TRAINING CIRCULAR

Subject: Group Training Course in "Building and Designing of ICT Infrastructure in Rural Area" to be held in Japan from July 22 to September 05, 2015 under Technical Cooperation Program of the Government of Japan.

The undersigned is directed to state that the Japan International Cooperation Agency (JICA) has invited applications for the above mentioned training program to be held in Japan from July 22 to September 05, 2015 under Technical Cooperation Program of the Government of Japan.

2. The program aims to enable the candidates to analyze and propose solutions to bridge the digital divide in rural area and applying the skill on building & designing ICT infrastructure and effective technology for problem solving acquired through this course. The program is offered to the local/central government departments, a relevant governmental institution in charge of organizing communication infrastructure and information society.

3. The applying organizations are expected to select a technical and managerial level person involved in information communications or digital divide improvement with more than five years of occupational experience in Information & Communication Technology. The participant is required to have knowledge and/or experience as an ICT technician. The applicant should be under fifty years of age; have competent command over spoken and written English; must be in good health (both physically and mentally); must not be part of any type of military service.

4. In addition to above, the following information in respect of the nominated officers may please be mentioned while furnishing the nomination:-
   a) Whether attended any foreign training program in the past? If so, the duration/details thereof;
   b) Whether cleared from vigilance angle;
   c) Age;
   d) Whether working in North East State/J&K;
   e) A brief in 50-100 words justifying the nomination.

5. The course covers the cost of a round-trip air ticket between international airport designated by JICA and Japan; travel insurance from the time of arrival in Japan to departure

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from Japan; allowances for (accommodation, living expenses, outfit and shipping); expenses for JICA study tours and free medical care for participants who may fall ill after reaching Japan (costs relating to pre-existing illness, pregnancy, or dental treatment are not included).

6.   It is, therefore, requested that the nomination of suitable candidates may please be forwarded (in duplicate) in JICA's prescribed form (available in persmin.nic.in→DOPT→Training Wing→Circular→JICA) to this Department duly authenticated by the HOD of the concerned department in accordance with the eligibility criteria.

7.   The applications should reach this Department through the Administrative Ministry/State Government not later than **May 25, 2015.** Nominations received after the prescribed date will not be considered. The details of the program may be drawn from Ministry of Personnel, Public Grievances and Pensions' website (persmin.nic.in).

(P.K. Pattnaik)
Under Secretary to the Government of India
Tele: 011-26109049

To,
   a) The Secretary, Dept of Telecommunication, Sanchar Bhawan, Rafi Marg, New Delhi,
   b) The Secretary, Ministry of Information & Broadcasting, Shastri Bhavan, New Delhi,
   c) The Chief Secretaries to all the State Governments/Union Territories(with request to circulate the same amongst their related Departments/Organizations),
   d) NIC with request to post the circular along with the JICA's circular on this Department's website.

GROUP AND REGION-FOCUSED TRAINING

GENERAL INFORMATION ON

**Building and Designing of ICT Infrastructure
in Rural Area**
課題別研修「ルーラル地域における情報通信インフラの構築・設計」
JFY 2015
NO. J15-04039　/ ID. 1584577
Core Phases in Japan: From July 22, 2015 to September 5, 2015

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

With the effort of governments both in developing and developed countries, as well as international organizations such as International Telecommunication Union (ITU), for promoting deregulation on communications within developing countries, information and communication technology infrastructure of major cities in developing countries are improving continuously. Telecommunications Infrastructures in rural are also steadily improving; however, factors such as geography and population distribution prevent rural area from developing, and "digital divide" between urban and rural areas still remains large. Moreover, rural problems could be causes for aging of the population, health/educational problem and insufficient disaster prevention/management in rural areas. Those problems block economic and social development in developing countries.

In solving this problem, as important as maintaining the infrastructure is to send necessary information to rural area. There for, this training program seeks primarily to improve skills on problem solving strategies which will improve the flow on information, and contribute to bridge digital divide, aiming to relevant governmental institution in charge of organizing communication infrastructure and information society.

For what?

To analyze and propose solutions for the participant's organization to bridge the digital divide in rural area of the participant's country, applying the skill on building and designing ICT infrastructure, and effective technology for problem solving acquired through this course.

For whom?

This program is offered to the departments of national and local government, a relevant governmental institution in charge of organizing communication infrastructure and information society.

How?

1. Nominees should submit a Job Report and Rural Area Information & Map of selected area, which is required in screening process to select participants.
2. Selected participants are required to formulate individual Reports (Inception Report, Interim Report and Final Report) in three different phases.
3. Participants are required to prepare relief maps (paper or digital data) of the selected area, when coming to Japan. These will be used in the network planning practice.
4. Participants will have opportunities to learn methods for developing communication and information environment （IT policy, information transmission methods, network planning, and telecommunications technology）through lectures, study visits and network planning practice.

