other sectors, and draw a conclusion by the end of this fiscal year.

[3] Increasing sport population that supports expansion of the sport market (increasing sport population without distinction of age or gender)

The government will examine possible approaches on developing/diffusing new sports easy to participate, recommending easily accessible sports at

workplace, enhancing exercise/sport programs suitable for life stages and setting up appropriate environment for disabled sports, and draw a conclusion on its basic stance by the end of this fiscal year.

5-2. Revitalizing economy through utilization of cultural/art resources

(1) Progress in achieving KPI

- <KPI> "Aim to boost cultural GDP to 18 trillion yen by the year 2025 (some 3% as percentage to overall GDP)"
 - * KPI newly set out this time
- <KPI> "Aim to increase the percentage of art viewers to some 80% and the percentage of those actually engaging in cultural/art activities other than art appreciation to some 40% by the year 2020"
 - * KPI newly set out this time

(2) Specific new measures to be taken

Japan enjoys diverse, unique and abundant cultural and art resources backed by its long history, ranging from traditional culture and performing art to cartoons, animations and games. In addition to making maximum use of these resources, the government will enhance necessary capabilities for coping with new policy needs expected for cultural administration and make further efforts on cross-sectional projects in government-industry-academia collaboration, regardless of past cultural policy framework or policy methods. Aiming at improving visibility of the Japan brand by providing effective information services at home and abroad such as cultural diplomacy through international cultural exchange by dispatching or accepting artists, the government will expand economic spillover effect based on cultural and artistic resources.

i) Expanding the cultural/art industry and economic spillover effect

Recognizing that culture widely covers not only cultural assets, traditional arts, but also foods, education, documents, music, motion pictures, game software and other contents or designs, the government will expand its economic spillover effect. To this end, Agency for Cultural Affairs will play the central role in analyzing successful cases at home and abroad, develop a policy roadmap by the end of this fiscal year and realize specific policy actions.

ii) Changing cultural assets/resources from cost center to profit center

The government will develop "Cultural Assets Utilization/Understanding Promotion Strategic Program 2020" to yield "profitability from cultural assets" by taking the following actions:

- Disseminating values and attractions of cultural assets that embody Japanese culture/history in a comprehensible and effective manner by providing multilingual explanations on cultural assets
- Providing attractive environment for tourists by repairing cultural assets at an appropriate interval and beautifying buildings and other cultural assets
- Creating some 200 tourism spots nationwide that yield diverse profits surrounding Japan Heritage or other cultural assets by the year 2020
- Promoting marketing or management by local governments in a way to improve revenue-earning power of cultural assets
- Enhancing functions of museums through establishment of lectures about tourism promotion utilizing cultural assets for curators or cultural asset

protection staff, and fostering/deploying high-quality heritage managers From the viewpoint of improving revenue-earning power of cultural facilities, the government will investigate and analyze pioneering cases including multifunctional facilities or consession approaches, and push ahead with utilization of PPP/PFI for project formation.

iii) Creating and disseminating artistic culture that contributes to regional revitalization and better brand capabilities

- In industry-academia-government collaboration, the government will work on setting up new hubs that lead to regional economic development, creating/fostering producers and other human resources that support such activities, utilizing cultural assets, and promoting formation of new social models that yield profits.
- The government will push ahead with "Culture Programs" on the nationwide scale (200,000 events by the year 2020) to dig up cultural/art resources and use them for regional revitalization and provide cultural/art information about the Cultural Programs at home and abroad. In this process, with an eye on the aftermath of the 2020 Tokyo Olympic/Paralympic Games, the government will work on "Beyond 2020 Programs" and improve Japanese culture that contribute to creation of legacies on the nationwide scale.
- The government will widely encourage participation of handicapped people, elderly citizens, parent and child, and other citizens in cultural/art activities, investigate/analyze/apply to other cases precedent best practices that lead to acquisition of potential customers or players and business creation in local communities, and accelerate projects such as holding workshops on the nationwide scale.

iv) Yielding spillover effect by investing in sectors closely related with culture

[1] Cultural information and marketing expansion strategy that employs new technologies/methods with focus on contents

- Development and diffusion of IoT technologies are anticipated to expand contents delivery opportunities and create new markets. The government will encourage technological development based on the content technology map and push ahead with further development of the content industry and creation of new industries in a way to contribute to Cool Japan Strategy. In particular, it will work with other stakeholders on doing R&D or creating new schemes in high-growth areas, such as virtual reality (VR).
- The government will support effective information services on regional appealing points or wide-area projects through cross-sectional collaborations between content industry, tourism or manufacturing industry or fosterage of promising regional creators. To cultivate new overseas markets for contents, it will also encourage content utilization by giving support or enhancing international collaboration to collecting rights data, or voice-over acting or other localization tasks.
- The government will push ahead with fostering human resources, such as creators or producers through practical activities (OJT) in Japan's world-

class cartoon/animation/game or other media art sectors, creating archive of media art fields and providing such information overseas.

[2] Strategically employing cultural potentials by using design

As design is playing more and more important roles in differentiation strategies of products and services, the government will take the following actions from the viewpoint of making use of cultural potentials.

- To spread out and teach design utilization methods for corporate management purposes such as incorporating diverse needs into designs easily understandable for customers, the government will develop an action plan by the end of this fiscal year, including enhancing information services on pioneering firms and encouraging industry-academia-government collaboration.
- To recognize again cultural values rooted in all areas in Japan and make them economic values, the government will provide designer dispatch/collaboration support to corporations/organizations as well as startup assistance by designers.
- The government will take concrete policy actions to support human resources development projects or set up appropriate framework, such as introducing new curriculum incorporating design, technique and corporate management elements at higher education institutes (universities or art colleges).

6. Revitalization and productivity improvement of service industry

(1) Progress in achieving KPI

<KPI> "Aim to send up labor productivity growth rate of the service industry to 2.0% by the year 2020 (from 0.8% in 2013)"

 \Rightarrow 1.0% in 2014

(2) Specific new measures to be taken

For revitalization and better productivity of the service industry, the government has been taking cross-sectional and sector-specific policy actions to send up labor productivity in service industry by 2.0% by the year 2020 in line with "Service Industry Challenge Program" (as decided by Headquarters for Japan's Economic Revitalization on April 15, 2015). To further advance efforts of "Service Industry Challenge Program" in the future, the government will create new growth firms that serve as a driving force for revitalization and productivity improvement of service industry, make further efforts for improving productivity in each sector in line with applicable legal framework, and push ahead with local community projects through utilization of SME organizations. In addition, the Council for Productivity Improvement of Service Industry will push ahead with its activities to send up productivity.

i) Creating 10,000 growth firms that achieve 10% productivity growth rate

By spreading out on the nationwide scale the best practices collected through "Nihon Service Award" since last July and deploying all policy programs "Manufacturing/Commerce/Service New Development Support Subsidy," the government will support IT-based innovative services development, and create 100,000 growth firms on the nationwide scale that achieve some 10% productivity growth rate by the year 2020. It will also start operating "Hospitality Standards" as new private-sector accreditation criteria that improve productivity by "visualizing" service quality of each service provider. To be more specific, working with local governments as well as several organizations, SME units and related trade associations that have insights on productivity improvement in the service industry, the government will conduct demonstration project by the end of this fiscal year for establishing screening practices as certification authority and get across the outcomes for diffusion of "Hospitality Standards," aiming at having 300,000 firms accredited by the year 2020. The government will start examination of feasibility of creating an ISO version of Hospitality Standards by the end of this fiscal year, develop "Service Overseas Expansion Grand Design (tentative title)" and provide support to overseas expansion of the service industry through utilizing Japan External Trade Organization (JETRO).

ii) Improving productivity in each sector

The government will push ahead with model creation/standardization efforts to improve productivity in each sector of the service industry. Through activities of "the Council for Productivity Improvement of Service Industry" set up by the

private and public sectors, it will encourage sending up productivity through utilizing knowhow in other industries, such as manufacturing sector. While making use of outcomes of these efforts, the government will work with trade associations or SME organizations to develop as soon as possible sectoral guidelines, including 7 areas (transport, medical, nursing-care, childcare, restaurant, hotel, and wholesale/retail) covered with "Service Industry Challenge Program" in accordance with "Act for Amending a Part of the Act for Facilitating New Business Activities of Small and Medium-sized Enterprises" (the Small and Medium Sized Enterprise Manufacturing Enhancement Act on May 24, 2016). Then, the government will get across such guidelines through SME organizations, etc., make use of a tool for conducting business diagnoses "Local Benchmarks" (Benchmarks for Local Companies) and provide support to IT introduction or management guidance in a suitable manner for characteristics of the service industry, aiming to encourage active utilization of applicable schemes.

iii) Improving local productivity through utilization of SME support organizations, etc.

Aiming at "competitiveness enhancement and productivity improvement of regional service industry," the government will, by making use of Regional Revitalization Promotion Subsidy, push ahead with setting up regional councils that will examine, conduct and diffuse specific actions at a regular interval. Through exchanging opinions at these councils, and while utilizing "Local Benchmarks" (management indicator/evaluation method developed in this March as reference for management assistance to improve productivity of regional firms) in addition to sector-specific guidelines and best practices in line with SME Corporate Management Enhancement Act, the government will encourage financial institutions and SME support organizations to deepen dialogues with corporations. In the wake of these efforts, the government will encourage supply of growth fund to enterprises that strive to improve productivity without resort to collaterals or personal guarantee through further bringing out loans or consulting services based on commercial feasibility evaluation by regional financial institutions. In addition, the government will make a list of human resources as IT experts including regional IT consultants prepared with IT coordinator associations or IT-related organizations and a list of human resources as service support experts related with Kaizen (improvement) activities in the workplace of service or development of a new service, sharing with SME support organizations such as local SME and micro firm counseling desk "Yorozu (general) Support Centers", which are counseling service counters for local SMEs and micro firms. Then, the government will also utilize SME support projects to enhance counseling services at the local level.

7. Achieving reform among mid-ranking companies, SMEs and micro enterprises

(1) Progress in achieving KPI

- <KPI> Create consortia under industry-academic-government-financial sector collaboration and provide support to 200 pioneering technical development projects that employ local technologies every year and some 1,000 projects for 5 years
 - * KPI newly set out this time
- <KPI> Ensure business startup ratio exceeds business closure ratio and aim at sending up business startup/closure ratio to the level of the United States or the United Kingdom (larger than 10% but smaller than 20%) (currently business startup ratio and business closure ratio both stand at 4.5% (average for 2004-2009)
 - ⇒FY2014: Business startup ratio at 4.9% and business closure ratio at 3.7% (FY2013: Business startup ratio at 4.8% and business closure ratio at 4.0%)
 - ⇒ Early-Stage Entrepreneurial Activity Index (FY 2015): 4.8% (FY 2014: 3.8%)
 - * Regarding the startup/closure rate, the government has set a goal to "double the Early-Stage Entrepreneurial Activity Index (the percentage of respondents who answered that they are "entrepreneurs or prospective entrepreneurs" in the "Survey on entrepreneurial spirit") in coming 10 years" as a supplementary index looking ahead for the next 10 years, as it will require not only the government policies but also change in social attitudes toward entrepreneurship, which makes it a long-range goal.

<KPI> Increase the number of profit-making SMEs and micro enterprises from 700,000 to 1.4 million by the year 2020

⇒FY2014: 859,753 enterprises (FY2013: 805,979 enterprises)

(2) Specific new measures to be taken

The government has been implemented capital investment tax reduction to date, aiming to create core firms serving as a driving force in local economies, enhance "Earning Power" of SMEs and micro enterprises through utilization of regional resources and improvement of regional innovation capacity, and back up SMEs and micro enterprises making investment in productivity enhancement. In addition, the government has also introduced fixed property tax reduction to encourage capital investment for sending up productivity. Furthermore, the government has been making efforts to strengthen Yorozu Support Centers, which are one-stop counseling services for SMEs and micro enterprises, and enhance transaction capabilities of SMEs and micro enterprises, aiming at expanding virtuous cycle.

In the future, with target set at SMEs and micro enterprises serving as a driving force in local economies, the government will back them up in expanding their

operations to the world markets in order for them to play more important roles in their local economies. In addition, while working on enhancing regional innovation capabilities, the government will thoroughly back up mid-ranking companies, SMEs and micro enterprises in improving their productivity through IT utilization, as well as in enhancing their profit-earning capacities and improving their trade terms and conditions.

To spread out the best business practices on nationwide scale, collaboration of regional support organizations is absolutely essential. The government will work on networking and quality improvement of regional support organizations and provide more effective corporate management support/guidance services. Addressing manpower shortage due to decreased population, the government will push ahead with local employment and occupational training support.

In the future, aging of business owners of SMEs and micro enterprises will be further advancing at the local level. At the same time, overt decreased population may pose an impact on local economy structure. In this context, the government will examine appropriate support programs for SMEs and micro enterprises from these medium-term perspectives.

i) Establishing "Earning Power" of regional mid-ranking companies, SMEs, and micro enterprises

[1] Supporting growth of regional core firms moving toward the global market

By setting up regional innovation consortia consisting of industrial, academic, government and financial sectors, the government will, among local mid-ranked firms or SMEs, pick up corporations with highly-competitive technologies and promising potential to grow to local core firms serving as a driving force of regional economy by effectively using insights of universities on excellent technical capabilities, corporate data held by regional financial institutions, and Regional Economy Society Analyzing System (RESAS). By effectively deploying support staff, the government will provide support to setting up collaboration schemes between regional core firm candidates and partner firms or universities, and developing commercialization strategies for further growth of regional core firms, their efforts for cultivation of sales channels and R&D activities in anticipation of their possible sales channels. From this fiscal year onward, the government intends to provide support to 200 innovative projects including the aforementioned efforts and some 1,000 projects in the next 5 years.

Furthermore, by setting up Global Network Council (tentative name), the government will organize global coordinators (tentative name) consisting of experts with deep knowledge of commercialization strategies effective in the global market and provide support to commercialization strategy development or sales channel cultivation with an eye to the global market.

[2] Supporting overseas expansion of regional SMEs in the wake of TPP

The government will set up appropriate framework to provide courteous information/counseling services on TPP and on how to use TPP so that midranking firms or SMEs will be able to cultivate their markets in the wake of TPP. Utilizing experts with deep knowledge of overseas business under "New Major

Export Nation Consortium" newly established this February, the government will support adjustment of necessary support programs, development of overseas business strategies, availability of local human resources, acquisition of overseas accreditations and cultivation of sales channels, aiming that more than 60% of firms eligible for comprehensive support program will successfully expand their markets or business operations.

[3] Pushing ahead with local innovation

The government will foster world-class research projects by encouraging international joint research projects or deploying research assistants through inviting high-quality foreign researchers at some 20 bases centering on regional universities with potential for high-level research capabilities.

The government will encourage local mid-ranking firms and SMEs to put in practice new technologies through conducting joint research projects in tie-up with bridging research institutes with technological seeds. In addition, it will also push ahead with nationwide collaborations with national research and development agencies and public test/research institutes by enhancing/utilizing bridging schemes or human resources. The government will create business production teams at regional universities with focus on local core technologies (a source of competitive edge), aiming to yield Japanese-style innovation eco systems.

Furthermore, through intensified efforts from development of new technologies to societal implementation, the government will work on revitalizing regional economy in Fukushima Hamadori area through new industrial clusters. To be more specific, it will create research/demonstration base of robot or reactor decommissioning by inviting human resources at home and abroad under Innovation Cost Initiative in order to push ahead with specific projects in energy (including projects under "Fukushima New Energy Society Initiative") and agriculture/forestry/fisheries sectors. Through enhancing support for local firms by a public-private joint team, it will push ahead with these projects by involving companies inside/outside local communities.

As for acquisition or utilization of patent rights by SMEs, the government will strengthen intellectual property strategies of SMEs and beef up necessary screening framework from this fiscal year through increasing on-site interviews at SME premises, spreading out patent practices with focus on food functionalities and promoting cooperation with SME support organizations. In addition, National Center for Industrial Property Information and Training (INPIT) will, in this fiscal year, start examine diversification of support programs such as intellectual property investigations for developing intellectual property strategies, aiming to expand support programs gradually from the next fiscal year onward.

For accelerating standardization of highly-competitive technologies/products of mid-ranking companies or SMEs, METI and Japanese Standards Association (JSA) will work with local governments, industrial promotion organizations, financial institutions, universities or public research institutes to dig up standardization projects by expanding partner organizations of "Standardization Utilization Support Partnership Program" into 47 prefectures nationwide.

[4] Supporting improvement of productivity of mid-ranking companies, SMEs and microenterprises including IT utilization

Based on "Act on Amending a part of Act for Facilitating New Business Activities of Small and Medium-sized Enterprises (SMEs Business Enhancement Act)" (passed on May 24, 2016), the government will develop sector-by-sector new guidelines on efforts for improvement of corporate management capability of each sector as soon as possible. It will also work with sector-by-sector management capability improvement organizations to diffuse any best practice on management capability improvement in an easily understandable manner. In addition, it will also examine new framework to intensively support certified corporations sending up their productivity. Furthermore, the government will push ahead with providing fine-tuned support programs to micro enterprises from corporate management coaches of commerce and industry associations/chambers that are the closest support organizations. It will also support sales channel cultivation of micro enterprises that work on sending up their productivity.

In particular, to send up productivity of SMEs under manpower shortage, the government will make efforts in collaboration with private sector to push ahead with laborsaving based on IT solutions or robots. With an eye on arrival of the fourth industrial revolution, the government will work with commerce and industry associations/chambers to hold introduction/counseling sessions on IT utilization or introduction cases, aiming to reform awareness among business owners of SMEs and micro enterprises, while paying due attentions to security solutions.

In addition, experts at IT, Kaizen activity or robotics will provide support to at least 10,000 companies in the next 2 years. In this process, the government will start in this fiscal year establishing new bases to consult "Smart Manufacturing Supporters" that back up production-related Kaizen activities, IoT or robot installation tasks at mid-ranking companies or SMEs.

In addition, the government will push ahead with IT investment or laborsaving investment in line with actual corporate business conditions, ranging from efforts for sales channel cultivation of online sales or other sales of micro enterprises to creation of new products/services based on IoT or big data of SMEs or micro enterprises, and smooth intercompany collaboration beyond industrial sectional boundaries.

[5] Improving trade terms for subcontractors

To expand virtuous cycle into SMEs and micro enterprises on the nationwide scale, it is important that business practice for employers to pay "appropriate prices" for "high quality" should take root in Japanese industries through diffusion of government-labor-employer agreements. To this end, it is essential to enhance effective countermeasures suitable for actual subcontracting conditions, such as strictly dealing with unfair practices. Subcontractors are facing difficulties in opposing inappropriate terms and conditions for fear of possible suspension of business transactions. In this context, the government will strive to improve terms and conditions for SMEs by simultaneously securing terms and conditions for large corporations at an appropriate level and enhancing

bargaining power of SMEs through holding hearing sessions on procurement practices or related projects of large companies, enforcing Subcontractors Act in a stricter manner, further getting across subcontracting guidelines on problematic business practices and best practices, and expanding functions of subcontractor shelter to diffuse negotiation knowhow. In addition, the government will continue figuring out business practices and provide information services to set appropriate business practices in place.

[6] Enhancing collaborations among business support organizations for local SMEs and micro enterprises

"Yorozu Support Centers," one-stop counseling service counters that provide a wide variety of support services for SMEs and micro enterprises, will play the central role to hold "Regional Support Organizations Collaboration Forum (tentative name)" in each prefecture, consisting of support organization stakeholders such as commerce and industry associations/chambers, in order to deepen information exchange and regional collaborations and to push ahead with networking of regional support organizations.

As for nationwide scale policies, the government will hold "SME National Organizations Council" consisting of business support-related Yorozu Support Centers or commerce and industry associations/chambers to widely spread out action plans of each organization, examples of collaboration among support organizations and good practices of each support organization. By doing so, the government strives to enhance capabilities of regional support organizations and strengthen mutual collaborations.

In addition, the government will make efforts to provide corporate support knowhow, aiming at improving business support capabilities of business instructors at commerce and industry associations/chambers.

[7] Enhancing financial capabilities and accelerating business revitalization or business succession to create "Earning Power" of SMEs and micro enterprises

While utilizing business management indicators and evaluation methods (local benchmarks) useful for business support to improve productivity of local firms, the government will encourage local financial institutions or support organizations to have deeper dialogues with companies and provide growth fund to corporations striving to send up their productivity without dependence on collaterals or personal guarantees.

The government will make take all possible steps to ensure financing of SMEs or micro enterprises by considering their business conditions, such as taking flexible actions at the time of emergencies or spreading out financing practices without dependence on personal guarantees of business owners. While expanding financial support programs, the government will draw a conclusion on institutional measures by the end of this year by designing detailed program to reexamine credit guarantee program so that financial institutions and corporations will make further efforts for business performance improvement or higher productivity. To encourage business revitalization or business succession of local SMEs, the government will examine necessary actions for providing

effective support for business revitalization, achieving smoother business succession and facilitating business management innovation through business succession, and it will draw a conclusion on institutional measures by the end of this year.

[8] Securing/fostering human resources by SMEs and micro enterprises

The government will find out human resources needed by local SMEs or micro enterprises from among young people, women, senior citizens or other diverse human resources inside/outside the local community and provide referral and long-term employment support services. For example, the government will, in line with local needs, hold interaction meetings between SME business owners and university students, training sessions for young corporate staff for long-term employment purpose, joint company information sessions for women, referral/information seminars for utilization of senior human resources, seminars for utilization of subsidy related to corporate employment and information sessions on strengths of local companies for urban human resources.

By supporting activities of Professional Human Resources Strategic Base in 46 prefectures, the government will find out corporations with growth potentials and expand job opportunities for professional human resources that have possibility to go back to local area. It will also enhance collaborations between urban large corporations and the said strategic base to encourage training sessions or other human resources interactions and diversify workstyles of professional human resources going back to local area, including dual employment in local areas and Tokyo.

In addition, the government will provide support to business owners in any sector that strive for long-term employment by launching employment management program. The government will also provide SMEs as well as midranking firms with support for professional knowledge/skill acquisition so that they will foster newly-hired employees as their core human resources. By doing so, it will continue working on securing/fostering human resources for local midranking companies and SMEs.

[9] Revitalizing local downtown areas and shopping streets

With decreased population, lower birthrate and aging population progressing, revitalization and maintenance of local downtown areas and shopping streets are absolutely necessary for stimulating local economies. To this end, in line with "Comprehensive Policy Package to Support Local Community Building" developed at the end of March 2016 and some other guidelines, the government will spread out and expand "profitable community building" projects through analyzing earning powers and developing/verifying visions or action plans, and provide support to creating/repairing commercial facilities that yield significant spillover effect as a part of the said community building projects. It will also support and spread out on the nationwide scale projects of drawing on inbound demand at model-type shopping streets in Japan, enhancing local community capabilities including elderly care services by using point card programs, revitalizing shopping streets and sending up their productivity.

[10] Encouraging spread of business continuity plans (BCPs) to diverse areas

To create disaster-resistant and flexible socioeconomic structure, it is important to actively push ahead with several projects including development of business continuity plans in preparation for emergencies. For creating new framework in which a third party will accredit corporations working on such projects, the government publicly announced certification-related guidelines in February this year. In this context, certification bodies started soliciting for certification projects in April.

In the future, the government will make this project known to the public by holding briefing sessions nationwide in tie-up with certification bodies, aiming at some 100 certification projects in this fiscal year and 400 projects for 3 years. Along with this, the government will collect and publicly announce noteworthy projects of certification bodies. From the viewpoint of enhancing incentives for companies to get certified, the government will coordinate with related ministries/agencies and explain or get across to financial institutions granting loans related to BCPs, aiming to widely diffuse efforts for business continuity.

8. Achieving manufacturing-oriented industrial revolution

(1) Progress in achieving KPIs

<KPI> Expand the robot domestic production market size to 1.2 trillion yen in manufacturing sector and 1.2 trillion yen in non-manufacturing sector, including service sector in 2020

⇒FY2014: Approximately 590.1 billion yen in manufacturing sector; some 61 billion yen in non-manufacturing sector

(FY2013: Approximately 503.7 billion yen in manufacturing sector; some 47 billion yen in non-manufacturing sector)

<KPI> Send up labor productivity in the manufacturing industry by more than 2% per year

 \Rightarrow 2014: +2.0% (on the year-on-year basis) (2013: +1.2% (on the year-on-year basis))

KPI> Expand the robot nursing-care equipment market size to some 50 billion, approximately 260 billion yen in 2030 [some 1 billion (in 2012)]

 \Rightarrow 2014: 1.27 billion yen

<KPI> Successfully achieve remote monitoring-based unmanned automatic driving systems, such as mobility between agricultural fields, by 2020

* KPI newly set out this time

(2) Specific new measures to be taken

As efforts to eliminate so-called "6 major problems" are steadily progressing, business performance of corporations in the manufacturing sector is improving. On the other hand, lower birthrate and aging population have been showing a stronger sign of manpower shortage, posing obstacles for domestic production expansion.

In this context, rapid digitalization coupled with emergence of new customer needs backed by social situations has changed the source of value added: From "goods" to "services" or "solutions." Making use of their competitive edge, corporations need to switch over to new business models.

In particular, speedy actions are necessary to cope with the fourth industrial revolution, which has resulted from IoT, big data and artificial intelligence. Business models themselves are changing at a faster pace than anticipated. For example, automobile industry, which serves as a driving force in Japan's economic growth and has one of the most efficient supply chains in the world, has been addressing new business model called automatic driving. In the future, such movement will spread out to the entire manufacturing sector.

As for smart factories, the government is planning to suggest international standards and create at least 50 pioneering projects by the year 2020 that utilize sensor-collected data beyond organizational boundaries, such as plant-to-plant, plant-to-headquarters and company-to-company projects. It is necessary to steadily actualize these projects by further enhancing collaborations with foreign countries,

including Germany that issued joint statement in this April.

In addition to these efforts, for example, materials-related sector in which Japan has competitive edge has started pushing ahead with efficient R&D efforts in intercompany collaboration projects using IoT and big data in terms of development of innovative materials.

In apparel sector, so-called mass customization movement is accelerating. In shipbuilding sector, development/production process productivity is improving through utilization of simulation or 3D data. In biotechnology sector, genic modification or growth condition control by using artificial intelligence or other IT technologies will yield new trend to easily extract and utilize biotic functions.

In addition, industrial machineries, construction machineries and robots sectors are seeing a shift to new business models: Enhancing after sales services, shifting away from sale of machines; and providing solutions in relation with manpower shortage by offering in-depth and efficient work management. Toward actualizing next-generation robots, it is necessary to accelerate R&D on highly accurate sensors, camera systems and other technologies.

In aircraft industry in which a lot of state-of-the-art technologies are used for materials or functional goods due to high-level safety and efficiency requirements, growth rate is estimated to stand at 5% in the future. In the world, new businesses or new services that make use of high-precision location/image data are created, backed by establishment of space infrastructures, such as positioning satellites or remote sensing satellites. For this reason, space-related market is anticipated to grow rapidly. It is necessary to maintain and send up competitive edge in these growth sectors and foster future growth seeds in Japan's manufacturing industry.

i) Actualizing robot-based new industrial revolution

[1] Implementing and advancing robots new strategy

Based on the follow-up in this May on how action plan in Robot New Strategy is implemented, the government will steadily implement and further bring forward sectional projects (manufacturing, services, nursing-care/medical, infrastructures/disaster countermeasures/construction, agriculture/forestry/fisheries/food sectors).

• "Robot Revolution Initiative Council" will examine feasibility of suggestion of international standards or identification/creation of innovative projects in tie-up with Germany in relation with business innovation or smart device installation in the manufacturing sector by using IoT or big data. To actualize next-generation robots, the government will start in this fiscal year establishment of global research base on multi-sectional areas of technology and artificial intelligence, such as high-accuracy sensors and camera systems. In this process, it is necessary to work with Artificial Intelligence Technology Strategic Conference.

Robots incorporate certain behavior patterns beforehand and correctly and quickly repeat tasks on the assumption that data input is homogenous to a certain extent. Researchers will develop element technologies, aiming to put in practice next-generation robots that autonomously operate with artificial intelligence, while learning. In addition, while working with projects on R&D or putting in practice artificial intelligence, and aiming at actualizing a new

robot society where several robots recognize their surrounding environment and autonomously work one another, the government will push ahead with technological development and demonstration works in diverse areas, such as movement of humans, transportation of goods, countermeasures on disasters and maintenance of infrastructures.

