

# Knowledge Co-Creation Program (Group & Region Focus)

**GENERAL INFORMATION ON** 

Hydrography for Charting and Disaster Management (Internationally Accredited Category B)

## 課題別研修 「海図作製技術 –航行安全・防災のために–(国際認定資格B級)」 JFY 2019 NO. J19-04210/ ID. 1984552

Course Period in Japan: From June 19<sup>th</sup> to December 7<sup>th</sup> 2019

This information pertains to one of the JICA Knowledge Co-Creation Program (Group & Region Focus) 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.

'JICA Knowledge Co-Creation Program (KCCP)' as a New Start

In the Development Cooperation Charter which was released from the Japanese Cabinet on February 2015, it is clearly pointed out 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 center of mutual learning process.

## I. Concept

## **Background**

Hydrographic survey and nautical chart preparation techniques are essential for maritime traffic safety and sustainable growth of seaborne trade. It is also very important for disaster management planning as well as maritime environmental preservation measures against large-scale disasters (e.g. Tsunami and oil spill incidents).

Since July 2012, it has become compulsory for many ships engaged in international navigation to equip an electronic navigational chart display system. Therefore, it is an urgent issue for coastal countries to improve hydrographic survey and nautical chart preparation techniques.

Considering these circumstances, this program focuses on capacity development of government officials for hydrographic survey and nautical charts preparation.

This course was designated by FIG/IHO/ICA in 1988 to issue Internationally Accredited Category B certificates for hydrographic surveyors\* after the successful completion (including examination) of the course.

### For what?

This program aims to train the official hydrographic surveyors in the competency areas which are necessary for survey tasks rated as an internationally Accredited Category B standard. After successful completion of the program(including examination), participants are expected to receive a certification of Internationally Accredited Category B.

### For whom?

The program is offered to mid-level engineers who belong to the government or government-affiliated agencies which are in charge of hydrographic surveys or nautical chart.

### How?

The curriculum of the course consists of 60% lectures and 40% practices. It includes practical field training, observations and site visits of various research institutions to fulfill the requirements of the International Standards of Competence for Hydrographic Surveyors.

### \*NOTE: Internationally Accredited Category B for Hydrographic Surveyors

In order to bring the hydrographic surveys of various coastal countries to a certain level of quality, the necessity of standardizing competence for hydrographic surveyors on an international basis has become clearly apparent. Hence, the FIG (Federation Internationale des Geometres, or International Federation of Survey), the IHO (International Hydrographic Organization) and the ICA (International Cartographic Association) jointly established the FIG/IHO/ICA International Advisory Board on Standards of Competence for Hydrographic Surveyors in 1977. The Advisory Board sets international standards and accredits various training courses in hydrographic survey as either Category A or B courses.

## II. Description

### 1. Title (J-No.):

Hydrography for Charting and Disaster Management (Internationally Accredited Category B) (J19-04210)

### 2. Course Period in JAPAN

June 19, 2019 to December 7, 2019 (172 days)

#### 3. Target Regions or Countries Myanmar and Thailand

- **4. Eligible / Target Organization** Governmental Authorities responsible for hydrographic survey or nautical chart (hydrographic office, port authority, maritime bureau)
- 5. Course Capacity (Upper limit of Participants) 8 participants
- 6. Language to be used in this program: English

### 7. Overall Goal

Hydrographic data is collected and nautical charts are prepared in coastal countries.

### 8. Course Objective:

To receive a certification of International Accredited Category B by acquiring the hydrographic survey techniques and understanding the utilization of hydrographic data.

### 9. Expected Module Output

- 1) To understand the theoretical concept, surveying and drafting techniques for hydrography
- 2) To be able to collect the necessary data from the field surveying for hydrography
- 3) To be able to draft the smooth sheet based on the collected data
- 4) To understand the utilization of hydrographic chart through using the tool such as GIS

### 10. Module

1) Lectures and Practice

Under the International Standards of Competence of Hydrographic Surveyors, the following major subjects will be covered in the training course.

Contents
Basic Subjects
<ul> <li>Mathematics and statistics</li> </ul>
<ul> <li>Information &amp; communication technology</li> </ul>
Physics
Nautical science
Essential Subjects
Bathymetry
Water levels and flow
Positioning
Hydrographic practice
<ul> <li>Hydrographic data management</li> </ul>
Environmental science
Legal aspects
• GIS
Hydrographic Field Practices in Port
Onboard Training (survey vessel / boat)
Maritime Disaster Prevention
Submarine earthquake and tsunami, tsunami simulation and tsunami
information maps, etc.
Study Tours

Tidal instruments, vessel traffic system, Japan Geological Survey and Geospatial Information Authority of Japan, etc.