In the end of this program, participants will write an Interim Report on developing communication and information environment, which will help solving the problems in their respective countries.

5. The Interim Report will be shared with participants' organization, and will get feedback in terms of impact and feasibility to be acquired. Participants are to include the feedback comments in Interim Report, and required to write Final Report.

II. Description

1．**Title (J-No.): Building and Designing of ICT Infrastructure in Rural Area (J15-04039)**

2．**Course Period in JAPAN:**
   July 22 to September 5, 2015

3．**Target Countries:**
   Bangladesh, Ethiopia, India, Indonesia, Myanmar, Pakistan, Peru, Samoa, Thailand and Tuvalu

4．**Overall Goal:**
   To improve living standards and stimulate local industry, by bridging digital divide

5．**Course Objective:**
   To propose a solution for bridging digital divide in rural area of participants' countries

6．**Expected Output**
   Ⅰ. To achieve above Program Objective, participants are expected;
   1) To review the current conditions and identify the issues regarding the situation of communications and information in rural area of their respective countries.
   2) To acquire a good understanding of outlines and theories essential for developing situation of communication and information in rural areas.
   3) To acquire the methods of information transmission in rural area, through case examples of backbone infrastructure and ICT system for inhabitants.
   4) To acquire the practical skills on network planning, and transmit information in the rural areas.
   5) To formulate an Interim Report on bridging the divide in rural area of their respective countries, of which taking account of feasibility.

   Ⅱ.The Interim Report prepared by the participant is also expected to be used in the participant's home country, and to be shared and discussed within the organization for implementation.
   Participants are asked to prepare a Final Report for submission to JICA Tokyo, **by November 20, 2015**.

７．**Eligible / Target Organization**

This program is offered to the departments of national and local government, a relevant government institution in charge of organizing the communications infrastructure and information society.

８．**Course Capacity (Upper limit of Participants)**

12 participants

９．**Language to be used in this program:** English

１０．**Contents**

This program consists of following components. Participants and participating organizations should be aware of the requirement that selected participants have to formulate individual Reports* in three different phases.

* For more details, please see section V and Annex 4 "Inception Report"

Details on each component are given below:

Preliminary Phase in a participant's home country
June 2015 to July 2015
Participating organizations make required preparation for the Program in the respective country.

Expected Module Output	Activities
1) Submission of Inception Report **Note:** Please reflect any changes in "3. Selected Rural Area Information", for reports which have been submitted. 2) Preparation to present the Inception Report	1) Each participant is required to formulate and submit the Inception Report **by July 10, 2015**. 2) Each participant is also requested to prepare his/her presentation material for the Inception Report Presentation in Power Point.

* Inception Report: See ANNEX 4 "Inception Report"

Core Phase in Japan
July 22, 2015 to September 5, 2015
Participants dispatched by the organizations attend the Program implemented in Japan.

Expected Module Output	Contents	Methodology
1) To review the current conditions and identify the issues in the communications	Inception Report presentation - Share current situation and respective issues	Presentation & Discussion

and information field in rural area of their respective countries.	- ICT Development Strategy: Global Challenge for Rural Community	& Lecture
2) To acquire a good understanding of outline and theories essential for developing communication and information in rural areas.	Basic theories on rural telecommunication network development - Overview of rural telecommunications - Role of rural telecommunications - Finance on infrastructure development - and others	Lecture
3) To acquire the methods of information transmission in rural area, through case examples of backbone infrastructure and ICT system for inhabitants.	- Basic theories on transmitting information in rural areas - PCM Method（analyzing issues） - Research case examples on designing backbone infrastructure to connect city and rural area - Building information delivery system such as sensor network and one-segment system, in the field of disaster management, medical, education, environment and etc. - Building an IP network	Lecture
4) To acquire the practical skills on network planning to transmit information in the rural areas.	Various telecommunication methods and technologies - Theory on telecommunications network system - Information System Theory - Drill on constructing a telecommunications system - Constructing a suitable telecommunications system using model map - Presentation and discussion over the constructed system	Lecture & Practice & Site Visit Presentation & Discussion
5) To formulate an Interim Report on bridging divide in rural area of their respective countries	Draft and submit an Interim Report on network development - Problem analysis using PCM (Project Cycle Management) method - FS (Feasibility Study) - Drafting action plans to develop communication and the information	Presentation & Discussion

| | | field in selected area of the participants' home country | |
| | | - Presentation and discussion of the Interim Report | |

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

| **Finalization Phase in a participant's home country** |
| September 2015 to November 2015 |
| |
| *Participants will present their Interim Report to their organizations, and revise the report with the feedback comment. Each participating organization should considers the feasibility of the plan and formulates it as Final Report.* |
| *This phase marks the end of the Program.* |

Expected Module Output	**Activities**
- To share their Interim Report in the organization and discuss its possibility of realization and implementation. - To finalize the Interim Report as a Final Report and submit.	1) Each participant is required to make a presentation of his/her Interim Report in his/her organization and add any lacking information, based on his/her organization's comments/feedback. 2) Each participant's organization is required to give comments on his/her Interim Report and to submit a revised report as a Final Report **by November 20, 2015.**

III. Conditions and Procedures for Application

1. Expectations from the Participating Organizations

(1) This program is designed primarily for organizations intended to address specific issues or problems identified in their operation. Participating organizations are expected to use this program for these specific purposes.