- The government will push ahead with providing appropriate environment for laborsaving of infrastructures inspection services, such as introducing on trial basis new robots capable of inspecting certain infrastructures and developing robot inspection procedures based on the outcomes of such trial run from this fiscal year. By setting out clear development targets with robot performance, policymakers will encourage developer manufacturers to participate if they are willing to put them in practice. As for anti-disaster robots, policymakers will encourage utilization of such robots by concluding disaster agreements, etc. on disaster investigation and first-aid recovery robots with superior performance suitable for on-site conditions. In addition, the government will prepare evaluation criteria, etc. that require robots to satisfy multiple basic performances at the same time under disturbance environment with multiple factors, such as wind, rain or radio wave.
- The government will work on halving volume of documents, including forms needed for civil services, and further push ahead with development support on user-friendly robots suitable for on-site needs and introduction of robots and sensor technologies to nursing-care service providers. To collect/analyze outcome data such as higher productivity of nursing-care services by introducing robots, etc. policymakers will quickly decide demonstration fields and start projects within this fiscal year. Based on available data collected and analyzed in this way, while paying attentions to incentives in a way to contribute to reducing burdens in nursing-care sector, the government will examine, and draw a conclusion on within the next fiscal year, appropriate systematic evaluation approaches on robot-based nursing-care services, including review of nursing-care reward scheme, manpower distribution and facility criteria. It will push ahead with standardizing nursing-care-related data, analyzing/standardizing introduction of ICT to nursing-care records, diffusing appropriate care management approaches and evaluating service quality.

By working on these projects, the government will encourage improving nursing-care services in order to send up service quality through appropriate nursing-care services serving for self-reliance support for elderly persons, strive for higher productivity of nursing-care services and mitigate burdens on nursing-care staff. [Described above]

• The government will support industry-university joint research projects and create safety guidelines within this fiscal year so that high-precision GPS or other geospatial information (G geospatial information)-based tractor automatic driving systems or man-monitored agriculture field unmanned system will become commercially available by 2018. In addition, to actualize remote monitoring-based unmanned automatic driving systems, such as mobility between agricultural fields, by the year 2020, the government will further push ahead with joint research projects and establish appropriate framework.

[2] Spill over the Fourth Industrial Revolution by encouraging midranking companies and SMEs to utilize IT and robots [Described above]

- To accelerate robot investment at mid-ranking companies and SMEs with focus on manufacturing or service sectors, the government will reduce general-purpose small robot prices and installation cost by 20% or more and accelerate robot installation at mid-ranking firms and SMEs. To this end, researchers will develop platform robots usable for general-purpose tasks/processes and capable of fulfilling common functions, and will make clear robots installation procedures. In addition, policymakers intend to double human resources supporting robot-based system establishment/installation works (system integrators) within 5 years (from the current 15,000 to 30,000 in 2020).
 - To push ahead with the Fourth Industrial Revolution for the entire Japan, IT, Kaizen activity and robot technology experts will help at least 10,000 midranking companies or SMEs in collaboration within the next 2 years. In this process, the government will start in this fiscal year establishing "Smart Manufacturing Support Team" offices that support production site Kaizen activities and IoT/robot installation tasks at mid-ranking companies and SMEs.
 - In addition, policymakers will encourage IT investment and laborsaving investment in line with employer's actual business conditions, ranging from micro enterprises' efforts for cultivating online or other sales channels to SME and micro enterprise's creation of new products/services through utilization of IoT or big data, or to smoother intercompany collaborations beyond sectoral boundaries.

[3] Creating appropriate environment for accelerating R&D and societal implementation

To accelerate robot R&D and encourage demonstration experiments for installation/diffusion in actual society, the government will, at an early timing in this fiscal year, start establishing some 50ha-large big robot test fields and R&D facilities for demonstration experiment on unmanned aircrafts and anti-disaster robots in Fukushima Hama-dori area under Innovation Coast Initiative.

To develop safe robots with appropriate capabilities, policymakers will set up review teams consisting of robot manufacturers, users, academic experts, etc. on physical distribution, infrastructures inspections or disaster countermeasures at robot test fields and start R&D on evaluation criteria and their verification methods with eye on international standards on robot capabilities or operation skills necessary for each sector in this fiscal year.

In addition, to accelerate R&D and societal implementation, the government will hold robot international contests on competitions/demonstrations for solving various social matters by making use of high-level robot technologies in a way to attract world's attentions in 2020. To hold such contests, Robot International Games Executive Committee and Robot International Games Executive Committee Advisory Conference set up last December will examine, and make decision on within this year, what contests should be or how such games are held.

ii) Expanding aircraft industry

To achieve GDP of 600 trillion yen, the government will work on growth of

Japan's complete aircraft industry as a driving force for growth, breaking away from the current small-sized industry, enhance strategic R&D from dual use perspectives and significantly send up productivity by utilizing IoT, such as applying robots to aircraft production process. By enhancement and technological development in materials/parts industries led by local core firms, the government will foster supporting industries in local communities. It aims to expand overall sales of Japan's aircraft industry to 2 trillion yen in 2020.

iii) Enhancing/expanding space equipment/utilization sectors

As space equipment/utilization sector markets are anticipated to expand rapidly in the world in the future, the government will issue its interim report around this summer in line with "Space Industry Vision (tentative name)," which sets out growth targets of Japan's space industry and outlines possible problems and policy actions to achieve such growth targets.

As for space equipment sector, policymakers will work to cultivate overseas markets on the full-scale basis and win some projects from customers in Asia, Middle East or some other promising market. The government will establish new public-private collaboration scheme under "Space System Overseas Business Expansion Task Force." To enhance international competitive edge of Japan's space industry, the government will push ahead with development on H3 rockets and next-generation satellites. In line with Bill on Launch of Artificial Satellites, etc. and Management of Artificial Satellites, the government will provide appropriate business environment for private-sector enterprises to participate in the rocket launching market, which is anticipated to expand in the world in the future.

For industries that use geospatial information (G geospatial information) or outer space, the government aims to create new businesses or new services that will play pioneering roles in the world, such as upgrading agricultural equipment automatic driving solutions, smart forestry, unmanned machine cargo transport services or anti-disaster systems through utilization of quasi-zenith satellite systems, various remote sensing satellites and G geospatial information centers. To this end, policymakers will develop KPIs for major categories and roadmap to attain them within this year and amend Basic Plan on Promoting Geospatial Information Utilization within this fiscal year. By providing high-level security for quasi-zenith satellite systems, the government will provide stable user environment for the said satellite systems. Through activities of "Space New Economy Creation Network (S-NET)" to provide arena for space/non-space sector firms, policymakers strive to create outer space-related ventures and encourage new business models and technological innovations, and aim at creating 100 outer space-related new projects by the year 2020. In addition, in line with Bill on Appropriately Handling Satellite Remote Sensing Records, the government will make efforts to reduce satellite remote sensing records utilization projects and foster satellite operations/image sales businesses.

The government will further push ahead with its efforts to develop international rules on outer space, as they are essential to enhance/expand the space sector, including prevention of emergence of space debris.

9. Revitalizing the housing market with focus on existing houses trading and renovation markets

(1) Progress in achieving KPI

<KPI> "Double the existing houses trading market size to 8 trillion yen by the year 2025 (from 4 trillion yen in 2010); Efforts should be made to achieve this KPI by the year 2020 as much as possible."

 \Rightarrow 2013: 4 trillion yen

<KPI> "Double the renovation market size to 12 trillion yen by the year 2025 (from 6 trillion yen in 2010); Efforts should be made to achieve this KPI by the year 2020 as much as possible."

 \Rightarrow 2013: 7 trillion yen

(2) Specific new measures to be taken

With population decrease, lower birthrate and aging population, further economic growth will require cultivation/fosterage of new housing market in addition to newly-built house market. Many Japanese people recognize home purchase as their goal in their life and their houses are not necessarily well maintained/managed after getting purchased. In this context, existing houses trading/renovation markets are not so active.

For this reason, the government will create and revitalize existing houses trading/renovation markets, shifting to "new house circulating system" in which high-quality housing stock will be evaluated as an asset and traded to the next generation even after a few decades. To restrain an increase in vacant houses, the government will establish "new house circulating system" and push ahead with replacing older houses by rebuilding projects.

The government will aim at growth of new related industries by encouraging diffusion of IoT technology-based next-generation houses.

Furthermore, to mitigate housing expense burden on young or child-rearing households and provide comfortable child-rearing environment, the government will push ahead with utilizing existing houses, including vacant houses.

i) Creating existing houses trading market in which houses are evaluated as an asset

[1] Creating trading market for high-quality and appealing existing houses

To establish "new house circulating system" and create existing houses trading market, it is necessary to expand trading volume of high-quality and appealing existing houses and create a framework for appropriately evaluating such housing stock.

To be more specific, the government will improve quality of existing houses by supporting energy-saving or "long-life quality housing" renovation projects and secure quality backed by building status investigations (inspections) and defects insurance policies.

The government will provide support to creation of trading/financial

framework for evaluating asset value of existing houses, and launch registration program for "Premium Existing Houses (tentative name)," which are high-quality and highly appealing products.

By comprehensively taking these policy actions, the government will create existing houses trading market that evaluates houses as an asset and mitigate post-retirement anxieties due to decreased asset value of houses, aiming to expand consumption.

[2] Eliminating nonperforming assets and encouraging new investment

The government will stimulate removal and reconstruction of former quakeproof standard-based houses, including vacant houses. It will examine feasibility of new framework to streamline consensus-formation rules for encouraging reconstruction of condominiums with many vacant units. To facilitate identification of vacant house owners and push ahead with their removal or reconstruction, the government will examine possible new scheme to encourage inheritance registration procedures. Through these efforts, the government will work on eliminating nonperforming assets and encouraging new investment.

ii) Encouraging diffusion of next-generation houses

To address various residence needs and expand housing life industry related to IoT technology or other new technologies, the government intends to work with related ministries/agencies, housing-related makers, etc. to collect information on pioneering cases of leading-edge next-generation houses, such as IoT houses, health houses or security houses, and identify various challenges, including feasible approaches to encourage introduction of related equipment's standards, within this fiscal year, aiming to examine next-generation houses' functional capabilities and their future visions and diffuse next-generation houses with a view to overseas markets.

iii) Mitigating housing expense burden on young or child-rearing households by effectively using existing houses

[1] Mitigating housing expense burden on young or child-rearing households by effectively using existing houses

To mitigate housing expense burden on young or child-rearing households by effectively using existing houses, the government will create new framework that employs existing private-sector rental houses such as vacant houses, so that young or child-rearing households will easily move in to housing units with necessary quality and space at an affordable rent. To this end, a panel in Houses/Housing Sites Committee under the Social Infrastructure Improvement Council will examine related matters and draw a conclusion on the direction of new scheme within this fiscal year. And the government will quickly create existing houses market in which high-quality and appealing existing houses are easily available.

[2] Setting up local community-based child-rearing environment

To provide community-based child-rearing environment in cooperation with community building projects, the government will provide support to invite child-rearing support facilities into public rental housing complexes in the wake of their reconstruction or accelerate establishment of child-rearing support facilities at private-sector housing complexes.

10. Overcoming environment/energy constraints and expanding investment

(1) Progress in achieving KPI

<KPI> "Legally separate power transmission and power distribution services on April 1, 2020 as the final stage of electric power system reform"

⇒Setting up OCCTO (Organization for Cross-regional Coordination of Transmission Operators, Japan) on April 1 of the last year; The Diet passed Act to amend a part of Electricity Business Act (Act #47 in 1952) on June 17 of the same year, which includes legal separation of power transmission and distribution sectors; Setting up Electricity Market Surveillance Commission on September 1 of the same year (reorganized as Electricity and Gas Market Surveillance Commission on September 1 of the same year); and Full liberalization of electric power retail sector started on April 1 of this year

<KPI> "Aim to boost the percentage of next-generation automobiles among new car sales to 50-70% by the year 2030"

⇒Next-generation automobiles as a percentage to overall new car sales stand at 29.3% (in FY 2015)

<KPI> "Set up some 160 commercial hydrogen stations by FY2020 and about 320 stations by FY2025"

 \Rightarrow 76 stations are already set up (at the end of this March)

<KPI> "Create 'Negawatt Trading Market' that trades saved electric power in the next year"

⇒ Conducting technical demonstration for potential evaluation of demand cut related with Negawatt trading

To launch energy resource aggregation business on the full-scale basis, the government will set up policy promotion arena, including forum of industry-academic top management or review sessions where working-level staff get together.

(2) Specific new measures to be taken

To reform conduct energy systems and achieve appropriate energy mix, the government will push ahead with "Energy Innovation Strategy" (as decided by Ministry of Economy, Trade and Industry on April 18, 2016) to expand energy investment and send down CO₂ emission. In addition to these efforts, policymakers will steadily work on "Anti-Global Warming Plan" (as decided by the cabinet on May 13, 2016) to simultaneously achieve economic growth and the FY 2030 greenhouse gas emission reduction target.

In line with the Paris Agreement that sets out the 2 degrees Celsius target, policymakers will drastically reduce greenhouse effect gas with view to the year 2050. To this end, the government will push ahead with national campaign, strategically work on reforming social infrastructures and lifestyles, and societal implementation of technologies for a long term, push ahead with enhancement

of R&D on innovative technologies and overseas deployment of Japan's highly-competitive technologies in line with "Energy/Environment Innovation Strategy" (as decided by Council for Science, Technology and Innovation on April 19, 2016) in a way to contribute to emission cut in the world.

In addition, lower resource prices have led to sluggish resource development investment in the world, resulting in slow-down of the world economy. In this context, in order to underpin sustainable growth of the world economy and mitigate the risk that Japan, where resource consumption heavily depends on import, will face a sharp rise of resource prices again, the government will actively encourage resource development investment and make efforts for procuring resources at affordable prices through fostering/developing LNG and natural gas trading markets that connect the domestic and overseas markets.

To make Fukushima Prefecture a pioneering location that will open a way to renewable energies and future hydrogen society, public-private collaborative "Fukushima New Energy Society Initiative Council," which held its first meeting in this March, will develop "Fukushima New Energy Society Initiative" in this summer at latest.

i) Pushing ahead with drastic energy-saving

[1] Pushing ahead with energy-saving in the industrial sector

By expanding to distribution/service sectors the sector's energy-saving top runner program (benchmark program) for energy-intensive sectors, policymakers intend to cover 70% of energy consumption of all sectors with the top runner program by FY2018. The government will enhance energysaving investment support to SMEs by expanding energy-saving counseling regional platforms (i.e., collaborative units that energy-saving supporter has set up in tie-up with local chamber of commerce and industry, local governments, consulting firms, financial institutes, etc.) set up at 17 locations in Japan up until the last fiscal year, and set up energy-saving-related support service desks on the nationwide scale in the next fiscal year at latest. To encourage large firms to provide SMEs with energy-saving technologies and actively collaborate with SMEs in energy-saving projects, the government will review evaluation methods for joint energy-saving projects (amendment of criteria) in line with Act on the Rational Use of Energy (Act #49 in 1979; Energy-Saving Act) in this fiscal year, including collaboration with J-Credit program.

To simultaneously achieve economic growth and energy-saving, the government will review support programs and Energy-saving Act-based regulatory schemes, aiming at strongly backing up productivity improvement efforts, such as energy reduction volume, energy-saving for reducing specific energy consumption, or collaborative energy-saving efforts of several parties in their sector or supply chain.

[2] Pushing ahead with energy-saving in consumer sector

Policyholders will make efforts so that a majority of custom-made houses built by housing makers will be net zero energy houses (ZEH) by the year 2020. To this end, to encourage major housing makers to publicly announce their target of increasing ZEHs to more than a half of newly-built custom-made houses by 2020, the government will reexamine ZEH incentive framework from this fiscal year. To double energy-saving renovation works by the year 2020, policymakers will start providing support to insulation retrofit works with high-performance windows or insulating materials and to renewal projects to high-efficient hot-water supply facilities.

To newly build net zero energy buildings (ZEBs) by the year 2020, the government will do demonstration for each region, usage or structure from this fiscal year and develop ZEB design guidelines based on the demonstration result by FY2018. Aiming at sending up light emitting diodes (LED) and other high-efficient lighting devices to 100% for flow by the year 2020 and 100% for stock by 2030, the government will expand lighting top-runner criteria to incandescent lamps within this fiscal year.

[3] Pushing ahead with energy-saving in transportation sector

To send up the percentage of next-generation automobiles to 50-70% of new car sales in 2030, the government aims to boost the number of electric vehicles (EVs) or plug-in hybrid vehicles (PHVs) owned to 1 million at maximum by 2020 and that of fuel cell vehicles (FCVs) to some 40,000 by 2020 and 800,000 by 2030. To attain these targets, policymakers will make efforts for creating initial demand, set up self-sustaining markets at an early timing and establish rechargers or hydrogen stations absolutely necessary for diffusion of these vehicles. The authority aims to set up 160 commercial hydrogen stations in Japan by FY2020. In parallel, it will also reexamine regulations on hydrogen stations, such as license of self-filling operations. Policymakers will strive to set up some 100 renewable energy-based hydrogen stations (relatively smaller station) nationwide by FY2020.

To significantly improve performance of car-mounted batteries and send down cost, the government will push ahead with R&D on common fundamental technologies to send up energetic density 5 times (500kwh/kg) as much as the current level for 5 years from the current fiscal year to FY2030.

[4] Expanding energy-saving, low-carbon products/services market through national campaigns

To drastically strengthen national campaign that encourages anti-global warming "smart choice (Cool Choice)" such as energy-saving, low-carbon products/services, under collaboration of the government, corporations, groups and local governments, new task forces will be established for LED, energy-saving consumer electronics or other major sector under "Cool Choice Promotion Team" in which Minister of the Environment serves as the team leader in this May. The government will also develop national campaign implementation plan. It will expand LED, energy-saving consumer electronics or other related markets by pushing ahead with effective information services in line with the said plans and household eco diagnosis services that offer detailed energy-saving suggestions to each household.

ii) Encouraging introduction of renewable energies

In accordance with "Act to amend a part of Act on Special Measures Concerning Procurement of Renewable Electric Energy by Operators of Electric Utilities" and related schemes, the government will satisfy both of maximizing introduction of renewable energies and reducing burdens on Japanese citizens, and take policy actions as follows.

[1] Eliminating constraints on electric power systems

OCCTO (Organization for Cross-regional Coordination of Transmission Operators, Japan) aims to develop "Wide-area power system long-term policy" within this fiscal year, which outlines its basic stance on establishing and renewing wide-area interconnection grid systems in the future. OCCTO will also reexamine operating rules on cross-regional interconnection grid systems. Policymakers will push ahead with developing concrete rules, provide more accurate output estimates on photovoltaic power generation or wind power generation and encourage developing technologies, such as upgrading output control technologies and battery discharge control technologies.

[2] Pushing ahead with R&D and regulatory system reforms

To make self-reliant and stable renewable energies, policymakers will push ahead with technical development/demonstration on sending up power generator efficiency or sending down battery system costs as well as R&D on next-generation energies such as floating-type offshore wind power generation. The government will also accelerate wind/thermal power generation environment assessment, provide support such as setting out wind power generation promotion areas, provide appropriate environment for high-potential offshore wind power generation projects, and reexamine regulatory framework for securing long-term and stable photovoltaic power generation.

[3] Expanding renewable energies in Fukushima Prefecture

To introduce renewable energies at the maximum level and create innovative models on future new energy society, the government will push ahead with "Fukushima New Energy Society Initiative" to efficiently enhance power grids, aiming at achieving wind power plan at Abukuma mountains and Fukushima Prefecture coastal areas where largescale wind power generation projects serve as a suitable solution.

iii) Establishing new energy systems

[1] Achieving both of power sector's new market entry and CO₂ emission cut

To encourage new entrants' investment under electric power full liberalization in this April and attain CO₂ emission reduction target at the same time, the government will take political actions that will encourage achieving the targets of voluntary schemes for electric power sector's major players. To be more specific, aiming at surely achieving the electric power sector's FY 2030 CO₂ emission factor target (0.37kg-CO₂/kWh) in line with energy mix and CO₂ emission cut target, policymakers will encourage sending up power generation efficiency in accordance with Energy-saving Act and push ahead with lower carbon on on-sale electric power through pushing up retail-level non-fossil power source percentage to 44% or more based on Energy Supply Structure Upgrading Act. The government will also ask major players to cooperate in reporting their actual CO₂ emission factors for emission calculation/report/disclosure purposes in line with Act on Promotion of Global Warming Countermeasures (Act #117 in 1998; Global Warming Countermeasures Act). Through these efforts, the government will push ahead with new investment and suspension/abolition or operation cut of old and lowefficient coal-fired thermal power generation. To further improve thermal power generation's efficiency, researchers will gradually develop nextgeneration thermal power generation technologies, such as Advanced-Ultra Super Critical (A-USC) thermal power generation or Integrated Coal Gasification Fuel Cell Combined Cycle (IGFC) by around 2050.

[2] Establishing IT-based renewable energy/energy-saving hybrid energy systems and local-production local-consumption energy systems

To launch "Energy Resource Aggregation Business" for IT-based integrated management/control of customer-side energy resources (photovoltaic power generation facilities, batteries, demand responses, etc.) for electric power trading purposes, policymakers will develop negawatt (a type of demand responses) trading rules within this fiscal year and aim at creating negawatt trading market the next year. In addition, as experts will examine feasibility of new capacity mechanism to yield necessary supply capacity (kW) in the future, policymakers aim to utilize negawatt as much as the United States' level where negawatt already becomes widespread (6% of the maximum demand), while making sure that negawatt is traded with appropriate value by FY 2030. The government will work on demonstration on "Virtual power plant," which controls customer-side energy resources in an integrated manner

and serves like a single power plant, and establish 50 megawatt VPPs in FY2020. Aiming at self-sustained VPPs in FY2020 at latest, policymakers will establish new scheme for accelerating price reduction within the next fiscal year. In addition to creating more flexible and stronger energy systems, the government will push ahead with installation of local-production local-consumption energy systems that will lead to local community revitalization and effective and stable use of local resources including biomass.

[3] Pushing ahead with achieving hydrogen society

Toward actualizing hydrogen society, the government will accelerate installation of hydrogen stations serving as residential-use fuel cells, fuel cell vehicles or infrastructures, expand hydrogen usage, and develop/demonstrate hydrogen-related technologies such as hydrogen power generation gas turbine-use combustors or liquefied hydrogen carrying vessels, aiming at full-scale introduction of hydrogen power stations and set-up of large-scale hydrogen supply chain around 2030. In addition, policymakers will create appropriate models that will "create" hydrogen from renewable energies and "store and transport" and "use" it in Fukushima Prefecture.

iv) Strengthening R&D on innovative energies and environment technologies

Development and diffusion of innovative technologies will serve as a key to solve environmental and energy problems in the world. It is important in the short run to send up existing technology's efficiency and thoroughly push ahead with energy-saving efforts. Researchers will develop, demonstrate, implement and put in practice at an early timing Japan's first gallium nitride-based high-efficient devices, batteries for accelerating introduction of next-generation vehicles, and new structural materials that will improve energy consumption efficiency.

Then, in line with "Energy and Environmental Innovation Strategy" as developed in this April, the government will place a higher priority on R&D on highly promising innovative technologies, rather than simply extending traditional technologies and enhance R&D schemes on the government-wide scale, aiming to significantly cut down CO₂ emission around 2050.

v) Enhancing resources security under lower resource prices

[1] Pushing ahead with resource development/securement at home and abroad

As stagnant resource prices have resulted in sluggish resource development investment in the world as well as slow-down of the world economy, the government will actively provide support to risk money supply through Japan Oil, Gas and Metals National Corporation (JOGMEC), underpin sustainable growth of the world economy through boosting stagnant resource development investment in the world, and mitigate possible risks that Japan will face soaring resource prices again, aiming at stable supply.

As for domestic resource development, the government will test-drill conventional oil and natural gas deposits off the coast of Shimane and Yamaguchi Prefectures within this fiscal year.

As for marine resources, policymakers are planning 1-month-long gas production experiment on sand layer-type methane hydrate in this fiscal year and will start full-scale survey and R&D on resource collection technologies for shallow-type methane hydrate. In terms of sea-floor hydrothermal deposits, the government is planning the world's first mining/lifting pilot test in the next fiscal year and conduct in-depth survey/exploration of rare earth or other marine mineral resources as well as their production technology surveys. Along with this, the government will proceed with survey research on environmental impact evaluation methods and demonstration/test production of equipment-related technologies, and steadily push ahead with engineer fosterage system operations from this fiscal year, aiming to enhance marine industries.

As for secondary materials emerging at home and abroad (used lead batteries, electronic parts scrap, etc.), in order to steadily recycle nonferrous metals by making use of Japan's pioneering environmental technologies, the government will examine appropriate regulations as set forth in Act on Control of Export, Import and Others of Specified Hazardous Wastes and Other Wastes (Act #108 in 1992). Based on such examination result, policymakers will take necessary measures at an early point. To encourage use of "urban mines" and growth of recycling service providers and nonferrous smelters. researchers will develop innovative technologies/systems that will make use of IT to efficiently recycle rare metals or other metallic materials in collaborations between arterial and venous economies. Policymakers will evaluate/review recycling targets in line with Small Electric/Electronic Equipment Recycling Act within this fiscal year and also work on increasing recycling volume.

[2] Fostering and development of flexible LNG and natural gas trading markets linking local and global markets

In order to enable procurement of LNG at reasonable prices and in a stable manner based on the "LNG Market Strategy" and utilizing the advantageous position of being the world's largest LNG consumption country, the Government will improve the liquidity of LNG and natural gas transactions

through the relaxation of the destination clause restricting resale by the first half of 2020s, establishment of an LNG price index reflecting demand in Northeastern Asian region, and promotion of development of domestic gas supply infrastructure, thereby aiming to make Japan a hub for LNG transactions and price formation. To this end, the Government will develop an environment in which a variety of energy transactions, including LNG and electricity futures transactions, can possibly be done in one stop, from the standpoint of the convenience of market participants.

vi) Utilization of nuclear power generation of which safety has been confirmed

Based on the premise of prioritizing safety above all other considerations and sparing no effort to eliminate the concerns of citizens, the Government will leave matters concerning the safety of nuclear power stations to the judgment of the Nuclear Regulation Authority (NRA), if the NRA accepts that a nuclear power station complies with the world's most stringent regulatory requirements, the Government will respect its judgment and move forward with the restart of that nuclear power station. In doing so, the national government will be at the forefront of efforts to secure the understanding and cooperation of interested parties, including the local authorities of the areas in which they are sited.

In order to promote enhancement and reinforcement of countermeasures against possible nuclear power plant incidents, the Government will formulate evacuation plans, organize drill, training and other human resource development systems, secure evacuation routes through road development, and maintain and improve radiation protection facilities, and strive to secure security and safety of residents. Simultaneously, the Government will listen to the voice of communities, and take a whole-of-government approach for actions in an attempt to resolve incidents and enhance support of victims, thereby striving to regain social trust on nuclear power.

Moreover, from the standpoint of improving safety and reducing the volume and toxicity of radioactive waste, the Government will utilize test reactors, such as experimental fast breeder reactors and high-temperature gascooled reactors owned by the Japan Atomic Energy Agency and other universities to promote research and development initiatives toward the future, while properly moving forward with international cooperation as premises for nuclear nonproliferation initiatives. At the same time, the Government will make steady efforts to foster human resources in these fields.

vii) Promotion of global expansion of Japanese energy and circulation industries

[1] Promotion of global expansion of the energy industry through energy infrastructure export

Under the initiative of "Enevolution," the Government will contribute to construction of energy policy formulation system and development of energy infrastructures in emerging countries through the utilization of policy formulation experiences and advanced technologies ever accumulated by Japan, including support for establishment of energy master plans to at least four countries mainly in Southeast Asia; joint development of roadmaps to achieve energy-saving and renewable energy goals, implementation of support for construction of training systems for establishment of energy management judgment criteria, and improvement of the competence to administer such criteria in the four ASEAN members (Indonesia, Malaysia, Thailand and Vietnam) by FY2020. In addition, a guideline which sets forth indices and method for measurement in order to secure the quality of power plants, such as stable supply of electricity and environmental considerations will be established by the APEC, thereby diffusing quality power plants including high-efficient thermal power generation.

