# **Record of Discussions**

On

Further sophistication of industrial structure as well as human resources development and R&D promotion in Thailand

# The Ministry of Science and Technology, The Office of the National Economic and Social Development Board, The Embassy of Japan in Thailand and The Japan External Trade Organization Bangkok

This Joint Policy Recommendation was produced in quadruplicate as a non-legally binding document in Thailand, September, 2016 in English language.

On September 28<sup>th</sup>, 2015, the Joint Recommendation on upgrading R&D and human resources development (HRD) mainly for Thai Automotive industry was signed by the representatives of The Ministry of Science and Technology, The Office of National Economic and Social Development Board (NESDB), The Embassy of Japan in Thailand and The Japan External Trade Organization (JETRO) Bangkok hereafter referred to as the "Four Representatives" in form of "Record of discussions". In order to identify the necessary measures for Thailand and Japan to accelerate sophistication of industrial structure as well as human resources development and R&D in a broader sense, the four representatives have continued a series of discussions since March 25<sup>th</sup>, 2016 by listening to the views of Japanese companies from various industrial sectors and shared the following points as a result of discussions.

# 1 Food industry

<br/>background>

For the food products of Thailand to be appreciated by the consumers, not only food quality but also food safety is important. One issue concerns food allergy. Another issue is the contamination of foreign objects into food products. Consumers find the contamination of foreign objects including insects, hairs, plastic tips, or metal piece in their food unacceptable. In addition, for further development of food industry in Thailand, firm and transparent regulations and environment enabling them in the health food and functional food areas are necessary.

#### <recommendations>

- Expand regulations to supply more appropriate foods for food allergic patients
- Introduce survey rules for food allergen (e.g. inspecting food allergy labeling and manufacturing records)
- Establish an organization for gluten-free certification to increase the export of rice products
- Support the collaboration among related organizations, including in human resources development, in specialized research
- Acceleration of communication regarding the effective disinfectant and pesticide
- Provide assistance for smoother trade of technical products (e.g. equipment and test kits)
- Provide technological and legal support for the development of laboratories working on identifying foreign objects
- Introduce regulation for the protection of patents which Japanese companies bring into or

- possess in Thailand
- Dissemination of Food Innopolis policy to Japanese food industry, utilizing opportunities such as JETRO seminar

## 2 Medical industry

<br/>background>

ASEAN countries, including Thailand, with their economy growing but their society aging, will need to develop rapidly and increasingly—the medical/nursing care/health-related industries. Thailand and Japan can cooperate in such areas as research, development, approval and post-marketing, to ensure the prompt delivery of drugs and medical devices not only to Thailand but also to people in ASEAN region and to improve the skill of medical human resources, thereby making Thailand a Medical Hub of ASEAN.

#### <recommendations>

- Establish the National Institute of Health Products Assessment and Inspection (NIPA) as an independent public organization
- Remove obstacles in clinical research by setting up effective procedure which includes ethical safety and environmental issues (e.g. Long procedure of import permit license of a drug for clinical research)
- Establish Innovative Drug Development network (cf. "Drug Seeds Alliance Network Japan")
- Simplify the drug approval process and regulation on exporting products
- Improve "Free sales Certificate" issuance system for an exporting products
- Develop medical human resources through cooperation between Thailand and Japan
- Consider the establishment of "Clinical engineer" certification system

# 3 ICT / Digital industry

<br/>background>

Thai Government is promoting the "Digital Thailand" policy to enhance the productivity and competitiveness of the Thai industrial sector, aiming at becoming a Digital Hub/Gateway in Southeast Asia. "Digital Thailand" can also contribute to the upgrade of R&D activities of the industry. In order to strengthen the "Digital Thailand", various issues remain to be tackled concerning upgrade to ICT network infrastructure, enhancement of cybersecurity for free flow of information such as R&D data on digital network, and collaboration with other industries such as automotive, food, medical sectors etc.

#### <recommendations>

- Promote creation of demand for Internet content in Thailand through new digital-related business (e.g. cybersecurity, IoT, Fin-tech, agriculture)
- Enhance capability and capacity of data centers with security by design (e.g. promotion from insource mind to outsource mind, acceleration of outsourcing from the government)
- Promote higher speed, more competitive price and lower latency for the connection to the international bandwidth by new submarine cable facilities between Thailand and Japan.
- Enhancement of cybersecurity (e.g. Raise of public awareness by seminar etc., Human resources development through educational scheme and cyber exercise etc., investment support for cybersecurity such as SOC, enhancement of ThaiCERT for collaboration with SOCs, acceleration of necessary legislation such as cybersecurity bill)
- Regular discussion with the ICT committee in Japan Chamber of Commerce, Bangkok (JCC) to promote industry-academia-government collaboration
- Recognize the importance of new technological trends including big data analysis

#### 4 Hybrid Vehicle (HV) / Electric Vehicle (EV)

<br/>background>

The four representatives reconfirmed "4. Collaboration towards being Pick-Up Truck and HV/EV Production Hub" in "Record of Discussions on Upgrading Research and Development (R&D) and Human Resources Development (HRD) of Thai Industries" signed on September 28<sup>th</sup>, 2015. In particular, they shared the importance of market creation for HV/PHV/EV/FCV at the first stage.