(2) This program is enriched with contents and facilitation schemes specially developed in the collaboration with relevant prominent organizations in Japan. These special features enable the program to meet the specific requirements of applying organizations and effectively help them to resolve the issues and problems.

(3) As this program is designed to help organizations coming up with concrete solutions for their issues, participating organizations are expected to ensure enough time for the participants to carry out the activities of the Preliminary Phase described in section II-10.

(4) Participating organizations are also expected to make the best use of the results achieved by their participants in Japan by carrying out the activities of the Finalization Phase described in section II-10.

2. Nominee Qualifications

Applying organizations are expected to select nominees who meet the following qualifications:

(1) Present position, assignment:

A technical and managerial level person involved in information communications or digital divide improvement of the government or a relevant government institution.

(2) Occupational background:

Practical experience in Information & Communication Technology for more than five years. Experience in network planning is preferable.

Note:

Since practical training in network design is scheduled, the participant had better have the knowledge and/or experience of an ICT technician

(3) Age: In principle, under fifty (50) years of age

(4) Language: Fluent command of spoken and written English. English proficiency equivalent to a TOEFL score of higher than 500 is recommended.

(5) Health: Physically and mentally healthy to undergo this program.

(6) Other prerequisites: Is not serving in any form of military service

Note:

Nominees who have previously participated in JICA programs for similar subjects will be given lower priority than those who have never participated in JICA training programs.

3. **Required Documents for Application**
   (1) **Application Form**: The Application Forms is available at **the JICA office (or the Embassy of Japan)**

   *Pregnancy
   Pregnant participants are strictly requested to attach the following documents in order to minimize the risk for their health.
   ① letter of the participant's consent to bear economic and physical risks
   ② letter of consent from the participant's supervisor
   ③ doctor's letter with permission of his/her training participation.
   Please ask JICA Staff for the details.

   (2) **Job Report (Annex 2)**
   (3) **Selected Rural Area Information & Map (Annex 3).**
   (4) **Nominee's English Score Sheet**
   If nominees have any official documentation showing English language proficiency (e.g., TOEFL, TOEIC, IELTS), please attach it (or a copy) to the Application Form.

   (5) **Photocopy of passport**: to be submitted with the application form, if you possess your passport which you will carry when entering Japan for this program. If not, you are requested to submit its photocopy as soon as you obtain it.
   *Photocopy should include the followings:
   Name, Date of birth, Nationality, Sex, Passport number and Expire date.

   <u>**Note:**</u>
   <u>**As "Job Report (Annex 2)"and "Selected Rural Area Information & Map (Annex3)" are important reference for screening nominees, applications that are submitted without these documents will be disqualified.**</u>

4. **Procedure for Application and Selection**
   (1) **Submission of the Application Documents:**
   Closing date for applications: **Please inquire to the JICA office (or the Embassy of Japan).**
   （After receiving applications, the JICA office (or the Embassy of Japan) will send them to **the JICA Center in JAPAN** by **June 5, 2015**）

   (2) **Selection**
After receiving the documents through proper channels from your government, the JICA office (or the embassy of Japan) will conduct screenings, and then forward the documents to the JICA Center in Japan. Selection will be made by the JICA Center in consultation with concerned organizations in Japan. *The applying organization with the best intention to utilize the opportunity of this program will be highly valued in the selection*

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(3) Notice of Acceptance

Notification of results will be made by the JICA office (or the Embassy of Japan) **not later than <u>June 19, 2015.</u>**

5. **Document to be submitted by accepted candidates:**
    <u>**Inception Report -- to be submitted by July 10, 2015.**</u>

    On receiving a Notice of Acceptance, accepted participants are required to prepare an Inception Report (detailed information is provided in the ANNEX 4 "Inception Report". The Inception Report should be sent to the JICA Tokyo International Center **<u>by July 10, 2015,</u>** preferably by e-mail to **<u>tictee@jica.go.jp</u>**

6. **Conditions for Attendance:**
    (1) to strictly adhere to the program schedule.
    (2) not to change the program topics.
    (3) not to extend the period of stay in Japan.
    (4) not to be accompanied by family members during the program.
    (5) to return to their home countries at the end of the program in Japan according to the travel schedule designated by JICA,
    (6) to refrain from engaging in any political activities, or any form of employment for profit or gain.
    (7) to observe Japanese laws and ordinances. If there is any violation of said laws and ordinances participants may be required to return part or all of the training expenditure depending on the severity of said violation.
    (8) to observe the rules and regulations of the accommodation and not to change the accommodation designated by JICA.