With respect to the Joint Crediting Mechanism (JCM), it is estimated that accumulated greenhouse gas emissions of 50 to 100 million tons of carbon dioxide equivalent will be reduced and removed by FY2030 through the Government's projects to be done within the annual budgetary framework, in addition to contributions from private sector-led projects, and the Government will deploy inter-city collaboration projects in at least five countries by the end of this fiscal year, increase the number of partner countries, and assist those countries in building up projects. Additionally, once the Government indicates potential contributions of Japanese companies in a private sector-led project and obtains consent of the counterparty country, such project will be designated as the JCM, in principle. Taking the most of the private sector vitality in globally expanding excellent low carbon technologies through the JCM or other initiatives, the Government will aim to achieve the project size of 1 trillion yen on a cumulative basis by FY2020.

[2] Promotion of global expansion of circulation industry by gathering the system, administration and technical cooperation as a single package

In order to address the issue with wastes which are expected to increase in Asia, the Regional 3R Forum in Asia and the Pacific consisting of 39 country members will be used to publish the "Asia Pacific 3R White Paper" compiling waste-related information of each country by the end of next fiscal year, and business operators will be urged to utilize such information. Moreover, the Government will start assistance toward construction of energy saving-type resource circulation systems, and newly establish a capacity of new entrant business operators to assist global expansion of circulation industry in and after next year. Through these efforts, the Government will strategically promote global expansion of high-efficient processing and other technologies owned by private companies in tandem with inter-government cooperation and inter-municipality collaboration, and aim to double incineration and other recycling plant exports by FY2030.

11. Improvement of the competitiveness of cities and reinforcement of industrial infrastructure functions

(1) Progress in achieving KPIs

<KPI> "Tokyo will be ranked among the top three cities in Global Power City Index by 2020."

 \Rightarrow In 2015, Tokyo took the fourth place (fourth place in 2012).

(2) Specific new measures to be taken

In order to reinforce Japan's international competitiveness and drive its economic growth, the Government will enhance industrial infrastructure functions through early development and utilization of high standard highways, projected *Shinkansen* high-speed train lines, and Linear Chuo *Shinkansen* Line and other high-speed transport networks, international hub airports, and international container and bulk strategic ports, proceed with efforts for "Invest Smartly, Use Smartly" strategic infrastructure management and compact cities with public transport networks, and make efforts to maximize stock effects of infrastructures including stimulation for private investment and productivity improvement. At the same time, the following initiatives will be taken.

i) Improvement of the competitiveness of cities

- In order to effectively utilize real estates through securitization transactions, the Government will promote real estate supply in the fields of tourism and nursing care of which needs are expected to increase toward the future, and make unified changes to the relevant laws necessary for renovation of vacant houses and shops through cloud funding or other petty money subscription program, management and utilization of idle real estate donated, and enhancement of real estate information including appraisals and assessments, thereby aiming to double total assets such as REITs to approximately 30 trillion yen by around 2020.
- In order to improve the attractiveness of cities and invite international investments and human resources, the Government will assess all urgent urban renaissance districts in which five years have passed, in principle, after they had been designated as such within the next three years, and collectively promote urban development by designating and reviewing districts that are suitable as hubs of activities of global companies given the convenience of transport access and accumulation of urban functions.
- The Government will accelerate implementation of excellent urban development projects led by the private sector by setting up nearly twenty facilities, including international conference halls, medical centers that can accept foreign people, and childcare facilities, by 2020 to improve international business and life style environments. The Government will also create liveliness of cities by providing assistance to

private-sector activities to raise "earning power" of communities, such as renovation projects for vacant shops and idle facilities.

ii) Reinforcement of industrial infrastructure functions

The Government will accelerate the efforts of the council consisting of trucking companies, consignors and others to reduce long-hours work, efforts toward promotion of fair trading practices including improvement of trade terms for subcontractors and other SMEs, and promotion of introduction of joint transport system including IT-based junction transport services. In addition, the Government will promote the following initiatives, and embody the "Logistics Productivity Revolution" to raise labor productivity of logistics vendors by about 20% by 2020:

- For the purpose of maximizing stock effects of road networks, realizing quick and smooth logistics and mitigating traffic congestion, development of the circular routes in the three metropolitan areas, including the three circular routes in the Greater Tokyo area, will be pushed forward, user-oriented new fare system will be introduced, and pinpointed congestion measures utilizing ETC 2.0 and other big data will be taken.
- In order to promote development of logistics centers that are highly accessible to highways, new rules on direct connection to logistics centers and effective utilization of road spaces will be discussed.
- Guidelines for design and administration of buildings considering logistics will be established by the end of this fiscal year so that freights can easily be brought into buildings by securing ceiling heights that correspond to freight elevators and carrying vehicles in buildings.
- The standards for permission of passage of special vehicles that allows for introduction of a double-connected truck in which a single unit of truck can carry two normal large-sized truckloads will be relaxed, and the average examination period for such permission will be shortened from the current about one month to around ten days by reinforcing automatic examination system utilizing electronic data.
- In order to accelerate efficient navigation of vessels that can quickly respond to weather conditions and detect any fault in advance by utilizing Internet of Things (IoT) and big data, and promote more efficient design and production of vessels, the Government will raise Japan's share in vessel construction worldwide by approximately 10% (i.e., from 20% to 30%) by 2025 through creation of a rating system for safety performance, economy and other factors that are also the strengths of Japan, and formulation of Japan-led international standards.

II. Regulation and System Reform to realize revolution in productivity

1. Introduction of a new mechanism for Regulatory and Institutional Reforms

(1) Specific new measures to be taken

It will be too late to begin discussion about regulation and system reform after problems become apparent, because it is difficult to predict technical innovation and the priority is put on speed in the Fourth Industrial Revolution. It is necessary for the government and the private sector to share the future business image, draw a roadmap by the back calculation of goals, and simultaneously proceed with technical development and refinement of business models by the private sector and regulation and system reform by the government. Even if an assumption gap arises, it is also necessary for the government and the private sector to share it concurrently and modify their respective actions instantly.

In order to make Japan "the most business-friendly country in the world," it is necessary to thoroughly support business operators in improvement of productivity to bring a "600 trillion yen GDP economy" into reality.

Given these, the Government will introduce two new reform mechanisms to respond to new era and proceed with further reforms.

i) "Roadmap method for the back calculation of goals" to win the Fourth Industrial Revolution"

• In order to cope with the Fourth Industrial Revolution where it is difficult to predict technical innovation and the priority is put on speed, the government and the private sector will share the future business image they should aim to accomplish by setting a time limit, draw a roadmap by counting backward from it, and introduce a new mechanisms to implement concrete reforms in or after the summer of this year.

ii) Introduction of new methodologies for regulation and system reform to proceed with regulation reform and simplification and computerization of administrative procedures from the standpoint of business operators

• In order to thoroughly support business operators in improvement of productivity with the aim of making Japan "the most business-friendly country in the world" and bring a "600 trillion yen GDP economy" into reality, the Government will introduce new methodologies for regulation and system reform to concurrently proceed with regulation reform and simplification and computerization of administrative procedures, and systematically take actions to reduce regulatory and administrative procedure costs from the standpoint of business operators by setting a time line. To this end, conclusions will be reached within one year to fundamentally simplify the regulatory and administrative procedures related to the activities of foreign companies investing in Japan (if a conclusion can be reached earlier, the Government will determine specific measures as up-front actions within the year and implement them promptly). For the areas other than those related to the activities of

foreign companies investing in Japan, the Government will decide specific measures, if it is possible to start up-front actions, within the year and implement them promptly. Considering the status of the implementation of those up-front actions and the actions related to the activities of foreign companies investing in Japan, the Government will conduct surveys into the methodologies adopted by foreign countries, and examine the approaches to reduce regulatory and procedural costs and how goals should be set. Then, the Government will decidefocused areas where the governmentshould promote regulation reform, simplification of administrative procedures; and evolution of information technology in an integrated and unified manner and on a full-scale basis by the end of this fiscal year, decide the goals to reduce regulatory and administrative procedural costs, and promote systematic efforts to accomplish them.

2. Institutional Reform for Investment in the Future

In order to ensure a positive cycle of Japanese economy, it is important to develop an environment in which it is possible to make the best of knowledge of private companies and urge private companies to invest in the future.

To this end, the Government has ever been making efforts to strengthen corporate governance of companies by formulating the Stewardship Code and the Corporate Governance Code. Under these circumstances, listed companies, including the three mega-bank groups, have started to take actions to reduce the numbers of shares held by banks in their customers and clients. The Government has also opened up the public service markets to private companies through the introduction of concession-based PFI projects. In addition, the Government has proceeded with the growth-oriented corporate tax reform and establishment of exceptional measures for the property tax on machinery and equipment, and has supported aggressive and bold investment judgments of companies in the "government-private sector dialogue toward investment in the future."

The Government will continue to mobilize all policies to aim to bring the "country where companies can most easily do business in the world" into realty, and will improve the medium- and long-term corporate value by making corporate governance work effectively, not only superficially, enhance the effectiveness and efficiency of disclosure of corporate information, enrich dialogues between companies and their investors, and promote investments from the medium- and long-term perspective. It is also important to facilitate rebalancing of portfolios that should lead to citizens' stable formation of assets, improve the competitiveness and productivities of industries and companies through exhibition of high-quality financial intermediation function, and strengthen concession-based PFI project initiatives.

Under the above-mentioned recognition, the following initiatives will be taken to proactively support investments in the future by private companies.

2-1. Promotion of "Proactive Management"

(1) Progress in achieving KPIs

<KPI> Aim to expand the level of capital expenditures to approximately 80 trillion yen a year in the next three years (by FY2018)

- \Rightarrow FY2014: 68.4 trillion yen
 - * Changed the previous KPI (to get back to the pre-Lehman shock level, i.e., approximately 70 trillion yen a year (average level for the five years before 2007) by FY2015)

(2) Specific new measures to be taken

i) Enhancement of corporate value through the corporate governance reforms

As the corporate governance "framework" was substantially developed last year, such as the formulation and adoption of the Corporate Governance Code and the enforcement of the amended Companies Act, it is said that the year of 2015 was the "first year of the corporate governance reforms." The corporate governance reforms continue to be one of the top agenda of Abenomics, and the first priority issue is to deepen those reforms from "superficial" to "substantial."

To this end, it is effective to raise the effectiveness of pressures from institutional investors on listed companies. As a result, the realization of "constructive dialogues" from the medium- and long-term perspective will be strongly promoted.

From this point of view, the Government will ensure through discussions and reviews at the "Council of Experts Concerning the Follow-up of Japan's Stewardship Code and Japan's Corporate Governance Code" (the "Follow-up Council") that institutional investors will properly fulfill their stewardship responsibility by putting interests of customers and beneficiaries (including ultimate beneficiaries) first. The Government will also urge investors and listed companies to make efforts to improve the quality of dialogues between them.

Concurrently, the Follow-up Council will monitor the efforts of listed companies to help their board of directors to exhibit their effective functions and banks to reduce shareholdings in their customers and clients, and ensure that listed companies will make appropriate efforts to improve the effectiveness of corporate governance. The Financial System Council will consider measures to realize the market structure that would contribute to effective corporate governance, also based on the philosophy depicted in the G20/OECD Principles of Corporate Governance.

In addition, in order to maintain sustainable growth of companies and improve the medium- and long-term corporate value, the Government will improve the effectiveness and efficiency of disclosure of corporate information, and improve the quality of, and secure the reliability of, the underlying accounting standards and accounting audit.

[1] Deepening of the efforts toward effective corporate governance reforms

- A) Efforts of the Follow-up Council
 Through discussions and reviews at the Follow-up Council, the following
 actions will be taken to improve the effectiveness of corporate
 governance of listed companies:
- In order to realize "constructive dialogue" between investors and listed companies, the Follow-up Council will urge institutional investors to have dialogue to give companies "awareness" based on the understanding of individual companies and their business environments,

and discuss the way in which conflicts of interest should be properly controlled so that voting rights may be exercised in a manner consistent with interests of customers and beneficiaries based on the stewardship responsibility.

- In order to contribute to constructive dialogue between investors and listed companies, the Follow-up Council will urge companies to make efforts based on which they can have dialogues with investors, by publishing their management policies including their basic capital policies, and their management strategies and plans in a way that is easy for shareholders to understand, and transmitting information in English.
- Based on its recommendation on the way the board of directors should be, and in collaboration with the Japan Exchange Group and other organizations, the Follow-up Council will grasp and publish the efforts of listed companies for appointment/dismissal of a chief executive officer (CEO), as well as for the structure, administration and evaluation of the board of directors, and urge listed companies to make efforts to help the management and the board of directors to fulfill their roles and responsibilities effectively.
- The Follow-up Council will work together with Japan Exchange Group and other organizations to analyze what measures listed companies have taken to reduce banks' shareholdings in them, and monitor the situations so that companies that "make banks hold" their shares may not prohibit banks from selling their banks, for example, by implying that the company will stop transactions with the bank, when banks decide to reduce their shareholdings in business companies.
- From the standpoint of increasing international understanding of the efforts for corporate governance in Japan, the Follow-up Council will transmit information on its discussions and efforts overseas in a timely and effective manner.
 - B) Improvement of sustainable corporate value and promotion of mediumand long-term investments
- The Government will aim to strengthen the function to monitor the boards of directors, including the processes of appointing and dismissing a CEO. More specifically, in order to meet the need of companies that have interest in the governance framework in which the decision-making speed will be secured by delegating the discretion to conduct business to the management led by CEO, and the board of directors will chiefly decide management strategies and business performance evaluations, the Government will formulate guidelines and concrete case studies concerning the roles and method of administration of the board of directors, appointment and dismissal of a CEO and succession planning, introduction of incentive remuneration, and practical affairs of the nomination and remuneration committees (including those of an optional nature) by the end of this fiscal year, while compiling Japanese and foreign advanced sample cases. Also, the Government will work with the relevant organizations to discuss possible measures to further accelerate

- qualitative and quantitative improvements of human recourses who will serve as outside directors.
- In addition, the Government will make further discussions and efforts about measures to secure the period of time during which companies can enhance disclosure of information, shareholders can consider proposals and companies can have dialogue with shareholders in order to develop most desirable environment for dialogue from a global point of view, and will aim to realize a process for dialogue-type shareholder meetings.
 - With respect to electronic delivery of attachments to the notice of convocation of the general meeting of shareholders, the Government will expand the scope of information that can be provided electronically in lieu of those documents even without individual approvals of shareholders and proceed with discussions toward the development of a new system so that those documents can basically be provided electronically. More specifically, based on the proposals by the "Study Group on Promoting Electronification of Processes for Shareholder Meetings" published in April this year, the Government will refer to the following common points of the electronic delivery system in foreign countries: (i) that all sets of information legally required to be submitted to the general meeting of shareholders have been disclosed on the internet; (ii) the minimum information including URLs will be given to shareholders in writing; (iii) no individual approvals of shareholders will be required for a company to adopt the system; and (iv) shareholders who wish to receive all information in writing will need to request that the company provide such information in writing. At the same time, the Government will discuss concrete legislative measures to take, given the systematic environment and realties surrounding the general meetings of shareholders in Japan, as well as corporate practice considerations, while aiming to start improvement of the company law system in early spring of next year.
 - With respect to the electronification of the voting process in shareholder meeting, to enhance the quality of voting rights to be exercised by securing the period of time during which shareholders can consider proposals and companies can have dialogue with their shareholders, the Government will urge those concerned and other related organizations to discuss: (i) one-stop process for exercise of voting rights; (ii) cooperation of platforms for electronic exercise of voting rights; and (iii) the way the procedure for proper and smooth usage of those platforms should be. Then, the Government will hold a meeting to check the progress of such discussion.
 - For the way in which the date of shareholder meeting and the record date for exercise of voting rights should be set based on global and business practices, the Government will urge those concerned, including companies, investors and dialogue support service industry, to change their awareness and behaviors by holding meetings to check the status of discussions by those concerned and the relevant organizations, based on the status of discussions about effective and efficient disclosure.

- In addition, the Government will transmit information in Japan and abroad on the progress of the efforts of those concerned to realize the process for a dialogue-type shareholder meeting.
- (environment, society and governance) factors, the Government will also consider the way in which corporate management and investments creating sustainable corporate value should be and how such value should be evaluated, and the mechanism of governance facilitating the optimization of investments in human, intellectual, manufacturing and other capital resources based on long-term management strategies, and how managers should make investment decisions and how investors should evaluate those decisions, as well as how information should be provided, and reach conclusion on what policy measures the Government should take to encourage optimization of investments by the end of this fiscal year.

[2] Realization of the market structure to secure the effectiveness of corporate governance

As indicated in the G20/OECD Principles of Corporate Governance, the stock market rules and regulations play an important role to ensure effective corporate governance. The Principles also present the thought that it is important that the stock market should provide fair and efficient price discovery for shareholders to work on companies based on medium- and long-term corporate value of companies.

From this standpoint, the Financial System Council will consider the following points and contribute to trans-border discussions on the stock market rules and regulations.

- How the exchanges should exhibit their self-regulatory functions contributing to ensuring effective corporate governance.
- Possible impacts of algorithmic high-frequency trading that is claimed to adversely affect the fair and efficient price discovery function on the fairness, transparency and stability of markets.

[3] Improvement of the quality of disclosure of information, accounting standards and accounting audit

It is necessary to secure the fairness and transparency of the market and promote constructive dialogue between companies and investors/shareholders to facilitate supply of growth capital in the market and promote sustainable growth of companies.

From this standpoint, the following measures will be taken to help companies to provide corporate information required by investors in an effective and efficient manner, and further improve the quality of accounting standards and accounting audit and secure the reliability of those standards and audit.

A) Improvement of the effectiveness and efficiency of disclosure of corporate information

In order to facilitate supply of growth capital in the market and promote sustainable growth of companies, it is necessary to secure the fairness and transparency of the market and promote constructive dialogue between companies and investors/shareholders. From this standpoint, the Government will realize an integrated disclosure framework that will ensure that corporate information required by investors will be provided effectively and efficiently, and develop an environment which will ensure that companies will set the schedules and record dates for shareholder meetings reasonably and appropriately.

Disclosure documents of listed companies consist of business reports and financial statements under the Companies Act (Act No. 86 of 2005, as amended), annual securities reports under the Financial Instruments and Exchange Act (Act No. 25 of 1948, as amended), and earnings reports under the relevant stock exchange securities listing regulations, and each of those documents has different purposes and roles, while certain systematic problems that are different from those of foreign countries have been pointed out, such as duplication of information and clerical burdens, appropriateness of disclosure timing, and two types of audit reports.

To resolve those problems, it is necessary to realize most effective and efficient disclosure system even from a global point of view by sorting out, and eliminating duplications of, disclosure items with respect to the statutory disclosure all listed companies are compulsorily and commonly required to comply with, from the standpoint of promoting dialogue between companies and investors as set forth in the "Stewardship Code."

As the first step for consideration toward the realization of such integrated disclosure, the "Disclosure Working Group" of the Financial System Council compiled the report in which the certain directionality was presented.

Given the above, from the standpoint of promoting dialogue between companies and investors and based on the previous discussions at the Financial System Council, the related government bodies and Tokyo Stock Exchange, Inc. will work together to have trans-system and cross-government discussions, and make the following comprehensive examinations and efforts by the first half of 2019, with the aim of developing an environment which is designed to realize the most effective and efficient disclosure system from a global standpoint and set reasonable schedules and record dates for general meeting of shareholders:

- With respect to the way integrated disclosure of business reports and annual securities report, and the earnings report and audit report for the relevant fiscal year should be, the related government bodies and Tokyo Stock Exchange, Inc. will meet together with the attendance of companies that are willing to participate in constructive dialogues with investors and shareholders; prepare and share comparative tables based on actual disclosure cases of companies; organize approaches of the related government bodies on integrated disclosure of statutorily required items; and, if there are items of disclosure that can be statutorily commonalized further, reach conclusion on concrete ways to commonalize them, including details of necessary works and deadlines, by the end of this fiscal year.
- For quarterly disclosure, it is necessary to continually verify the necessity for statutory disclosure and how it should be, considering international situations and discussions. First of all, the Government will sequentially start evaluation and analysis of Tokyo Stock Exchange, Inc.'s review of earnings reports, and the possible impacts and effects of such review, and identification of points required to be improved in the future in the course of this fiscal year.
- While proceeding with the above-mentioned efforts for institutional reforms of disclosure, from the standpoint of promoting integrated disclosure by companies by giving companies sufficient time necessary to prepare integrated reports on and after the most recent settlement date, as well as of securing the period of time during which investors can consider proposals and promoting investors' dialogue with companies by enabling companies to disclose such integrated reports enough prior to the date of the meeting and, the Government will make efforts to develop a comprehensive environment for companies emphasizing dialogue to set schedules and record dates for shareholder meetings reasonably and appropriately in relation to the situations in the United States and European countries (for example, to hold a general meeting of shareholders four months after the most recent settlement date and/or shorten the period between the record date and the date of the meeting by setting a record date after the most recent settlement date, like foreign countries).

B) Improvement of the quality of accounting standards

In order to improve the quality of accounting standards to be used in Japan, the Government will cooperate with the Financial Accounting Standards Foundation, the Accounting Standards Board of Japan, The Japanese Institute of Certified Public Accountants, Japan Exchange Group, and companies to promote the following initiatives:

Promotion of expansion of companies voluntarily adopting IFRS
 The Government will work with the relevant organizations to provide opportunities to share experiences of companies that have completed transition to IFRS, and facilitate the practices of companies adopting the IFRS or considering transiting to IFRS by

dispatching and communicating IFRS interpretations, thereby promoting expansion of companies voluntarily adopting IRFS.

• Strengthening of international transmission of opinions on IFRS

The Government will more strongly offer Japan's opinions as to
how IFRS should be in connection with goodwill accounting and
recycling (i.e., accounting for items recognized in other
comprehensive income to be transferred to net income).

• Enhancement of the quality of Japanese standards

The Government will provide support necessary to accelerate discussions to enhance the quality of Japan's revenue recognition standards at the Accounting Standards Board of Japan.

• Fostering of international accounting specialists

The Government will cooperate with the related organizations to build up a pool of human resources who can offer opinions as to IFRS in international arena. The Government will also grasp human resources who can handle accounting audit practices under IFRS and how audit firms foster those human resources and urge audit firms to make appropriate efforts, both through The Japanese Institute of Certified Public Accountants.

- C) Securing of improved quality and reliability of accounting audit
 In order to establish a positive cycle of audit firms providing highquality accounting audit under effective governance and management
 being properly evaluated by companies and shareholders and aiming to
 provide higher-quality accounting audit, and secure a sustainable
 improvement and reliability of the quality of accounting audit, the
 Government will take the following initiatives based on
 recommendations of the Advisory Council on the Systems of Accounting
 and Auditing:
 - The Government will establish the principles for systematic administration of audit firms (the governance code for audit firms) and strengthen management of audit firms. More specifically, management teams of audit firms will be required to show leadership to urge their members to exercise professional skepticism build up and clarify administration and supervision frameworks, and conduct human resources enlightenment, and personnel assignment and evaluation.
 - The Government will urge audit firms to work hard to establish highly transparent and effective audit firm governance by asking them to appropriately disclose and explain their status of governance and their efforts to secure quality, and ensure that market participants including shareholders and investors of audit clients, and the competent authorities can more easily check audit firms externally.
 - The Government will cause companies to enhance their accounting audit disclosure, including the period of time during which the company has been audited by the same auditors, and enhance provision of information on accounting audit to shareholders and

- other stakeholders, so that shareholders can make appropriate judgment on appointment and dismissal of the auditor.
- A forum for dialogue between the authority and major and quasimajor audit firms will be established to share the awareness on issues with accounting audit of large listed companies, thereby improving the audit service levels.

[4] Promotion of dialogue between companies and investors

Tokyo Stock Exchange, Inc. has introduced JPX Nikkei Index 400 of which constituent stocks are to be selected based on 3-year average ROE and appointment of independent outside directors, and have had stock index-linked exchange traded funds (ETFs) based on JPX Nikkei Index 400 listed.

The Bank of Japan has the policy of purchasing ETFs constituted by stocks of companies that are making positive efforts for capital expenditures and investments in human resources. The Government will aggressively urge those concerned to make such efforts smoothly.

Given the diffusion of emphasis on ESG factors and the increase of institutional investors who have willingly signed the United Nations' Principles for Responsible Investment, the Government will urge companies to have aggressive dialogue with investors to reinforce their medium- and long-term growth power and profitability.

ii) Promotion of metabolism and smoothening of business restructuring

As the pace of business model transformation goes up drastically, the Government will consider measures necessary to accelerate R&D that will create innovation, strategic investment in tangible and intangible assets to win global competition, and far-sighted speedy business restructuring based on management strategies, reach conclusion, including the necessity for institutional actions, by the end of this year, and take necessary measures, considering bringing related bills before the Diet meeting (including the next session of the Diet) early. Simultaneously, the Government will consider how equity investment for promoting innovation should be vivified.

iii) Promotion of business rehabilitation

In order to enable companies to proceed with business rehabilitation quickly and smoothly even in case of there being creditors opposing to out-of-court workout proceeding, the related government bodies will consider a legal framework, based on details of the report by the panel of experts.

In addition, the Government will consider measures necessary for realization of effective rehabilitation support, smoothening of business succession, and promotion of management innovation triggered by business succession in order to promote business revitalization and business succession of regional SMEs, and reach conclusion on institutional actions by the end of this fiscal year.

2-2. Realization of vital financial and capital markets

(1) Specific new measures to be taken

i) Promotion of portfolio rebalancing contributing to supply of growth capital and development of market environment

In order to realize a good capital flow and facilitate rebalancing of portfolios that should lead to citizens' stable formation of assets, it is necessary to work on both households and financial institutions.

With respect to household accounts, the Government will further disseminate NISA and Junior NISA schemes and develop those schemes to widely facilitate stable formation of assets through long-term, diversified and accumulated investments starting with a small amount, and strengthen financial and investment education useful for such formation of assets.

The Government will ensure that financial institutions engaged in distribution and development of financial instruments and financial institutions that are contracted by households and pension fund and other institutional investors for management and administration of their assets will fulfill the fiduciary duty, thereby urging them to contribute to citizens' stable formation of assets, so that the former can take actions putting interests of customers (households) first, and the latter can manage operations that are truly in the interest of customers and beneficiaries through appropriate conflict of interest management and sophistication of management techniques.

[1] Development of environment and investment education that will facilitate rebalancing of household portfolios

- Considering that long-term and diversified investment approaches utilizing accumulations starting with a small amount is useful to realize stable formation of assets by households, the Government will further disseminate NISA and Junior NISA schemes and develop those schemes from the standpoint of facilitating formation of assets though such accumulation methodology.
- Concurrently, in light of the importance of widely communicating the effect of long-term diversified investment utilizing accumulation, the Government will further improve citizens' financial literacy by enhancing financial economic education programs, and make efforts to further disseminate workplace savings NISA scheme in which officers and employees at each workplace can join and receive financial and investment education, and get it established. Similarly, the related government bodies will cooperate with each other to disseminate the defined contribution annuity scheme in which officers and employees can join and will be given opportunity to receive financial and investment education at each workplace and get it established.
- It is pointed out that although much of household assets are held by senior citizens, treatment of listed stocks under the inheritance tax distorts selection of assets by citizens, because listed stocks are exposed to large price fluctuation risk after the inheritance until the

- due date of payment of the inheritance tax and are disadvantageous in relation to other assets. Such situation may perhaps become a negative factor in working on citizens for stable formation of assets, and the Government will consider improving it.
- Given the recent deposit interest rate reductions, the Government will develop an environment in which individuals can more easily hold JGBs by simplifying the procedure for purchasing JGBs for retail investors that are free from the risk of principal loss, from the standpoint of broadening the width of management of individual and household assets, as well as of making it possible to manage them as advantageously as possible.

[2] Ensuring that the fiduciary duty will be fulfilled

- The Financial System Council will consider necessary actions to ensure that all entities engaged in formation of assets by customers, such as development, distribution and management of instruments, and asset management, will fulfill their fiduciary duties (customeroriented management of operations).
- The Government will take the initiatives to make fees for high-risk instruments such as investment trusts and savings insurance more transparent and appropriate, from the viewpoint of providing instruments that meet the need of customers and are truly in the interest of customers.

[3] Promotion of sophistication of asset management by financial institutions

• Sophistication of asset management by financial institutions will contribute to a sustainable economic growth through market revitalization and citizens' stable formation of assets. For sophistication of asset management by financial institutions, including Japan Post Bank and Japan Post Insurance, the Government will verify how the asset management business is positioned in the underlying business model and what management issues they are aware of, and encourage them to make efforts for that purpose.

