



TRAINING AND DIALOGUE PROGRAMS

GENERAL INFORMATION ON

Telecommunications Standardization

集團研修「電気通信標準化」

JFY 2008

<Type: Leaders Training / 類型 : 中核人材育成>

NO. J08-00952 / ID. 0880967

Phase in Japan: From February 3 to March 7, 2009

This information pertains to one of the Training and Dialogue Programs of the Japan International Cooperation Agency (JICA), which shall be implemented as part of the Official Development Assistance of the Government of Japan based on bilateral agreement between both Governments.

I. Concept

Background

Rapid socioeconomic development and technological innovation in recent years have been making information and communications services more sophisticated and diversified. The fourth-generation cellular telephone systems, wireless broadband and NGN (Next Generation Network) will have an enormous impact on the future ICT industry and ICT applications. In order to put ICT technology into practical use, to create seamless information and communications networks worldwide as well as to utilize the networks, in addition to ensuring its efficient operations, interconnectivity and interoperability among networks, not to mention between networks and terminal equipment, must be realized.

It is therefore essential that all countries around the world come to share a common understanding concerning the trends relating to standardization of information and communications technologies.

For what?

This program aims to help participants analyze issues related to the administration of telecommunications standardization and consider improvement plans against the issues facing their respective countries.

For whom?

This program is offered to administrative officials in charge of information and telecommunications administration or engineers in public telecommunications organizations.

II. Description

1. Title (J-No.): Telecommunications Standardization (J08-00952)

2. Period of program

Duration of whole program: December 2008 to March 2009

Preliminary Phase: December 2008 to February 2009
(in a participant's home country)

Core Phase in Japan: February 3 to March 7, 2009

Post Training Phase: March 2009
(in a participant's home country)

3. Target Countries: Myanmar, Papua New Guinea, Brazil, Iraq, Palau

4. Eligible / Target Organization

This program is designed for governmental organizations in charge of telecommunications

administration or public organizations in charge of telecommunications standardization.

5. Total Number of Participants: 5

6. Language to be used in this program: English

7. Program Objective

This program aims to help participants analyze issues related to the administration of telecommunications standardization and consider improvement plans against the issues facing their respective countries.

8. Expected Output

To achieve the above Program Objective, participants are expected;

- 1) To acquire general knowledge of international mandatory standards and voluntary standards applied in Japan,
- 2) To obtain better understanding of international standardization trends, as well as efforts being made by the Japanese government toward international standardization, in addition to an understanding of the standardization policy and activities in Japan, and
- 3) To identify the problems/issues regarding telecommunication standardization in their respective countries and formulate individual Action Plans to improve the related activities at the level of their own organizations.

9. Contents

This program consists of the following components.

| | |
|---|-------------------------------|
| Preliminary Phase in a participant's home country | |
| December 2008 to February 2009 | |
| <i>Selected participants make required preparation for the Program in the respective countries.</i> | |
| Modules | Activities |
| Country Report | Formulation of Country Report |

| Core Phase in Japan | | | | |
|---|---|---|-----------|-----|
| February 3 to March 7, 2009 | | | | |
| <i>Participants dispatched by the organizations attend the Program implemented in Japan</i> | | | | |
| Subject | Purpose | Details | Sessions* | |
| | | | Lec | Obs |
| 1) Introduction and Administration | To obtain a knowledge on the telecommunications standardization activities in general and standardization administration in Japan | a. Policy of MIC on telecommunications | 5 | |
| | | b. Telecommunications standardization activities in the world | 2 | |
| Sub total | | | 7 | |