IV. Administrative Arrangements

1. **Organizer:**
   (1) Name: JICA TOKYO
   (2) Contact: Ms. TAKAHASHI Fumiko (tictee@jica.go.jp)

2. **Implementing Partner:**
   (1) Name: The ITU Association of Japan
   (2) URL: https://www.ituaj.jp/

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: Coverage is from time of arrival up to departure in Japan. Thus traveling time outside Japan will 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/about/organization/domestic/pdf/welcome.pdf

5. **Expenses**
   The following expenses will be provided for the participants by JICA:
   (1) Allowances for accommodation, meals, 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.

   For more details, please see "III. ALLOWANCES" of the brochure for participants titled "KENSHU-IN GUIDE BOOK," which will be given before departure for Japan.

6. Pre-departure Orientation

A pre-departure orientation will be held at the respective country's JICA office (or Japanese Embassy), to provide participants with details on travel to Japan, conditions of the program, and other matters.

V. Others:

Participants of this training program are required to submit the following 3 (three) "Reports". An overview of each "Report" is as follows.

1. Inception Report (Submission Deadline: July 10, 2015)

Purpose: To collect basic data for formulating the Interim Report on developing communications and the information environment, together with the "Selected Rural Area Information＆Map (Annex 3)".

For more details, please see Annex 4 "Inception Report"

Before coming to Japan, selected participants are required to prepare an Inception Report (detailed information is provided in the ANNEX 4 "Inception Report". The Inception Report should be sent to JICA Tokyo International Center **by July 10, 2015**, preferably by e-mail to tictee@jica.go.jp

＊Please update the "Selected Rural Area Information＆Map (Annex 3)" if necessary.

Participants are also required to make a presentation of the Inception Report in the second week of the program in Japan.

2. Interim Report (to be submitted during the Core Phase in Japan)

Purpose: To formulate a draft action plan to promote communications development and an information environment that will lead to problem solving.

Topics to be included:
- ✓ background of the selected area
- ✓ problem analysis by the PCM (Project Cycle Management) method
- ✓ Ideas for resolving the information-gap in the selected area
- ✓ Network planning on the actual topographic map of the selected area as the infrastructure to resolve the information-gap
- ✓ cost estimation, etc.

* Time is allocated to write the Interim Report during the program in Japan.
* Presentation and discussion of the Interim Report is to be held at the end of program in Japan.

3. **Final Report** (Submission Deadline: November 20, 2015)

Purpose: To formulate an action plan to promote development in Information and communications field, of which will lead to the problem solving.

Each participant is required to make a presentation of his/her Interim Report in his/her organization and supply necessary information based on comments/feedback from his/her organization.

What is to be added to the Interim Report for the Final Report:
- ✓ Feedback from the organization
- ✓ Supplemental information

Each participant's organization is required to provide comments on his/her Interim Report and to submit the revised report as the Final Report **by November 20, 2015.**

VI. ANNEXES:

1. Reference (Course schedule in 2014) (ANNEX 1)
2. Job Report (ANNEX 2)
3. Selected Rural Area Information & Map (Annex 3)
4. Inception Report (ANNEX 4)

ANNEX 1
Reference (Course schedule in 2014)
(The below contents may be subject to changes in 2015)

Course Title;
"Building and Designing of ICT Infrastructure for Bridging Digital Divide in rural area (J14-04243)"

Date		Time			Subject	Accommo dation
7/24	Thu	9:30	～	12:00	Briefing	
		13:30	～	14:30	Program Orientation	
7/25	Fri	9:30	～	16:00	General Orientation	
7/26	Sat				off	
7/27	Sun				off	
7/28	Mon	9:30	～	12:30	Outline of the Telecommunications in Japan	
		13:30	～	16:30	Briefing and Discussion for Interim Report (check each participant's map and other data)	
7/29	Tue	9:00	～	13:00	Presentation of Inception Report	
		13:00	～	14:30	Welcome Party	
7/30	Wed	9:30	～	12:30		
		13:30	～	16:30		
7/31	Thu	9:30	～	12:30	PCM Methodology	JICA Tokyo
		13:30	～	16:30		
8/1	Fri	9:30	～	12:30		
		13:30	～	16:30		
8/2	Sat				off	
8/3	Sun				off	
8/4	Mon	9:30	～	12:30	ICT Development Strategy: Global Challenge for Rural Community	
		13:30	～	16:30	Considerations to provide Universal Service	
8/5	Tue	9:30	～	12:30	Development of Rural Telecommunications	
		13:30	～	16:30	Fundamentals of Rural Telecommunications	
8/6	Wed	9:30	～	12:30	Mobile Systems-Systems Overview and GSM	
		14:30	～	16:00	Visit: NTT docomo show room	
8/7	Thu	9:30	～	12:30	Radio Access Network Desighn (W-CDMA) Disaster recover after Great East Japan Earthquake	

