## JICA Knowledge Co-Creation Program Improving ICT Policy Promotion Skills Utilizing Standards

— overcome challenges by deployment of ICT infrastructure corresponding to the situation —

## International Cooperation Department The ITU Association of Japan

During the fortnight from January 19 to February 3, 2017, The ITU Association of Japan (ITU-AJ) held a group training event on behalf of the Japan International Cooperation Agency (JICA). The purpose of this event was to promote international cooperation in the resolution of social issues such as ICT infrastructure improvements in each participant's home country, and to familiarize engineers with the latest ICT measures. As a starting point for international standardization, we conducted theoretical and experimental training on how to improve communication infrastructure more effectively and efficiently.

Thanks to the cooperation of the Ministry of Internal Affairs and Communications since 2012, this is the fifth time we have been able to hold this event. This year, it was attended by thirteen trainees from seven different countries — Colombia, Ecuador, Indonesia, Laos, Malaysia, Myanmar and Papua New Guinea.

The training consisted of an opening lecture on communication poli-

cy and standardization policy in Japan, followed by lectures and presentations on standardization trends at the ITU, problem analysis methods (PCM), inception reports, the activities of Japan's standardization organizations, the standardization activities of related companies and groups, and individual reports, as well as visits to related facilities.

There were two lectures on communication policy and standardization policy in Japan: *Telecommunications Policy in Japan* (Ministry of Internal Affairs and Communications) and *Standardization of ICT in Japan* (Ministry of Internal Affairs and Communications).

There were also two lectures on Japan's standardization organizations: Towards Global Standardization in TTC (Telecommunication Technology Committee), and Standardization of Radio Systems (ARIB: Association of Radio Industries and Businesses). Regarding standardization trends at the ITU, there was a lecture on Standardization on ICT fields and ITU-T(TTC).

As activities of organizations that

reflect standardization in actual systems, there were lectures on *Certification System for Telecommunications Equipment in Japan* (TELEC: Telecom Engineering Center), *Overview of HATS* (HATS Conference), and *Activities for Interoperability Tests and Standardizations of Optical Access Systems* (HATS Conference).

When the lecture on communication policy and standardization policy in Japan was finished, there was a lecture on an analysis method called project cycle management (PCM), at which we extracted the issues relating to standardization in each of the trainees' countries, and held group discussions to share the knowledge level among the trainees. This PCM lecture was also delivered just before the announcement of each of the individual reports by the trainees, and in the group discussions we gave each trainee the opportunity to draw up problem-solving methods for the standardization of ICT in their own countries, and/or summarize the state of progress in standardization activities in their own countries.

Photo 1: Courtesy visit in MIC



Photo 2: Observation in TELEC



## Photo 3: Observation in Smart House (KAIT)



Photo 4: Tour in Meiji Shrine



For standardization activities such as related business groups, there were lectures on KDDI's Strategy for Development of ICT Service & Technology (KDDI), Current Status on Standardization of Future Network (NTT), and Global Standardization of Mobile Communication Systems (NTT DOCOMO).

For the visits to related facilities, we arranged visits to TELEC's standard certification facility for telecommunication equipment, the NICT Exhibition Hall, Fujitsu Technology Hall, NHK's Broadcast Center, NEC's Innovation World showroom and the HEMS Interoperability Test Center at Kanagawa Institute of Technology (Smart House). At each of these facilities, the trainees were able to observe the development and standardization of new technologies at each company/organization, and deepen their understanding by getting involved in the latest technology and standardization efforts of each company.

At TELEC, the trainees gained an understanding of the importance of standard certification by attending a lecture on *Certification System for Telecommunications Equipment in Japan* and viewing standard certification facilities for telecommunications equipment. At the National Institute of Information and Communications Technology (NICT), the trainees were shown an overview of NICT's various activities, and saw a lecture on Research and Development on ICT and Standardization Activities in NICT. At the Fujitsu Technology Hall, the trainees observed Fujitsu's latest technology and saw a lecture on Fujitsu's Activities of International Standardization.

At the HEMS Interoperability Test Center at the Kanagawa Institute of Technology, the trainees were shown an actual smart house, which reconfirmed the importance of standardization in diverse home appliances, and saw a lecture on *Current Status of Smart Houses*.

At the NHK Broadcast Center, the trainees were shown around the Technical Operation Center and saw demonstrations of Hybridcast technology and a prototype 8K broadcasting system. They also saw lectures on Setup of Digital Terrestrial Television Broadcasting Network, The Roles and Convergence of Broadcasting and Communications, and The Outline of NHK Digital Content Service. At the NEC

Innovation World showroom, the trainees were shown NEC's latest technology and saw a lecture on *Wireless Broadband Access*.

As in last year's event, we also arranged some Japanese cultural visits. During the early stages of the event, the trainees visited the Tokyo Tower, and at the end of the training, we arranged English-speaking volunteer guides for a visit to the Meiji Shrine.

On the final day, each trainee presented an Individual Report. These reports included a discussion of the current state and future prospects of standardization in each trainee's home country, summarized using the PCM method or the like, and led to lively discussions on the progress of ICT standardization in each country.

Although this training course was highly rated by the trainees, ITU-AJ hopes to develop this event into a more satisfying experience by gathering the opinions and requirements of trainees based on their evaluations of the lectures, text materials and site visits, and analyzing these findings to clarify where improvements can be made to the course implementation from next year.