#### <Additional recommendation >

- Raise awareness and create market for HV/PHV/EV/FCV through appropriate measures.

#### 5 Auto parts industry

<background>

Although the scope of R&D activities of Japanese auto-assemblers has been expanding in Thailand, their main area of R&D in Thailand is the upper body development. Basic or structural designing is mainly carried out in Japan. Some Japanese components suppliers set up technical centers in Thailand. However, their R&D activities tend to follow those of auto assemblers, and consequently their main tasks are quality assurance (QA) such as durability and reliability testing and failure analysis of products.

On the other hand, based on the real needs, the focus on increasing productivity in processing or development of more cost-competitive substitute materials is one of the R&D options for auto-parts suppliers.

#### <recommendations>

- Provide suitable testing facilities for auto-parts suppliers in national or regional public testing centers based on the actual needs
- Support auto-parts companies investing in the technical center or R&D center
- Carry out needs survey of auto-assemblers' expectation to Thai auto-suppliers

#### 6 Space industry

<br/>background>

Japan has fostered space industry over several decades, and particularly satellite segments, triggering many innovations across the industries. Japanese satellite technology is characterized by robustness throughout value chain ranging from upstream to downstream. Based on the wide range of experience either in satellite manufacturing and data utilization, Japan is fully ready to co-create the industry in Thailand.

#### <recommendation>

- Initiate Memorandum of Intent/Cooperation (MOI/MOC) in order to advance cooperation in space utilization and to contribute to the use of space for peaceful goals between the two countries by building cooperation frameworks, facilitating a platform for discussion on common interests, and promoting exchanges of information and human resources etc.
- Promote cooperation with Japanese space industry co-working among government, academy and private sector having various technologies such as VHR (Very High Resolution) optical sensor satellite, Micro satellite, various application for satellite data utilization and various know-how in the field of positioning GNSS infrastructure.

#### 7 Intellectual property

## <base>

The patent is a primal system for promoting the innovation aimed to contribute to industrial development by protecting invention. To take the advantage of the patent system at maximum, it is essential not only to obtain the patent right at the earliest timing but also to exercise the enforcement of patent right with less burden. Other countries including Japan take measures such as simplifying procedures in both judicial system and administrative system, imposing high fine, to ensure the enforcement of patent right with less burden.

#### <recommendation>

- Provide the means to exercise the enforcement of patent right with less burden in both judicial system and administrative system;

#### **Human Resource Development**

In the margin of the abovementioned discussion, the Thai side made a proposal on the human resources development (HRD) as attached. The Japanese side took note of this proposal with interest and expressed its willingness to contribute, where possible, in the framework of the Memorandum of Cooperation on Industrial Human Resources Development in Thailand and Mekong Sub-region signed on 5 June.

# **Attachment on Human Resources Development**

#### **Background**

As set forth in the 1<sup>st</sup> Record of Discussion, Thailand and Japan shared a vision that it was essential to support the strengthening of human resource development, especially, the quality and quantity of Thai engineers and workers from CLMV at various levels. To implement the measures relating to HRD, Thai government, the Embassy of Japan in Thailand, and the Japan External Trade Organization Bangkok had continuing dialogue. The objectives of the Project on Human Resource Development Center (HRDC) are as follow:

- Establishing the infrastructure for Japan-Thailand human resource development cooperation
- Capacity building through the exchange of information, experience and expertise as well as the training of human resources in Thailand and CLMV countries
- Promoting joint research projects on the issues of common concern, exchanging knowledge and results.

#### Recommendations

To accomplish all activities of HRDC initiative, Japan and Thailand will take the roles as below:

#### Japan

- 1. Participating in HRDC steering committee (Representative from: Embassy, JETRO, JCC, JICA, HIDA).
- 2. Assisting in survey planning or use existing JETRO or JICA survey result.
- 3. Coordinating Japanese companies in Thailand to participate in curriculum design and training.
- 4. Coordinating Japanese companies and universities to send instructors.
- 5. Coordinating Japanese companies and universities for on the job training both in Thailand and Japan.

#### **Thailand**

- 1. Establishing the HRDC (Human Resource Development Center)
- 2. Regularly dialogue with the industry for human resource development
- 3. Surveying the industry for human resource requirement, area, numbers, and sector
- 4. HRD requirement planning
- 5. Curriculums committee and curriculum design
- 6. Coordinating with training institutes and interested universities in Thailand for training.
- 7. Constructing database for training institutes, university,
- 8. Registering system for Japanese companies and industries to register their HRD needs
- 9. Monitoring