		13:30	～	16:30	LTE Summary	
8/8	Fri	9:30	～	12:30	Fundamentals of Optical/Photonic Networks	
		13:30	～	16:30	Sensor Network	
8/9	Sat				off	
8/10	Sun				off	
8/11	Mon	9:30	～	12:30	Fundamentals of Rural Telecommunications Network	
		13:30	～	16:30		
8/12	Tue	9:30	～	12:30	Network Planning Workshop	
		13:30	～	16:30		
8/13	Wed	9:30	～	12:30		
		14:00	～	16:00		
8/14	Thu	9:30	～	12:30		
		13:30	～	16:30		
8/15	Fri	9:30	～	12:30		
		13:30	～	16:30		
8/16	Sat				off	
8/17	Sun				off	
8/18	Mon	9:30	～	12:30	Actively Promote Use of ICT utilization in Rural Area	
		13:30	～	16:30	Network Planning Workshop	
8/19	Tue	9:30	～	12:30	Feasibility Study Items Necessary	
		13:30	～	16:30	Local governments' effort in rural telecommunication	
8/20	Wed	10:00	～		travel to Miyazaki, Kyusyu Island	Hotel
8/21	Thu	10:00	～	15:00	Visit: ①IRU Implementation in Shin-tomi Town	
		15:00	～		travel to Osaka	
8/22	Fri	10:00	～	12:00	Visit: ②Production site of latest ICT equipment in Mitsubishi Electric Corp.	Hotel
		14:30	～	16:30	Visit: ③ Near Future Technology Trends in NTT West R&D KANSAI Open room	
8/23	Sat	8:30	～	12:30	Kyoto Morning Tour	JICA Tokyo
					travel back to TIC	
8/24	Sun				off	
8/25	Mon	9:30	～	12:30	Interim Report (Network Planning) introduction	

		13:30	〜	16:30	Interim Report (Network Planning)
8/26	Tue	9:30	〜	12:30	Interim Report (Network Planning)
		13:30	〜	16:30	
8/27	Wed	9:30	〜	12:30	
		13:30	〜	16:30	
8/28	Thu	9:30	〜	12:30	
		14:30	〜	15:30	Visit: NEC Innovation World
		15:30	〜	16:30	Wireless Broadband Access
8/29	Fri	9:30	〜	12:30	Interim Report (Network Planning)
		13:30	〜	16:30	
8/30	Sat	off			
8/31	Sun	off			
9/1	Mon	9:30	〜	12:30	Interim Report (issues)
		13:30	〜	16:30	
9/2	Tue	9:30	〜	12:30	Interim Report (solutions)
		13:30	〜	16:30	
9/3	Wed	9:30	〜	12:30	Interim Report (solutions)
		13:30	〜	16:30	
9/4	Thu	9:30	〜	12:30	Interim Report (Presentation)
		13:30	〜	16:30	
9/5	Fri	10:00	〜	11:00	Evaluation Meeting
		11:00	〜	11:30	Closing Ceremony
		11:30	〜	13:00	Farewell Party

ANNEX 2

Job Report

- ✓ <u>All the nominees are required to submit a Job Report</u>, which is **essential for screening the nominees.** Those who do not submit this report will be disadvantaged during the selection process due to the lack of relevant professional information. Please make sure to submit the report without failing.

- ✓ This report consists of two parts, **Part 1 to be filled in by the nominee** and **Part 2 to be filled in by the supervisor of the nominee**.

- ✓ The report should be submitted together with the Application Form.

Part 1: Filled in by the Nominee

1) Regarding the organization the participant works for
1-1）Background of the organization (i.e. main field of business, etc.)