[4] Development of tools supporting long-term stable investments

- In order to contribute for households' long-term and stable formation of assets, the Government will hasten the efforts of Japan Exchange Group for further dissemination and establishment of JPX Nikkei Index 400, and development of new stock price index such as smart beta index.
- From the standpoint of forming a thick market which a variety of investors including households can join, the Financial System Council will consider how new stock price index contributing to households' long-term stable formation of assets should be developed, how ETFs should be originated and the liquidity of ETFs should be improved, and how distribution channels should be like.

[5] Improvement of the convenience of financial and capital markets and their revitalization

- With the aim of strengthening the competitiveness of Japan's asset management business, the Government and the private sector will work together to set up a framework to sophisticate management and maximize customer gains, diversify management companies including independent ones, and develop an environment that will attract superb fund managers and sophisticated financial professionals from both inside and outside Japan.
- A one-stop office for foreign asset managers/owners who are considering setting up an office in Japan will be established in the Financial Services Agency for consultation. It will collaborate with the "Financial Concierge Services" and the "Tokyo One Stop Business Establishment Center" administered by the Tokyo Metropolitan Government to provide one-stop services for all affairs relating to the establishment of an office.
- In order to reduce settlement risks and improve the market efficiency, the Japan Securities Dealers Association and other organizations have been taking various initiatives with the aim of implementing "T+1" settlement of JGBs in the first half of FY2018 and implementing "T+2" settlement of stocks as early as possible in 2019, and the Government will encourage those initiatives to be taken steadily.
- From the viewpoint of improving the convenience of market participants and strengthening the international competitiveness of the exchanges in Japan, the Government will continue the work of establishing a comprehensive exchange as early as possible, and make aggressive efforts to ensure that electricity and LNG futures will be listed smoothly.
- The Government will develop an environment necessary for sustainable growth of the infrastructure fund market so that investors may easily invest in infrastructure assets. The Government will also collaborate with the self-regulatory associations to take the initiatives toward further dissemination and enlightenment of healthcare REITs by holding sessions for healthcare companies.
- In order to improve the convenience of, and revitalize, the bond market, the Government will continue to encourage the efforts of market players to revitalize the TOKYO PRO-Bond Market in which Japanese and foreign institutional investors participate.

[6] Ensuring of the fairness, transparency and stableness of the market

• Given the fact that the share of algorithmic high-frequency trading is growing in the stock market, the Financial System Council will consider measures to be taken so that the impartiality with households and other investors who cannot make such trading and the formation of prices that reflect medium- and long-term

profitability of companies may not be adversely affected, and a system trouble may not cause any problem in the market, from the standpoint of ensuring the fairness, transparency and stableness of the market.

[7] Supply of growth capital by public-private funds

While paying attention to the principle of subsidiarity and the principle for externalities that public-private funds and government-affiliated financial institutions are required to comply with, given the current situation in which they are still strongly sought to exhibit a priming effect for supply of growth capital, the Government will consider initiatives that will enable them to further exhibit their functions.

[8] Strengthening of strategic actions for international financial regulatory reforms and international network/financial cooperation

- In order to strategically cope with problems with international financial regulatory reforms as the moves to strengthen regulations continue globally after the worldwide financial crisis, the Government will strive to aggressively dispatch opinions on reexamination of regulations such as avoidance of excessive regulations. The Government will also encourage international harmonization and collaboration of the regulatory authorities to respond to the globalization of activities and transactions of financial institutions.
- In order to strategically respond to problems with international financial regulatory reforms, the Government will utilize a wide variety of international conferences, and aggressively offer opinions of the authority. Also, the Government will aggressively hold and invite various meetings and conferences relating to international finance, including high-level international conferences, in Japan.
- From the standpoint of Japan's international presence and raising the presence of Tokyo as an international financial center, the Government will provide necessary support to the International Forum of Independent Audit Regulators (IFIAR), which has recently decided to set up a permanent secretariat in Tokyo, for the establishment of the secretariat in April of the next year and its subsequent smooth administration.
- The Government will actively address international discussions about the usage of FinTech.
- In order to promote dialogues and cooperative relationships with overseas financial authorities, the Government will conduct bilateral discussions.
- From the viewpoint of providing Japanese companies and Japaneseaffiliated financial institutions with support for global expansions, as well as of expanding opportunities of Japanese investors to make overseas investments, the Government will provide Asian and other

- countries with deep financial cooperation such as support for improvement of the abilities of financial authorities and support for development of financial systems.
- In order to steadily foster pro-Japanese groups in overseas financial authorities, and reinforce medium- and long-term cooperation with them, the "Global Financial Partnership Center" (GFPC) will strengthen the preparedness for acceptance of researchers from not only Asian countries but also Africa and Latin America. In addition, GFPC will construct and reinforce its networks with researchers once accepted.

[9] Strengthening of collaboration to make Tokyo an international financial center

In order to revitalize the Japanese economy, it is important to stimulate the financial sector that will supply the underlying funds. Given this, in order to make Tokyo a center that will attract human resources, information and funds from all over the world, and supply funds to the sectors that need them in Japan and abroad, the Government will strengthen the partnerships with the Tokyo Metropolitan Government and the private sector, and further promote the efforts to revitalize business exchange centers, hold and invite international financial conferences, and provide collaboration programs for financial education. The Government will also aggressively take the following initiatives:

- From the standpoint of promoting the Tokyo Global Financial Center conception, the Tokyo Metropolitan Government will collaborate with the office for foreign asset managers/owners to be established at the Financial Services Agency (mentioned earlier) to deploy "financial concierge services" to provide foreign financial companies with support for business in general, and strive to encourage invitation of FinTech companies. In order to strategically cope with problems with international financial regulatory reforms, the Government will widely utilize international conferences and other opportunities, and positively disseminate opinions of the authority.
- In order to ensure that the areas along Eitai Street from Ohtemachi to Kabuto-cho districts where the core functions of Japan's financial services gather around (i.e., "Tokyo Financial Street") will work as a showcase where overseas sophisticated financial professionals gather around, the national government and the Tokyo Metropolitan Government will be going forward with effective utilization of national strategic special zones, as well as with enhancement and reinforcement of invitation support measures.
- Including the above-mentioned measures, the study group consisting of representatives from the Tokyo Metropolitan Government, the Financial Services Agency and private business operators will be established, in which participants will compile what measures should be taken in the immediate future to contribute to promotion of the conception.

ii) Strategic Actions for FinTech

Recently, the move toward the fusion of finance and information technology called FinTech has been in progress, revolutionizing the financial services and markets. Considering protection of users and prevention of frauds, it is important to sophisticate financial services and link it to improvement of the convenience of users and strengthening of the growth potential of Japanese economy by introducing the IT evolution into the financial sector. From this viewpoint, the following initiatives will be taken.

[1] Promotion of the financial innovation through Fintech

The Government will create FinTech ventures made in Japan considering global expansion to lead the world and aim at user-oriented financial services innovation. From this viewpoint, the Government will proceed with forming up an environment (FinTech ecosystem) in which advanced ideas will be created by human resources from a broad variety of fields of the industry and academia and FinTech companies supported by the supply of equity capital will grow. To this end, based on discussions at the "Panel of Experts on FinTech Start-ups" that will consider issues with FinTech, the Government will promote initiatives towards construction of a forum where human resources from a wide variety of fields can collaborate and formation of global networks with foreign persons concerned.

In order to facilitate sophistication of financial services, the Government will change inter-company bank remittance instruction telegraphic messages to global standard XML telegraphic messages by 2020 and proceed with initiatives towards financial EDI (electronic data interchange) that will make it possible to attach commercial distribution information to remittance instruction telegraphic messages. From the standpoint of maximizing effects of the change to XML telegraphic messages, including improvement of the productivity of SMEs and improvement of cash conversion cycle (CCC), the industry and the Ministry of Economy, Trade and Industry will reach conclusion on standardization of commercial distribution information to be contained in financial EDI by the end of this year.

Moreover, the government and private sector will work together to consider providing a new mechanism that will bring less expensive and non-urgent international money remittance (low-value remittances) into realty, publishing the API (application program interface) of the banking system that will enable creation of various financial services connecting to the bank systems while paying attention to information security, and utilizing new financial technologies such as block chain technology. The Government will also develop an environment for sophistication of cash management. To this end, a framework will be organized through which the government and the private sector can implement those initiatives.

[2] Institutional actions for FinTech movements

The Government will enforce the Act Partially Amending the Banking Act to address changes in the environment such as evolution of information telecommunication technologies, and promote development of an environment to reinforce cooperation between financial institutions and financial-related IT companies. In addition, the Financial System Council will continue to consider financial-related institutional problems, while looking into further evolution of FinTech, and taking protection of users and prevention of frauds into consideration. In that process, the Government will fully identify the future directions of the development of cooperation between FinTech companies and financial institutions, and consider how the legislative system for the relationship between FinTech companies and financial institutions should be, while paying attention to the relationship with the current bank agency business system. In order to realize the development of new regulatory and institutional environments that will encourage innovation, the Government will take necessary legislative measures in the credit card sector by awarding new legal positioning to highly reputable settlement agencies with high technology so that they can improve the convenience of network transactions by utilizing their original IT technologies.

iii) Promotion of a cashless society

In order to improve the convenience and efficiency through the diffusion of cashless payment in light of the Tokyo 2020 Olympic and Paralympic Games, the Government will promote the diffusion of cashless environment in tourist spots and localities based on the "Measures for a cashless society" formulated by the relevant ministries and agencies in December 2014.

To encourage the development of an environment in which credit cards can be used safely, the Government will promote smooth implementation of the "implementation plans" established by credit card-related business operators, with the aim of realizing international-level security environment by 2020, such as realization of "100% shift to IC-compliant credit settlement terminal devices," and take necessary legislative measures to secure the effectiveness of those plans, including obliging merchants and other establishments to take security measures.

For the purpose of developing excellent products and services, providing attractive tourism and further stimulating inbound demand by accurately identifying the diversifying needs of domestic consumers and foreign people vising Japan through the use and application of big data generating from a cashless society, the Government will encourage the following initiatives:

• To promote the required data standardization for credit card payment and purchase information by the end of this fiscal year;

- To urge the related trade associations to establish privacy rules to make information anonymous in connection with the enforcement of the Act on the Protection of Personal Information amended last year;
- To utilize IT (such as contactless electronic tags through which more than one kind of tag information can be read instantly) and develop an environment to collect, use and apply various data generated from supply chains; and
- To statistically analyze information that can be obtained from big data and electronic tags, and consider how those data can be politically utilized for various statistics and surveys, preparation of new consumption statistics, and the "Regional Economy and Society Analyzing System (RESAS)." In addition, the Government will urge more and more business operators to join advanced projects led by the private sector and universities that are preparing consumption statistics by using purchase history data.

In order to realize the development of new regulatory and institutional environments that will encourage innovation through FinTech, the Government will take necessary legislative measures in the credit card sector, including awarding new legal positioning to highly reputable settlement agencies with high technology so that they can efficiently secure the safety of transactions by utilizing their original IT technologies.

For promotion of establishment of ATMs that can accept cards issued overseas by financial institutions to develop a stress-free environment in which all tourists can comfortably enjoy sightseeing, the Government will convert most of nearly half of all megabank ATM facilities (approximately 3,000 units in total) to ones that can accept cards issued overseas by the end of 2018, based on the "Tourism Vision to Support the Future of Japan" (decided at the meeting of the Council for the Development of a Tourism Vision to Support the Future of Japan on March 30, 2016).

iv) Improvement of the quality of the financial intermediation function

Financial institutions are expected to cope with the ongoing reduction and aging of population, continued low interest rates and various environment changes surrounding management, and financially support sustainable growth of Japanese industries and companies. From this standpoint, the Government will secure the soundness of financial institutions, enable financial institutions to fully demonstrate their financial intermediation function even when economic or market stress arises, and enable financial institutions to demonstrate high-quality financial intermediation function contributing to solution of problems facing industries and companies through lending and support for their regular business operations based on evaluation of business potentials, leading those efforts to improvement of the competitiveness and productivities of Japanese industries and companies.

[1] Stable demonstration of financial function towards improvement of the competitiveness and productivities of Japanese industries and companies

- Financial institutions are required to financially support the efforts of Japanese industries and companies to improve their competitiveness and productivities and to promote their metabolisms by flexibly addressing substantial economic and market changes and stably demonstrating the financial intermediation function. From this standpoint, the Government will encourage financial institutions to construct solid business administration and risk management systems and further strengthen their financial bases. In particular, the Government will continue to request systematically important financial institutions to reduce shareholdings in their customers and clients on a stable manner. Considering the review of global financial regulations and the recent low interest rates, the Government will urge financial institutions to make efforts to strengthen their management bases through business model changes and reinforce their governance systems. For regional financial institutions, the Government will urge them to analyze the possible effects of reduction and aging of population in the region on their respective business models, and demonstrate lending and consulting functions based on evaluation of business potentials reflecting such analysis. In addition, the Government will improve the productivities of regional industries and companies and further accelerate their growth by urging regional financial institutions to participate in and cooperate on platforms for reinforcing the regional growth together with other SME support organizations and local universities. Through those initiatives, the Government will urge regional financial institutions to formulate and implement medium- and long-term management strategies from the viewpoint of constructing their sustainable business models while contributing to community development. In taking those initiatives, the Government will utilize the capital reinforcement plan under the Act on Special Measures for Strengthening Financial Functions, and stock purchases by the Banks' Shareholdings Purchase Corporation, as necessary.
- The Government will grasp the actual situation of support by financial institutions for overseas expansion of companies, develop an environment, cooperate with the relevant ministries and agencies, and encourage financial institutions to make further efforts, for example, by sharing best practices.
- From the standpoint of supporting those efforts of financial institutions, the Government will cause financial institutions to strike a balance between the sound management of financial institutions and demonstration of financial intermediation function, and consider a framework for prudence policy that will lead to persistent improvement of risk management abilities of those financial institutions themselves, while appropriately combining regulations

and supervision, and rules and principles, and restricting regulatory costs and side effects as much as possible. From the viewpoint of securing the effectiveness of the above-mentioned framework, the Government will consider how financial institutions should be monitored in the future.

[2] Further enhancement and strengthening of financial intermediation function

The Study Committee for Improvement of Financial Intermediation will continually discuss issues and measures so that financial institutions may improve their lending attitudes relying on collateral and guarantee, appropriately evaluate business nature and growth potentials of their customer companies (evaluation of business potentials), and encourage improvement of productivities of regional industries and companies and smooth metabolism through lending and support for regular business. Based on those discussions, the Government will encourage financial institutions to take active responses and aggressively take the following initiatives:

A) Continuous hearings from borrower companies

The Government will continue to conduct hearings from borrower companies, and urge financial institutions to provide high-quality services that meet the needs of companies through the dialogue with financial institutions based on results of those hearings.

B) Formulation of various benchmarks in connection with evaluations of financial intermediation initiatives

With respect to the financial intermediation function fulfilled by each of financial institutions, the Government will formulate various benchmarks by utilizing results of the above-mentioned hearings from companies and knowledge of external experts, from the objective evaluation perspective and for the purpose of having in-depth dialogue about promotion of lending and support for regular business operations based on business potential evaluation. The Government will encourage financial institutions to make original and concrete disclosure of how they have been fulfilling the financial intermediation function, based on the characteristics of each region and needs of customers, including the use of the guidelines for personal guarantee provided by business owners.

C) Reinforcement of collaboration between financial institutions and the related organizations

From the standpoint of contributing to improvement of productivities of regional industries and companies and smooth promotion of their metabolisms, the Government will develop a system for collaboration between financial institutions and the related organization.

More specifically, firstly, the Government will collaborate with the

Japan Human Resources Co., Ltd. to encourage financial institutions to take specific measures to secure top management human resources that can resolve corporate issues when those issues have become apparent through dialogues between companies and financial institutions.

Secondly, the Government will hold a meeting of the "Labor and Financial Liaison Conference towards the Productivity Revolution of All Industries," and encourage the initiatives including advice of regional financial institutions on the employment creation policy, and the related ministers and agencies will work together to accelerate the labor productivities of regional mid-ranking companies and SMEs and to secure human resources in the growth industry by providing companies that are tackling with both business administration improvement and employment management improvement with integrated support.

Thirdly, the Government will urge financial institutions to positively utilize the guidelines for personal guarantee provided by business owners in lending money, reconsidering the existing guarantees and working out guaranteed obligations, and will further communicate it to business operators.

Fourthly, from the standpoint of improving the abilities of financial institutions on the lending and support for regular business operations based on business potential evaluation, support for business reconstruction and support for the second challenge, the Government will encourage financial institutions to utilize the functions owned by the "Regional Economy Vitalization Corporation of Japan" (REVIC) (i.e., dispatch of specialists, direct business reconstruction of companies, investment in and management of regional vitalization funds and cooperate reconstruction funds, and purchase of debts guaranteed by business owners).

v) Review of management of public and quasi-public funds

In light of the recommendations by the Panel, the Government will take the requisite steps to ensure that the necessary measures are implemented swiftly and steadily, taking into account the need to ensure long-term soundness, according to the scale and nature of the funds in question.

vi) Improvement of Corporate Pensions

After the conclusion of the Bill Partially Amending the Defined Contribution Pension Act, the Government will promote smooth enforcement of such bill, and disseminate and expand corporate pensions by adopting the "risk-sharing defined benefit corporate pension plan" under which employers and plan participants will share management risks.

Simultaneously, the Government will enhance post-retirement income of participants by encouraging the pension and other funds to accept the

Stewardship Code and otherwise make efforts to improve the effectivene corporate governance.	ess of

2-3. Opening of public services and assets to the private sector (expansion of utilization of PPP/PFI)

(1) Progress in achieving KPIs

- <KPI> "Expand the business size of PPP/PFI to 21 trillion yen for ten years (from FY2013 to FY2022). Of which amount, the target amount of concession-based PFI projects is 7 trillion yen."
 - ⇒ The business size of PPP/PFI for FY2013 to FY2014 was approximately 2.4 trillion yen (as of March 2016).

(2) Specific new measures to be taken

As the concession system makes it possible to effectively and efficiently develop and manage infrastructures under severe financial situation by introducing the management principles of the private sector into management of public service facilities, and gives the private sector large markets and opportunities to reinforce the global competitiveness, it is necessary to reinforce efforts to achieve numerical goals including cultural and educational facilities (athletic, social education and cultural facilities) (three concession-based PFI projects to be embodied for the three years from this fiscal year to FY2018) and public housing (three-types* of projects in six "Action Plan Toward the Fundamental Reform of PPP/PFI" for the three years from this fiscal year to FY2018 to be embodied), newly referred to in the "Action Plan Toward the Fundamental Reform of PPP/PFI."

Under those goals, it is necessary to make efforts to further expand the utilization of concession system, the key pillar of PPP/PFI. In the prior projects, including the water supply project of Osaka City, the water front redevelopment and concession project in Fukuoka City, and more than one airport in Hokkaido, should steadily address problems to be overcome.

* PFI project utilizing the concession system (Type I), PPP/PFI project recovering costs from business income through establishment and utilization of profit-making facilities in parallel (Type II), and PPP project effectively utilizing public real properties (Type III).

More specifically, the fields to be covered by the concession system will be categorized into the "fields that will meet the expansion of demands resulting from the increase of the number of Japanese and foreign visitors, such as airports, cultural and educational facilities, cruising ship passengers terminal facilities, and MICE facilities (growth-based fields)" and the "fields that will require sophistication of asset management and development of new projects in response to the reduction in demands resulting from the reduction of population, such as toll highways, water supply services, sewage systems, and public housing (maturity-based fields)" and the following initiatives will be taken.

i) Initiatives to be taken in the growth-based fields

- To consider introducing a mechanism that will enable admission of non-passengers to the domestic line's security area, bringing of kitchen appliances into such area, two-step security check for domestic lines and international lines, and relocation of CIQ facilities, or clarifying its operations, in either case based on the assumption of considering security.
- To consider transferring the unit ownership of CIQ facilities owned by the national government and operators to the operator and leasing those facilities to the national government, and enabling flexible layout changes in the terminal buildings.
 - To study and consider establishing duty-free shops at arrival lobbies.
- To consider relaxing restrictions on construction hours within the restricted areas, and clarifying the scopes of products that can be used as airport runway lighting solutions, based on the assumption of smooth flight operations and securement of safety.
- In utilizing the concession system in multiple airports in Hokkaido, to efficiently promote integrated privatization from the standpoint of tourism strategies, including formation of wide-area sightseeing and excursion routes.
- For measures under the Local Allocation Tax Act and subsidiarity for city-managed airports, to consider the desirable equal footing approach so that financial discipline may not be impaired even through the utilization of financially non-independent concession.
- In forming up a project, to consider utilizing not only concession system for single facility but also complex and integrated concession systems covering multiple facilities. Especially for cultural and educational facilities in cities, to introduce a mechanism to consider complex operation covering other facilities in the neighborhood.
- For cultural and educational facilities, to consider issues necessary to proceed with a concession-based PFI project, based on the cases in other fields, including a methodology that will no longer require double application with the designated operator system, and reach conclusion by the end of this fiscal year. Also to consider a mechanism for support of the burdens of municipalities in preparation for the concession system.
- For cruising ship passengers terminal facilities, to build up a mechanism reflecting overseas cases and the needs of users so that the concession system may be utilized. At that time, to consider how to apply the existing system to a concession-based PFI project, as well as a methodology that will no longer require double application with the designated operator.
- To consider any methodologies to smoothly promote commercial activities for passengers in the port areas, and stimulate development of environments surrounding MICE facilities by utilizing national strategic special zones, if necessary.
- For cruising ship passenger terminal facilities and MICE facilities, to set numerical goals for the number of concession-based PFI projects.

ii) Initiatives to be taken in the maturity-based fields

- In order to form up prior water supply projects, to consider introducing a mechanism that will eliminate new burdens of municipalities to the maximum extent through grant, subsidy or other measures only for certain projects, including those which will be initiated before results of concession system in Japan are verified.
- In order to provide municipalities with information necessary to examine whether or not the concession system should be introduced into the water supply project, to gather and analyze prior cases abroad and communicate results to those concerned.
- To consider stipulating a mechanism to leave the grounds for a municipality to be eligible to engage in the water supply business when it decides to utilize the concession system, a mechanism for the national government to inspect operators with focus on their management conditions and water quality, and the method of calculation of rate costs if private companies engage in the management of the water supply business in the Water Supply Act (Act No. 177 of 1957, as amended), so that municipalities may utilize the concession system without anxiety in the water supply project.
- To clarify concrete application procedures and permission criteria when operators obtain permissions under the Water Supply Act and the Industrial Water Supply Business Act (Act No. 84 of 1958, as amended), and communicate them to municipalities.
- When a municipality introducing the concession system to any business in the maturity-based field repays its obligations for that business early at the amount of concession price, to consider, from the standpoint of encouraging introduction of that system, exemption from or reduction of compensation or any other alternative measures by summer and reach conclusion by the end of this fiscal year.
- To consider measures to fund capital expenditures during the period in the form of a reserve in the water supply business.
- For the water supply business, in order to secure stable management and implement efficient development and administration in the progress of full-scale reduction of user population, to promote the concession system by encouraging expansion of business area, depending on the actual situation of the region.

iii) Initiatives across the fields

- To promptly hold a forum for dialogue with private companies toward the future expansion of projects, and hear opinions on initiatives necessary to increase investment potentials and compile those opinions by the end of this fiscal year.
- To grasp human resources needs to be arisen when the concession system is adopted in a broad variety of fields, and the areas previously not handled by private companies are opened up to the private companies, and develop an environment necessary to secure an appropriate supply of human resources and expand as an appropriate industry considering global expansion.
- It is important for deploying prior projects horizontally to share information and knowhow between municipalities. To encourage the efforts of PPP/PFI regional platforms to consider forming up a concrete project, and devise how to operate them so that it may be surely led to the formation of a project.

3. Bold regulatory reforms by the national strategic special zones

(1) Progress in achieving KPIs

<KPI> "Japan will be ranked among the top three developed countries in the World Bank's Ease of Doing Business Ranking" by 2020.

- \Rightarrow 24th place in October 2015 (2 ranks down from the previous year)
- * The rank as of the previous year was revised from 19th to 22nd as a result of change of ranking method.

<KPI> "Tokyo will be ranked among the top three cities in Global Power City Index by 2020" (4th place in 2012)."

 \Rightarrow 4th place in October 2015 (unchanged from the previous year)

(2) Specific new measures to be taken

(Promotion of the national strategic special zones at an accelerated pace under the new goals)

With respect to the "national strategic special zones," the two years prior to the end of the last year was designated as the intensified initiative period under the National Strategic Special Zones Act enacted in December 2013 (Act No. 107 of 2013, as amended in July 2015) to break through the so-called hard-rock regulations.

Over 50 regulatory reform matters have ever been realized by the national strategic special zones, including the nationwide measures. The regulatory reforms especially include the expediting of urban planning, lifting of so-called private lodging services (residences that can accommodate tourists), establishment of new medical departments, creation of the region-limited nursery teachers system, clarification of employment conditions (establishment of the Employment Consultation Centers), promotion of the private sector access to public schools, review of clerical burdens of the Agricultural Committees, all of which could not have been realized for many years.

In the ten areas designated in the three phases of May 2014, August 2015 and January 2016 ("Tokyo Zone" (Tokyo Metropolitan area, Kanagawa Prefecture, and Chiba City and Narita City, Chiba Prefecture), "Kansai Zone" (Osaka Prefecture, Hyogo Prefecture and Kyoto Prefecture), "Niigata City, Niigata Prefecture," "Yabu City, Hyogo Prefecture," "Fukuoka City and Kitakyushu City, Fukuoka Prefecture," "Okinawa Prefecture," "Semboku City, Akita Prefecture," "Sendai City, Miyagi Prefecture," "Aichi Prefecture," and "Hiroshima Prefecture and Imabari City, Ehime Prefecture"), a total of 175 projects were recognized by the Prime Minister through the Council on National Strategic Special Zone (the "Zone Council") and the Council on National Strategic Special Zone held 50 times and 22 times, respectively, and have been swiftly in progress in a visible manner.

In addition, as a compilation of the intensified initiative period, in March this year, the draft revision of the National Strategic Special Zones Act setting forth

new regulatory reform matters in the field of medical care, tourism, and agriculture based on the recommendations of the Zone Council and the proposals solicited from all over the country, in addition to the regulatory reform matters included in the "revised Japan Revitalization Strategy 2015, was submitted to the Diet, which came into force in May of the same year.

i) Establishment of "new goals" of the national strategic special zones

In order to promote the "second stage" of the national strategic special zones at an accelerated rate, and with an eye on the 2020 Tokyo Olympic/Paralympic Games, and with the goal of attaining "post-World War II largest nominal GDP 600 trillion yen", the Government will designate the two years until the end of next year as the "intensified reform reinforcement period", and by establishing the following initiatives as "new goals", develop the most easiest environment for doing business in the world to enable private sector to fully show their abilities which link to economic growth.

[1] Reforms of remained "hard-rock regulations"

With respect to so-called "hard-rock regulations" for which no reform has been made for many years, although they have prevented the private sector from demonstrating their original thoughts as the economic and social situation change, the Government will break through the regulatory and institutional reforms through the use of the national strategic special zones.

More specifically, the Government will add necessary designated zones, and "visualize" concrete projects utilizing reform matters in an accelerated rate, in addition to adding and deepening the existing regulatory reform matters, seeing the followings as the areas and matters that require particular attention:

- To encourage acceptance of "foreign human recourses" in a wide variety of fields:
- To promote "inbound" demand through the use of the concession system;
- To promote "sharing economy" in a wide variety of fields;
- To realize "equal footing" among business entities in a wide variety of fields:
- To promote "diversified ways of working" especially in global and emerging companies; and
- To reform the fields of "primary industry" and "tourism" contributing to regional revitalization.

[2] Reinforcement of "gateway" functions to embody projects

In addition, the Government will constantly and comprehensively respond to concrete needs one by one, including institutional obstacles facing private business operators and municipalities across the nation that may not resultantly be subject to measures in the national strategic special zones (such as the confirmation that they can be realized under the current system, in addition to nationwide measures and measures in

the structural reform special zones), and will reinforce the function as the "gateway" to embody all projects in close collaboration with the economic and other associations.

ii) Making and implementing projects promptly and addition of designated zones

In the existing ten designated zones, the Government will thoroughly utilize the regulatory reform matters under the National Strategic Special Zones Act, and strongly work on the related municipalities to realize concrete projects in a visible manner.

