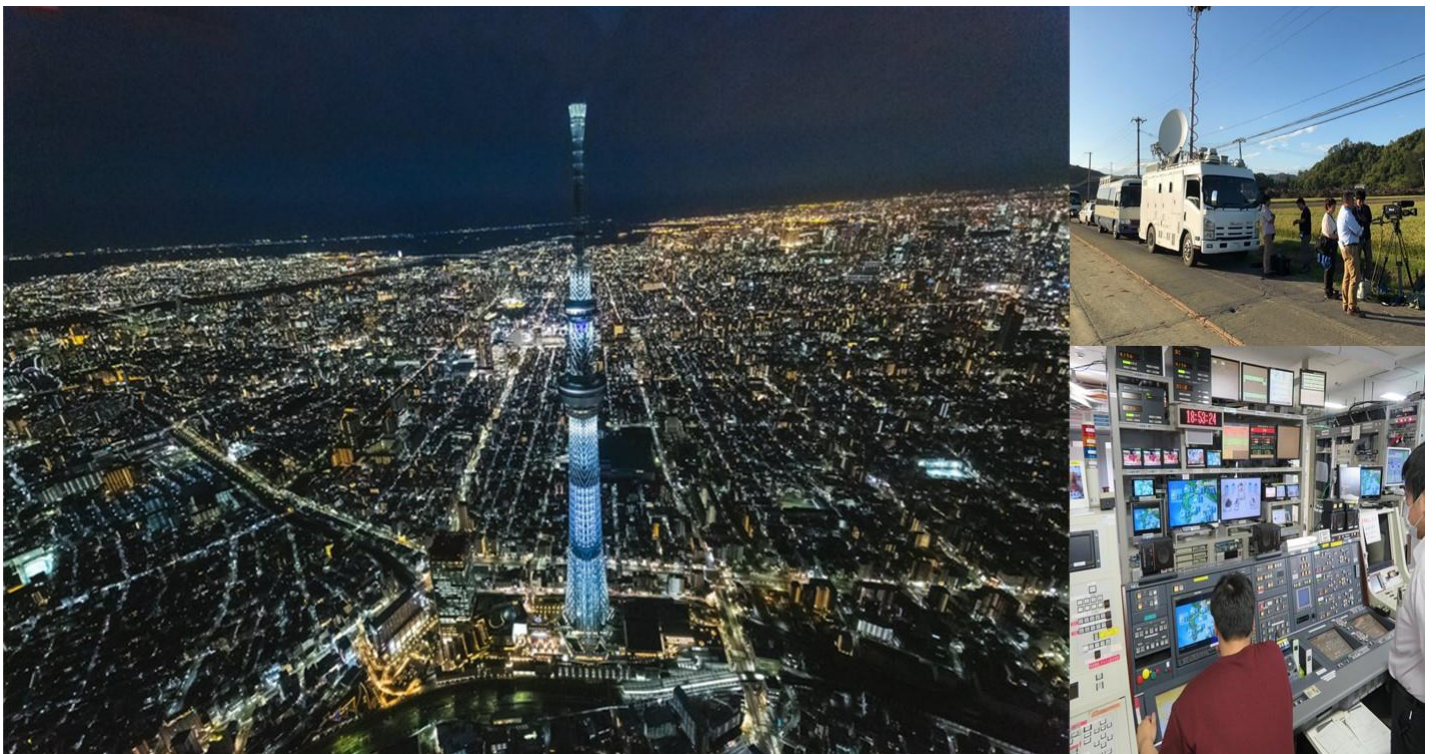




Knowledge Co-Creation Program

Digital Terrestrial TV Broadcasting (DTTB) Policy and Engineering




All the above photos: © NHK

Online Course Period:

November 28 - December 16, 2022
(Program Days: 14 days in total)





How does DTTB affect and change our daily life positively?

Gain insight for the development of DTTB systems, policy, science and various uses from the experiences of Japan.



Outline

This program is offered to the officers working at the broadcasting organizations and its related governmental organizations to learn about Japanese practices in digital terrestrial broadcasting policy and engineering areas.

The sessions will be held online and will include self-study and discussion with web conference.

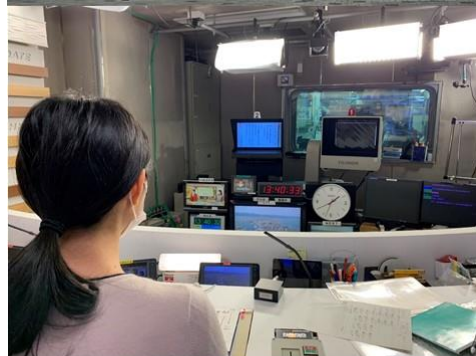
All sessions are carried out in English.