#### 2) Examination

The course will be conducted in the form of lectures, video screenings and slideshows, practice, and field training on survey vessels. An examination will be conducted on each subject.

Participants are required to pass the examination, in principle, with a score over 60 points.

### 11.Training equipment

Personal computers for each participant are available during the lectures at the Hydrographic and Oceanographic Department (HOD), Japan Coast Guard (JCG).

Following equipment will be also provided and used during the course:

- Survey vessels belonging to the HOD, JCG
- · Electronic positioning systems
- Global Navigation Satellite System (GNSS)
- Echo sounders (4 beam & multi-beam )
- Side scan sonar
- · Electro-optical range finders
- Theodolites and sextants
- Automatic hydrographic data logging and processing system
- Tide gauges
- Current Meters
- Handheld calculators
- Various drafting instruments

Note: The above contents may be subject to change.

### 12. Program of year 2018(last year) (For your reference)

The program of this year will be designed based on the last year's program. Detailed information is provided in <u>V. Other Information</u>.

## **III.** Conditions and Procedures for Application

### 1. Expectations to the Participating Organizations:

- (1) This program is designed primarily for organizations that intend to address specific issues or problems identified in their operation. Participating organizations are expected to use the project for those specific purposes.
- (2) This program is enriched with contents and facilitation schemes specially developed in collaboration with relevant prominent organizations in Japan. These special features enable the project to meet specific requirements of applying organizations and effectively facilitate them toward solutions for the issues and problems.

### 2. Nominee Qualifications:

Applying Organizations are expected to select nominees who meet the following qualifications.

### (1) Essential Qualifications

1) Current Duties:

Hydrographer in an authority responsible for hydrographic survey or nautical chart (hydrographic office, port authority, maritime bureau)

### 2) Educational Background:

Have obtained credits for two years of courses in mathematics and physics on the level of at least a technical college or equivalent educational institution

### 3) **Experience in the relevant field:**

Be technical college graduates or equivalent with at least two years of occupational experience in hydrographic survey

### 4) Language:

Be proficient in spoken and written English (Please attach an official certificate for English ability such as TOEFL, TOEIC etc, if any)

### 5) Health:

Must be in good health, both physically and mentally, to participate in the program in Japan. Pregnant participants are not acceptable, because this course includes one month field work in a port as a hydrographic survey practice as well as short onboard training by a survey vessel with some hard exercise.

### 6) Others:

Qualifications of nominees who belong to military or other relevant organization will be judged taking into consideration his/her duty, position in the organization, and any other information in a comprehensive manner.

### (2) Recommendable Qualifications

Gender Consideration: JICA is promoting Gender equality. Women are encouraged to apply for the program.

### 3. Required Documents for Application

- (1) Application Form: The Application Form is available at the JICA office (or the Embassy of Japan). Typing in the form will be recommended to avoid misunderstanding.
- (2) Attachments: to be submitted with the Application Form.

(2)-1 Photocopy of passport: 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 and Passport number

(2)-2 Country Report : Each applicant is requested to prepare a report on the subjects listed in **ANNEX 1**. Participants will be required to present his or her country report during the program.

(2)-3 Questionnaire: Each applicant should fill in the questionnaire, which is also used for the screening (format attached - see ANNEX 2).

(2)-4 Certificate of Credits: Certificate of the academic credits mentioned in Section III-2.-(1)-2) above. The certificate should be issued by the authority of the relevant college or educational institution.
(2)-5 Nominee's English Score Sheet: If you have any official documentation of English ability. (e.g., TOEFL, TOEIC, IELTS)

## 4. Procedures 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 Apr., 25 (Thursday)**, **2019**)

### (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*.Qualifications of applicants who belong to the military or other military-related organizations and/or who are enlisted in the military will

be examined by the Government of Japan on a case-by-case basis, consistent with the Development Cooperation Charter of Japan, taking into consideration their duties, positions in the organization, and other relevant information in a comprehensive manner.

### (3) Notice of Acceptance

Notification of results will be made by the JICA office (or the Embassy of Japan) not later than <u>May, 15 (Wednesday), 2019</u>.