| | | | | |
|---|---|---|-----|----|
| 2) Organization | To obtain a knowledge on the structure and organization of telecommunications standardization in Japan | a. Telecommunications standardization organization in Japan | 3 | |
| | | b. Telecommunications standardization activities in Japan | 2 | |
| | | Sub total | 5 | |
| 3) Recent Telecommunications Technologies | To obtain a knowledge on recent telecommunications technologies in Japan | a. Mobile communication | 1 | 1 |
| | | b. NGN | 1 | 1 |
| | | c. FWA, WAS | 1 | 1 |
| | | d. Others | 2 | 2 |
| | | Sub total | 5 | 5 |
| 4) Field Study | To learn the activities of telecommunications R&D institution | a. R&D institution | 3 | 4 |
| | | Sub total | 3 | 4 |
| 5) Technical Standards Conformity Certification & Type Approval | To obtain a knowledge on the technical standards conformity certification systems in Japan | a. Technical standards conformity certification | 1 | 1 |
| | | b. Type approval | 1 | 1 |
| | | Sub total | 2 | 2 |
| 6) Discussion | To make discussions regarding current situation and consider the next step for telecommunications standardization in respective countries | a. Country Report presentation | 2 | |
| | | b. Group discussion | 4 | |
| | | c. Action Plan making and presentation | 2 | |
| | | Sub total | 8 | |
| 7) Closing | To evaluate the Program Performance | a. Program evaluation | 0.5 | |
| | | b. Closing ceremony | 0.5 | |
| | | Sub total | 1 | |
| Total | | | 31 | 11 |

* Sessions: One session is two (2) hours (Lec: Lecture, Obs: Observation)

NOTE: The above contents are subject to minor changes, if necessary.

When preparing the Action Plan, it is necessary for the participants to analyze the current situation and problems in the telecommunications sector and its standardization activities. It is, therefore, recommended for the participants to bring the reference materials regarding telecommunication standardization activities in their own countries.

Post Training Phase in a participant's home country

February 2009

Participants make a presentation of their Action Plan in their organizations.

Each participating organization assesses or reviews the proposal made in the Action Plan and considers its viability. This phase marks the end of the Program.

III. Conditions and Procedures for Application

1. Expectations for the Participating Organizations

- (1) This program is designed primarily for organizations intend to address specific issues or problems identified in their operation. Participating organizations are expected to use this Program for those specific purposes.
- (2) In this connection, applying organizations are expected to nominate the most qualified candidates to address the said issues or problems, carefully referring to the qualifications described in section III-2 below.
- (3) Applying organizations are also expected to make use of knowledge acquired by the nominees for the said purpose.

2. Nominee Qualifications

Applying Organizations are expected to adequately select nominees. Nominees must;

- (1) be university graduates specialized in communication engineering or electronic engineering, or have its equivalent technical knowledge and experience,
- (2) be administrative officials in charge of information and telecommunications administration or engineers in a public telecommunications organization,
- (3) be preferable engaged in telecommunications standardization,
- (4) be under forty-five (45) years of age, in principle,
- (5) have a sufficient command of spoken and written English,
- (6) be both physically and mentally fit for the training; pregnancy is regarded as a disqualifying condition, and
- (7) not be serving in any form of military services

3. Required Documents for Application

(1) Application Form

The Application Form is available at the respective country's JICA office or the Embassy of Japan.

(2) Nominee's English Score Sheet

If nominees have any official documentation of English ability (e.g., TOEFL, TOEIC, IELTS), please attach it (or a copy) to the Application Form.

4. Procedure for Application and Selection

(1) Submitting the Application Documents

Closing date for application to the JICA Tokyo International Center in JAPAN, which organizes this program: December 1, 2008

Note: Please confirm the closing date set by the respective countries' JICA offices or Embassies of Japan of your countries to meet the closing date in Japan.

(2) Selection

After receiving the document(s) through due administrative procedures in the respective governments, the respective countries' JICA offices (or Embassies of Japan) shall conduct screenings, and send the documents to the JICA Tokyo International Center. Selection shall be made by the JICA Tokyo International Center in consultation with the organizations concerned in Japan based on submitted documents according to qualifications. The organization with intention to utilize the opportunity of this program will be highly valued in the selection.