1-2）Vision and Strategy for developing communications and information environment

1-3）Organization's projects for rural area (completed, on-going and planned projects)

2）Regarding the nominee
2-1) Main field and experience of your work

	Main Field (tick one)	Experience: if yes, tick as necessary	Number of working years
1. Optical fiber Transmission			
2. Radio wave Transmission			
3. Satellite Communication			
4. I.P.			
5. Operation & Maintenance			
6. Network Planning			
7. Others ( )			

2-2) Details of your position and duties in network planning

FROM (MONTH/YEAR):	TO (MONTH/YEAR):	TITLE OF YOUR POST :
NAME OF EMPLOYER:		TYPE OF BUSINESS:
DESCRIPTION OF YOUR DUTIES:		

FROM (MONTH/YEAR):	TO (MONTH/YEAR):	TITLE OF YOUR POST :
NAME OF EMPLOYER:		TYPE OF BUSINESS:
DESCRIPTION OF YOUR DUTIES:		

FROM (MONTH/YEAR):	TO (MONTH/YEAR):	TITLE OF YOUR POST :
NAME OF EMPLOYER:		TYPE OF BUSINESS:
DESCRIPTION OF YOUR DUTIES:		

2-3) Experience in outside-plant networking
    a. Title of your position:

    b. Description of your duties:

2-4) Involvement/ duties in developing communications and an information environment at present or in the future

3）Your expectations of this program
3-1) What do you think you need to promote communications development and an information environment?

3-2）What do you want to learn most in this program?

Name:
Organization:
E-mail Address:
Date:
Signature:

Part 2: To Be Filled in by the Supervisor of the Nominee

This report will be used only for screening the nominees for this course. This part should be filled in by the supervisor of the nominee and will constitute an important part of the selection process together with "Part 1" which is to be filled in by the nominee.

This program requires active participation of the organization that the participant works for during the preliminary and final phases of the program. The specific cooperation required is mentioned below. Please be aware of this requirement when filling out the application.

- ➢ The participant of this program is required to submit reports before and after the training program in Japan, which may require preparation during ordinary working hours.
- ➢ Prior to submitting the Inception Report by the participant, the organization must select the model area, where rural telecommunications network development will be planned in Japan during the program.
- ➢ Feedback should be given on the content of Interim Report, which will be presented by the participant on his/her return home from Japan.

1) What does your organization need to promote communications development and an information environment?

2) What do you expect the nominee to learn in this program?

3) Possibility of the nominee to be involved in developing communications and information environment. If so, please describe the details of his/her expected work duties.

Name: _____

Organization: _____

E-mail Address: _____

Date: _____

Signature: _____

ANNEX 3

Selected Rural Area Information & Map

1. Selected Rural Area Information

1.1 Basic Information of the Selected Area

(1) Name of the selected area

(2) Surface/Square of the area

(3) Population(by each town/village in the selected area)

(4) The background of the area (e.g. topography, history, on-going project, etc.)

(5) The characteristics of the area
   (e.g. Main industry, Residential area or not, Rural or remote, Distance from city nearby, Economical activities, Government office(hospital, post office, town/village office)) etc .)

(6) The reasons why the area was selected

(7) Future growth estimations regarding industry, population, etc.

(8) Topographic map(s) of the area

Please prepare a geographical map(s) of the selected rural area and bring it to Japan. Topographic map(s) needs appropriate contour (altitude) lines, map(s) of 1/50.000 is recommendable.
It is preferable to prepare 2 kinds of maps, such as map(s) of the entire province or country and map(s) of selected area(s).

Note:
See example of a topographic map; "2. Map of the selected rural area" (p.24).

(9) Other information

1.2 Issues To Overcome in the Selected Area

Please describe the problems in the selected rural area and as many solutions as possible

following the example. As your ideas do not need to be very precise, find at least 3 issues.

<Example>

The problem in rural areas: In area A, the income of farmers is very low. One of the reasons is because they do not know the market price, so they tend to sell their crops very cheap due to price control by buyers.
Your idea to resolve the problem: Farmers sell their crops at a reasonable price.
The means of solution, if you have any idea: Regional office sends the market price of crops every week by SMS text massage.

The problem in rural areas:
Your idea to resolve the problem:
The means of solution, if you have any idea:

The problem in rural areas:
Your idea to resolve the problem:
The means of solution, if you have any idea:

The problem in rural areas:
Your idea to resolve the problem:
The means of solution, if you have any idea:

1.3 Existing infrastructure in the Selected Area

Please plot on the map or confirm the position of existing necessary facilities for network planning such as existing fixed optical fiber or metallic lines, base stations of mobile system, electrical power facility, etc. by the time Core Phase starts.

(1) Users and subscribers
- Number of existing fixed telephone subscribers

- Number of existing Mobile phone subscribers

- Number of existing Internet network (PC terminals) users

(2) Connection system(s); existing telecommunication network that new networks can connect to, in particular cellular networks

(3) Legacy Infrastructure; existing facilities that can be utilized for new installation of radio equipment, base stations, repeater stations, etc.
  - Premises;

- Power supplies;

- Access road;

(4) Other information
(e.g. Situation of existing telecommunication network in/ around selected area such as optical network, mobile network and/ or its capacity, etc.)

1.4 Cost of Equipment and Facilities

(1) Cost of equipment in the selected area; average price of equipment which will be used for rural network projects. (This information will be used in "Network Planning Drills". You need to select necessary equipment and gather information about the costs.)