### 5. 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 home countries at the end of the program in accordance with 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. Junko Sasaki (tictee@jica.go.jp)

## 2. Implementing Partner:

(1) Name: Japan Coast Guard, Hydrographic and Oceanographic Department

URL: http://www1.kaiho.mlit.go.jp/jhd-E.html

(2) Name: Japan Hydrographic Association URL: <u>http://www.jha.or.jp/en/jha/</u>

## 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 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 <u>JICA TOKYO</u>, JICA will arrange alternative accommodations for the participants.

Please refer to facility guide of TIC at its URL,

https://www.jica.go.jp/tokyo/english/office/index.html

## 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 <u>not</u> 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 workshop, and other matters.

### <For Accepted Participants only>

### 7. What to bring to Japan:

### (1)Materials for Discussion:

If you have any materials (information etc.) which you consider useful for discussion with lecturers, instructors and other participants to discuss, please bring them to Japan.

### (2)Latest Brochures of your organization:

If possible, please bring two (2) copies of the latest brochure about your organization.

### (3)Clothes

It is recommended to bring the following clothes.

One set of formal suits

(for courtesy calls to high officials and official ceremonies)

• A warm jacket for winter season

(The temperature in Tokyo in December is normally between 3-15 degrees Celsius.)

# V. Other Information

### 1 Scene of the program

You can easily imagine how the program is going when you see the movie as below. <u>https://www.youtube.com/watch?v=Vm-Dy2M1vHY</u>

### 2 Program of Year 2018(last year )(For your reference)

Date		Subject	Place
Jun 24	Sun	Arrival in Japan	JICA Tokyo
25	Mon	Briefing Lecture on JICA programs Medical examination	JICA Tokyo Cross clinic
26	Tue	General Orientation	JICA Tokyo
27	Wed	JCG Orientation at JHOD Courtesy Call on Chief Hydrographer	JHOD
28	Thu	Observation of JHOD facilities Country report presentation	JHOD
29	Fri	Geodesy	JICA Tokyo
30	Sat		
Jul 1	Sun		
2	2 Mon Geodesy / Statistics (Treatment of errors)		JICA Tokyo
3	Tue	Statistics (Treatment of errors) / Optics and Laser	JICA Tokyo
4	Wed	Underwater Acoustics	JICA Tokyo
5	Thu	Underwater Acoustics	JICA Tokyo
6	Fri	Hydrographic Survey (Aids to navigation) Outline of IHO	S.R. at JHOD
7	Sat	Nautical Publications	
8	Sun		
9	Mon	Computer	S.R. at JHOD
10	Tue	Tide (Basics)	S.R. at JHOD
11	Wed	IHO Standards Nautical Publications	S.R. at JHOD
12	Thu	Tide (Measurement & Analysis)	S.R. at JHOD
13	Fri	Tide (Tidal information) Pilotage	S.R. at JHOD

Date		Subject	Place
14	Sat		
15	Sun		
16	Mon	Public Holiday	
17	Tue	Tide (Tidal information, tidal current)	S.R. at JHOD
18	Wed	Monitoring Survey (Water current)	S.R. at JHOD
19	Thu	Monitoring Survey (Marine pollution)	S.R. at JHOD
20	Fri	Study tour to Sonic Corp. (Lecture and practice on tide guage)	Sonic Corp.
21	Sat		
22	Sun		
23	Mon	Map Projection	S.R. at JHOD
24	Tue	Map Projection	S.R. at JHOD
25	Wed	Cartography (Basic theory)	S.R. at JHOD
26	Thu	Cartography (Basic theory, practice) Visit to Buyodo Co. (Chart Printing Co.)	S.R. at JHOD Buyodo (Tokyo)
27	Fri	Cartography (Practice)	S.R. at JHOD
28	Sat		
29	Sun		
30	Mon	Cartography (ENC)	S.R. at JHOD
31	Tue	Cartography (ENC)	S.R. at JHOD
Aug 1	Wed	Navigation	Japan Marine
2	Thu	Navigation / Ship Maneuvering	Science Inc.
3	Fri	Ship Maneuvering	(Kawasaki City)
4	Sat		
5	Sun		
6	Mon	GNSS Survey	S.R. at JHOD
7	Tue	GNSS Survey	S.R. at JHOD
8	Wed	Cartography (S100) Cartography (Digital Chart Compilation)	S.R. at JHOD
9	Thu	Lecture cancelled due to typhoon	
10	Fri	Meteorology	S.R. at JHOD
11	Sat	Public Holiday	
12	Sun		