(3) Notice of Acceptance

Notification of results shall be made by the respective countries' JICA offices (or Embassies of Japan) to the respective Governments by **not later than December 12, 2008.**

5. Document(s) to be submitted by selected participants

Country Report -- to be submitted by January 26, 2009

Before coming to Japan, only selected participants are required to prepare a Country Report (detailed information is provided in the ANNEX "Country Report Form". The Country Report document should be sent to JICA or the Japan International Cooperation Center (JICE) by January 26, 2009, preferably by e-mail to fujisawa.narihito@jice.org.

6. Conditions for Attendance:

- (1) to observe the schedule of the program,
- (2) not to change the program subjects or extend the period of stay in Japan,
- (3) not to bring any members of their family,
- (4) to return to their home countries at the end of the program in Japan according to the travel schedule designated by JICA,
- (5) to refrain from engaging in political activities, or any form of employment for profit or gain, and
- (6) to observe the rules and regulations of their place of accommodation and not to change the accommodation designated by JICA

IV. Administrative Arrangements

1. Organizer: JICA Tokyo International Center (JICA TOKYO)

2. Implementing Partner:

Ministry of Internal Affairs and Communications (MIC)

Standardization Division, Global ICT Strategy Bureau, MIC

Address: 1-2 Kasumigaseki, 2-Chome, Chiyoda-ku, Tokyo, 100-8926, Japan

3. Travel to Japan

- (1) **Air Ticket:** The cost of a round-trip ticket between an international airport designated by JICA and Japan will be borne by JICA.
- (2) **Travel Insurance:** Term of Insurance: From arrival to departure in Japan. *the traveling time outside Japan shall not be covered.

4. Accommodation in Japan

JICA will arrange the following accommodations for the participants in Japan:

JICA Tokyo International Center (JICA TOKYO)
Address: 2-49-5 Nishihara, Shibuya-ku, Tokyo 151-0066, Japan
TEL: 81-3-3485-7051 FAX: 81-3-3485-7904
(where “81” is the country code for Japan, and “3” is the local area code)

If there is no vacancy at JICA TOKYO, JICA will arrange alternative accommodations for the participants. Please refer to facility guide of TIC at its URL:

<http://www.jica.go.jp/english/contact/pdf/tic.pdf>

5. Expenses

The following expenses will be provided for the participants by JICA:

- (1) Allowances for accommodation, living expenses, outfit, and shipping
- (2) Expenses for study tours (basically in the form of train tickets).
- (3) Free medical care for participants who become ill after arriving in Japan (costs related to pre-existing illness, pregnancy, or dental treatment are not included)
- (4) Expenses for program implementation, including materials
- (5) For more details, please see p. 9-16 of the brochure for participants titled “KENSHU-IN GUIDE BOOK,” which will be given to the selected participants before (or at the time of) the pre-departure orientation.

6. Pre-departure Orientation

A pre-departure orientation will be held at the respective countries’ JICA offices (or Embassies of Japan), to provide participants with details on travel to Japan, conditions of the workshop, and other matters.

V. Annex: Country Report Form

Telecommunications Standardization (JFY 2008) Document Form of Country Report

After the notice of acceptance from JICA, the selected participants are required to prepare Country Report documents providing the information on the following contents. The Report should be sent to JICA Tokyo International Center by January 26, 2009, preferably by e-mail to fujisawa.narihito@jice.org. The participants are also requested to make a 20-minute presentation with visual material (e.g. MS Power Point) in the beginning of the Program. The focal point of participants' presentation will be informed when acceptance notice is sent back to the participating organization.

Format of the Report document

The Reports should be typewritten in English on A4 size paper (21 cm by 30 cm), formatted in digital data.

