REPUBLIC OF DJIBOUTI
DJIBOUTI COAST GUARD

PREPARATORY SURVEY REPORT
ON
THE PROJECT
FOR
THE ENHANCEMENT OF THE ABILITY OF MARITIME SAFETY AND SECURITY IN THE REPUBLIC OF DJIBOUTI

OCTOBER 2021

JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)
FISHERIES ENGINEERING CO., LTD.

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Preface

Japan International Cooperation Agency (JICA) decided to conduct the preparatory survey for the Project for the Enhancement of the Ability of Maritime Safety and Security in the Republic of Djibouti and entrusted the survey to Fisheries Engineering Co., Ltd.

The survey team held a series of discussions with the officials concerned of the Government of the Republic of Djibouti, and conducted a field investigation at the study area. As a result of further studies in Japan, the present report was finalized.

I hope that this report will contribute to the promotion of the project and to the enhancement of friendly relations between our two countries.

Finally, I wish to express my sincere appreciation to the officials concerned of the Government of the Republic of Djibouti for their close cooperation extended to the survey team.

October, 2021

Kiyoshi Amada

Director General,

Infrastructure Management Department

Japan International Cooperation Agency

Summary

(1) Country Overview

The Republic of Djibouti (hereinafter referred to as “Djibouti”) has a population of 988,002 (World Bank. 2020), a land area of 23,200 km^2 (approximately 1.3 times that of Shikoku), and it has land borders with Eritrea, Ethiopia, and Somalia. As their topography extends beyond the entrance to the Red Sea the neighboring region is known as the Horn of Africa, and it is a key point for maritime transport between Europe and the Middle East and Asia via the Red Sea with 19,000 ships passing through each year.

The ships that pass through the sea areas include approximately 1,600 ships per year which have a connection with Japan (Annual Report 2020 “Japan's Actions against Piracy off the Coast of Somalia and in the Gulf of Aden”, March 2021). Thanks to the success of multilayered efforts by the international community, including anti-piracy operations by Japan's Self-Defense Forces based in Djibouti as well as the U.S. and French forces, which serve as a deterrent, the number of piracy cases in Djibouti’s sea areas had begun to decline and from 2011, when there were a peak number of 237 piracy cases, this had been reduced to zero by 2020 (International Maritime Bureau Annual Report 2020, January 2021).

The annual precipitation of Djibouti is around 124 mm. The entirety of the country’s land area has a dry zone climate, while coastal areas and inland lowlands have a desert climate, and mountainous areas have a steppe climate.

There is little surface runoff, and vegetation is essentially limited to the vicinity of dryland rivers (wadis) and a few oases. Agriculture is underdeveloped because of the country’s harsh natural environment, and herding by nomads is marginal.

About 54.34%[1] of the working population depends mainly on tertiary industries, such as the transportation of exports to Ethiopia, port services, and services connected to the foreign military forces.

The Gross Domestic Product (hereinafter referred to as “GDP”) growth rate, which had been between 4.7% and 8.4% since 2011, has been impacted by a stagnation of industrial activity related to a de facto lockdown, etc., which started due to the spread of the novel coronavirus in 2020. The growth rate for 2020, which had been initially forecasted to be 7.5%, has dropped to 1.3%[2].

However, GDP growth rate is expected to be 5.5% in 2021, and 6.1% between 2022 and 2023, due to transit trade and trade in logistics and telecommunications services with the neighboring nation of Ethiopia[3].

2001 marked the end of a decade-long civil war, and since then the country has had political stability, while Western and other forces have also been stationed in the area for regional stability and counter terrorism activities.

[1] World Bank: World Development Indicators 2020
[2] World Bank : Djibouti's Economic Update — April 2020
[3] World Bank : Djibouti's Economic Update — April 2020

(2) Project Background, History and Overview

Djibouti has adopted a national development plan called Vision Djibouti 2035 (hereinafter referred to as "Vision 2035"), and this includes a stated need to strengthen security institutions in order to protect the country from all risks. However, Djibouti's sea areas, including the Bab-el-Mandeb Strait which is an entry point to the Red Sea, suffer from challenges such as piracy, illegal activities like people smuggling, illegal fishing and smuggling, and marine accidents involving refugees.

In order to address these challenges, the Djibouti Coast Guard (hereinafter referred to as the "DCG") aims to strengthen its patrol system, with the vicinity of the strait being a priority area. However, out of the 35 DCG ships in the current fleet, only two patrol boats which were provided through Japan's grant aid in 2015 are capable of carrying out safe patrols in the strait. These two patrol boats have difficulties in conducting stable patrols in the strait during the approximately two months of the Khamsin season, when there are seasonal winds. In addition, the continuous patrol time for each voyage is limited. Therefore, an urgent challenge is upgrading patrol boats that can handle ocean waters with stability throughout the year.

Against this background, in December 2017, the Government of Djibouti requested the Government of Japan for the grant aid for the construction of two 32m to 35m class patrol boats and a 35m to 40m class pontoon, and Japan decided to implement the Project for the Enhancement of the Ability of Maritime Safety and Security.

Meanwhile, the Japan International Cooperation Agency (hereinafter referred to as "JICA") has been impacted by travel restrictions following the global spread of the novel coronavirus from 2020. As such it was decided to carry out remote surveys from September 2020 to January 2021 so as to collect and analyze as much information as possible in Japan. Subsequently, JICA dispatched a Preparatory Survey Team to Djibouti from February 17 to March 22, 2021 and a mission to explain the contents of a Draft Outline Design Report from August 25 to September 4, 2021. These delegations discussed and confirmed the details of the outline designs and items to be borne by Djibouti, and managed to obtain an agreement. The following table shows an overview of this Project.

Table 1: Project Details and Scale

	Main items	Details and scale
Patrol boats	Scale	Two 35-meter patrol boats
		Confidential due to security reasons

	Main items	Details and scale
Pontoon	Scale	One 35 m pontoon
	Mooring method	Mooring ropes and fender piles on the shore side, and fenders from the pontoon side
	Design elements	
	Dimensions	Total length 35 m, width 6 m, depth 2.7 m, draft 1.5 m
	Structural system	Post-tension prestressed concrete segment structure
	Fenders	V-type rubber fender
	Lighting equipment	Three LED lights
	Power and water supply systems	Power and water supply terminals x 1 location (3-phase 400 V, AC, 60 A x 2 terminals, single phase 220 V AC, 15 A x 1 terminal), Water supply (20 mmAq x 1 outlet)
	Other accessories	Bollards, gangways, handrails, wheel stops, life preserver rings, a case for fire extinguishers, etc.
	Ancillary equipment	Four bollards and four fender piles

(3) Project Schedule and Estimated Project Costs

When it is decided to implement this Project under the Japanese grant aid scheme, the preparation of tender documents, tender for the selection of a contractor, conclusion of the contract for project implementation, and procurement, transportation, assembly, and installation of the equipment shall be implemented after the conclusion of an Exchange of Notes (hereinafter referred to as "E/N") between the two countries.

The building period for the new patrol boats is expected to be 20.0 months for construction and 3.0 months for the preparation for transport, transportation, on site acceptance inspection and the handover, for a total of 23.0 months.

In addition, the building period for the new pontoon is expected to be 13.5 months in total, with 2.0 months for construction preparations and material procurement, 6.0 months for construction, 4.0 months for transportation from the shipyard to the local mooring site, and 1.5 months for assembly and installation work, mooring work, and ancillary work for the pontoon.

However, following requests from the DCG for a quicker deployment of the patrol boats, the possibility of shortening the work period will be pursued.

The project cost for Djibouti is estimated to be 37,730 USD (approximately 4.144 million yen), including water supply and electricity installation, bank fees, fire extinguishers, surveillance cameras, etc.

(4) Relevance of the Project

The expected effects of the implementation of this Project are as follows:

1) Qualitative effects

The patrol system in Djibouti's sea areas, including the Bab-el-Mandeb Strait, will be strengthened, which will contribute to an abatement of marine accidents, people smuggling, illegal fishing, piracy, etc., as well as ensuring safe and problem-free maritime transport and socio-economic activities.

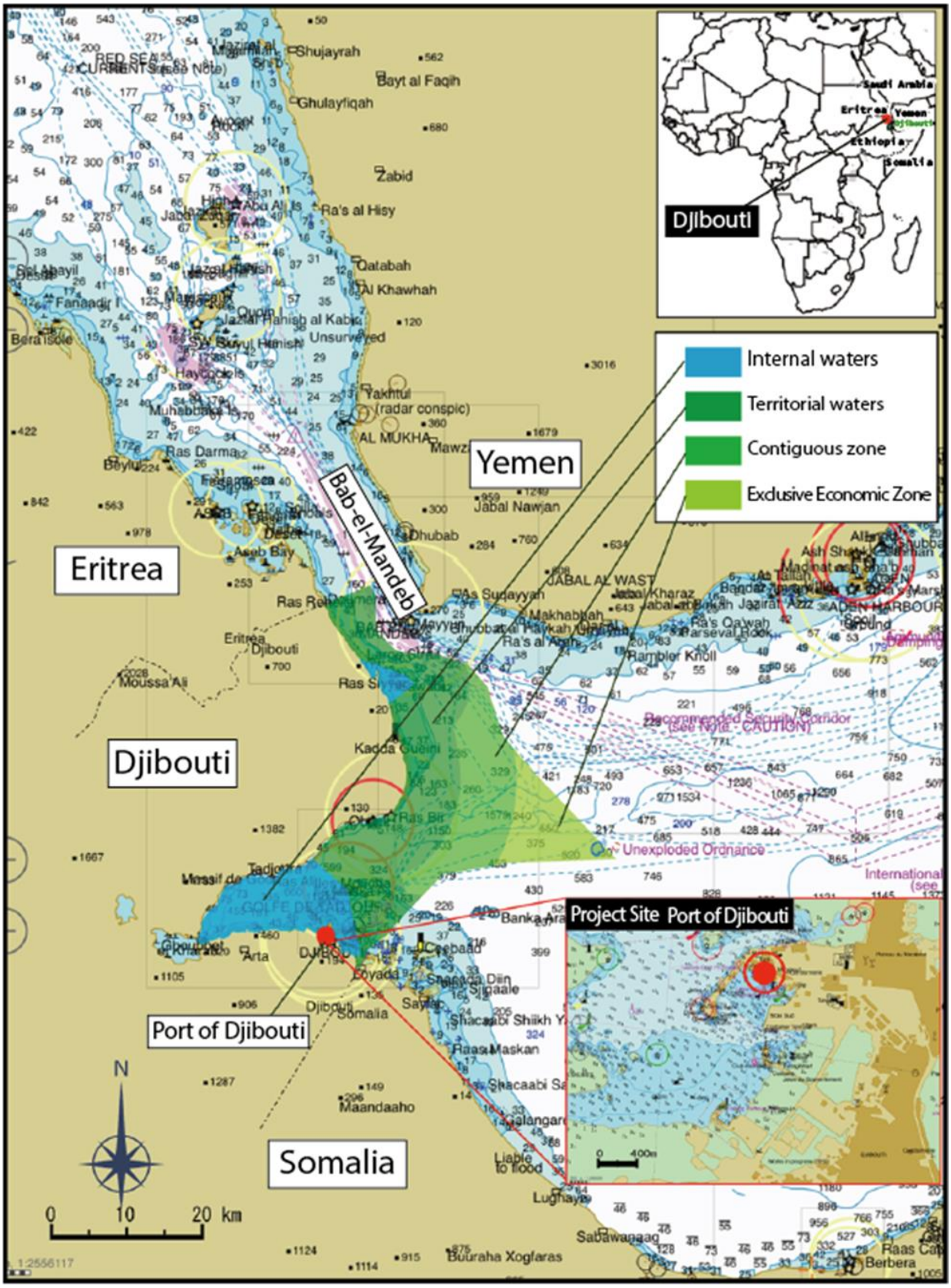
2) Quantitative effects

Indicator name	Reference value (Actual figures for 2021)	Target value (2027) (3 years after project completion)
Continuous patrol period possible per voyage	5 Days	14 Days
Seaworthiness (wave height conditions feasible for safe navigation)	Wave height of 2.5m or less	Wave height of 3.0m or less
Annual number of deployment days in priority sea areas (Bab-el-Mandeb Strait) / number of boats	62 days / 2 patrol boats	182 days / 4 patrol boats

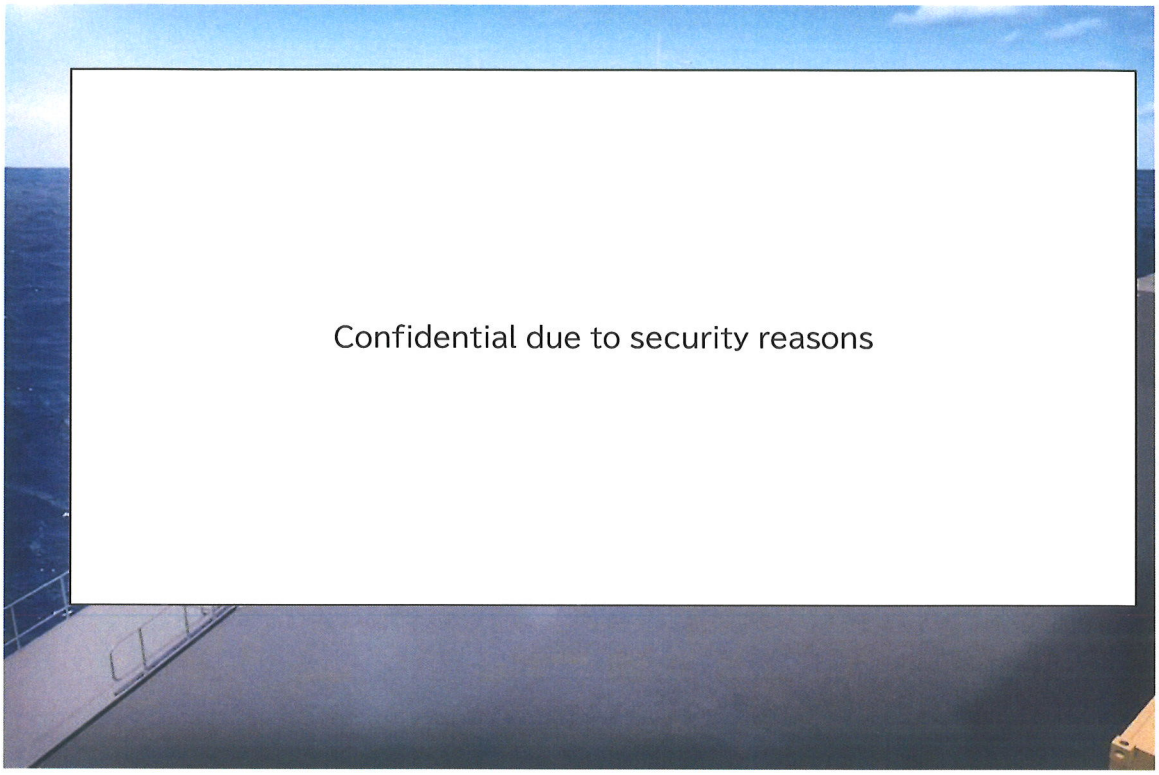
Based on the above-mentioned effects of the Project, the implementation of this Project under Japan's grant aid scheme is judged to be relevant.

Contents

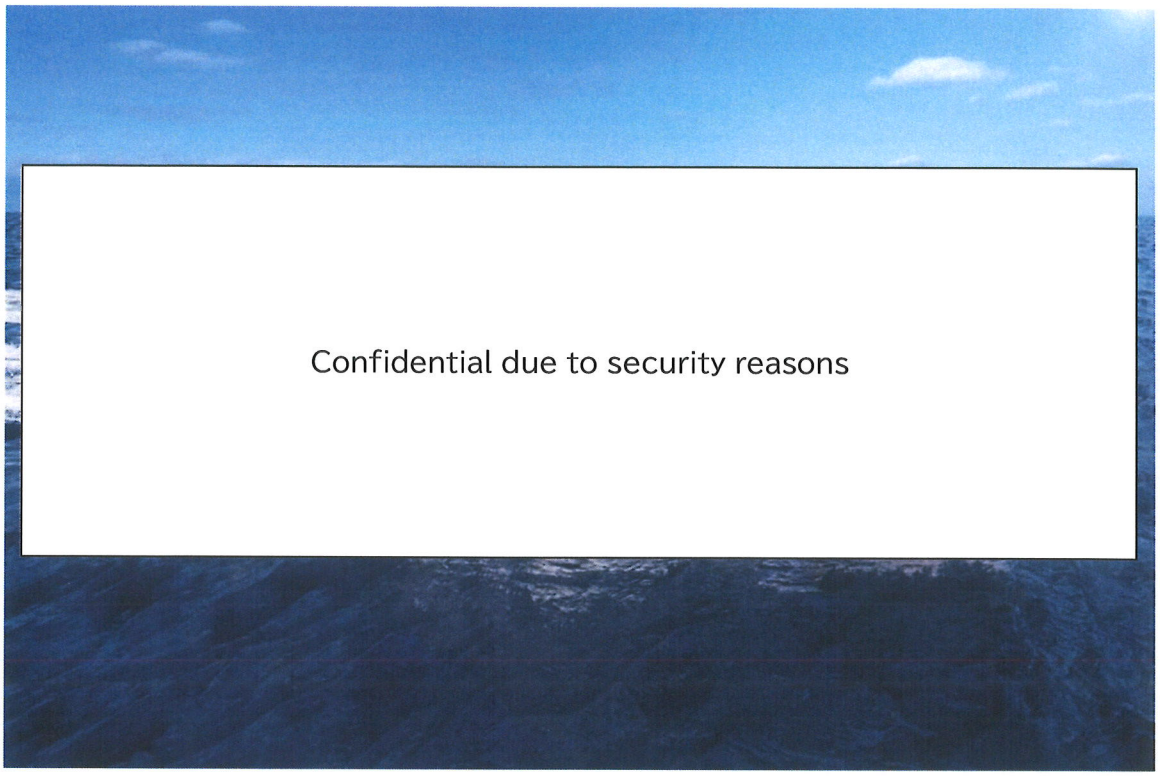
Location Map



Perspective



Visualization of Moored Patrol Boats



Perspective Image of Patrol Boats

Perspective Image of Pontoon

Lists of Tables and Figures

List of Abbreviations

AED	Automated External Defibrillator
AIS	Automatic Identification System
C.D.	Chart Datum
COD	Chemical Oxygen Demand
COLREG	International Regulations for Preventing Collisions at Sea
COVID-19	Coronavirus disease 2019
DCG	Djibouti Coast Guard
DEDD	Direction of Environment and Sustainable Development
DJF	Djiboutian Francs
ECDIS	Electronic Chart Display and Information System
EIA	Environmental Impact Assessment
E/N	Exchange of Notes
EPIRB	Emergency Position Indicating Radio Beacon
FRP	Fiber Reinforced Plastics
G/A	Grant Agreement
GDP	Gross Domestic Product
GOD	The Government of Djibouti
GOJ	The Government of Japan
GPS	Global Positioning System
HF	High Frequency
H.H.W.L	High High Water Level
HK	Nippon Hakuyohin Kentei Kyokai
H.W.L.	High Water Level
IMO	International Maritime Organization
JCI	Japan Craft Inspection Organization
JICA	Japan International Cooperation Agency
JIS	Japanese Industrial Standards
L.W.L.	Low Water Level
MARPOL	International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto
MIE	Ministry of Infrastructures and Equipment
MF	Medium frequency
MOB	Ministry of Budget
M.S.L	Mean Sea Level
NAVTEX	Navigation Telex

ODA	Official development assistance
PCS	Prestressed Concrete Segmental Structure
PCR	Polymerase Chain Reaction
PMP	Preventive Maintenance Program
RHIB	Rigid hull Inflatable Boat
SART	Search And Rescue Rader Transponder
SBP	Sub-bottom profiler
SS	Suspended Solids
SUS	Stainless steel
USD	United States Dollar
VHF	Very High Frequency

CHAPTER 1 BACKGROUND OF THE PROJECT

1-1 Current Sector Status and Challenges

1-1-1 Current Status and Challenges

The Republic of Djibouti (hereinafter referred to as “Djibouti”) borders countries and regions that are experiencing armed conflict, and it is a strategic point for maritime traffic that connects Asia, Africa and Europe, and through which approximately 19,000 ships pass each year. Djibouti has adopted a national development plan called Vision Djibouti 2035 (hereinafter referred to as “Vision 2035”), and this includes a stated need to strengthen security institutions in order to protect the country from all risks. However, Djibouti’s sea areas suffer from challenges such as piracy, illegal activities like people smuggling, illegal fishing and smuggling, and marine accidents involving refugees. The ships that pass through the sea areas include approximately 1,600 ships per year which have a connection with Japan (Annual Report 2020 “Japan's Actions against Piracy off the Coast of Somalia and in the Gulf of Aden”, March 2021). Thanks to the success of multilayered efforts by the international community, including anti-piracy operations by Japan's Self-Defense Forces based in Djibouti as well as the U.S. and French forces, which serve as a deterrent, the number of piracy cases in Djibouti’s sea areas had begun to decline and from 2011, when there were a peak number of 237 piracy cases, this had been reduced to zero by 2020 (International Maritime Bureau (IMB) Annual Report 2020, January 2021). On the other hand, people smuggling occurs frequently, particularly in the Bab-el-Mandeb Strait which is an entry point to the Red Sea, and the Djibouti Coast Guard (hereinafter referred to as the “DCG”) arrested more than 850 stowaways in 2019. In addition, there have been other incidents of maritime accidents, smuggling, illegal fishing, and marine pollution, and as such patrolling the sea areas of this country, including the strait, continues to be of high priority.

In order to address these challenges, the DCG aims to strengthen its patrol system, with the vicinity of the strait being a priority area. However, maintaining patrols in the strait are difficult for the current fleet, which includes patrol boats provided through Japan’s grant aid in 2015, for the approximately two months of the Khamsin season, when there are seasonal winds. In addition, the continuous patrol time for each voyage is limited. Therefore, an urgent challenge is upgrading patrol boats that can handle ocean waters with stability throughout the year.

The Project for the Enhancement of the Ability of Maritime Safety and Security (hereinafter referred to as the “Project”) aims to strengthen the capabilities of the DCG to tackle the above-mentioned maritime security challenges by constructing new patrol boats that are larger than the existing ones and a pontoon for the use of these patrol boats as a mooring facility. This Project is positioned as a high-priority one that is essential for the realization of Vision 2035.

1-1-2 Development Plan (Upper Level Plan)

Djibouti's national development plan Vision Djibouti 2035 was formulated in 2014 as a basis for the further evolution and development of the nation. It is an upper level plan for the Project, and it has the following five basic strategies.

- PILLAR 1: National Peace and Unity
- PILLAR 2: Good Governance
- PILLAR 3: Diversified and Competitive Economy, with the Private Sector as a Driver
- PILLAR 4: Consolidation of Human Capital
- PILLAR 5: Regional Integration and International Cooperation

Of the five strategies mentioned above, "National Peace and Unity" lists the following three priority issues. In particular, under "Promote a comprehensive defense policy that guaranties the security of people and goods" it is stated that against diversifying risks, the safety of the public and security of resources should be protected, defense capabilities should be strengthened in order to take appropriate measures, and specialized agencies and organizations mobilized.

- Promote social justice, equity, and culture of peace
- Promote cultural identity and national conscious
- Promote a comprehensive defense policy that guaranties the security of people and goods

The Project's implementing agency, the DCG, is responsible for Djibouti's territorial waters and exclusive economic zone, the security of coastal facilities, the preservation of the marine environment, and handles problems such as piracy, refugees, smuggling and illegal fishing. This Project aims to provide patrol boats and mooring facilities, strengthen the capacity of the DCG to respond to maritime security issues, and enable Djibouti to internationally contribute as a maritime country through these activities. This is consistent with the policies of the upper level plan.

1-1-3 Socio-economic Situation

Djibouti has a population of 988,002 (World Bank, 2020), a land area of 23,200 km^2 (approximately 1.3 times that of Shikoku island of Japan), and it has land borders with Eritrea, Ethiopia, and Somalia. As their topography extends beyond the entrance to the Red Sea, these areas are known as the Horn of Africa, and they are a key point for maritime transport between Europe and the Middle East and Asia via the Red Sea.

2001 marked the end of a decade-long civil war, and since then the nation has had political stability, while Western forces have also been stationed in the area for regional stability and counter terrorism activities. Moreover, in recent years, Djibouti has attracted attention from the international community as a base for anti-piracy operations off the coast of Somalia, and the Japanese Self-Defense Forces have been carrying out anti-piracy operations with Djibouti as their base since 2009.

The annual precipitation of Djibouti is around 124 mm. The entirety of the country's land area has a dry zone climate, while coastal areas and inland lowlands have a desert climate, and mountainous areas have a steppe climate.

Table 1-1: Djibouti City Average Climate Data

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Average maximum temperature (°C)	31.1	31.1	32.4	33.4	38.8	42.8	43.6	42.7	41.3	35.6	32.3	30.8
Average minimum temperature (°C)	22.4	22.1	23.0	24.4	28.1	31.6	31.3	31.9	29.6	26.0	24.4	22.8
Precipitation (mm)	11	11	10	11	6	1	10	18	8	8	24	6
Average humidity (%)	72%	73%	73%	72%	62%	44%	42%	46%	55%	62%	68%	69%
No rainfall (days)	17	15	19	21	25	28	20	13	20	24	19	22

Source: Djibouti-Ambouli International Airport

For temperature, the data from Djibouti National Meteorological Agency for the year 2020 were used.

There is little surface runoff, and vegetation is essentially limited to the vicinity of dryland rivers (wadis) and a few oases. Agriculture is underdeveloped because of the country's harsh natural environment, and herding by nomads is marginal. About 54.34%[1] of the working population depends mainly on tertiary industries, such as the transportation of exports to Ethiopia, port services, and services connected to the foreign military forces.

The following table shows the added value ratio for the working population ratio and gross domestic product (hereinafter referred to as "GDP") by industry.

Table 1-2: Working Population Ratio and Added Value Ratio by Industry

Item		**2017**	**2018**	**2019**	**2020**
Primary industries	Working population (%)	34.74	33.91	33.12	32.40
	Value added to GDP (%)	1.37	1.46	1.43	-
Secondary industries	Working population (%)	12.68	12.87	13.07	13.26
	Value added to GDP (%)	12.32	16.57	17.09	-
Tertiary industries	Working population (%)	52.58	53.22	53.81	54.34
	Value added to GDP (%)	86.31	81.97	81.48	-

Source: World Bank: World Development Indicators 2020

The GDP growth rate, which had been between 4.7% and 8.4% since 2011, has been impacted by a stagnation of industrial activity in 2020 caused by a de facto lockdown and other precautionary measures taken in response to the spread of the Coronavirus disease 2019

[1] World Bank: World Development Indicators 2020

(hereinafter referred to as the "COVID-19") in 2020. The economic growth rate, which had been initially estimated as 7.5%, has dropped to 1.3%[2].

However, following the restart of social and economic activities in 2021, such as transit trade and trade in logistics and telecommunications services with neighboring Ethiopia, etc., the GDP growth rate for that year is forecasted to be 5.5% and it is forecasted to be 6.1% from 2022 to 2023 according to interim economic forecasts[3].

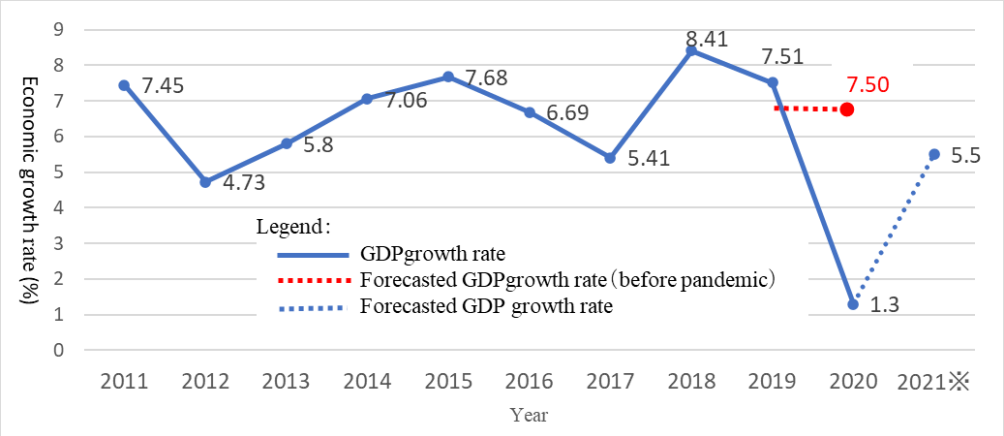


Figure 1-1: Djibouti GDP Growth Rate

Source: World Bank

* Interim economic forecasts for 2021

1-2 Background, History and Overview of the Grant Aid

Under National Peace and Unity, which was flagged in Vision 2035, the DCG is responsible for maritime security in territorial waters, the safety of the nation's exclusive economic zone and the security of port facilities. It is also responsible for handling the problems of piracy, refugees, smuggling and illegal fishing. However, the current patrol boats have a short range and are limited in the number of days they can be at sea per voyage, which not only makes it difficult to carry out maritime safety activities in high priority sea areas (the Bab-el-Mandeb Strait) which are located approximately 150 km from the Port of Djibouti, but also prevents stable patrol activities during the Khamsin season when there is continuous stormy weather, and this limits the patrol boats to emergency response only.

Against this background, in December 2017, the Government of Djibouti made a request to the Government of Japan for grant aid to build two 32-35 m class patrol boats and a 35-40 m class pontoon.

Meanwhile, due to the Project being affected by travel restrictions caused by the global spread

[2] World Bank: Djibouti's Economic Update - April 2020
[3] World Bank : Djibouti's Economic Update — April 2020

of COVID-19, remote surveys were carried out to gather as much information as possible before field investigations took place, while complementary surveys took place on-site.

1-2-1 Requested Items and Changes

(1) Patrol boats

Confidential due to security reasons

Table 1-3: DCG's Initial Request Items Regarding Patrol Boats and Points to Change

December 2017 Request items	Items requested during remote survey	Changes at the time of field survey
Two 32m to 35m class patrol boats	Confidential due to security reasons	

December 2017 Request items	Items requested during remote survey	Changes at the time of field survey
	Confidential due to security reasons	

Source: JICA Preparatory Survey Team

(2) Pontoon

The DCG's initial request items, items confirmed during remote survey, and the main changes considered and discussed at the time of field survey are shown in the following table.

Table 1-4: DCG's Initial Request Items Regarding Pontoon and Points to Change

December 2017 Request items	Items requested during remote survey	Changes at the time of field survey
35m-40m pontoon for patrol boats	1. Dimensions: 35m pontoon for patrol boats	35mL x 6mB x 1
-	2. Structure: Steel Split Type Structure	Change to a prestressed concrete segment structure (hereinafter referred to as "PCS structure"). Reason for change: In Japan, steel pontoons are vulnerable to corrosion and require a lot of maintenance work. As such, there are few examples of steel pontoons being used at sea. In response to a request from the Djibouti side for the structure of the pontoon to be reconsidered, the three structural types (1. PCS structure, 2. Steel structure, and 3. Wale and tie rod structure) proposed during remote surveys were explained again. As a result, DCG finally decided on the 1. PCS structure, which was evaluated as having the best durability and requiring the least amount of maintenance work.
-	3. Renovation of existing facilities ・ Bollards at existing wharf	Bollards (4) will be installed as the bollards needed for mooring the pontoon are partially damaged or lacking.
	・ Repair of existing wharf walls	Since the wall surface of the wharf has deteriorated significantly and it is not even, there is a possibility of damaging the mooring fenders. Therefore, the existing wharf walls should be repaired or fender piles should be installed to prevent the pontoon from coming into contact with the wharf.
	・ Water supply and power supply facilities at existing wharf	To be pulled into place at the expense of Djibouti.

Source: JICA Preparatory Survey Team

1-3 Trends in Japan's Assistance

Japan's relevant development projects and assistance to Djibouti are as follows.

1-3-1 Relevant Technical Cooperation Provided by Japan to Date

Table 1-5: Technical Cooperation Provided by Japan to Date

Project name	Fiscal years of Implementation	Outline
Project for Capacity Development of Djibouti Coast Guard Phase III	October 2019 – March 2026 (tentative)	Cooperation to improve DCG's field response capabilities for law enforcement
Project for Capacity Development of Djibouti Coast Guard Phase II	October 2016 - October 2018	Cooperation to improve DCG's arrest and suppression techniques and other law enforcement capabilities
Project for Capacity Development of Djibouti Coast Guard	May 2013 - May 2016	Cooperation to improve the deployment and communication systems

1-3-2 Relevant Grant Aid Provided by Japan to Date

Table 1-6: Grant Aid Provided by Japan to Date

Project name	Fiscal years of Implementation	Outline
Economic and Social Development Programme	FY 2017	Maintenance of 19 m class patrol boat
Project for Construction of Patrol Vessels for Enhancing the Ability to Secure Maritime Safety and Security	FY 2014	Construction of two 20 m class patrol boats
Projet de Dévelopment de la fonction du Port Autonome	FY 1988 (Phase I) FY 1994 (Phase II)	Maintenance of one small salvage ship, one pilot boat, one oil spill response vessel, one multipurpose vessel, and one mooring vessel

In addition to the above, Japan provides the following assistance through the International Maritime Organization (hereinafter referred to as the "IMO") for the purpose of improving the maritime security capacity of coastal nations in the Gulf of Aden.

- Dispatch of Japan Coast Guard and Ministry of Foreign Affairs staff (November 2012 to October 2014)

Table 1-7: Trust Fund Contributors[1]

Donor country	Contribution
Japan	14.6 million USD
Netherlands	72,300 USD
Norway	40,300 USD
South Korea	192,900 USD
France	49,900 USD
Marshall Islands	100,000 USD
Saudi Arabia	100,000 USD
Denmark	560,000 USD
Bahrain	50,000 USD

- Cumulative contribution of United States Dollar (hereinafter referred to as “USD”) 4.5 million to an international Trust Fund (to Support Initiatives of States Combating Piracy off the Coast of Somalia)
- Contributed USD 14.6 million to a trust fund (Djibouti Code of Conduct Trust Fund) established by the IMO (2009)

The Trust Fund is financed by the countries listed in the Table 1-7. The IMO, using this fund, has constructed training centers, provided training in maritime security operations, developed human resources, and established laws and regulations for maritime security.

1-4 Trends in Assistance from Other Donors

The United States, the International Organization for Migration (IOM) and others have provided small patrol boats to the DCG, but cruising duration is restricted and no further support is forthcoming. In addition, the IOM and the EU provide equipment and training related to maritime law enforcement. The following table presents the number of patrol boats provided by other donors.

Table 1-8: Patrol Boats Provided by Other Donors to Date

Donor country	Description	Year of implementation
International Organization for Migration	Provision of three small boats (length over all 10m)	2015
United States	Provision of eight patrol boats (length over all 8m)	2013
Italy	Provision of four patrol boats (Classe 200 Super Speranza)	2004

1-5 Natural Conditions

1-5-1 Marine Environment

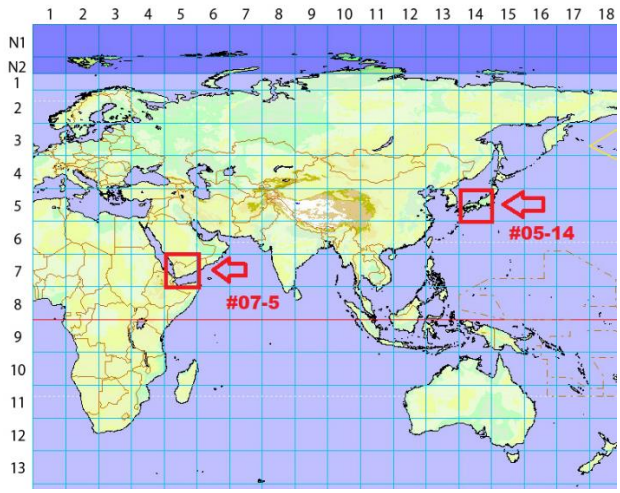
Djibouti does not carry out measurements of its marine environment. Therefore, data on oceans and natural conditions has been obtained from a database on global waves and winds (GLOBUS) published by Japan’s National Maritime Research Institute (NMRI). For comparison, these data are arranged in Figure 1-2: along with data from Japanese coastal waters.

According to this data, the average annual significant wave height in Djibouti’s sea areas is 0.84m, compared to 1.55m in sea areas near Japan. The sea near Djibouti experiences waves of about 4 to 8m, though this occurs mainly during the Khamsin season, but this is not often. In comparison to Japan, where waves of 4m and above occur regularly throughout the year, Djibouti has smaller wave heights.

Figure 1-3: shows data on the seas surrounding Japan from the Statistical Database of Winds

and Waves around Japan which was also published by NMRI (data on only the white part surrounding Japan was compiled). Due to differences in the data mesh, a direct comparison can't be made with the above-mentioned statistics for the sea areas around Djibouti. However, it can be said that in comparison to Djibouti's sea areas, the Japanese coastal sea areas have a higher frequency of waves of 4m and above, as well as a higher maximum wave height and a higher average significant wave height, and also that Djibouti's sea areas are relatively milder than those of Japan.

Based on the above, it has been determined that the new patrol boat design can proceed with Japan's coastal areas as the navigation condition.



Output table

	Spring	Summer	Autumn	Winter	Annual
↑ Wave height ↓	Frequency				
Total	No. of samples				
	Average significant wave height (m)				
	Average wave period (sec)				

Area #07-5 - Sea areas around Djibouti

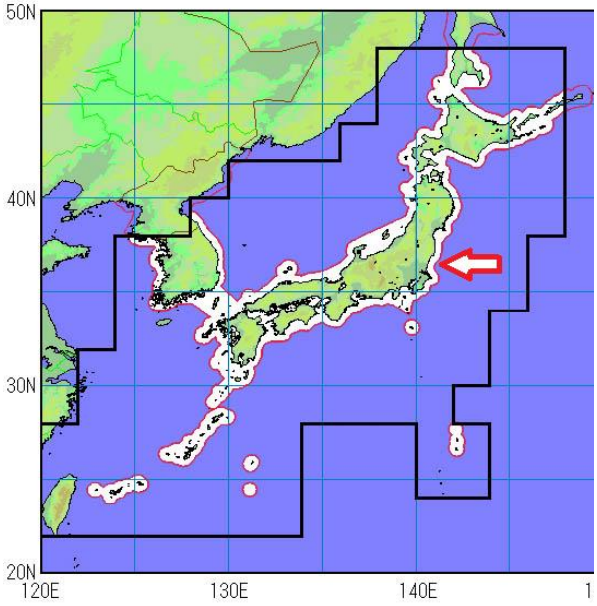
Wave	Area #07-5				
height(m)	Spring	Summer	Autumn	Winter	Annual
12.5-	0.0000	0.0000	0.0000	0.0000	0.0000
12.0-	0.0000	0.0000	0.0000	0.0000	0.0000
11.5-	0.0000	0.0000	0.0000	0.0000	0.0000
11.0-	0.0000	0.0000	0.0000	0.0000	0.0000
10.5-	0.0000	0.0000	0.0000	0.0000	0.0000
10.0-	0.0000	0.0000	0.0000	0.0000	0.0000
9.5-	0.0000	0.0000	0.0000	0.0000	0.0000
9.0-	0.0000	0.0000	0.0000	0.0000	0.0000
8.5-	0.0000	0.0000	0.0000	0.0000	0.0000
8.0-	0.0000	0.0000	0.0024	0.0000	0.0006
7.5-	0.0000	0.0000	0.0024	0.0000	0.0006
7.0-	0.0000	0.0000	0.0024	0.0000	0.0006
6.5-	0.0000	0.0000	0.0000	0.0000	0.0000
6.0-	0.0000	0.0000	0.0024	0.0000	0.0006
5.5-	0.0000	0.0000	0.0073	0.0000	0.0018
5.0-	0.0000	0.0000	0.0049	0.0000	0.0012
4.5-	0.0000	0.0000	0.0097	0.0000	0.0024
4.0-	0.0000	0.0048	0.0243	0.0000	0.0073
3.5-	0.0000	0.1204	0.0194	0.0000	0.0351
3.0-	0.0289	1.5943	0.0413	0.1323	0.4513
2.5-	0.8081	11.1815	0.2796	4.3892	4.1717
2.0-	11.3203	46.3371	3.8632	32.1204	23.4158
1.5-	46.1231	120.6820	30.6282	111.0695	77.0824
1.0-	145.3872	225.2818	160.9550	306.0528	209.1049
0.5-	431.1544	361.1285	439.2079	428.8227	414.9685
0-	365.1780	233.6697	364.9494	117.4132	270.7550
TOTAL	1,000	1,000	1,000	1,000	1,000
Mean Wave Height (m)	0.7	0.96	0.68	1.01	0.84
Mean Wave Period (s)	5.52	5.58	5.4	6.46	5.74

Area #05-14 - Sea areas near Japan

Wave	Area #05-14				
height(m)	Spring	Summer	Autumn	Winter	Annual
12.5-	0.0000	0.0000	0.0010	0.0000	0.0002
12.0-	0.0000	0.0000	0.0019	0.0000	0.0005
11.5-	0.0000	0.0009	0.0077	0.0000	0.0021
11.0-	0.0000	0.0066	0.0221	0.0000	0.0072
10.5-	0.0000	0.0228	0.0211	0.0000	0.0110
10.0-	0.0000	0.0484	0.0479	0.0000	0.0241
9.5-	0.0000	0.0958	0.0479	0.0000	0.0361
9.0-	0.0019	0.1015	0.0777	0.0019	0.0459
8.5-	0.0066	0.1707	0.1179	0.0232	0.0798
8.0-	0.0304	0.2419	0.3011	0.0454	0.1548
7.5-	0.0579	0.3595	0.4219	0.1990	0.2594
7.0-	0.1451	0.4600	0.5945	0.4357	0.4082
6.5-	0.2874	0.5814	0.8889	1.0762	0.7063
6.0-	0.5947	0.7379	1.4575	2.3079	1.2693
5.5-	1.0964	1.1979	2.5871	4.2921	2.2834
5.0-	1.8818	1.9785	4.5299	7.9824	4.0741
4.5-	3.6820	3.3614	8.0001	13.7902	7.1761
4.0-	7.0026	5.6852	14.5715	23.6216	12.6652
3.5-	13.2427	10.2872	25.6343	40.2364	22.2593
3.0-	25.8906	18.7410	42.7037	65.3476	38.0339
2.5-	53.2893	33.6767	68.0580	100.8969	63.8001
2.0-	97.5235	65.6130	110.3676	145.9683	104.6649
1.5-	171.1994	130.0470	174.9660	197.2302	168.2104
1.0-	267.0461	241.0627	235.2492	215.9423	239.9469
0.5-	260.2635	296.4824	199.8610	142.9669	225.3369
0-	96.7581	189.0396	109.4624	37.6359	108.5437
TOTAL	1,000	1,000	1,000	1,000	1,000
Mean Wave Height (m)	1.42	1.21	1.61	1.95	1.55
Mean Wave Period (s)	7.04	7.09	7.49	7.48	7.27

Figure 1-2: Wave Statistics for Sea Areas near Djibouti and Japan

Source: National Maritime Research Institute (NMRI)



	Spring	Summer	Autumn	Winter	Annual
14.75-	0.00000	0.01578	0.00117	0.00000	0.00437
14.25-	0.00000	0.00923	0.00116	0.00000	0.00267
13.75-	0.00000	0.01341	0.00105	0.00000	0.00372
13.25-	0.00000	0.01493	0.00119	0.00000	0.00415
12.75-	0.00000	0.01798	0.00176	0.00000	0.00508
12.25-	0.00000	0.03248	0.00232	0.00000	0.00896
11.75-	0.00000	0.05077	0.00285	0.00000	0.01382
11.25-	0.00014	0.06460	0.00922	0.00000	0.01903
10.75-	0.00080	0.07296	0.01802	0.00000	0.02358
10.25-	0.00171	0.08593	0.02363	0.00000	0.02857
9.75-	0.00471	0.10545	0.04115	0.00000	0.03879
9.25-	0.00148	0.14699	0.07686	0.00029	0.05782
8.75-	0.00338	0.18131	0.12094	0.00470	0.07937
8.25-	0.01138	0.25337	0.16711	0.00969	0.11283
7.75-	0.01135	0.34990	0.24549	0.02715	0.16178
7.25-	0.01581	0.49531	0.33350	0.05759	0.23001
6.75-	0.02537	0.59178	0.42338	0.11794	0.29457
6.25-	0.05776	0.82473	0.58159	0.28133	0.44212
5.75-	0.16860	1.04847	0.79067	0.52906	0.63994
5.25-	0.33053	1.42864	1.25780	1.18016	1.05330
4.75-	0.67770	1.92795	2.18927	2.49643	1.82117
4.25-	1.54273	2.65115	3.82865	5.61610	3.38893
3.75-	3.42847	4.08836	7.27212	11.69396	6.56347
3.25-	8.74829	7.17550	15.52142	25.86882	14.18273
2.75-	22.09265	14.71232	32.82332	51.40059	29.96774
2.25-	52.60818	34.30030	68.28202	94.94070	62.05476
1.75-	121.65408	87.58687	132.48597	161.19984	125.13837
1.25-	223.23010	201.57743	212.61672	221.19936	214.46809
0.75-	280.73638	295.68852	260.12750	232.27026	267.69665
0.25-	239.35530	289.31278	223.38506	163.89079	230.01466
0-	45.29310	55.17479	37.36710	27.21524	41.47895
TOTAL	1000	1000	1000	1000	1000
Mean Wave Height (m)	1.23	1.14	1.35	1.54	1.31
Mean Wave Period (s)	5.55	5.86	5.89	5.71	5.75

Figure 1-3: Wave Statistics for Japan's Coastal Areas

Source: National Maritime Research Institute (NMRI)

1-5-2 Results of Survey on Natural Conditions concerning the Pontoon

The following survey was carried out via a local consultant (subcontractor).