To this end, the Government will link the six primary designated zones to further reforms based on the evaluation of the previous efforts conducted at the end of the last year. With respect to the secondary and subsequent designated zones, the Council on National Strategic Special Zone will stringently evaluate results of the reforms based on the National Strategic Special Zones Act and the "Basic Policy for the National Strategic Special Zones" (decided at the Cabinet meeting held on February 25, 2014), and manage the progress using the PDCA cycle.

The Government will quickly respond to highly economical regulatory reform proposals made by municipalities and the private sector across the nation, realize concrete projects one by one, and designate new zones, if necessary.

iii) Addition of further regulatory reform matters

With respect to the national strategic special zones, the Council on National Strategic Special Zone and the National Strategic Special Zone Working Group will examine to add the following regulatory reform matters, in addition to the regulatory reform proposals not addressed to date and those solicited from all over the country, to the National Strategic Special Zones Act, and take prompt legislative measures, including submitting them to the next session of the Diet.

To this end, proposals from any regions not designated as the national strategic special zones and proposals that had never resultantly become subject to the measures in the national strategic special zones will be positively considered for realization as the nationwide regulatory reform measures or as the regulatory reform measures in the structural reform special zone or comprehensive special zone from the standpoint of "realizing the reform by choosing nationwide or special zone measure".

Based on the policy of "soliciting proposals at least twice a year" in the Basic Policy for the National Strategic Special Zones, the Government will steadily solicit proposals from municipalities and the private sector nationwide.

At that time, the Government will concurrently solicit proposals from private business operators and municipalities to add and deepen "Reform 2020" related projects, the momentum of the reforms in the growth strategies, and encourage the substantiation of each projects for being showcased by realizing necessary regulatory and institutional reforms.

(Formation of globally competitive international cities and development of global innovation centers)

[1] Further improvement of international urban function in the Tokyo zone

- There are as many as 29 "Urban Reconstruction Projects" utilizing the special exemption under the Act on Special Measures Concerning Urban Reconstruction (Act No. 22 of 2002, as amended) in the Tokyo zone, including the eleven projects consisting of the "Tokyo Global Business Front" in the neighborhood of the Tokyo Station, with the aim of concentrating Japanese and foreign financial institutions and fostering the related human resources, of which economic ripple effect amounts to as much as approximately 2.5 trillion yen only with 10 projects designated prior to the end of the last year.
- The Government will continue to relax the housing coverage ratio for promotion of urban dwelling (special exemption from the Building Standards Act (Act No. 201 of 1950, as amended), and the Zone Council will expedite necessary adjustments to further improve the global city functions of the Tokyo zone, among other zones. The Government will also publish a plan to increase the total number of the above-mentioned "Urban Reconstruction Projects" to 100 in two years as part of "Global Business 100," aiming to realize it early.
- With respect to "acceptance of foreign human resources supporting housekeeping," the Government will positively consider implementing the project in the Tokyo Metropolitan area where there are large concrete needs, based on the status of implementation in Kanagawa and other regions, and reach conclusion promptly.

[2] Fundamental strengthening of the Tokyo One-Stop Business Establishment Center

- The "Tokyo One-Stop Business Establishment Center", opened in April last year that accept various applications necessary for starting up and opening business, will develop a support system in which electronic application is available for six clerical services including registration, tax affairs, and pension in order to further encourage start-up and opening of business by entrepreneurs (including foreign ones), and expand the scope of acceptance of applications at counters currently available only for parts of clerical services relating to the immigration controls to all clerical services, thereby fundamentally improving the convenience of the Center.
- From the standpoint of facilitating immigration procedures of foreign people in connection with business start-ups, the Center will add

- "Engineer/Specialist in humanities/International services" to the status of residence they can apply at the Center, in addition to "Business manager" and "Intra-company transferee." The Center will also extend the deadline for application for the status of residence which is currently within six months after incorporation of a company.
- In order to improve its utilization ratio, the Center will closely collaborate with the Government's support measures for SMEs/venture companies, and arrange for active introduction of the Center at the business start-up counters of the Japan External Trade Organization and strengthen public relations for Japanese and foreign people who wish to start up business, and foreign companies.

[3] Promotion of "demonstration of near future technology" relating to small drones and fully automated driving

- Under the revised "Japan Revitalization Strategy" 2015, in the national strategic special zones, demonstration experiments of small drones were conducted in Semboku City in July last year, and Chiba City in April this year, while those of automated driving was conducted in Kanagawa Prefecture (Fujisawa City) in February this year, and Sendai City in March this year. In order to promote "near future technology demonstrations" in the national strategic special zones, the Government will hold an international competition race of small drones in Semboku City in July this year and frequently conduct other demonstration experiments including the case of involving necessary regulatory reforms to verify their effects.
- For automated driving, in order to aim at technical development up to "Level 4" (fully automated driving), necessary measures will be taken promptly to realize demonstration on public roads of moving services by unmanned automated driving in the special zones within next year under the "Public-Private ITS Initiative/Roadmaps2016" (decided at the IT Strategic Headquarter on May 20, 2016) to enable monitoring of an unmanned vehicle through the use of remote devices and driving of automated vehicles without steering wheel and axel pedal in the demonstration experiments on public roads.

[4] Verification of "private residence" in the national strategic special zones

- In order to respond to rapid increase of lodging needs of Japanese and foreign tourists, the Government will verify concrete problems with implementation of the initiatives of so-called "private residence" services now provided in Ota-ku, Tokyo and certain other national strategic special zones (lodging in the special zones) based on actual results of those services.
- In order to contribute the nationwide measures for private residence rules now under discussion, the Zone Council for the national strategic special zones will continually hear opinions from private business operators on additional regulatory and institutional reforms,

including the requirements for the minimum number of lodging days and the minimum floor areas of private residence in the special zones, and surely realize necessary regulatory and institutional reforms.

(Construction of sustainable social security systems, such as response to wait-listed children)

[5] Measures for children on waiting lists reflecting the actual situation of the region

- While it is requested to eliminate the numbers of children on waiting lists mainly in urban areas, the Government will consider measures for children on waiting lists reflecting the actual situation and demands of the region, as necessary, based on the details and the status of implementation of the "Urgent measures toward the elimination of wait-listed children" compiled by the Ministry of Health, Labour and Welfare on March 28 this year and the "Plan for Dynamic Engagement of All Citizens" and reach conclusion promptly.
- Concrete subjects of discussions include, for example, promotion of utilization of childcare staff, other than nursing teachers, who support nursing teachers, disclosure of information and third party evaluations, including the utilization of the national strategic special zones, provided that the quality of childcare may not consistently be deteriorated.

[6] Clarification of exemptions from the adaptation of the barrier free ordinances to small-sized licensed nursery schools

In order to promote establishment of small-sized licensed nursery schools as measures for wait-listed children, the Government will promptly take the required measures to encourage reasonable administration by refraining from calling for regulations on facilities that users of small-sized licensed nursery schools are not assumed to use, given the purpose of the Barrier-Free Law of securing autonomous life of ordinary citizens including children, after clarifying that the Government does not oblige small-sized licensed nursery schools to adapt to the building relocation and other smoothening standards under the Barrier-Free Law, so that the Tokyo Metropolitan Government may clarify by notice that a residential complex can smoothly be used to establish a small-sized licensed nursery school by changing the purpose of that complex as concrete administration of "Article 14 of the Tokyo Metropolitan Government Barrier-Free Building Ordinance" under the Barrier-Free Law, even if it does not meet the designated standards.

[7] Construction of a new nursing mechanism for compulsory education of "children in need of medical care"

• Reflecting rapid increase of children in need of "medical care," such as sputum suction and tube feeding, in daily life, the Government will

consider enabling nursing not at home, such as at schools and when going to and returning from schools, including review of the current on-visit nursing, in order to secure the opportunities of so-called "children in need of medical care" to fully receive compulsory education, and reach conclusion promptly.

• To this end, the Government will collaborate closely with the related ministries and agencies on the existing measures after fully considering desirable financial sources and fiscal restrictions.

[8] Prior implementation of "work style revolution" of public officials in the special zones

- In the national strategic special zones, the "Employment Guidelines" have been developed and "Employment Consultation Centers" have been established for the purpose of introducing diversified work styles and employment patterns. Special measures have been taken for movement of human resources from government offices to started-up companies in order to facilitate movement of human recourses to the growing fields.
- The Government will strengthen the initiatives based on the previous measures, and take measures for municipalities and other public offices to lead the "work style revolution." For example, given the efforts of municipalities to correct disparities of treatment between regular employees and non-regular employees working at public nursery schools, consumption life centers and other public offices toward the principle of equal pay for equal work, the Government will encourage public offices to lead problem solutions by considering how certain regulatory reform matters should be applied.
- Based on proposals from municipalities and other entities, the Government will utilize the special zone system to substantially expand introduction of work style free from time constraints, flexible way of work, and telework to public officials.

(Promotion of regional revitalization through acceptance of foreign human resources including tourists)

[9] Lifting of the bans on planning and provision of travel products by lodging service providers such as lodging in farmhouses

- It is important for enthusiastic lodging service providers to plan and provide "region-limited" travel products utilizing resources peculiar to the relevant region in the acceptance-side region (community), such as farmhouse lodging, in order to respond to an increase of tourists including foreign people visiting Japan and promote regional revitalization.
- To this end, the Government will consider simplification and other review of certified travel service supervisor required by the Travel Agency Act (Act No. 239 of 1952, as amended), considering demands in the national strategic special zones, and take necessary

measures, in order to broaden treatment of such "community-based travel products" by lodging service providers.

[10] Promotion of acceptance of "foreign human resources" in a broad variety of fields

- For acceptance of "foreign human resources" in the national strategic special zones, the projects in Kanagawa Prefecture, Tokyo Metropolitan area and Fukuoka City were approved last year based on the exceptional measures for "human resources supporting housekeeping" and "human resources for business start-ups" included in the Revised National Strategic Special Zones Act in July last year, and the Amendment of the Act, that has been submitted to the Diet in March this year and has come into force in this May, contains the provision that the Government will consider concrete measures for "Cool Japan human resources" to learn professional knowledge and technologies and enhance their opportunities to work expeditiously within one year after the enforcement of that Act, and take necessary measures based on results of such consideration.
- It is provided for in "additional items for regulatory reform for the National Strategic Special Zones" (compiled at the meeting of the Council on National Strategic Special Zones on March 2, 2016) that the related ministries and agencies will work together to consider "lifting the ban on work of foreign human resources who will engage in agriculture" and reach conclusion promptly.
- In order to encourage revitalization of the related industries and responses to inbound demands, the Government will conduct a necessary study about accepting a wide variety of foreign human resources who the national strategic special zones should accept, as well as the above-mentioned various foreign human resources, based on proposals of municipalities and the private sector.
- With respect to "acceptance of foreign human resources supporting housekeeping," the Government will positively consider implementing the project in the Tokyo Metropolitan area where there are large concrete needs, based on the status of implementation in Kanagawa and other regions, and reach conclusion promptly. [Reprinted]

[11] Further relaxation of the requirement for issue of region-limited multiple-entry visas

- In order to promote tourism and support for reconstruction in the main regions affected by the Great East Japan Earthquake, the Government will consider further relaxing the requirement for issue of region-limited visas and promptly take necessary measures to increase the number of tourists.
- At the same time, the Government will proceed with introduction of the concession system to airports and other various infrastructures, and the zone conference for the national strategic special zones will

from time to time hear opinions from private companies on additional regulatory and institutional reforms, and surely realize necessary regulatory and institutional reforms.

III. Strengthening of the Power to Create Innovation Ventures and Creation of Human Resources full of challenge spirit

1. Strengthening of the power to create innovation ventures

(1) Progress in achieving KPIs

<KPI> "Aim to increase companies' investments in universities and national research and development agencies by three times by 2025": Companies' research expenditures to universities and national research and development agencies (FY2014 results: 115.1 billion yen)

* New KPI established this year

<KPI> "At least 10 Japanese universities will be in the top 100 world universities in the next 10 years."

⇒World University Ranking 2015-2016, *Times Higher Educations magazine*: 2 Japanese universities within the top 100; *QS*: 5 Japanese universities within the top 100; *Shanghai Jiao Tong University*: 4 Japanese universities within the top 100.

<KPI> "Japan will become the No.1 global innovator within the next five years": 5th place in 2013 to 2014; 4th place in 2014 to 2015

 \Rightarrow 5th place in 2015 to 2016 (down one rank from last year)

<KPI> "Aim to increase the number of people eligible for annual salary or mixed-salary systems from 6,000 in FY2014 to 10,000 in FY2015"

- ⇒ Approximately 10,400 persons eligible for annual salary systems as of October 2015 (attained)
 - * New KPI established this year (increase the number of researchers between the sectors in Japan by 20% by the end of FY2020)

<KPI> "Aim to allocate resources to reform initiatives at each university and maintain the percentage of the amounts affected at about 30-40% of the operation cost subsidies as at the end of FY2015."

- ⇒ FY2015 results: 32% (FY2014 results: 21%)
 - * New KPI established this year (aim to allocate resources to strategic reform initiatives to strengthen the functions of each university (including the reforms during the reform acceleration periods (from FY2013 to last year)) and maintain the percentage of the amounts affected at about 40% of the operation cost subsidies through the third medium-term goal period of the national university corporation (from FY 2016 to FY 2021))

<KPI> "Aim to double nominal GDP as a percentage of VC investments in venture companies by 2022."

- ⇒ Current: 0.028% (3 year average between 2012 and 2014) (Source: "System of National Accounts," Cabinet Office and "VEC YEARBOOK/Annual Report on Japanese Startup Business," VEC)
 - * New KPI established this year

(2) Specific new measures to be taken

i) Finishing of construction of innovation national system

Considering the conclusion of the Act Partially Amending the National University Corporation Act (Act No. 38 of 2016) (the "Amended National University Corporation Act") and the Act on Special Measures for Promotion of Research and Development by Specified National Research and Development Corporations (Act No. 43 of 2016) (the "Specified National Research and Development Corporation Act") in May this year, the Government will move its priorities to development of a framework to reinforce the power to create innovation and how it should be implemented.

To this end, the Government will encourage details of the "Comprehensive" Strategy on Science, Technology and Innovation 2016" (decided at the Cabinet meeting on May 24, 2016) toward the realization and embodiment of "Society 5.0" published in the fifth-term Science and Technology Basic Plan (decided at the Cabinet meeting on January 22, 2016) that has just started this fiscal year. The Government will also strengthen the functions of national universities for which third-term medium-term goal period has started this fiscal year, strengthen "bridging" functions of national research and development corporations, and further strengthen formation of a forum of joint creation that will gather together technology, human resources and capitals. In the course of the Fourth Industrial Revolution, the Government will build up a full-scale "organization" to "organization" industry-academia collaboration framework in order to expedite development collaboration ranging from basic research to social implementation through open innovation. Through those initiatives, the Government will create innovation and form up a positive cycle of investments in next innovation seeds of fruits obtained from such innovation, thereby aiming to realize the world's most innovative country.

The Government will set a total government-private R&D investment objective at 4% or higher as a percentage of GDP, and aim to set government R&D investment at 1% as a percentage of GDP, while securing the consistency with the "Economic and Fiscal Reconstruction Plan" included in the "Basic Policy on Economic and Fiscal Management Reform 2015" (decided at the Cabinet meeting on June 30, 2015). If the nominal growth rate of GDP during the relevant period is estimated based on the economic reconstruction cases in the "Economic and Fiscal Projections for Medium to Long Term Analysis," the total amount of government research and development investments that will become necessary during the fifth-term Science and Technology Basic Plan will be approximately 26 trillion yen.

To realize this goal, the Government will develop an environment to support aggressive investments medium- and long-term innovative research and development leading to corporate innovation and the awareness and behavioral reforms for "innovation management" to the maximum extent.

Also, based on the "Intellectual Property Strategic Program 2016"

(decided by the Intellectual Property Strategy Headquarters on May 9, 2016), the Government will promote the initiatives to construct an intellectual property system that will meet the Fourth Industrial Revolution, and to reinforce international standardization and certification systems.

[1] University reforms

A) Designated national university corporation system

Considering the conclusion of the Amended National University Corporation Act, the Government will start operation of the designated national university corporation system to invite various resources through high-level management power, aiming to attain the world's top level, and aim to designate several national universities by the end of the next year.

The Government will also promote creation of concrete model projects utilizing the relaxation of the regulations on projects to be invested.

B) Distinguished graduate schools (tentative name)

The Government will form up "distinguished graduate schools (tentative name)" that will enable integrated education in different fields such as integrated area of arts and sciences, and state-of-the-art education in Japan's strong fields, considering the needs of the industry, and where multiple universities, private companies, national research and development corporations, and overseas top universities will collaborate. "Distinguished graduate schools (tentative name)" will foster human resources with practical knowledge and expertise beyond the borders of the existing schools and disciplines, and will be eligible to award interdisciplinary degrees.

Given the fact that the four fields including the fields contributing to creation of new industries were presented in the "Basic Thoughts" compiled by the industry-academia-government panel of experts to consider distinguished graduate schools (tentative name) in April this year, the Government will encourage full-scale and close discussion about the relevant idea between universities and companies that will be started in this fiscal year, and start to sequentially construct graduate school education programs in next fiscal year, such as composition of education courses and development of collaboration systems.

As there are some cases in which students participate in the industry-academia joint research programs at a "distinguished graduate school (tentative name)," rules relating to involvement of students will be included in the guidelines to be formulated for universities and national research and development corporations (as discussed below).

If a distinguished graduate school (tentative name) is formed in the

inter-disciplinary fields of IoT, big data, artificial intelligence, manufacturing, and robotics and other driving system from the standpoint of effectively and efficiently fostering human resources who will play key roles in the industrial competitiveness of Japan in the future, it will collaborate with the Artificial Intelligence Technology Strategic Council and other organizations.

C) Acceleration of the initiatives to strengthen the functions of universities Throughout the third-term medium-term goal period (from this fiscal year to 2021) of national university corporations, the Government will aim to allocate resources to strategic reform initiatives to strengthen the functions of each university (including the reforms during the reform acceleration period (from FY2013 to last fiscal year)) and maintain the percentage of the amount affected at about 40% of the operating cost subsidies, such as the function strengthening expenses, president's discretionary expenses, and amounts affected by the personnel and salary system reforms including the transfer to annual salary system.

In order to encourage national universities to take concrete initiatives on newly permitted land and other property lending projects to reinforce their financial bases, the Government will formulate guidelines on the lend or other property lending project approach by the end of this fiscal year.

The Government will continue to promote World Premier International Research Center (WPI) initiatives to construct research centers where excellent talents will gather from all over the world, and consider a mechanism to horizontally deploy experiences and knowhow of such initiatives inside and outside the universities and introduce it in next fiscal year, given that those initiatives will produce distinguished results, including creation of new inter-disciplinary fields, personnel and salary reforms, and invitations of excellent researchers and solicitations for donation from outside of Japan. In evaluating national university corporations, the Government will use them as advanced cases of reforms towards improvement of research capabilities and promotion of globalization initiatives.

The WPI initiatives will have marked the tenth anniversary at the end of this fiscal year since the WPI initiatives had started to provide support in 2007, and problems with maintenance and development of excellent research systems at the universities where support had been finished have become apparent. The Ministry of Education, Culture, Sports, Science and Technology will aim to consider measures and desirable approaches to continue those system reforms by the end of this fiscal year, while clarifying how they should be positioned in the whole initiatives for university reforms, and based on the standpoint of reconstructing a dual support system through management expenses grants and competitive

expenses, and reach certain conclusion.

[2] Bids-type grants of research expenses

In addition to the Ministry of Education, Culture, Sports, Science and Technology and the Cabinet Office that have decided measures to set the percentage of indirect costs at 30% starting with newly adopted projects subject to bids-type grants of research expenses for this fiscal year, the related ministries and agencies will start to take trial measures to permit indirect costs of bids-type grants of research expenses up to 30% in this fiscal year after conducting necessary examinations.

The Ministry of Education, Culture, Sports, Science and Technology will gather and present objective grounds for the necessity for appropriate treatment of indirect costs at national university corporations within this fiscal year.

Based on the objective grounds presented by the Ministry of Education, Culture, Sports, Science and Technology, the Cabinet Office and the related ministries and agencies will start to consider execution rules for allocation of bids-type grant of research expenses (bids-type grant of funds) to indirect costs, and measures towards further improvement of the usability as early as possible during this fiscal year.

In addition, for the grants-in-aid for scientific research, the Government will consider introducing support for independence of young researchers (improvement of adoption and satisfaction rates) and new examination methods, and reconstructing research categories in order to reinforce fostering of young researchers and promote creation of new academic disciplines, and compile and publish results of such consideration in or around the summer of this year.

[3] Reforms of national research and development corporations (strengthening of "bridging" functions)

The Government will continue to strengthen the "bridging" functions of national research and development corporations to connect technical seeds of universities to the industry in the shortest distance and to further strengthen formation of a forum of joint creation that will gather together technology and human resources (such as introduction of cross-appointment system and promotion of joint research with the private sector). More specifically, for the Japan Science and Technology Agency that will enter new medium-term and long-term goal period next year, the Government will specify the initiatives to create original and new technical seeds and to lead to strengthening of "bridging" functions in the medium- and long-term goals and medium- and long-term plans.

Towards innovations of regional medium- and small-sized companies and mid-ranking companies, the Government will continue to promote strengthening of collaborations among the national research and development corporations, and public experimental and research institutions ("public experimental institutions"), local universities and overseas research institutions, and will build up a mechanism in which national research and development corporations with bridging functions will surely connect results of national projects to social implementation (provision of samples, and international standardization of technologies) by the end of this fiscal year. For fundamental technologies that will become a driving force for long-term national growth, such as ocean resources investigation and development technologies, space and aviation technologies, natural disaster observation/prediction/responsive technologies, and quantum science and technology, the Government will promote and strengthen research, development and social implementation by national research and development corporations, and encourage creation of ventures based on technologies spun out in those processes.

Given the fact that the innovation environment has changed at a higher pace than expected, the related ministries and agencies will work together to survey and analyze Japanese and foreign scientific and industrial technology movements, draw out strategies and road maps utilizing the "strength" and "advantage" of Japan, sophisticate the R&D infrastructures towards accelerated creation of innovation at national research and development corporations, and develop and deploy challenging and innovative research and development initiatives, including ImPACT.

ii) Promotion of full-scale "organization" to "organization" industryacademia-government collaboration with which the organization's top management sill get involved

Thanks to the previous reforms of universities and national research and development corporations, both of them have been embodying movements of self-innovation initiatives, including strengthening of their respective functions, and have strong interest especially in collaboration with external organizations and social implementation of technologies. As the innovation environments including the Fourth Industrial Revolution change faster than expected, it is important for companies to broadly introduce technologies in Japan and abroad, and their expectation for open innovation has been growing as never before.

Given these situations, the Government will evolve industry-academia-government collaboration that has been just the collaboration between individual researchers and a single corporate organization (R&D division) and of which R&D amount per project has remained immaterial from a global point of view into a full-scale, thickly connected and sustainable industry-academia-government collaboration in which top managements of universities, national research and development corporations and companies

will get involved (realization of a large-sized joint research project).

More specifically, the Government will boost companies' investments in universities and national research and development corporations by three times beyond the average levels of OECD member countries by FY2025. Taking the designated national university corporation system and the specified national research and development corporation system into consideration, the Government will create at least five core model organizations that will enter into full-scale industry-academia-government collaboration and global collaborations and invite investments from Japanese and foreign companies by the end of the next fiscal year. With focus on those organizations, the Government will promote formation of research, development and demonstration centers that will attract top talents from all over the world due to the world's level remuneration, plans and life environments.

In order to encourage those initiatives, the Ministry of Education, Culture, Sports, Science and Technology and the Ministry of Economy, Trade and Industry will establish a forum to implement and realize concrete behaviors for creation of innovation, including setting of goals by universities and national research and development corporations and promotion of the awareness and behavioral reforms to strengthen the systems and promote corporate innovations through the industry-academia and government dialogues by the end of this fiscal year. Besides these, the following initiatives will be encouraged.

[1] Formulation of guidelines for universities and national research and development corporations

"Towards Strengthening of Industry-Academia-Government Joint Researches" compiled by the KEIDANREN (Japan Business Federation) in February this year refer to a wide array of issues, such as the system to promote industry-academia-government collaboration including the function to propose plans, treatment of intellectual properties, protection of trade secrets, desirable method for payments of joint research costs and improvement of the transparency of the purpose of use of expenses, and desirable personnel exchange utilizing the mutual cross appoint systems, as the issues of universities and national research and development corporations seen from the industry with the goal of bringing a full-scale industry-academia-government collaboration into reality. Based on the previous discussions at the related ministries and agencies, and after coordination with the industry, the related ministries and agencies will work together to formulate guidelines compiling prescriptions for and thoughts on those issues by the autumn of this year, from the standpoint of facilitating the industry-academia-government collaboration. For clarity, points the industry is expected to address will be included in the guidelines.

[2] Utilization of the guidelines for evaluation of national university corporations and designation of designated national university corporations

In conducting annual evaluation of national university corporations under the National University Corporation Act, details of the guidelines to be formulated in [1] above will be utilized as examples of the initiatives to be referenced in evaluating the industry-academia-government collaboration initiatives. In designating designated national university corporations, the Government will fully identify whether or not they have been taken the initiatives reflecting the guidelines to be formulated in [1] above in entering into the industry and academia collaboration, and whether or not they plan to take those initiatives.

[3] Strengthening of the efforts of specified national research and development corporations

With respect to specified national research and development corporations that are expected to create the world's class research results, in the fields where revolutionary innovations are sought to realize 600 trillion yen of GDP, such as the inter-disciplinary fields of IoT, big data, artificial intelligence, manufacturing, robotics and other driving system, and regenerative medicine, energy, environment, nanotechnology, and materials, the Government will start initiatives to form up research, development and demonstration centers for the industry-academia-government collaboration chiefly in non-competitive fields by the end of this fiscal year, based on the needs of Japanese companies, or reinforce those initiatives. At that time, attention will be paid to reinforce basic research initiatives to realize innovative results in ten years or longer, and to invite more than one company in the same industry, and overseas excellent organizations and researchers.

In addition, in the fields where Japan's strengths can be utilized, such as nanotechnology and materials, the Government will establish a global research center that will enable strategic sharing, application and use of big data, and construct human and research networks. In addition to the directionality of those initiatives, those concerned will identify operational problems and institutional bottlenecks, such as procurement of products and services for research and development activities and share how they should be recognized, and take corrective actions, as necessary, for the purpose of strengthening the functions of specified national research and development corporations.

The Government will consider measures to promote ripple effects of effective initiatives taken by specified national research and development corporations on other national research and development corporations.

Specified national research and development corporations will provide positive cooperation in forming up a distinguished graduate school (tentative name) and strengthen partnerships with designated national university corporations, only if they can exert their strengths.

iii) Promotion of intellectual property and standardization strategy surviving the fourth industrial revolution, etc.

1) System development of intellectual properties, etc., responding to the fourth industrial revolution

With the growing practical use of new technologies, including IoT, big data, and artificial intelligence, new systematical challenges relating to the way of protection of intellectual properties have been evident regarding copyrights, e.g. the facilitation of and lowering cost for accumulation, processing, dissemination of information, coupled with further diversification of use of information, together with the emergence of case examples of creation by artificial intelligence.

After the analysis of such challenges, in connection with the way of next-generation intellectual properties responding to the fourth industrial revolution, the Government will develop specific discussions on flexible right restriction provisions in the Copyright Act, including effects and impacts of the provisions, etc., toward the early revision of laws made in the next ordinary Diet session, etc. while taking necessary measures for the drawing up of guidelines for acts, etc. to be covered by the revision and the further improvement of licensing environment.

2) Strengthening of system to promote international standardization

In the areas of the social system relating to the fourth industrial revolution and advanced technologies where international technology development competition is increasingly intensified, the Government will further promote the international standardization of Japan's excellent technologies also considering the moves of the strengthening of international standardization activities by Europe and the U.S., as well as China and South Kores.

Specifically, in respect of the priority areas of automatic driving, smart factory, and robot, the Government will carry out demonstration work for examination of technologies, as well as collection and analysis of data, when necessary, while quantitatively and qualitatively expanding international standardization proposals issued by Japan.