Part I. Personal Details of Participant

1. Name of participant and nationality
2. Name of participant's organization and section
3. Type of organization (choose one of the following)
 - a) Governmental organization (excluding public company)
 - b) Public company (fully state-owned company or business organization)
4. Organizational chart
Please attach a chart outlining the structure of the participant's organization that shows the participant's position and responsibilities. (see attached Figure)
5. Participant's special interests

Part II. Telecommunications Policy Structure and Statistical Data

II-1. Policy-making and regulatory authority

1. Name of the authority(ies) responsible for telecommunications policy
2. Name of the authority or divisions within the authority responsible for telecommunications regulation

3. Legal structure for regulating the telecommunications sector

II-2. Current policy and regulatory environment

1. Basic laws governing telecommunications businesses
2. Policy on privatization
Please mention whether privatization of state-owned telecommunications carrier has been implemented or is planned, in your country.
If implemented, please describe how privatization was carried out.
3. Policy on competition
Please mention whether entry of new common carriers has been implemented, or is planned, in your country.
If implemented, describe how this was carried out.
4. National policy on developing information and communications technology (ICT)
5. Major challenges and problems that need to be solved in your country's telecommunications sector / telecommunications Business
e.g. tariff issue caused by use of different Mobile Country Code (MCC) and different Mobile Network Code (MNC), if any
6. Future program of telecommunication development
7. International assistance in the field of telecommunications (Year, Name of aid agencies, Budget, etc.)
 - a) Completed projects (-2007)
 - b) Ongoing projects
 - c) Planned projects
8. participant's own Experience and future prospects in their profession

II-3. Standardization activities

1. Main organization in charge of standardization of ICT
2. Situation of participation in standardization activities carried out by international standardization organizations like ITU-T

II-4. Market Structure

Please indicate the following market environment of each service type

1. Total Telephone
 - a) Number of total telephones (Number of total telephones = fixed Phones + mobile Phones)
 - b) Total telephone density (per 100 inhabitants)
2. Fixed Telecommunications Services
 - a) Business license(es) required, or other restrictions on operators
 - b) Number of carriers or service providers
 - c) Number of subscribers
 - d) Subscribers per 100 inhabitants
 - e) Coverage of population(%)

- f) Number of waiting applicants of fixed telephone
 - g) Comparison of Current Number of waiting applicants of fixed telephone with that of 5 years ago (%)
 - h) Name of the incumbent or the largest carrier and its share of the market
 - i) Organizational type of the incumbent or the largest carrier
 - j) Organizational type of the second largest and third largest carriers and their shares of the market
3. Mobile Telecommunications Services
- a) Business license(es) required, or other restrictions on operators
 - b) Number of carriers or service providers
 - c) Mobile telephone systems
(3G (W-CDMA, MC-CDMA), 2G (GSM, CDMA, PDC))
 - d) Number of subscribers
 - Number of subscribers to 3G mobile phone services
 - The ratio of 3G mobile phone subscribers to total mobile phone subscribers (%)
 - e) Subscribers per 100 inhabitants
 - f) Coverage of population (%)
 - g) The ratio of mobile telephone subscribers to total telephone subscribers (%)
 - h) Name of the incumbent or the largest carrier and its share of the market
 - i) Organizational type of the incumbent or the largest carrier
 - j) Organizational type of the second largest and third largest carriers and their shares of the market
4. Internet and Broadband
- a) Business license(es) required, or other restrictions on operators
 - b) Number of service providers
 - c) Name of the largest service provider and its share of the market
 - d) Organizational type of the largest service provider
 - e) Organizational type of the second largest and third largest service provider and their shares of the market
 - f) Number of internet users
 - Number of users through telephone line (dial up)
 - Number of users through Broadband line (FTTH, DSL, Cable TV, and others)
 - Others
 - g) Internet users per 1,000 inhabitants
 - h) Round numbers of personal computers per 1,000 inhabitants
 - i) Broadband price per 100 kbps
5. Domestic Service (Data Communications)
- a) Name of Carriers
 - b) Type of Organization
 - c) Present Status (source of revenue, etc.)
6. Domestic Service (Satellite Communications)
- a) Name of Carriers
 - b) Type of Organization
 - c) Present Status (source of revenue, etc.)
7. International Service (Basic Communications)
- a) Name of Carriers
 - b) Type of Organization
 - c) Present Status (source of revenue, etc.)