The period of the program is from November 28 to December 16, 2022.

Course Capacity:
15 participants

All the right and left side photos:

© NHK



JICA Knowledge Co-Creation Program (KCCP)

The Japanese Cabinet released the Development Cooperation Charter in February 2015, stated that “In its development cooperation, Japan has maintained the spirit of jointly creating things that suit partner countries while respecting ownership, intentions and intrinsic characteristics of the country concerned based on a field oriented approach through dialogue and collaboration. It has also maintained the approach of building reciprocal relationships with developing countries in which both sides learn from each other and grow and develop together.” We believe that this ‘Knowledge Co-Creation Program’ will serve as a foundation of mutual learning process.



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For What?

Background

TV broadcasting is one of the most efficient communications methods, as people can get the useful information and knowledge and raise the public awareness for education, health services, environment, peace-building and consolidation of democracy. In this sense, it contributes to the improvement of quality of life.

Objectives

To provide the useful knowledge, techniques and clues for the effective digitalization of TV broadcasting by learning the digital broadcasting technologies and theories.

To Whom?

Job Areas and Organizations

This program is offered to the officers working at the broadcasting organizations and its related governmental organizations in the countries which have adopted or are considering ISDB-T as their digital terrestrial TV broadcasting systems.

The applying organization with the best intention to utilize the opportunity of this program will be highly valued in the selection.

Targeted Countries

Bolivia, Botswana, Brazil, Peru
Philippines, Sri Lanka, Tanzania,
Zambia

Participants who have successfully completed the program will be awarded the certificate by JICA.

When?

Online Program Period



<14 days in total>

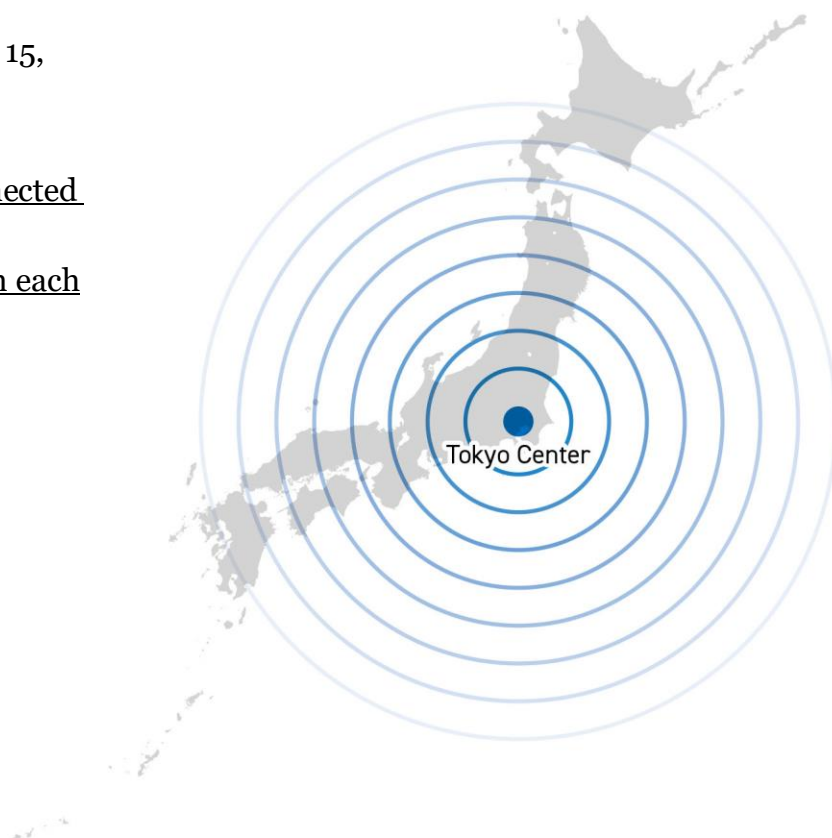
November 28, 29, 30,
December 1, 2, 5, 6, 8, 9, 13, 14, 15,
16, 2022

All the participants will be connected
via Teams.

The starting time of program on each
day will be announced later.

Where?

This program is organized by JICA Tokyo Center and is carried out online entirely. You will receive the essential reading and pre-recorded lecture videos for your self-study at your office or home. As the online homeroom and Q&A sessions are held to assist your learning process, you are required to have a certain IT environment. For the details, please refer to page 14.



