

COMPLETION REPORT
FOR
THE PROJECT FOR ENHANCEMENT OF
OPERATIONS AND MANAGEMENT CAPACITY
OF
INLAND WATERWAY
IN SOUTH SUDAN

June 2015

JAPAN INTERNATIONAL COOPERATION AGENCY

The Overseas Coastal Area Development Institute of Japan
Katahira & Engineers International

EI
JR
15-129

**Republic of South Sudan
Ministry of Transport, Roads and Bridges**

**COMPLETION REPORT
FOR
THE PROJECT FOR ENHANCEMENT OF
OPERATIONS AND MANAGEMENT CAPACITY
OF
INLAND WATERWAY
IN SOUTH SUDAN**

June 2015

JAPAN INTERNATIONAL COOPERATION AGENCY

**The Overseas Coastal Area Development Institute of Japan
Katahira & Engineers International**

List of Abbreviations

Abbreviation	Description
CES	Central Equatoria State
CPA	Comprehensive Peace Agreement
C/P	Counterpart
DAC	Development Assistance Committee
DRT	Directorate of River Transport
GOSS	Government of South Sudan
IMO	International Maritime Organization
ISPS Code	The International Ships and Port Facility Security Code
JRPA	Juba River Port Administration
MoPI	Ministry of Physical Infrastructure
MTRB	Ministry of Transport, Roads and Bridges
OJT	On-the-Job Training
PDM	Project Demand Matrix
PO	Plan of Operation
RSS	The Republic of South Sudan
SOLAS	The International Convention for the Safety of Life at Sea
TF	Task Force
WBS	Work Breakdown Structure
WG	Working Group
WS	Workshop

Contents

1. Background of the Project	1
1-1 Background of the Project	1
1-2 Purposes of the Project	2
1-3 Project Term	3
2. Major Activities	4
2-1 Changes in External Conditions	4
2-2 Work Plan	4
2-3 JCC	5
2-4 Technology Transfer Activities	5
(1) Activity 1: Role and responsibility of JRPA are established and executed	5
(2) Activity 2: Budget and accounting system of JRPA are established.	6
(3) Activity 3 : Facilities of Juba port are properly managed and maintained.	7
(4) Activity 4: Safe and efficient cargo handling is carried out at the port of Juba	8
(5) Activity 5: Juba port is managed and operated safety, securely and environmentally-friendly	9
(6) Activity 6: Statistical data of Juba port are collected, maintained and utilized.	10
(7) Activity 7: Knowledge and experience accumulated at Juba port are shared among the ports in South Sudan	10
2-5 Other Important Activities	11
(1) Seminar, workshop and domestic training	11
(2) Supporting activity for stakeholder meeting	11
(3) Capacity building for computer skills	11
2-6 Study Tour in Japan and a third Country	12
3. Challenges and Lessons Learnt	13
3-1 Implementation System of the Project	13
3-2 On-the-Job Training (OJT) Activities	14
3-3 Activity in Phase III	14
3-4 Other activities	14
4. Achievement of the Project	15
4-1 Mid-Term Evaluation	15
(1) Revision of PDM	15
(2) Evaluation by five criteria	16
(3) Conclusion	16
4-2 Further Revision of PDM	17

(1)	Project Purpose	17
(2)	Output	17
(3)	Activities	18
4-3	Terminal Evaluation.....	18
(1)	Evaluation by five criteria	19
(2)	Conclusion	19
5.	Recommendation for Achieving the Overall Goal	21
(1)	Challenges in each activity field	21
(2)	Utilization of manuals and materials	21
(3)	Monitoring	22
(4)	Issues to be improved	22
(5)	Toward the next stage	22
Appendix	24

1. Background of the Project

In response to a request from the Government of South Sudan (hereinafter referred to as “GOSS”), the Government of JAPAN (hereinafter referred to as “GOJ”) decided to conduct a technical cooperation project on “the Project for Enhancement of Operation and Management Capacity of Inland Waterway in South Sudan” (hereinafter referred to as “the Project”).

The Project was implemented by the Japan International Cooperation Agency (hereinafter referred to as “JICA”) in close coordination with GOSS and the other concerned government agencies.

1-1 Background of the Project

Through the Comprehensive Peace Agreement (hereinafter referred to as “CPA”) in 2005 in the Republic of Sudan, GOSS was established and reconstruction in South Sudan began. Based on CPA, referendum on the secession of South Sudan from the Republic of Sudan was carried out on January 9th, 2011, with the result that South Sudan voted to recede from the north. On the 9th of July 2011, the Republic of South Sudan (hereinafter referred to as “RSS”) was finally established.

In South Sudan, demands for commodities and materials necessary for daily lives and development of infrastructure are rapidly increasing, meaning that a stable and effective logistics system is required. Furthermore, smooth distribution of commodities and materials will bring good relations between the north and south Sudan, and will expedite CPA.

Therefore, inland water transport using the White Nile River in South Sudan which connects the city of Juba, the capital of RSS, to the port of Kosti, which is a base port of Sudan, is becoming extremely significant.

GOJ has extended ODA to Juba port for the development of a pier and handling equipment through an urgent development study as well as follow-up cooperation. Furthermore, through a grant aid cooperation named “the Juba river port expansion project” (hereinafter referred to as “the Grant Aid project”), a pier of 200m in length, large sized crane and warehouse, etc. will be developed. Cargo handling capacity is expected to be increased by introducing a full-scale mechanized handling system.

At the same time, the Ministry of Transport and Roads, GOSS (hereinafter referred to as “GOSS/MTR”) and the Ministry of Physical Infrastructure, Central Equatoria State (hereinafter referred to as “CES/MoPI”) jointly established the Juba River Port Administration (hereinafter referred to as “JRPA”) for the purpose of management and operation of the port of Juba. Rudimentary technology transfer to staff of JRPA with regard to port management and operation was conducted by the project team in charge

of the urgent development study and its follow-up cooperation.