Name of Equipment	Costs (US$ preferable)

(2) Local costs in the selected area; price of telecommunication facilities and others essential in telecommunication projects.

Items	Price (US$)
1) Premises	
a. Land / 100m² City	
Rural area	
Mountain for repeater station	
b. Access Road to repeater station (8m- width)	
c. Building 100m² for office or base station	
20m² for repeater or terminal station	
2) Antenna Supporter	
a. Self-supporting tower 50m	
20m	
b. Guyed mast 50m	
20m	
15m	
c. Pole 10m	
5m	
3) Line Installation (material and installation	
a. AC Power Line / km	
b. Subscriber pair cable / km	
c. Optical cable (4 cores) / km with pole	
with existing pole	
4) Personnel costs / day	
a. Engineer	
b. Technician	
c. Rigger	
d. Worker	

* Gasoline consumption
  Car; 1 liter / 10km, Engine generator; 10kVA : 3.6 liter / hour, 15kVA : 5.5 liter / hour

2. Map of the Selected Rural Area

A map with appropriate contour (altitude) line is necessary.

Sample 1 **(map(s) of selected area(s))**

1/50,000

Note:
When participants come to Japan, please bring a map (paper or digital data) of the selected area. The map data should be made of Word, Excel, Text files, JPEG data etc. In the network planning practice, the map will be needed because participants will be asked to plot a network on the map.

Sample 2 **(map(s) of an entire province or country)**

Please square off the selected area in the map showing the entire province or country as shown in Sample 2 below.

ANNEX 4

Inception Report

All participants are required to fill in this form and submit it as an "Inception Report" **by July 10, 2015.**

You will need the information and data in the Inception Report for two purposes in Japan. <u>Firstly, you are going to make a presentation of the summary of your "Inception Report". Secondly, you will need the information and data together with "Selected Rural Area Information (Annex3)", when preparing the "Interim Report" at the end of the program in Japan.</u>

Many lectures and drills require that all participants review the current condition of the communications and information environment thoroughly and bring information that will be required for this Inception Report. As the Inception Report is crucial for your successful performance in the training, you are recommended to start working on your Inception Report as soon as possible.

Among all the sections, "Selected Rural Area Information" and map of the selected area are most essential in preparing the Interim Report. Accuracy of data brings Successful completion, therefore, please make sure to bring necessary information and data. Please combine the revised content of the Annex 3 Selected Rural Area Information that you have already submitted with the other parts of your Inception Report.

  ✓ **Selected rural area information**
    When you write your "Interim Report" in Japan, you will need relevant information to complete. It is recommended that participants collect the latest and most accurate data to ensure an effective training experience.

  ✓ **Map of the selected rural area**
    You are going to plan communications development and information environment on the map of the selected rural area. Therefore, <u>a map with appropriate contour (altitude) line is necessary</u> to estimate the line-of-sight in a radio transmission path. The map can be in any form (e.g. paper, data, etc.).

If you have any questions about Inception Report, please contact
tictee@jica.go.jp

Inception Report 2015
for "Building and Designing of ICT Infrastructure
in Rural Area"

Name: _____

Country: _____

1. Organizational Information

1.1 Organization which you belong to
(1) Name

(2) Date of Foundation

(3) Home Page Address

1.2 Type of Organization (select appropriate one)
Government Body
State Owned Company or Public
Private Company (Privatized year _____)
Others

1.3 Organization Chart (Please attach herewith)

1.4 Profile of Organization
(1) Business Outline

(2) Capital in thousand US dollars	$
(3) Operation Revenue in thousand US dollars	$
(4) Operation Expense in thousand US dollars	$
(5) Total communication and information environment Asset in thousand US dollars	$
(6) Total Number of Employees	
a. Number of Administrative Employees	
b. Number of Technical Employees	

1.5 Country Data
(1) Population

Year	2012	2013	2014	present
Population				

(2) Square (km^2)

2. National Telecommunications Infrastructure Information

2.1 Regulatory Authority
(1) Name of Regulatory Authority that supervises or controls your organization

(2) Organization Chart of the authority (Please attach herewith)

2.2 Privatization of Telecommunication Services
(1) Telecommunication services in your country are already privatized?

Mobile	Yes / No
Internet	Yes / No
Fixed Line	Yes / No

(2) If "No", is there a national plan to privatize?