Table 1-9: Scope and Method of Natural Conditions Survey

Survey item	Survey method
1. Bathymetric survey a) Survey location b) Scope c) Supervision Work in Japan and in Djibouti	Subcontractor: Hydro Terra Engineering SARL. ・Old Port of Djibouti, where the patrol boat will be moored, before berth no. 4 (4ha, 200m x 200m) ・Verification of the location of structures, power supply and water supply, drainage and sanitary facilities on the wharf and ground where the gangway is to be installed. ・Checking the water depth and obstructions in the anchorage and shipping route around the mooring facility. The following work was done in Djibouti by a local subcontractor based on survey instructions provided remotely from Japan, and the results were also confirmed remotely from Japan. In addition, the preparatory survey team physically went to the site to double check the results of the work by

Survey item	Survey method
	the local subcontractor. ・ Bathymetric survey by single-beam echo sounder Verification of the change of water depth by comparison with the nautical chart made in 2010 by French Naval Hydrographic and Oceanographic Service (SHOM)
2.Geotechnical study a) Survey location b) Scope c) Supervision Work in Japan and in Djibouti	Subcontractor: Hydro Terra Engineering SARL. ・Planned mooring site for patrol boats ・Sub-bottom profilers (hereinafter referred to as the “SBP”) The following work was done in Djibouti by a local subcontractor based on survey instructions provided remotely from Japan, and the results were also confirmed remotely from Japan. In addition, the preparatory survey team physically went to the site to double check the results of the work by the local subcontractor. ・SBP: Length 200m x 5 lines (interval 50m, depth up to about 40m)
3. Water quality survey Work in Djibouti	(Implementation system: Directly managed) The following operations were conducted as a baseline survey of the water quality environment at the planned site for mooring facilities. ・pH, Chemical Oxygen Demand (hereinafter referred to as the “COD”) (simplified inspection), suspended solids (hereinafter referred to as the “SS”) (*converted from transparency), and electrical conductivity (EC) ・Date and time of water sampling and tide level: March 14, 2021, 11:40 a.m. *At approximately average tide level (Ordinary tide level C.D.L. +1.72m) * MSL at Djibouti Port = C.D.L. +1.93m)

Source: JICA Preparatory Survey Team

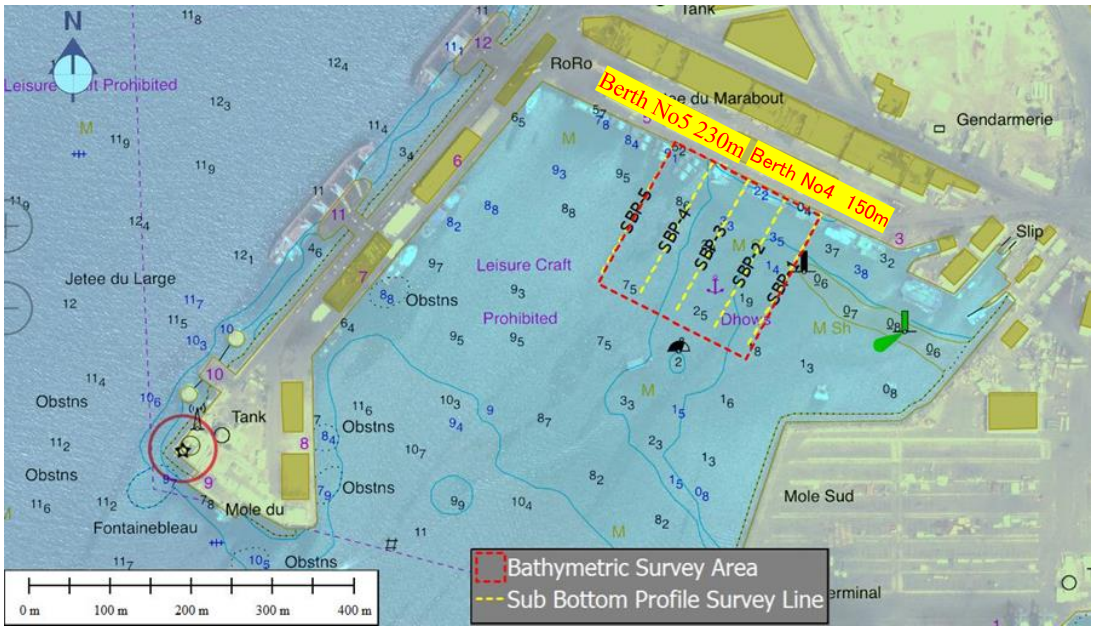


Figure 1-4: Location of Survey on Natural Conditions

Source: JICA Preparatory Survey Team

(1) Bathymetric survey

The left side in the following figure (west side) is berth no. 5 (extension: 230m), and the right side in the figure (east side) is berth no. 4 (extension: 150m).

The planned site for the pontoon is 50m long from the west end of berth no. 4. The water depth

in front of berth no. 4 is 3m, but there are some shallow places directly near the wharf.

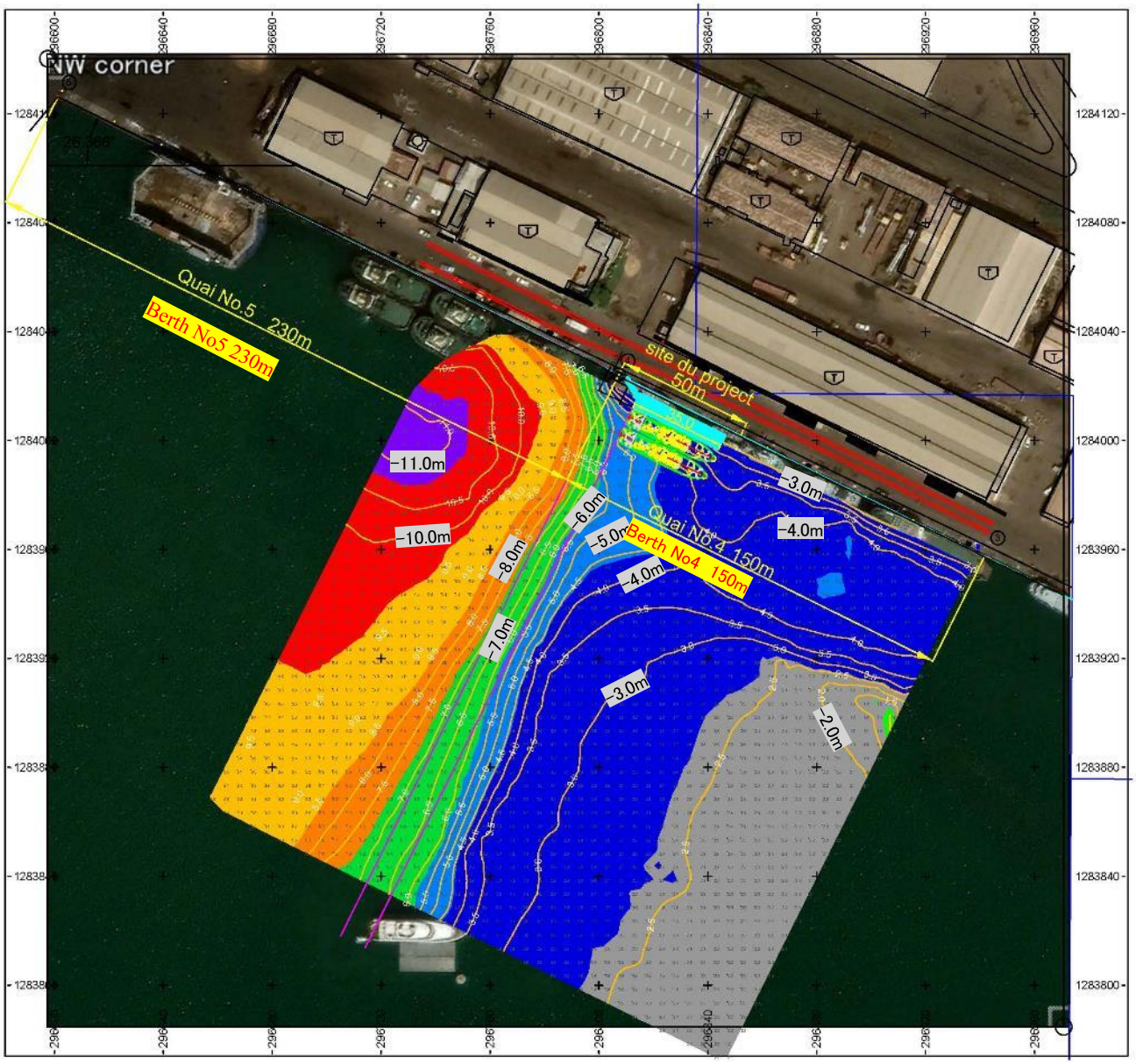


Figure 1-5: Bathymetric Survey

Source: JICA Preparatory Survey Team

(2) Geotechnical study

The west side of the port is an anchorage created through dredging, and the bottom sediment is a layer of sand. It would appear that there hasn't been any maintenance dredging for the anchorage to the east of berth no. 4 where the pontoon will be located.

In the upper layer above the survey line, the existence of hard layers such as bedrock and obstacles were not detected underground.

Figure 1-6: Sub-Bottom Profiler (SBP) Equipment Mounted on Research Ship

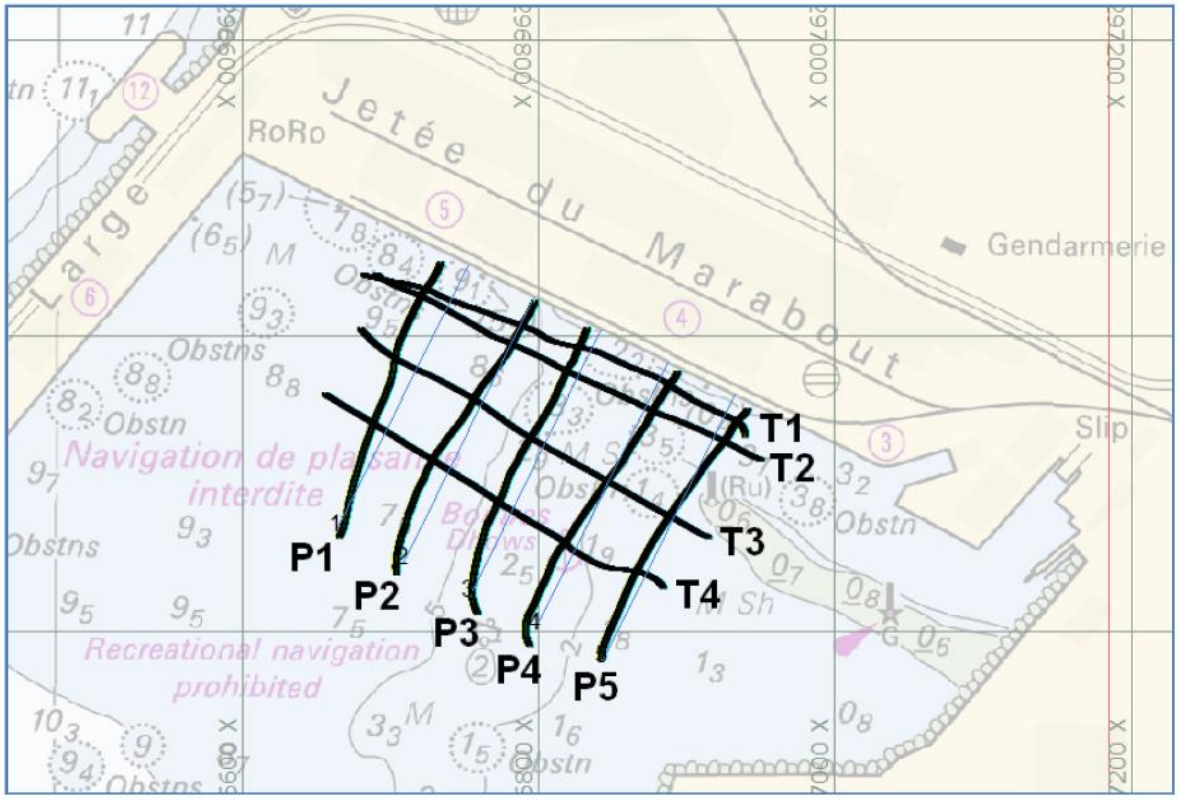


Figure 1-7: SBP Line Wake (Black Line: Wake)

Source: JICA Preparatory Survey Team

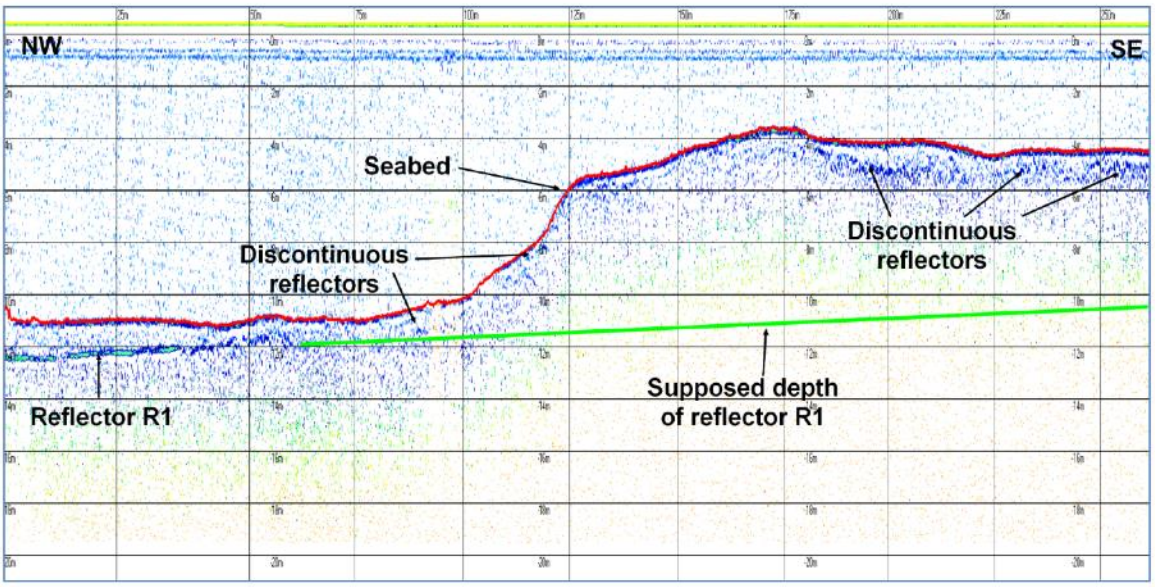


Figure 1-8: Example of SBP Outcome (T1 Line)

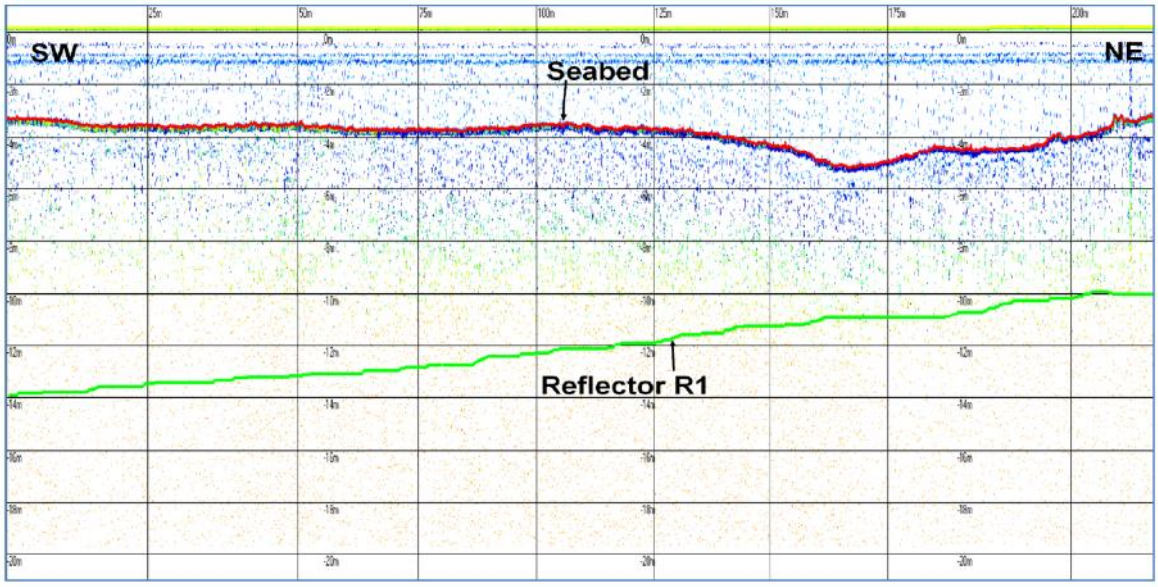


Figure 1-9: Example of SBP Outcome (P3 Line)

(3) Water quality survey

The results of the water quality survey are shown below.

Water quality analysis results

Measurement location	Djibouti old port - berth no. 4	
Date and time of water sampling	14/3/2021 11:40 MSL	14/3/2021 11:40 MSL
Measurement results		
Water sampling point	WS-1: Just in front of berth no. 4	WS-2: 20m offshore from berth no. 4
Water temperature ℃	18.1	18.0
pH	7.7	7.7
COD	5.0	5.0
Transparency cm	30<	30<
(Converted values in SS mg/L)	(<20)	(<20)
Electrical conductivity mS/cm	48.0	49.0
(Electrical conductivity μS/cm)	(48,000)	(49,000)
Coliforms	Not detected	Not detected

※Electrical conductivity (standard value):

Sea water	20～50	mS/cm	20,000～50,000	μS/cm
Brackish water	2～21	mS/cm	2,000～21,000	μS/cm
Ground water	0.3～0.5	mS/cm	30～500	μS/cm
River water	0.3～0.4	mS/cm	30～400	μS/cm
Rain water	0.005～0.05	mS/cm	5～50	μS/cm
Normal saline solution	0.666～0.728	mS/cm	666～728	μS/cm
Tap water	0.1～0.135	mS/cm	100～135	μS/cm
Mineral water	0.13～0.6	mS/cm	130～600	μS/cm
Reference:	i-Lohas(0.13) Volvic(0.2) Contrex(0.6)	mS/cm		

Water sampling points

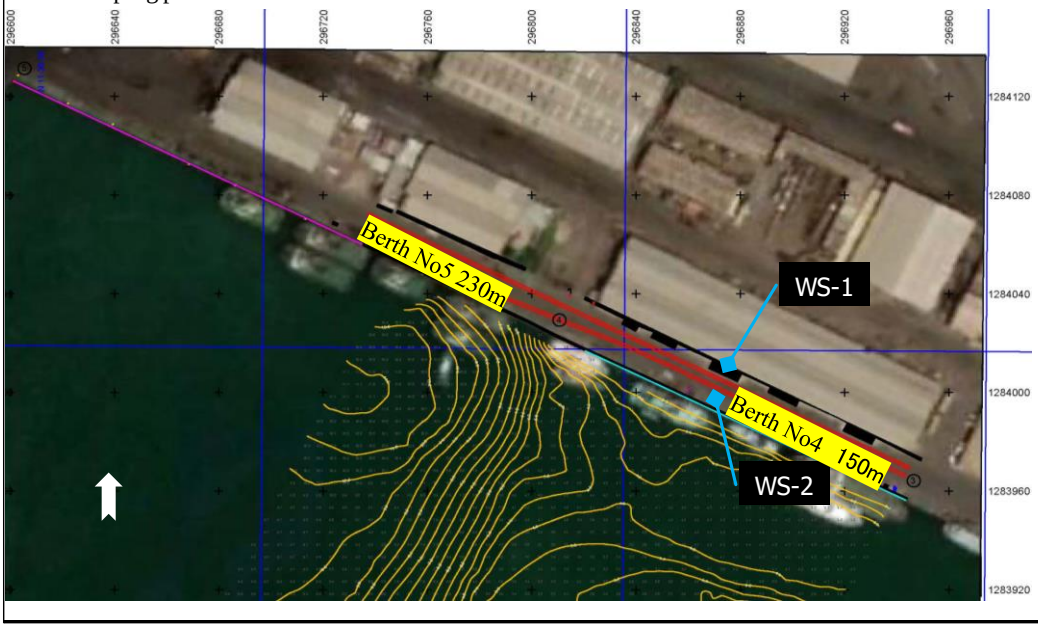


Figure 1-10: Water Quality Survey Results

Source: JICA Preparatory Survey Team

1-6 Environmental and Social Considerations

1-6-1 Overview of Project Components that have Environmental and Social Impacts

The Project is to construct patrol boats, and also a pontoon in order for crew members to board and disembark the boats. It has been determined that there will be a minimal undesirable impact on the environment, and so it has been classified as Category C under the Japan International Cooperation Agency (hereinafter referred to as "JICA") Guidelines for Environmental and Social Considerations (April 2010).

1-6-2 Relevant Legal System for Environmental and Social Considerations

The Environmental Framework Law (Law No. 51/AN/09 6eme L of 1 July 2009 instituting the Environment Code) is the basic framework in Djibouti. A decree was adopted in 2011 (Decree No. 2011-029/PR/MHUEAT of 24/02/2011 revising the environmental impact assessment procedure in the Republic of Djibouti) to establish a framework for environmental management.

This decree specifies that all projects that may have a negative impact on the environment and all projects that are carried out in vulnerable locations are, depending on the extent of their impact, subject to a simple or detailed environmental impact assessment (hereinafter referred to as the "EIA").

According to the classification under this decree, the construction of ships is not included in the scope of an EIA, but the improvement or upgrading of port facilities where ships of 1,350 tons or less berth are included in the scope of a simplified assessment. However, the Department of Environment and Sustainable Development (hereinafter referred to as "DEDD") of the Ministry of Urban Planning, Environment and Tourism has informed that the installation of the pontoon under this Project is not subject to an EIA because there will be a limited environmental impact from its construction. This was confirmed in an interview with the DEDD officer in charge of EIA. It is advisable that the DCG obtains a written public notice from the DEDD to confirm that there is no need to carry out an EIA.

1-6-3 Marine Pollution Control

Djibouti does not have any domestic laws governing the design and equipment of ships that pollute the sea, and applies where necessary, the IMO Protocol of 1978 in relation to the 1973 International Convention for the Prevention of Pollution from Ships (hereinafter referred to as the "MARPOL Convention"). However, international laws such as the MARPOL Convention apply to ships on international voyages, and they do not apply to government-owned non merchant ships such as patrol boats. However, from the perspective of conserving the marine environment, this Project will apply mutatis mutandis to the applicable parts of the MARPOL Convention as follows.

- Annex-I – Regulation for the Prevention of Pollution by Oil: Applicable (installation of oil filtering equipment in accordance with MARPOL regulations)
  Equipment for controlling oil concentrations so as not to exceed specified values when disposing of oil polluted water from a ship. The regulations permit a policy of not disposing of oil polluted water (stored on board) even if a ship has less than 400 gross tonnage, but the new patrol boats will be installed with a bilge separator.
- Annex II - Regulation for the Control of Pollution by Noxious Liquid Substances in Bulk: Not applicable as noxious liquid substances will not be carried.
- Annex III - Prevention of Pollution by Harmful Substances Carried by Sea in Packaged Form: Not applicable as noxious liquid substances will not be carried.
- Annex IV - Prevention of Pollution by Sewage from Ships: This applies to ships of 400 gross tonnage or, ships with 15 crew members or more, but not to the new patrol boats for this Project.
- Annex V - Prevention of Pollution by Garbage from Ships: Although this does not apply in regard to the specifications of the patrol boats, garbage generated from ships should be managed appropriately.
- Annex VI - Prevention of Air Pollution from Ships: Applicable (patrol boats will have equipment that is compliant with MARPOL emission control standards).

1-6-4 Water Quality

Djibouti has not enacted domestic laws to establish emission standards for air quality, water quality, noise or vibration, etc. Instead, it applies water quality standards set by international aid organizations.

1-6-5 Measures against COVID-19 for Construction Workers

Djibouti formulated a National Action Plan for preparedness and response for COVID -19 (*Plan d'Actions pour la Prévention et la Réponse à la Maladie à COVID-19*) in March 2020. This national action plan includes activity guidelines on avoiding crowds and close contact, ensuring a safe distance from others, recommends handwashing, provides information on coughing etiquette, and includes limiting the movement of close contacts, and lists criteria for seeking a diagnosis at medical institutions and the early symptoms of infection as well as signs of severe illness. Based on this plan, DCG's industrial physicians have set policies to thoroughly implement the following measures for construction workers as preventive measures against COVID-19 infection during construction work.

- At the start of construction, workers are required to present negative PCR (Polymerase Chain Reaction) test results, and all workers who develop symptoms, such as a fever, during the

construction work are required to take a PCR test.

- Masks are mandatory and frequent handwashing is promoted during construction work.
- Body temperatures are to be measured every morning at morning meetings.
- The Japanese side is requested not to hire day laborers.

1-6-6 Other (global issues, etc.)

This Project is in line with the development agenda and development policy of the government of Djibouti and Japan's cooperation policy, and will contribute to strengthening the DCG's maritime security capacity through the construction of patrol boats, which will contribute to the realization of Goal 16 (peace and justice) of the Sustainable Development Goals.

1-7 Gender Considerations

The number of female DCG employees, the implementing agency of this Project, is 48 to 50 (as of December 2020), which accounts for approximately 3.3% to 3.4% of all employees (1,450), and this is only a small percentage. However, with a view to “building a fair society without discrimination in which capable men and women can work for the development of the state on an equal basis”, which is the 10-year goal set by the National Gender Policy (2011-2021) of Djibouti, the implementing agency does comprehend the critical nature of magnifying participation by women in order to ensure both diversity and appropriateness, and it has set a policy of actively promoting the employment of women.

The Project has taken into consideration improving the environment to enable women to play a larger and more active role in the field of maritime security, and has taken into consideration the needs of female crew members in terms of upgrading and arranging separate rooms and lavatories on the new patrol boats.

CHAPTER 2 CONTENTS OF THE PROJECT

2-1 Basic Concept of the Project

Piracy and illegal activities, including people smuggling, illegal fishing and smuggling, occur in the territorial waters of Djibouti and its surrounding sea areas. While the Self-Defense Forces of Japan, together with US and French forces, are working to prevent piracy, it is desirable to strengthen the DCG's patrol activities, particularly in the vicinity of the Bab-el-Mandeb Strait.

At present, DCG patrols the strait mainly using two 20m patrol boats provided in 2015 with Japanese grant aid. However, because of the scale of these patrol boats, the DCG's patrol activities have been limited by harsh maritime conditions during the Khamsin season, and the DCG has not been able to conduct long-term continuous maritime activities. Currently, the DCG has not been able to conduct maritime patrol activities efficiently and intensively as the boats have to return to port repeatedly for replenishment during patrol operations.

Against this background, the Government of Djibouti requested Japan for assistance in procuring new patrol boats and a pontoon for the patrol boats to reduce restrictions on maritime activities during the Khamsin season, and in order to conduct patrol activities in a more stable and efficient manner.

This Project will contribute to the improvement of maritime safety and security in Djibouti's territorial waters, including the Bab-el-Mandeb Strait, by improving the capabilities of the DCG to quickly and appropriately carry out operations such as maritime rescue and law enforcement by equipping it with patrol boats, pontoon and related equipment.

2-2 Outline Design of the Japanese Assistance

2-2-1 Design Policy

[New Patrol Boats]

2-2-1-1. Basic Design Policy

Confidential due to security reasons

(1) Crew capacity, speed, and cruising duration

Confidential due to security reasons

Confidential due to security reasons

(2)Safety

Confidential due to security reasons

(3)Environmental protection measures

Confidential due to security reasons

(4)Operational cost-efficiencies

Confidential due to security reasons

(5)Durability and Maintenance

Confidential due to security reasons

2-2-1-2. Design for the New Patrol Boats

(1) Requests for new patrol boats and operation plans

Confidential due to security reasons

Confidential due to security reasons

(2) Particulars of the new patrol boats

Confidential due to security reasons

Confidential due to security reasons

Table 2-1: Particulars of New Patrol Boats

	Confidential due to security reasons		

2-2-1-3. Applicable Regulations for Ships

Confidential due to security reasons

Confidential due to security reasons

2-2-1-4. Feedback on Problems in Operating Current 20m Patrol Boats

Confidential due to security reasons

Table 2-2: Feedback Items

	Confidential due to security reasons	

2-2-1-5. Maintenance of Patrol Boats

Confidential due to security reasons

Confidential due to security reasons

Confidential due to security reasons

[New Pontoon]

2-2-1-6. Basic Design Policy

A scale that enables the new patrol boats to be safely and easily moored shall be adopted. In addition, structural systems and specifications shall be selected with consideration for durability and ease of maintenance.

(1) Design conditions

1) **Specifications of ships to be moored at pontoon**

Patrol Boats (x 2): Length over all: 35m,

2) **Installation location**

The planned site of the pontoon is a 50m section from the western end of berth no. 4 (extension 150m) which faces the old Port of Djibouti.

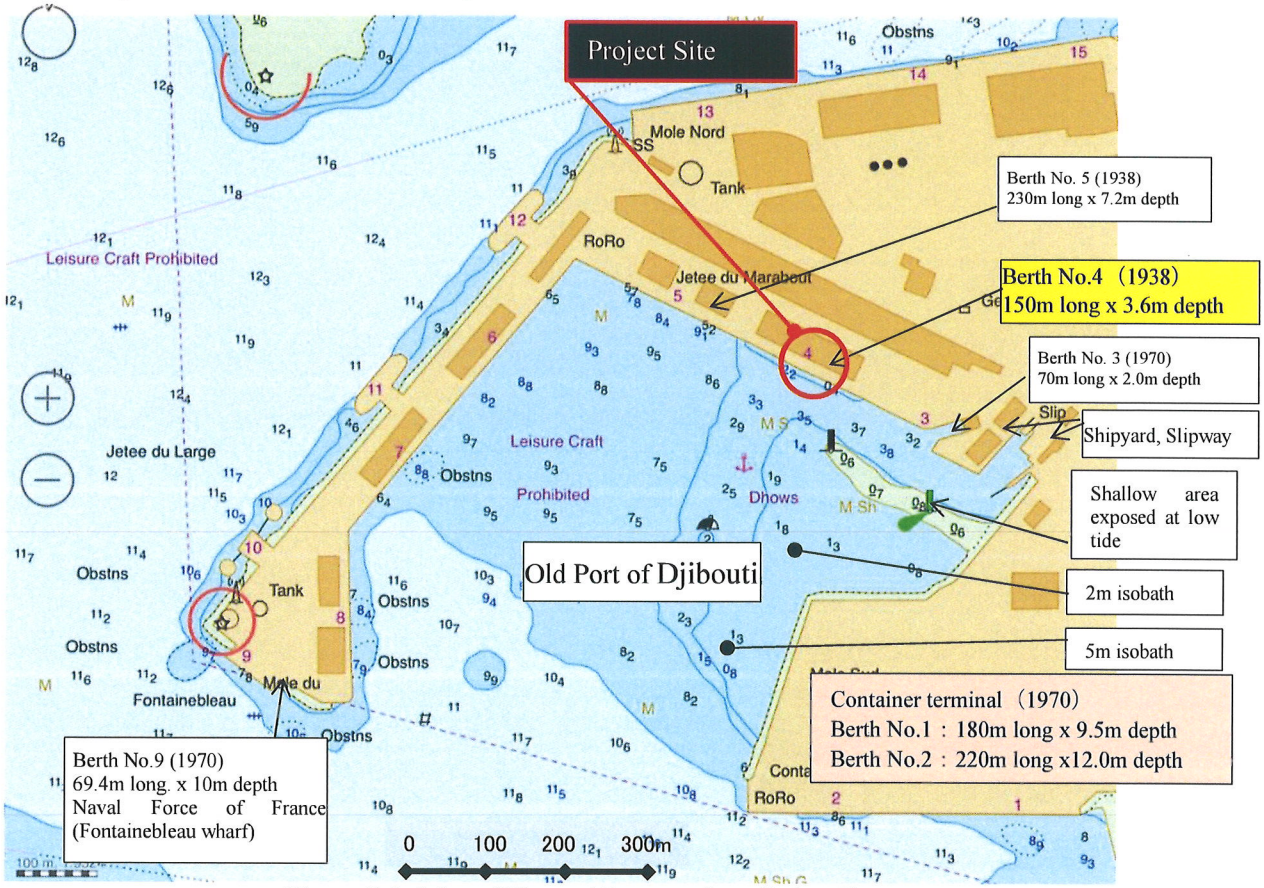


Figure 2-1: Map of Planned Pontoon Installation Site

Source: JICA Preparatory Survey Team

3） Meteorological Data

Meteorological changes in Djibouti City are as follows:

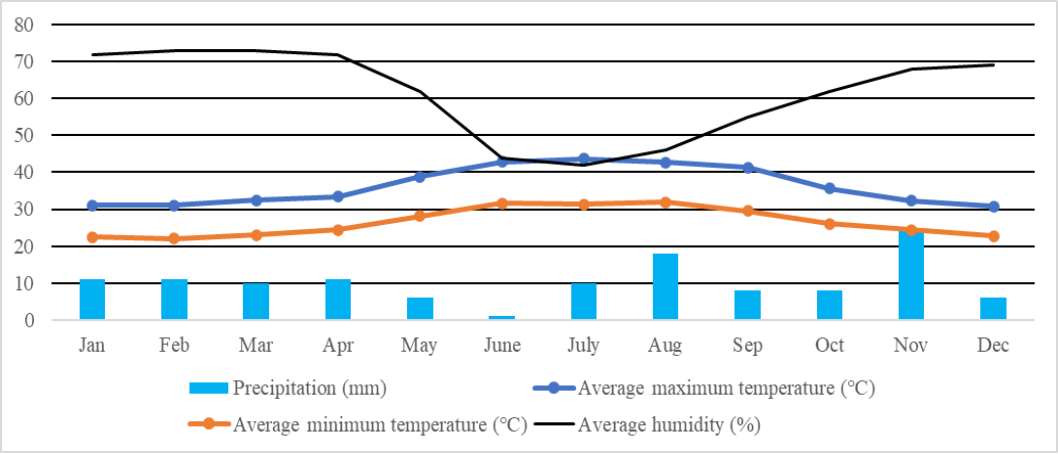


Figure 2-2: Average Meteorological Data for Djibouti City

Table 2-3: Average Meteorological Data for Djibouti City

	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.
Average maximum temperature (°C)	31.1	31.1	32.4	33.4	38.8	42.8	43.6	42.7	41.3	35.6	32.3	30.8
Average minimum temperature (°C)	22.4	22.1	23.0	24.4	28.1	31.6	31.3	31.9	29.6	26.0	24.4	22.8
Precipitation (mm)	11	11	10	11	6	1	10	18	8	8	24	6
Average humidity (%)	72%	73%	73%	72%	62%	44%	42%	46%	55%	62%	68%	69%
No rainfall (days)	17	15	19	21	25	28	20	13	20	24	19	22

Source：Djibouti-Ambouli International Airport

For temperature, the data from Djibouti National Meteorological Agency for the year 2020 were used.

Normal Season

Khamsin Season (July to August)
Average speed of seasonal wind (sand storm): 5 – 10m/s
Winds up to 30 m/s may be observed, but only for a short time

Wind Speed Scale

Figure 2-3: Wind Conditions in Djibouti City

Table 2-4: Wind Conditions in Djibouti City

Month	Item	2014	2015	2016	2017	Average: 2014 - 2017
Jan.	Direction (º)	90.00	90.00	112.50	101.25	**98.44**
	Speed (m/s)	6.4	5.7	6.7	6.4	**6.3**
Feb.	Direction (º)	90.00	78.75	101.25	101.25	**92.8**
	Speed (m/s)	6.2	5.7	6.9	7.1	**6.5**
Mar.	Direction (º)	78.75	123.75	90.00	78.75	**92.8**
	Speed (m/s)	6.5	6.5	6.6	6.3	**6.5**
Apr.	Direction (º)	101.25	90.00	101.25	78.75	**92.8**
	Speed (m/s)	6.2	6.0	6.9	5.9	**6.3**
May	Direction (º)	67.50	337.50	101.25	90.00	**149.1**
	Speed (m/s)	6.5	6.4	6.9	6.5	**6.6**
Jun.	Direction (º)	225.00	247.50	270.00	202.50	**236.3**
	Speed (m/s)	6.4	7.0	7.1	6.0	**6.6**
Jul.	Direction (º)	247.50	123.75	258.75	202.50	**208.1**
	Speed (m/s)	7.3	7.7	7.7	7.4	**7.5**
Aug.	Direction (º)	202.50	180.00	236.25	258.75	**219.4**
	Speed (m/s)	7.7	8.0	8.3	8.7	**8.2**
Sept.	Direction (º)	112.50	101.25	157.50	112.50	**120.9**
	Speed (m/s)	6.6	6.4	7.4	6.7	**6.8**
Oct.	Direction (º)	90.00	90.00	101.25	101.25	**95.6**
	Speed (m/s)	5.3	6.6	6.5	5.8	**6.1**
Nov.	Direction (º)	90.00	101.25	101.25	101.25	**98.4**
	Speed (m/s)	5.5	6.2	6.6	6.0	**6.1**
Dec.	Direction (º)	90.00	112.50	101.25	112.50	**104.1**
	Speed (m/s)	5.4	6.9	6.1	6.3	**6.2**
Yearly Average	Direction (º)	**133.3**	**138.5**	**153.2**	**134.1**	**139.8**
	Speed (m/s)	**6.4**	**6.7**	**7.0**	**6.7**	**6.7**
Khamsin Season Average	Direction (º)	**225.0**	**183.8**	**255.0**	**221.3**	**221.3**
	Speed (m/s)	**7.1**	**7.6**	**7.7**	**7.4**	**7.4**
Normal Season Average	Direction (º)	**90.0**	**125.0**	**107.5**	**97.5**	**105.0**
	Speed (m/s)	**6.1**	**6.3**	**6.7**	**6.3**	**6.4**

Source：Djibouti-Ambouli International Airport

4) Oceanographic Data

■ Tide Levels

The design tide levels are as follows:

Table 2-5: Design Tide Levels

Item	Abbreviation	Tide Level (m)
High High Water Level	H.H.W.L	+ 3.20 m
High Water Level	H.W.L.	+ 2.95 m
Mean Sea Level	M.S.L.	+ 1.93 m
Low Water Level	L.W.L.	+ 0.62 m
Chart Datum	C.D.	± 0.00 m

■ Tidal Current

The tidal current in Djibouti Port below is taken from JICA's Outline Design Report for the "Project for the Reinforcement of Maritime Transport Capacity at the Gulf of Tadjourah".

・ Tidal current in Djibouti Port (v) = 0.14 m/sec. (0.27 kt)

■ Wave Height

There are no problems with wind on the waves in front of berth no. 4 in the old port of Djibouti as the anchorage is shielded by warehouses from the predominant wind direction in normal seasons. There are westerly winds during the Khamsin season, however interview surveys revealed that swells caused by this wind do not enter the port and there are only ship wakes that are about 30cm high.

