

APT Training 2025 Report

—*Strengthening network planning for connectivity and development in rural areas*—

Engagement Relations Department
The ITU Association of Japan

The ITU Association of Japan conducts training programs as part of the Asia-Pacific Telecommunity (APT) human resource development support program. This program, funded by contributions from the Government of Japan, provides training for practitioners and engineers from APT member countries to introduce Japanese technologies and services. The training aims to equip participants with the skills needed to develop network plans that help bridge the digital divide between urban and rural areas.

The FY2025 training program was held under the theme “Strengthening network planning for connectivity and development in rural areas.” It took place over six weekdays between December 2 and December 9. Trainees were recruited by APT between September 3 and October 2, and ten participants were selected from nine countries: Bangladesh, Cambodia, Laos, Malaysia, Maldives, Mongolia, Nepal, Sri Lanka, and Tonga. The trainees stayed at Hotel Sunroute Plaza Shinjuku, located near the south exit of Shinjuku Station, and attended the training sessions in a conference room on the fourth floor of a neighboring building.

During the program, trainees studied methods for analyzing the current state of telecommunications networks in their home countries and learned fundamental network planning techniques aimed at addressing the digital divide between urban and rural areas in developing countries. On the basis of this knowledge, they acquired practical skills for designing telecommunications networks suited to the conditions of their respective regions.

The training consisted of lectures and practical exercises using drills focused on network planning. Mr. Takayoshi Hamano, formerly of NTT, delivered an overview of network planning. Mr.

Aleman Shiraishi, formerly of Fujitsu Solutions Ltd., lectured on optical fiber technology. Mr. Yuki Shida of KDDI Corporation presented KDDI’s initiatives in satellite communications and recent developments. The drill-based practical exercises were conducted by Mr. Hamano and Mr. Shiraishi.

The six-day training schedule was as follows:

- Day 1 Morning: Orientation
Afternoon: Opening ceremony and presentation of country reports by trainees
Evening: Welcome reception
- Day 2 Morning: Presentation of Japan’s country report by Mr. Takashi Komoro, Secretary-General of the ITU Association of Japan
Afternoon: Lectures by Mr. Hamano, Mr. Shiraishi, and Mr. Shida
- Day 3 All day: Group exercises using drills and presentations
- Day 4 Morning: Visit to the NICT Advanced ICT Technology Exhibition
Afternoon: Visit to Jindaiji Temple and action plan guidance by Mr. Hamano
- Day 5 Morning: Group exercises using drills
Afternoon: Presentations of the group exercises and preparation of action plans
- Day 6 Morning: Presentations of action plans by trainees, closing ceremony, and farewell luncheon

On the morning of the first day, an orientation session was held, which included an overview of the ITU Association of Japan, an explanation of the training schedule, and a short guided tour of the area around the training venue. During the opening ceremony in the afternoon, Mr. Kaiho Aono and Mr. Katsuhiko Suzuki from the Ministry of Internal Affairs and Communications (MIC) attended the event, and Mr. Aono delivered the opening remarks. This was followed by presentations of country reports by all trainees. In their presentations, the trainees introduced their respective countries, outlined the current state of telecommunications and ICT technologies as well as their future visions, and described the rural areas they planned to address in their action plans (Figure 2). Later that evening, a welcome reception was held at a venue on the second floor of the trainees’ hotel, with Mr. Ryo Horikawa from MIC attending as a guest. During the reception, games involving the trainees were organized, providing an opportunity for trainees to interact with one another and with the instructors, thereby fostering stronger connections among participants.

■ Figure 1: Group photo at the opening ceremony



■ **Figure 2: Presentation of country reports**



On the morning of Day 2, a presentation on Japan's country report was delivered by Mr. Komoro, Secretary-General of the ITU Association of Japan. His presentation covered topics including the current state of mobile communications in Japan. In the afternoon, lectures were given by the instructors: Mr. Hamano spoke on network planning and wireless technologies, Mr. Shiraishi presented on optical fiber technology, and Mr. Shida introduced KDDI's initiatives in satellite communications and the latest developments in this field. Each lecture generated many questions from the trainees, reflecting their strong interest in optical fiber technologies and non-terrestrial network systems (Figure 3).