How?

How to Learn

- Online Self-Studies
- Online Lectures
- Online Q&A Sessions
- Online Field Visits
- Online Workshop
- Online Discussion
- Online Presentation



Language

English

Commitment to the SDGs



Program Structure (Tentative)

The final contents and schedule will be announced by 10 days before the program starts.

Day 1

- @ Program Orientation
- @ Inception Report Presentation

Day 2

Online Lectures (On-Demand) on “Full Transition to Terrestrial DTV in Japan”
@ Q&A and Discussion Session

Day 3

Online Lectures (On-Demand) on “Introduction to DTTB” and “Challenges and Solutions in Migration to DTTB”
@ Q&A and Discussion Session

Day 4

Online Lectures (On-Demand) on “Master Control Systems” and “Set-top Box”
@ Q&A and Discussion Session

Day 5

@ Live Online Tour: Hitachi Kokusai Corp.

Day 6

Online Lectures (On-Demand) on “Technical Theory on Orthogonal Frequency-Division Multiplexing” and “Technical Theory on Signal Transmission”
@ Q&A and Discussion Session

Day 7

Online Lecture (On-Demand) on “Digital Transmitter” and “Single Frequency Network (SFN)”
@ Q&A and Discussion Session

Day 8

Online Lecture (On-Demand) on “Transmission and Signal Measurement” and “Electric Field Intensity”
@ Q&A and Discussion Session

Day 9

Online Lectures (On-Demand) on “Emergency Warning Broadcast Systems (EWBS)” and “Data Broadcasting”
@ Q&A and Discussion Session



Day 10

Online Lecture (On-Demand) on “Transmission and Signal Measurement”
@ Q&A and Discussion Session

Day 11

Online Lecture (On-Demand) on “Channel Planning”
@ Q&A and Discussion Session

Day 12

Online Lecture (Live) on “Channel Planning”
@ Exercise of Channel Planning
@ Q&A and Discussion Session

Day 13

@ Online Live Tour: NHK Hakodate Local Station

Day 14

@ Action Plan Presentation
@ Evaluation Session
@ Closing Ceremony

Implementing Partner

Mr. IGARASHI Toshiya

Executive Producer, NHK Communications Training Institute

Mr. Igarashi worked at NHK for more than 30 years and was in charge of outside broadcasting engineering, network engineering, program control systems and other engineering fields. He also worked in the United States for three years at a communication satellite firm and as an engineering attaché of NHK General Bureau for America.



“Even though we can’t meet in Japan due to the pandemic, we are preparing

lessons and exercises to introduce smooth transition, expansion and other various aspects of DTTB across country. I hope this program enables further promotion and development of DTTB in your country.”

Mr. NAKAMURA Kunio

Senior Director, NHK Communications Training Institute

“I have worked at NHK Communications Training Institute since 2018. Before 2018, I was in charge of transmission and reception of radio waves. In the process of digitalization of broadcasting, I was involved in the reception of BS digital broadcasting, the shift from analog to digital reception, DTV reception consultation and other engineering departments. I will organize lectures to the best of my ability in a clarifying way. Looking forward to meeting you soon.”



Ms. TAMURA Satomi

Senior Director, NHK Communications Training Institute

“I am in charge of this KCCP program, “Digital Terrestrial TV Broadcasting Policy and Engineering”. The program will be held online for this year, but we are pondering and preparing the best method and delivery of lectures and exercises. Through this program, I am hoping participants to build connections and network among engineers that will last for the next coming centuries.”



Program Officer

Mr. NUNOYA Akira

**Economic Infrastructure Development and Environment Division,
Tokyo Center, Japan International Cooperation Agency (JICA)**



“DTTB enables us not only to enjoy the high quality TV programs, but also to get any latest and necessary information on natural disaster, health services, etc. It is no exaggeration to say that it is one of the most important utilities for our daily life. We are more than happy if you can gain a new perspective on your work through the discussions with the lecturers and other participants.”

Eligibility and Procedures

1. Expectations to the Applying Organizations

This course is designed primarily for the organizations that intend to address specific issues or problems identified in their operation. The applying organizations are expected to use the program for those specific purposes.

This course is enriched with the contents and facilitation schemes specially developed in collaboration with the relevant prominent organizations in Japan. These special features enable the course to meet the specific requirements of applying organizations and effectively facilitate them toward the solutions for the issues and problems.

2. Nominee Qualifications

The applying organizations are expected to select nominees who meet the following qualifications.