2-2-2 Basic Plan

[New Patrol Boats]

2-2-2-1. Outline Specification for New Patrol Boats

(1) Dimensions and number of boats

35m-class Patrol Boats (x 2)

(2) Main particulars

1) Dimensions : Length over all of 35m,

Confidential due to security reasons

2-2-2-2. Design Elements of Components

(1) Speed, main engine output, and hull material

Confidential due to security reasons

Confidential due to security reasons

Table 2-6: Relationship between Output and Operational Load/Overhaul Interval of Main Engines of Patrol Boats

	Confidential due to security reasons	

Confidential due to security reasons

(2) Cruising range and duration

Confidential due to security reasons

(3) Propulsion system

Confidential due to security reasons

Confidential due to security reasons

Table 2-7: Comparison of Propeller and Water Jet Systems

	Confidential due to security reasons	

	Confidential due to security reasons	

(4) Complement and accommodation facilities

Confidential due to security reasons

(5) Anchors, anchor ropes, and mooring facilities

Confidential due to security reasons

Table 2-8: Comparison of Different Types of Ropes

Confidential due to security reasons			

Confidential due to security reasons

(6) Deck machinery

Confidential due to security reasons

(7) RHIB (Rigid Hull Inflatable Boat)

Confidential due to security reasons

Confidential due to security reasons

Table 2-9: Comparison of the Three Proposed RHIB Models

Confidential due to security reasons			

(8) Lifesaving and firefighting equipment

Confidential due to security reasons

(9) Air conditioning systems, and windows

Confidential due to security reasons

(10) Main engines, auxiliary engines, and engine room equipment

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Table 2-10: Specifications of Fuel Supplied in Djibouti

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(11) Nautical instruments

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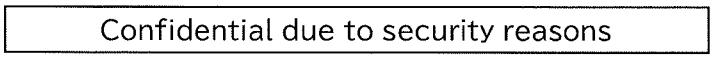
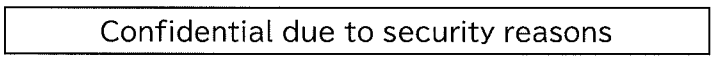


Figure 2-4: Schematic Diagram of Different Radar Systems (Left: Magnetron Radar. Right: Solid-state Radar)



(12) Radio communication systems

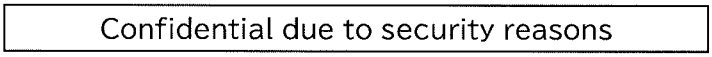


Figure 2-5: Portable Digital Radio Transceiver with Damaged Antenna (Almost all portable transceivers have this problem.)

(13) Generators, lighting and electrical equipment

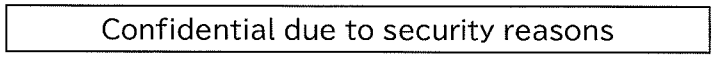
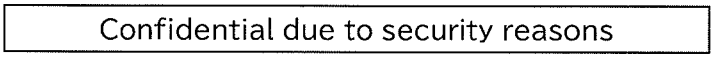


Figure 2-6: Measurement of Voltage at Power Terminals on Berth No. 4



(14) Freshwater generator

Confidential due to security reasons

(15) Anticorrosion measures

Confidential due to security reasons

Confidential due to security reasons

(16) Spare parts

Confidential due to security reasons

2-2-2-3. Draft Design Specifications for New Patrol Boats

Table 2-11: Specifications for New Patrol Boats

Item	Specifications	Remarks
1. Navigation Area and Hull Materials		
	Confidential due to security reasons	
2. Speed and Cruising Range		

Item	Specifications	Remarks
3. Main Particulars		
Length over all	35.0m	Current boats: 19.6m
4. Accommodation Facilities		
5. Anchoring and Mooring		
6. Deck Machinery		
7. High Speed Boat		

Confidential due to security reasons

Item	Specifications	Remarks
8. Lifesaving Equipment		
9. Firefighting Equipment		
	Confidential due to security reasons	
10. Air-Conditioning and Ventilation		
11. Window and Scuttle		
12. Painting and Cathodic Protections		

Item	Specifications	Remarks
13. Main Engine and Propulsion System		
	Confidential due to security reasons	
14. Diesel Driven Generator		
15. Engine Room Machinery		

Item	Specifications	Remarks
16. Power Sources		
17. Onboard Communication Systems		
	Confidential due to security reasons	
18. Lighting		
19. Nautical Instruments		

Item	Specifications	Remarks
20. Radio Apparatus		
	Confidential due to security reasons	

2-2-2-4. Outline Specifications for New Pontoon

(1) Dimensions and number of boats

35m pontoon for patrol boats (x 1)

(2) Main particulars

1) Dimensions: 35.0 m L x 6.0m B x 2.7m D, draft 1.5 m

2) Mooring method: Mooring ropes and fender piles on the shore side, fenders on the pontoon side

3) Design element

Structure: Post-tensioned, pre-stressed concrete segment structure

Fenders: V-shaped rubber

Lighting facilities: LED x 3

Power and water supply: Power and water supply terminals x 1 location (3-phase 400 V, AC, 60 A x 2 terminals, single phase 220 V AC, 15 A x 1 terminal), Water supply (20 mmAq x 1 outlet)

Other accessories: Bollards, gangways, handrails, wheel stops, life preserver rings, a case for fire extinguishers

Ancillary equipment (installed on the berth side): 4 bollards and 4 fender piles

2-2-2-5. Structure Type of Pontoon

DCG and the preparatory survey team discussed the structure of the pontoon and requested to change the structure from the steel structure originally requested by DCG to a pre-stressed concrete segment (PCS) structure.

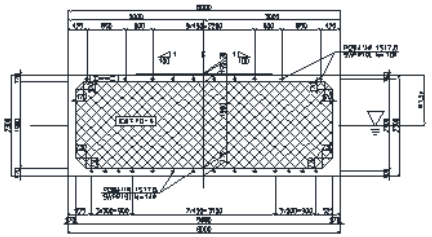
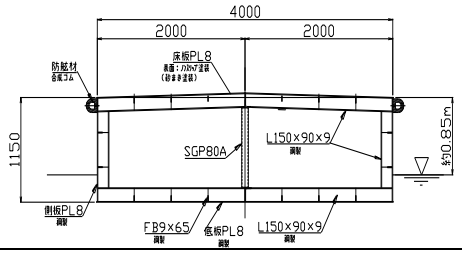
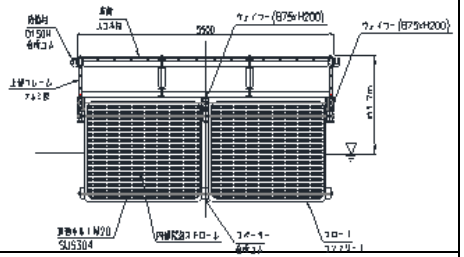
Steel pontoons are prone to seawater corrosion. Therefore, they need to be grounded in a shipyard every five years so that corrosion-proof coatings can be reapplied. As the old Port of Djibouti has a shipyard for repairs and a floating dock, the pontoon can be recoated on a slipway there. However, the recoating does cause inconveniences – there are large costs associated with it and it also means that the pontoon is out of action during this work.

The PSC structure is used widely in Japan because it is resistant to corrosion and shocks and it is inexpensive to maintain.

The only shortcoming of a PCS pontoon is the need for a large crane for the pontoon's assembly at an installation site. Although the procurement of a large crane was a major concern before the field survey, it was found that the Djibouti Port Authority has a floating crane with a lifting capacity of 80 tons, which, though it was manufactured in 1954, is in good shape. The team also found that a local transportation company owns a crane lorry with a lifting capacity of 50 tons and a crane lorry with a lifting capacity of 70 tons, both of which can be hired. These findings eliminated any problems concerning cranes during pontoon assembly. Therefore, the preparatory survey team selected the PCS structure as the one that satisfies Djibouti's requests the most.

A comparison of Pontoon Structures is shown in the following table.

Table 2-12: Comparison of Pontoon Structures

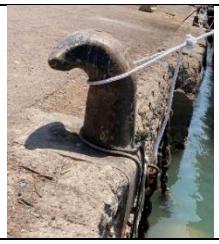
	Precast Post-tensioned Concrete Float Segment Method	Steel Hull Structure	Segmented Float with Wale and Tie-rod Joint Method
Typical Cross Section			
Structural Characteristics	It is manufactured in small block units and connected horizontally on the water by introducing prestressing at the top and bottom of the side walls. There are no restrictions on the shape and size of the blocks, and there are few restrictions on the production yard. The interior of each block is filled with styrofoam to eliminate the risk of flooding.	Lighter weight due to its all-steel welded structure. Mooring cables can be made thinner because the draft is shallow and the external force to which they are subjected is small.	The structure consists of multiple floats (concrete skin) joined to the walling material and through-bolts. The longitudinal bending strength of the entire floating pier is borne by the wailer material.
Durability	The floating structure is made of PC concrete, making it highly durable. It has a service life of more than 30 years.	Since they are prone to corrosion in seawater, they need to be repainted after landing at regular intervals (once every five years), which is expensive to maintain. (Underwater parts can be treated with electrolytic protection, but periodical replacement of anode plates is required. Durable life of about 30 years (with maintenance).	The concrete-covered float has high durability and Durability is further enhanced by using aluminum as a connecting material to connect the floats. Durable life of about 30 years (with maintenance).
Construction Efficiency	A 120-ton class crawler crane and an 80-ton class truck crane are required. Since the segment is a secondary product, construction management is relatively easy. Rent expense for local heavy machinery will be a heavy burden.	The manufacturing period is short. Airtightness of the welded part needs to be controlled. Large heavy machinery is required for launching.	A 50-ton crane is required for connecting work on the water. On-site work is easy to handle due to its light weight.
Impact Resistance	The floating body is made of PC concrete and has high impact resistance.	Depending on the degree of impact, there is a possibility of paint peeling off, deforming, or breaking, but this can be repaired.	Depending on the degree of impact, there is a possibility of damage to the walling material and connections, but partial repair is possible.
Stability	Due to its weight, the floating structure has a long oscillation cycle and a sense of stability.	Due to its light weight, the tilt is small, but the rocking period is short, so it is not as stable as the other options.	Compared to steel floats, concrete floats are more massive and stable
Maintenance	Periodic inspection (once a year) In the case of a fixed pile system, roller replacement (1 time/10years) Chain replacement (1 time/15 years) in case of chain mooring)	Periodic inspection (once a year). In the case of a fixed pile system, roller replacement (1 time/10 years). Chain replacement (1 time/15 years) in case of chain mooring Re-paint the whole thing every five years.	Periodic inspection (once a year). In the case of a fixed pile system, roller replacement (1 time/10 years). Chain replacement (1 time/15 years) in case of chain mooring.

2-2-2-6. Ancillary Work (repair of existing facilities)

The following existing facilities shall be improved and repaired.

1) Bollards on existing berth

Because some of the bollards on the berth are damaged, or there are not enough bollards to moor the new pontoon, four new bollards shall be installed on the berth.

Curved Bollards (250 – 500 kN-type)	Straight Bollards (100 kN-type)

* *cf.* The dimensions of the foundation of an existing bollard (250 kN-type) on berth no. 5: 2.5 mL x 2.0 mB x 10 mD)

2) Study on mooring of pontoon

■ Current state of berth

Almost all of the fenders on the berth wall have been damaged or lost, and used lorry tires are hung from the side of the patrol boats for berthing. The mortar in the joints of the basalt block mortar masonry wall has been lost or damaged severely over time and the surface of the wall is covered by sessile organisms, including oysters. If the mooring fenders of the pontoon come into contact with the wall surface, it is assumed that the fenders will wear away in a fairly short amount of time.



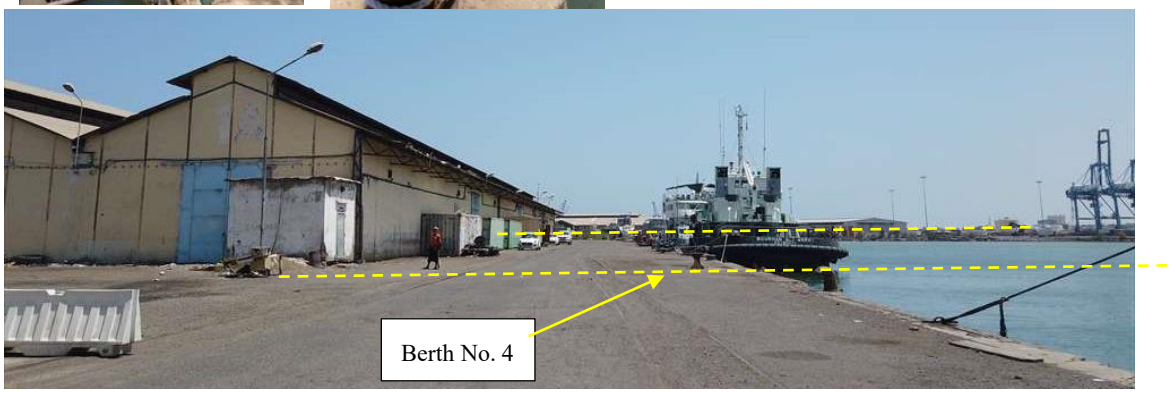



Figure 2-7: Current State of Existing Berth

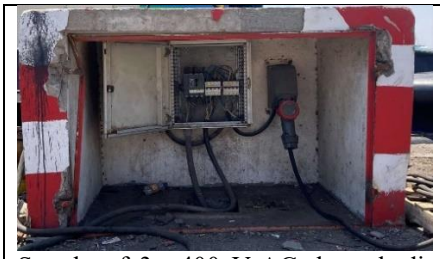
If the mooring method of installing rubber fenders on the side of the pontoon and putting them into contact with the berth wall is used, the fenders will be abraded severely by the rough wall surface. Therefore, the preparatory survey team studied the following three methods of repairing the berth or mooring the pontoon to the berth.

i. To install a hanging wall of precast concrete blocks on the existing berth wall,
ii. To install shock-absorbing plates on the wall to reduce the impact friction between the wall and the pontoon, and
iii. To install fender piles to moor the pontoon before the berth

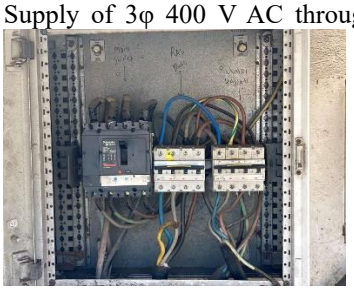
i. The method of installing a hanging wall of PCa blocks as a shock absorber has several problems: Its installation is time-consuming. The hanging wall will be a fixed structure protruding from the face line of the existing berth. It would difficult to fix the wall to the berth because of the large deadweight of the wall material.
ii. The feasibility of anchoring ready-made rubber fenders with shock-absorbing plates to the berth wall is questionable. Not only is it difficult to drill anchor holes in the hard basalt walls underwater, even if an anchor is successfully installed in the wall, it is not certain whether the wall near the anchor is strong enough to support the load of a fender as the mortar joining the basalt blocks has deteriorated over time.
iii. Considering the difficulty in implementing the above two methods, the preparatory survey team has selected the method of installing fender piles before the berth to absorb the force of collision from the pontoon to the berth. The tractive force on the pontoon in the offshore direction and the direction parallel to the berth shall be absorbed by connecting mooring ropes between the berth on land and the pontoon. Because there is a rubble mound on the seabed at the foot of the berth wall to support the wall, it is difficult to drive piles into the seabed. Therefore, the piles shall be fixed to a concrete block placed on the seabed (spread footing method).

3) Water and power supply facilities at existing berth

The Djibouti side shall extend a water supply pipe and power supply lines to a site near the planned site of the gangway to the pontoon and install connecting terminals at the ends of the pipe and lines at its own expense. After the pontoon is set up, the water supply pipe and the power supply lines will be connected to the water supply pipe and the power supply lines on the pontoon side.



Supply of 3φ 400 V AC through direct coupling



(Left) Circuit breaker. (Right) Legrand connector

Shore power supply terminal on existing berth

10 cm aperture Quick coupler connection

Water hydrant (fire hydrant) on existing berth

Figure 2-8: Current State of Shore Power Supply Terminal (left) and Water Hydrant on Existing Berth

2-2-2-7. Ancillary Equipment on Pontoon

The table below shows the current state of the ancillary equipment on the existing mooring facility and the results of the study on the outline specifications of ancillary equipment required to be installed on the pontoon.

Table 2-13: Study on Ancillary Equipment

Equipment	Outline Specification	Remarks
1. Fender	- V-shaped rubber fenders: 26 (13 each on both sides) 300 m H x 1500 mm L, @2.5 m intervals - V-shaped rubber fenders (at contact points with fender piles): 8 (2 each parallel at 4 locations on the shore side) 300 m H x 1500 mm L (300 mm H, @2.5 m intervals) - Fender piles at 4 locations - V-shaped rubber fenders for corners: 8 (2 each on the four corners) 200 m H x (750 + 750) mm L - Rubber ladder fenders: 4 (1 each on the four sides)	 V-shaped rubber fenders Ladder fenders
2. Mooring fittings	- Cross bollards (150 kN): 4 (1 each at the bow and stern on each side) - Horn bollards (150 kN): 8 (4 each on the middle part of each side) (Total number of bollards: 12) - Fairleads for guiding mooring ropes - Cleats, hooks, etc., for tying ropes	 Horn bollard  Cross bollard

Equipment	Outline Specification	Remarks
		 Fairlead
3. Power and water supply facilities	- Install a shore-power supply terminal x 1 location. - 3φ 4-line 400 V (60 A) x 2 terminals - 1φ 3-line 220 V (15 A) x 1 terminal * Models of plugs and receptacles to be determined in discussion with DCG - Electricity meter x 1 - Hydrant (with 20 mm diameter x 1 outlet) + 20 m-long hose Power supply lines from the pontoon to the boats and connectors to be supplied by shipbuilder	  Example: Power supply and water supply terminals integrated inside a stainless steel (hereinafter referred to as “SUS”) housing
4. Lighting equipment	- Outside lighting with 5m high aluminum pole of heavy-duty salt-resistant specifications: 3 units - Select LED lighting types that are available in Djibouti	- Install a power supply port for a surveillance camera on the poles. - Surveillance cameras to be provided and installed by DCG
5. Jib crane	- 5 KN at 3.0 m, with a manual chain block	- Fire extinguishers to be provided and installed by DCG
6. Fire extinguisher storage case	- Install a case to store CO_2 and foam fire extinguishers	- Fire extinguishers to be provided and installed by DCG
7. Warehouse	- Ready-made warehouse of corrosion-proof steel sheets	
8. Life preserver rings	- 2 sets (including ropes, hooks, and storage boxes)	
9. Other	- Oil supply piping or equipment will not be installed on the pontoon	- Fire extinguishers to be provided and installed by DCG

2-2-3 Outline Design Drawings

Figures below show the outline design drawings.

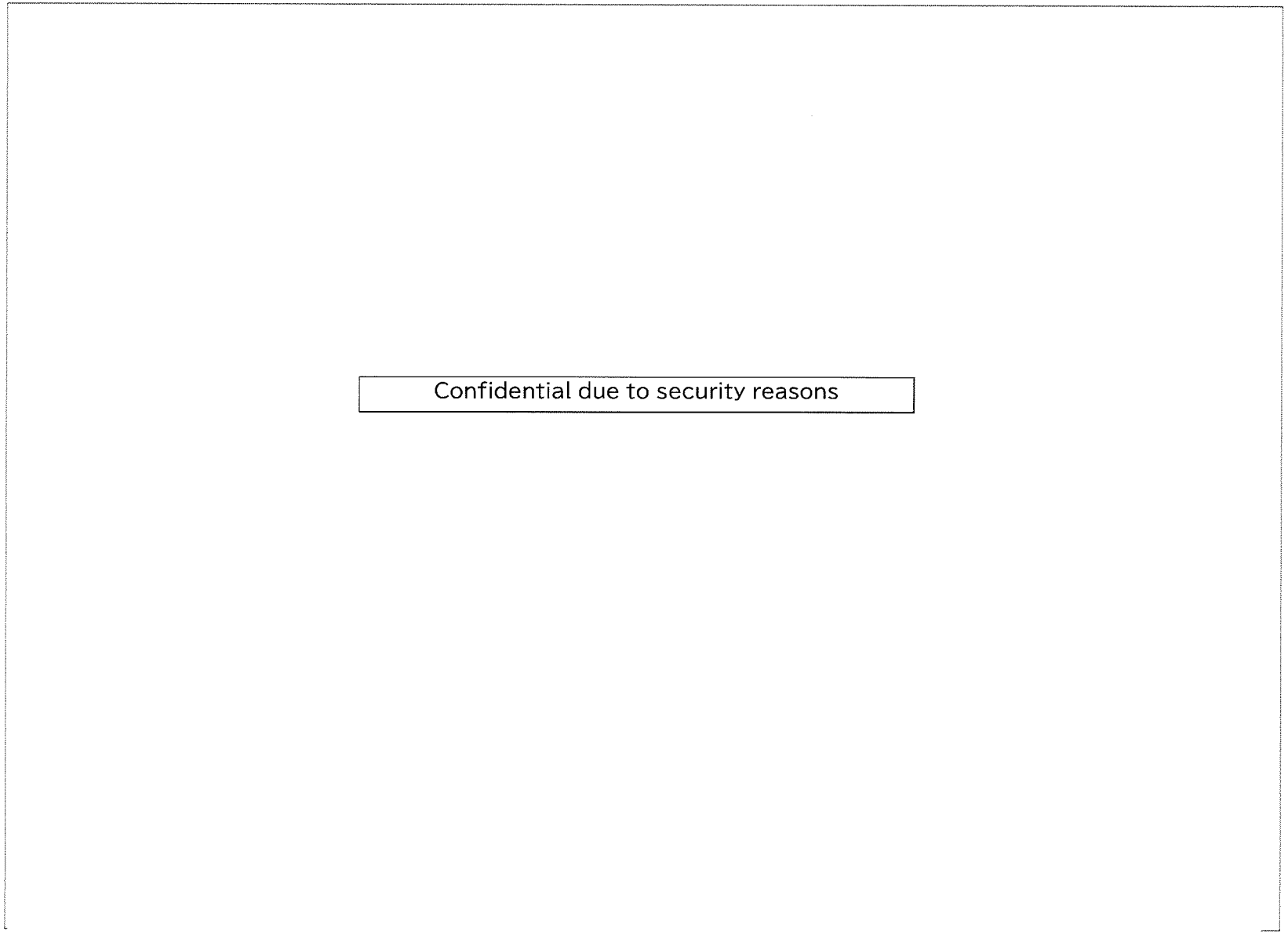


Figure 2-9: General Layout

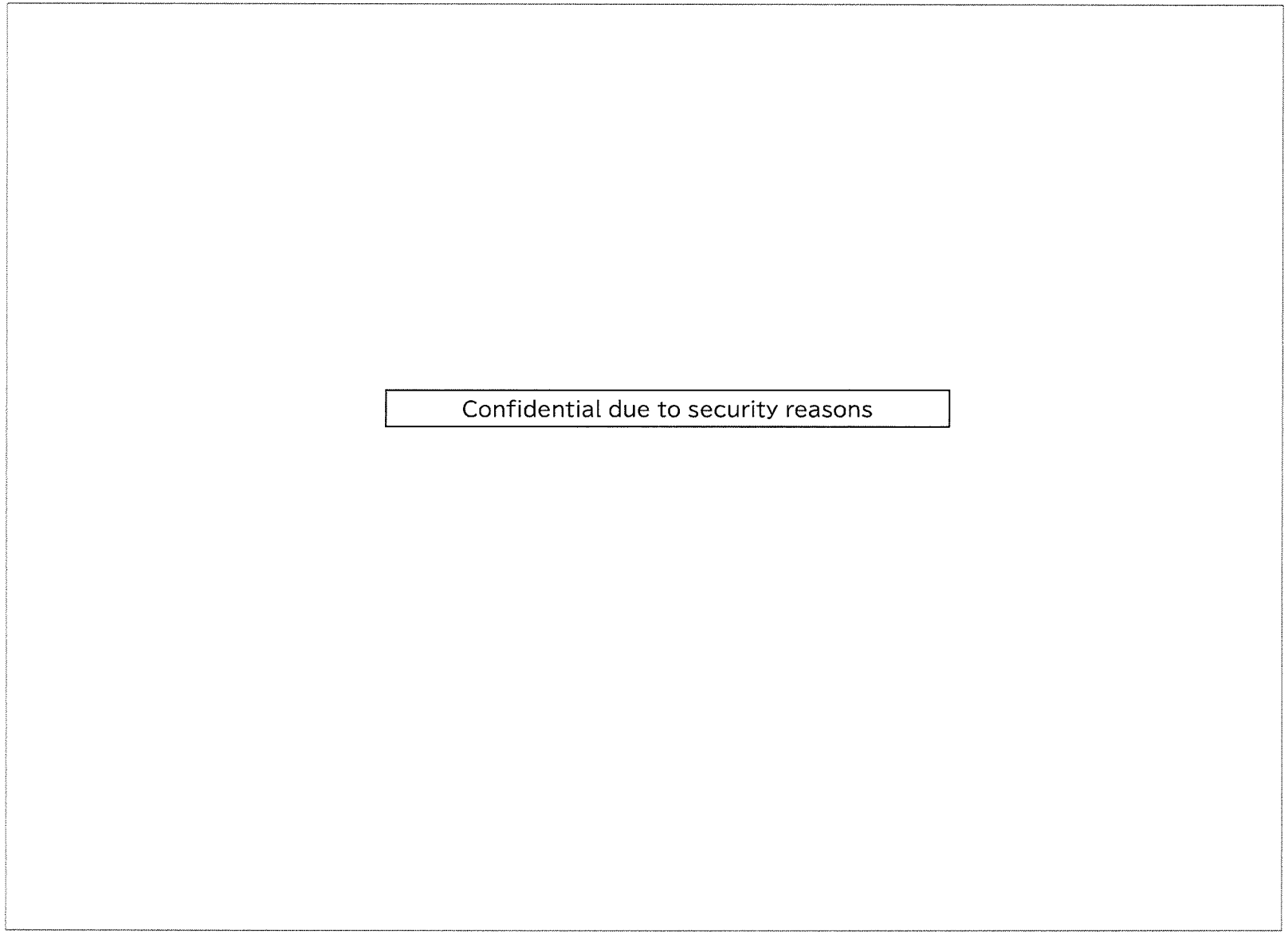


Figure 2-10: Hull Form Lines

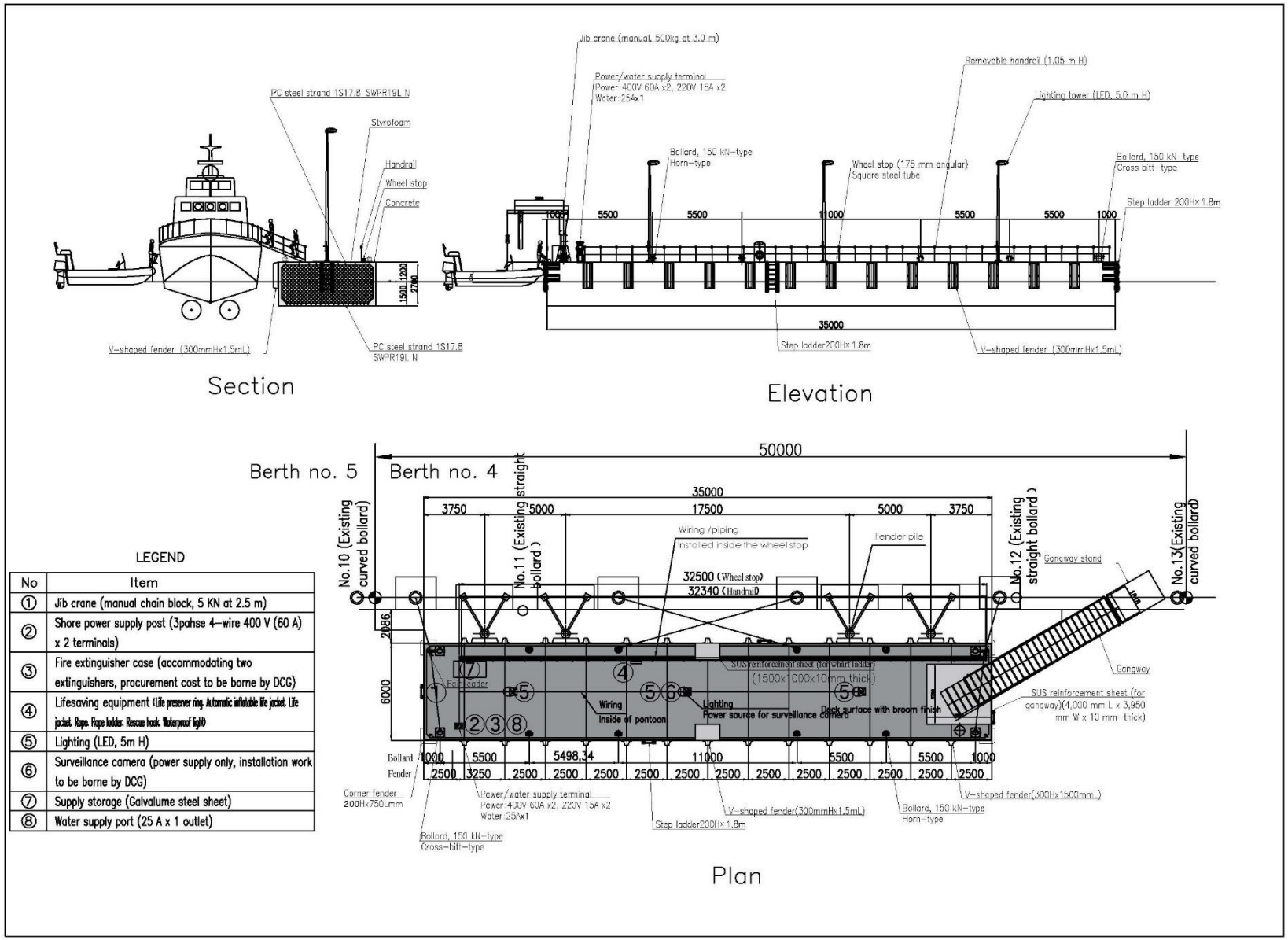
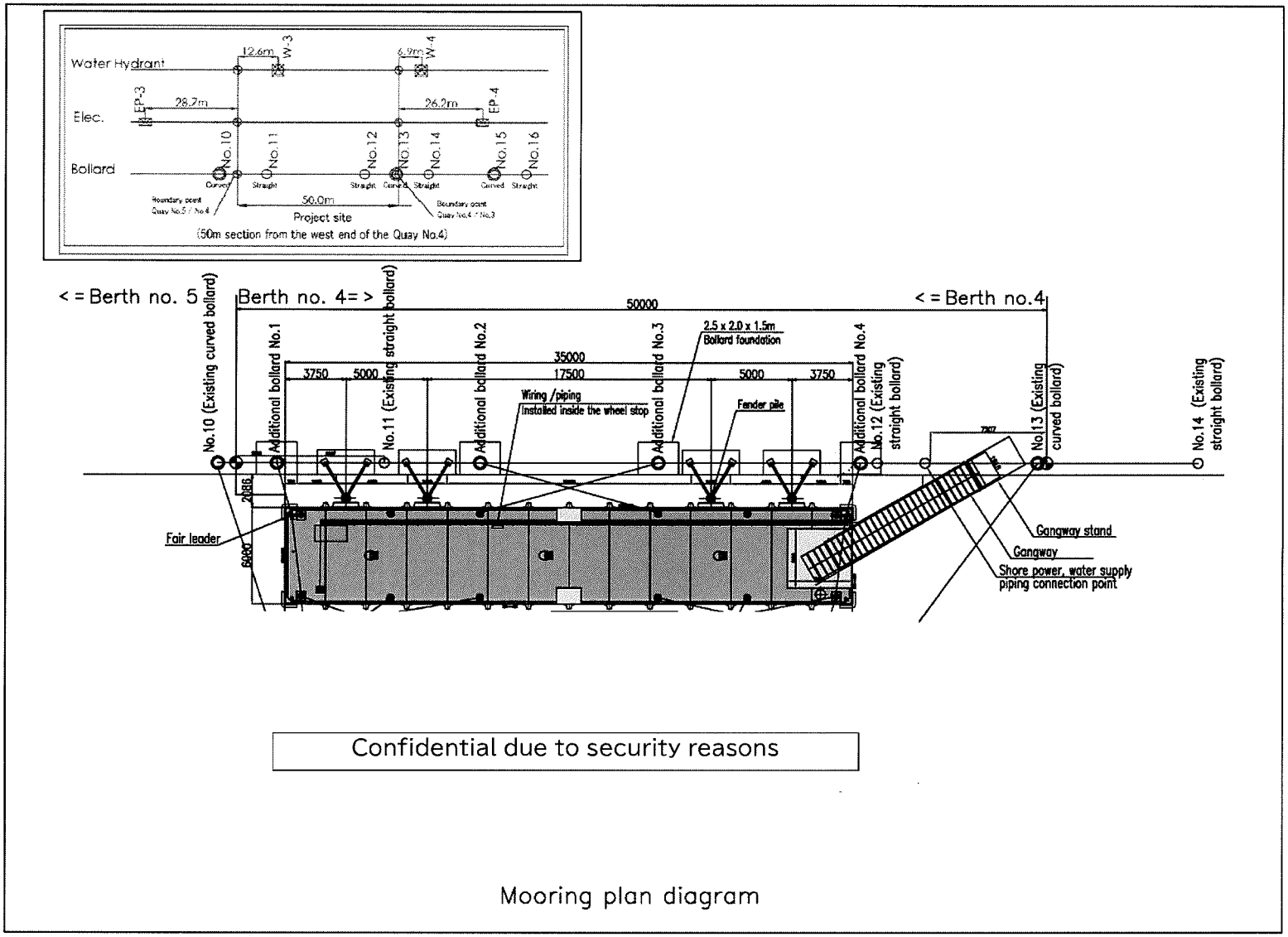


Figure 2-11: Plan View (Pontoon)



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Mooring plan diagram

Figure 2-12: Mooring Plan Diagram (Pontoon)

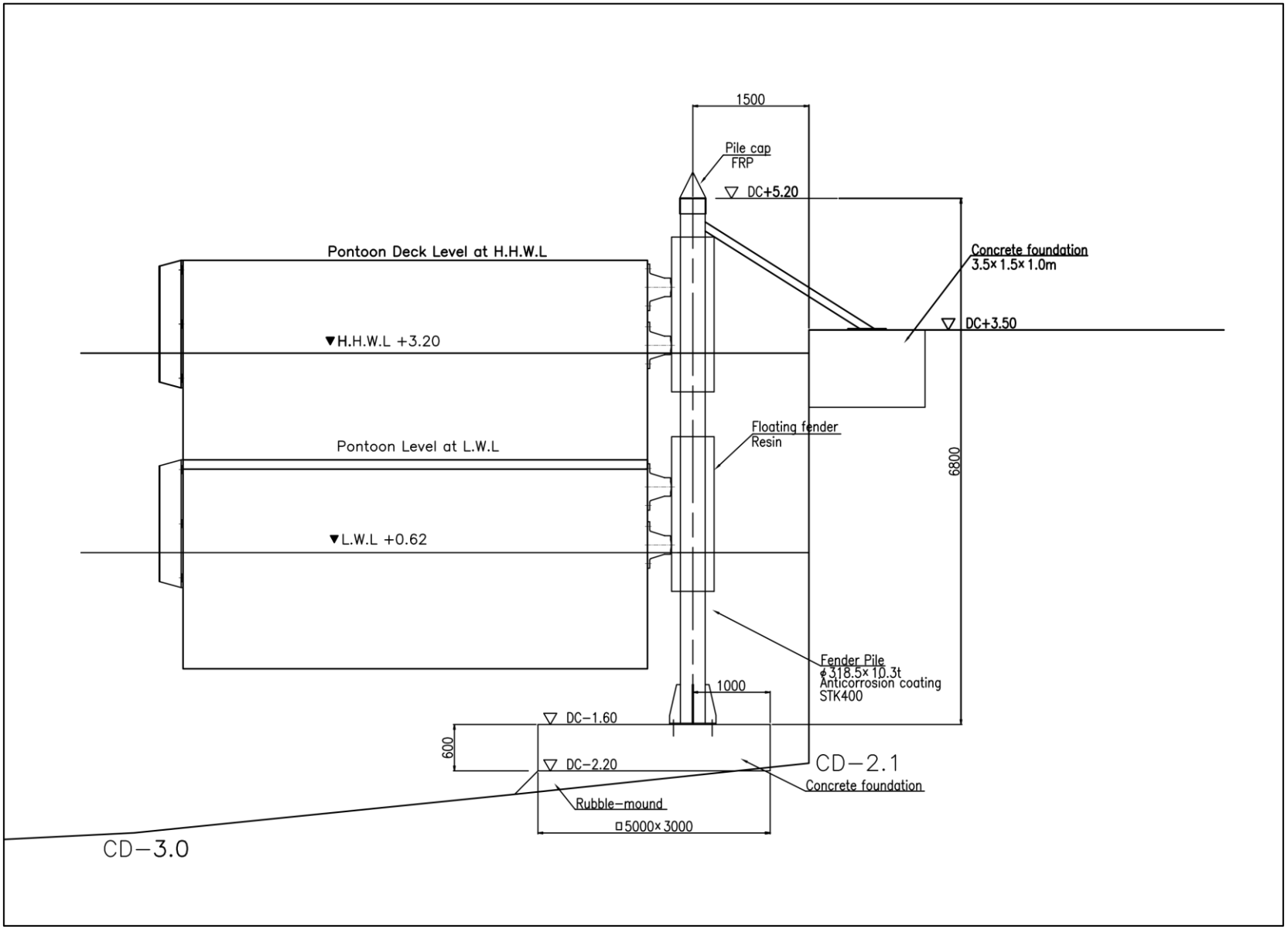


Figure 2-13: Cross Section View (Pontoon)

2-2-4 Implementation Plan

2-2-4-1. Implementation Policy

(1) Construction procedures

In this Project to be implemented within the framework of Japan's ODA grant aid, new patrol boats and a new pontoon shall be built and delivered as described below:

1) The Government of Djibouti (hereinafter referred to as the "GOD") and the Government of Japan (hereinafter referred to as the "GOJ") shall conclude an exchange of notes (hereinafter referred to as the "E/N") and GOD and JICA shall conclude a grant agreement (hereinafter referred to as the "G/A") for the implementation of this Project.

2) GOD and a consultant recommended by JICA (hereinafter referred to as the "Consultant") shall conclude a consulting service agreement (for project implementation).

3) JICA shall approve the consulting service agreement.

4) The Consultant shall prepare drafts of the documents required for conducting a tender, including draft prequalification procedures, technical specifications, technical drawings, including general layout plans, project cost estimation, and a shipbuilding contract, and obtain GOD's approval for the documents.

5) The Consultant shall prequalify potential bidders following the approved prequalification procedures and select bidders with the approval of GOD. The bidder must be a Japanese shipbuilder or a joint venture including such a shipbuilder.

6) The Consultant shall open the bids in the presence of GOD and evaluate bid proposals submitted by bidders. The Consultant shall recommend the best bidder selected in the evaluation to GOD as the candidate contractor.

7) The Consultant shall assist the contract negotiations between GOD and the candidate contractor and witness the conclusion of the shipbuilding contract between them.

8) JICA shall approve the concluded shipbuilding contract.

9) The shipbuilding contractor shall build the new patrol boats and thereafter carry out sea trials for them. The contractor shall also procure equipment and a pontoon. The Consultant shall supervise the construction of the patrol boats and their sea trials.

10) The Contractor shall transport the patrol boats, equipment, and the pontoon by sea from Japan to Djibouti.

11) The Consultant shall witness the handover of the patrol boats and installation of the

equipment and pontoon in Djibouti.

(2) Basic matters for project implementation

The basic matters in the implementation of the grant aid project are as follows:

1) Implementing Entity

DCG shall be the competent authority and implementing agency for GOD in this Project. In principle, DCG shall receive all documents associated with the project implementation and give required approval to them.

2) Consultant

After the conclusion of the E/N between GOD and GOJ, a consulting service agreement between GOD and a Japanese consulting firm nominated by JICA shall be concluded. The Consultant shall prepare tender documents, including technical specifications, assist GOD in tender and contract negotiations, and supervise the shipbuilding, as an agent of GOD. The Consultant shall dispatch engineers in charge of the shipbuilding and outfitting engineers for various outfitting works to the shipyard at necessary times during the construction period to supervise the construction of the patrol boats.

3) Contract for the construction of new patrol boats and procurement of pontoon and equipment

For this Project, competitive tender will be organized in accordance with the predetermined tender and contracting procedures after conducting the prequalification for Japanese companies that have applied for prequalification. The company selected in the tender shall conclude a contract with GOD. The Contractor shall build the patrol boats, conduct sea trials, procure a pontoon and equipment, and transport them to Djibouti. The new patrol boats, pontoon, and equipment shall be transported to Djibouti by ship.

(3) New patrol boats construction policy

1) Shipbuilding plan

In the construction of new patrol boats, the Contractor shall carry out production design of the ship hulls and outfitting based on the conditions of its own shipbuilding facilities and equipment, while taking into account the contract and accompanying technical specifications. After the preparation of the building designs, the Contractor shall begin construction. The work shall proceed in the order of hull building, outfittings (deck outfitting, mechanical and electrical outfittings), various tests, and transportation. The following points shall be considered in the preparation of the shipbuilding plan.

i. As this Project shall be implemented within the framework of Japan's ODA grant aid, the Contractor shall have to complete the construction by the pre-set completion date. The Contractor shall need to prepare a shipbuilding plan that enables all the contractual obligations to be fulfilled within the period in which the E/N remains valid.

ii. The Contractor shall monitor the progress of the manufacturing of outfittings and equipment that require a longer delivery period, including engines, to ensure that manufacturing progresses as planned. The Contractor shall coordinate the schedules of the hull construction and outfitting works with the manufacturing schedule of necessary equipment so that the construction work shall be implemented without delay.

iii. The Contractor shall conduct various tests stipulated under international conventions and regulations and the Ship Safety Act of Japan, which is to be followed in this Project. The Contractor shall also conduct the required sea trials after the patrol boats have been constructed in order to confirm their performance.

iv. In the last stage of the construction process, the Contractor shall provide training to 12 crew members of each patrol boat (including the candidate captain, chief engineer, mate, engineers, and cadets (in navigation and engines/electrical facilities)). They shall attend the final outfitting work and sea trials of the new patrol boats, receive briefings on the handling of various equipment and systems from the staff of the manufacturers and shipyard, and receive familiarization training on ship and equipment operation. In this practical training, they shall learn how to operate and maintain equipment, including the main and auxiliary engines, other equipment in the engine room, nautical instruments, and radio equipment. In order to familiarize the trainees with the maintenance work required on a regular basis, the initial maintenance work such as filter replacement shall be performed by the trainees in the presence of manufacturers' engineers after the sea trials and before project completion as much as possible. The training shall be provided in French, with interpretation arranged by the shipyard, if necessary.

v. The Shipbuilding Contractor shall be responsible for the transportation of the new patrol boats from the berth of the Contractor's shipyard to Djibouti Port by ship. The Contractor shall perform a final inspection of the patrol boats immediately after they have arrived at the Port of Djibouti and hand them over to GOD.

vi. The shipyard that has built the patrol boats shall provide a final briefing on the handling and maintenance of important equipment to DCG in Djibouti.