8. International Service (Data Communications)
 - a) Name of Carriers
 - b) Type of Organization
 - c) Present Status (source of revenue, etc.)
9. International Service (Satellite Communications)
 - a) Name of Carriers
 - b) Type of Organization
 - c) Present Status (source of revenue, etc.)

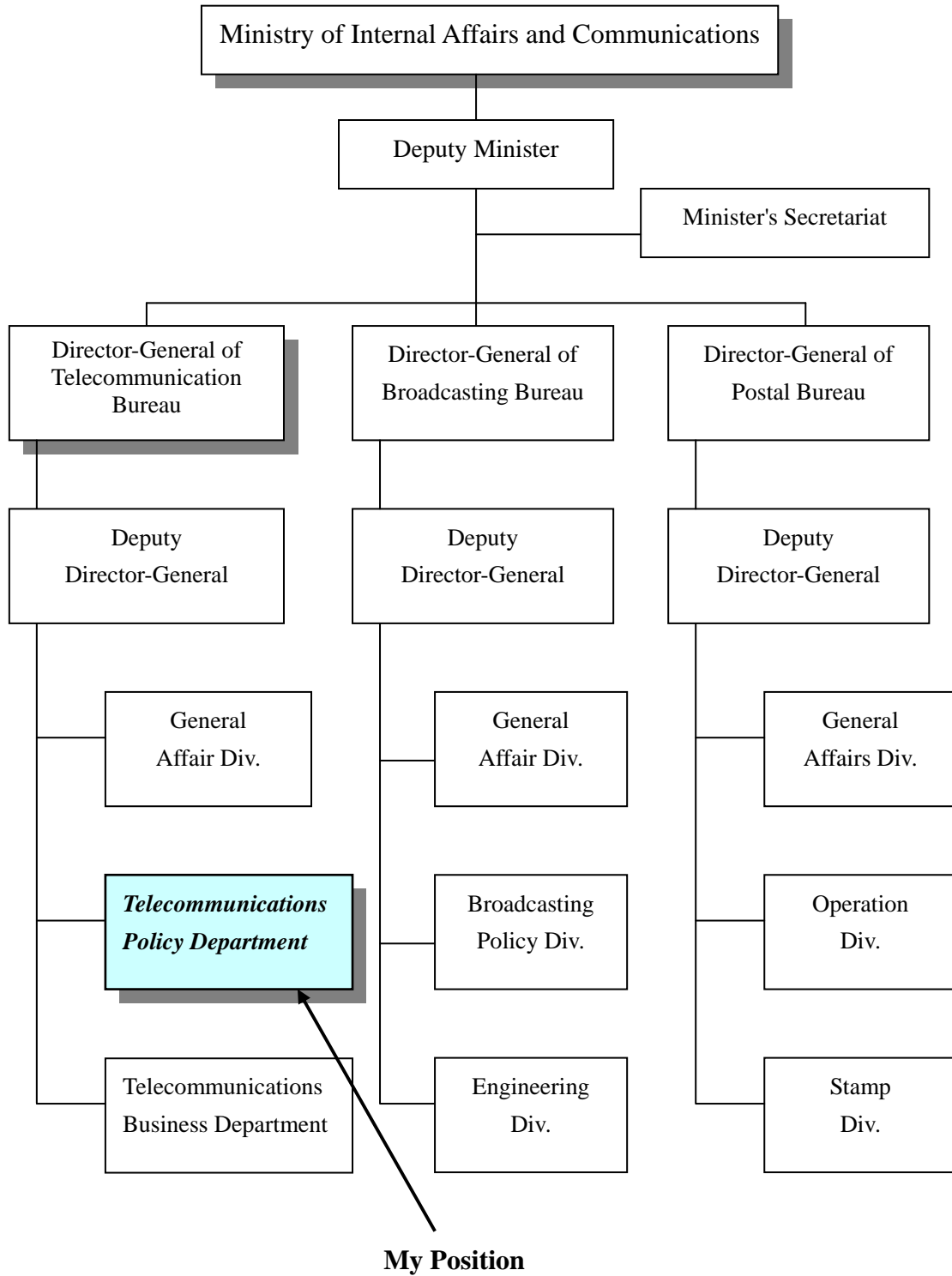
Part III. General Questions

- 1. If your country has any difficulties for the telecommunication infrastructure for internet services in rural area, please indicate the current situation in accordance with the followings.**
 - Any geographical factors which have become the cause of difficulties, such as mountains, sea, scattered islands, distance from urban area, etc., and the description of the current status.
 - Any social, economical and/or technological factors which make it difficult to promote the internet services in your country.
- 2. What kinds of applications/solutions as the public service are expected to be equally prevailed over the internet in your country, such as e-learning, e-medical care, emergency information, governmental bulletin, etc., and the reason why so expected?**
 - Expected service applications/solutions as the public service
 - The reason why
- 3. If the wireless access system (e.g. WiMAX) can be practically considered in your planning for rural area, please give the information on the followings.**
 - Necessary functions for the terminal (fixed and/or mobile)
 - Estimated initial fee for a user
 - Estimated monthly fee for a user
 - The restrictions of radio frequency under the regulations
- 4. What is the general view of the future network (i.e. NGN) in your country?**
 - Any image or picture of the new future network
 - Any policy of the assurance of end-to-end connectivity and QoS

- End of questionnaires -

Figure 1

Organization Chart



For Your Reference

JICA and Capacity Development

The key concept underpinning JICA operations since its establishment in 1974 has been the conviction that “capacity development” is central to the socioeconomic development of any country, regardless of the specific operational scheme one may be undertaking, i.e. expert assignments, development projects, development study projects, training programs, JOCV programs, etc.