Please note that the nominees would not necessarily be employed by the applying organizations, as long as they are selected officially by the organizations for their specific purposes. However, any nominees must be either the persons who are engaged in the said field or directly related to this program subject

Essential Qualifications

1) Current Duties:

- be an official who is in charge of the planning of DTTB.
- (acting) as a team leader of TV broadcasting organization in charge of DTTB, or an engineer who has practical experience in TV transmission.

2) Experience in the Relevant Field: have more than 3 years' experience in the field of DTTB policy or engineering.

- 3) **Educational Background:** be a graduate of university, or its equivalent.
- 4) **Language Proficiency:** have a competent command of spoken and written English proficiency equivalent to TOEFL iBT 70 or above. (This workshop includes the active participation in discussions, which requires high competence in English. Please attach any official certificate for English ability such as TOEFL, TOEIC etc, if possible.)
- 5) **Gender :** no condition to be expected. Female nominee is encouraged to apply for this program. JICA is promoting gender equality.
- 6) **Age:** preferred to be less than 45 years old. (not a strict condition)
- 7) **Technical Requirements :**
 - a. Technology Proficiency
 - Basic computer skills such as, sending/receiving email with attachments, and using a web browser.
 - Online course is delivered using the following services, web conference (Teams) , Cornerstone (JICA-VAN) and other learning management systems . Online tutorial and support by JICA will be limited. The ability to be self-directed in learning new technology skills are required.
 - b. Internet Connection
 - High Speed Broadband Connection (at least 2Mbps).
 - * Internet access charge incurred for this course shall be borne by your organization.
 - c. Hardware (Minimum Requirement)
 - Regular access to a computer, either from your home or from your office.
 - Operating System: Windows or Mac OS (Updated version is preferred).
 - Processor: Intel Core 2 Duo or higher; 2GHz or higher
 - Memory: 4GB of RAM or higher
 - Hard Drive Space: 5GB free disk space
 - Browser: Google Chrome is preferred browser. (Edge, Firefox, Safari can be used)
 - Others: Webcam Microphone, and Audio output Device (Speaker or Headset)
 - d. Software (which is required)
 - Teams
 - * In case you are using your office computer and the use of Teams is not authorized by your IT administrator, please notify JICA at the time of application.
- 8) **Health:** must be in good health to participate in the program.

3. Required Documents for Application

- (1) **Application Form:** The Application Form is available at the JICA overseas office (or the Embassy of Japan)
- (2) **Photocopy of Passport or an Official ID:** to be submitted to clarify your name notation.
- (3) **English Score Sheet:** to be submitted with the application form, if the nominees have any official English examination scores. (e.g., TOEFL, TOEIC, IELTS)
- (4) **Job Report:** Please refer to ANNEX I

4. Procedures for Application and Selection

(1) Submission of the Application Documents

Each nominee is required to prepare the Job Report on the subjects indicated in the Annex I. The Job Report, which will be used for screening the nominees, should be attached in the Application Form.

All required materials must be collected at JICA Tokyo **by October 3, 2022.**

Please confirm the local deadline with the JICA overseas office (or the Embassy of Japan).

(2) Selection

Primary screening is conducted at the JICA overseas office (or the embassy of Japan) after receiving official documents from your government. JICA Center will consult with concerned organizations in Japan in the process of final selection. Applying organizations with the best intentions to utilize the opportunity will be highly valued.

The Government of Japan will examine applicants who belong to the military or other military-related organizations and/or who are enlisted in the military, taking into consideration of their duties, positions in the organization and other relevant information in a comprehensive manner to be consistent with the Development Cooperation Charter of Japan.

(3) Notice of Acceptance

The JICA overseas office (or the Embassy of Japan) will notify the results not later than October 24, 2022.

5. Additional Document(s) to be submitted by the Accepted Candidates

Inception Report -- to be submitted by November 11, 2022.

The accepted candidates are required to prepare the Inception Report.

Please refer to Annex II "Inception Report" for the detailed information.

6. Conditions for Participation

The accepted participants are required below;

- (1) to adhere to the program schedule strictly.
- (2) to respect the rules and regulations of program which the implementing partner provides.
- (3) not to change the program topics unnecessarily.

Annex I

For All Applicants

Job Report

Name: /Country:

E-mail address:

Notice: This report will be used in the selection of applicants for this program. Therefore, it must be submitted with the Application Form together.

A. Applicant's Scope of Engineering Work

A-1. Please explain your job in detail, especially on your position, experience and current job description.

A-2. Which kinds of particular engineering fields are you engaged in now?