2) Equipment procurement plan

In procuring a pontoon for the new patrol boats and related materials and equipment, the

Contractor shall procure these materials and equipment in accordance with the contract and accompanying technical specifications.

3） **Dispatch of engineers**

After the new patrol boats are handed over to GOD, two engineers (one specialized in equipment on the deck and the other in the equipment in the engine room) will stay in Djibouti for two weeks following the handover to deal with any initial failures of the patrol boats, and will provide technical guidance on the operation and maintenance of the patrol boats and equipment as far as possible.

2-2-4-2. Implementation Conditions

In implementing this Project, the following points should be fully considered.

(1) The construction of patrol boats and pontoon shall be implemented in a rational sequence.

(2) As it is difficult to estimate the dates of delivery of many materials and equipment accurately, the planned delivery dates should be regularly checked, and whenever a delay in delivery is expected the relevant work schedules must be adjusted without fail.

(3) Detailed plans for the performance test of equipment at the berth and sea trials of the patrol boats should be prepared, and these plans reflected in the implementation schedule.

(4) The progress of the work should be checked regularly (at least once a week) and the schedule for the following stages adjusted accordingly.

(5) As a delay in the implementation of items to be borne by GOD may affect the progress of the entire project, attention shall be paid to the implementation status of such items before commencing project activities in Djibouti.

(6) GOD shall be responsible for tax exemptions (including that from value-added tax) for the equipment and materials to be transported to Djibouti in this Project. As the complexity of the tax exemption process may affect the project schedule, attention shall be paid to the progress in the tax exemption process.

(7) Before the transportation of the equipment and materials to Djibouti, GOD shall be reminded of its responsibility for the customs clearance of the equipment and materials at the Port of Djibouti.

2-2-4-3. Scope of Works

The scope of works for Japan and Djibouti are as follows:

Table 2-14: Scope of Works for Japan and Djibouti

	Work, administrative procedures, and costs to be borne	Japan	Djibouti
1	Conclusion of a banking arrangement with a Japanese bank and payment of associated commission		●
2	Permission and application procedures for installation of a pontoon and wharf repairs, and permission for the mooring of the new patrol		●

	Work, administrative procedures, and costs to be borne	Japan	Djibouti
	boats		
3	Preparation of the site for pontoon installation and a storage areas		●
4	Extension of the power lines and waterworks to the project site (near the planned site of the gangway to the pontoon) and installation of connection terminals, valves and a switchboard		●
5	Import and customs clearance procedures for the materials, equipment and services required for project implementation		●
6	Tax exemption procedures such as value added tax for payments for goods and services required for project implementation		●
7	Consulting services including detailed design, assistance in tender implementation, and project supervision	●	
8	Preparation and submission of project monitoring reports (PMRs)		●
9	Transportation of the patrol boats and the equipment from Japan to Djibouti by sea.	●	
10	Acquisition of certificates (radio station approval certificate, etc.) necessary for operation of the new patrol boats		●
11	Structure repairs (repair of wharf walls)	●	
12	Procurement and installation of equipment	●	
13	Facilitation of the entry, stay and departure of Japanese nationals engaged in the Project in Djibouti		●
14	Equipment (including transmission equipment and monitors) and installation work for fire extinguishers and surveillance cameras on pontoon		●
15	Construction of a warehouse to store spare parts for the patrol boats		●
16	Other work required for the implementation of the Project not included in the scope of the work of GOJ.		●

In addition to the above, after the handover of the new patrol boats, Djibouti shall be responsible for all matters required for the safe and smooth operation of the patrol boats, including the maintenance of the patrol boat operation system, payment for operation costs, maintenance and insurance of the patrol boats, and government subsidies for the cost of patrol boat operations.

2-2-4-4. Consultant Supervision

(1) Basic policy for supervision of shipbuilding and procurement

The Consultant shall inspect the work details by the Contractor including equipment procurement and shipbuilding to confirm their appropriateness for implementation under the Japanese grant aid scheme, prepare a supervision plan in line with the project implementation schedule, and verify whether the structures have been built according to the drawings, specifications, and quantities provided in the contract documents, and supervise implementation schedule, procurement and construction. The basic policy for the consultant supervision is as follows.

1） Approval of drawings and specifications

The Consultant shall inspect the shipbuilding plan and schedule, construction and production drawings, and production specifications to be submitted by the Contractor for compliance with the drawings and specifications provided in the shipbuilding contract, and promptly approve the documents submitted by the Contractor or instruct the Contractor to revise them. The Consultant shall respond quickly to the questions of the Contractor concerning the documents so that project implementation shall not be delayed.

2） Schedule supervision

The Consultant shall always monitor the progress of all work and provide the Contractor with the instructions required for completing the work as scheduled.

3） Quality inspection

[New Patrol Boats]

The Consultant shall dispatch persons specialized in the outfittings and equipment to the workshops and shipyard for appropriate periods at appropriate stages to inspect the accuracy of the shipbuilding work and the compliance of the equipment manufacturing and outfitting work with the drawings, specifications, and other approved documents. The Consultant shall also conduct witnessed inspections based on approved test methods and contractor's in-house inspection criteria for equipment and outfitting work.

DCG shall conduct in-process inspections, as per DCG’s request, of the new patrol boats when the first patrol boat is launched and when the construction of the second patrol boat has been completed. When the first patrol boat is launched, the construction of the second will be in progress. Therefore, DCG will be able to inspect places that will not be accessible after the engines and other equipment have been installed in the engine room at this timing. When the construction of the second patrol boat has been completed, DCG will be able to operate the two patrol boats at sea to confirm their performance and specifications, and inspect their maneuverability as well as the vibration, noise, etc., generated by them. The details of the in-process inspections by DCG shall be determined in discussions between the shipyard and the Consultant, and based on any requests made by DCG.

[New Pontoon]

The Consultant shall implement short-term technical supervision by experts, in which the Consultant shall approve the procured equipment, confirm installation methods, control the quality of work, and provide guidance on equipment installation. During the manufacturing of the equipment and its installation in Djibouti, the Consultant shall attend inspections and approve the inspection results at appropriate times, and conduct the completion inspection after the completion

of the installation and approve the completed work.

4） Handover

The Consultant shall conduct witnessed inspections of the new patrol boats and pontoon at the Port of Djibouti after they have arrived at the port and the installation has been completed, then prepare the certificates required for the handover.

5） Shipbuilding reports

The Consultant shall submit a monthly report to DCG summarizing the progress of the work, the schedule for the following month's work, and photographs of the work.

(2) Consultant supervision system

The Consultant will form a project team consisting of the following personnel: for patrol boats, a team leader, hull design, outfitting design, electrical and mechanical design, and equipment planning; for pontoon, a pontoon chief, outfitting design, and equipment and cost estimation. The Consultant will also be in charge of the detail design, and project implementation supervision.

(3) Transportation plan

[New Patrol Boats]

The new patrol boats shall be built in Japan and transported by a freighter to the Port of Djibouti. The contract for the construction of the patrol boats shall cover their construction, procurement and transportation of equipment, and a shipping or transportation company engaged by the shipbuilding contractor shall transport the boats and equipment.

A heavy-lift ship or a freighter shall be used for the transportation of the boats and equipment. As several large-scale ports have been developed and are in operation in Djibouti, there will be no problem with a heavy-lift ship or freighter entering the Port of Djibouti.

Figure 2-14: A Heavy-Lift Ship moored in the Port of Djibouti

(A ship with sufficient capacity to carry two patrol boats and a pontoon)

As large-scale cargo transportation is dependent on irregular services, and it is difficult to predict the exact number of days of transportation because cargo is unloaded at ports along the route and new cargo is loaded as the ship sails. However, it is estimated to take approximately

one month to transport the boats and pontoon from Japan to Djibouti.

[New Pontoon]

As the site has limited storage space, the equipment and materials will be shipped not in one batch but in two batches.

1) Transportation of equipment and materials by container ship (First Ship)

As the repair of the existing wharf walls in the Port of Djibouti shall be implemented before the assembly and installation of the floating pontoon, the materials and equipment required for wall repairs will be packed in containers and transported to Djibouti by a container ship first. The containers will be purchased in Japan and used for the storage of materials near the mooring site after arrival at the project site. When the Project has been completed, the equipment taken from Japan to Djibouti shall be packed into the containers and transported back to Japan. It is estimated to take approximately two months to transport materials and equipment in containers between Japan and Djibouti in either direction, including time taken for land transportation within both countries.

The procured materials and equipment shall be packed in containers in such a way that they will not be damaged during the long marine and land transportation.

2) Transportation of floating segments by ordinary multi-purpose freighter (Second Ship)

The floating segments of pontoon will be transported to Djibouti in such a way that they arrive in Djibouti just after the completion of the wharf wall repairs. They will be transported from a construction yard (presumably in the Kanto region) to a port (presumably Tokyo Port or Yokohama Port) by semi-trailer lorries. The floating segments will be loaded on an ordinary multi-purpose freighter (Second Ship) with a derrick on the freighter and transported by sea to the berth No. 1 in the Port of Djibouti near the mooring site. The time required for transporting the floating segments from Japan to the mooring site in the Port of Djibouti is estimated at 4 months, including the time required for customs clearance.

After the segments have been cleared at customs they will be transported overland to the mooring site by semi-trailer lorries, and unloaded using a floating crane.

2-2-4-5. Quality Control Plan

[New Patrol Boats]

Quality control of the raw materials for the shipbuilding and the manufacturing of onboard equipment shall be as stated below:

Table 2-15: Quality Control Plan

Item		Quality Control
Raw materials	Structural steel materials	A mill sheet (test report) based on material standards must be included with each purchased steel sheet and bar.
	Piping materials and valves	Purchase Japanese Industrial Standards (hereinafter referred to as "JIS")-certified piping materials and valves.
	Wood	The Consultant is to inspect wood materials when they are delivered to the shipyard.
	Fireproof structural materials	Fireproof partition wall materials, liner materials, fireproof and heat-protection materials, fire doors, etc., to be used for the fireproof structures of the accommodation facilities should comply with the Ship Safety Regulations of Japan, and their prototypes should already have been tested and certified.
Onboard equipment and outfittings	Diesel engines	Installed engines should be compliant with the Marine Engine Regulations of Japan and manufactured in a quality-controlled plant where prototypes have already been tested and certified. Conduct a three-component test of the engines under different conditions, including overload, while running them on a trial basis on a test bench at the plant for a period specified in the engine regulations when their manufacturing has been completed.
	Other engine room equipment	Install equipment compliant with the Marine Engine Regulations of Japan, manufactured in a certified quality-controlled plant, and certified in writing by *Nippon Hakuyohin Kentei Kyokai* (hereinafter referred to as "HK"), (Japan Marine Equipment Inspection Institute), on behalf of GOJ.
	Firefighting and lifesaving equipment	Install equipment manufactured with detailed designs compliant with the International Convention for the Safety of Life at Sea (hereinafter referred to as "SOLAS") and type-certified by HK, on behalf of GOJ.
	Equipment required by law	Install equipment type-certified by HK, on behalf of GOJ.
	Deck outfittings	Install outfittings designed in compliance with JIS. The Consultant shall conduct an in-production inspection of the outfittings at the shipyard.
Equipment	RHIB	The RHIB shall be compliant with the standards of the Japan Craft Inspection Organization (hereinafter referred to as the "JCI").
	Outboard engine	Install engines type-certified by JCI or equivalents.

[New Pontoon]

1） Concrete work

Gravel and river sand are usually used as rough and fine aggregate, respectively, in concrete near the mooring site. The quality of concrete shall be controlled according to the following points:

・Cement	Confirmation of type, standards, and performance
・Admixture	Confirmation of test results
・Mixing water	Confirmation of contents of hazardous substances
・Aggregate	Confirmation of grain size, specific gravity, and water absorption capacity
・Test mixing	Confirmation of result of slump test, strength, composition, and quality of concrete

2) Pontoon

The arrangement of reinforcement bars in the pontoon floating segments, which shall be covered with concrete during production, will be inspected visually before the concrete casting. The Consultant shall compare the dimensions of the products and those on the drawings before packing to confirm they have been manufactured to the right dimensions.

The state of the floating segments, equipment, and materials delivered to the mooring site shall be inspected after arrival and before use or installation to confirm that they are in good condition.

2-2-4-6. Procurement Plan

[New Patrol Boats]

The new patrol boats to be built under this Project will be constructed at a shipyard in Japan. In addition, equipment for the patrol boats will also be procured in Japan. However, if special equipment, etc., cannot be procured in Japan, then it shall be procured from a third country.

[New Pontoon]

Among the materials to be procured for the pontoon, ready-mixed concrete (for constructing the foundations of the additional bollards for the berthing and the fender piles) shall be procured locally. The other materials (including segments of the pontoon, additional bollards, fender piles, and equipment to be attached to the pontoon) shall be procured in Japan. To reduce the amount of installation work in Djibouti, equipment, including ancillary equipment that can be assembled in Japan shall be assembled in Japan before being transported to Djibouti.

(1) List of suppliers of major equipment

A list of suppliers for major equipment is shown below.

Table 2-16: List of Suppliers of Major Equipment

Component		Qty.	Supplier country			Outline specification
			Djibouti	Japan	Third country	
1.	Patrol boat	2		○		Including spare parts for PMP
2.	Pontoon	1		○		PCS pontoon

(2) Heavy machinery for assembly and installation

There is no special equipment, or equipment that requires special skill, in terms of the heavy equipment that is scheduled to be procured under this Project. Due to the importance of ease of maintenance and inspection after procurement, it is planned that the machinery will be procured in Djibouti.

The field survey in Djibouti has revealed that the heavy machinery required for assembly and installation (including a floating crane and a crane lorry) is locally available. Materials for temporary structures shall also be procured locally. In addition, jacks to tension the floating segments, a grout plant (a mixer and a pump), and a generator shall be required for the work. As the tensioning is an important process in ensuring the quality of the pontoon, the pontoon manufacturer will procure the equipment required for the tensioning in Japan and transport it to Djibouti. The equipment will be transported back to Japan by sea once installation is complete. The following heavy construction machinery is available in Djibouti:

a) A large floating crane (with a lifting capacity of 80 tons) * property of Port Authority
b) A large crane lorry (with a lifting capacity of 70 tons) * property of a private company
c) Equipment for concrete work, including concrete mixers, transportation equipment and a concrete pump lorry

(3) Labor management in Djibouti

Neither the repair of the existing wharf walls (installation of additional bollards, repair of the top of the wall) nor the ancillary work is particularly difficult. Therefore, the preparatory survey team considers that the work concerned can be implemented by local workers under the supervision of Japanese technical instructors. However, highly strict quality control is required for the tensioning and anchoring of the floating segments. Therefore, although the tensioning and anchoring is a short process, a Japanese expert shall be dispatched to control the work implementation.

2-2-4-7. Operational Guidance Plan

[New Patrol Boats]

(1) Initial operational guidance

When the construction of the new patrol boats has been completed, a total of 12 senior DCG staff members who are to be assigned to them shall receive guidance for two weeks on their operation and that of onboard equipment from shipyard engineers and equipment manufacturers.

(2) Warranty engineers

After the new patrol boats are handed over to GOD, two engineers (one specialized in

equipment on the deck and the other in the equipment in the engine room) will stay in Djibouti for two weeks following the handover to deal with any initial failures of the patrol boats, and will provide technical guidance on the operation and maintenance of the patrol boats and equipment as far as possible.

[New Pontoon]

Since the structure of the new pontoon will have superior long-term durability, adopting a PCS structure will not require its periodic grounding at the shipyard for the anti-corrosion coating to be repainted. It is thought that this can reduce maintenance costs. However, regardless of the structure type, appropriate maintenance will be essential for the mooring section, fenders, gangways, and other ancillary facilities (water supply, power supply, and lighting).Therefore, engineers of the manufacturers of the pontoon and equipment shall provide DCG staff members with training on the expertise required for daily maintenance and repair methods. The engineers shall submit completion reports to the Consultant when they have finished the training. Upon confirmation by DCG and the Consultant that DCG is ready to operate and maintain the pontoon and equipment, the Consultant shall issue technical guidance completion certificates to the manufacturers with the approval of DCG.

2-2-4-8. Soft Component (Technical Assistance) Plan

This Project does not include technical assistance or soft component.

2-2-4-9. Implementation Schedule

When it is decided to implement this Project under Japan's ODA grant aid from GOJ, the preparation of tender documents, tender for the selection of a contractor, conclusion of the contract for project implementation, and procurement, transportation, assembly, and installation of the equipment shall be implemented after the conclusion of E/N between the two countries.

[New Patrol Boats]

When constructing patrol boats, the shipbuilder, after signing the shipbuilding contract, shall conduct production design for the hulls and appropriate outfitting based on the conditions of its own shipbuilding facilities and equipment, and in accordance with the contract and the technical specifications attached to it. After the production design, the hull building, outfitting work, mechanical and electrical outfitting work mentioned below shall be implemented in this order.

1） Hull building

A structure that can maintain the buoyancy required by the patrol boat and withstand external

forces, such as that of waves, sufficiently is to be built for the hull. This work usually consists of assembling parts into blocks, and the assembly of the blocks into a hull on a slipway.

2） Outfitting work

The outfitting work to be performed after the completion of the hull building shall consist of the installation of anchoring and mooring equipment, steering gear, accommodation facilities, sanitary facilities, lifesaving equipment, firefighting equipment, lifting facility, etc.

3） Mechanical outfitting work

This work shall consist of the installation and outfitting of main engines, engines for power generation, generators, pumps, and auxiliary equipment to them and piping work.

4） Electrical outfitting work

This work shall consist of the installation of electrical boards and wiring required for supplying power to the equipment and facilities installed in the outfitting and the mechanical outfitting mentioned above.

5） Transportation

After the new patrol boats have been built and completed sea trials they shall be shipped to Djibouti on a freighter. The Contractor shall be responsible for transportation as stipulated in the shipbuilding contract.

The total construction period is expected to be 23.0 months, including 20.0 months for the construction of the new patrol boats and 3.0 months for the preparation for transport, transportation, on site acceptance inspection and the handover.

[New Pontoon]

With consideration for the construction and transportation of the new patrol boats, the installation work for the pontoon will need to be completed before the patrol boats arrive at the site. The repair of the existing wharf walls and infrastructure installation to be implemented by Djibouti will need to have been completed before the assembly and installation of the pontoon.

It is expected to take 2.0 months to prepare for the construction of the new pontoon and procure the required materials and equipment, 6.0 months to construct the pontoon, 4 months to transport the pontoon from the construction yard to the mooring site in Djibouti, 1.5 months to assemble and install it, and to implement the mooring work and ancillary work on the pontoon. The total construction period is expected to be 13.5 months. The wharf wall repairs will also be completed within this timeframe. The implementation schedule is as follows.

However, following requests from the DCG for a quicker deployment of the patrol boats, the possibility of shortening the work period will be pursued.

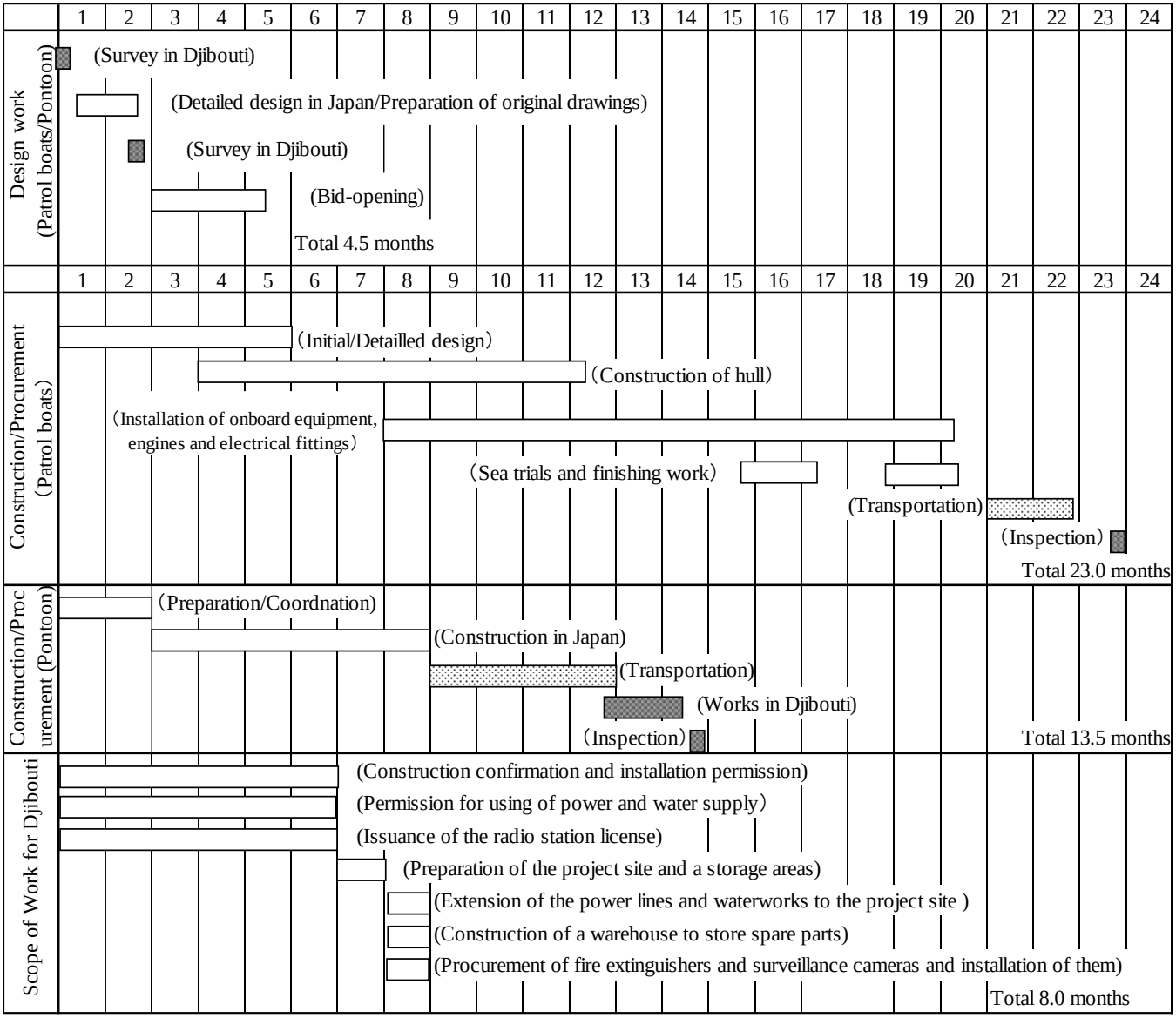


Figure 2-15 : Implementation Schedule

2-3 Security Plan

(1) New Patrol boats

As the new patrol boats will be built in a Japanese shipyard, the Ordinance on Industrial Safety and Health of Japan shall apply. The shipyard shall strictly observe the industrial safety standards set by the Shipbuilders' Association of Japan and the National Headquarters for Promotion of Industrial Safety and Health in Shipbuilding and the notifications on industrial safety that the association has sent to its members to ensure industrial safety in shipyards.

(2) Pontoon

Since excavation, concrete work, underwater work, demolition, and slinging fall under the Technical Guidelines for Safe Execution (by type of work) of Japan, measures for industrial safety to prevent and reduce accidents and disasters shall be taken in the Project in compliance with the Guidance for the Management of Safety for Construction Works in Japanese ODA Projects (September 2014).

Due to the large volume of traffic of people and vehicles working at the berths near the project site, the Contractor shall draw the attention of the users of these berths to matters concerning industrial safety during the project implementation period and inform them of the project activities as much as is possible. Work areas shall be demarcated by traffic safety cones and cone bars, and unauthorized entry into the demarcated areas shall be prohibited during project implementation. In addition, lighting equipment will be installed around the demarcated areas and containers (to be used for storage of equipment and materials) to ensure night visibility.

2-4 Obligations of Djibouti

The items to be borne by Djibouti for this Project are as follows:

(1) Issuing of the Authorization to Pay (A/P) and bear bank fees based on Banking Arrangement (B/A) with a Japanese bank for payments related to the contract for this Project.

(2) Preparation of storage warehouse (for spare parts)

The storage warehouse for the storing of large parts, including spare parts, will be constructed at the cost of Djibouti and be finished by the time the new patrol boats are to be handed over.

(3) Securing and preservation of planned site for installation of pontoon

Although the planned site for the installation of the pontoon has been secured by Djibouti, Djibouti will continue to take responsibility for all activities concerning the site. In addition, the consent of the Djibouti Port Authority or its superior authority for the repair of the existing wharf walls, installation of bollards, and installation of fender piles shall be obtained in writing prior to the public announcement of a bid.

(4) Access to water-and electricity

After obtaining the writing consent of the Djibouti Port Authority or its superior authority for connecting the project site to the power grid and the water supply system, connection works will be carried out at the expenses of Djibouti. Power and water supply connection works must be completed by the start of construction work of this Project at the latest.

(5) Permission for use of cranes

It is necessary to procure large cranes which are needed for the assembly of the pontoon. Djibouti shall acquire permission for the use of an 80-ton floating crane owned by the Port Authority. If by some chance the floating crane can't be used due to a breakdown, etc., the pontoon should be offloaded on the Port of Doraleh where there are other cranes and then transported to Berth No. 4. Therefore, Djibouti should confirm the necessary procedures for offloading and transport, and obtain the necessary permissions in writing prior to the public announcement of a bid.

(6) Application for and acquisition of all permissions and approvals pertaining to the Project

Permission and application procedures for construction of a pontoon and wharf wall repairs (building certification, use of electricity and water supply, construction permission, etc.) will be conducted by Djibouti, and the necessary permissions and approvals will be obtained in writing prior to the public announcement of a bid.

(7) Implementation of EIA and acquisition of approval

If it is determined that an EIA is necessary, then this will be carried out in accordance with JICA's Environmental Guidelines and domestic laws of Djibouti, and mitigation measures and monitoring shall be undertaken as per the EIA report, domestic laws of Djibouti and JICA's Environmental Guidelines.

(8) Measures to be taken for project implementation (customs clearance for imported equipment, facilitation of the entry, stay and departure of Japanese nationals engaged in the Project in Djibouti)

Djibouti will exempt from customs duties, etc., all materials and equipment imported into Djibouti in relation to this Project, provide exemptions from taxes or surcharges imposed for prompt customs clearance and the provision of services.

(9) Maintenance and operation of patrol boats and pontoon after going into service

All certificates (radio station licenses, etc.) needed for the operation of the new patrol boats shall be obtained, and the budgets necessary for the operation of the patrol boats and the pontoon shall be secured.

Any other matters required for the implementation of the Project, and that are not included in the matters to be borne by the Government of Japan, shall all be borne by Djibouti.

2-5 Project Operation Plan

[New Patrol Boats]

The maintenance of medium-sized DCG boats is currently being mainly carried out by six

engineers. In addition, DCG workshops are attended by not only these six engineers, but also by engineers who handle both ships and outboard engines, as well as the new engineers who are currently being trained. These staff members work together to implement daily maintenance.

In addition, the Djibouti Port Authority operates slipways and floating docks in Djibouti Port that can be used to lift small and medium-sized ships. A workshop has been set up together with these facilities, and there is processing machinery which is necessary for the maintenance of ships. This workshop is also responsible for maintaining the existing DCG patrol boats. Therefore, no particular problems can be foreseen in terms of technical and organizational capabilities for the operation and maintenance of the new patrol boats.

It has also been determined that a systematic maintenance system, such as the PMP system, can be operated provided that there is a suitable environment for that. The current 20m patrol boats, excluding the main engine, water jet, and electronic equipment which require some advanced technology, are maintained and managed by the DCG engineers using the Port Authority's facilities. DCG has established to a certain extent routine work by which sufficient daily maintenance and planned repair work is carried out, which has led to the long-term maintenance of its fleet of ships.

Therefore, this Project aims at the long-term stable operation of the new patrol boats by preparing PMP.

(1) Maintenance program (weekly, monthly, or annual): Create a program for all equipment.
(2) Procure spare parts necessary for PMP.
(3) Before handover, training on PMP will be given to the captain, chief engineers and the crew members.

[New Pontoon]

Since the structure of the pontoon will have superior long-term durability, adopting a PCS structure will not require its periodic grounding at the shipyard for the anti-corrosion coating to be repainted. It is thought that this can reduce maintenance costs. However, regardless of the structure type, appropriate maintenance will be essential for the mooring section, fenders, gangways, and other ancillary facilities (water supply, power supply, and lighting). It is possible for this repair work to be adequately handled by DCG's repair department, the Port Authority's workshop, etc.

2-6 Project Cost Estimation

2-6-1 Initial Cost Estimation

The cost to be borne by Djibouti in case the project is implemented under the Japanese grant aid scheme is estimated to be 37,730 USD (approximately 4.144 million yen), broken down as follows.

1. Connecting the project site to the power grid and the water supply system
   6,750.00 USD (approximately 0.741 million yen)
2. Bank fees, etc. 26,820.00 USD (approximately 2.945 million yen)
3. Providing and installing fire extinguishers: 560.00 USD (approximately 0.061 million yen)

4. Providing and installing surveillance cameras:

3,600.00 USD (approximately 0.395 million yen)

Estimate terms and conditions

1. Reference date March 2021
2. Exchange rate (ministerial rate as of September 2021) 1 USD = 109.84 Yen,
   1 Djiboutian Francs = 0.61805 Yen (hereinafter referred to as "DJF")
3. Construction and Procurement Period : Detailed design and construction (or procurement of equipment) period are as shown in the schedule.
4. Other estimations shall be made based on the grant aid scheme of the Government of Japan.

2-6-2 Operation and Maintenance Cost

Confidential due to security reasons

Confidential due to security reasons

Table 2-17: Annual Fuel Cost (per patrol boat)

	Confidential due to security reasons			

Confidential due to security reasons

Table 2-18: Maintenance and Repair Costs for New Patrol Boats (one boat)

	Confidential due to security reasons

Confidential due to security reasons

Table 2-19: Maintenance Costs for New Patrol Boats (4 years after handover)

	Confidential due to security reasons			

Confidential due to security reasons

The total annual budget for DCG, including allocations from the Ministry of Infrastructures and Equipment (hereinafter referred to as "MIE"), is as follows:

Table 2-20: DCG Annual Budget

(Unit: DJF (USD in parentheses))

	2019	2020	2021
DCG budget	664,962,454 (3,740,090)	659,692,454 (3,711,956)	686,692,454 (3,863,879)
Allocation from MIE	188,000,000 (1,057,838)	38,000,000 (213,818)	88,000,000 (495,158)
TOTAL	852,692,454 (4,797,927)	697,692,454 (3,925,774)	774,692,454 (4,359,037)

Source: MIE

Once the two new patrol boats have been provided, the maintenance costs for the patrol boats are expected to increase by about 13.5% of DCG's total budget for FY2021 in the fourth year of maintenance, when the generator engines will be overhauled. However, the maintenance budget for the patrol boats is allocated as appropriate by the Ministry of Budget (hereinafter referred to as "MOB"), and the above increased budget can be secured without a problem.

CHAPTER 3 PROJECT EVALUATION

3-1 Prerequisites for Implementation of Project

- No significant changes in major national development plans or maritime security policies.
- No significant changes in DCG's organizational structure and scope of operations.
- DCG appropriately operates and maintains the new patrol boats in the same way as current patrol boats.

3-2 Necessary Inputs (Contributions) by Djibouti to Achieve the Overall Project Plan

- Confidential due to security reasons
- DCG will appropriately secure an annual increase of approximately 13.5% (compared to the fiscal 2021 budget), which is estimated for maintenance years when generator engines need to be overhauled. In addition, the budget needed for large-scale overhauls once every 10 years will also need to be secured.
- Together with continuous repairs and inspections of the new patrol boats at the Djibouti Port Authority, engineers with appropriate skills must be secured.

3-3 Important Assumptions

- The progress of the Project must not be significantly impacted by security deterioration or the spread of infectious diseases, etc.
- Djibouti's maritime safety activities environment and security in the sea areas of the country must not deteriorate rapidly.

3-4 Project Evaluation

3-4-1 Relevance

The results of a study into the relevance of the Project, as a project to be implemented under Japan's grant aid scheme, are as follows:

(1) The National Development Plan (Vision Djibouti 2035) formulated by Djibouti in 2014, advocates "National Peace and Unity" as one of five basic strategies, and emphasizes the need to strengthen defense capabilities to guarantee the security of people and goods, and so that appropriate measures can be taken, and the Project contributes to this.

(2) DCG has a 35 strong fleet, including two 20m patrol boats and one 30m tugboat which were constructed through Japan's grant assistance. As DCG carries out daily maintenance, and regular inspections at the Djibouti Port Authority, maintenance and management of the new patrol boats can be undertaken without any foreseeable problems.

(3) DCG has 1,450 personnel and 650 trainees (as of December 2020) and is scheduled to provide technical guidance on the operation, maintenance, etc. of the patrol boats through technical cooperation from Japan under Phase 3 of the Djibouti Coast Guard Capacity Expansion Project (launched in October 2019). Therefore, there are no particular problems in terms of human resources and systems.

(4) DCG has forecasted that maintenance costs for the patrol boats to be constructed in this Project will increase annually by approximately 13.5% (in comparison to the fiscal 2021 budget) against the total DCG budget in maintenance year when generator engines are overhauled, etc. However, the maintenance budget for the patrol boats is allocated appropriately by MOB, and the above increased budget can be secured without a problem.

(5) The construction and operation of the new patrol boats and pontoon will not have a negative impact on the environment or society, and they have been situated as Category C under the JICA's Guidelines for Environmental and Social Considerations.

(6) Djibouti's National Gender Policy (2011-2021) has the objective of "building a fair society without discrimination in which capable men and women can work for the development of the state on an equal basis", and the Project will contribute to this objective.

Based on the above, the implementation of this Project is judged to be highly relevant.

3-4-2 Effectiveness

(1) Overall goal

Contribute to the improvement of maritime safety and security in Djibouti's territorial waters, including the Bab-el-Mandeb Strait.

(2) Project purpose

Improve the DCG's ability to quickly and appropriately carry out operations such as maritime rescue and law enforcement via the construction of patrol boats and a pontoon.

3-4-3 Project Outcomes

(1) Beneficiary area

Djibouti City, and coastal areas and sea areas of the Republic of Djibouti

(2) Beneficiary population

1) Direct beneficiary population

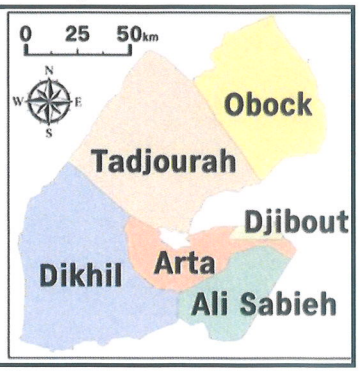
DCG personnel (including trainees): 2,100

2) Indirect beneficiary population

Number of inhabitants in Djibouti City and the coastal areas of Djibouti: Approx. 773,000
The breakdown of the number of inhabitants is as follows.

Table 3-1: Number of Inhabitants in Djibouti City and the Coastal Areas of Djibouti

Region	Tadjourah	Obock	Djibouti City	Arta	Total
Population	102,329	44,678	576,157	50,017	773,181



Source: Djibouti City: World Bank Data (2020),
Tadjourah, Obock, Arta: Office of President of Djibouti (2020)

(3) Qualitative effects

The patrol system in Djibouti's sea areas, including the Bab-el-Mandeb Strait, will be strengthened, which will contribute to an abatement of marine accidents, people smuggling, illegal fishing, piracy, etc., as well as ensuring safe and problem-free maritime transport and socio-economic activities.

(4) Quantitative effects

Table 3-2: Quantitative Effect Indicators

Indicator name	Reference value (Actual figures for 2021)	Target value (2027) (3 years after project completion)
Continuous patrol period possible per voyage	5 Days	14 Days
Seaworthiness (wave height conditions feasible for safe navigation)	Wave height of 2.5m or less	Wave height of 3.0m or less
Annual number of deployment days in priority sea areas (Bab-el-Mandeb Strait)*/ number of boats	62 days / 2 patrol boats	182 days / 4 patrol boats

Confidential due to security reasons

Confidential due to security reasons

Appendices

1. Member List of the Preparatory Survey Team
2. Study Schedule
3. List of Parties Concerned in the Recipient Country
4. Minutes of Discussions
5. Memorandum
6. Reference

1. Member List of the Preparatory Survey Team

Reasonable		Belong to	
1	Leader of Preparatory Survey team	Keita IZUMI	Team2 Transportation Group, Infrastructure Management Department, JICA
2	Consultant Team leader/ Planning of vessels/ Planning of operation and maintenance	Shuhei SOEDA	Fisheries Engineering Co., Ltd.
3	Deputy Consultant Team leader/ Study of environmental conditions/ Study of natural conditions 2/ Study of Gender consideration	Kyoko YASUI	Fisheries Engineering Co., Ltd.
4	Design of vessels/ equipment on board	Akio MARUYAMA	Fisheries Engineering Co., Ltd. (Self-employed)
5	Design of devices and electric installations	Masaharu SEKI	Fisheries Engineering Co., Ltd. (Self-employed)
6	Design of the pontoon/ Study of natural conditions 1	Toshihito INKI	Fisheries Engineering Co., Ltd.
7	Calculation and study of equipment	Akio YAMADA	Fisheries Engineering Co., Ltd. (Self-employed)
8	Calculation and study of construction conditions	Yuichi TAKAHASHI	Fisheries Engineering Co., Ltd.
9	Interpretation in French (Remote survey)	Emi IKUMA	Fisheries Engineering Co., Ltd. (Technostaff Co.,Ltd.)
10	Interpretation in French (1st Survey in Djibouti)	Miwa MUTSUMINE	Fisheries Engineering Co., Ltd. (Technostaff Co.,Ltd.)
11	Interpretation in French (Discussion on the final report of the preparatory study)	Keisuke SUETSUGU	Fisheries Engineering Co., Ltd. (Technostaff Co.,Ltd.)