Within this wide range of programs, Training Programs have long occupied an important place in JICA operations. Conducted in Japan, they provide partner countries with opportunities to acquire practical knowledge accumulated in Japanese society. Participants dispatched by partner countries might find useful knowledge and re-create their own knowledge for enhancement of their own capacity or that of the organization and society to which they belong.

About 460 pre-organized programs 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 are being customized to address the specific needs of different target organizations, 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 was the first non-Western country to successfully modernize its society and industrialize its economy. At the core of this process, which started more than 140 years ago, was the “adopt and adapt” concept by which a wide range of appropriate skills and knowledge have been imported from developed countries; these skills and knowledge have been adapted and/or improved using local skills, knowledge and initiatives. They finally became internalized in Japanese society to suit its local needs and conditions.

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 this “adoption and adaptation” process, which, of course, has been accompanied by countless failures and errors behind the success stories. We presume that such experiences, both successful and unsuccessful, will be useful to our partners who are trying to address the challenges currently faced by developing countries.

However, it is rather challenging to share with our partners this whole body of Japan’s developmental experience. This difficulty has to do, in part, with the challenge of explaining a body of “tacit knowledge,” a type of knowledge that cannot fully be expressed in words or numbers. Adding to this difficulty are the social and cultural systems of Japan that vastly differ from those of other Western industrialized countries, and hence still remain unfamiliar to many partner countries. Simply stated, coming to Japan might be one way of overcoming such a cultural gap.

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.



CORRESPONDENCE

For enquiries and further information, please contact the JICA office or the Embassy of Japan. Further, address correspondence to:

Tokyo International Center,
Japan International Cooperation Agency
(JICA TOKYO)

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TEL: 81-3-3485-7051 FAX: 81-3-3485-7904