Date		Subject	Place
13	Mon	Oceanography	S.R. at JHOD
14	Tue	Cartography (Digital Chart Compilation) JHOD's Response to 2011 Earthquake and Tsunami	S.R. at JHOD
15	Wed	Monitoring of Volcanic Activities Marine Disaster (Tsunami and tidal waves)	S.R. at JHOD
16	Thu	Tsunami Disaster Prevention Map Tsunami Disaster	S.R. at JHOD
17	Fri	Bathymetric Survey (Introduction to HYPACK)	Toyo Corp.
18	Sat		
19	Sun		
20	Mon	Observation of Submarine Crustal Movement Airborne Laser Survey	S.R. at JHOD
21	Tue	Submarine Topography and Geology	S.R. at JHOD
22	Wed	Sedimentology	S.R. at JHOD
23	Thu	Acoustic Profiling	S.R. at JHOD
24	4 Fri Acoustic Profiling <u>Cartography (Digital Chart Compilation)</u>		S.R. at JHOD
25	Sat		
26	Sun		
27	Mon	Swath Sounding	S.R. at JHOD
28	Tue	Swath Sounding	S.R. at JHOD
29	Wed	Dredging Visit to Dredging Site in Tokyo Bay	S.R. at JHOD Tokyo Bay
30	Thu	Photogrametry	S.R. at JHOD
31	Fri	Photogrametry	S.R. at JHOD
Sep 1	Sat		
2	Sun	AOV (Autonomous Ocean Vehicle)	
3	Mon	Estimation of Water Depth Using Satellite AOV (Autonomous Ocean Vehicle) Framework of Hydrographic Service of Japan	S.R. at JHOD
4	Tue	Legal Aspects and Responsibilities Visit to Hydrographic & Oceanographic Museum	S.R. at JHOD H&O Museum
5	Wed	Law of the Sea / Limits of Territorial Waters	S.R. at JHOD
6	Thu	Types of Hydrographic Survey	S.R. at JHOD

Date		Subject	Place
7	Fri	Specifications of Hydrographic Survey	S.R. at JHOD
8	Sat		
9	Sun		
10	Mon	Control Point Survey	S.R. at JHOD
11	Tue	Control Point Survey	S.R. at JHOD
12	Wed	Control Point Survey	S.R. at JHOD
13	Thu	Vertical Survey	S.R. at JHOD
14	Fri	Coastlining	S.R. at JHOD
15	Sat		
16	Sun		
17	Mon	Public Holiday	
18	Tue	Sounding (Single-beam sounding) Visit to Large-size Survey Ship	S.R. at JHOD
19	Wed	Sounding (Single-beam sounding)	S.R. at JHOD
20	Thu	Sidescan Sonar / Planning of Hydrographic Survey	S.R. at JHOD
21	Fri	Mid-term Evaluation Meeting Preparation for Field Training	S.R. at JHOD
22	Sat		
23	Sun	Public Holiday	
24	Mon	Substitute Day-off	
25	Tue	Loading of Survey Equipment onto Truck	S.R. at JHOD JHOD Aomi
26	Wed	Move to Beppu city Courtesy Call on Related Local Organizations	Beppu City
27	Thu	Unloading of Survey Equipment Survey Site Inspection	Beppu City
28	Fri	Installation of Temporary Tide Guage Levelling Survey	Beppu City
29	Sat	Control Point Survey (GNSS)	Beppu City
30	Sun		
Oct 1	Mon	Control Point Survey (GNSS)	Beppu City
2	Tue	Data Processing (Control Point Survey)	Beppu City
3	Wed	Traverse Survey	Beppu City
4	Thu	Traverse Survey	Beppu City