2. Study Schedule

2-1. 1st survey in Djibouti

Date		No	IZUMI Keita	SOEDA Shuhei	MUTSUMINE Miwa	YASUI Kyoko	MARUYAMA Akio	No	INKI Toshihito	TAKAHASHI Yuichi
			Leader of Preparatory Survey team	Consultant Team leader/ Planning of vessels/ Planning of operation and maintenance	Interpretation in French	Deputy Consultant Team leader/ Study of environmental conditions/ Study of natural conditions 2/ Study of Gender consideration	Design of vessels/ equipment on board		Design of the pontoon/ Study of natural conditions 1	Calculation and study of construction conditions
17-Feb	Wed	1		Departure from Narita Airport	Departure from Abidjan	Departure from Narita Airport				
18-Feb	Thu	2		Arrival in Djibouti, Quarantine						
19-Feb	Fri	3		Quarantine	Quarantine	Quarantine	Quarantine			
20-Feb	Sat	4		Quarantine	Quarantine	Quarantine	Quarantine			
21-Feb	Sun	5		Quarantine	Quarantine	Quarantine	Quarantine			
22-Feb	Mon	6		Quarantine	Quarantine	Quarantine	Quarantine			
23-Feb	Tue	7		Consultation with DCG (Courtesy visit with Colonel Wais, Explanation of the items investigated in the field survey and the specifications of the patrol boats)						
24-Feb	Wed	8		Consultation with DCG on survey details and schedule, Explanation of patrol boat specifications						
25-Feb	Thu	9		Visit to the warehouse and the workshop		Gathering information from DCG (number of employees and budget), EIA study	Visit to the warehouse and the workshop			
26-Feb	Fri	10		Data collection and analysis	Document translation	Data collection and analysis	Data collection and analysis	1	Departure from Narita Airport	
27-Feb	Sat	11						2	Arrival in Djibouti, Quarantine	
28-Feb	Sun	12		Obock	Obock	Gathering information from DCG (existing patrol activities and other donors' projects)	Obock	3	Quarantine	Quarantine
1-Mar	Mon	13	Departure from Narita Airport	Discussion with the Port of Djibouti on the access permit application and the information sharing, Consultation with DCG				4	Quarantine	Quarantine
2-Mar	Tue	14	Arrival in Djibouti, Quarantine	Discussion with MIE, Consultation with DCG on patrol boat specifications		Discussion with MIE, Consultation with CERD	PCR test, Consultation with DCG on patrol boat specifications	5	Quarantine	Quarantine
3-Mar	Wed	15	Quarantine	Consultation with DCG		Consultation with DCG, Survey of the environment around the site	Receipt of PCR results, Consultation with DCG	6	Quarantine	Quarantine
4-Mar	Thu	16	Quarantine	Consultation with DCG on pontoon specifications, Discussion with the National Meteorological Agency, Finalization of patrol boat specifications and MOU preparation			Consultation with DCG Departure from Djibouti	7	Consultation with DCG on pontoon specifications, Discussion with the National Meteorological Agency, Site visit	
5-Mar	Fri	17	Internal team meeting				Arrival at Narita Airport	8	Internal team meeting	

Date	No	IZUMI Keita	SOEDA Shuhei	MUTSUMINE Miwa	YASUI Kyoko	MARUYAMA Akio	No	INKI Toshihito	TAKAHASHI Yuichi
		Leader of Preparatory Survey team	Consultant Team leader/ Planning of vessels/ Planning of operation and maintenance	Interpretation in French	Deputy Consultant Team leader/ Study of environmental conditions/ Study of natural conditions 2/ Study of Gender consideration	Design of vessels/ equipment on board		Design of the pontoon/ Study of natural conditions 1	Calculation and study of construction conditions
6-Mar Sat	18	Quarantine	Analysis of the survey results	Translation in French	Analysis of the survey results		9	Site survey	
7-Mar Sun	19	Consultation with DCG, Site visit					10	Consultation with DCG, Site visit	
8-Mar Mon	20	Consultation with DCG on specifications, Meeting Minutes writing, and Visit to the workshop					11	Consultation with DCG on specifications, Meeting Minutes writing, and Visit to the workshop	
9-Mar Tue	21	Consultation with DCG and Meeting Minutes writing					12	Consultation with DCG and Meeting Minutes writing	
10-Mar Wed	22	Signing/Discussion of Minutes					13	Signing/Discussion of Minutes	
11-Mar Thu	23	Additional study					14	Confirmation of natural condition survey results	
12-Mar Fri	24	Responding to other projects	PCR test	PCR test	PCR test		15	Data collection and analysis	
13-Mar Sat	25	Responding to other projects	Receipt of PCR results	Receipt of PCR results	Receipt of PCR results		16	Data collection and analysis	
14-Mar Sun	26	Responding to other projects	Study on the existing patrol boats, Departure from Djibouti				17	Confirmation of natural condition survey results	
15-Mar Mon	27	Responding to other projects	Arrival at Narita Airport	Arrival in Abidjan	Arrival at Narita Airport		18		
16-Mar Tue	28	Responding to other projects					19	Confirmation of natural condition survey results	Survey on construction/procurement conditions
17-Mar Wed	29	Responding to other projects					20		
18-Mar Thu	30	Responding to other projects, PCR					21		
19-Mar Fri	31	Receipt of PCR results					22	PCR test	PCR test
20-Mar Sat	32	Departure from Djibouti					23	Receipt of PCR results	Receipt of PCR results
21-Mar Sun	33	Arrival at Narita Airport					24	Visit of the construction site of the Training Center in Doraleh, Data collection on the construction Departure from Djibouti	
22-Mar Mon	34						25	Arrival at Narita Airport	

2-2. Discussion in the final report of the preparatory survey

Day		No.	IZUMI Keita	INKI Toshihito	SUETSUGU Keisuke
			Leader of Preparatory Survey team	Design of the pontoon/ Study of natural conditions 1	Interpretation in French
25-Aug-2021	Wed	1	Departure from Tokyo		
26-Aug-2021	Thu	2	Arrival in Djibouti Discussion with DCG and Port of Djibouti, Explanation of the Draft Report		
27-Aug-2021	Fri	3	Discussion with DCG on the Minutes of Discussion (M/D)		
28-Aug-2021	Sat	4	Data collection and Internal team meeting		
29-Aug-2021	Sun	5	Discussion with DCG on the M/D, visit of the existing patrol boats		
30-Aug-2021	Mon	6	Internal team meeting		
31-Aug-2021	Tue	7	Courtesy call and meeting with Colonel Wais, Discussion on the M/D		
1-Sep-2021	Wed	8	Discussion with DCG on the M/D, Finalization of the M/D Discussion with the Port of Djibouti and visit to the No.4 Berth of Djibouti Port		
2-Sep-2021	Thu	9	Discussion/Signature on the M/D, Report to the Japanese Embassy and JICA Office		
3-Sep-2021	Fri	10	Data collection	Departure from Djibouti	
4-Sep-2021	Sat	11	Departure from Djibouti	Arrival in Tokyo	
5-Sep-201	Sun	12	Arrival in Tokyo		

3. List of Parties Concerned in the Recipient Country

Class	Name	Belong to	Title
Colonel	Wais Omar Bogoreh	DCG	Commander of the DCG
Lieutenant-Colonel	Mohamed Adawa Mohamed	DCG	Second commander of the DCG (Chief of Committee)
Lieutenant	Moktar Djama Osman	DCG	Chief of Guidance Instruction Office
Consultant	Abdillahi Aïnan Abdillahi	DCG	Ministry of Infrastructures and Equipment
	Ilhan Hassan Abdallah	DCG	Project Assistant
Lieutenant	Abdourazak Yonis Arreh	DCG	Operating Officer
Captain	Dr. Houssein Okieh Hussein	DCG	Chief Medical Officer
Second Lieutenant	Gadid Ali Osman	DCG	Captain of the Ship P06
Sergent-chef	Ismail Said Egueh	DCG	Radio engineering division
Adjudant-chef	Isman Idris Dirieh	DCG	Second Captain of the Ship P05
Adjutant	Ali Mohamed Hagayta	DCG	Chief Engineer Officer P05

Name	Belong to	Title
Ifrah Idriss Nour	Ministry of Infrastructures and Equipment	Director of administration and finance

Yacin Houssein Duale	Ministry of Foreign Affairs and International Cooperation	Director of Bilateral Relations
Mahdi Absieh Bouh	Ministry of Foreign Affairs and International Cooperation	Acting Director of Bilateral Relation

Djima Ibrahim Darar	Port of Djibouti S.A.	Director
Mahamoud Hassan Djama	Port of Djibouti S.A.	Head of Marine Services Division

Name	Belong to	Title
Mohamed Ismail Nour	National Meteorology Agency	Director
Abdourahman Youssouf Nour	National Meteorology Agency	Deputy director

Hassan Moussa Rayaleh	Direction of Environment and Sustainable Development	Environmental engineer
Mohamed Ahmed Djibril	Direction of Environment and Sustainable Development	Environmental engineer

Moussa Omar Youssouf	Centre for the Study and Research of Djibouti	Marine Biology Expert
Jayati Chourey	Centre for the Study and Research of Djibouti	Senior Environmental Expert

Dr Jean Gassani	Hydroterra Engineering	Director
Omar Ibrahim Kanano	Hydroterra Engineering	Surveying Engineer

4. Minutes of Discussions

4-1. Minutes of Discussions in the remote survey

Minutes of Discussions
on the Preparatory Survey for the Project for
the Project for the Enhancement of the Ability of Maritime Safety and Security

In response to the request from the Government of Republic of Djibouti (hereinafter referred to as "Djibouti"),Japan International Cooperation Agency (hereinafter referred to as "JICA")commencedthe Preparatory Survey for the Outline Design (hereinafter referred to as "the Team")of the Project for the Project for the Enhancement of the Ability of Maritime Safety and Security (hereinafter referred to as "the Project")to Djibouti. The Team held a series of discussions with the officials of the Government of Djibouti. In the course of the discussions, both sides have confirmed the main items described in the attached sheets.

29th September, 2020

Atsushi NAKAGAWA
Director
Team 2, Infrastructure Management Dept.,
Japan International Cooperation Agency
Japan

Colonel Wais Omar Bogoreh
Commandant
Djibouti Coast Guard
Republic of Djibouti

(Witness)

Yacin Houssein Douale
Director of Bilateral Relations
Ministry of Foreign Affairs and
International Cooperation
Republic of Djibouti

ATTACHMENT

1. Objective of the Project

The objective of the Project is to enhance the ability of maritime safety and security of the Djibouti Coast Guard (DCG) by/through deployment of patrol boat(s) and a pontoon, thereby contributing to maintain maritime safety and security in Djibouti'sterritorial waters.

2. Title of the Preparatory Survey

Both sides confirmed the title of the Preparatory Survey as "the Preparatory Survey for the Project for the Project for the Enhancement of the Ability of Maritime Safety and Security".

3. Project site

Both sides confirmed that the site of the ProjectisinPort of Djibouti, Djibouti City, where the patrol boats and pontoon to be procured under the Project are to be deployed as shown in Annex 1.

4. Responsible authority for the Project

Both sides confirmed the authorities responsible for the Project are as follows:

4-1. The DCG will be the executing agency for the Project (hereinafter referred to as "the Executing Agency"). The Executing Agency shall coordinate with all the relevant authoritiesto ensure smooth implementation of the Project and ensure that the undertakings for the Project shall be managed by relevant authorities properly and on time. The organization charts are shown in Annex 2.

4-2. The line ministry of the Executing Agency is the Ministry of Equipment and Transportation (MET). The MET shall be responsible for supervising the Executing Agency on behalf of the Government of Djibouti.

5. Items requested by the Government of Djibouti

5-1. As a result of discussions, both sides confirmed that the items requested by the Government of Djibouti are as follows:

- Procurement of two (2) patrol boats, having a maximum length of 35 meters
- Procurement of one (1) set of pontoon facility for mooring the said patrol boats

5-2. JICA will assess the feasibility of the above requested items through the survey and will report the findings to the Government of Japan. The final scope of the Project will be decided by the Government of Japan.

6. Procedures and Basic Principles of Japanese Grant

6-1. The Djiboutianside agreed that the procedures and basic principles of Japanese Grant (hereinafter referred to as "the Grant") as described in Annex 3shall be applied to the Project.

As for the monitoring of the implementation of the Project, JICA requires the Djiboutian side to submit the Project Monitoring Report, the form of which is attached as Annex 4.

6-2. The Djiboutianside agreedto take the necessary measures, as described in Annex 5, for smooth implementation of the Project. The contents of the Annex 5 will be elaborated and refined during the Preparatory Survey and be agreed in the mission dispatched for explanation of the Draft Preparatory Survey Report.

The contents of Annex 5 will be updated as the Preparatory Survey progresses, and eventually, will be used as anattachment to the Grant Agreement.

7. Schedule of the Survey

7-1. The Team will conduct the remote survey from September, 2020 to March 2021. Major specification of the patrol boats and the pontoon to be procured under the Project will be agreed and the Technical Memorandum will be signed between the Team and the DCG by the end of October, 2020.

7-2. The Team will proceed with the field survey in Djibouti in April, 2021.

7-3. JICA will prepare a draft Preparatory Survey Report in English / French and dispatch a mission to Djibouti in order to explain its contents around August, 2021.

7-4. If the contents of the draft Preparatory Survey Report are accepted and the undertakings for the Project are fully agreed by the Djiboutian side, JICA will finalize the Preparatory Survey Report and send it to Djibouti around October, 2021.

7-5. The above schedule is tentative and subject to change due to the COVID-19 pandemic.

8. Environmental and Social Considerations

8-1. The Djiboutian side confirmed to give due environmental and social considerations before and during implementation, and after completion of the Project, in accordance with the JICA Guidelines for Environmental and Social Considerations (April, 2010).

8-2. The Project is categorized as "C"from the following considerations:

Not located in a sensitive area, nor has it sensitive characteristics, nor falls it into sensitive sectors under the Guidelines, and its potential adverse impacts on the environment are not likely to be significant.

9. Outline of the patrol boats

As a result of discussion, both sides agreed and confirmed on the outline of the patrol boats to be procured under the Project as follows:

- 2 patrol boat (max. length 35m) with two main engine and propulsion system
- Necessary spare parts for preventive maintenance plan for major machinery

10. Outline of the pontoon facility

As a result of discussion, both sides agreed and confirmed on the outline of the pontoon facility to be procured under the Project as follows:

- Floating pontoon for 2 patrol boats (max. 35m) with anchoring system and a gangway
- Outfitting such as fenders, mooring bitts and safety equipment etc.

11. Other Relevant Issues

11-1. The Team explained a method of the preparatory survey based on the Inception Report submitted by the Team. The Djiboutian side understood the contents and accepted the method.

11-2. The Djiboutian side shall, at its own expense, provide the Team with following items;

1) Necessary data and information for the preparatory survey,
2) Answers to the questionnaire submitted by the Team,
3) Counterpart personnel,
4) Shares the information on the study progress with the Team once a week,
5) Attendance to meetings about the Study (including remote meetings),
6) Permissions for entering private properties and restricted places and for taking photographs,
7) Security information in a timely manner,
8) Permissions of conducting field survey, such as a topographic survey, geotechnical investigations, environmental and social considerations, and other activities in / around the area of the Port of Djibouti, by local consulting firms entrusted by the Team and issuing identification cards for members of the said firms,and
9) An office space for the Team during their field survey in April, 2021.

11-3. Both sides confirmed the mooring site of the two patrol ships with the pontoon to be procured under the Project will be the quay of 50 metre length in the Port of Djibouti, where DCG has the right to exclusive usebased on the lease agreement between the DjiboutiPort Authority andDCG. The Djiboutian side assured that the DCG would keep the right for usage of the said quay, and allocate their existing boats from the quay to other site and secure the site for mooring the said patrol ships and pontoon. Djiboutian side also assured that the DCG would obtain approval from the Djibouti Port Authority and other related authority for mooring the said patrol ships and installation of the pontoon according to Djiboutian regulations and procedures before the conclusion of Grant Agreement.

11-4. In case it is revealed there is necessity to dredge the navigation channel and mooring site in the Port of Djibouti, such dredging works shall be done be the Djiboutian side.

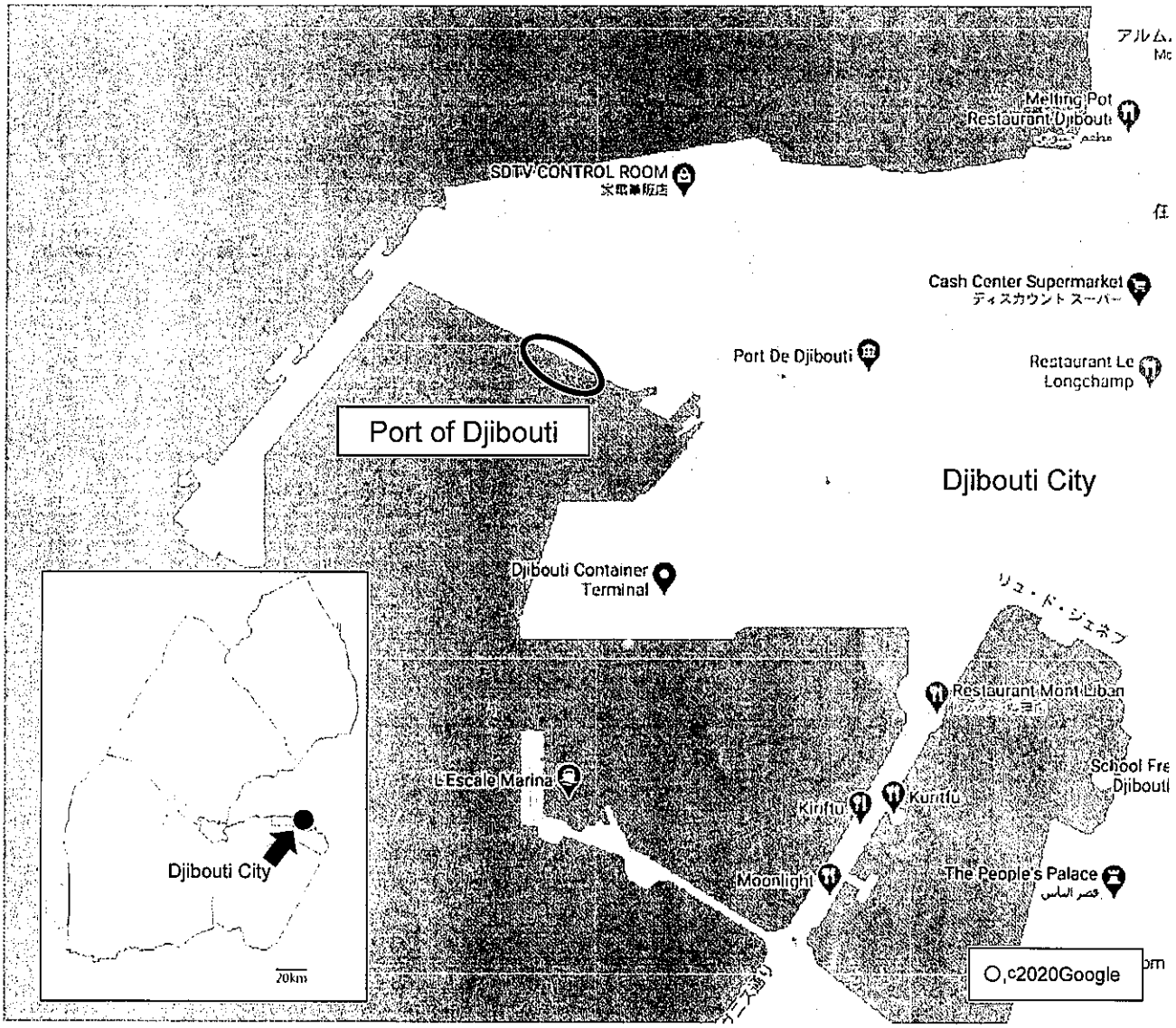
11-5. The Djiboutian side understood that it shall reinforce the human capacity for the operation of the said patrol boats, while JICA will provide technical advice on the ship operation and maintenance thorough the technical cooperation project which is on-ongoing.

11-6. The Djiboutian side assured the items procured under the Project shall not be used for military purposes.

Annex 1 Project Site
Annex 2 Organization Chart
Annex 3 Japanese Grant
Annex 4 Project Monitoring Report (template)
Annex 5 Major Undertakings to be taken by the Government of Djibouti
Annex 6 Language used in each Document

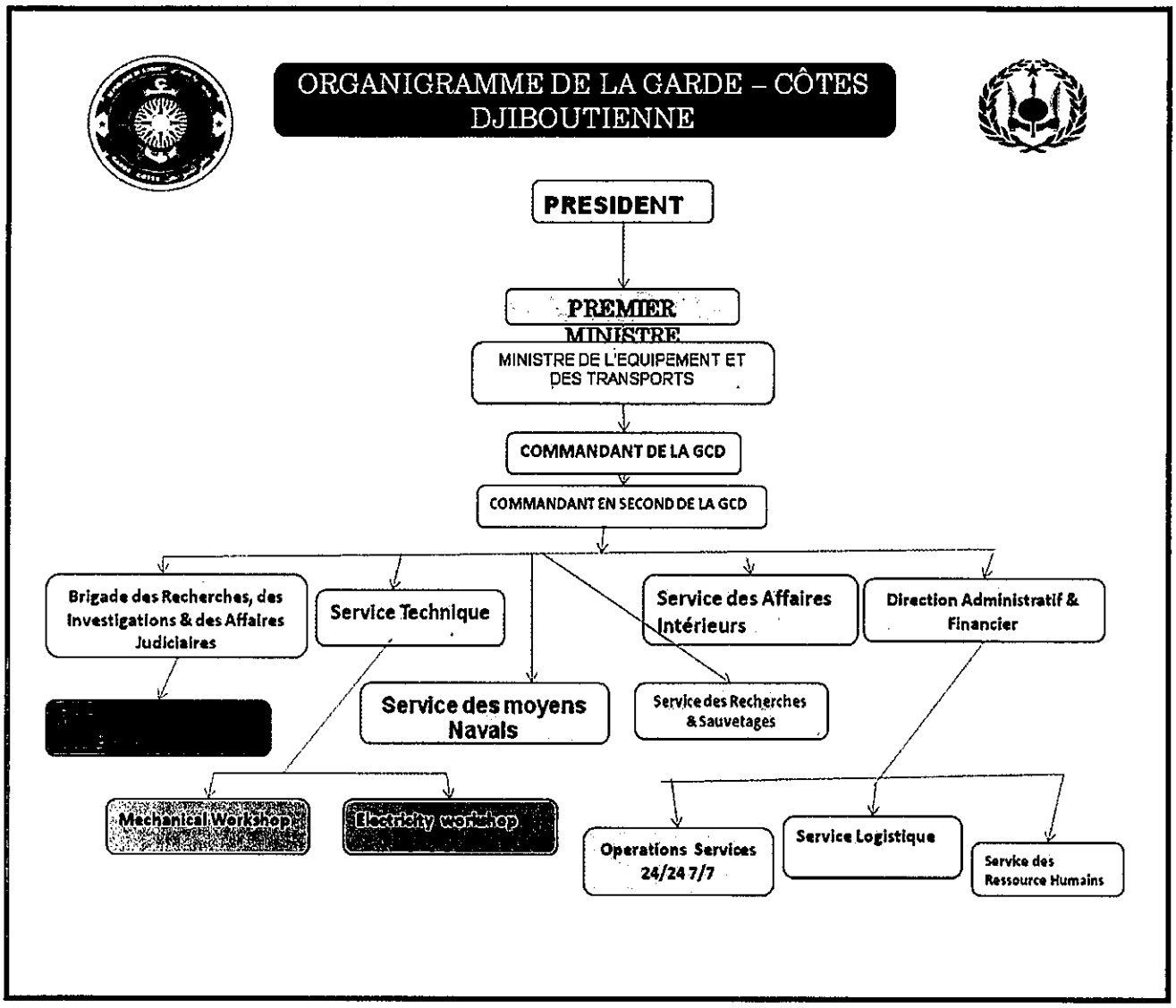
Annex 1

Project Site



Annex 2

Organization Chart



Annex 3

JAPANESE GRANT

The Japanese Grantis non-reimbursable fund provided to a recipient country (hereinafter referred to as "the Recipient") to purchase the products and/or services (engineering services and transportation of the products, etc.) for its economic and social development in accordance with the relevant laws and regulations of Japan. Followings are the basic features of the project grants operated by JICA (hereinafter referred to as "Project Grants").

1. Procedures of Project Grants

Project Grants are conducted through following procedures (See "PROCEDURES OF JAPANESE GRANT" for details):

(1) Preparation
- The Preparatory Survey (hereinafter referred to as "the Survey") conducted by JICA

(2) Appraisal
-Appraisal by the government of Japan (hereinafter referred to as "GOJ") and JICA, and Approval by the Japanese Cabinet

(3) Implementation

Exchange of Notes
-The Notes exchanged between the GOJ and the government of the Recipient

Grant Agreement (hereinafter referred to as "the G/A")
-Agreement concluded between JICA and the Recipient

Banking Arrangement (hereinafter referred to as "the B/A")
-Opening of bank account by the Recipient in a bank in Japan (hereinafter referred to as "the Bank") to receive the grant

Construction works/procurement
-Implementation of the project (hereinafter referred to as "the Project") on the basis of the G/A

(4) Ex-post Monitoring and Evaluation
-Monitoring and evaluation at post-implementation stage

2. Preparatory Survey

(1) Contents of the Survey

The aim of the Survey is to provide basic documents necessary for the appraisal of the Project made by the GOJ and JICA. The contents of the Survey are as follows:

- Confirmation of the background, objectives, and benefits of the Project and also institutional capacity of relevant agencies of the Recipient necessary for the implementation of the Project.
- Evaluation of the feasibility of the Project to be implemented under the Japanese Grant from a technical, financial, social and economic point of view.
- Confirmation of items agreed between both parties concerning the basic concept of the Project.
- Preparation of an outline design of the Project.
- Estimation of costs of the Project.
- Confirmation of Environmental and Social Considerations

The contents of the original request by the Recipient are not necessarily approved in their initial form. The Outline Design of the Project is confirmed based on the guidelines of the Japanese Grant.

JICA requests the Recipient to take measures necessary to achieve its self-reliance in the implementation of the Project. Such measures must be guaranteed even though they may fall outside of the jurisdiction of the executing agency of the Project. Therefore, the contents of the Project are confirmed by all relevant organizations of the Recipient based on the Minutes of Discussions.

(2) Selection of Consultants

For smooth implementation of the Survey, JICA contracts with (a) consulting firm(s). JICA selects (a) firm(s) based on proposals submitted by interested firms.

(3) Result of the Survey

JICA reviews the report on the results of the Survey and recommends the GOJ to appraise the implementation of the Project after confirming the feasibility of the Project.

3. Basic Principles of Project Grants

(1) Implementation Stage

1) The E/N and the G/A

After the Project is approved by the Cabinet of Japan, the Exchange of Notes(hereinafter referred to as "the E/N") will be singed between the GOJ and the Government of the Recipient to make a pledge for assistance, which is followed by the conclusion of the G/A between JICA and the Recipient to define the necessary articles, in accordance with the E/N, to implement the Project, such as conditions of disbursement, responsibilities of the Recipient, and procurement conditions. The terms and conditions generally applicable to the Japanese Grant are stipulated in the "General Terms and Conditions for Japanese Grant (January 2016)."

2) Banking Arrangements (B/A) (See "Financial Flow of Japanese Grant (A/P Type)" for details)

a) The Recipientshall open an account or shall cause its designated authority to open an account under the name of the Recipient in the Bank, in principle. JICA will disburse the Japanese Grant in Japanese yen for the Recipient to cover the obligations incurred by the Recipient under the verified contracts.

b) The Japanese Grant will be disbursed when payment requests are submitted by the Bank to JICA under an Authorization to Pay (A/P) issued by the Recipient.

3) Procurement Procedure

The products and/or services necessary for the implementation of the Project shall be procured in accordance with JICA's procurement guidelines as stipulated in the G/A.

4) Selection of Consultants

In order to maintain technical consistency, the consulting firm(s) which conducted the Survey will be recommended by JICA to the Recipient to continue to work on the Project's implementation after the E/N and G/A.

5) Eligible source country

In using the Japanese Grant disbursed by JICA for the purchase of products and/or services, the eligible source countries of such products and/or services shall be Japan and/or the Recipient. The Japanese Grant may be used for the purchase of the products and/or services of a third country as eligible, if necessary, taking into account the quality, competitiveness and economic rationality of products and/or services necessary for achieving the objective of the Project. However, the prime contractors, namely, constructing and procurement firms, and the prime consulting firm, which enter into contracts with the Recipient, are limited to "Japanese nationals", in principle.

6) Contracts and Concurrence by JICA

The Recipient will conclude contracts denominated in Japanese yen with Japanese nationals. Those contracts shall be concurred by JICAin order to be verified as eligible for using the Japanese Grant.

7) Monitoring

The Recipient is required totake their initiative to carefully monitor the progress of the Project in order to ensure its smooth implementation as part of their responsibility in the G/A, and toregularly report to JICA about its status by using the Project Monitoring Report (PMR).

8) Safety Measures

The Recipient must ensure that the safety is highly observed during the implementation of the Project.

9) Construction Quality Control Meeting

Construction Quality Control Meeting (hereinafter referred to as the "Meeting") will be held for quality assurance and smooth implementation of the Works at each stage of the Works. The member of the Meeting will be composed by the Recipient (or executing agency), the Consultant, the Contractor and JICA.The functions of the Meeting are as followings:

a) Sharing information on the objective, concept and conditions of design from the Contractor, before start of construction.

b) Discussing the issues affecting the Works such as modification of the design, test, inspection, safety control and the Client's obligation, during of construction.

(2) Ex-post Monitoring and Evaluation Stage

1) After the project completion, JICA will continue to keep in close contact with the Recipient in order to monitor that the outputs of the Project are used and maintained properly to attain its expected outcomes.

2) In principle, JICA will conduct ex-post evaluation of the Project after three years from the completion. It is required for the Recipient to furnish any necessary information as JICA may reasonably request.

(3) Others

1) Environmental and Social Considerations

TheRecipientshall carefully consider environmental and social impacts by the Project and must comply with the environmental regulations of the Recipient and JICA Guidelines for Environmental and Social Considerations (April, 2010).

2) Major undertakings to be taken by the Government of the Recipient

For the smooth and proper implementation of the Project, the Recipient is required to undertake necessary measures including land acquisition, and bear an advising commission of the A/P and payment commissions paid to the Bankas agreed with the GOJ and/or JICA. The Government of the Recipientshall ensure that customs duties, internal taxes and other fiscal levies which may be imposed in the Recipient with respect to the purchase of the Products and/or the Services be exempted or be borne by its designated authority without using the Grant and its accrued interest, since the grant fund comes from the Japanese taxpayers.

3) Proper Use

The Recipient is required to maintain and use properly and effectively the products and/or services under the Project (including the facilities constructed and the equipment purchased), to assign staff necessary for this operation and maintenance and to bear all the expenses other than those covered by the Japanese Grant.

4) Export and Re-export

The products purchased under the Japanese Grant should not be exported or re-exported from the Recipient.

Attachment 1

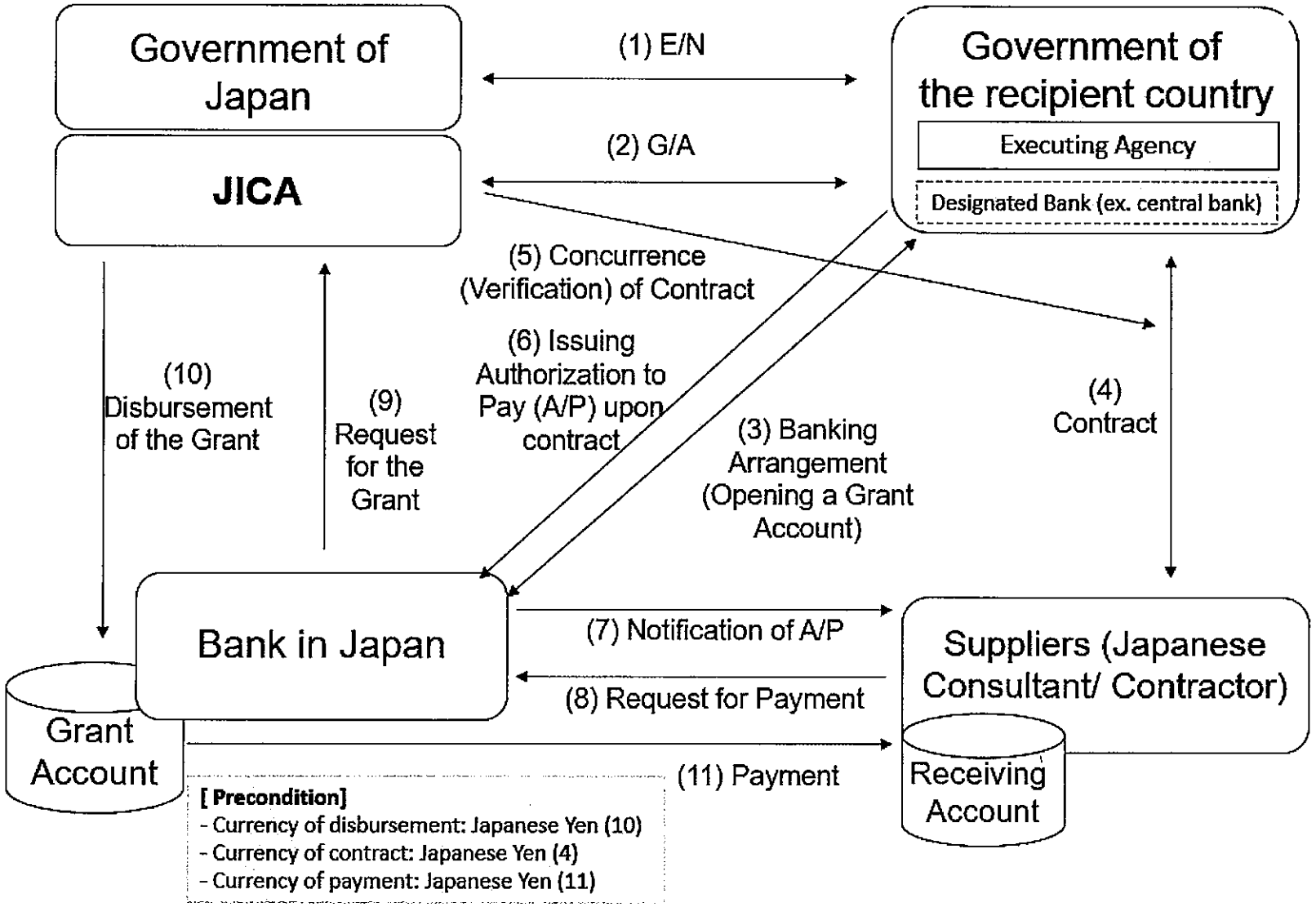
PROCEDURES OF JAPANESE GRANT

Stage	Procedures	Remarks	Recipient Government	Japanese Government	JICA	Consultants	Contractors	Agent Bank
Official Request	Request for grants through diplomatic channel	Request shall be submitted before appraisal stage.	x	x				
1. Preparation	(1) Preparatory Survey Preparation of outline design and cost estimate	—	x		x	x		
2. Appraisal	(2)Preparatory Survey Explanation of draft outline design, including cost estimate, undertakings, etc.		x		x	x		
	(3)Agreement on conditions for implementation	Conditions will be explained with the draft notes (E/N) and Grant Agreement (G/A) which will be signed before approval by Japanese government.	x	x (E/N)	x (G/A)			
	(4) Approval by the Japanese cabinet	—		x				
3. Implementation	(5) Exchange of Notes (E/N)		x	x				
	(6) Signing of Grant Agreement (G/A)		x		x			
	(7) Banking Arrangement (B/A)	Need to be informed to JICA	x					x
	(8) Contracting with consultant and issuance of Authorization to Pay (A/P)	Concurrence by JICA is required	x			x		x
	(9) Detail design (D/D)	—	x			x		
	(10) Preparation of bidding documents	Concurrence by JICA is required	x			x		
	(11) Bidding	Concurrence by JICA is required	x		—	x	x	
	(12) Contracting with contractor/supplier and issuance of A/P	Concurrence by JICA is required	x				x	x
	(13) Construction works/procurement	Concurrence by JICA is required for major modification of design and amendment of contracts.	x			x	x	
	(14) Completion certificate	—	x			x	x	
4. Ex-post monitoring & evaluation	(15) Ex-post monitoring	To be implemented generally after 1, 3, 10 years of completion, subject to change	x		x			
	(16) Ex-post evaluation	To be implemented basically after 3 years of completion	x		x			

notes:

1. Project Monitoring Report and Report for Project Completion shall be submitted to JICA as agreed in the G/A.
2. Concurrence by JICA is required for allocation of grant for remaining amount and/or contingencies as agreed in the G/A.

Financial Flow of Japanese Grant (A/P Type)



Annex 4

Date:

Ref. No.

JAPAN INTERNATIONAL COOPERATION AGENCY
JICA DJIBOUTI OFFICE
[Address specified in the Article 5 of the Grant Agreement]

Attention: Chief Representative

Ladies and Gentlemen:

NOTICE CONCERNING PROGRESS OF PROJECT

Reference : Grant Agreement, dated (signed date of the G/A), for(name of the Project)

In accordance to the Article 6 (3) of the Grant Agreement, we would like to reporton the progress of the Project up to the following stages:

[Common]

- ☐ Preparation of bidding documents - result of detailed design
- ☐ Completion of final works under construction/procurement contract

[Construction]

- ☐ Monthly progress [Month/Year]

[Procurement of Equipment]

- ☐ Shipping/delivery, hand-over (take over) of equipment
- ☐ Installation works
- ☐ Operational training

- ☐ Other

Please see the details as per attached Project Monitoring Report (PMR).

Very truly yours,

[Signature]

[Name of the signer]

[Title of the signer]

[Name of the executing agency]

cc:
Director General
Financial Cooperation Implementation Department
Japan International Cooperation Agency
[Address specified in the Article 5 of the Grant Agreement]

Project Monitoring Report
on
Project Name
Grant Agreement No. XXXXXXX

20XX, Month

Organizational Information

Signer of the G/A (Recipient)	Person in Charge (Designation) Contacts Address: Phone/FAX: Email:
Executing Agency	Person in Charge (Designation) Contacts Address: Phone/FAX: Email:
Line Ministry	Person in Charge (Designation) Contacts Address: Phone/FAX: Email:

General Information:

Project Title	
E/N	Signed date: Duration:
G/A	Signed date: Duration:
Source of Finance	Government of Japan: Not exceeding JPY _____ mil. Government of ():

1: Project Description

1-1 Project Objective

1-2 Project Rationale

- Higher-level objectives to which the project contributes (national/regional/sectoral policies and strategies)
- Situation of the target groups to which the project addresses

1-3 Indicators for measurement of "Effectiveness"

Quantitative indicators to measure the attainment of project objectives		
Indicators	Original (Yr)	Target (Yr)
Qualitative indicators to measure the attainment of project objectives		

2: Details of the Project

2-1 Location

Components	Original *(proposed in the outline design)*	Actual
1.		

2-2 Scope of the work

Components	Original* *(proposed in the outline design)*	Actual*
1.		

Reasons for modification of scope (if any).

(PMR)

2-3 Implementation Schedule

Items	Original		Actual
	(proposed in the outline design)	*(at the time of signing the Grant Agreement)*	

Reasons for any changes of the schedule, and their effects on the project (if any)

2-4 Obligations by the Recipient

2-4-1 Progress of Specific Obligations

See Attachment 2.

2-4-2 Activities

See Attachment 3.

2-4-3 Report on RD

See Attachment 11.

2-5 Project Cost

2-5-1 Cost borne by the Grant (Confidential until the Bidding)

Components			Cost (Million Yen)	
	Original *(proposed in the outline design)*	Actual *(in case of any modification)*	Original[1),2)] *(proposed in the outline design)*	Actual
	1.			
Total				

Note: 1)Date of estimation:
2)Exchange rate: 1 US Dollar = Yen

2-5-2 Cost borne by the Recipient

Components			Cost (Djiboutian franc)	
	Original *(proposed in the outline design)*	Actual *(in case of any modification)*	Original[1),2)] *(proposed in the outline design)*	Actual
	1.			

Note: 1)Date of estimation:
2)Exchange rate: 1 US Dollar =

Reasons for the remarkable gaps between the original and actual cost, and the countermeasures (if any)

(PMR)

2-6 Executing Agency

- Organization's role, financial position, capacity, cost recovery etc,
- Organization Chart including the unit in charge of the implementation and number of employees.

Original *(at the time of outline design)* name: role: financial situation: institutional and organizational arrangement (organogram): human resources (number and ability of staff):
Actual *(PMR)*

2-7 Environmental and Social Impacts

- The results of environmental monitoring based on Attachment 5 (in accordance with Schedule 4 of the Grant Agreement).
- The results of social monitoring based on in Attachment 5(in accordance with Schedule 4 of the Grant Agreement).
- Disclosed information related to results of environmental and social monitoring to local stakeholders (whenever applicable).

3: Operation and Maintenance (O&M)

3-1 Physical Arrangement

- Plan for O&M (number and skills of the staff in the responsible division or section, availability of manuals and guidelines, availability of spare parts, etc.)

Original*(at the time of outline design)*
Actual *(PMR)*

3-2 Budgetary Arrangement

- Required O&M cost and actual budget allocation for O&M

Original*(at the time of outline design)*
Actual *(PMR)*

4: Potential Risks and Mitigation Measures

- Potential risks which may affect the project implementation, attainment of objectives, sustainability
- Mitigation measures corresponding to the potential risks

Assessment of Potential Risks (*at the time of outline design*)

Potential Risks	Assessment
1. (Description of Risk)	Probability: High/Moderate/Low
	Impact: High/Moderate/Low
	Analysis of Probability and Impact:
	Mitigation Measures:
	Action required during the implementation stage:
	Contingency Plan (if applicable):
2. (Description of Risk)	Probability: High/Moderate/Low
	Impact: High/Moderate/Low
	Analysis of Probability and Impact:
	Mitigation Measures:
	Action required during the implementation stage:
	Contingency Plan (if applicable):
3. (Description of Risk)	Probability: High/Moderate/Low
	Impact: High/Moderate/Low
	Analysis of Probability and Impact:
	Mitigation Measures:
	Action required during the implementation stage:
	Contingency Plan (if applicable):

Actual Situation and Countermeasures
(PMR)

5: Evaluation and Monitoring Plan (after the work completion)

5-1 Overall evaluation

Please describe your overall evaluation on the project.

5-2 Lessons Learnt and Recommendations

Please raise any lessons learned from the project experience, which might be valuable for the future assistance or similar type of projects, as well as any recommendations, which might be beneficial for better realization of the project effect, impact and assurance of sustainability.

5-3 Monitoring Plan of the Indicators for Post-Evaluation

Please describe monitoring methods, section(s)/department(s) in charge of monitoring, frequency, the term to monitor the indicators stipulated in 1-3.

Attachment

1. Project Location Map
2. Specific obligations of the Recipient which will not be funded with the Grant
3. Monthly Report submitted by the Consultant

Appendix - Photocopy of Contractor's Progress Report (if any)
- Consultant Member List
- Contractor's Main Staff List

4. Check list for the Contract (including Record of Amendment of the Contract/Agreement and Schedule of Payment)
5. Environmental Monitoring Form / Social Monitoring Form
6. Monitoring sheet on price of specified materials (Quarterly)
7. Report on Proportion of Procurement (Recipient Country, Japan and Third Countries) (PMR (final)only)
8. Pictures (by JPEG style by CD-R) (PMR (final)only)
9. Equipment List (PMR (final)only)
10. Drawing (PMR (final)only)
11. Report on RD (After project)

Monitoring sheet on price of specified materials

1. Initial Conditions (Confirmed)

	Items of Specified Materials	Initial Volume A	Initial Unit Price (¥) B	Initial total Price C=A×B	1% of Contract Price D	Condition of payment	
						Price (Decreased) E=C−D	Price (Increased) F=C+D
1	Item 1	●●t	●	●	●	●	●
2	Item 2	●●t	●	●	●		
3	Item 3						
4	Item 4						
5	Item 5						

2. Monitoring of the Unit Price of Specified Materials

(1) Method of Monitoring : ●●

(2) Result of the Monitoring Survey on Unit Price for each specified materials

	Items of Specified Materials	1st ●month, 2015	2nd ●month, 2015	3rd ●month, 2015	4th	5th	6th
1	Item 1						
2	Item 2						
3	Item 3						
4	Item 4						
5	Item 5						

(3) Summary of Discussion with Contractor (if necessary)

-
-
-

Report on Proportion of Procurement (Recipient Country, Japan and Third Countries)
(Actual Expenditure by Construction and Equipment each)

	Domestic Procurement (Recipient Country) A	Foreign Procurement (Japan) B	Foreign Procurement (Third Countries) C	Total D
Construction Cost	(A/D%)	(B/D%)	(C/D%)	
Direct Construction Cost	(A/D%)	(B/D%)	(C/D%)	
others	(A/D%)	(B/D%)	(C/D%)	
Equipment Cost	(A/D%)	(B/D%)	(C/D%)	
Design and Supervision Cost	(A/D%)	(B/D%)	(C/D%)	
Total	(A/D%)	(B/D%)	(C/D%)	

Annex 5

Major Undertakings to be taken by the Government of Djibouti

1. Specific obligations of the Government of Djiboutiwhich will not be funded with the Grant

(1) Before the Bidding

NO	Items	Deadline	In charge	Estimated Cost	Ref.
1	To sign the banking arrangement (B/A) with a bank in Japan (the Agent Bank) to open bank account for the Grant	within 1 month after the signing of the G/A	MOF		
2	To issue A/P to the Agent Bank for the payment to the consultant	within 1 month after the signing of the contract(s)	MOF		
3	To bear the following commissions to the Agent Bank for the banking services based upon B/A				
	1) Advising commission of A/P	within 1 month after the signing of the contract(s)	MOF		
	2) Payment commission for A/P	every payment	MOF		
4	To secure and clear the following site - the project site described in Annex 1	before notice of the bidding documents	DCG		
5	To obtain the planning, installationand mooring permit of the patrol boats and pontoon	before notice of the bidding documents	DCG		
6	To submit Project Monitoring Report (with the result of Detailed Design)	before preparation of the bidding documents	DCG		

(B/A: Banking Arrangement, A/P: Authorization to pay, N/A: Not Applicable)

(2) During the Project Implementation

NO	Items	Deadline	In charge	Estimated Cost	Ref.
1	To issue A/P to the Agent Bankfor the payment to the supplier and the contractor	within 1 month after the signing of the contract(s)	MOF		
2	To bear the following commissions to the Agent Bank for the banking services based upon the B/A				
	1) Advising commission of A/P	within 1 month after the signing of the contract(s)	MOF		
	2) Payment commission for A/P	every payment	MOF		
3	to ensure prompt unloading and customs clearance at ports of disembarkation in the country of the Recipient and to assist the Supplier(s) with internal transportation therein	during the Project	DCG		
4	To accord Japanese physical persons and/or physical persons of third countries whose services may be required in connection with the supply of the products and the services such facilities as may be necessary for their entry into the country of the Recipient and stay therein for the performance of their work	during the Project	DCG		
5	To ensure that customs duties, internal taxes and other fiscal levies which may be imposed in the country of the Recipient with respect to the purchase of the products and/or the services be exempted	during the Project	DCG		
6	To bear all the expenses, other than those covered by the Grant, necessary for the implementation of the Project	during the Project	DCG		

7	To notify JICA promptly of any incident or accident, which has, or is likely to have, a significant adverse effect on the environment, the affected communities, the public or workers.	during the construction	DCG		
8	1) To submit Project Monitoring Report after each work under the contract(s) such as shipping, hand over, installation and operational training	within 1 month after completion of each work	DCG		
	2) To submit Project Monitoring Report (final) (including as-built drawings, equipment list, photographs, etc.)	within 1 month after issuance of Certificate of Completion for the works under the contract(s)	DCG		
9	To submit a report concerning completion of the Project	within 6 months after completion of the Project	DCG		
10	To take measure necessary for security and safety of the Project - maintaining the safety of workers and the general public by thorough implementation of safety measures and immediate action in the case of accident - traffic control around the site(s) and on transportation routes of construction materials - installation of fences around the site(s)	during the construction	DCG		
11	To secure necessary storage room with adequate condition for the spare parts	during the project	DCG		
12	To issue letter, certificate, license and other necessary documents necessary for construction, delivery and operation of the vessels (example: issuance of radio station license, Provisional Certificate of Registry)	during the project	MET / DCG		

(3) After the Project

NO	Items	Deadline	In charge	Estimated Cost	Ref.
1	To maintain and use properly and effectively the facilities constructed and equipment provided under the Grant Aid 1) Allocation of maintenance cost 2) Operation and maintenance structure 3) Routine check/Periodic inspection	After completion of the construction	DCG		
2	To carry out any installation works required for the equipment. (e.g. fixed type maintenance equipment, such as Desktop grinder etc.)	After completion of delivery the equipment	DCG		

2. Other obligations of the Government of Djibouti funded with the Grant

NO	Items	Deadline	Amount (Million Japanese Yen)*
1	To implement detailed design, bidding support and procurement supervision (Consulting Service)		
2	To reinforce the human capacity for the operation of the patrol boats		
	Total		XXX

*The Amountis provisional. This is subject to the approval of the Government of Japan.