In addition, to promptly implement proposals from Japan at international standardization institutions and strengthen responses to proposals from other countries, the Government will create a system that promotes international standardization under the initiative of the Government during this fiscal year, e.g. national research and development agencies of National Institute of Advanced Industrial Science and Technology, etc. formulate plans for transactions to be covered and implement process control.

3) Development of human resources for intellectual property and standardization

In a bid to ensure the quantitative and qualitative expansion of future human resources for intellectual property, etc., it is necessary to cultivate creativity,

protect and use intellectual properties, as well as promote education to understand the purposes therefor. To this end, the Government will realize cross-curricular curriculum management at schools so that qualities and abilities for intellectual properties are fostered as entire education curriculum in line with directions of next-period guidelines for education, and launch "Intellectual Property Education Promotion Consortium (tentative name)" composed of relevant ministries and agencies during this fiscal year in order to support creation of a system whereby learning at educational sites is carried out through collaboration between community and society.

Moreover, the Government will advance preparation of learning materials (industrial property rights, Unfair Competition Prevention Act, Copyright Act, standardization) contributing to the intellectual property education. In parallel, the Government will encourage the appointment of a Chief Standardization Officer (CSO) to incorporate standardization of respective enterprises into a part of business and management strategies, while developing discussions mainly by the Japanese Standards Association, keeping in mind the establishment in the next fiscal year of a new qualification system concerning human resources for standardization to ensure that industries can use the system. In addition, human resources for standardization will be fostered in collaboration with industry, government and academia through an increase of learning courses for intellectual properties and standardization at a university or graduate school, whether arts or sciences.

4) Strengthening functions of an intellectual property dispute settlement system

As for an intellectual property dispute settlement system, in order to actually prepare appropriate and fair evidence collection procedures, etc. where the protection of business secrets and the prevention of abuses of systems are considered, the Government will increase the value of intellectual properties and obtain a certain conclusion regarding the way of legal systems during this fiscal year through specific discussions on the basis of opinions of parties concerned such as industries about the way of strengthening the intellectual property dispute settlement system that contributes to the creation of innovation.

iv) Realization of "Venture Challenge 2020"

Up to now, the Government has been implementing various venture business support measures, including the improvement of systems and the provision of subsidies. However, the current society has yet to be a society that continuously creates global venture businesses in a true meaning that discontinuous great changes are caused in the way of competition in the global market and the entire industrial structure. Not only government organizations but also entrepreneurs, universities, research institutions, and local governments could have lacked "awareness toward the world."

In addition, we cannot say that sufficient collaboration of measures has been carried out by relevant ministries and agencies. Because of this, venture companies that receive support must find optimal measures in light of their lines of business and growth stage. Further, even if measures themselves are suitable

for their own situations, as a result of the fact that respective ministries and agencies have been finding independently supporting human resources and supporting institutions used in those measures, matching of supporting human resources and supporting institutions which are most suitable for needs called on by venture firms could not be made adequately among a wide range of options. We must reflect on such points with an open mind.

All related organizations, such as the Government and local governments, as well as enterprises, universities / R&D institutions, financial institutions, and business groups, must be aware that "building up of a venture eco-system" where global venture businesses are created spontaneously in succession is their common target and each of them needs to strongly recognize that each is a party who must settle the above-mentioned issues. The respective entities will actively find what can be done for needs of venture companies while deepening collaboration with other entities. Thus, it is necessary to begin such "proactive movement formation" and create venture businesses of a different level.

To this end, with a target of 2020, the Government has compiled, as the "Venture Challenge 2020," a future image to be aimed by the Japan's venture eco-system and a direction of policy measures to realize such image, as well as the way of collaboration with entities composing the eco-system, such as private sector (approved by the Headquarters for Japan's Economic Revitalization on April 19, 2016).

In the U.S., so-called concept of philanthropy has been established where a wide range of persons, such as successful entrepreneurs as well as leaders in the regional economy and enterprises, return fruits gained in the process of business to the society and contribute to settlement of social problems, forming a virtuous cycle in the society. To well establish a virtuous cycle like that in Japan is a crucial challenge from the viewpoint of a virtuous cycle of growth and distribution.

Based on this, the Government will promote the following measures in the future:

1) Establishment of "Kakehashi (Bridge) Platform between Regions and the World"

The Government will establish the "Kakehashi Platform between Regions and the World" which constitutes a path leading to challenges the global market by venture companies nationwide, including regions.

To this end, the Government will:

- Raise the quality of the "Kekehashi Project between Silicon Valley and Japan" launched in the previous fiscal year, and expand the project to Asia, Israel, and Europe, while leading to the holding of the Global Venture Summit (tentative name) in 2020, thereby creating a system for international collaboration with world venture eco-systems.
- Find "proactive" transactions not "waiting" through a transaction finding caravan to local districts and other approaches.
- Establish a consortium of government-related organization to ensure a unified implementation of facilities tying the world and regions and create a system that provides support in the process from finding of promising venture

companies in a region through challenges in the global market. Coupled with these efforts, the Government will establish an Advisory Board for advices from private-sector human resources who support venture businesses where respective ministries and independent administrative agencies have networked, and are persons holding extensive networks for supporting venture companies inside and outside Japan, thereby enhancing supporting measures of the Government and advices for support for respective venture firms. Moreover, broad involvement of the venture business supporting human resources in such processes and sharing of various types of knowhow are decided as a measure that leads to a raise in quality and base of Japan's venture business supporting human resources. In this regard, the Government will keep in mind that Japan will not fall behind world trends by sharing in the consortium of government-related organizations and the Advisory Board the global human resources networks expanded through the "Kekehashi Project between Silicon Valley and Japan" etc.

A) Creation of a system for international collaboration with world venture ecosystems

By creating a framework connecting entrepreneurs and venture business supporting organizations in Silicon Valley, a cutting-edge venture eco-system in the world, and entrepreneurs, etc. in Japan, the Government will provide support in finding business partners and improving business knowhow ("Kekehashi Project between Silicon Valley and Japan" etc.)

In addition, from the standpoint of a raise in the quality of collaboration with Silicon Valley, the Government will strengthen the finding of supporters, etc. for the startup of business in Silicon Valley, who are enthusiastic about cooperation with Japan, while expanding horizontally those initiatives also to other advanced strongholds in Asia, Israel and Europe, thereby creating a strategic collaboration system depending on the characteristics of the respective regions.

Also, the Government will strengthen the cooperation of overseas entrepreneurs and supporters for the startup of business, e.g. creation of a mechanism whereby investments in Japanese R&D venture businesses by the overseas venture capital are encouraged and formation of research and practical use sites where the most advanced technologies and knowledge in the world are introduced, while strengthening collaboration between those efforts and large enterprises and leading to the creation of an autonomous innovation eco-system by the private sector.

In addition, toward the "Global Venture Summit (tentative name)" in 2020 (In 2020 when Olympic and Paralympics Games are held, a world-scale event will be held where first-rate corporate managers, entrepreneurs, venture capital, and institutional investors are invited from all over the world for business matching, etc.), the Government will collaborate also with other international large-scale events, while "visualizing" the appeal of Japan's venture eco-systems for overseas corporate manager, entrepreneurs, venture capital, and institutional investors and disseminating information in full coordination with relevant ministries and agencies.

B) Finding of "proactive" local transactions

Through the use of special zones and promotion of the sharing economy, the Government will assist the dissemination of new projects to settle regional issues, including depopulation and manpower shortage.

In addition, the Govenment will strive to strengthen collaboration with the regional transaction finding caravan by government-related organizations, local startup accelerators, and municipalities that are enthusiastic about startup support.

Moreover, the Government will implement measures in a united manner for the finding of SMEs and mid-ranking companies leading the regional economy using regional networks, support for creation of innovation beginning from regional universities and establishment of "Regional Version of IoT Promotion Laboratory," and thoroughly make local transactions "proactive."

Further, human resources who have accumulated adequate experience of business startup and corporate management in the world and the metropolitan area will move back to local areas, which will encourage the "Proactive Management" by local enterprises, while the Government will create a mechanism which assumes the finding of entrepreneurs and the regional development.

Also, the Government will promote formation of public venture businesses that actively settle regional common issues through venture spirits and using knowhow of private-sector projects, including the finding and fostering of thoughtful young people who intend to start up a social business.

C) Unified implementation of related measures that connect the world and regions (establishment of the consortium of government-related organizations and the Advisory Board)

The consortium of government-related organizations will study and collaborate as much as possible in the same time advertisement for measures, joint holding of various events, commonalization of application documents, sharing and use of the results of various surveys (analysis of factors of growth of venture businesses provided by universities, international comparison of business startup activities), improvement of statistics and databases, and preparation of venture business measure maps.

The Advisory Board will provide advice of a support policy for venture companies, etc. considered to have growth potential based on proposals, etc. for which proposals etc., were submitted from the respective government-related organizations through the proactive finding of regional venture firms, etc., and act as a bridge to external organizations and enterprises. On this occasion, government organizations will provide policy support that they hold in collaboration with each other. Besides, the Advisory Board will provide advice regarding implementation schemes for respective measures and the selection of supporting human resources to be used.

In addition, the Advisory Board will continue studying the way of financing venture companies and other matters while collecting and diffusing best practices regarding government procurement.

2) Support for creation of autonomous innovation eco-systems by the private sector (exerting potentials of universities, national research and development agencies, and large enterprises)

As it has become possible to make capital contribution to funds for investments in venture businesses originating from universities by national university corporations, the Government will continue promoting investment activities through funds of four universities, namely, the University of Tokyo, Kyoto University, Osaka University, and Tohoku University.

In addition, the Government will promote the active use of the designated national university corporation system that enables capital contribution to persons providing consulting services, etc. through the use of research results of universities.

Moreover, the Government will strive to make at least five universities or national research and development agencies the most advanced strategic research sites in the world having the world's top human resources and joint research facilities with enterprises. In parallel, to realize full-scale industry-academia collaboration where the top management of both an enterprise and a university is involved, the Government will encourage creation of an organization-wide industry-academia collaboration system and thorough implementation of intellectual property management.

Besides, to vitalize venture investments by private enterprises, the Government will promote capital contribution to venture businesses and VCs as well as carve-outs through further collaboration between large enterprises and venture companies and matching investments by government funds and private funds, while facilitating efforts to foster human resources in order to increase venture companies that will be investees of such capital contribution, etc. with the aim of increasing human resources who challenge the startup of business.

Coupled with these initiatives, the Government will review the way of socalled philanthropy that fits in with Japan also considering trends and other factors in the U.S.

- 2. Development and securing of human resources through a multidimensional approach
- 2-1. Strengthening human resource capabilities
- (1) Progress in achieving KPIs
 - **KPI** "The rate of teachers who can teach using IT during the class is targeted at 100% by 2020." (Fiscal 2014: 71.4%)
 - * KPI newly set
 - **KPI** "Ensure that the rate of formulation of IT environment improvement plan in prefectures and municipalities is 100% by fiscal 2020." (Fiscal 2014: 31.9%)
 - * KPI newly set
 - **KPI** "Ensure that the rate of improvement of ordinary classes for wireless LANs is 100% by fiscal 2020." (Fiscal 2014: 27.2%)

 * KPI powly set
 - * KPI newly set
 - **KPI** "Ensure that the number of students of members of society at universities and technical schools is 240 thousand in five years (by 2018)" (2014: 120 thousand)

 \Rightarrow 2015: 120 thousand

《KPI》 "The rate of employment for the age 20 to 34 in 2020: 79% (2012: 74%)"

 \Rightarrow 2015: 76.1%

(2) Specific new measures to be taken

In the "Japan Revitalization Strategy Revised in 2015" (approved by the Cabinet on June 30, 2015), in a bid to strengthen human resource capabilities that support the future on the basis of the notion that investments in human capital will lead to certain and long-term return, the Government showed initiatives, etc. concerning the promotion of career education, including entrepreneur experience, etc., the creation of an education system through collaboration between special technical schools and industries, promotion of internship at universities, etc., enhancement of functions for fostering advanced professionals at professional graduate schools, and the career development of workers. It is important to continue promoting those initiatives for strengthening of human resource capabilities. In addition, from the standpoint of the development of global human resources, efforts to improve English capabilities must be strengthened and educational environment functions at education facilities outside Japan must be strengthened further so that children overseas can receive high-quality education. At the same time, looking forward a great innovative change of the new fourth industrial revolution, the Government needs to advance new initiatives in view of strengthening of human resource capabilities which are a future investment.

i) Reform of elementary and secondary education looking forward the future society

Toward the fourth industrial revolution, the development of human resources who are able to exert various capabilities of each person to the extent possible, combine various different types of knowledge and create new added value will be called on.

To this end, in the elementary and secondary education, it is necessary to realize the "education curriculums open to the society" that responds to the changing society and world through collaboration with the region and the society, and realize learning in view of active learning suitable for "next-generation schools" and education in response to respective leaning needs while fostering information use capabilities (including programming) needed to create new value using necessary information.

In addition, it is also important to release teachers from time-consuming miscellaneous tasks, as well as reduce their burdens and secure time to give a class by using IT and external human resources.

Initiatives for reform of the elementary and secondary education to settle those issues are as follows:

1) Nationwide development of education called on in the era of innovative changes

To promote educational reform where Japan's advantages are exerted toward a new era, the Government will make a best mix of improvement in teachers' teaching capabilities in the class and active use of IT while fostering knowledge and skills, such as vocabulary and reading comprehension ability, as well as creative skills to solve problems, thoroughly improving learning in view of dialogic and independent deep learning (active learning) and providing guidance depending on respective individuals (adaptive learning), thereby fostering skills to solve problems at schools at a school and realizing careful education appropriate for the understanding level of respective children, which are suitable for the "next-generation school."

In addition, to foster information use skills whereby IT can be used to find and settle issues depending on a development phase, IT will be used effectively according to characteristics of each subject in the process of finding and settling issues of all subjects. In respect of the programing education, the Government will strive to secure an opportunity of experiential learning at elementary schools and making subjects compulsory in response to the phase of development, e.g. making common and compulsory the programming learning at junior high schools and the subject for information at high schools.

To carry out such education nationwide, the Government will, during this fiscal year, compile conclusions for reviews of new curriculum guidelines that will begin from fiscal 2020, fiscal 2021, and fiscal 2022 at elementary schools, junior high schools, and high schools, respectively, and take necessary measures therefor.

Moreover, in a bid to develop outstanding human resources leading new era,

the Government will review the existing initiatives and arrange an opportunity of education for elementary and junior high school students nationwide with particular motivation and outstanding capabilities in the areas of science and mathematics as well as information, thereby examining and promoting initiatives to increase their capabilities.

2) Strengthening collaboration between the government and private sector through education consortium

Including active earning and programming education, it is important to not uniformly determine IT educational materials and contents used at schools, but to broadly share, evaluate, evolve, and disseminate things supporting teachers' teaching capabilities through creative efforts of the private sector and educational sites depending on the needs of schools. To this end, during this fiscal year, the Government will establish a government-private sector consortium composed of school-related persons as well as education-related entities and IT-related enterprises and venture businesses through collaboration between mainly the Ministry of Education, Culture, Sports, Science and Technology as well as Ministry of Economy, Trade and Industry and Ministry of Internal Affairs and Communications, thereby beginning initiatives through collaboration between the government and private sector, which will accelerate education using IT for development and sharing of excellent educational contents as well as dispatch of external personnel to schools.

3) Thorough improvement of teachers' teaching capabilities and development of IT environment

To show teaching capabilities of respective teachers facing children at a school site to the extent possible, it is effective to refer to overseas excellent initiatives and effectively use IT and private education tools. To this end, the Government will strengthen efforts to further improve teachers' teaching capabilities using IT, etc. in the fostering and training of teachers. To promote those efforts, the Government will strive to submit early to the Diet, including the next Diet, a bill for unified reforms of the fostering, employment and training of teachers, which will contribute to improvement of the quality of teachers.

In addition, the use of external human resources, such as private human resources, at schools is important. Thus, the Government will promote collaboration and cooperation with the region and the society while facilitating the use of special teacher's certificates and the special temporary lecturers system.

Further, in providing education using IT, the development of the IT environment of schools is also important. To this end, in respect of the enhancement of IT equipment and network environments, it is necessary to create a "one terminal for one person system" used by children and stable wireless LAN environment while referring to overseas excellent initiatives regarding terminals. On that occasion, it is important to take into consideration the elements of the aspect of software, including trends of more dramatic increase of data that process teaching materials and animation contents

depending on each child and a point that a school affairs support system is called on, and develop effective, practical IT environment that is called on in and after 2020. Considering these viewpoints, the Government will compile specific measures before this summer as a "Plan for accelerating informatization of education," including the standardization of wireless LAN environment, etc. required at educational sites and planned environmental improvement depending on the scale and the development status of local governments, and then steadily implement activities of local governments, etc., e.g. encouragement of drawing up of an IT environment development plan.

4) Response to issues of copyrights, etc. in the informatization of elementary and secondary education

When proceeding with the informatization of elementary and secondary education, in order to settle issues regarding copyrights in managing and sharing educational materials, etc. prepared by teachers using a cloud, etc., the Government will keep in mind a balance between protection of rights and use while examining the way of copyright systems and licenses and pursuing the compilation of desirable directions at the Council for Cultural Affairs.

In addition, when promoting the informatization of future elementary and secondary education, the use of educational contents and the management and sharing of learning information of children on a cloud are effective so such activities need to be disseminated to school sites throughout Japan. Personal information protection ordinances of local governments to use a cloud in the field of education and a response to information security policy are differently treated depending on municipalities in some cases. Because of this, to ensure that convenience and effectiveness are consistent at educational sites across Japan through the protection of personal information and securing of information security as well as the use of a cloud, the Ministry of Internal Affairs and Communications will compile and announce advanced cases, etc. during this fiscal year in collaboration with the Ministry of Education, Culture, Sports, Science and Technology, thereby promoting the informatization of education at school sites.

ii) Strengthening human resource capabilities through higher education higher education, etc.

1) Producing world top-level human resources in response to the fourth industrial revolution era (fostering and strengthening of human resources by the Outstanding Graduate School (tentative name) and Outstanding Researcher System)

Also based on the needs of industries, the Government will make possible a unified education of different area, such as a science and mathematics-fused area, and education of most advanced education of Japan's strong areas, and form the "Outstanding Graduate School (tentative name)" in which multiple universities, private enterprises, national research and development agencies and overseas top universities work together. At the "Outstanding Graduate School (tentative name)," human resources who are ready to work will be fostered without reference to existing graduate courses and majors,

and the degrees, including interdisciplinary fusion, can be awarded.

In addition, considering that four fields, including a field contributing to the creation of new industries, were shown in April this year in the "basic concept" compiled by the advisory council to examine the Outstanding Graduate School (tentative name) composed of government, industry and academia, the Government will promote full-fledged and close consultations about initiatives that will be commenced at universities and enterprises from this fiscal year, while sequentially drawing up graduate school education programs for formation of education curriculums and improvement of collaboration systems from the next fiscal year.

In this regard, students of the "Outstanding Graduate School (tentative name)" sometimes participate in joint research conducted by industries and universities. Thus, in drawing up guidelines for universities and national research and development agencies, rules for involvement of students will also be included [written again].

Further, regarding the Outstanding Researcher System that allows excellent young researchers to play active roles in a stable post and open environment, open recruitment was commenced in February this year and many private enterprises expressed intentions to accept outstanding researchers. These are welcome steps from the viewpoint of the mobilization of human resources and technologies. The Government will analyze the results, etc. of decisions on acceptance of outstanding researchers during this fiscal year and organizations receiving such researchers, while promoting steady implementation of the system so that the outstanding researchers are accepted smoothly at universities, national research and development agencies, and private enterprises. In particular, at specified national research and development agencies and designated national university corporations, the Government will actively facilitate acceptance of outstanding researchers using a Cross Appointment System with private enterprises, etc. ahead of other organizations.

2) Development of top-level information human resources leading IoT, big data, and artificial intelligence and strengthening of education of science and mathematics

To develop and secure human resources who create future society responding to the advancement of IoT, big data, and artificial intelligence, the Government will promote establishment of faculties and graduate schools that foster a high level of data scientists, etc. in the higher education. Through the development etc. of standard curriculums for mathematics education which provides a basis for science and engineering, the Government will reinforce school-wide mathematical and information education, while strengthening functions for development of professional human resources for mathematical and information areas at universities, graduate schools, and higher professional schools for creation of industry-academia collaboration networks, etc.

In addition, to foster top-level human resources, the Government will call together world-level researchers at specified national research and development agencies, etc. in collaboration with higher education organizations, etc., carry

out researches in the fusion field of drive systems, including IoT, big data, artificial intelligence, as well as monozukuri and robots, and develop human resources in an integrated manner, while forming international research sites that enable the strategic sharing and use of big data, etc. in the areas, such as those of nanotechnology and materials as well as the global environment, where Japan' strengths can be demonstrated, thereby fostering professional personnel. In this regard, if the Outstanding Graduate School (tentative name) is formed and outstanding researchers are selected in those fusion areas, the Government will strive to collaborate with the Artificial Intelligence Technology Strategic Council, etc. and foster doctor human resources and excellent researchers who are ready to work.

3) New higher educational institutions that provide practical vocational education

With rapid changes in industrial structure, capabilities and skills needed for workers now continue changing at an accelerated rate. Thus, it is necessary to develop environment where everyone can quickly and flexibly learn sophisticated vocational professionalism in a timely manner. Regarding the "new higher educational institution that provides practical vocational education" that assume the realization of development of environment," the Government will establish an unprecedented "vocational professional fostering institution" with abundant expertness and an education implementation system where "sophisticated vocational human resources" capable of being a driving force of site-level innovation leading a world industrial revolution are produced, and which drastically strengthens human resources capabilities of Japan who can obtain a wage and academic degree of the same or more than existing university graduates. In an effort to provide high-quality practical vocational education and flexible learning environment as a venue of leaning of a wide range of age groups, including not only prevocational young people, but also ambitious members of society who want a step-up in the current job and a job in which they participate actively, the Government will seek to develop discussions on the following matters at the Central Education Council toward opening such institution in fiscal 2019 and then take require legal steps around this year. Further, the Government will set a standard for establishment in response to a new era immediately after the enactment of the legislative bill.

A) Reflecting future needs of human resources acquisition in industries

The Government will properly understand new social needs, including those of the pool of human resources and human resources specs called on in industries which are changing in the progress of the fourth industrial revolution through collaboration between the nation and related industries, and create a mechanism whereby such needs can be reflected in the respective curriculums and programs with a priority placed on.

B) Providing flexible learning environment in response to the new era The Government will make facilities and equipment reasonable and flexible so that, regardless of the young or the members of society, the sophisticated vocational professionalism can be learned in quick response to changes in the real society, while creating a mechanism whereby diversified curriculums easily accessed by the members of the society are provided.

C) Flexible securing and fostering appropriate teaching human resources

To fully secure and foster proper human resources who teach in the respective areas, the Government will positively use external personnel, such as practical teachers, who can respond to human resources acquisition needs of industries. On this occasion, together with this measure, the Government will create a mechanism whereby the effective appointment of practical teachers is promoted substantially, e.g. opportunities for training where teaching skills can be learned for a short time.

D) Built-in incentives for assurance and improvement of quality as a "vocational professional fostering institution"

The Government will create an assessment system in which objective indicators and support measures are linked on the basis of the results of the employment rate and business startup rate of participants in the class, as well as the rate of participation of members of society and the level of satisfaction of participants in the class. In addition, to secure social significance and mission of the "education institution producing "sophisticated vocational human resources" capable of leading a site-level innovation, with a lot of expertness, who are able to obtain a wage and academic degree of the same or more than existing university graduates and serve as a driving force of a site-level innovation that may lead a world industrial revolution," the Government will create a mechanism to assure adequate quality and provide an authorization.

4) Holding the "Council for Promotion of Human Resource Development for the fourth industrial revolution fostering promotion

When the fourth industrial revolution is progressing and changes in the pool of human resources and human resources specs called on by industries are forecast, the Government is required to strategically develop the human resources who can play active roles in growth industries, based on changes in the medium- to long-term industrial structure and employment structure. To this end, through collaboration between relevant ministries and agencies, industries, labor world, educational institutions, vocational training institution, and human resources fostering industries, the Government will, during this fiscal year, create a mechanism whereby changes in the industrial structure and employment structure as well as the image of human resources and their qualities as well as capabilities in response to new industries assumed in such changes, which could come in the future, are pictured properly, while the results thereof are recognized and shared by the government and private sector and reflected specifically in vocational capability development policies and educational policies.

5) Enhancement of functions for development of sophisticated professional vocational human resources at professional graduate schools, higher professional schools, and special technical schools

In a bid to produce abundant managerial human resources both qualitatively and quantitatively who bolster the growth of the Japanese economy and improve the productivity of the service industry, etc., the Government will enhance human resource development functions regarding management-related professional graduate schools, in the form of increasing characteristics of the respective schools, including globalization and community-based operation as well as the strengthening of specified fields which are expected to develop in the future. In addition, the Government will review the professional graduate school system as soon as possible, enhance assessments where diversified views of related parties, such as students and industries, are adopted, promote assessments by international assessment institutions, facilitate collaboration with faculties and graduate courses, and advance the clarification of subjects which constitute a core on the bases of the needs of enterprises, etc.

In respect of higher professional schools, the Government will promote reviews of educational programs for the reorganization of courses of study, etc., which respond to future changes of society and needs of enterprises. Moreover, to foster human resources bolstering Japanese enterprises that are developing globally, the Government will push forward the acceptance of foreign students from the Southeast Asia, etc. at higher professional schools and overseas development of higher professional schools to Southeast Asian countries.

Also regarding special technical schools, the Government will, during this fiscal year, consider measures for promoting acceptance of foreign students in order to develop human resources responding to globalization and the way of the education of special technical schools, including the examination of results, etc. of "practical professional curriculums for vocation," while taking necessary institutional measures by the next fiscal year to strengthen functions for professional human resource development by special technical schools based on the needs of industries and ensure the assurance and enhancement of quality.

Further, in enhancing functions to foster sophisticated professional vocational human resources, etc. at those higher education institutions, the Government will enhance systems for example to strategically develop human resources who play active roles in growth industries, in light of changes in the medium- to long-term industrial structure.

iii) Promotion of human resources management by enterprises

1) Promoting provision of information on human resources development initiatives at enterprises

Regarding information on initiatives for development of human resources, etc. by enterprises (hereinafter referred to as the "workplace information"), it is necessary to introduce databases with high practicality for job seekers, in which enterprises that are willing to develop human resources are easily assessed to be positive. Thus, the Government will prepare formats for the "workplace information" useful to job seekers and request enterprises to actively provide a wide range of "workplace information." In addition, when providing the

"workplace information" of enterprises to job seekers, the Government will make a comparison between enterprises easy and prepare lists to contribute to selection of jobs according to their desires. Policies coping with these measures will be complied during this fiscal year in order to implement them from the next fiscal year.

2) Maximum utilization of middle-aged and elderly human resources

Due to acceleration of changes in environment surrounding enterprises, only human resources development within enterprise cannot cope with such changes adequately. In addition, in the midst of increases in workers who have various careers through a change of job, etc. the Government will create a mechanism whereby human resources with capabilities and experiences are able to fully exert their capabilities at enterprises that particularly need personnel who is ready to work (for example, local SMEs and emerging enterprises on the track of growth). To this end, the Government will compile and organize knowhow and issues on a trial temporal transfer in accordance with the "trial enrollment temporal transfer program" of the Industrial Employment Stabilization Center of Japan, examine the way of another support system that is intended to be established in FY2018, and reach conclusions. In addition, an opportunity for continuous career consulting from early life by the "self-career dock" etc. will be secured.

3) Accelerating comprehensive measures to employ and foster young people who will create the future (introduction and promotion of "self-career dock")

The Government will seek to realize the environment where young people who assume the future are able to exert their capability and personality in their working career. To this end, in light of enactment of the Act on Employment Promotion of Young People, the Government will promote the development of human resources, etc. by enterprises, including the promotion of information provision by enterprises and the promotion of introduction of the "self-career dock," while supporting the voluntary development of capability, including the learning of IT technologies contributing to the career formation of workers using a professional practical education training, etc. In addition, to foster human resources in the area of monozukuri with high productivity, the Government will immediately study a reduction or exemption of examination fees for proficiency tests and reach conclusions thereof during this year, while examining specific measures for invitation of the World Skills Competition to Japan and reaching conclusions by the middle of the next fiscal year.

