APT Training 2021
— *Development of fundamental network planning skills in regional communities to bridge the digital divide* —

The ITU Association of Japan
International Cooperation Department

As part of APT's (Asia-Pacific Telecommunity) program to support human resource develop, the ITU Association of Japan has been delivering training programs[1] since 2017 that aim to build skills in status analysis, solution formulation and conceptual design of communication networks as a solution strategy in an effort to bridge the digital divide between urban and less-populated communities in developing countries.

In 2021, the eight-day program[2] was held between December 1-13, and for the second-year running was delivered online. As was the case last year, class times were limited to two-to-three hours a day, which was just long enough for trainees to maintain concentration for an effective training session. This year's training program welcomed eight trainees from five countries: Bhutan, Iran, Myanmar, Palau and Sri Lanka.

The training program has three clear objectives.
(1) Gaining an understanding of issues specific to one's own country and learn methodology for proposing tangible projects to overcome the digital gap in the various communities of that country.
(2) Understanding the importance of adopting clear government policies on network architecture.
(3) Developing skills in proposing and evaluating solutions for the various issues faced in one's own country.

On the first day of training all trainees delivered presentations on current ICT conditions and related issues in their own countries and/or specific regional areas. After the presentations, trainees were given plenty of time to exchange ideas and learn about and gain a deeper understanding of conditions in the countries of their fellow participants.

Day two started with an address by Kazuhiko Tanaka, the Secretary-General of the ITU Association of Japan, on the current status of ICT in Japan. This was followed by a lecture on the basic concepts of network design by former NTT-employee Takayoshi Hamano. Mr. Hamano joined the program as a lecturer this year to provide practical drills training, which is a major drawcard of the program.

Trainees carried out various training drills from day three to learn how to design networks. Each drill presented a model of a typical regional area, such as a mountainous or coastal community, and trainees examined methodology for designing networks suitable for each region based on analysis of geographical and other conditions. They were also instructed in the development of region-specific ICT services and ICT environments.

On day six, trainees were given a virtual tour of KDDI DIGITAL GATE by KDDI, with a few staff from the ITU Association of Japan also visiting to support the virtual tour.

During this virtual tour, trainees shared in a lecture on KDDI's 5G initiatives and demonstrations of KDDI's advanced 5G technologies via a live stream. Despite trainees participating remotely via their computer screens, there must have been a real sense of presence about the training not generally available in such formats.

On the final day, each trainee

■ Group Photo
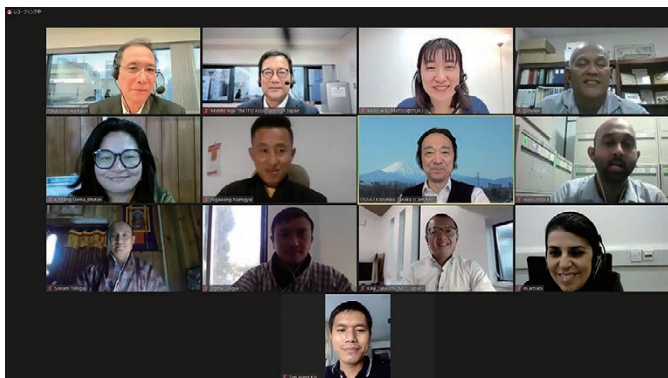
■ Lecture delivered by Mr. Hamano

■ KDDI lecture

■ Virtual tour of KDDI

presented an action plan. The action plans proposed solutions to the issues identified by trainees on the first day, as well as applied the skills learnt on the program. Once all trainees had presented their plans, trainees were given the opportunity to exchange ideas with the lecturers and other trainees. By attempting to address challenges close to their own hearts, trainees were able to learn more practical approaches.

Training formats that center on practical drills induce independence in trainees and enable more active communication between participants. In view of the Covid-19 situation, this year's program adopted last year's training methods and was delivered entirely online.

Specifically, the program was designed so that trainees could read and familiarize themselves with texts and drills in advance via an e-learning platform so that they could concentrate on questions and answer sessions and meaningful discussions during online classes. During discussion-based drills trainees were divided into smaller groups using the breakout room function on the Web-conferencing tool, Zoom.

Drills were conducted four times, with members in each group taking turns to practice the techniques, and despite differences in nationality and skill levels, the trainees managed to deepen interactions with each other.

Once debate had been concluded on a group level, a representative from each group was asked to present their group's findings, with lecturers evaluating design ideas and giving suggestions on alternative methods. Trainees came to a shared realization that there was never a single strategy to solving an issue, which then prompted a wide-ranging discussion.

Despite being conducted entirely online, this year's program again proved to be comprehensive and productive.

Even if the program continues to be held online in 2022, we would like to consider how best to deliver purposeful training sessions in view of the recent noticeable advances in communication technology.

In closing, we would like to express our gratitude to the staff of the APT and Ministry of Internal Affairs and Communications for their guidance and cooperation in carrying out this training, Mr. Hamano for his efforts in creating the course materials and instructing the trainees, and the staff of KDDI for providing a virtual tour of their facilities. In addition, we would also like to take this opportunity to thank Mr. Takuzo Fujii, who created the foundations of the program and continued to lecture up until last year.

■ Practice drills

■ Post-drill presentations