Annex 6

Language used in each Document

No	Item	Prepared by	Language	
			French	English
I	**PREPARATORY SURVEY STAGE**			
1.	Field Survey Report	Consultant		○
2.	Draft Preparatory Survey Report (Draft Final Report) Note: Technical contents (Technical Drawings, etc.)	Consultant	○	○
3.	Preparatory Survey Report (Final Report) Note: Technical contents (Technical Drawings, etc.)	Consultant	○	○
II	**IMPLEMENTATION STAGE**			
1.	**Documents for the Agreement for Consulting Services**			
1.1	Agreement for Consulting Services	Consultant		○
1.2	Recommendation of Consultant	JICA		○
1.3	Documents for Banking Arrangement (B/A, A/P)	Bank	○	
1.4	Documents for Payment	Consultant	○	
2.	**Documents for the Contract with Supplier**			
2.1	Tender Announcement	Consultant		○
2.2	Tender Documents			
	Volume I Tender Conditions and Contract	Consultant		○
	Part I : Instructions to Tenderers	Consultant		○
	Part II : Forms of Tender	Consultant		○
	Part III : Form of Contract	Consultant		○
	Volume II Specifications	Consultant		○
2.3	Questions and Answers to Tender Documents	Tenderer/ Consultant		○
2.4	Document of Submissions of Tenders	Tenderer (Supplier)		○
2.5	Tender Evaluation Report	Consultant		○
2.6	Contract for execution	Supplier		○
2.7	Documents for Banking Arrangement (B/A, A/P)	Bank	○	
2.8	Documents for Payment	Supplier	○	
2.9	Completion Certificate	Consultant/Buyer		○
2.10	Technical Documents for Approval	Supplier		○
2.11	Operation and Maintenance Manuals (Manufacturer original) Note: If available by manufacturer	Supplier	○	○

Note: A language used at the implementation stage shall follow the one used in the Exchange of Notes (E/N) regardless of the above table.

4-2. Minutes of Discussions in the 1st survey in Djibouti

Minutes of Discussions
on the Preparatory Survey for the Project for
the Enhancement of the Ability of Maritime Safety and Security
(Survey in Djibouti)

With reference to the minutes of discussions signed between the Djibouti Coast Guard (hereinafter referred to as "DCG") and the Japan International Cooperation Agency (hereinafter referred to as "JICA") on 29th September, 2020 and in response to the request from the Government of the Republic of Djibouti (hereinafter referred to as "Djibouti"), JICA dispatched the Preparatory Survey Team for the Outline Design (hereinafter referred to as "the Team") of the Project for the Enhancement of the Ability of Maritime Safety and Security (hereinafter referred to as "the Project") to Djibouti. The Team held a series of discussions with the officials of the Government of Djibouti and conducted a field survey. In the course of the discussions, both sides have confirmed the main items described in the attached sheets.

Djibouti City, 10th March, 2021

Izumi Keita
Leader
Preparatory Survey Team
Japan International Cooperation Agency
Japan

Colonel Wais Omar Bogoreh
Commandant
Djibouti Coast Guard
Republic of Djibouti

(Witness)

Yacin Houssein Douale
Director of Bilateral Relations
Ministry of Foreign Affairs and
International Cooperation
Republic of Djibouti

ATTACHMENT

1. Objective of the Project

The objective of the Project is to enhance the ability of maritime safety and security of the Djibouti Coast Guard (DCG) by/through deployment of patrol boat(s) and a pontoon facility, thereby contributing to maintain maritime safety and security in Djibouti's territorial waters.

2. Title of the Preparatory Survey

Both sides confirmed the title of the Preparatory Survey as "the Preparatory Survey for the Project for the Enhancement of the Ability of Maritime Safety and Security".

3. Project site

Both sides confirmed that the site of the Project is in Port of Djibouti, Djibouti City, where the patrol boats and pontoon to be procured under the Project are to be deployed as shown in Annex 1.

4. Responsible authority for the Project

Both sides confirmed the authorities responsible for the Project are as follows:

4-1. The DCG will be the executing agency for the Project (hereinafter referred to as "the Executing Agency"). The Executing Agency shall coordinate with all the relevant authorities to ensure smooth implementation of the Project and ensure that the undertakings for the Project shall be managed by relevant authorities properly and on time. The organization charts are shown in Annex 2.

4-2. The line ministry of the Executing Agency is the Ministry of Equipment and Transport (MET). The MET shall be responsible for supervising the Executing Agency on behalf of the Government of Djibouti.

5. Outline of the Project Scope

5-1. As a result of discussion, both sides agreed and confirmed on the outline of the patrol boats and pontoon facility to be procured under the Project as follows.

(a) Patrol Boats

- two (2) patrol boats (a maximum length of 35m) with two main engine and propulsion system
- Necessary spare parts for preventive maintenance plan for major machinery

(b) Pontoon Facility

- A floating pontoon for two (2) patrol boats with mooring system and a gangway
- Outfitting such as fenders, mooring bitts and safety equipment etc.

5-2. Major specification of the said patrol boats and a pontoon facility was agreed in the Technical Memorandum signed between the Team and the Executing Agency dated 10th March, 2021.

5-3. JICA will assess the feasibility of the items above through the Preparatory Survey and will report the findings to the Government of Japan. The final scope of the Project will be decided by the Government of Japan.

6. Procedures and Basic Principles of Japanese Grant

6-1. The Djiboutian side agreed that the procedures and basic principles of Japanese Grant (hereinafter referred to as "the Grant") as described in Annex 3 shall be applied to the Project.

6-2. The Djiboutian side agreed to take the necessary measures, as described in Annex 5, for smooth implementation of the Project. The contents of the Annex 5 will be elaborated and refined during the Preparatory Survey and be agreed in the mission dispatched for explanation of the Draft Preparatory Survey Report.

The contents of Annex 5 will be updated as the Preparatory Survey progresses, and eventually, will be used as an attachment to the Grant Agreement.

7. Schedule of the Survey

7-1. The Team will proceed with further survey in Djibouti until 21st March, 2021.

7-2. JICA will prepare a draft Preparatory Survey Report in English / French and dispatch a mission to Djibouti in order to explain its contents around August, 2021.

7-3. If the contents of the draft Preparatory Survey Report are accepted and the undertakings for the Project are fully agreed by the Djiboutian side, JICA will finalize the Preparatory Survey Report and send it to Djibouti around October, 2021.

7-4. The above schedule is tentative and subject to change due to the COVID-19 pandemic.

8. Ex-Post Evaluation

JICA will conduct ex-post evaluation after three (3) years from the project completion, in principle, with respect to six (6) evaluation criteria (Relevance, Coherence, Effectiveness, Efficiency, Impact, Sustainability). The result of the evaluation will be publicized. The Djiboutian side is required to provide necessary support for the data collection.

9. Monitoring during the implementation

The Project will be monitored by the Executing Agency and reported to JICA by using the form of Project Monitoring Report (PMR) attached as Annex 4. The timing of submission of the PMR is described in Annex 5.

10. Project Completion

Both sides confirmed that the project completes when all the facilities constructed and equipment procured by the Grant are in operation. The completion of the Project will be reported to JICA promptly by the Executing Agency, but in any event not later than six months after completion of the Project.

11. Environmental and Social Considerations

11-1. The Team explained that 'JICA Guidelines for Environmental and Social Considerations (April 2010)' (hereinafter referred to as "the Guidelines") is applicable for the Project. The Project is categorized as "C" because the Project is likely to have minimal adverse impact

on the environment under the Guidelines.

11-2. The Djiboutian side confirmed to give due environmental and social considerations before and during implementation, and after completion of the Project, in accordance with the Guidelines.

12. Other Relevant Issues

12-1. Both sides confirmed the mooring site of the two patrol boats with the pontoon to be procured under the Project will be the quay no.4 of 50 metre length out of 150 metre in the Port of Djibouti, where the Executing Agency has the right to exclusive use based on the lease agreement between the Port of Djibouti and the Executing Agency. The Djiboutian side assured that the Executing Agency would keep the right for usage of the said quay, and allocate their existing boats from the quay to other site and secure the site for mooring the said patrol boats and pontoon. The Djiboutian side also assured that the Executing Agency would obtain approval from the Port of Djibouti and other related authority for mooring the said patrol boats and installation of the pontoon according to Djiboutian regulations and procedures before the conclusion of Grant Agreement.

12-2. There is no necessity to dredge the navigation channel and mooring site in the Port of Djibouti under the current condition.

12-3. The Djiboutian side understood that it shall reinforce the human capacity for the operation of the said patrol boats, while JICA will provide technical advice on the ship operation and maintenance thorough the technical cooperation project which is on-ongoing.

12-4. The Djiboutian side agreed that custom duties, internal taxes and other fiscal levies which may be imposed in the Republic of Djibouti with respect to the purchase of the products and/or services procured by Japanese Grant under the Project should be exempted. The Executing Agency agreed to take necessary actions for tax exemption for smooth implementation of the Project and apply to Ministry of Budget (MOB) and the Customs Office for tax exemption for the Project.

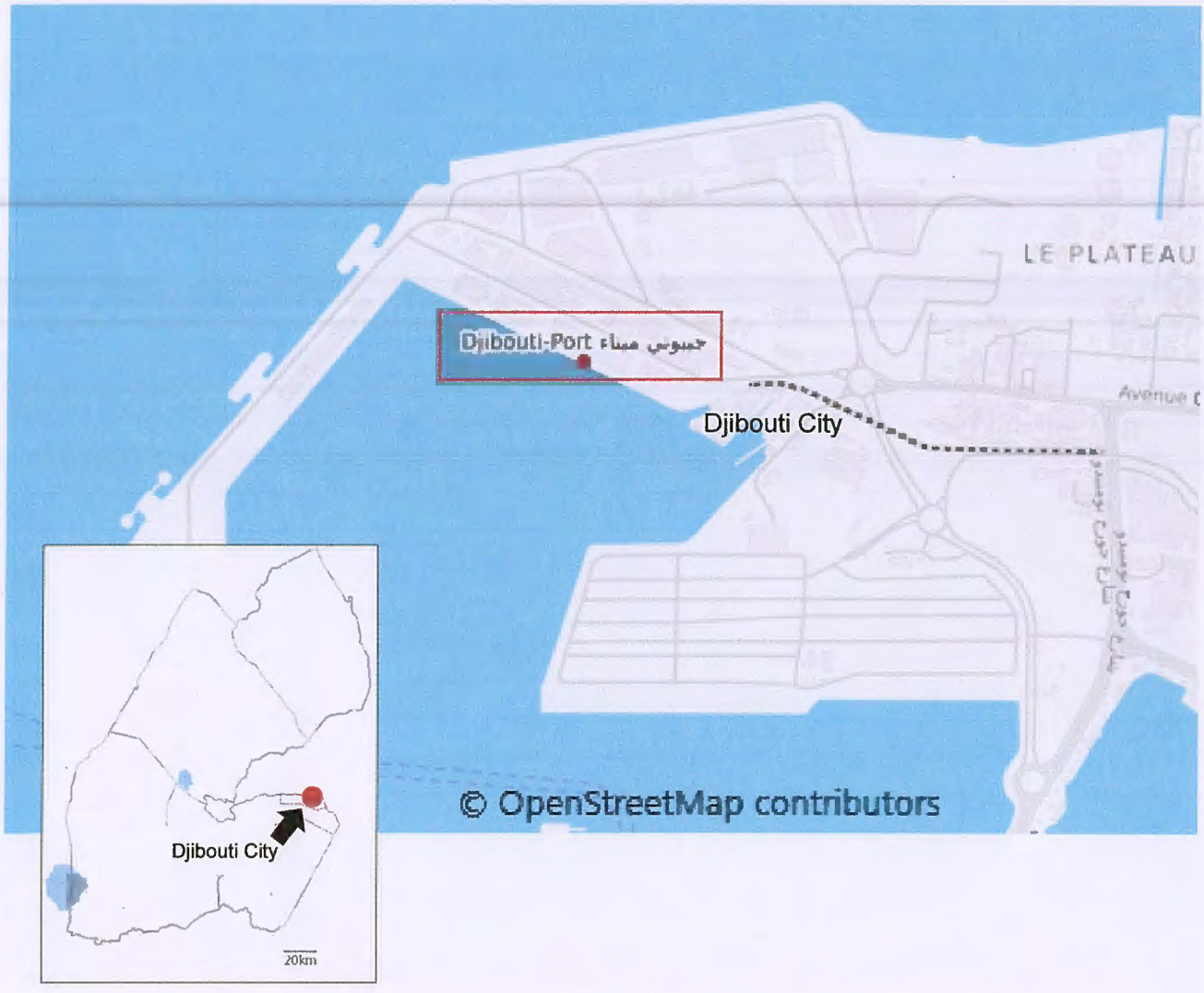
12-5. The Djiboutian side assured the items procured under the Project shall not be used for military purposes.

12-6. The Executing Agency and JICA remarked the importance to implement a familiarization training and the progress monitoring of the construction works in Japan for the purpose of smooth operation and maintenance of the patrol boats under this Project.

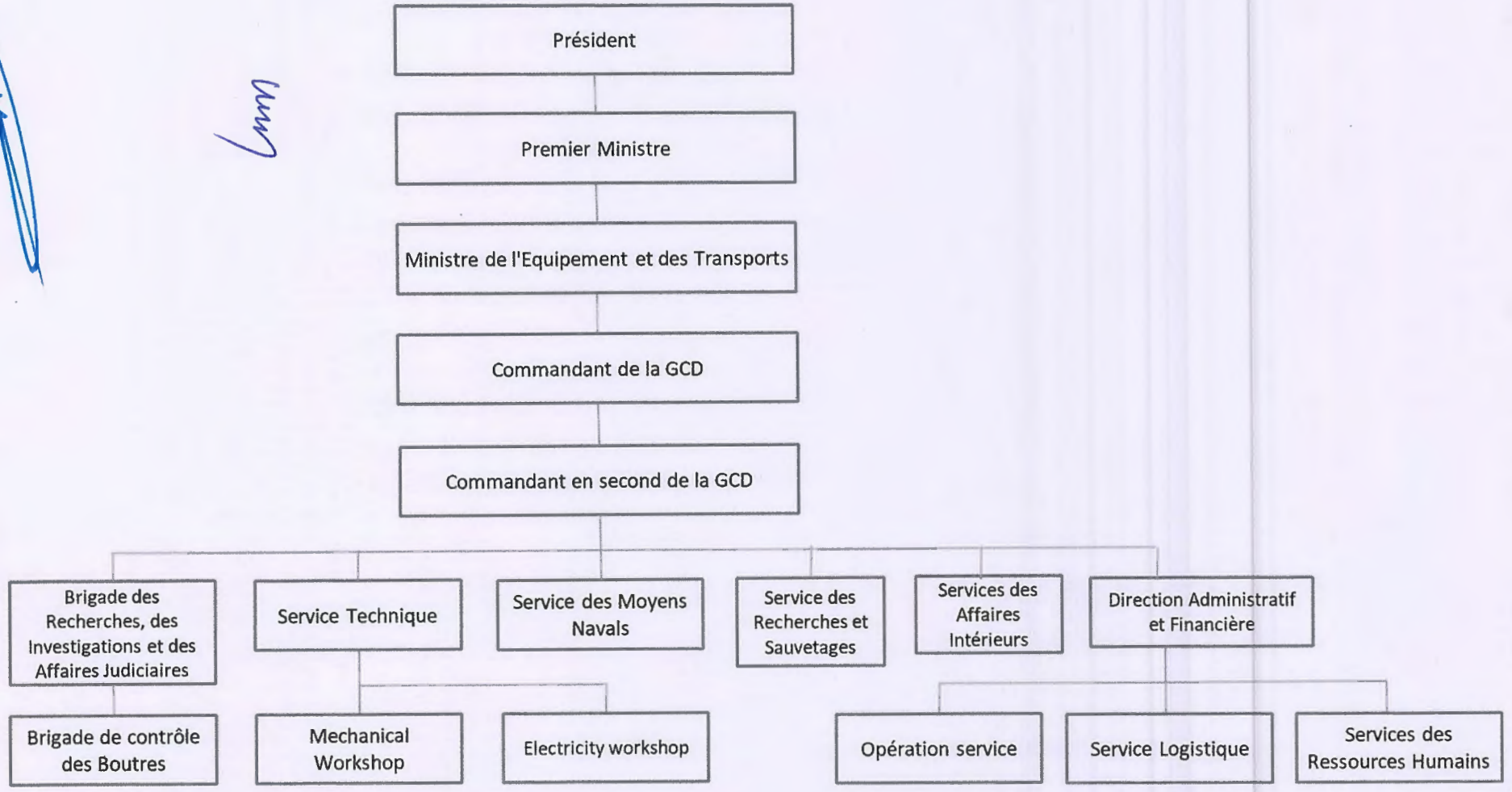
Annex 1 Project Site
Annex 2 Organization Chart
Annex 3 Japanese Grant
Annex 4 Project Monitoring Report (template)
Annex 5 Major Undertakings to be taken by the Government of Djibouti
Annex 6 Language used in each Document

Annex 1

Project Site



Organization Chart



Annex 2

Annex 3

JAPANESE GRANT

The Japanese Grantis non-reimbursable fund provided to a recipient country (hereinafter referred to as "the Recipient") to purchase the products and/or services (engineering services and transportation of the products, etc.) for its economic and social development in accordance with the relevant laws and regulations of Japan. Followings are the basic features of the project grants operated by JICA (hereinafter referred to as "Project Grants").

1. Procedures of Project Grants

Project Grants are conducted through following procedures (See "PROCEDURES OF JAPANESE GRANT" for details):

(1) Preparation

- The Preparatory Survey (hereinafter referred to as "the Survey") conducted by JICA

(2) Appraisal

- Appraisal by the government of Japan (hereinafter referred to as "GOJ") and JICA, and Approval by the Japanese Cabinet

(3) Implementation

Exchange of Notes

- The Notes exchanged between the GOJ and the government of the Recipient

Grant Agreement (hereinafter referred to as "the G/A")

- Agreement concluded between JICA and the Recipient

Banking Arrangement (hereinafter referred to as "the B/A")

- Opening of bank account by the Recipient in a bank in Japan (hereinafter referred to as "the Bank") to receive the grant

Construction works/procurement

- Implementation of the project (hereinafter referred to as "the Project") on the basis of the G/A

(4) Ex-post Monitoring and Evaluation

- Monitoring and evaluation at post-implementation stage

2. Preparatory Survey

(1) Contents of the Survey

The aim of the Survey is to provide basic documents necessary for the appraisal of the Project made by the GOJ and JICA. The contents of the Survey are as follows:

- Confirmation of the background, objectives, and benefits of the Project and also institutional capacity of relevant agencies of the Recipient necessary for the implementation of the Project.
- Evaluation of the feasibility of the Project to be implemented under the Japanese Grant from a technical, financial, social and economic point of view.

- Confirmation of items agreed between both parties concerning the basic concept of the Project.
- Preparation of an outline design of the Project.
- Estimation of costs of the Project.
- Confirmation of Environmental and Social Considerations

The contents of the original request by the Recipient are not necessarily approved in their initial form. The Outline Design of the Project is confirmed based on the guidelines of the Japanese Grant. JICA requests the Recipient to take measures necessary to achieve its self-reliance in the implementation of the Project. Such measures must be guaranteed even though they may fall outside of the jurisdiction of the executing agency of the Project. Therefore, the contents of the Project are confirmed by all relevant organizations of the Recipient based on the Minutes of Discussions.

(2) Selection of Consultants

For smooth implementation of the Survey, JICA contracts with (a) consulting firm(s). JICA selects (a) firm(s) based on proposals submitted by interested firms.

(3) Result of the Survey

JICA reviews the report on the results of the Survey and recommends the GOJ to appraise the implementation of the Project after confirming the feasibility of the Project.

3. Basic Principles of Project Grants

(1) Implementation Stage

1) The E/N and the G/A

After the Project is approved by the Cabinet of Japan, the Exchange of Notes(hereinafter referred to as "the E/N") will be singed between the GOJ and the Government of the Recipient to make a pledge for assistance, which is followed by the conclusion of the G/A between JICA and the Recipient to define the necessary articles, in accordance with the E/N, to implement the Project, such as conditions of disbursement, responsibilities of the Recipient, and procurement conditions. The terms and conditions generally applicable to the Japanese Grant are stipulated in the "General Terms and Conditions for Japanese Grant (January 2016)."

2) Banking Arrangements (B/A) (See "Financial Flow of Japanese Grant (A/P Type)" for details)

a) The Recipient shall open an account or shall cause its designated authority to open an account under the name of the Recipient in the Bank, in principle. JICA will disburse the Japanese Grant in Japanese yen for the Recipient to cover the obligations incurred by the Recipient under the verified contracts.

b) The Japanese Grant will be disbursed when payment requests are submitted by the Bank to JICA under an Authorization to Pay (A/P) issued by the Recipient.

3) Procurement Procedure

The products and/or services necessary for the implementation of the Project shall be procured in accordance with JICA's procurement guidelines as stipulated in the G/A.

4) Selection of Consultants

In order to maintain technical consistency, the consulting firm(s) which conducted the Survey will be recommended by JICA to the Recipient to continue to work on the Project's implementation after the E/N and G/A.

5) Eligible source country

In using the Japanese Grant disbursed by JICA for the purchase of products and/or services, the eligible source countries of such products and/or services shall be Japan and/or the Recipient. The Japanese Grant may be used for the purchase of the products and/or services of a third country as eligible, if necessary, taking into account the quality, competitiveness and economic rationality of products and/or services necessary for achieving the objective of the Project. However, the prime contractors, namely, constructing and procurement firms, and the prime consulting firm, which enter into contracts with the Recipient, are limited to "Japanese nationals", in principle.

6) Contracts and Concurrence by JICA

The Recipient will conclude contracts denominated in Japanese yen with Japanese nationals. Those contracts shall be concurred by JICA in order to be verified as eligible for using the Japanese Grant.

7) Monitoring

The Recipient is required to take their initiative to carefully monitor the progress of the Project in order to ensure its smooth implementation as part of their responsibility in the G/A, and toregularly report to JICA about its status by using the Project Monitoring Report (PMR).

8) Safety Measures

The Recipient must ensure that the safety is highly observed during the implementation of the Project.

9) Construction Quality Control Meeting

Construction Quality Control Meeting (hereinafter referred to as the "Meeting") will be held for quality assurance and smooth implementation of the Works at each stage of the Works. The member of the Meeting will be composed by the Recipient (or executing agency), the Consultant, the Contractor and JICA. The functions of the Meeting are as followings:

a) Sharing information on the objective, concept and conditions of design from the Contractor, before start of construction.
b) Discussing the issues affecting the Works such as modification of the design, test, inspection, safety control and the Client's obligation, during of construction.

(2) Ex-post Monitoring and Evaluation Stage

1) After the project completion, JICA will continue to keep in close contact with the Recipient in order to monitor that the outputs of the Project are used and maintained properly to attain its expected outcomes.

2) In principle, JICA will conduct ex-post evaluation of the Project after three years from the completion. It is required for the Recipient to furnish any necessary information as JICA may reasonably request.

(3) Others

1) Environmental and Social Considerations

The Recipient shall carefully consider environmental and social impacts by the Project and must comply with the environmental regulations of the Recipient and JICA Guidelines for Environmental and Social Considerations (April, 2010).

2) Major undertakings to be taken by the Government of the Recipient

For the smooth and proper implementation of the Project, the Recipient is required to undertake necessary measures including land acquisition, and bear an advising commission of the A/P and payment commissions paid to the Bank as agreed with the GOJ and/or JICA. The Government of the Recipient shall ensure that customs duties, internal taxes and other fiscal levies which may be imposed in the Recipient with respect to the purchase of the Products and/or the Services be exempted or be borne by its designated authority without using the Grant and its accrued interest, since the grant fund comes from the Japanese taxpayers.

3) Proper Use

The Recipient is required to maintain and use properly and effectively the products and/or services under the Project (including the facilities constructed and the equipment purchased), to assign staff necessary for this operation and maintenance and to bear all the expenses other than those covered by the Japanese Grant.

4) Export and Re-export

The products purchased under the Japanese Grant should not be exported or re-exported from the Recipient.

Attachment 1

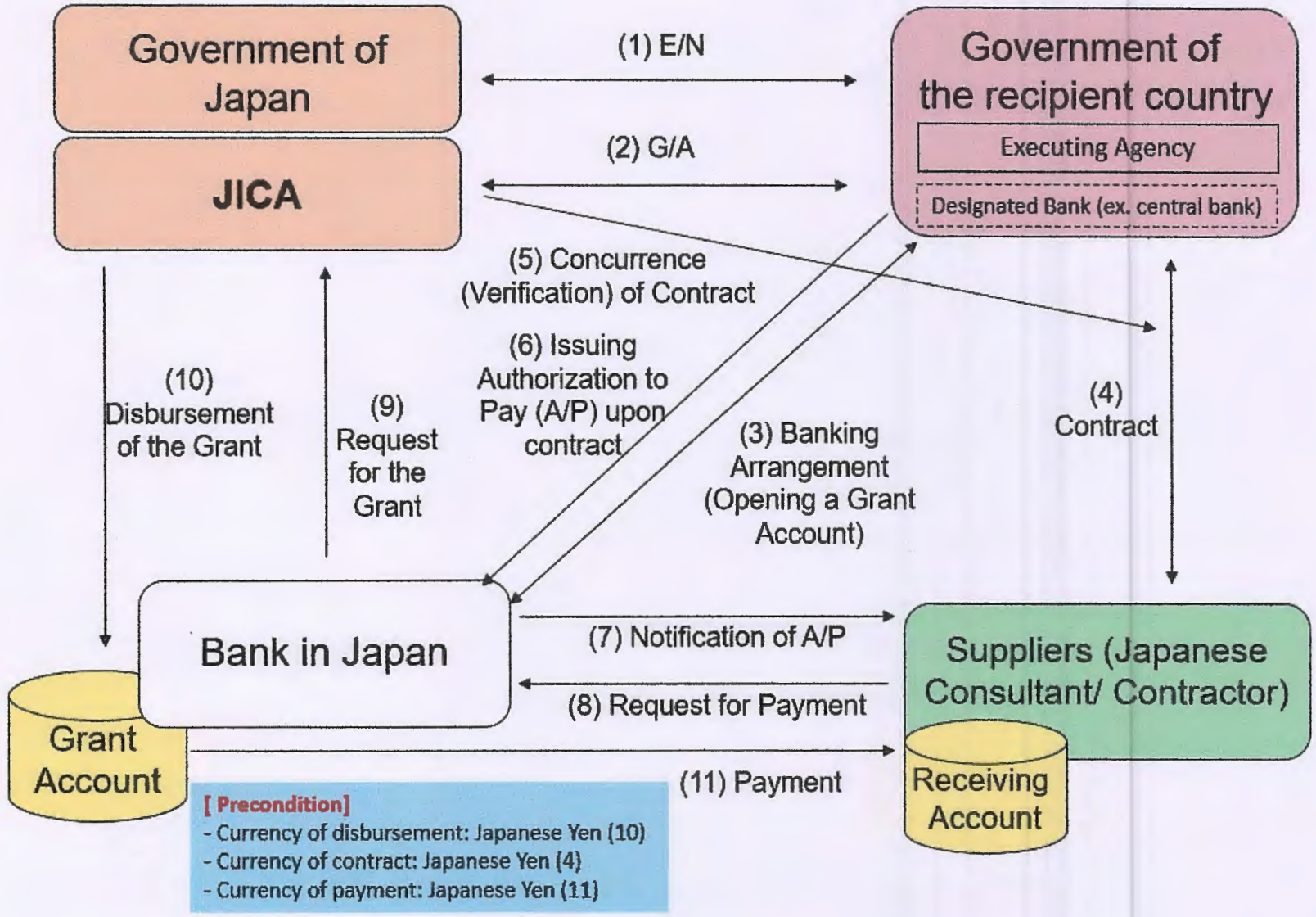
PROCEDURES OF JAPANESE GRANT

Stage	Procedures	Remarks	Recipient Government	Japanese Government	JICA	Consultants	Contractors	Agent Bank
Official Request	Request for grants through diplomatic channel	Request shall be submitted before appraisal stage.	X	X				
1. Preparation	(1) Preparatory Survey Preparation of outline design and cost estimate	—	X		X	X		
2. Appraisal	(2)Preparatory Survey Explanation of draft outline design, including cost estimate, undertakings, etc.		X		X	X		
	(3)Agreement on conditions for implementation	Conditions will be explained with the draft notes (E/N) and Grant Agreement (G/A) which will be signed before approval by Japanese government.	X	X (E/N)	X (G/A)			
	(4) Approval by the Japanese cabinet	—		X				
3. Implementation	(5) Exchange of Notes (E/N)		X	X				
	(6) Signing of Grant Agreement (G/A)		X		X			
	(7) Banking Arrangement (B/A)	Need to be informed to JICA	X					X
	(8) Contracting with consultant and issuance of Authorization to Pay (A/P)	Concurrence by JICA is required	X			X		X
	(9) Detail design (D/D)	—	X			X		
	(10) Preparation of bidding documents	Concurrence by JICA is required	X			X		
	(11) Bidding	Concurrence by JICA is required	X			X	X	
	(12) Contracting with contractor/supplier and issuance of A/P	Concurrence by JICA is required	X				X	X
	(13) Construction works/procurement	Concurrence by JICA is required for major modification of design and amendment of contracts.	X			X	X	
	(14) Completion certificate	—	X			X	X	
4. Ex-post monitoring & evaluation	(15) Ex-post monitoring	To be implemented generally after 1, 3, 10 years of completion, subject to change	X		X			
	(16) Ex-post evaluation	To be implemented basically after 3 years of completion	X		X			

notes:

1. Project Monitoring Report and Report for Project Completion shall be submitted to JICA as agreed in the G/A.
2. Concurrence by JICA is required for allocation of grant for remaining amount and/or contingencies as agreed in the G/A.

Financial Flow of Japanese Grant (A/P Type)



Annex 4

Date:

Ref. No.

JAPAN INTERNATIONAL COOPERATION AGENCY
JICA DJIBOUTI OFFICE
[Address specified in the Article 5 of the Grant Agreement]

Attention: Chief Representative

Ladies and Gentlemen:

NOTICE CONCERNING PROGRESS OF PROJECT

Reference : Grant Agreement, dated (signed date of the G/A), for(name of the Project)

In accordance to the Article 6 (3) of the Grant Agreement, we would like to reporton the progress of the Project up to the following stages:

[Common]

- ☐ Preparation of bidding documents - result of detailed design
- ☐ Completion of final works under construction/procurement contract

[Construction]

- ☐ Monthly progress [Month/Year]

[Procurement of Equipment]

- ☐ Shipping/delivery, hand-over (take over) of equipment
- ☐ Installation works
- ☐ Operational training

- ☐ Other

Please see the details as per attached Project Monitoring Report (PMR).

Very truly yours,

[Signature]

[Name of the signer]

[Title of the signer]

[Name of the executing agency]

cc:
Director General
Financial Cooperation Implementation Department
Japan International Cooperation Agency
[Address specified in the Article 5 of the Grant Agreement]

G/A NO. XXXXXXX
PMR prepared on DD/MM/YY

Project Monitoring Report
on
Project Name
Grant Agreement No. XXXXXXX
20XX, Month

Organizational Information

Signer of the G/A (Recipient)	Person in Charge (Designation) Contacts Address: Phone/FAX: Email:
Executing Agency	Person in Charge (Designation) Contacts Address: Phone/FAX: Email:
Line Ministry	Person in Charge (Designation) Contacts Address: Phone/FAX: Email:

General Information:

Project Title	
E/N	Signed date: Duration:
G/A	Signed date: Duration:
Source of Finance	Government of Japan: Not exceeding JPY _____ mil. Government of ():

1: Project Description

1-1 Project Objective

1-2 Project Rationale

- Higher-level objectives to which the project contributes (national/regional/sectoral policies and strategies)
- Situation of the target groups to which the project addresses

1-3 Indicators for measurement of "Effectiveness"

Quantitative indicators to measure the attainment of project objectives		
Indicators	Original (Yr)	Target (Yr)
Qualitative indicators to measure the attainment of project objectives		

2: Details of the Project

2-1 Location

Components		Original *(proposed in the outline design)*	Actual
1.			

2-2 Scope of the work

Components	Original* *(proposed in the outline design)*	Actual*
1.		

Reasons for modification of scope (if any).

(PMR)

2-3 Implementation Schedule

Items	Original		Actual
	(proposed in the outline design)	*(at the time of signing the Grant Agreement)*	

Reasons for any changes of the schedule, and their effects on the project (if any)

2-4 Obligations by the Recipient

2-4-1 Progress of Specific Obligations

See Attachment 2.

2-4-2 Activities

See Attachment 3.

2-4-3 Report on RD

See Attachment 11.

2-5 Project Cost

2-5-1 Cost borne by the Grant (Confidential until the Bidding)

Components			Cost (Million Yen)	
	Original *(proposed in the outline design)*	Actual *(in case of any modification)*	Original[1),2)] *(proposed in the outline design)*	Actual
	1.			
Total				

Note: 1) Date of estimation:
2) Exchange rate: 1 US Dollar = Yen

2-5-2 Cost borne by the Recipient

Components			Cost (Djiboutian franc)	
	Original *(proposed in the outline design)*	Actual *(in case of any modification)*	Original[1),2)] *(proposed in the outline design)*	Actual
	1.			

Note: 1) Date of estimation:

2) Exchange rate: 1 US Dollar =

Reasons for the remarkable gaps between the original and actual cost, and the countermeasures (if any)

(PMR)

2-6 Executing Agency

- Organization's role, financial position, capacity, cost recovery etc,
- Organization Chart including the unit in charge of the implementation and number of employees.

Original *(at the time of outline design)* name: role: financial situation: institutional and organizational arrangement (organogram): human resources (number and ability of staff):
Actual *(PMR)*

2-7 Environmental and Social Impacts

- The results of environmental monitoring based on Attachment 5 (in accordance with Schedule 4 of the Grant Agreement).
- The results of social monitoring based on in Attachment 5(in accordance with Schedule 4 of the Grant Agreement).
- Disclosed information related to results of environmental and social monitoring to local stakeholders (whenever applicable).

3: Operation and Maintenance (O&M)

3-1 Physical Arrangement

- Plan for O&M (number and skills of the staff in the responsible division or section, availability of manuals and guidelines, availability of spare parts, etc.)

Original*(at the time of outline design)*
Actual *(PMR)*

3-2 Budgetary Arrangement

- Required O&M cost and actual budget allocation for O&M

Original*(at the time of outline design)*
Actual *(PMR)*

4: Potential Risks and Mitigation Measures

- Potential risks which may affect the project implementation, attainment of objectives, sustainability
- Mitigation measures corresponding to the potential risks

Assessment of Potential Risks (*at the time of outline design*)

Potential Risks	Assessment
1. (Description of Risk)	Probability: High/Moderate/Low
	Impact: High/Moderate/Low
	Analysis of Probability and Impact:
	Mitigation Measures:
	Action required during the implementation stage:
	Contingency Plan (if applicable):
2. (Description of Risk)	Probability: High/Moderate/Low
	Impact: High/Moderate/Low
	Analysis of Probability and Impact:
	Mitigation Measures:
	Action required during the implementation stage:
	Contingency Plan (if applicable):
3. (Description of Risk)	Probability: High/Moderate/Low
	Impact: High/Moderate/Low
	Analysis of Probability and Impact:
	Mitigation Measures:
	Action required during the implementation stage:
	Contingency Plan (if applicable):

Actual Situation and Countermeasures
(PMR)

5: Evaluation and Monitoring Plan (after the work completion)

5-1 Overall evaluation

Please describe your overall evaluation on the project.

5-2 Lessons Learnt and Recommendations

Please raise any lessons learned from the project experience, which might be valuable for the future assistance or similar type of projects, as well as any recommendations, which might be beneficial for better realization of the project effect, impact and assurance of sustainability.

5-3 Monitoring Plan of the Indicators for Post-Evaluation

Please describe monitoring methods, section(s)/department(s) in charge of monitoring, frequency, the term to monitor the indicators stipulated in 1-3.

Attachment

1. Project Location Map
2. Specific obligations of the Recipient which will not be funded with the Grant
3. Monthly Report submitted by the Consultant
   Appendix
   - Photocopy of Contractor's Progress Report (if any)
   - Consultant Member List
   - Contractor's Main Staff List
4. Check list for the Contract (including Record of Amendment of the Contract/Agreement and Schedule of Payment)
5. Environmental Monitoring Form / Social Monitoring Form
6. Monitoring sheet on price of specified materials (Quarterly)
7. Report on Proportion of Procurement (Recipient Country, Japan and Third Countries) (PMR (final)only)
8. Pictures (by JPEG style by CD-R) (PMR (final)only)
9. Equipment List (PMR (final)only)
10. Drawing (PMR (final)only)
11. Report on RD (After project)

Monitoring sheet on price of specified materials

1. Initial Conditions (Confirmed)

	Items of Specified Materials	Initial Volume A	Initial Unit Price (¥) B	Initial total Price C=A×B	1% of Contract Price D	Condition of payment	
						Price (Decreased) E=C−D	Price (Increased) F=C+D
1	Item 1	●●t	●	●	●	●	●
2	Item 2	●●t	●	●	●		
3	Item 3						
4	Item 4						
5	Item 5						

2. Monitoring of the Unit Price of Specified Materials

(1) Method of Monitoring : ●●

(2) Result of the Monitoring Survey on Unit Price for each specified materials

	Items of Specified Materials	1st ●month, 2015	2nd ●month, 2015	3rd ●month, 2015	4th	5th	6th
1	Item 1						
2	Item 2						
3	Item 3						
4	Item 4						
5	Item 5						

(3) Summary of Discussion with Contractor (if necessary)

-
-
-

Attachment 6

Report on Proportion of Procurement (Recipient Country, Japan and Third Countries)
(Actual Expenditure by Construction and Equipment each)

	Domestic Procurement (Recipient Country) A	Foreign Procurement (Japan) B	Foreign Procurement (Third Countries) C	Total D
Construction Cost	(A/D%)	(B/D%)	(C/D%)	
Direct Construction Cost	(A/D%)	(B/D%)	(C/D%)	
Others	(A/D%)	(B/D%)	(C/D%)	
Equipment Cost	(A/D%)	(B/D%)	(C/D%)	
Design and Supervision Cost	(A/D%)	(B/D%)	(C/D%)	
Total	(A/D%)	(B/D%)	(C/D%)	

Annex 5

Major Undertakings to be taken by the Government of Djibouti

1. Specific obligations of the Government of Djibouti which will not be funded with the Grant

(1) Before the Bidding

NO	Items	Deadline	In charge	Estimated Cost	Ref.
1	To sign the banking arrangement (B/A) with a bank in Japan (the Agent Bank) to open bank account for the Grant	within 1 month after the signing of the G/A	DCG MAECI		
2	To issue A/P to the Agent Bank for the payment to the consultant	within 1 month after the signing of the contract(s)	DCG MAECI		
3	To bear the following commissions to the Agent Bank for the banking services based upon B/A				
	1) Advising commission of A/P	within 1 month after the signing of the contract(s)	DCG MAECI		
	2) Payment commission for A/P	every payment	DCG MAECI		
4	To secure and clear the following site - the project site described in Annex 1	before notice of the bidding documents	DCG		
5	To obtain the planning, installation and mooring permit of the patrol boats and floating pontoon	before notice of the bidding documents	DCG		
6	To submit Project Monitoring Report (with the result of Detailed Design)	before preparation of the bidding documents	DCG		

(B/A: Banking Arrangement, A/P: Authorization to pay, N/A: Not Applicable)
* MAECI: Ministry of Foreign Affairs and International Cooperation (Ministère des Affaires Etrangères et de la Coopération Internationale)

(2) During the Project Implementation

NO	Items	Deadline	In charge	Estimated Cost	Ref.
1	To issue A/P to the Agent Bank for the payment to the supplier and the contractor	within 1 month after the signing of the contract(s)	DCG MAECI		
2	To bear the following commissions to the Agent Bank for the banking services based upon the B/A				
	1) Advising commission of A/P	within 1 month after the signing of the contract(s)	DCG MAECI		
	2) Payment commission for A/P	every payment	DCG MAECI		
3	To ensure prompt unloading and customs clearance at ports of disembarkation in the country of the Recipient and to assist the Supplier(s) with internal transportation therein	during the Project	DCG		
4	To accord Japanese physical persons and/or physical persons of third countries whose services may be required in connection with the supply of the products and the services such facilities as may be necessary for their entry into the country of the Recipient and stay therein for the performance of their work	during the Project	DCG		
5	To ensure that customs duties, internal taxes and other fiscal levies which may be imposed in the country of the Recipient with respect to the purchase of the products and/or the services be exempted	during the Project	DCG MAECI		

6	To bear all the expenses, other than those covered by the Grant, necessary for the implementation of the Project	during the Project	DCG MAECI		
7	To notify JICA promptly of any incident or accident, which has, or is likely to have, a significant adverse effect on the environment, the affected communities, the public or workers.	during the construction	DCG		
8	1) To submit Project Monitoring Report after each work under the contract(s) such as shipping, hand over, installation and operational training	within 1 month after completion of each work	DCG		
	2) To submit Project Monitoring Report (final) (including as-built drawings, equipment list, photographs, etc.)	within 1 month after issuance of Certificate of Completion for the works under the contract(s)	DCG		
9	To submit a report concerning completion of the Project	within 6 months after completion of the Project	DCG		
10	To take measure necessary for security and safety of the Project - maintaining the safety of workers and the general public by thorough implementation of safety measures and immediate action in the case of accident - traffic control around the site(s) and on transportation routes of construction materials - installation of fences around the site(s)	during the construction	DCG		
11	To secure necessary storage room with adequate condition for the spare parts	during the project	DCG		
12	To issue letter, certificate, license and other necessary documents necessary for construction, delivery and operation of the vessels (example: issuance of radio station license)	during the project	MET / DCG		
13	To prepare necessary storage space for the spare parts of the patrol boats such as containers for items which are not required for temperature control	during the project	DCG		

* MAECI: Ministry of Foreign Affairs and International Cooperation (Ministère des Affaires Étrangères et de la Coopération Internationale), MET: Ministry of Equipment and Transport

(3) After the Project

NO	Items	Deadline	In charge	Estimated Cost	Ref.
1	To maintain and use properly and effectively the facilities constructed and equipment provided under the Grant Aid 1) Allocation of maintenance cost 2) Operation and maintenance structure 3) Routine check/Periodic inspection	After completion of the delivery the equipment	DCG		
2	To carry out any installation works required for the equipment. (e.g. fixed type maintenance equipment, such as Desktop grinder etc.)	After completion of delivery the equipment	DCG		

Other obligations of the Government of Djibouti funded with the Grant

NO	Items	Deadline	Amount (Million Japanese Yen)*
1	To provide equipment 1) To conduct the following transportation a) Marin (Air) transportation of the products from Japan to the country of the Recipient 2) To provide equipment with installation and commissioning a) Two (2) patrol boats with necessary spare parts b) A floating pontoon for two (2) patrol boats with mooring system and a gangway		
2	To implement detailed design, bidding support and procurement supervision (Consulting Service)		
	Total		XXX

*The Amount is provisional. This is subject to the approval of the Government of Japan.