2-2 Reforming the way of working and reforming employment systems

(1) Progress in achieving KPIs

KPI "Decrease the number of people with unemployed period of six months or more by 20% in the next five years" (2012: 1.51 million)

 \Rightarrow 2015 : 1.08 million

KPI "Raise the job turnover rate of general workers (excluding parttime workers) who changed their job in the next five years) by 9% in the next five years" (2011: 7.4%)

 \Rightarrow 2014: 8.9%

KPI "Employment rate of people aged 20 to 64 in 2020: 81%" (2012:75%)

 \Rightarrow 2015: 78.1%

(2) Specific new measures to be taken

In response to a supply restriction caused by the declining population and in a bid to continue realizing sustainable growth, the Government will early enact a bill for partial revision of the Labour Standards Act, etc., while realizing the productive ways of working and strongly promoting initiatives for prevention of overwork for diversified workers to participate.

i) Implementation and realization of reforming way of working

1) Realizing productive ways of working

To further promote the reform of way of working and realize a productive way of working, it is important for the concept to further disseminate in the society, which constitutes an important factor for consideration of whether the workplace allows individuals to move away from the awareness of "joining a certain company," improve expertness depending on capability and personality without long-time constraints in the workplace and exert the value of the individual to the extent possible when selecting jobs. To this end, the Government will further proceed with the review of measures for further promoting visualization of enterprises' initiatives and results concerning working hours and human resource development [stated later] (details are stated in ("III-2-2-ii) Promotion of visualization in the labor market"). In addition, regarding the reform of way of working, good practices are collected and made public in various forms, but the Government will not only reduce working hours but also improve productivity and expand earnings to upgrade the reform. Moreover, regarding the flexible way of working such as telework, the Government will examine, analyze and make public the way of contributing to productivity improvement of enterprises, thereby utilizing and promoting telework.

Besides, the Government will hold the "Labor / Financial Liaison Conference toward Productivity Revolution of All Industries," while supporting enterprises, etc. in an integrated manner that work on both business administration and employment management through collaboration between relevant ministries and agencies, e.g. promoting an initiative for advices regarding an employment

creation policy from regional financial institutions, etc., thereby accelerating productivity improvement of regional mid-ranking companies and SMEs and securing human resources in growth industries.

2) Early establishment of advanced professional system

In respect of the "advanced professional system," it is important for highly creative workers to fully demonstrate their potential in response to needs of workers who desire the way of working which is evaluated on results not on hours and increase options so that an efficient way of working is possible. To this end, regarding subject jobs to be stipulated in ministerial ordinances, after a bill for partial revision of the Labor Standards Act is enacted, the Government will develop discussions at the Labour Policy Council and reach conclusions early so that jobs leading to the creation of innovation in new industries and markets that are changing with the times are allowed appropriately and flexibly through proper consultations between labor and management.

When introducing the system,

- A) As support for enterprises, the Government will specify necessary information and examples of entries in the work rules in legal guidance, and leaflets to ensure easy labor management for persons subject to the system.
- B) As support for workers, the Government will provide information carefully to workers who wish to uses the system while eliminating anxieties of such workers when necessary, as well as establishing and disseminating a one-stop consultation system that supports quick solution of problems when troubles occur.

3) Realization of a policy of equal pay for equal jobs

In a bid to increase options for diversified, flexible ways of working of women and young people, it is necessary to thoroughly improve labor conditions of nonregular workers. And to realize a policy of equal pay for equal jobs,

- 1) For dissemination and enlightenment, the Government will draw up guidelines in which whether or not what kinds of differences of labor conditions are reasonable is shown by examples, etc. in order to ensure accurate application of the Labor Contract Act, Part-time Employment Act, and Worker Dispatching Act.
- 2) The Government will clarify matters to be corrected as unreasonable differences of labor conditions, refer to systems of Europe so that such correction is made smoothly, examine a packaged revision, etc. of the Labor Contract Act, Part-time Employment Act, and Worker Dispatching Act, including the establishment of governing provisions for judicial rulings concerning unreasonable differences of labor conditions and the clarification of accountability of business operators pertaining to differences of labor conditions between non-regular workers and regular workers, and then submit relevant bills to the Diet.

In addition, on the basis of the "Plan for Realizing Conversion to Regular Employees and Improvement of Labor Conditions" (approved by the Headquarters for Plan for Realizing Conversion to Regular Employees and Improvement of Labor Conditions on January 28, 2016), the Government will aggressively promote conversion from non-regular workers to regular employees and improvement of labor conditions.

4) Shortening long working hours

Promotion of a reform of the way of working assuming long working hours across the society, regardless of men or women, will allow new workers who were unable to work due to childrearing and nursing care to get a job. In addition, various initiatives and creative approaches of enterprises that attempt to make up for a reduction in working hours with improvement of productivity and an increase in motivation of individual workers who try to achieve good results within working hours will lead to improvement of the "quality" of labor. Through this, it is anticipated that earning capability of enterprises will be strengthened and the birth rate will rise, e.g. by further balancing childrearing and nursing care with working. Moreover, in view of measures for declining birth rate and considering the population distribution of Japan, we must keep in mind that the strengthening of efforts to immediately shorten long working hours will result in a significant increase in effects. In order to maintain Japan's industrial competitive edge in the world and realize sustainable economic growth, coupled with challenging the declining birth rate and aging population, which are structural issues of the Japanese society, it is required to quickly make a policy decision on and strengthen initiatives for shortening long working hours at this timing. Reflecting various initiatives already made by the government to reform the way of working, the recognition of challenging childrearing and nursing care while working has significantly been heightened. Thus, it is vital to capture this timing and further support the correction of such practice.

A) Strengthening enforcement of the Labor Standards Act

The Government will strengthen supervision and guidance by the Labor Standards Office under the Labor Standards Act. In particular, the Government will implement thorough supervision and guidance with all workplaces suspicious of overtime work of more than 80 hours per month as the subject of priority supervision. In addition, the Government will reinforce supervision and guidance in case the notification of the 36 Agreement, which stipulates overtime work of more than 80 hours per month, was submitted.

Moreover, in view of strengthening the enforcement of the Labor Standards Act, the Government will thoroughly disseminate the contents of and consultation window for the Labor Standards Act, while strengthening a system for supervision and guidance as well as investigation, including the improvement of a necessary personnel system, to make the strengthening of supervision and guidance valid.

B) Review of the way of overtime work regulations

The Government will early enact the bill for partial revision of the Labour

Standards Act, etc. submitted to the Diet in April last year, while reviewing the way of overtime work regulations set forth in the 36 Agreement.

C) Promoting voluntary initiatives of enterprises

In addition to the measures to strengthen enforcement of laws and to promote voluntary initiatives of enterprises to shorten long working hours, the Government will revise the guideline under the Act on Special Measures for Improvement of Working Hours Arrangements (Act No. 90 of 1992) and incorporate in-depth measures into the revision as specific example, e.g. taking a measure for rest intervals between working days. Also, the Government will support enterprises which voluntarily strive to shorten long working hours and introduce rest intervals between working days.

D) Promoting initiatives for national government employees

The Government will promote initiatives to shorten long working hours of national government employees also in promoting initiatives at enterprises. Specifically, the Government will promote initiatives set forth in the "Guidance" for active social participation by women and promotion of work-life balance," including "Yukatsu," and the promotion of streamlining operations using the flextime system expanded in April this year as well as renewed thorough reflection in personnel evaluation of efforts and results of managerial staff, etc. to shorten long working hours, while examining working time management using a system in light of the progress of the "reform of the way of working." Moreover, considering reviews made at the "Advisory body for accelerating the reform of the way of working at Kasumigaseki," the Government will immediately implement vertical development of advanced examples for shifting to a paperless system and telework, while promoting the streamlining of Dietrelated operations. In addition, the Government will comprehend the management capability called on managerial staff and study the way of initiatives to improve the capability.

E) Development of a nationwide work-life balance drive, etc.

To foster social momentum toward shortening long working hours, seminars, etc. to realize work-life balance have been held across Japan. On that occasion, the Government will enhance such seminars, etc. so that the contents thereof are changed to those not only to enlighten awareness but also to share specific practical methods and best practices for the realization of work-life balance.

In addition, to understand and analyze impacts of the realization of work-life balance on earnings, etc. of enterprises, the Government will follow up subsequent initiatives and results of enterprises that are subject to a national award and collection of case examples.

To promote initiatives to realize a work-life balance at enterprises, with regard to the framework for broader evaluation of enterprises that promote a work-life balance, etc. in the procurement by the nation, which was introduced in this fiscal year, the Government will expand the framework to the procurement by incorporated administrative agencies, etc. during this fiscal year and in principle, completely implement the new framework in the next fiscal year. Coupled with

this effort, the Government will promote similar initiatives at local governments and private enterprises.

5) Improvement of environment to raise wages and minimum wages toward sustainable economic growth

The Government will provide support for enhancement of productivity of SMEs and micro enterprises and improvement of transaction conditions so that a virtuous cycle of a wage rise at all income groups and an increase of corporate earnings is sustained and expanded, while continuous promoting a rise in wages and striving to rise minimum wages to around 3% per year also considering the nominal GDP growth rate.

ii) Promotion of visualization in the labor market

Regarding initiatives for "visualization" of workplace information, including the establishment of databases for enterprises promoting active social participation by women (February this year) and the commencement of provision of workplace information (March this year), the Government will seek to realize a virtuous cycle where enterprises that are more active in the reform of the way of working, including development of human resources and the shortening of long working hours, are selected more in the labor market and this further promotes voluntary initiatives of enterprises. To this end, the Government will carry out uninterrupted improvement of a mechanism to provide such information, while examining the matters listed below, to integrate various initiatives for "visualization" so that the mechanism becomes a highly convenient one for information provision without reference to the attribute of young people or women:

- 1) Introduction of a highly convenient search function and a mechanism for comparison between enterprises
- 2) Conjunction with various certification systems, such as those for "Eruboshi Certification," "Kurumin Certification," "Youth Yale Certification," "Stocks of Nadeshiko Brand," and "Health Management Stocks" (indication of whether the certification are obtained)
- 3) Items subject to information provision (from the viewpoint of the shortening of long working hours, for example, information provision by enterprises is made available regarding overtime working hours entered into in the 36 Agreement)
- 4) The way of disclosing policies for the way of working including shortening long working hours and various ways of working at listed companies

After examining those items, the Government will aim to implement them in the next fiscal year, and compile policies to cope with during this fiscal year.

iii) Creation of a highly foreseeable labor dispute solution system, etc.

In light of the "Japan Revitalization Strategy (revised edition 2015)" (approved by the Cabinet on June 30, 2015), the Government will immediately examine the way of a highly foreseeable labor dispute solution

system, etc., including the way of the monetary relief system at the time when a dismissal is invalid and necessity thereof, at the "conference for review of the way of transparent and fair labor dispute solution system" set up in October last year, reach conclusions as soon as possible, develop deliberations at the Central Labour Standards Council, and then take required institutional measures.

2-3 Participation by diverse workers

(1) Progress in achieving KPIs

(Promoting active social participation by women)

(KPI) "Boost the employment rate of women (age 25-44) to 77% by 2020"

 \Rightarrow 2015: 71.6% (2012: 68%)

- **(KPI)** "Aim for the elimination of childcare waiting lists by securing childcare arrangements for about 500,000 children by the end of next fiscal year" (Plan to Accelerate the Elimination of Childcare Waiting Lists)
 - ⇒ The childcare arrangement expanded to about 219,000 in the last 2 years, FY2013 and FY2014.

(Promoting active social participation by the elderly)

KPI "Boost the employment rate of the elderly (age 60-64) to 67% by 2020"

 \Rightarrow 2015: 62.2% (2012: 58%)

(Promoting active social participation by the handicapped)

(KPI) "Boost the employment rate of the handicapped to 2.0% by 2020"

 \Rightarrow 2015: 1.88% (2012: 1.69%)

(Utilization of highly-skilled foreign professionals)

- **KPI** "Aim to recognize 5,000 highly-skilled foreign professionals by the end of 2017 and further 10,000 highly-skilled foreign professionals by the end of 2020"
 - ⇒ A total of 4,347 foreign nationals have been recognized as highly-skilled foreign professionals by December 2015 since the introduction of the points system in May 2012

(2) Specific new measure to be taken

Act of Promotion of Women's Participation and Advancement in the Workplace was enforced completely in April this year and initiatives, including the drawing up of an action plan, etc. in accordance with the Act, have been promoted by companies, etc. Considering these development, the Government will promote the following measures to further push forward the active social participation by women. In parallel, based on the "Priority Policies 2016 to Accelerate Active Social Participation by Women" (approved on May 20, 2016 by Headquarters for Creating a Society in Which All Woman Can Shine), the Government will promote the improvement of working conditions of non-regular female workers and the diverse way of working, including telework, as well as initiatives of innovative changes of the way of males' living and awareness.

Considering that the Act for Partial Revision of the Employment Insurance

Act (Act No. 17 of 2016) which incorporates the expansion of application of employment insurance to people at least 65 years old and the increase of services of Silver Human Resources Centers will be enforced sequentially from April this year, the Government will accelerate environmental improvement to realize the society where the elderly can actively work in their life toward active participation in the society by the elderly.

Regarding utilization of foreign human resources, the Asian IT Engineers Career Support Council of Japan was established in November last year with the Computer Software Association of Japan as a base foundation to support studies of foreign IT human resources in Japan and employment after that. Amid intensifying global competition in securing human resources, the Government will actively attract excellent foreign human resources, such as IT human resources, to Japan in order to revaitalize Japanese economy and improve its competitiveness.

i) Promotion of active social participation by women

1) Promoting practical diversity management

Based on previous initiatives for "Nadeshiko Brand" and "Diversity Management Selection 100" and through analysis of good practices, the Government will clarify the way of the diversity management (broadly including the appointment of not only women but also foreign nationals and the handicapped), which leads to improvement of growth potential and profitability of enterprises, while establishing a venue to develop new discussions on measures for an increase of appeal for both enterprises and investors, including for example the way of information provision promoting the diversity management, and reach conclusions during this fiscal year.

Further, in conjunction with the above venue of discussions, in view of not only human resources management of enterprises but also the effective use of capital, the Government will, at the Study Group on Investment for Sustainable Value Creation, develop discussions on narrowly defined ESG (Environment, Society, and Governance) as well as comprehensive discussions with an eye on human capital and intellectual capital regarding the way of corporate management and investments to create sustainable corporate value and approaches to evaluate them during this fiscal year, and reach a certain conclusion.

2) Strengthening initiatives to eliminate childcare waiting lists

Based on the "Plan to Accelerate the Elimination of Childcare Waiting Lists" and the "Measures for Urgent Response to Elimination of Childcare Waiting Lists" compiled in March this year toward realizing the elimination of childcare waiting list at the end of the next fiscal year, the Government will secure stable financial resources in accordance with the framework of the economic and financial revitalization plan, while steadily promoting improvement of venues of childcare and securing of childcare human resources. Specifically, the Government will actively develop the "Enterprise-led Childcare Project" established under the Act for Partial Revision of the Child and Child Care Support Act (Act No.22 of 2016) enacted in March this year and reduce

operational burdens as well as support for acquiring a nursery teacher qualification using ICT, etc., while further improving treatment of nursery teachers, etc. and building career paths.

To promote joint construction of childrearing facilities of large-scale condominiums, etc., the Government will compile model cases of joint construction of childcare facilities using an exceptional measure to ease floor-area ratios, and disseminate the cases to local governments, etc. On this occasion, the Government will deepen collaboration, etc. among urban planning department, construction department, and childrearing department within local governments, and make thoroughly known to local governments so that initiatives in collaboration among related departments are carried out from the time when an urban plan is drawn up and an exceptional measure is applied for permission.

Based on a further increase in working women, the development of reform of the way of working, and initiatives to take childrearing holidays that constitute continuous support for childcare, the Government will strive to secure the venue of childrearing. On this occasion, the Government will examine and analyze systems and examples for nursery teachers in various countries during this fiscal year and consider measures that further improve social valuation of nursery teachers so that the social valuation of nursery teachers with professional expertise improves for medium to long term and a nursery teacher becomes more attractive occupation.

3) Review toward a system, etc. for better working environment for women

Regarding reviews toward the taxation, social security system, spouse allowance, etc., the Government will develop specific discussions to realize better working environment for women.

Regarding taxation, based on the "Summary of issues regarding the system of taxation on personal income, including the creation of neutral tax system to selecting the way of working (primary report)" compiled by the Government Tax Commission on November 7, 2014 and the "Summary of issues regarding the way of taxation based on structural changes in economic society" compiled by the Government Tax Commission on November 13, 2015, the Government will promote national debate extensively and carefully.

Regarding social security system, the Government will smoothly expand application to part-time workers at large enterprises from October this year, and regarding SMEs, take an institutional system that open a path to the expansion of application on the basis of consensus between labor and management. In addition, based on Article 2 of the Supplementary Provision of the Act on Reinforcing Pension Function, the Government will steadily promote deliberations on further expansion of application within three years after the expansion of application of employees' insurance is enforced.

Regarding the allowance for dependent pertaining to spouses of national government employees, the Government has requested the National Personnel Authority to make deliberations, and will deal with this issue promptly based on the result of deliberations. Also regarding spouse allowance at private enterprises,

the Government will broadly disseminate the "Matters to be considered for deliberation on the way of spouse allowance" complied by the Ministry of Health, Labour and Welfare and encourage labor and management to consider the way of spouse allowance.

ii) Promoting active social participation by the elderly

The Government will enhance support for enterprises, etc. where the elderly who are willing to work, regardless of age, seek to realize a society in which they can actively work in their life by taking advantage of their capability and experience and the continuous employment is extended to the age of 65 and older and the mandatory retirement age is extended to the age of 65. In addition, the Government will develop a mechanism nationwide to secure various employment and working opportunities using local councils, while supporting re-employment of elderly people and ensure a dramatic enhancement of opportunities where the elderly can active participation in the society though the use of the "Lifetime working support desk" of the Hellowork and the "Career human resources bank for prospective elderly retirees" that is a platform of matching for prospective elderly retirees

iii) Promoting active social participation by the handicapped, etc.

The Government will continue focusing its efforts on support for social participation by the handicapped, patients with an intractable disease, and patients with cancer, including working support for them. Regarding the handicapped, the Government will strengthen support for their job retention and promote working support for the handicapped (collaboration between agriculture and welfare) in the area of agriculture, while pushing social participation and independence of the handicapped through promotion of cultural and artistic activities by the handicapped.

iv) Utilization of foreign human resources

To overcome fierce global competition in the fourth industrial revolution, it is vital to more actively accept highly-skilled foreign professionals whose demand is increasing as with highly-skilled IT professionals in the wide range of industries with the evolution and deepening of information technology, and thereby improve the productivity of the entire Japanese economy.

To this end, the Government will issue constructive messages to accept highly skilled foreign professionals, while further improving the living environment of Japan, wages and employment personnel systems, as well as immigration and residence control systems so that these are made attractive for highly skilled foreign professionals who are pursuing employment outside their countries, and create a strategic mechanism whereby those professionals can actively work over a long period of time in Japan.

1) Considering immigration and residence control systems that further attract highly skilled foreign professionals

In a bid to attract foreign human resources, including highly skilled IT professionals, with advanced technologies and knowledge, who are expected to

contribute to the growth of the Japanese economy, and work actively for a long time, it is necessary to create immigration and residence control systems more attractive than those of other countries. To this end, the Government has decided to create the "Japanese–version green card system for highly skilled foreign professionals," which is the fastest such system in the world and substantially reduces the period of stay required before highly skilled foreign professionals can apply for permanent residence from the current five years, and will take necessary steps as soon as possible. At the same time, to make Points-based System for Hiligly Skilled Foreign Professionals more user-friendly, the Government will revise requirements and promote further awareness of it.

In the case of significant investors and human resources in growth fileds such as the IoT & regenerative medicine, the Government will consider approaches to application for permanent residence by foreign human resources who make a major contribution to Japan and reach a conclusion as quickly as possible.

2) Strengthening support for employment of international students and overseas students by Japanese companies

Aiming to increase the share of international students who find jobs within Japan from the current 30% to 50%, the Government will immediately draw up measures to promote the development of special programs by universities, including Japanese language education, medium- to long-term internship and career education. Further, as for students who have completed the special program with the appropriate certification based on the standpoint of the results of collaboration with companies and internship implementation plan, the Government will, with appropriate involvement of ministries and agencies in charge, provide preferential status of residence acquisition measures, including simplification of documents to be submitted required to take procedures for a change of status of residence and speeding-up of screening process for application, and then support the development of such programs by universities from the next fiscal year.

In addition, by strengthening the dissemination and advertisement in collaboration with a international student-related association and enhancing the internship and employment enlightenment seminar at Employment Service Center for Foreigners, the Government will promote the employment of international students in Japan through collaboration between relevant ministries and agencies.

Moreover, many human resources produced through the highly skilled professionals development project implemented in Asian countries by using public funds of ODA, etc. of the Japanese government have a high affinity for Japan. Thus, they are expected to promote innovation for domestic industries, while contributing to the development of their countries and helping strengthen a tie between Japan and their countries. To encourage those human resources to reflux between Japan and Asian countries, the Government will reflect the needs of Japanese industries in the contents of the highly skilled professionals development project by ODA of the Japanese government at engineering top-level schools, etc. (universities, graduate schools) in Asian countries to enhance the project. Also, in addition to universities and graduate

schools that have implemented such project, the Government will take following measures for excellent students, etc. of engineering top-level schools, etc. (universities, graduate schools) in Asian countries that have yet to implement such project;

- Inviting excellent students, etc. to Japan, with target of 1,000 persons for five years from the next fiscal year to 2021 and providing short and long term training (studying at Japanese universities, internship at Japanese companies) to them, for the purpose of improvement of innovation environment in terms of human resources in both Japan and Asian developing countries
- Effectively providing services, including job fairs and matching projects, to excellent students who wish to have a job with Japanese companies through collaboration between ministries and agencies
- Taking measures to simplify documents to be submitted for an application for preferential measures (including special additions in the "highly skilled point system") to obtain the status of residence and for status of residence regarding the excellent students, etc. and are certified after the foreign minister examines their eligibility

3) Promoting acceptance of foreign employees by Japanese companies developing globally

With reference to the mechanism of the "Project for acceptance of foreign employees from overseas in the manufacturing industry" started from March this year and from the standpoint of an increase of initiatives to promote global development with the strengths of Japanese companies demonstrated also in other areas than the manufacturing industry that contribute to the growth of the Japanese economy, the Government will conduct survey on needs for making possible a short-period transfer and the acquisition of skills, etc. within a corporate group with the involvement of a relevant minister responsible for the project depending on the necessity of acquisition of specific professional skills in Japan, examine the results of the survey and reach a conclusion during this fiscal year.

4) Strengthening residence control infrastructure and facilitating / expediting of procedures for the status of residence

It is necessary to manage the residency situation of foreign nationals more properly as the base for seeking to further acceptance of foreign human resources. Thus, the Government will improve a mechanism that comprehends the working status of foreign nationals by the end of the next year by unifying entry methods of the "Notice of employment of foreign nationals" and a residence card, while making further discussions to achieve more appropriate residence control. Also, the Government will proceed with required preparations to ensure facilitation / expediting of procedures for the status of residence, including the introduction of online procedures, to commence from FY2018.

5) Improving living environment to promote the acceptance of foreign nationals

To promote the acceptance of foreign nationals, it is necessary to promote not only institutional initiatives for residence control systems but also environmental improvement necessary for foreign nationals to live in Japan. Particularly, regarding educational environment, the Government will aim for 100% of the rate for participation in a Japanese language learning course by foreign children who need to learn Japanese as soon as possible so that, while learning Japanese, they can live a school life even at a general public school in Japan, and in the region where there are many foreign children who need to particularly learn Japanese, the Government will make sure that teaching of "JSL Curriculum" is surely implemented. Also, the Government will encourage relevant ministries and agencies to disseminate to medical institutions, banks, and electricity / gas suppliers the information easily understandable about sites, etc. where foreign languages can be used, and at the same time, particularly regarding "medical institutions with a system to accept foreign patients established," the Government will improve living environment, e.g. an increase of the number of such institutions to 40 during this fiscal year.

(Consideration on approaches to accept foreign human resources)

To ensure sustainability of economic and social infrastructure, the Government will advance comprehensive and detailed study on approaches to accept foreign human resources while focusing on the field where they are truly required. To this end, the Government will conduct cross-governmental surveys and considerations regarding essential issues including a mechanism that would not be misconstrued as an immigration policy and the way to shape the national consensus.

IV Taking in Overseas Growing Market

(1) Progress in achieving KPIs

《KPI》 "Aim to raise the FTA ratio to 70% (2012: 18.9%) by 2018"

- \Rightarrow As of the end of FY2015: 39.5%
- *The share of trade value in total Japanese trade value with countries with which EPA/FTA has entered into force or has been signed as of the end of FY2015 (based on 2015 trade value)
- *Negotiations on 6 EPAs are underway with a view to their early conclusions.

KPI "Double the inward foreign direct investment (FDI) to ¥35 trillion by 2020 (as of the end of 2012: ¥19.2 trillion"

 \Rightarrow As of the end of 2015: \(\frac{2}{2}\)4.4 trillion

KPI "Double the value of export by small and medium-sized companies by 2020 compared with the 2010 level"

 \Rightarrow FY2013: \(\pm\)13.8 trillion (FY2010: \(\pm\)12.6 trillion)

KPI "Raise infrastructure project orders received to approximately ¥30 trillion by 2020 (2010: Approximately ¥10 trillion)"

- \Rightarrow 2014: Approximately ¥19 trillion
 - *KPI figures include "income from business investments on overseas infrastructure, etc."

KPI "Triple overseas sales of broadcast contents by FY2018 from the FY2010 level"

⇒ FY2014: ¥14.36 billion (FY2010: ¥6.63 billion)

(1) Specific new measures to be taken

The Government will promote public and private joint initiatives to take in overseas growing markets expanding primarily in emerging countries and to incorporate benefits therefrom into regions of Japan. The enforcement of TPP signed in February this year will bring about great opportunities to take in huge growing markets of 800 million people in the Asia and Pacific, which account for approximately 40% of the world GDP. Taking this opportunity, in addition to steady implementation of measures based on the "Comprehensive TPP-related Policy Framework" (approved by the TPP Task Force on November 25, 2015), the Government will accelerate the exports / overseas expansion of Japanese companies with technologies, including small and medium-sized companies, while aiming to further expand the inward foreign direct investment and achieve sustainable growth of Japan serving as an international global hub.

On that opportunity, the Government will also promote overseas development of manufactured products and infrastructure systems, as well as local products, agricultural products, contents such as broadcasting contents, and services. In addition, the Government will reinforce mutual collaboration in various fields and collaboration with other industries such as tourism, thereby expanding a

virtuous circle of the regional economy.

i) Promoting economic partnership negotiations, and conclusion/revision of investment agreements and tax treaties

The Government will push forward to achieve early entry into force of the TPP and expand its member countries/regions, and strategically and expeditiously promote negotiations on other economic partnerships, including the Japan-EU EPA, Regional Comprehensive Economic Partnership (RCEP), and Japan-China-Republic of Korea FTA. Playing central roles in building such wide-area new economic order, Japan aims to take the lead in establishing comprehensive, well-balanced and high-level global rules.

In addition, to improve business environment toward overseas development of Japanese companies, the Government will aim to sign and/or achieve entry into force of investment-related agreements (investment agreements and economic partnership agreements withinvestment chapters) covering 100 countries / regions by 2020 according to the "Action Plan for improvement of investment climate through promoting the conclusion of investment-related agreements" (announced in May 2016). The Government will strategically and actively promote conclusion of new agreements and amendment of existing agreements to achieve this goal. Regarding partner countries for negotiations, the Government will make discussions within the government every fiscal year considering in comprehensive manner results and prospects for increases of investment in partner countries / regions, requests from industries, consistency with diplomatic policies, and needs and circumstances of partner countries / regions.

Regarding the contents of agreements, the Government will seek to secure a high level of quality, keeping in mind "free type" agreements that require an indiscriminate treatment from the stage of new entry, and develop flexible negotiations with an emphasis on speediness depending on specific needs of industries and circumstances of partner countries. In addition, the Government will aim to create investment environment in response to new corporate activities *e.g.* by considering inclusion of the areas of services and e-commerce. To further accelerate those efforts, ministries and agencies centering on the Ministry of Foreign Affairs will strengthen their negotiation capacity in their collaboration by increasing the number of negotiators and by promoting participation of private human resources.