On Days 3 and 5, group exercises were conducted using

■ **Figure 3: Lecture on network planning by Mr. Hamano**



drills based on three different types of terrain data. The trainees were divided into three groups, where they carried out self-study and group discussions. Each group then presented the optimal network plan they had developed, with the team leader delivering the presentation on behalf of the group. Team leaders had been assigned in advance by the program organizers, ensuring that nearly all trainees had the opportunity to take on a leadership role. After each presentation, the instructors provided feedback, allowing trainees to further deepen their understanding of network planning (Figures 4 and 5). On the afternoon of Day 5, following the group exercises, the trainees worked on preparing their action plans, while also engaging in question-and-answer

■ **Figure 4: Group discussion using drills**



■ **Figure 5: Presentations following the drill-based group discussions**



discussions with the instructors.

On Day 4, the trainees visited the National Institute of Information and Communications Technology (NICT) as part of a study tour of Japan's advanced technology research facilities. They first observed the generation and distribution system of Japan Standard Time, as well as demonstrations related to remote sensing using aircraft to observe the Earth's surface. Afterward, they toured the exhibition area, where displays on Beyond 5G, multilingual simultaneous interpretation, and cybersecurity were presented. The trainees listened attentively to the explanations and showed particular interest in the hands-on exhibits, especially the "Multiple Sound Spot Synthesis Technology" and the "Multi-Aroma-Shooter" (Figures 6 and 7).

Following the visit, the trainees traveled to Jindajji Temple in Chofu City, the second-oldest temple in Tokyo. After lunch, they took a walk around the surrounding area. Although the visit lasted only about two hours, the trainees fully enjoyed the traditional atmosphere of Japan. Afterward, they returned to the training venue, where Mr. Hamano provided guidance on preparing their action plans.

On the final day (Day 6), the trainees presented their action plans, followed by active question-and-answer sessions between the presenters, lecturers, and other participants (Figure 8). A closing ceremony was then held, during which Mr. Komoro, Secretary-General of the ITU Association of Japan, presented certificates of completion to each trainee (Figure 9).

Afterward, the trainees provided evaluation comments on the training program. The program concluded with a farewell lunch at

■ **Figure 6: Visit to the Japan Standard Time exhibition at NICT**



■ **Figure 7: Group photo at NICT**



a Japanese restaurant, where participants enjoyed Japanese cuisine while deepening their exchanges with one another.

As in previous years, the organizing office also arranged catering with beverages and snacks at the training venue to encourage communication among trainees, lecturers, and staff. In

■ **Figure 8: Presentation of action plans**



addition, a post-program questionnaire on the program's operation was conducted on a voluntary basis. The results indicated a high level of satisfaction among nearly all respondents regarding the overall management of the program, the training venue, the accommodation hotel, the catering, and the lecture content. The survey results also showed that trainees had strong interests in topics such as future trends in 5G/6G, generative AI models, wireless network propagation, sustainability in rural and remote areas, frequency planning, and network optimization. As for preferred sites for future technical visits, trainees expressed interest in facilities of telecommunications operators and ICT companies, as well as network operation centers of mobile network operators.

Finally, we would like to express our sincere gratitude to the APT and the Ministry of Internal Affairs and Communications for their guidance and support in organizing this training program. We also extend our appreciation to Mr. Hamano, Mr. Shiraiishi, and Mr. Shida of KDDI Corporation for their efforts in preparing lecture materials and guiding the trainees, as well as to Ms. Hiroko Taga of NICT for supporting the study visit. Our heartfelt thanks also go to all others who contributed to the successful implementation of this training program.

■ **Figure 9: Presentation of certificates of completion**