Annex 6

Language used in each Document

No	Item	Prepared by	Language	
			French	English
I	**PREPARATORY SURVEY STAGE**			
1.	Field Survey Report	Consultant		X
2.	Draft Preparatory Survey Report (Draft Final Report) Note: Technical contents (Technical Drawings, etc.)	Consultant	X	X
3.	Preparatory Survey Report (Final Report) Note: Technical contents (Technical Drawings, etc.)	Consultant	X	X
II	**IMPLEMENTATION STAGE**			
1.	**Documents for the Agreement for Consulting Services**			
1.1	Agreement for Consulting Services	Consultant		X
1.2	Recommendation of Consultant	JICA		X
1.3	Documents for Banking Arrangement (B/A, A/P)	Bank	X	
1.4	Documents for Payment	Consultant	X	
2.	**Documents for the Contract with Supplier**			
2.1	Tender Announcement	Consultant		X
2.2	Tender Documents			
	Volume I Tender Conditions and Contract	Consultant		X
	Part I : Instructions to Tenderers	Consultant		X
	Part II : Forms of Tender	Consultant		X
	Part III : Form of Contract	Consultant		X
	Volume II Specifications	Consultant		X
2.3	Questions and Answers to Tender Documents	Tenderer/ Consultant		X
2.4	Document of Submissions of Tenders	Tenderer (Supplier)		X
2.5	Tender Evaluation Report	Consultant		X
2.6	Contract for execution	Supplier		X
2.7	Documents for Banking Arrangement (B/A, A/P)	Bank	X	
2.8	Documents for Payment	Supplier	X	
2.9	Completion Certificate	Consultant/Buyer		X
2.10	Technical Documents for Approval	Supplier		X
2.11	Operation and Maintenance Manuals (Manufacturer original) Note: If available by manufacturer	Supplier	X	X

Note: A language used at the implementation stage shall follow the one used in the Exchange of Notes (E/N) regardless of the above table.

4-3. Minutes of Discussions in the final report of the preparatory survey

Minutes of Discussions
on the Preparatory Survey for the Project for
the Enhancement of the Ability of Maritime Safety and Security
(Explanation on Draft Preparatory Survey Report)

With reference to the minutes of discussions signed between the Djibouti Coast Guard (hereinafter referred to as "DCG") and the Japan International Cooperation Agency (hereinafter referred to as "JICA") on 29th September, 2020 and 10th March, 2021, and in response to the request from the Government of the Republic of Djibouti (hereinafter referred to as "Djibouti") dated 27th December, 2017, JICA dispatched the Preparatory Survey Team (hereinafter referred to as "the Team") for the explanation of Draft Preparatory Survey Report (hereinafter referred to as "the Draft Report") for the Project for the Enhancement of the Ability of Maritime Safety and Security (hereinafter referred to as "the Project").

As a result of the discussions, both sides agreed on the main items described in the attached sheets.

Djibouti City, 2nd September, 2021

Izumi Keita
Leader
Preparatory Survey Team
Japan International Cooperation Agency
Japan

Colonel Wais Omar Bogoreh
Commandant
Djibouti Coast Guard
Republic of Djibouti

(Witness)

Mahdi Absieh Bouh
Acting Director of Bilateral Relations
Ministry of Foreign Affairs and
International Cooperation
Republic of Djibouti

ATTACHEMENT

1. Objective of the Project

The objective of the Project is to improve DCG's ability to quickly and appropriately carry out operations such as maritime rescue and law enforcement by/through deployment of patrol boats and a pontoon facility, thereby contributing to improvement of maritime safety and security in Djibouti's territorial waters, including the Bab-el-Mandeb Strait.

2. Title of the Preparatory Survey

Both sides confirmed the title of the Preparatory Survey as "the Preparatory Survey for the Project for the Enhancement of the Ability of Maritime Safety and Security".

3. Project site

Both sides confirmed that the site of the Project is in Port of Djibouti, Djibouti City, where the patrol boats and pontoon to be procured under the Project are to be deployed as shown in Annex 1.

4. Responsible Authority for the Project

Both sides confirmed the authorities responsible for the Project are as follows:

4-1 The DCG will be the executing agency for the Project (hereinafter referred to as "the Executing Agency"). The Executing Agency shall coordinate with all the relevant authorities to ensure smooth implementation of the Project and ensure that the undertakings for the Project shall be taken care by relevant authorities properly and on time. The organization charts are shown in Annex 2.

4-2 The line ministry of the Executing Agency is the Ministry of Infrastructure and Equipment (MIE). The MIE shall be responsible for supervising the Executing Agency on behalf of the Government of Djibouti.

5. Contents of the Draft Report

After the explanation of the contents of the Draft Report by the Team, the Djiboutian side agreed to its contents. JICA will finalize the Preparatory Survey Report based on the confirmed items. The report will be sent to the Djiboutian side around December, 2021.

6. Cost estimate

Both sides confirmed that the cost estimate explained by the Team is provisional and

will be examined further by the Government of Japan for its approval.

7. Confidentiality of the cost estimate and technical specifications
Both sides confirmed that the cost estimate and technical specifications of the Project should never be disclosed to any third parties until all the contracts under the Project are concluded.

8. Procedures and Basic Principles of Japanese Grant
The Djiboutian side agreed that the procedures and basic principles of Japanese Grant (hereinafter referred to as "the Grant") as described in Annex 3 shall be applied to the Project. In addition, the Djiboutian side agreed to take necessary measures according to the procedures.

9. Timeline for the project implementation
The Team explained to the Djiboutian side that the expected timeline for the project implementation is as attached in Annex 4.

10. Expected outcomes and indicators
Both sides agreed that key indicators for expected outcomes are as follows. The Djiboutian side will be responsible for the achievement of agreed key indicators targeted in year 2027 and shall monitor the progress for Ex-Post Evaluation based on those indicators.
[Quantitative indicators]

Indicator name	Reference value (Actual figures for 2021)	Target value (2027) (3 years after project completion)
Continuous patrol period possible per voyage	5 Days	14 Days
Seaworthiness (wave height conditions feasible for safe navigation)	Wave height of 2.5m or less	Wave height of 3.0m or less
Annual number of deployment days in key sea areas (Bab-el-Mandeb Strait)	62 days / 2 patrol boats	182 days / 4 patrol boats

[Qualitative indicators]
The patrol system in Djibouti's sea areas, including the Bab-el-Mandeb Strait, will be strengthened, which will contribute to an abatement of marine accidents, people smuggling, illegal fishing, piracy, etc., as well as ensuring safe and problem-free maritime transport and socio-economic activities.

11. Ex-Post Evaluation

JICA will conduct ex-post evaluation after three (3) years from the project completion, in principle, with respect to five evaluation criteria (Relevance, Effectiveness, Efficiency, Impact, Sustainability). The result of the evaluation will be publicized. The Djiboutian side is required to provide necessary support for the data collection.

12. Undertakings of the Project

12-1 Both sides confirmed the undertakings of the Project as described in Annex 5. With regard to exemption of customs duties, internal taxes and other fiscal levies as stipulated in NO. 5 of Annex 5, both sides confirmed that such customs duties, internal taxes and other fiscal levies, which shall be clarified in the bid documents by DCG during the implementation stage of the Project.

12-2 The Djiboutian side assured to take the necessary measures and coordination including allocation of the necessary budget which are preconditions of implementation of the Project.

12-3 Both sides also confirmed that the Annex 5 will be used as an attachment of G/A.

12-4 Both sides confirmed the mooring site of the two patrol boats with the pontoon to be procured under the Project will be the berth no.4 of 50 metre length out of 150 metre in the Port of Djibouti, where the Executing Agency has the right to exclusive use based on the lease agreement between the Port of Djibouti and the Executing Agency. In this regard, both sides confirmed the followings:

(a) the Executing Agency will keep the right for usage of the said berth,

(b) the Executing Agency will obtain approval from the Port of Djibouti and other related authority for mooring the said patrol boats and installation of the pontoon according to Djiboutian regulations and procedures before the announcement of bidding process.

(c) the Executing Agency will provide the distribution line of electricity and water to the berth, which is necessary for the implementation of the Project before start of the installation works at the site.

(d) the Executing Agency will allocate their existing boats from the berth to other site and secure the site for mooring the said patrol boats and pontoon before start of the installation works at the site.

12-5 The Djiboutian side agreed that custom duties, internal taxes and other fiscal levies which may be imposed in the Republic of Djibouti with respect to the purchase of the products and/or services procured by Japanese Grant under the Project should be exempted. The Executing Agency agreed to take necessary actions for tax exemption

for smooth implementation of the Project and apply to Ministry of Budget (MOB) and the Customs Office for tax exemption for the Project.

13. Monitoring during the implementation

The Project will be monitored by the Executing Agency and reported to JICA by using the form of Project Monitoring Report (PMR) attached as Annex 6. The timing of submission of the PMR is described in Annex 5.

14. Project Completion

Both sides confirmed that the project completes when all the facilities constructed and equipment procured by the Grant are in operation. The completion of the Project will be reported to JICA promptly by the Executing Agency, but in any event not later than six months after completion of the Project.

15. Environmental and Social Considerations

15-1 General Issues

15-1-1 Environmental Guidelines and Environmental Category

The Team explained that 'JICA Guidelines for Environmental and Social Considerations (April 2010)' (hereinafter referred to as "the Guidelines") is applicable for the Project. The Project is categorized as C because the Project is likely to have minimal adverse impact on the environment under the Guidelines.

15-1-2 the Executing Agency shall carry out monitoring activities in accordance with the law in Djibouti and the Guidelines, in case the Environmental Impact Assessment (EIA) is required.

16. Other Relevant Issues

16-1 There is no necessity to dredge the navigation channel and mooring site in the Port of Djibouti under the current condition.

16-2 The Djiboutian side understood that it shall reinforce the human capacity for the operation of the said patrol boats, while JICA will provide technical advice on the ship operation and maintenance through the technical cooperation project which is on-going.

16-3 The Djiboutian side understood the principle of the Japan's Development Cooperation Charter, which stresses that Japan's ODA must not be utilized for military purpose or promoting international conflicts, and agreed to following conditions regarding the vessels and equipment to be procured in the Project.

The vessels and equipment under the Project;

(a) shall never be used for any military purposes including logistic support under any circumstances;
(b) shall never be transferred to any third party without prior consultation with the Japanese Government;
(c) shall need prior notification to the Japanese Government for major alteration such as permanent installation of machine guns; and
(d) shall be monitored at least one year and three years after completion of the Project by the Embassy of Japan in Djibouti and JICA Djibouti Office in accordance with procedures designated by the Government of Japan.

The Djiboutian side also agreed to report the status of utilization of the vessels and equipment under the Project to the Embassy of Japan in Djibouti and JICA Djibouti Office upon requests at any time.

16-4 Disclosure of Information

Both sides confirmed that the Preparatory Survey Report from which project cost and the description of patrol boats design is excluded will be disclosed to the public after completion of the Preparatory Survey. The comprehensive report including the project cost, will be disclosed to the public after all the contracts under the Project are concluded, while the description of patrol boats design will be confidential and not to be diclosed even after all the contracts under the Project are concluded for the purpose of safety and security.

16-5 Gender Mainstreaming

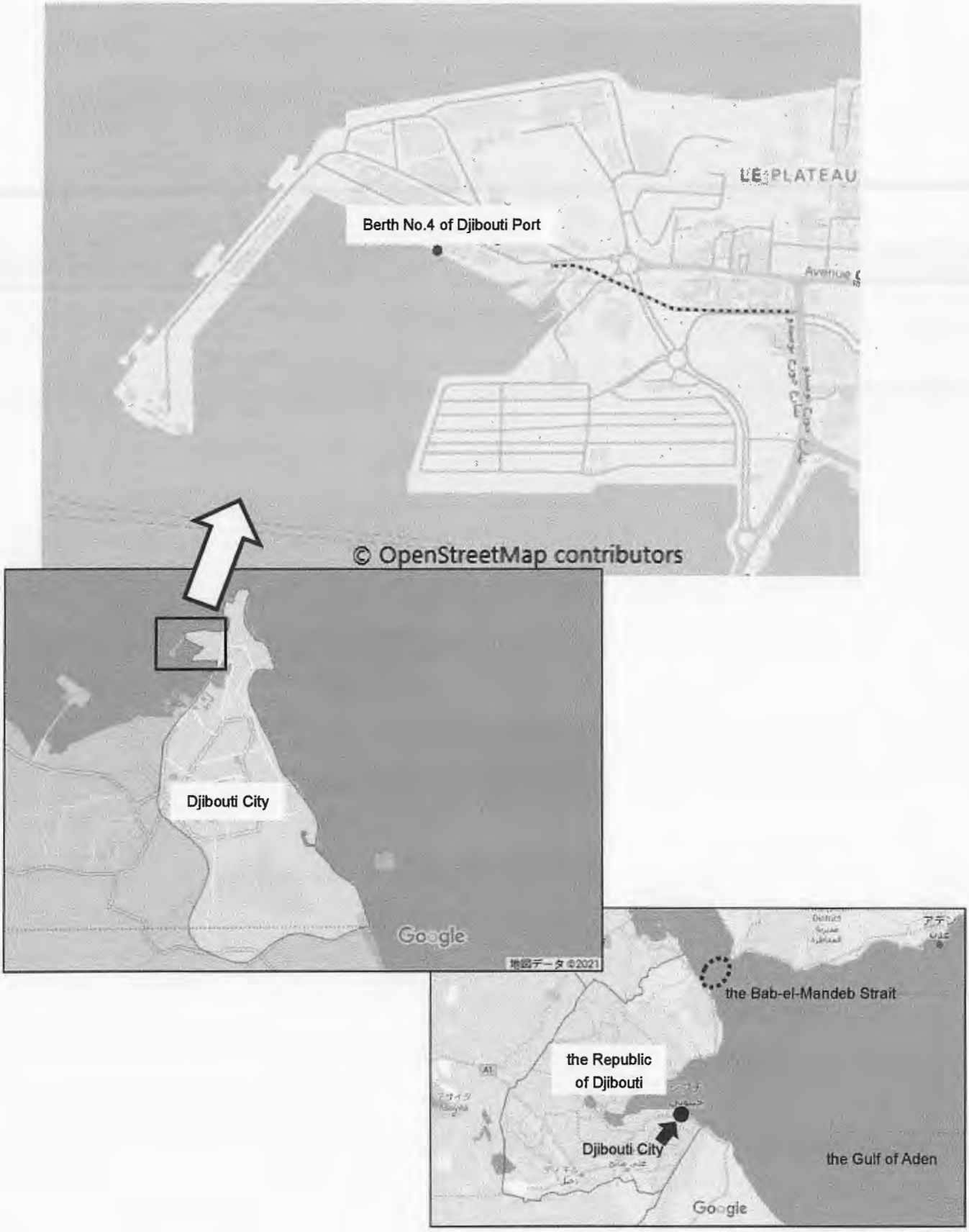
Both sides confirmed that gender mainstreaming should be duly practiced for the Project implementation as the project is categorized as GIS (Gender Integrated Project). In particular, Both sides agreed on the following gender elements to be integrated into the Project.

(a) The Project has taken into consideration improving the environment to enable women to play a larger and more active role in the field of maritime security. In this regard, based on the needs of female crew members, rooms and separate toilets for men and women of the new patrol boats will be arranged.

Annex 1 Project Site
Annex 2 Organization Chart
Annex 3 Japanese Grant
Annex 4 Project Implementation Schedule
Annex 5 Major Undertakings to be taken by the Government of Djibouti
Annex 6 Project Monitoring Report (template)
Annex 7 Language used in each Document

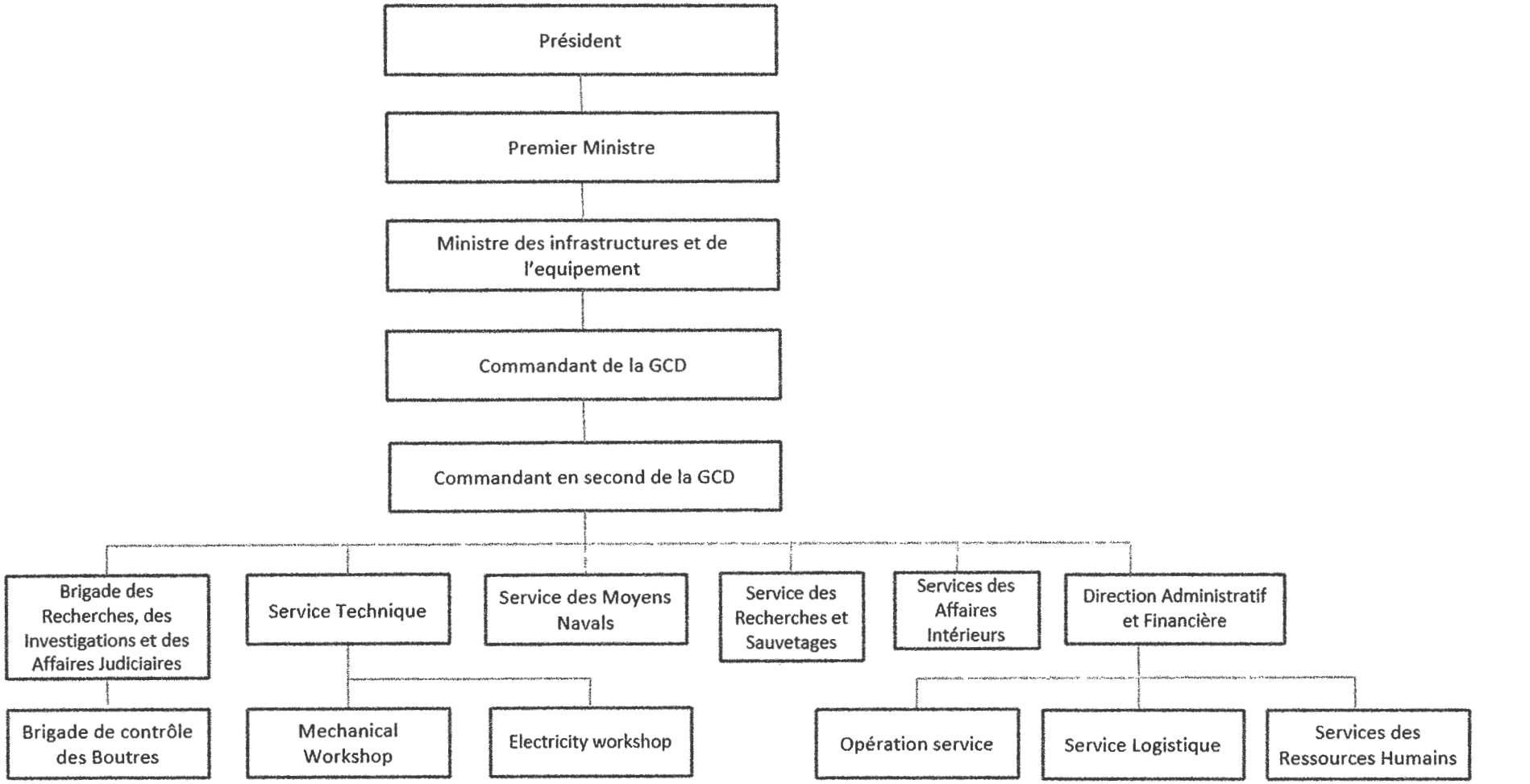
Annex 1

Project Site



Source: Google Map

Organization Chart



Annex 2

Annex 3

JAPANESE GRANT

The Japanese Grantis non-reimbursable fund provided to a recipient country (hereinafter referred to as "the Recipient") to purchase the products and/or services (engineering services and transportation of the products, etc.) for its economic and social development in accordance with the relevant laws and regulations of Japan. Followings are the basic features of the project grants operated by JICA (hereinafter referred to as "Project Grants").

1. Procedures of Project Grants

Project Grants are conducted through following procedures (See "PROCEDURES OF JAPANESE GRANT" for details):

(1) Preparation

- The Preparatory Survey (hereinafter referred to as "the Survey") conducted by JICA

(2) Appraisal

- Appraisal by the government of Japan (hereinafter referred to as "GOJ") and JICA, and Approval by the Japanese Cabinet

(3) Implementation

Exchange of Notes

- The Notes exchanged between the GOJ and the government of the Recipient

Grant Agreement (hereinafter referred to as "the G/A")

- Agreement concluded between JICA and the Recipient

Banking Arrangement (hereinafter referred to as "the B/A")

- Opening of bank account by the Recipient in a bank in Japan (hereinafter referred to as "the Bank") to receive the grant

Construction works/procurement

- Implementation of the project (hereinafter referred to as "the Project") on the basis of the G/A

(4) Ex-post Monitoring and Evaluation

- Monitoring and evaluation at post-implementation stage

2. Preparatory Survey

(1) Contents of the Survey

The aim of the Survey is to provide basic documents necessary for the appraisal of the Project made by the GOJ and JICA. The contents of the Survey are as follows:

- Confirmation of the background, objectives, and benefits of the Project and also institutional capacity of relevant agencies of the Recipient necessary for the implementation of the Project.
- Evaluation of the feasibility of the Project to be implemented under the Japanese Grant from a technical, financial, social and economic point of view.

- Confirmation of items agreed between both parties concerning the basic concept of the Project.
- Preparation of an outline design of the Project.
- Estimation of costs of the Project.
- Confirmation of Environmental and Social Considerations

The contents of the original request by the Recipient are not necessarily approved in their initial form. The Outline Design of the Project is confirmed based on the guidelines of the Japanese Grant. JICA requests the Recipient to take measures necessary to achieve its self-reliance in the implementation of the Project. Such measures must be guaranteed even though they may fall outside of the jurisdiction of the executing agency of the Project. Therefore, the contents of the Project are confirmed by all relevant organizations of the Recipient based on the Minutes of Discussions.

(2) Selection of Consultants

For smooth implementation of the Survey, JICA contracts with (a) consulting firm(s). JICA selects (a) firm(s) based on proposals submitted by interested firms.

(3) Result of the Survey

JICA reviews the report on the results of the Survey and recommends the GOJ to appraise the implementation of the Project after confirming the feasibility of the Project.

3. Basic Principles of Project Grants

(1) Implementation Stage

1) The E/N and the G/A

After the Project is approved by the Cabinet of Japan, the Exchange of Notes(hereinafter referred to as "the E/N") will be singed between the GOJ and the Government of the Recipient to make a pledge for assistance, which is followed by the conclusion of the G/A between JICA and the Recipient to define the necessary articles, in accordance with the E/N, to implement the Project, such as conditions of disbursement, responsibilities of the Recipient, and procurement conditions. The terms and conditions generally applicable to the Japanese Grant are stipulated in the "General Terms and Conditions for Japanese Grant (January 2016)."

2) Banking Arrangements (B/A) (See "Financial Flow of Japanese Grant (A/P Type)" for details)

a) The Recipient shall open an account or shall cause its designated authority to open an account under the name of the Recipient in the Bank, in principle. JICA will disburse the Japanese Grant in Japanese yen for the Recipient to cover the obligations incurred by the Recipient under the verified contracts.

b) The Japanese Grant will be disbursed when payment requests are submitted by the Bank to JICA under an Authorization to Pay (A/P) issued by the Recipient.

3) Procurement Procedure

The products and/or services necessary for the implementation of the Project shall be procured in accordance with JICA's procurement guidelines as stipulated in the G/A.

4) Selection of Consultants

In order to maintain technical consistency, the consulting firm(s) which conducted the Survey will be recommended by JICA to the Recipient to continue to work on the Project's implementation after the E/N and G/A.

5) Eligible source country

In using the Japanese Grant disbursed by JICA for the purchase of products and/or services, the eligible source countries of such products and/or services shall be Japan and/or the Recipient. The Japanese Grant may be used for the purchase of the products and/or services of a third country as eligible, if necessary, taking into account the quality, competitiveness and economic rationality of products and/or services necessary for achieving the objective of the Project. However, the prime contractors, namely, constructing and procurement firms, and the prime consulting firm, which enter into contracts with the Recipient, are limited to "Japanese nationals", in principle.

6) Contracts and Concurrence by JICA

The Recipient will conclude contracts denominated in Japanese yen with Japanese nationals. Those contracts shall be concurred by JICA in order to be verified as eligible for using the Japanese Grant.

7) Monitoring

The Recipient is required to take their initiative to carefully monitor the progress of the Project in order to ensure its smooth implementation as part of their responsibility in the G/A, and toregularly report to JICA about its status by using the Project Monitoring Report (PMR).

8) Safety Measures

The Recipient must ensure that the safety is highly observed during the implementation of the Project.

9) Construction Quality Control Meeting

Construction Quality Control Meeting (hereinafter referred to as the "Meeting") will be held for quality assurance and smooth implementation of the Works at each stage of the Works. The member of the Meeting will be composed by the Recipient (or executing agency), the Consultant, the Contractor and JICA. The functions of the Meeting are as followings:

a) Sharing information on the objective, concept and conditions of design from the Contractor, before start of construction.
b) Discussing the issues affecting the Works such as modification of the design, test, inspection, safety control and the Client's obligation, during of construction.

(2) Ex-post Monitoring and Evaluation Stage

1) After the project completion, JICA will continue to keep in close contact with the Recipient in order to monitor that the outputs of the Project are used and maintained properly to attain its expected outcomes.

2) In principle, JICA will conduct ex-post evaluation of the Project after three years from the completion. It is required for the Recipient to furnish any necessary information as JICA may reasonably request.

(3) Others

1) Environmental and Social Considerations

The Recipient shall carefully consider environmental and social impacts by the Project and must comply with the environmental regulations of the Recipient and JICA Guidelines for Environmental and Social Considerations (April, 2010).

2) Major undertakings to be taken by the Government of the Recipient

For the smooth and proper implementation of the Project, the Recipient is required to undertake necessary measures including land acquisition, and bear an advising commission of the A/P and payment commissions paid to the Bank as agreed with the GOJ and/or JICA. The Government of the Recipient shall ensure that customs duties, internal taxes and other fiscal levies which may be imposed in the Recipient with respect to the purchase of the Products and/or the Services be exempted or be borne by its designated authority without using the Grant and its accrued interest, since the grant fund comes from the Japanese taxpayers.

3) Proper Use

The Recipient is required to maintain and use properly and effectively the products and/or services under the Project (including the facilities constructed and the equipment purchased), to assign staff necessary for this operation and maintenance and to bear all the expenses other than those covered by the Japanese Grant.

4) Export and Re-export

The products purchased under the Japanese Grant should not be exported or re-exported from the Recipient.

Attachment 1

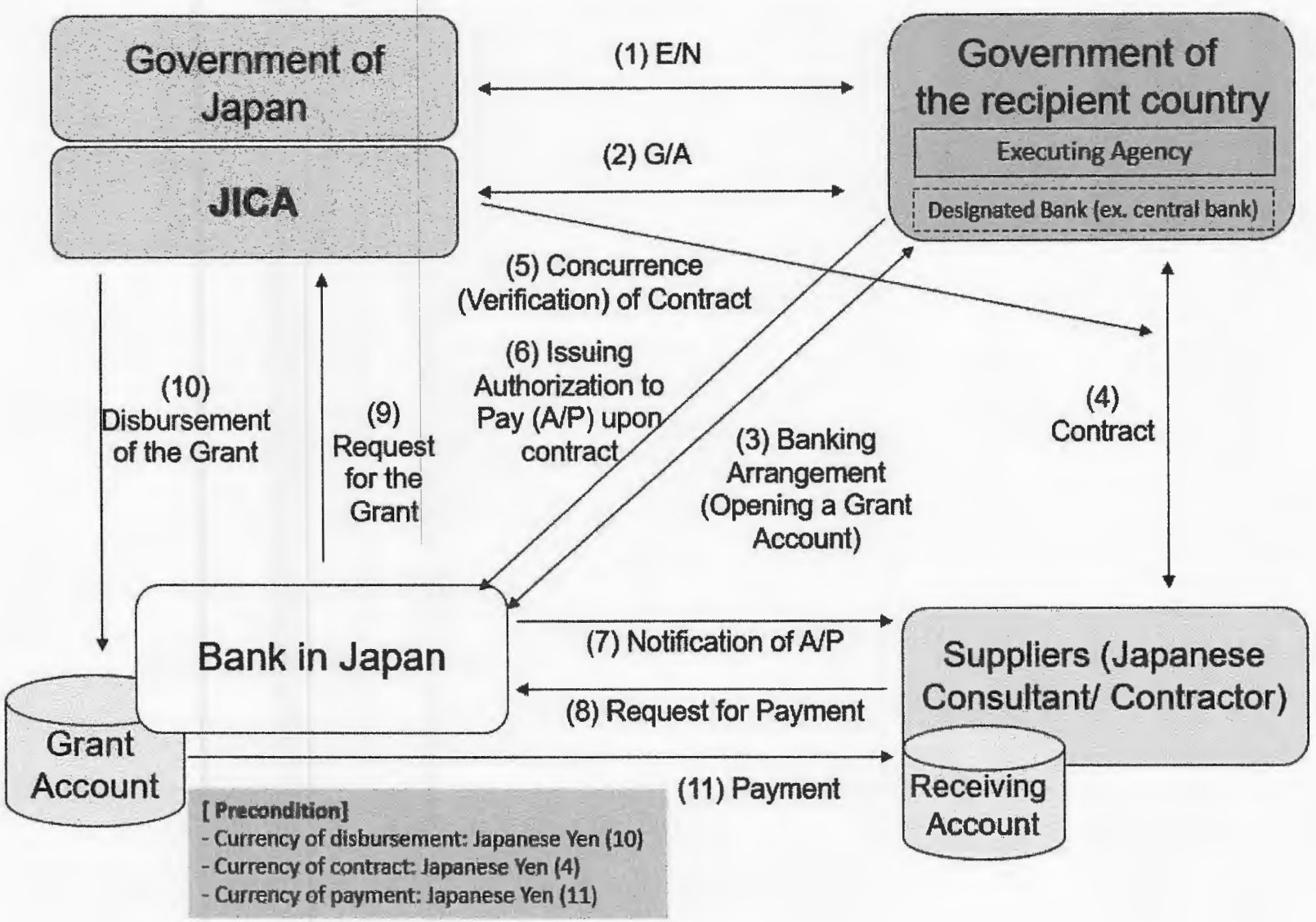
PROCEDURES OF JAPANESE GRANT

Stage	Procedures	Remarks	Recipient Government	Japanese Government	JICA	Consultants	Contractors	Agent Bank
Official Request	Request for grants through diplomatic channel	Request shall be submitted before appraisal stage.	X	X				
1. Preparation	(1) Preparatory Survey Preparation of outline design and cost estimate	—	X		X	X		
2. Appraisal	(2)Preparatory Survey Explanation of draft outline design, including cost estimate, undertakings, etc.		X		X	X		
	(3)Agreement on conditions for implementation	Conditions will be explained with the draft notes (E/N) and Grant Agreement (G/A) which will be signed before approval by Japanese government.	X	X (E/N)	X (G/A)			
	(4) Approval by the Japanese cabinet	—		X				
3. Implementation	(5) Exchange of Notes (E/N)		X	X				
	(6) Signing of Grant Agreement (G/A)		X		X			
	(7) Banking Arrangement (B/A)	Need to be informed to JICA	X					X
	(8) Contracting with consultant and issuance of Authorization to Pay (A/P)	Concurrence by JICA is required	X			X		X
	(9) Detail design (D/D)	—	X			X		
	(10) Preparation of bidding documents	Concurrence by JICA is required	X			X		
	(11) Bidding	Concurrence by JICA is required	X			X	X	
	(12) Contracting with contractor/supplier and issuance of A/P	Concurrence by JICA is required	X				X	X
	(13) Construction works/procurement	Concurrence by JICA is required for major modification of design and amendment of contracts.	X			X	X	
	(14) Completion certificate	—	X			X	X	
4. Ex-post monitoring & evaluation	(15) Ex-post monitoring	To be implemented generally after 1, 3, 10 years of completion, subject to change	X		X			
	(16) Ex-post evaluation	To be implemented basically after 3 years of completion	X		X			

notes:

1. Project Monitoring Report and Report for Project Completion shall be submitted to JICA as agreed in the G/A.
2. Concurrence by JICA is required for allocation of grant for remaining amount and/or contingencies as agreed in the G/A.

Financial Flow of Japanese Grant (A/P Type)



Annex 4

Project Implementation Schedule

Estimated Timeline for the Project Implementation is as follows:

Item	Estimated Timeline
E/N and G/A	December, 2021
Detailed Design and Procurement of the Contractor	December, 2021 to May, 2022
Manufacturing and Delivering of the Equipment	June, 2022 to April, 2024
Defect Liability Inspection	April, 2025

Annex 5

Major Undertakings to be taken by the Government of Djibouti

1. Specific obligations of the Government of Djibouti which will not be funded with the Grant

(1) Before the Bidding

NO	Items	Deadline	In charge	Estimated Cost	Ref.
1	To sign the banking arrangement (B/A) with a bank in Japan (the Agent Bank) to open bank account for the Grant	within 1 month after the signing of the G/A	DCG MAECI	N/A	
2	To issue A/P to the Agent Bank for the payment to the consultant	within 1 month after the signing of the contract(s)	DCG MAECI	N/A	
3	To bear the following commissions to the Agent Bank for the banking services based upon B/A			27,700 USD in total	
	1) Advising commission of A/P	within 1 month after the signing of the contract(s)	DCG MAECI		
	2) Payment commission for A/P	every payment	DCG MAECI		
4	To secure and clear the following site for the assembling work of pontoon and for material safekeeping. - the project site described in Annex 1	before notice of the bidding process	DCG	N/A	
5	To obtain the planning, installation and mooring permit of the patrol boats, floating pontoon and related facilities from the Port of Djibouti	before notice of the bidding process	DCG	N/A	
6	To submit Project Monitoring Report (with the result of Detailed Design)	before preparation of the bidding documents	DCG	N/A	

(B/A: Banking Arrangement, A/P: Authorization to pay, N/A: Not Applicable)
* MAECI: Ministry of Foreign Affairs and International Cooperation (Ministère des Affaires Etrangères et de la Coopération Internationale)

(2) During the Project Implementation

NO	Items	Deadline	In charge	Estimated Cost	Ref.
1	To issue A/P to the Agent Bank for the payment to the supplier and the contractor	within 1 month after the signing of the contract(s)	DCG MAECI	N/A	
2	To bear the following commissions to the Agent Bank for the banking se rvices based upon the B/A			27,700 USD in total	
	1) Advising commission of A/P	within 1 month after the signing of the contract(s)	DCG MAECI		
	2) Payment commission for A/P	every payment	DCG MAECI		
3	To ensure prompt unloading and customs clearance at ports of disembarkation in the country of the Recipient and to assist the Supplier(s) with internal transportation therein	during the Project	DCG	N/A	
4	To accord Japanese physical persons and/or physical persons of third countries whose services may be required in connection with the supply of the products and the services such facilities as may be necessary for their entry into the country of the Recipient and stay therein for the performance of their work	during the Project	DCG	N/A	
5	To ensure that customs duties, internal taxes and other fiscal levies which may be imposed in the country of the Recipient with respect to the purchase	during the Project	DCG MOB	N/A	

	of the products and/or the services be exempted				
6	To bear all the expenses, other than those covered by the Grant, necessary for the implementation of the Project	during the Project	DCG MAECI	N/A	
7	To notify JICA promptly of any incident or accident, which has, or is likely to have, a significant adverse effect on the environment, the affected communities, the public or workers.	during the construction	DCG	N/A	
8	1) To submit Project Monitoring Report after each work under the contract(s) such as shipping, hand over, installation and operational training	within 1 month after completion of each work	DCG	N/A	
	2) To submit Project Monitoring Report (final) (including as-built drawings, equipment list, photographs, etc.)	within 1 month after issuance of Certificate of Completion for the works under the contract(s)	DCG	N/A	
9	To submit a report concerning completion of the Project	within 6 months after completion of the Project	DCG	N/A	
10	To take measure necessary for security and safety of the Project - maintaining the safety of workers and the general public by thorough implementation of safety measures and immediate action in the case of accident - traffic control around the site(s) and on transportation routes of construction materials - installation of fences around the site(s)	during the construction	DCG	N/A	
11	To provide facilities for distribution of electricity, water supply necessary for the implementation of the Project.		DCG	6,752 USD	
	1) Electricity A distribution box with a distribution line to the site (Berth No.4)	before start of the installation works at the site	DCG		
	2) Water Supply A hydrant bulb and the city water distribution line to the site (Berth No.4)	before start of the installation works at the site	DCG		
12	To allocate their existing boats from the berth to other site.	before start of the installation works at the site	DCG		
13	To obtain certificate, license and other necessary documents necessary for installation, delivery and operation of the vessels (example: radio station license)	during the project	MIE / DCG	N/A	
14	To prepare necessary storage space for the spare parts of the patrol boats such as containers for items which are not required for temperature control	during the project	DCG	N/A	

* MAECI: Ministry of Foreign Affairs and International Cooperation (Ministère des Affaires Étrangères et de la Coopération Internationale),
MIE: Ministry of Infrastructure and Equipment
MOB: Ministry of Budget

(3) After the Project

NO	Items	Deadline	In charge	Estimated Cost	Ref.
1	To maintain and use properly and effectively the facilities constructed and equipment provided under the Grant Aid 1) Allocation of operation and maintenance cost 2) Operation and maintenance structure 3) Routine check/Periodic inspection	After completion of the delivery the equipment	DCG	Apprx. 91.3milDFR (Annual average for the period of 4 yrs after the completion of the Project)	
2	To carry out any installation works required for the equipment. (e.g. surveillance cameras, transmitting system, monitors, distinguishers, and others.)	After completion of delivery the equipment	DCG	3,883USD	

Other obligations of the Government of Djibouti funded with the Grant

NO	Items	Deadline	Amount (Million Japanese Yen)*
1	To provide equipment 1) To conduct the following transportation a) Marin (Air) transportation of the products from Japan to the country of the Recipient 2) To provide equipment with installation and commissioning a) Two (2) patrol boats with necessary spare parts b) A floating pontoon for two (2) patrol boats with mooring system and a gangway	April, 2024	
2	To implement detailed design, bidding support and procurement supervision (Consulting Service)		
	Total		

*The Amount is provisional. This is subject to the approval of the Government of Japan.

Annex 6

Date:

Ref. No.

JAPAN INTERNATIONAL COOPERATION AGENCY
JICA DJIBOUTI OFFICE
[Address specified in the Article 5 of the Grant Agreement]

Attention: Chief Representative

Ladies and Gentlemen:

NOTICE CONCERNING PROGRESS OF PROJECT

Reference : Grant Agreement, dated (signed date of the G/A), for(name of the Project)

In accordance to the Article 6 (3) of the Grant Agreement, we would like to reporton the progress of the Project up to the following stages:

[Common]

- ☐ Preparation of bidding documents - result of detailed design
- ☐ Completion of final works under construction/procurement contract

[Construction]

- ☐ Monthly progress [Month/Year]

[Procurement of Equipment]

- ☐ Shipping/delivery, hand-over (take over) of equipment
- ☐ Installation works
- ☐ Operational training

- ☐ Other

Please see the details as per attached Project Monitoring Report (PMR).

Very truly yours,

[*Signature*]_____

[*Name of the signer*]

[*Title of the signer*]

[*Name of the executing agency*]

cc:
Director General
Financial Cooperation Implementation Department
Japan International Cooperation Agency
[Address specified in the Article 5 of the Grant Agreement]

Project Monitoring Report
on
Project Name
Grant Agreement No. XXXXXXX
20XX, Month

Organizational Information

Signer of the G/A (Recipient)	Person in Charge (Designation) _____ Contacts Address: _____ Phone/FAX: _____ Email: _____
Executing Agency	Person in Charge (Designation) _____ Contacts Address: _____ Phone/FAX: _____ Email: _____
Line Ministry	Person in Charge (Designation) _____ Contacts Address: _____ Phone/FAX: _____ Email: _____

General Information:

Project Title	
E/N	Signed date: Duration:
G/A	Signed date: Duration:
Source of Finance	Government of Japan: Not exceeding JPY _____ mil. Government of ():

1: Project Description

1-1 Project Objective

1-2 Project Rationale

- Higher-level objectives to which the project contributes (national/regional/sectoral policies and strategies)
- Situation of the target groups to which the project addresses

1-3 Indicators for measurement of "Effectiveness"

Quantitative indicators to measure the attainment of project objectives		
Indicators	Original (Yr)	Target (Yr)
Qualitative indicators to measure the attainment of project objectives		

2: Details of the Project

2-1 Location

Components		Original *(proposed in the outline design)*	Actual
1.			