B. Applicant's Scope of Managerial Work



B-1. Are you in charge of planning/designing the engineering facilities in your organization? Or are you one of the key members for the above mentioned function ? (Yes / No)

B-2. If yes, how long have you served ? (From)

B-3. Please describe your role in detail .(ex. selection of facility, designing network, budget management and so on)

B-4. Do you have the responsibility of educating/training your junior staff members? (Yes / No)

B-5. How long and how often do you serve as a trainer ?

B-6. Please describe how your education program is carried out (ex. on the job training, seminar and so on).

B-7. Is there any project/working group for planning Digital Terrestrial Television Broadcast (DTTB), or Analog Switch Off (ASO) in your organization? (Yes / No)

B-8. Are you a member of the group? (Yes / No)

B-9. Please describe how actively the group is working in your organization and what your main role is in the group?

Annex II

For Accepted Participants Only

Inception Report

The Accepted participants are requested to prepare Inception Report in the format of Microsoft Power Point . The detailed explanation for each slide should be written on the NOTE of PPT. The attention for Inception Report will be announced separately after the notice of acceptance.

1. Presentation:

The Participant will make the presentation at the beginning of the program. Each participant has about 10 minutes for the presentation.

The contents below should be included in your Inception Report **(maximum 10 slides of PPT)**.

- @ Structure of your organization
- @ Policies on DTTB
- @ Current status of DTTB in your country
- @ How can the life and society be changed with DTTP in your country

For Your Reference

JICA and Capacity Development

Technical cooperation is people-to-people cooperation that supports partner countries in enhancing their comprehensive capacities to address development challenges by their own efforts. Instead of applying Japanese technology per se to partner countries, JICA's technical cooperation provides solutions that best fit their needs by working with people living there. In the process, consideration is given to factors such as their regional characteristics, historical background, and languages. JICA does not limit its technical cooperation to human resources development; it offers multi-tiered assistance that also involves organizational strengthening, policy formulation, and institution building.

Implementation methods of JICA's technical cooperation can be divided into two approaches. One is overseas cooperation by dispatching experts and volunteers in various development sectors to partner countries; the other is domestic cooperation by inviting participants from developing countries to Japan. The latter method is the Knowledge Co-Creation Program, formerly called Training Program, and it is one of the core programs carried out in Japan. By inviting officials from partner countries and with cooperation from domestic partners, the Knowledge Co-Creation Program provides technical knowledge and practical solutions for development issues in participating countries.

The Knowledge Co-Creation Program (Group & Region Focus) has long occupied an important place in JICA operations. About 400 pre-organized courses cover a wide range of professional fields, ranging from education, health, infrastructure, energy, trade and finance, to agriculture, rural development, gender mainstreaming, and environmental protection. A variety of programs is being customized by the different target organizations to address the specific needs, such as policy-making organizations, service provision organizations, as well as research and academic institutions. Some programs are organized to target a certain group of countries with similar developmental challenges.

Japanese Development Experience

Japan, as the first non-Western nation to become a developed country, built itself into a country that is free, peaceful, prosperous and democratic while preserving its tradition. Japan will serve as one of the best examples for our partner countries to follow in their own development.

From engineering technology to production management methods, most of the know-how that has enabled Japan to become what it is today has emanated from a process of adoption and adaptation, of course, has been accompanied by countless failures and errors behind the success stories.

Through Japan's progressive adaptation and application of systems, methods and technologies from the West in a way that is suited to its own circumstances, Japan has developed a storehouse of knowledge not found elsewhere from unique systems of organization, administration and personnel management to such social systems as the livelihood improvement approach and governmental organization. It is not easy to apply such experiences to other countries where the circumstances differ, but the experiences can provide ideas and clues useful when devising measures to solve problems.

JICA, therefore, would like to invite as many leaders of partner countries as possible to come and visit us, to mingle with the Japanese people, and witness the advantages as well as the disadvantages of Japanese systems, so that integration of their findings might help them reach their developmental objectives.



This information pertains to one of the JICA Knowledge Co-Creation Programs (Group & Region Focus) of the Japan International Cooperation Agency (JICA) implemented as part of the Official Development Assistance of the Government of Japan based on bilateral agreement between both Governments.



Correspondence

For enquiries and further information, please contact the JICA office or Embassy of Japan.

Further, address correspondence to:

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Address: 2-49-5 Nishihara, Shibuya-ku, Tokyo 151-0066, Japan

TEL: +81-3-3485-7659 FAX: +81-3-3485-7904

("81" is the country code for Japan, and "78" is the local area code)