Date		Subject	Place
5	Fri	Data Processing (Traverse Survey)	Beppu City
6	Sat	Coastlining (RTK-GNSS)	Beppu City
7	Sun		
8	Mon	Coastlining (Angle measurement)	Beppu City
9	Tue	Setting Guiding Points for Single-beam Sounding	Beppu City
10	Wed	Simultaneous Tide Observation	Beppu City
11	Thu	Drawing of Sounding Sheets Outfitting of Chartered Boat for Swath Sounding	Beppu City
12	Fri	Swath Sounding by Chartered Boat	Beppu City
13	Sat	Data Processing (Swath Sounding)	Beppu City
14	Sun		
15	Mon	Data Processing (Coastlining)	Beppu City
16	Tue	Outfitting of C. Boat for Single-beam Sounding Trial run of Single-beam Sounding	Beppu City
17	Wed	Single-beam Sounding by Chartered Boat	Beppu City
18	Thu	Single-beam Sounding by Chartered Boat	Beppu City
19	Fri	Single-beam Sounding by Chartered Boat	Beppu City
20	Sat	Single-beam Sounding by Chartered Boat	Beppu City
21	Sun		
22	Mon	Side-scan Sonar Survey by Chartered Boat	Beppu City
23	Tue	Data Processing (Side-scan Sonar Survey) Photogrametric Survey On-site Check	Beppu City
24	Wed	Removal of Temporary Tide Gauge Packing of Survey Equipment	Beppu City
25	Thu	Packing of Survey Equipment Loading of Survey Equipment onto Truck	Beppu City
26	Fri	Return to Tokyo	
27	Sat	Unloading of Survey Equipment from Truck Sorting of Survey Equipment	JHOD Aomi
28	Sun		
29	Mon	Notice to Mariners & Navigational Warnings Example of GIS Application (Ceisnet)	S.R. at JHOD
30	Tue	Survey Data Processing (Tide)	S.R. at JHOD
31	Wed	Survey Data Processing (Tide)	S.R. at JHOD

Date		Subject	Place
Nov 1	Thu	Survey Data Processing (Tide)	S.R. at JHOD
2	Fri	Survey Data Processing (Control Point)	S.R. at JHOD
3	Sat	Public Holiday	
4	Sun		
5	Mon	Survey Data Processing (Sounding)	S.R. at JHOD
6	Tue	Survey Data Processing (Sounding)	S.R. at JHOD
7	Wed	Survey Data Processing (Sounding)	S.R. at JHOD
8	Thu	Survey Data Processing (Sounding)	S.R. at JHOD
9	Fri	Drawing of Survey Smooth Sheet	S.R. at JHOD
10	Sat		
11	Sun		
12	Mon	Drawing of Survey Smooth Sheet	S.R. at JHOD
13	Tue	Drawing of Survey Smooth Sheet	S.R. at JHOD
14	Wed	Making of Survey Report	S.R. at JHOD
15	Thu	Making of Survey Report Briefing on On-board Training	S.R. at JHOD
16	Fri	Gravity & Geomagnetism	S.R. at JHOD
17	Sat		
18	Sun	Move to Shizuoka City Visit to Earthquake Disaster Prevention Center Move to Shimizu	Tokyo - Shizuoka City
19	Mon	On-board Training on JHOD's Survey Ship "Meiyo"	Suruga Bay
20	Tue	On-board Training on JHOD's Survey Ship "Meiyo" Return to Tokyo	Suruga Bay - Tokyo
21	Wed	Electronics and Telecommunication	S.R. at JHOD
22	Thu	Data Telemeter Link	S.R. at JHOD
23	Fri	Public Holiday	
24	Sat		
25	Sun		
26	Mon	Substitute Day-off for Nov. 18	
27	Tue	GIS (Basics and Operation)	S.R. at JHOD
28	Wed	GIS (Spatial Data Information/ Marine GIS)	S.R. at JHOD
29	Thu	GIS (Coastline)	S.R. at JHOD

Date		Subject	Place
30	Fri	GIS (Depth / Depth Contours)	S.R. at JHOD
Dec 1	Sat		
2	Sun		
3	Mon	Maritime Policy Management of Seacoast	S.R. at JHOD
4	Tue	Preservation of Marine Environment AUV (Autonomous Underwater Vehicle)	S.R. at JHOD
5	Wed	Visit to Geospatial Information Authority of Japan (GSI) Visit to Geological Survey of Japan (GSJ)	Tsukuba City
6	Thu	Examination of Survey Smooth Sheet Drawn by Participants Tidying up Seminor Room	S.R. at JHOD
7	Fri	Evaluation Meeting Closing Ceremony	JICA Tokyo
8	Sat	Leaving Japan	

• S.R stands for Seminor Room.

• JHOD stands for Japan Hydrographic and Oceanographic Department, Japan Coast Guard.

IAO stands for International Affairs Office of JHOD

## ANNEX 1 Country Report

### 1. Submission of Country Report

Applicants are required to submit a Country Report in MS Power Point or equivalent visual material by <u>Apr., 25 (Thursday), 2019.</u>

During the course, all participants are required to deliver a **15-20 minute** country report presentation.