2-2 Scope of the work

Components	Original* *(proposed in the outline design)*	Actual*
1.		

Reasons for modification of scope (if any).

(PMR)

2-3 Implementation Schedule

Items	Original		Actual
	(proposed in the outline design)	*(at the time of signing the Grant Agreement)*	

Reasons for any changes of the schedule, and their effects on the project (if any)

2-4 Obligations by the Recipient

2-4-1 Progress of Specific Obligations

See Attachment 2.

2-4-2 Activities

See Attachment 3.

2-4-3 Report on RD

See Attachment 11.

2-5 Project Cost

2-5-1 Cost borne by the Grant (Confidential until the Bidding)

Components			Cost (Million Yen)	
	Original *(proposed in the outline design)*	Actual *(in case of any modification)*	Original[1),2)] *(proposed in the outline design)*	Actual
	1.			
Total				

Note: 1) Date of estimation:
2) Exchange rate: 1 US Dollar = Yen

2-5-2 Cost borne by the Recipient

Components			Cost (Djiboutian franc)	
	Original *(proposed in the outline design)*	Actual *(in case of any modification)*	Original[1),2)] *(proposed in the outline design)*	Actual
	1.			

Note: 1) Date of estimation:

2) Exchange rate: 1 US Dollar =

Reasons for the remarkable gaps between the original and actual cost, and the countermeasures (if any)

(PMR)

2-6 Executing Agency

- Organization's role, financial position, capacity, cost recovery etc,
- Organization Chart including the unit in charge of the implementation and number of employees.

Original *(at the time of outline design)* name: role: financial situation: institutional and organizational arrangement (organogram): human resources (number and ability of staff):
Actual *(PMR)*

2-7 Environmental and Social Impacts

- The results of environmental monitoring based on Attachment 5 (in accordance with Schedule 4 of the Grant Agreement).
- The results of social monitoring based on in Attachment 5(in accordance with Schedule 4 of the Grant Agreement).
- Disclosed information related to results of environmental and social monitoring to local stakeholders (whenever applicable).

3: Operation and Maintenance (O&M)

3-1 Physical Arrangement

- Plan for O&M (number and skills of the staff in the responsible division or section, availability of manuals and guidelines, availability of spare parts, etc.)

Original*(at the time of outline design)*
Actual *(PMR)*

3-2 Budgetary Arrangement

- Required O&M cost and actual budget allocation for O&M

Original*(at the time of outline design)*
Actual *(PMR)*

4: Potential Risks and Mitigation Measures

- Potential risks which may affect the project implementation, attainment of objectives, sustainability
- Mitigation measures corresponding to the potential risks

Assessment of Potential Risks (*at the time of outline design*)

Potential Risks	Assessment
1. (Description of Risk)	Probability: High/Moderate/Low
	Impact: High/Moderate/Low
	Analysis of Probability and Impact:
	Mitigation Measures:
	Action required during the implementation stage:
	Contingency Plan (if applicable):
2. (Description of Risk)	Probability: High/Moderate/Low
	Impact: High/Moderate/Low
	Analysis of Probability and Impact:
	Mitigation Measures:
	Action required during the implementation stage:
	Contingency Plan (if applicable):
3. (Description of Risk)	Probability: High/Moderate/Low
	Impact: High/Moderate/Low
	Analysis of Probability and Impact:
	Mitigation Measures:
	Action required during the implementation stage:
	Contingency Plan (if applicable):

Actual Situation and Countermeasures
(PMR)

5: Evaluation and Monitoring Plan (after the work completion)

5-1 Overall evaluation

Please describe your overall evaluation on the project.

5-2 Lessons Learnt and Recommendations

Please raise any lessons learned from the project experience, which might be valuable for the future assistance or similar type of projects, as well as any recommendations, which might be beneficial for better realization of the project effect, impact and assurance of sustainability.

5-3 Monitoring Plan of the Indicators for Post-Evaluation

Please describe monitoring methods, section(s)/department(s) in charge of monitoring, frequency, the term to monitor the indicators stipulated in 1-3.

Attachment

1. Project Location Map
2. Specific obligations of the Recipient which will not be funded with the Grant
3. Monthly Report submitted by the Consultant
   Appendix
   - Photocopy of Contractor's Progress Report (if any)
   - Consultant Member List
   - Contractor's Main Staff List
4. Check list for the Contract (including Record of Amendment of the Contract/Agreement and Schedule of Payment)
5. Environmental Monitoring Form / Social Monitoring Form
6. Monitoring sheet on price of specified materials (Quarterly)
7. Report on Proportion of Procurement (Recipient Country, Japan and Third Countries) (PMR (final)only)
8. Pictures (by JPEG style by CD-R) (PMR (final)only)
9. Equipment List (PMR (final)only)
10. Drawing (PMR (final)only)
11. Report on RD (After project)

Monitoring sheet on price of specified materials

1. Initial Conditions (Confirmed)

	Items of Specified Materials	Initial Volume A	Initial Unit Price (¥) B	Initial total Price C=A×B	1% of Contract Price D	Condition of payment	
						Price (Decreased) E=C−D	Price (Increased) F=C+D
1	Item 1	●●t	●	●	●	●	●
2	Item 2	●●t	●	●	●		
3	Item 3						
4	Item 4						
5	Item 5						

2. Monitoring of the Unit Price of Specified Materials

(1) Method of Monitoring : ●●

(2) Result of the Monitoring Survey on Unit Price for each specified materials

	Items of Specified Materials	1st ●month, 20XX	2nd ●month, 20XX	3rd ●month, 20XX	4th	5th	6th
1	Item 1						
2	Item 2						
3	Item 3						
4	Item 4						
5	Item 5						

(3) Summary of Discussion with Contractor (if necessary)

-
-
-

Attachment 6

Report on Proportion of Procurement (Recipient Country, Japan and Third Countries)
(Actual Expenditure by Construction and Equipment each)

	Domestic Procurement (Recipient Country) A	Foreign Procurement (Japan) B	Foreign Procurement (Third Countries) C	Total D
Construction Cost	(A/D%)	(B/D%)	(C/D%)	
Direct Construction Cost	(A/D%)	(B/D%)	(C/D%)	
Others	(A/D%)	(B/D%)	(C/D%)	
Equipment Cost	(A/D%)	(B/D%)	(C/D%)	
Design and Supervision Cost	(A/D%)	(B/D%)	(C/D%)	
Total	(A/D%)	(B/D%)	(C/D%)	

Annex 7

Language used in each Document

No	Item	Prepared by	Language	
			French	English
I	**PREPARATORY SURVEY STAGE**			
1.	Field Survey Report	Consultant		X
2.	Draft Preparatory Survey Report (Draft Final Report) Note: Technical contents (Technical Drawings, etc.)	Consultant	X	X
3.	Preparatory Survey Report (Final Report) Note: Technical contents (Technical Drawings, etc.)	Consultant	X	X
II	**IMPLEMENTATION STAGE**			
1.	**Documents for the Agreement for Consulting Services**			
1.1	Agreement for Consulting Services	Consultant		X
1.2	Recommendation of Consultant	JICA		X
1.3	Documents for Banking Arrangement (B/A, A/P)	Bank	X	
1.4	Documents for Payment	Consultant	X	
2.	**Documents for the Contract with Supplier**			
2.1	Tender Announcement	Consultant		X
2.2	Tender Documents			
	Volume I Tender Conditions and Contract	Consultant		X
	Part I : Instructions to Tenderers	Consultant		X
	Part II : Forms of Tender	Consultant		X
	Part III : Form of Contract	Consultant		X
	Volume II Specifications	Consultant		X
2.3	Questions and Answers to Tender Documents	Tenderer/ Consultant		X
2.4	Document of Submissions of Tenders	Tenderer (Supplier)		X
2.5	Tender Evaluation Report	Consultant		X
2.6	Contract for execution	Supplier		X
2.7	Documents for Banking Arrangement (B/A, A/P)	Bank	X	
2.8	Documents for Payment	Supplier	X	
2.9	Completion Certificate	Consultant/Buyer		X
2.10	Technical Documents for Approval	Supplier		X
2.11	Operation and Maintenance Manuals (Manufacturer original) Note: If available by manufacturer	Supplier	X	X

Note: A language used at the implementation stage shall follow the one used in the Exchange of Notes (E/N) regardless of the above table.

5. Memorandum
5-1. First Memorandum (in the remote survey)

Mémorandum d'Accord
entre
la Garde-Côtes Djiboutienne
et Fisheries Engineering., Co., Ltd.
sur la conception des patrouilleurs
pour
le Projet pour le renforcement des capacités de sécurité et de sûreté maritime en République de Djibouti

Fisheries Engineering, Co., Ltd (ci-après dénommé « le Consultant ») a expliqué à la Garde-Côtes Djiboutienne lors de la vidéoconférence qui a eu lieu le 20 octobre 2020, sur les principes fondamentaux de la conception des patrouilleurs à construire comme suit :

Confidential due to security reasons

Tenant compte des raisons citées ci-dessus, les deux parties sont convenues que la conception des patrouilleurs soit établie sur la base des principes suivants ;

Confidential due to security reasons

Confidential due to security reasons

Le 20 octobre 2020

Colonel Wais Omar Bogoreh
Commandant
Garde-Côtes Djiboutienne
République de Djibouti

Soeda Shuhei
Chef de mission
l'équipe pour l'étude préparatoire
pour le projet pour le renforcement
des capacités de sécurité et de sûreté
maritime
Fisheries Engineering, Co., Ltd.

(Provisional Translation)

Memorandum of Agreement
between
the Djibouti Coast Guard
and Fisheries Engineering Co., Ltd.
on the design of patrol boats
for
the Project for the Enhancement of the Ability of Maritime Safety and Security
in the Republic of Djibouti

Fisheries Engineering Co., Ltd (hereinafter referred to as the "Consultant") explained to the Djibouti Coast Guard during the video conference held on October 20, 2020, the basic design principles for patrol boats to be built as follows:

Confidential due to security reasons

Based on the reasons given above, the two parties have agreed that the design of the patrol boats be based on the following principles:

Confidential due to security reasons

(Provisional Translation)

October 20, 2020

Colonel Wais Omar Bogoreh

Commandant

Djibouti Coast Guard
Republic of Djibouti

Soeda Shuhei

Leader of the JICA Preparatory Survey Team

for the Project for the Enhancement of the Ability of Maritime Safety and Security
Fisheries Engineering Co., Ltd.

5-2. Second Memorandum (in the remote survey)

Deuxième Mémorandum d' Accord
entre
la Garde-Côtes Djiboutienne
et Fisheries Engineering., Co., Ltd.
sur la conception des patrouilleurs et du ponton
pour
le Projet pour le renforcement des capacités de sécurité et de sûreté maritime
en République de Djibouti

Suite à la lettre officielle datée du 30 Décembre 2020 émise par la Garde-Côtes Djiboutienne (ci-après dénommé《la GCD》) et destinée à Fisheries Engineering, Co., Ltd (ci-après dénommé《 le Consultant 》) (Reference : 5846GC/CD), le Consultant propose comme suit, lesystème de propulsiondes patrouilleurs et la structure du ponton aménagés par《 le Projet pour le renforcement des capacités de sécurité et de sûreté maritime 》effectué par l' Agence Japonaise de Coopération Internationale (ci-après dénommé《 laJICA 》) dans le cadre de la Coopération Financière NonRemboursable du Japon.

Système de propulsion des patrouilleurs

Confidential due to security reasons

Structure du ponton

- La structure du ponton est en acier en conformité avec le choix de la GCD.
- Le Consultant propose le ponton en type de module plutôt qu' en type intégré en raison (i) de la facilité du déplacement du ponton, (ii) dela facilité de l' ajustement de la largeur et de la longueur en réorganisant les modules, et (iii) de la possibilité de la réparation partielle (la révisioncomplète sur le terrain n' est pas nécessaire).

Colonel Wais Omar Bogoreh
Commandant
Garde-CôtesDjiboutienne
République de Djibouti

Soeda Shuhei
Chef de mission de l'équipe consultant
pour l'étude préparatoire de la JICA
pour le projet pour le renforcement
des capacités de sécurité et de sûreté maritime
Fisheries Engineering, Co., Ltd.

(Provisional Translation)

Second Memorandum of Agreement between the Djibouti Coast Guard and Fisheries Engineering Co., Ltd. on the design of patrol boats and the pontoon for the Project for the Enhancement of the Ability of Maritime Safety and Security in the Republic of Djibouti

Following the official letter dated December 30, 2020 issued by the Djibouti Coast Guard (hereinafter referred to as the "DCG") to Fisheries Engineering Co., Ltd. (hereinafter referred to as the "Consultant") (Reference: 584GC/CD), the Consultant proposes the following for the propulsion system of the patrol boats as well as the structure of the pontoon to be installed under the "Project for the Enhancement of the Ability of Maritime Safety and Security", conducted by Japan International Cooperation Agency (hereinafter referred to as "JICA") within the framework of the Japanese Grant Aid.

Propulsion system for patrol boats

Confidential due to security reasons

Pontoon structure

- The pontoon will be made of steel as decided by DCG,
- The Consultant has proposed a module type pontoon instead of an integrated type (i) to facilitate the displacement of the pontoon, (ii) to facilitate adjustment of the width and length by rearranging the modules, and (iii) to allow partial repairs (a complete overhaul on the ground will not be necessary).

Colonel Wais Omar Bogoreh
Commandant
Djibouti Coast Guard
Republic of Djibouti

Soeda Shuhei
Leader of the JICA Preparatory Survey Team
for the Project for the Enhancement of the Ability of Maritime Safety and Security
Fisheries Engineering Co., Ltd.

5-3. Third Memorandum (in the 1st survey in Djibouti)

Troisième Mémorandum d'entente
entre
la Garde-Côtes Djiboutienne
et Fisheries Engineering., Co., Ltd.
sur les spécifications des patrouilleurs et du ponton
Projet pour le renforcement des capacités de sécurité et de sûreté maritime
en République de Djibouti

En réponse à la requête du Gouvernement de Djibouti, l'Agence Japonaise de Coopération Internationale (ci-après dénommé « la JICA ») a effectué « le Projet pour le renforcement des capacités de sécurité et de sûreté maritime (ci-après dénommé « le Projet ») » dans le cadre de la Coopération Financière Non Remboursable du Japon et dépêché l'Equipe d'Etude constitué de Fisheries Engineering., Co., Ltd (ci-après dénommé « l'Equipe ») en février et en mars 2021.

L'Equipe a tenu des discussions avec la Garde-Côtes Djiboutienne (ci-après dénommée « la GCD ») sur les spécifications des patrouilleurs et du ponton et les deux parties se sont accordés sur les principaux points décrits dans les fiches attachées.

Le 10 mars 2021

Colonel Wais Omar Bogoreh
Commandant
Garde-Côtes Djiboutienne
République de Djibouti

Soeda Shuhei
Chef de mission de l'équipe consultant
pour l'étude préparatoire de la JICA
pour le projet pour le renforcement
des capacités de sécurité et de sûreté
maritime
Fisheries Engineering, Co., Ltd.

Annexe 1

Preparatory Survey for the Project for the Project for the Enhancement of the Ability of Maritime Safety and Security

New Patrol Boat Specification

Prémisse

Ce document montre les Spécifications du nouveaux patrouilleurs. Les spécifications sont basées sur la conception de base comme suit :

Confidential due to security reasons

Objet	Spécification	Observation	Remarques supplémentaires
1. Zone de navigation et matériaux de la coque			
	Confidential due to security reasons		
2. Vitesse et endurance			

Confidential due to security reasons

3. Principales caractéristiques

Confidential due to security reasons

4. Installations d'hébergement (voir dessin ci-joint)

Confidential due to security reasons

Confidential due to security reasons

5. Ancrage et amarrage

Confidential due to security reasons

6. Machines de pont

Confidential due to security reasons

7. Bateau à grande vitesse

Confidential due to security reasons

8. Sauvetage, etc.

Confidential due to security reasons

Confidential due to security reasons

9. Le sauvetage, etc.

Confidential due to security reasons

Confidential due to security reasons

10. Ventilation et climatisation

Confidential due to security reasons

11. Fenêtre et hublot

Confidential due to security reasons

Confidential due to security reasons

12. Peinture et protection cathodique

Confidential due to security reasons

Confidential due to security reasons

13. Moteur principal et système de propulsion

Confidential due to security reasons

14. Générateur diesel

Confidential due to security reasons

15. Machines de la salle des machines

Confidential due to security reasons

Confidential due to security reasons

16. Source d'électricité

Confidential due to security reasons

17. Communication interne

Confidential due to security reasons

Confidential due to security reasons

18. Éclairage

Confidential due to security reasons

19. Équipement de navigation

Confidential due to security reasons

Confidential due to security reasons

20. Appareil radio

Confidential due to security reasons

Confidential due to security reasons

[i] International Convention for the Prevention of Pollution from Ships, 1973 (annex 6), Protocol 1978 and amendments (Regulations for the Prevention of Air Pollution from Ships)

[ii] International Convention for the Prevention of Collision at Sea, 1972

[iii] International Convention on the Control of Harmful Anti-fouling Systems on Ships, 2001

Confidential due to security reasons

Spécification du Ponton

Annexe 2

NO.	Objet	Spécifications	Quantité
1	**Ponton**		
(1)	Ponton	Structure: En béton précontraint Dimension: environ 35m longueur x 6m largeur Largeur de la passerelle: environ 10m longueur x 1.8m largeur Largeur des escaliers : environ 5m longueur x 0.9m largeur	1
2	**Installations annexes sur le ponton**		
(1)	Borne	Borne d'amarrage	L.S.
(2)	Contours	Tubes carrés en acier galvanizé	L.S.
(3)	Grue	Opération manuelle Capacité de levage : 500kg et plus Longueur du boom: 2.5 mètres	1
(4)	Approvisionnement en électricité	3 phase x 400V (60A) x 2 prises électriques (prise étanche) 1 phase x 220V (15A) x 2 prises électriques (prise étanche) Prises étanches dans une boîte scellée Boîte supplémentaire (pour la conduit électrique seulement, pas de câblage)	2 chaque
(5)	Compteur d'électricité	220V x 1 400V x 1	1 chaque
(6)	Extincteur	Matériaux : Boîte en acier galvanisé à chaud Boîtes pour 2 unités de extincteurs en type de CO2 et en poudre Les extincteurs seront mis en place par la GCD	1

Spécification du Ponton

Annexe 2

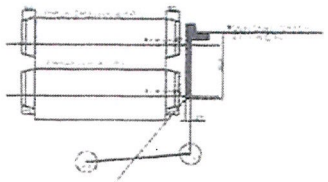
NO.	Objet	Spécifications	Quantité
(7)	Bouées Flottant	Flottabilité: 7.5kg ou plus Type : Type solide avec câble 10m Forme: Circulaire	2
(8)	Main courante	1100m hauteur x environ 41m longueur	1
(9)	Eclairages	Système de l'éclairage à LED	3
(10)	Caméras de surveillance	Courant électrique seulement. Les produits seront mis en place par la GCD	2
(11)	Magasin	Porte coulissante à clef 2m(w) x 0.8m(d) x 1.2m(h)	2
(12)	Approvisionnement en eau	1set φ20mm(à l'avant) x 1 robinet 1set φ20mm(à l'arrière) x 1 robinet	2
(13)	Palpeur de niveau d'eau		1
(14)	Défenses	Système de défenses	1

SITE SURVEY on MARCH 8th, 2021

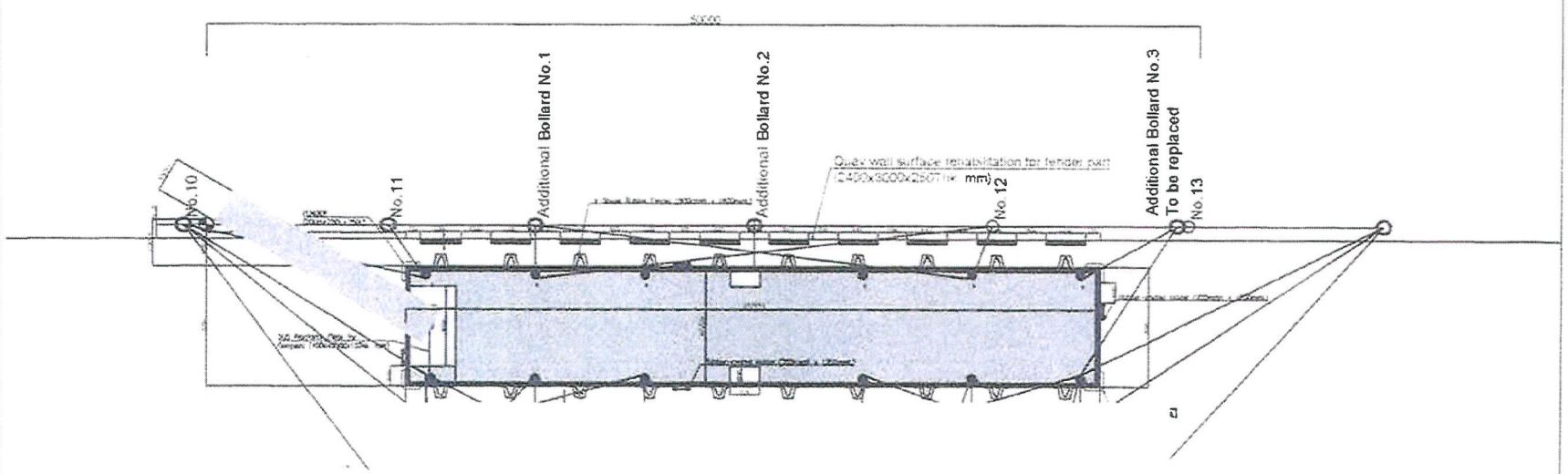
BOLLARD & STAIR

NO	MARK	Type	HIGHT	WIDTH	PIECE	数量	Remarks
10	A	Curved	60	60	110	35	
11	B	Straight	32	ϕ 22	63	20	
		Stairs					15m from west edge of 4th quay
12	C	Straight	32	ϕ 22	63	20	
13	D	Curved	78	48	78	25	
14	E	Straight	32	ϕ 22	63	20	
		Stairs					46.3m from west edge of 4th quay
15	F	Curved	28	48	93	30	

QUAYWALL SECTION



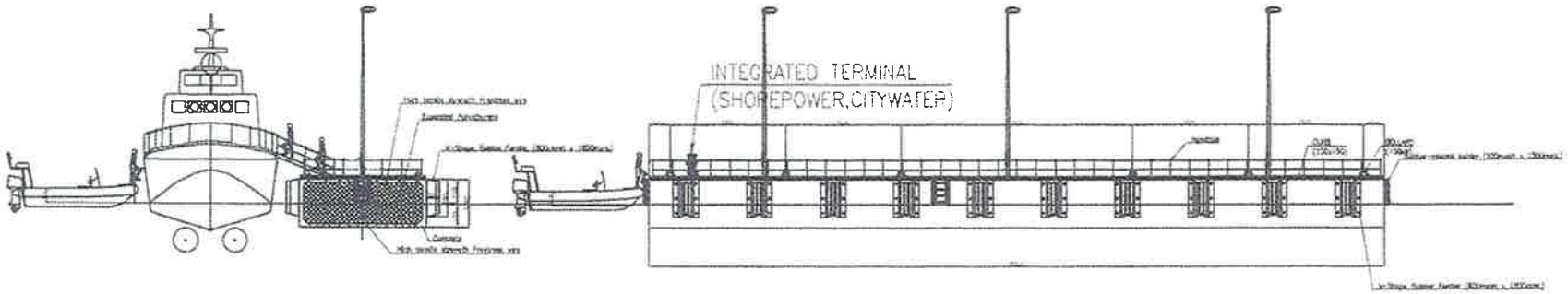
Quay wall surface rehabilitation for fender part
(2400x3000x250Thk. mm)



Confidential due to security reasons

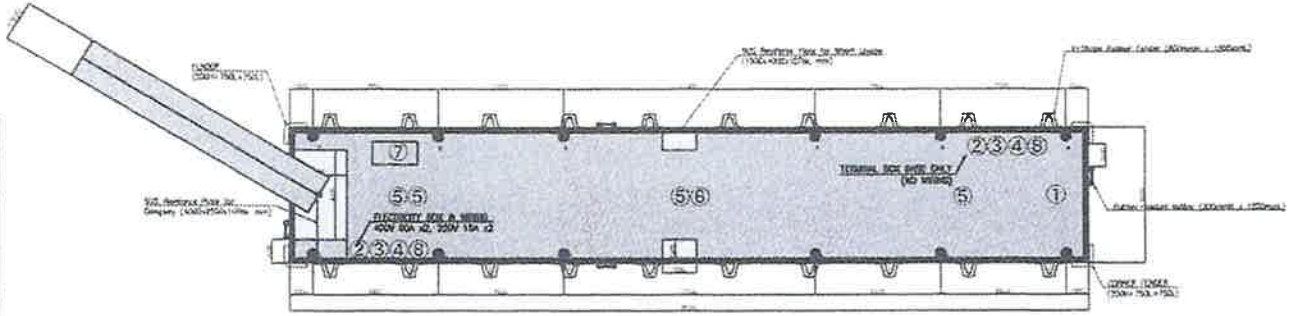
GENERAL ARRANGEMENT PLAN

A3 1/200
2021/3/10
FOR THE UNDERSTANDING OF
CONCEPT DESIGN ONLY



ELEVATION

ELEVATION



PLAN

LEGEND

NO.	Articles
①	CRANE Grue
②	ELECTRICITY SUPPLY Approvisionnement en électricité
③	FIRE EXTINGUISHER Extincteur
④	FLOATING RING Bouées Flottant
⑤	LIGHTS Eclairages
⑥	SECURITY CAMERA Caméras de surveillance
⑦	STORAGE Magasin
⑧	WATER SUPPLY Approvisionnement en eau

A3 1/200
2021/3/10
FOR THE UNDERSTANDING OF
CONCEPT DESIGN ONLY

(Provisional Translation)

Third Memorandum of Understanding
between
the Djibouti Coast Guard
and Fisheries Engineering Co., Ltd.
on specifications for patrol boats and the pontoon
Project for the Enhancement of the Ability of Maritime Safety and Security
in the Republic of Djibouti

Upon request made by the Government of Djibouti, Japan International Cooperation Agency (hereinafter referred to as "JICA") carried out the "Project for the Enhancement of the Ability of Maritime Safety and Security" (hereinafter referred to as the "Project") under the Japanese Grant Aid, and dispatched the Survey Team consisting of members from Fisheries Engineering Co., Ltd. (hereinafter referred to as the "Team") in February and March 2021.

The Team held discussions with the Djibouti Coast Guard (hereinafter referred to as the "DCG") on specifications for patrol boats and the pontoon. The two parties have agreed on the main points described in the attached sheets.

March 10, 2021

Colonel Wais Omar Bogoreh
Commandant
Djibouti Coast Guard
Republic of Djibouti

Soeda Shuhei
Leader of the JICA Preparatory Survey Team
for the Project for the Enhancement of the Ability of Maritime Safety and Security
Fisheries Engineering Co., Ltd.

Preparatory Survey for the Project for the Project for the Enhancement of the Ability of Maritime Safety and Security

New Patrol Boat Specification

Prémisse

Premise

Ce document montre les Spécifications du nouveaux patrouilleurs. Les spécifications proposées sont basées sur la conception de base comme suit :

This document shows proposed Specification of new patrol boats. The specification is based on the following basic concept:

Confidential due to security reasons

Item	Specification	Remark	Additional remark
1. Navigation Area & Hull Material			
		Confidential due to security reasons	

Item	Specification	Remark	Additional remark
		Confidential due to security reasons	
2. Speed & Endurance			
		Confidential due to security reasons	

Item	Specification	Remark	Additional remark
		Confidential due to security reasons	
3. Main Particulars			
		Confidential due to security reasons	
4. Accommodation Facilities (refer to attached drawing)			
		Confidential due to security reasons	

Item	Specification	Remark	Additional remark
		Confidential due to security reasons	
5. Anchoring and Mooring			
		Confidential due to security reasons	

Item	Specification	Remark	Additional remark
6. Deck Machinery			
		Confidential due to security reasons	
7. High speed boat			
		Confidential due to security reasons	
8. Lifesaving, etc			
		Confidential due to security reasons	

Item	Specification	Remark	Additional remark
		Confidential due to security reasons	
9. Fire fighting			
		Confidential due to security reasons	
10. Ventilation and Air Conditioning			

Item	Specification	Remark	Additional remark
		Confidential due to security reasons	
11. Window and scuttle			
		Confidential due to security reasons	
12. Painting and Cathodic Protections			

Item	Specification	Remark	Additional remark
		Confidential due to security reasons	
13. Main Engine and propulsion system			

Item	Specification	Remark	Additional remark
		Confidential due to security reasons	
14. Diesel driven generator			
		Confidential due to security reasons	

Item	Specification	Remark	Additional remark
15. Engine room machinery			
		Confidential due to security reasons	
16. Electric Source		Confidential due to security reasons	

Item	Specification	Remark	Additional remark
		Confidential due to security reasons	
17. Inboard Communication			
		Confidential due to security reasons	
18. Lighting			
		Confidential due to security reasons	

Item	Specification	Remark	Additional remark
		Confidential due to security reasons	
19. Navigation Equipment			
		Confidential due to security reasons	

Item	Specification	Remark	Additional remark
		Confidential due to security reasons	
20. Radio Apparatus			
		Confidential due to security reasons	

[i] International Convention for the Prevention of Pollution from Ships, 1973 (Annex 6), Protocol 1978 and amendments (Regulations for the Prevention of Air Pollution from Ships)

[ii] International Convention for the Prevention of Collision at Sea, 1972

[iii] International Convention on the Control of Harmful Anti-fouling Systems on Ships, 2001

Confidential due to security reasons

Pontoon Specification

NO.	Item Objet	Specifications Spécifications	Quantity Quantité
1	**Pontoon** **Ponton**		
(1)	Pontoon Ponton	Structure: Precast Post-tensioned Concrete Dimension : approx. 35m L x 6m B Gangway: approx. 10 m L x 1.8 m B Wharf ladder : approx. 5 m L x 0.9 m B Structure: En béton précontraint Dimension: environ 35m longueur x 6m largeur Largeur de la passerelle: environ 10m longueur x 1.8m largeur Largeur des escaliers : environ 5m longueur x 0.9m largeur	1
2	**Installations annexes sur le ponton**		
(1)	BOLLARD Borne	Mooring bollards Borne d'amarrage	L.S.
(2)	CONTOURS Contours	Galvanized steel square pipe type Tubes carrés en acier galvanizé	L.S.

Pontoon Specification

NO.	Item Objet	Specifications Spécifications	Quantity Quantité
(3)	CRANE Grue	Manual operation, Lifting capacity: 500kg or more Working radius: 2.5 m Opération manuelle Capacité de levage : 500kg et plus Longueur du boom: 2.5 mètres	1
(4)	ELECTRICITY SUPPLY Approvisionnement en é lectricité	3 phase x 400V AC (60A) x 2 outlets (waterproof socket) 1 phase x 220V AC (15A) x 2 outlets (waterproof socket) Waterproof sockets in lockable box. Additional box (conduit only, no wiring) 3 phase x 400V (60A) x 2 prises électriques (prise étanche) 1 phase x 220V (15A) x 2 prises électriques (prise étanche) Prises étanches dans une boîte scellée Boîte supplémentaire (pour la conduit électrique seulement, pas de câblage)	2 chacun
(5)	ELECTLICITY METER Compteur d'électricité	220V x 1 400V x 1	1 chacun
(6)	FIRE EXTINGUISHER Extincteur	Material: Hot-dip galvanized steel box. Boxes for 2 set of CO2 and powder type. Fire extinguishers shall be supplied by DCG Matériaux : Boîte en acier galvanisé à chaud Boîtes pour 2 unités de extincteurs en type de CO2 et en poudre Les extincteurs seront mis en place par la GCD	1

Pontoon Specification

NO.	Item Objet	Specifications Spécifications	Quantity Quantité
(7)	LIFE BOUY Bouées Flottant	Buoyancy:7.5 kg or more Type: Solid type with rope 10m Shape: Circular Flottabilité: 7.5kg ou plus Type : Type solide avec câble 10m Forme: Circulaire	2
(8)	HANDRAIL Main courante	1100m H x approx. 41m long 1100m hauteur x environ 41m longueur	1
(9)	LIGHTS Eclairages	LED Lighting system Système de l'éclairage à LED	3
(10)	SECURITY CAMERA Caméras de surveillance	Power supply only. Products to be supplied by DCG Courant électrique seulement. Les produits seront mis en place par la GCD	2
(11)	STORAGE Magasin	Sliding door with Lock 2m(w) x 0.8m(d) x 1.2m(h) Porte coulissante à clef 2m(w) x 0.8m(d) x 1.2m(h)	2

Pontoon Specification

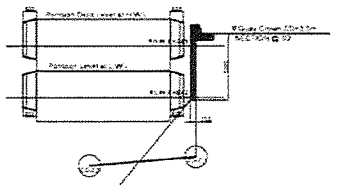
NO.	Item Objet	Specifications Spécifications	Quantity Quantité
(12)	WATER SUPPLY Approvisionnement en eau	1pc φ20mm(front side) x 1 faucet 1pc φ20mm(back side) x 1 faucet 1set φ20mm(à l'avant) x 1 robinet 1set φ20mm(à l'arrière) x 1 robinet	2
(13)	WATER GAUGE Palpeur de niveau d'eau		1
(14)	FENDER Défenses	Fender system Système de défenses	1

SITE SURVEY on MARCH 8th, 2021

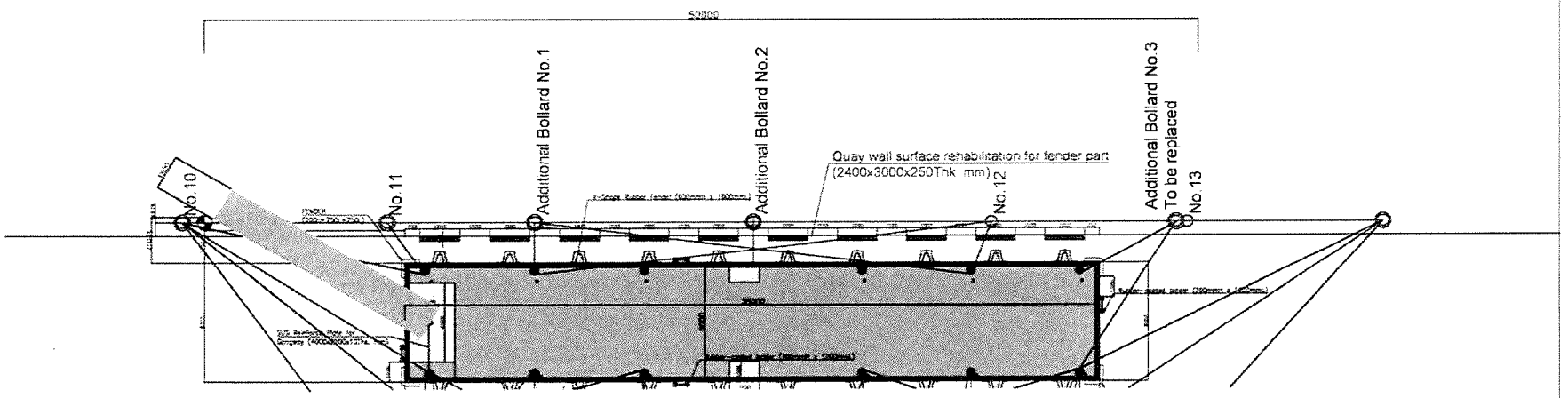
BOLLARD & STAIR

NO.	MARK	Type	HIGHT	WIDTH	前面	全長	Remarks
10	A	Curved	60	60	110	35	
11	B	Straight	32	ϕ 22	63	20	
		Stairs					15m from west edge of 4th quay
12	C	Straight	32	ϕ 22	63	20	
13	D	Curved	28	48	78	25	
14	E	Straight	32	ϕ 22	63	20	
		Stairs					46.3m from west edge of 4th quay
15	F	Curved	28	48	93	30	

QUAYWALL SECTION



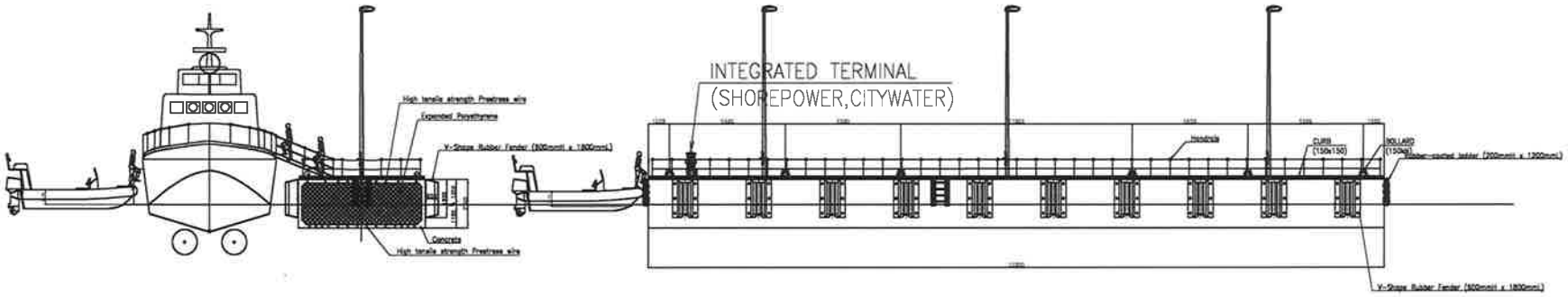
Quay wall surface rehabilitation for fender part
(2400x3000x250Thk. mm)



Confidential due to security reasons

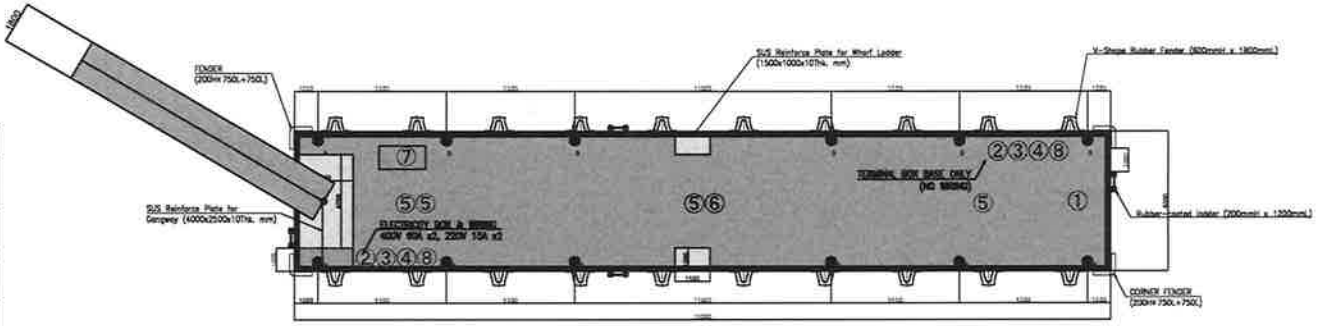
GENERAL ARRANGEMENT PLAN

A3 1/200
2021/3/10
FOR THE UNDERSTANDING OF
CONCEPT DESIGN ONLY



ELEVATION

ELEVATION



PLAN

LEGEND

NO.	Articles
①	CRANE Grue
②	ELECTRICITY SUPPLY Approvisionnement en électricité
③	FIRE EXTINGUISHER Extincteur
④	FLOATING RING Bouées Flottant
⑤	LIGHTS Eclairages
⑥	SECURITY CAMERA Caméras de surveillance
⑦	STORAGE Magasin
⑧	WATER SUPPLY Approvisionnement en eau

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2021/3/10
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CONCEPT DESIGN ONLY

6. Reference

Title	Publication	Publisher (Organization)	Overview
Ship Related Materials			
The Society of Naval Architects of Japan	1983	Ryusuke HOSODA, Kunitake YOSHIKUNI, Hideki MARUYAMA, Masakazu MASTSUSHIMA, Hatsumi KOYAMA, Seijiro MIYAKE, Hiroshi NAKAMURA, Katashi TAGUCHI,	Comprehensive assessment of seaworthiness in the initial designs of ship (①～③ 1983)
Journal of Zosen Kiokai No 107	1960	Shuichi IWATA	Survey results on the roll damping coefficient for patrol boats
Operating manual (MTU 16V2000)	2015	MTU	Explanation of handling and maintenance for high-speed diesel main engines
Maintenance Manual	N.A.	Hamilton Jet	Water jet propulsion engine maintenance manual
Pontoon Related Materials			
Floating Pier Estimation Manual	2017	Association for Innovative Technology on Fishing Ports and Grounds Technical Committee on Floating Piers	Public estimation standards for floating piers based on construction results and actual conditions
Standard Man-hour Rate	2007	Nagasaki prefecture	Cost estimation standard for design and supervision of floating piers
Climate Data	2021	National Meteorology Agency	Precipitation, topography, and temperature data for all region

Title	Publication	Publisher (Organization)	Overview
Environmental, Social, and Gender Related Materials			
Politique Nationale Genre (National Gender Policy) 2011-2021	2011	The Ministry of Women and Family.	Government policy for sustainable economic and social development through women's participation in social development
Project Appraisal Document Support for Women and Youth Entrepreneurship Project	2018	World Bank	Report on the activities of the social development plan for the improvement of living conditions for women and young people
Mesures d'adaptation et de protection pour la zone côtière de Djibouti (Adaptation and protection measures for the coastal zone of Djibouti)	2006	Abdoulkader Oudoum Abdallah	Survey report on the development status and impact on the environment in the coastal areas of Djibouti
Decree revising the environmental impact assessment procedure	2011	Djiboutian nationality law	Djibouti laws in relation to EIA standards and procedures
Annual report (Japan's Actions against Piracy off the Coast of Somalia and in the Gulf of Aden)	2021	Inter-ministerial meeting on countering piracy off the coast of Somalia and in the Gulf of Aden	Summary of trends in Somali piracy, Japan's initiatives and the outcomes of these initiatives.
Organizations in Djibouti			
Port of Djibouti	NA	Port of Djibouti	Pamphlet of the Djibouti Port Authority
Decree for the creation of DCG	2010	Djiboutian nationality law	Act to establish the DCG organization
Law revising for the creation of the Ministry of Equipment and Transport	2015	Djiboutian nationality law	Organizational chart of the Ministry of Infrastructures and Equipment