Yes / No   If "Yes", when will it be privatized?   Year _____

2.3 Telecommunication Services in Your Country

Numbers of Companies/Organizations (Competitors) providing domestic telecommunications services	

\<Companies Providing Domestic Telecommunication Services\>
as of year 20__

	Name of company	Service share (%)		
		Mobile	Internet	Fixed line
1				
2				
3				
4				
5				

* When the number of companies is more than 5, please make additional lines

\<Mobile Phone Services\>

(1) Total number of mobile phone subscribers	
(2) Number of mobile phone subscribers per 100 inhabitants	
(3) Tariff (Typical)	
a. Basic charge	
b. Call charge	
c. Other charges	

(4) Increase/Decrease of Mobile Phone Subscribers' Density in Your Country

Year	2009	2010	2011	2012	2013	2014	Present
Mobile Phone Subscribers' Density*							

* Mobile Phone Subscribers' Density = (Number of Mobile Phone Subscribers / Population) × 100 (%)

(5) Increase/Decrease of Mobile Phone Subscribers' Density in Your Country Except Capital City

Year	2009	2010	2011	2012	2013	2014	Present
Mobile Phone Subscribers' Density*							

* Mobile Phone Subscribers' Density = (Number of Mobile Phone Subscribers / Population) × 100 (%)

\<Internet\>

(1) Number of Internet users in your country	
(2) Number of estimated PCs in your country	
(3) Tariff	
a. Basic charge	
b. Flat rate charge	
c. Other charges	

(4) Increase/Decrease of Internet in Your Country

Year	2009	2010	2011	2012	2013	2014	present
Number of users							
Internet users Density*							

* Internet users Density = (Number of uses / Population) × 100 (%)

\<Fixed Telephone Services\>   as of year 20__

(1) Total Number of Telephone Subscribers	
(2) Number of Telephone Subscribers per 100 inhabitants	
(3) Domestic Telephone Tariff (Typical)	
a. Initial fees (Installation fee, Subscription fee, etc.):	
b. Basic charge (Monthly)	
c. Call charges (Per unit)	
Local call	
Toll call	
d. Other charges	
(4) Revenue per line*	
(5) Expenses per line**	

* Revenue per line; the figure dividing operation revenue by the number of activated lines of a fixed line telephone company in your country.

** Expenses per line; the figure dividing operation expenses except depreciation by the number of activated Lines of a fixed line telephone company in your country.

(6) Increase/Decrease of Fixed Telephone Subscribers' Density in Your Country

Year	2009	2010	2011	2012	2013	2014	Present
Fixed Telephone Subscribers' Density*							

* Fixed Telephone Subscribers' Density = (Number of Fixed Telephones Subscribers / Population) × 100 (%)

(7) Increase/Decrease of Fixed Telephone Subscribers' Density in Your Country except Capital City

Year	2009	2010	2011	2012	2013	2014	Present
Fixed Telephone Subscribers' Density*							

* Fixed Telephone Subscribers' Density = (Number of Fixed Telephones Subscribers / Population) × 100 (%)

2.4 Backbone Network Between Capital and Cities/Rural Areas

(1) Backbone network between capital city and major cities
Please fill in the table using following numbers.
Wide Use-1, Moderate Use-2, Limited Use-3, Not in Use-4

	Microwave	Optical Fiber	Satellite
Present			
Future			

(2) Backbone network between major cities and rural areas
Please fill in the table using following marks.
Wide Use-1, Moderate Use-2, Limited Use-3, Not in Use-4

	Microwave	Optical Fiber	Satellite
Present			
Future			

2.5 Telecommunication Systems for Rural Areas

(1) Typical example of rural network configuration in connection with the domestic network
(Please attach herewith)

(2) Technologies Applied to Rural Telecommunication
Please fill in the table using following number.
Wide Use-1, Moderate Use-2, Limited Use-3, Not in Use-4

	Open Cable Wire	HF System	VHF /UHF /SHF point to point	WLL	Cellular	Satellite	Optical Fiber
Present							

(3) Power facilities applied to Rural Telecommunication
Please fill in the table using following number.
Wide Use-1, Moderate Use-2, Limited Use-3, Not in Use-4

	Commercial Electric Power	Engine Generator system	Solar Power system	Wind-Driven Generator	Waterpower generator	Thermionic generator	Others
Present							
Future							

(4) Other information about rural telecommunication in your country

2.6 Current Problems in Rural Telecommunications and Countermeasures That Have Been Considered

(1) Are there areas where there is no access to any telephone?

     Number of villages without telephone access: _____

     Rate of population without telephone access: _____

     Is there any project or plan to reduce villages/population without telephone access? Explain the on-going project or future plan briefly.

(2) Technical problems (systems, facilities, etc.)

(3) Others

2.7 Development of Human resources

     (skills, knowledge of staff, current effort, future plans etc.)

3. National Communications and Information Environment Projects

3.1 National plan to develop rural telecommunications in conjunction with evolution plan for city, town.

(1) Cellular Mobile

(2) Fixed Broadband Services

3.2 Plan of global single standard cellular mobile network based on 4G LTE.

End

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 objective.

JICA