In addition, from the standpoint of vitalization of the Japanese economy through promotion of sound international investment and economic exchanges and considering economic relation with partner countries and requests from business community, the Government will facilitate the amendment of existing tax treaties in response to changes in recent economic conditions, while striving to increase networks for tax treaties by concluding new treaties with investee countries where investment relations with Japan are expected to develop in the future. Also, to further accelerate those efforts, ministries and agencies will work together to strengthen their negotiation capacity.

ii) Supporting overseas business expansion of small and medium-sized companies taking opportunities afforded by the TPP

The Government will aggressively develop support to use TPP for regional companies as well as small and medium-sized companies of Japan that have not been able to begin overseas business expansion so that they will be able to participate in a global value chain to be created by TPP and to tap a huge market. To this end, the Government will ensure careful information provision and create a consultation system for contents of TPP and methods to use TPP, as well as utilizing specialists versed in overseas business under the "Consortium for New Export Nation" established in February this year and providing comprehensive support to respective companies, such as coordination of necessary supporting measures, drawing up of overseas business strategies, securing of local human resources, acquisition of overseas certification, and exploring of overseas sales channels. On that occasion, various supporting institutions, including ministries and agencies, local governments, Japan External Trade Organization (JETRO), societies of commerce / chambers of commerce, financial institutions which provide loans and advices to Japanese companies expanding business overseas, will work together utilizing Japanese overseas diplomatic missions abroad and ODA. Through this collaboration, the Government will create and laterally develop successful cases that have not been realized without such collaboration. The subject of support is not limited to industrial products but includes a wide range of areas, such as traditional crafts, agricultural products, and services. The Government will also promote collaboration with the distribution industry, including convenience store chains, which is expected to be developed overseas, on the back of the easing of restrictions on foreign investment based on TPP. Through these efforts, the Government will aim at the successful rate of at least 60% for market exploitation / business expansion of companies subject to comprehensive support.

iii) Enhancing the initiatives to promote inward foreign direct investment

The Government will implement measures based on the "Policy Package" (approved by the Counsil for Promotion of Foreign Direct Investment in Japan on May 20, 2016) drawn up with the aim of becoming an global hub for trade / investment taking opportunities afforded by the TPP, and further promote the inward foreign direct investment.

In order to support regional local governments, which play a major role in promotion of foreign investments, in creating a strategic foreign investment promotion policy that takes into account circumstances and characteristics of the respective regions and accumulating successful cases, the Government will enhance support measures for local governments, such as the human resource development and the provision of successful case examples inside and outside Japan, as well as support for projects of local governments including the use of subsidies for promotion of regional revitalization. In addition, the Government will promote business alliances with foreign companies including through capital contribution / business tie-ups so that regional small and medium-sized companies which have no overseas contact can strengthen their growth potential, such as technological capabilities and expansion of sales channels, using

management resources of foreign companies. Moreover, the Government will strive to effectively utilize sales pitches by the prime minister and Cabinet ministers and strengthen public relations through Japanese overseas diplomatic missions, etc., while actively attracting the high value-added business sectors, such as research and development division., by strengthening sales promotion of and support for an individual cases including provision of investment incentives, through strengthening of JETRO's institutional capacity.

Further, to ensure drastic improvement of business and living environment that poses an obstacles to the attraction of foreign companies, the Government will steadily implement the "Five Promises for Attracting Foreign Businesses to Japan" (approved by the Counsil for Promotion of Foreign Direct Investment on March 17, 2015). In addision, in accordance with the above "Policy Package," the Government will aim to reach a conclusion within about one year for drastic simplifying regulations / administrative procedures related to investments in Japan by foreign companies, and then decide on and undertake specific measures within this year as advance initiative for those for which a conclusion is obtained early. Also, the Government will provide high-quality English education to all children by allocating to all elementary schools at least 20,000 external human resources of assistant language teachers (ALT), etc. as well as fostering teachers and enhancing practical training, while working on an increase of translation of Japanese laws and regulations into foreign languages, strengthening of attraction of highly skilled human resources, promotion of employment of international students in Japan, improvement of educational environment for foreign children, and promotion of multilingual services in the daily life.

iv) Expansion of infrastructure exports

Amid fiercer competition to acquire orders in terms of world infrastructure demand that is expanding primarily in emerging countries, in an effort to achieve the target for orders in response to a wide range of needs worldwide, the Government will effectively implement and utilize the measures incorporated in the "Infrastructure Export Strategy" (revised in FY2016) (approved on May 23, 2016 by the Ministerial Meeting on Strategy relating Infrastructure Export and Economic Cooperation) and "Partnership for Quality Infrastructure" (announced in May 2015) as well as its specific measures (announced in November last year). In addition, in accordance with the "Expanded Partnership for Quality Infrastructure High-quality Infrastructure Export Expansion Initiative (announced in May this year), the Government will increase supply of financial resources towards infrastructure projects including natural resources across the world, aiming to achieve approximately 200 billion dollars for the next five years and further improving relevant measures and strengthen institutional capacity and financial grounds of JICA, JBIC, NEXI, JOGMEC, and other related organizations which contribute to those measures. Keeping in mind that infrastructure exports will contribute to economic growth of both emerging countries and Japan, to further increase the appeal of Japan's infrastructure projects and make differentiation with competing countries, the Government will promote whole-government approaches by launching a coordination team, etc. for each project through the Ministerial Meeting on Strategy relating Infrastructure Export and Economic Cooperation and bolster the initiatives of Japanese companies. On that occasion, in addition to the strengthening of support by capital investments / loans and trade insurance using all public financial institutions and public-private funds, the Government will combine various policy tools, including the fostering of local human resources, enhancement of strategic public relations activities, feasibility study (F/S) for projects, and demonstration project, as well as acquisition of international standards, and support for improving operation of tests / evaluation sites for acquisition of certification, while securing quick decision-making and leading joint initiative by the government and the private sector to receive orders.

In addition, the Government will examine various cases in the past regarding infrastructure system exports, compile lessons / issues, and utilize them for future receipt of orders through the sharing among relevant organizations and others. Further, the Government will utilize a framework for inter-governmental dialogues, opportunity of summit / ministerial level talks, and network between Japanese ambassadors to and the governments of partner countries, thereby working together with such government activities and various support tools including those for development of human resources and institutional building, as well as private companies' activities to receive infrastructure project orders. Through these measures, the Government will promote specific initiatives of private companies to receive orders with strategic involvement from the phase of drawing up of industrial policy and development plan of the government of partner country.

1) Implementation of strategic human resource development

In the broad-ranging growth markets of emerging countries, the Government will promote development of industrial human resources who contribute to sustainable growth, such as the fostering of engineers in the field of infrastructure, including steady implementation of the "Industrial Human Resources Development Cooperation Initiative" (announced in November 2015). On this opportunity, it is necessary not only to foster industrial human resources who are ready to work and administrative officials who assume the drawing up of industrial policies but also to provide cooperation for fostering / research to Japanese higher educational institutions and research institutions including colleges of technology. In addition, the Government will implement the strategic human resource development for government-related persons, etc. who are key to making decisions on the infrastructure development plan, raising their awareness of importance of standards for environment, safety, energy efficiency, etc., for which Japan enjoys a comparative advantage, with the aim of incorporating such standards in the form of specific regulations and evaluation standards of partner countries. Moreover, the Government will promote improvement of business environment, including support for improvement of legal system, etc. in countries where Japanese companies have businesses.

2) Conducting strategic public relations activities and promoting the importance of "Quality Infrastructure Investment" in the process of developing relevant international standards

The Government will promote explanation and disseminate the philosophy of "Quality Infrastructure Investment" of Japan in crossing the boundaries of relevant ministries and agencies / organizations by using effective means, including top sales of prime minister / Cabinet ministers, working on embassies in Japan, and use of overseas diplomatic missions of Japan depending on the subject. It will also implement strategic public relations activities this year by preparing materials, including PR images, etc. for public relations that introduce the advantage of Japan's infrastructure technologies and launch a website to disseminate unified information. In addition, the Government will aim to establish a position as international standard of the "Quality Infrastructure Investment" by externally showing such concept at international conferences, etc. and through implementation of projects by international organizations, such as the Economic Research Institute for ASEAN and East Asia (ERIA). The Government will encourage multilateral development banks to carry out a procurement system reform considering a high quality of infrastructure. Regarding sectoral initiatives, the Government will ensure that APEC draws up guidelines for assuring a high quality of power stations by the end of this fiscal year, while also promoting discussions on actions in other sectors.

3) Further expediting the process of yen loans and overseas investment & loans, and strengthening of collaboration with multilateral development banks

In response to more and more increasing push for early completion of infrastructure developments from emerging countries, the Government will promote use of new systems improved to expedite the process of yen loans and overseas investment & loans *e.g.* by disseminating those systems to partner countries and further expedite the process of such systems to make yen loans more attractive.

In addition, the Government will utilize new support packages agreed by Japan International Cooperation Agency (JICA) with the Asian Development Bank (ADB) and an expansion of the framework for joint financing agreed by JICA with Inter-American Development Bank (IDB), while working on promotion of employment of Japanese human resources and creating specific case examples in which such human resources are involved actively from the upstream stage of syndication of loans. Further, the Government will proceed with creation of same cooperative relations with other multilateral development banks.

v) Promotion of Cool Japan

To ensure unified overseas development through collaboration of attractive contents and peripheral industries according to the "Cool Japan Public-Private Partnership Platform" launched in December last year, the Government will promote syndication of specific collaboration projects with high synergy effects and ripple effects. Specifically, on the occasion of contents-related events of

private-sector, the Government will hold business seminars and introduce case example of collaboration, thereby arousing diverse relevant business operators not only in the area of contents but also food / tourism / manufacturing to have interests in their collaboration, while conducting surveys on needs of each area regarding collaboration, thereby specifying areas / business operators with a high possibility of the commercialization of collaboration projects. After that, the Government will hold a matching forum where those relevant business operators and organizations participate, and then find prospective collaboration projects. Further, to support commercialization of those prospective projects, the Government will strengthen matching support measures, including provision of advices for capital contribution to them by Cool Japan Fund.

In addition, from the viewpoint of effectively disseminating extensive attractiveness of Japan ranging from pop culture including animation to culture and art, and creating new Cool Japan-related industries including a culture industry, the Govenement will establish a study group under the abovementioned platform to bolster private-sector initiatives toward the creation of Cool Japan hub on the site of the Haneda Airport, etc., and, work on networking such hubs. On the other hand, looking at overseas, the Government will drastically reinforce functions of the Cool Japan hubs, such as an overseas diplomatic missions.

Further, the Government will promote development of human resources who assume the Cool Japan and provide actively and more flexibly support from the Cool Japan Fund. Moreover, to strengthen the international transmission capability of contents, the Government will take various measures to pursue promotion of contents industry. In addition, the Government will strengthen functions to find Cool Japan projects emerging from local districts and utilize external human resources and overseas knowledgeable people through collaboration with support organizations such as JETRO, and further promote vitalization of regional economy, thereby providing consistent support in the process from refinement of attractive regional resources to development of overseas sales channels.

Regarding Japanese alcoholic beverages, under the "Inter-Ministry/Agency Coordination Committee for Promoting Export of Japanese Alcoholic Beverages", the Government, together with Japanese food, will promote disseminating information using overseas diplomatic missions and various personnel networks inside and outside Japan and contents, enhancing promotion of sake breweries tourism, etc. for inbound foreign tourists and others., using the tax-free shop system, and adding value by using the geographical indication system, while supporting sales channel expansion by relevant ministries and agencies, and JETRO, as well as organizing issues on improvement of business environment, etc. in export destination countries. Through these means, the entire Government will address those challenges.

V Momentum for the reform ∼ Promotion of the "Reform 2020" ∼

It is important to accelerate reform and innovation, using as a momentum of 2020 when the 2020 Tokyo Olympic/Paralympic Games are held; Japan attracts much attention from all over the world; and many foreigners visit Japan.

Accordingly, while using as the leverage the 2020 Tokyo Olympic/Paralympic Games, the Government will make all-out efforts to promote core projects—which should be accomplished by 2020 and will become legacies succeeded to future generations—as accelerators of reform and innovation. Specifically, the Government will implement the following six projects in the three priority areas, as the ones which can generate high policy effects by the implementation along with the rising attention from the world, put Japan's strengths in social implementation and show cases; appeal to overseas; and lead to economic growth afterwards.

The Government will promote projects with the following matters as common issues to be implemented by all projects. Particularly, in principle, keep in mind that entities responsible for the project and the place of implementation should be clarified during this fiscal year, the status of progress should be managed strictly, necessary regulatory reforms should be defined early, and these projects will contribute to solutions of social problems and lead to a legacy that can be succeeded in and after 2020.

To this end, from the medium- to long-term perspectives for each project, the Government will make clear social problems in the world to be contributed to solution and matters to be left as legacy with an eye to 2020 and after. At the same time, also from the standpoint focused on a success of the showcase, the Government will discuss and clarify a milestone for progress management taking into consideration both of a buildup from now on and a back calculation from 2020, while also utilizing the national strategic zone system to clarify matters for regulatory reforms to be accelerated and examining points to be emphasized in the showcase. Through these discussions from both views in which time axes are different, the Government will carry out refinement, etc. of respective projects. In addition, the Government will develop uninterrupted discussions when necessary to raise the momentum of reforms, including those discussions on additions and reviews of respective projects.

(Technology-utilizing solutions to social problems and export of system solution technologies)

- (1) Use of next-generation urban transportation system and automatic driving technology
- i) Stress-free next-generation urban transportation system

1) Social problems to be solved

- Aim to realize the society where all people, including movement constraint persons such as the elderly and the handicapped, can move comfortably.

2) Outline of project

- Connect the downtown and the new Tokyo waterfront subcenter by bus routes using automatic driving technologies (bus stop right arrival control, etc. whereby wheelchairs, etc. can get in and out of a bus without assistance).

3) Initiatives up to now

- Keisei Bus Co., Ltd. was decided as operator of project in September last year. Regarding a specific route for implementation place, a route from Toranomon to International Exhibition Halls Bus Station will be realized when the 2020 Tokyo Olympic/Paralympic Games is over, which is shown in the business plan drawn up in April this year.
- Research and development / demonstration of smooth acceleration/deceleration, automated distance-to-curb adjustments (right arrival control) and transportation system with priority on public vehicles have been carried out.

4) Major issues and future initiatives

- Including local districts, specific considerations are necessary for how initiatives are broadly developed and disseminated.
- It is necessary to comprehend whether or not the technology level of this project is the world's most advanced level and can be showcased.

ii) Securing means of transportation of the elderly, etc. and realization of platooning driving

1) Social problems to be solved

- Seek to realize a society where all persons, including movement constraint people, such as the elderly and the handicapped, can move safely and comfortably.
- Respond to insufficient workforce (driver) in the depopulating society.
- Based on the way of sharing economy society, seek to create a business model that can secure both security and safety.

2) Outline of project

- Provide means of transportation available to movement constraint people by utilizing automatic driving technologies in the "last one mile" connecting the nearest station and the destination. In addition, make possible a service for transportation by unmanned automatic driving at the 2020 Tokyo Olympic/Paralympic Games.

- Establish platooning technologies, etc. for electronical interlinking of a subsequent truck with a foregoing truck on the expressway, etc. and realize platooning driving in a truck transportation service between cities.

3) Initiatives up to now

- At the "automatic driving business study meeting" composed of the government, industry and academia, which has been held form the last year, needs were clarified and necessary issues for which discussions are necessary to determine a business model were extracted.

4) Major issues and future initiatives

- Make clear, during this fiscal year, the entities responsible for the project and the place of implementation.
- Based on the "Public-Private Sector ITS Initiative/Roadmap 2016" (approved by the IT Comprehensive Strategic Headquarters on May 20, 2016), establish necessary systems and infrastructure to realize a service for transportation by unmanned automatic driving at the 2020 Tokyo Olympic/Paralympic Games. In addition, clarify a business model and develop discussions on technology development, demonstration, system, and business environment to realize the platooning driving of trucks on the expressway, etc. in 2020. Further, examine methods, etc. aiming for realization of complete automatic driving in 2020 and after.

(2) Solutions to energy / environmental problems through use of distributed energy resources

i) Use of CO2-free hydrogen derived from renewable energy

1) Social problems to be solved

- Seek to solve energy / environmental problems, which are world common issues.

2) Outline of project

- Produce CO2-free hydrogen by using renewable energy which exist abundantly in local districts, transport such hydrogen to urban areas, and create supply chains which use it, thereby eliminating an unbalance between demand and supply regarding renewable energy of local districts and urban areas.

3) Initiatives up to now

- To pursue discussions to specifically create a project that is able to secure profitability of the project, the establishment of a working group composed of working-level personnel under the Council for a Strategy for Hydrogen and Fuel Cells was decided on.
- A technology demonstration project for large-scale hydrogen manufacturing equipment and a development / technology demonstration project for hydrogen transportation technologies are being implemented.

4) Major issues and future initiatives

- Clarify entities responsible for project and the place of implementation during this year. At the same time, examine a business model conscious of economic efficiency
- Proceed with technology demonstration related to a hydrogen transportation method, while reviewing regulations for hydrogen station (self-filling, practical

use of liquid hydrogen pump) in accordance with the "Implementation Plan for Regulatory Reform" (Cabinet Decision of June 30, 2015).

ii) Establishment of Innovative energy management system

1) Social problems to be solved

- Aim to solve energy and environmental problems, which are world common issues.
- Aim to create a business model conscious of sharing economy.

2) Outline of project

- By controlling and utilizing in an integrated manner renewable energy generation facilities and batteries, which are dispersed in regions, and DemandResponse, etc., which is an advanced demand management method, establish an effective energy management method to make them work as if they were one power plant ("VPP: Virtual Power Plant").

3) Initiatives up to now

- Technologies are being developed to use weather observation and prediction data for predicting the output of renewable energy.
- The Commission on Energy Resource Aggregation Business was launched in January this year and discussions were commenced about improvement, etc. of communication standards for the remote control of energy equipment

4) Major issues and future initiatives

- At the "VPP Project Committee (tentative name)" where VPP project-related knowledgeable people adopt a project and carry out progress management, determine persons who implement demonstration project during this fiscal year and clarify entities responsible for implementation and the place of implementation.
- Promote initiatives to establish a group control technology for batteries, while continuously promoting discussions to improve communication standards and ensure cyber security. In addition, revise the "Guidelines for Trading Negawatts" to create a negawatt trading market during the next year.

(3) Realization of a universal future society through leading-edge robotic technology

i) A universal future society experience project through leading-edge robotic technology

1) Social problems to be solved

- Respond to insufficient workforce in the depopulating society.
- Realize a stress-free living for diverse people, including elderly, handicapped, and foreign nationals, where robots work actively in every living space.

2) Outline of project

- With a core of Daiba and the Aomi region where the National Museum of Emerging Science and Innovation is located and that are close to facilities for the Tokyo Olympic/Paralympic Games, build experience fields for personal mobility, ultra-realistic image technology, digital signage, multilingual translation, and leading-edge robotic technologies for guide robot, etc.

3) Initiatives up to now

- The "Council for Promotion of Universal Future Society" which is composed of knowledgeable people was established in September last year and recruitment of members began in October last year (number of members: 61 enterprises / organizations as of April this year).
- The "Chiba City Makuhari New Urban Center Working Group" was set up within the Council for Promotion of Universal Future Society in April this year and the demonstration field was extended to the Makuhari New Urban Center region.

4) Major issues and future initiatives

- Promote the drawing up of an action plan to create a showcase in 2020. At the same time, to further promote universal future society-related projects, etc., launch a working group for respective issues and clarify issues to ensure practical use, including development and demonstration of technology.

ii) Urban areas and airports

1) Social problems to be solved

- Respond to insufficient workforce in the depopulating society.
- Realize a stress-free living for diverse people, including elderly, handicapped, and foreign nationals.

2) Outline of project

- Compile and examine rules for the use of robots in the environment of urban areas and airports where people are walking busily on a daily basis, and disseminate to the world the fact that various robots are providing services everywhere in the public space under the rules.

3) Initiatives up to now

- The Robot Innovation Working Group was set up in September last year within the "Robot Revolution Initiative Council" composed of private business operators, etc. for the use of robots.
- At the sub-working group set up within such innovation working group, rules concerning the securing of safety for the use of robots are being considered, while collaboration with relevant business operators etc. is now being promoted regarding creation, etc. of use cases through implementation of a

demonstration project to showcase.

4) Major issues and future initiatives

- From this fiscal year, carry out a demonstration project that assumes use scenes and then clarify the place of implementation of and responsible entities to put the project into practice.
- In parallel, add and review rules for securing the safety as necessary at the Robot Revolution Initiative Council sub-working group on the basis of the results of the above demonstration project.

(4) International implementation of high-quality Japanese medical services and technologies (inbound use of medical care)

1) Social problems to be solved

- Disseminate the Japanese medical care to the world as the first nation with a super-aging society.

2) Outline of project

- See the year 2020 as a good opportunity to disseminate Japanese medical services to overseas, and focus on the areas where there are high needs from overseas and Japan's medical care has an international advantage, while listing the medical institutions which actively accept patients for medical services (examinations, treatment and screening[including after treatment follow-ups], and thereby enhance opportunities for visiting foreign patients to experience Japan's medical care in person).

3) Initiatives up to now

- In June last year, the Inbound Working Group set up under the Task Force for Global Reach of Japanese-style Medical Technology and Services compiled and made public "Approach to the certification of companies supporting travel for medical treatment and information-dissemination to foreign countries by medical institutions accepting inbound medical examinees."
- In September last year, the general incorporated association Medical Excellence JAPAN (MEJ), a certification organization, certified two companies of JTB Corp. (JTB) and Emergency Assistance Japan Co. (EAJ) as companies supporting medical tourism that consistently support medical examination at domestic medical institutions for the period from visiting Japan to leaving Japan.- In September last year, a Japanese booth was installed at the exhibition for medical tourism held in Moscow. Companies supporting medical tourism and Japanese medical institutions carried out PR for Japanese medical treatment by holding mini seminars and providing individual consultations. In addition, in December last year, certified companies supporting medical tourism, etc. carries out PR for Japanese medical treatment at the exhibition for medical treatment travel held in Beijing.

4) Major issues and future initiatives

- MEJ is considering the framework and standards of Japan International Hospitals (tentative name) at an advisory committee mainly composed of medical care-related people. Thus, look for medical institutions that meet standards, and announces medical institutions that will become "Japan International Hospitals (tentative name)" during this fiscal year.
- Implement effectiveness verification and issue extraction of guidelines,

including the certification of companies supporting medical tourism, and consider a new response when necessary.

- Regarding overseas promotion of Japanese medical treatment, put future strategies into practice early also based on the previous results of implementation.

(Developing an environment to increase the number of foreign tourists to Japan)

(5) Showcasing Japan as the leading country of tourism

i) Sightseeing Areas

1) Social problems to be solved

- Aim to be the leading country of tourism with a view to achieving 40 million foreign visitors in 2020.

2) Outline of project

- Select local cities that promote tourism strategically, establish a Japanese version of DMO at those cities, enhance tourism resources, develop an environment for cashless / multilingual translation, etc., use overseas diplomatic offices, and disseminate information depending on attributes of individuals, thereby creating tourism regions that can embody the leading country of tourism.

3) Initiatives up to now

- Proposals were collected broadly from across the nation in November last year. Three cities of Kushiro City, Kanazawa City, and Nagasaki City were selected as a showcase of tourism-oriented country in January this year.
- A support team composed of members of relevant ministries and agencies was set up and opinions were exchanged.

4) Major issues and future initiatives

- Japanese version of DMOs will be launched in this fiscal year at three cities of Kushiro City, Kanazawa City, and Nagasaki City which were selected and decided on as the place of implementation.
- Centering on such Japanese version of DMOs, draw up an implementation plan during this fiscal year whereby attractiveness of tourism resources is refined as a showcase of country of tourism.
- In addition, based on such implementation plan, provide preferential support for refinement of tourism resources, etc.
- Moreover, clarify regulatory reforms necessary for the refinement of tourism resources and take immediate countermeasures.

ii) Tokyo

1) Social problems to be solved

- Aim to realize a country of tourism with a view to achieving 40 million foreign visitors in 2020.

2) Outline of project

- Promote barrier-free accessibility, and provision of easy-to-understand guidance information in the continuous areas of Tokyo linking major terminal stations and Olympic/Paralympic Games facilities.
- In addition, promote understandings of the public about barrier-free attitude.

3) Initiatives up to now

- Regarding the way of barrier-free for public transportations, a study group composed of knowledgeable people, relevant business operators and organizations for the disabled people was set up, and access routes from airport to competition venues, etc. were surveyed and examined.
- A "Tokyo 2020 Accessibility Guideline" is being drawn up to promote universal designs in competition venues and their access routes of the 2020 Tokyo Olympic/Paralympic Games. Regarding items affecting designs of structures, prior studies were implemented and the approval was obtained from the International Paralympic Committee in January this year.
- A survey for the guidance display and support of the pedestrian movement were implemented at the Tokyo Station.
- Continuous efforts were made for barrier-free attitude .

4) Major issues and future initiatives

- In promoting universal designs, mandatory for access routes from competition venues of the Tokyo Olympic/Paralympic Games as well as Narita Airport and Haneda Airport, it is necessary to link promotion of barrier-free for public transportations with provision of guidance display and barrier-free attitude depending on the attribute of individuals and thereby increase an appeal as showcase. To this end, make clear the contents of project as showcase by the end of this fiscal year.
- In addition, while the relevant ministries and agencies will closely work together led by the Ministry of Land, Infrastructure, Transport and Tourism, refine showcases at the Universal Design 2020 Liaison Committee among Ministries and Agencies and expand the creation of universal design societies nationwide.

iii) Narita Airport and Haneda Airport

1) Social problems to be solved

- Aim to be a country of tourism with a view to achieving 40 million foreign visitors in 2020.

2) Outline of business

- Enhance facilities' convenience and amenities, through improvement to access to Narita and Haneda Airport by railways and busses, and through the establishment of information provision hubs utilizing the airports as gateways.

3) Initiatives up to now

- In April this year, "Ideal ways of future urban railways in the Tokyo area" including access to airports by railways" (reported by the Council of Transport Policy) was compiled.
- The project of airport access bus in the national strategic special zone was established as a menu according to the Act on Special Zones. In addition, convenience for airport access buses was improved at midnight and early morning.
- To establish the information provision hubs utilizing the airports, standard specifications were drawn up last year for maintenance of digital signage and sophistication of its functions. The development of multilingual technology is now underway.

4) Major issues and future initiatives

- Regarding improvement of access to airport by railways and busses, transmission of various contents depending on attributes of individuals, provision of barrier-free information, and installment of cutting-edge toilets, concrete initiatives, and responsible entities and schedule of implementation will clarified in this fiscal year, , to be suitable for showcases as gateway of Japan open to the world.
- To this end, while relevant ministries and agencies work together led by the Ministry of Land, Infrastructure, Transport and Tourism, establish a council, etc. and refine showcases.

(Expansion of foreign direct investment into Japan and improvement / enhancement of business environment)

(6) Measures to attract toward expanding foreign direct investments

1) Social problems to be solved

- Leverage the internationally growing attention, expand foreign direct investments, and thereby improve the business environment.

2) Outline of project

- With a target year of 2020, hold various business conferences, such as (i) Japan Business Conference (JBC), (ii) Regional Business Conference (RBC), (iii) World Forum on Sport and Culture (iv) Global Venture Summit, and thereby strengthen external dissemination to expand foreign direct investments.

3) Initiatives up to now

- To hold RBC from 2019 to 2020, JETRO have been supporting the formulation of initiatives toward attraction and provision of information by local governments.
- To hold the World Forum on Sport and Culture in October this year, the "Sports and Culture World Forum Public-Private Collaboration Implementation Committee" was held in July last year, and a system to implement this forum was created throughout Japan in cooperation with relevant ministries and agencies, business communities, and local governments.
- To improve the environment toward the Global Venture Summit in 2020, a human resources development project was promoted, where entrepreneurs and persons responsible for new projects were sent to Silicon Valley and participated in international matching events, such as SLUSH and SXSW.

4) Major issues and future initiatives

- Regarding the JBC, RBC and Global Venture Summit, clarify specific time schedules to hold those conferences and summit.
- Regarding the "World Forum on Sport and Culture," actually develop specific discussions on PR, etc. for the contents of growth strategy. In addition, examine the results of discussions on the government-private sector workshop, implemented through collaboration with the World Economic Forum, and connect with measures to expand foreign direct investments, e.g. reflect the results in the growth strategy of the government, including the "Reform 2020 Project."