### 1) Format:

Visual material for presentation (ex. MS Power Point)

2) Font:

Please use font size 24 or more

3) Number of Slides:

The report should not exceed 30 slides.

### 4) Way to submit:

Please submit it together with application form. For the detail, please inquire to the JICA office.

5) Deadline:

May 7(Tuesday), 2019

### 2. Contents of your report

### <Personal and Organizational Information>

- 1. Name of applicant
- 2. Country
- 3. Name of organization and date of its establishment
- 4. Present post of the applicant in the above organization

## 5. Organizational function

Illustrate the function of the organization to which you belong, and indicate the number of staff members of each section. How many staff members are there in your organization? What is the organization's annual budget?

#### 

- 6. Hydrographic services and activities Describe the services and activities carried out by the organization (illustrate if necessary).
- 7. Annual issue of hydrographic surveys Describe the annual hydrographic implementation issues of the organization (illustrate if necessary).
- 8. Chart, ENC, and nautical publications How many charts and ENC does your organization publish? How many copies of nautical publications does your organization publish?
- 9. Technical problems encountered Describe the technical problems that your organization is currently facing.
- 10. Future plans for hydrographic services and activities Describe future plans for hydrographic instrumentation, surveying, and activities (i.e. the acquisition of new ships, etc.).
- 11. Hydrographic survey ships

Give information on survey/research ships currently engaged in hydrographic survey carried out by your organization.

- (1) Name of ship
- (2) Displacement or gross tonnage
- (3) Date launched
- (4) Number of officers, researchers, and crew
- (5) Type of hydrographic survey instruments in use

(6) Types of surveys conducted (e.g. bathymetric survey, submarine topographic/geological survey, geomagnetic/gravity survey, etc.)

#### <Outline of maritime disaster prevention measures>

12. Disaster prevention measures taken <u>by your organization</u> Describe the maritime disaster prevention measures taken against tsunami and earthquakes.

## ANNEX 2 Questionnaire

- 1. Please write your background
- (1) Personal record in the organization
- (2) Academic background
- (3) Work record
- 2. What are your expectations for this training course?
- 3. Which of the latest survey technologies or conventional survey technologies do you feel are necessary for you? If your answer is latest, please describe what specific technologies you need to learn about?
- 4. Do you have any experience aboard a survey ship as a crew member or a surveyor?
- 5. What kind of survey equipment is used in your organization? Do you have any experience in using any such equipment?
- 6. What kind of maritime disasters have occurred in your country (e.g. tsunami, submarine volcanic eruption, etc.)? What kinds of measures are important for your country?

7. Please check the boxes either "Yes" or "No."

a)	Have you ever studied any aspect	t of the following subjects?	Ma
(1)	Mathematics		
(2)	Physics		
(3)	Optics		
(4)	Astronomy		
(5)	Oceanography		
(6)	Map projection		
(7)	Cartography		
(8)	Tides and tidal streams		
(9)	Data processing for sounding		

b) Have you ever been engaged in the following fieldwork or operations aboard a ship?If yes, please give the term.

Yes (Term	1)	No
□ (	)	
□ (	)	
□ (	)	
□ (	)	
□ (	)	
urveying)		
□ (	)	
□ (	)	
	Yes ( Term	Yes ( Term ) () () () () () () ()

(8) Submarine topographic survey (swat side scanning, etc.)	th survey, □(	)	
(9) Submarine geological survey observ	ation		
	□ (	)	
(10) Tide and tidal current observation			
	□ (	)	
(11) Correction of survey results			
	□ (	)	
(12) Data processing by GIS software			
	□(	)	

c) Do you have any experience in using the following survey instruments? If yes, please describe the term and types / models currently used in your office.

	Yes (T	erm) (Type/	Model)	No
(1) Theodolite	□ (	) (	)	
(2) Sextant	□ (	) (	)	
(3) GPS receiver	□ (	) (	)	
(4) Echo-sounder	□ (	) (	)	
(5) Tide gauge	□ (	) (	)	
(6) Automatic hydrograph	nic data			
acquisition system	□ (	) (	)	
(7) Automatic hydrograph processing system	nic data □ (	) (	)	

8. Please provide the following information of you. This is to prepare an uniform for each participant for field practices at port.

(1)Height (

- (2)Waist ( )
- (3)Size of Shoes ( )

#### 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 and 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

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