Based on the above-mentioned background and the request of GOSS, JICA discussed the matter with GOSS/MTR, CES/MoPI, JRPA and related organizations, and agreed to implement the Project as a technical cooperation in October 2010.

Based on the said agreement, the main purpose of the Project is to enhance the operation and management capacity of the staff of JRPA and other related organizations in order to properly maintain facilities and equipment which will be developed in the Grant Aid project, and to handle cargo effectively. In addition, knowledge and experience accumulated at the port of Juba will be shared among the major ports in South Sudan.

1-2 Purposes of the Project

Purposes of the Project are as follows;

a) Overall Goal

Inland water transport in South Sudan is facilitated and its capacity enhanced.

b) Project Purpose

- 1) Management capacity of Juba port is strengthened.
- 2) Port management system established at Juba port is shared among the ports in South Sudan.

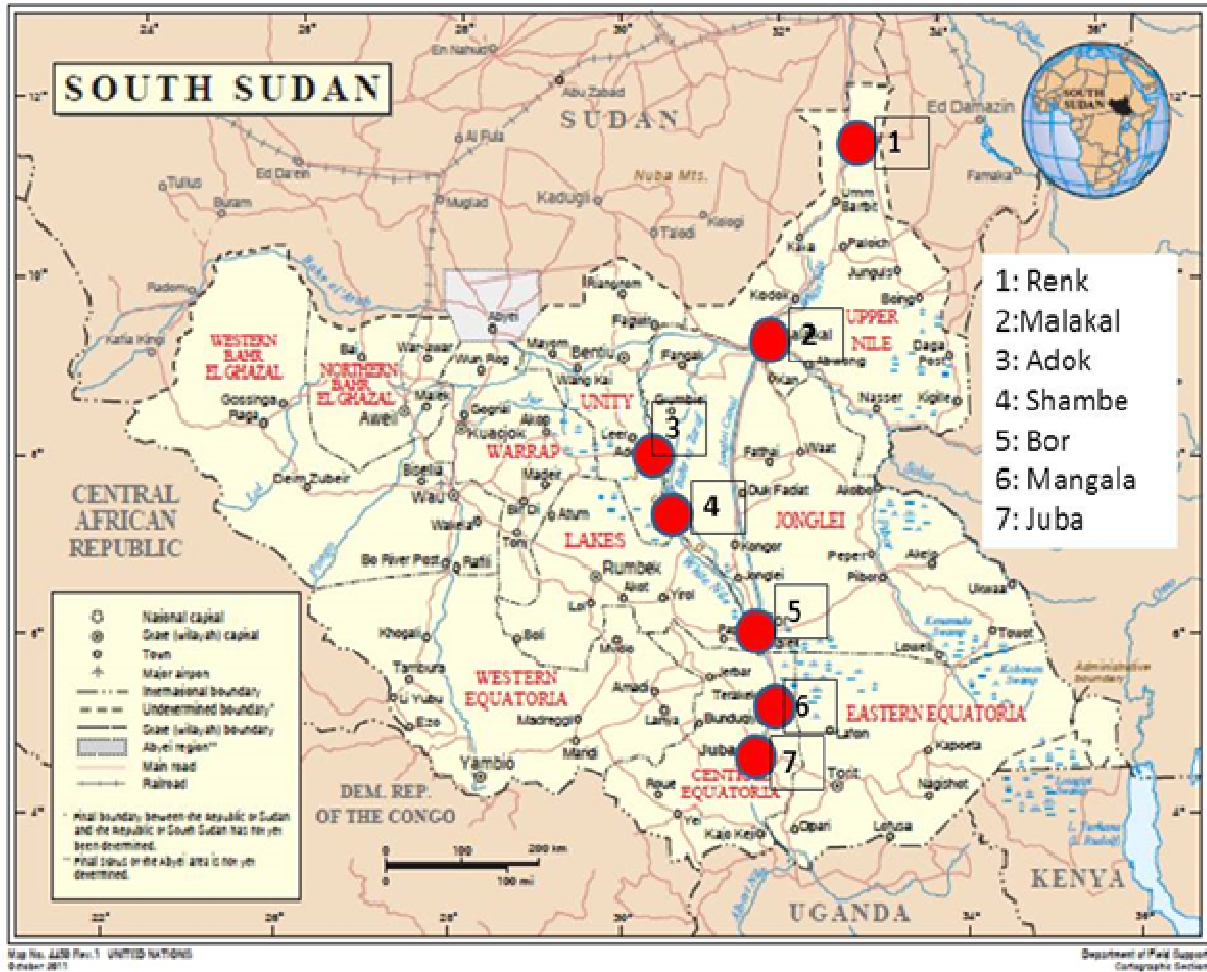
c) Output

- 1) Roles and responsibilities of JRPA are established and executed.
- 2) Budget and accounting system of JRPA are established.
- 3) Facilities of Juba port are properly managed and maintained.
- 4) Cargoes are handled efficiently and safely at Juba port.
- 5) Juba port is managed and operated safely, securely and in an environmentally -friendly manner.
- 6) Statistical data of Juba port are collected, maintained and utilized.
- 7) Knowledge and experience accumulated at Juba port are shared among the ports in South Sudan.

Wide-ranging activities with regard to port management and operation are included in the Project as mentioned above. Among these activities, the highest priority should be put on proper management and operation of port facilities and equipment to be developed by the Grant Aid project.

Project sites include Juba port and six other ports (Mangala, Bor, Shambe, Adok, Malakal, Renk) in South Sudan. A major activity base is the city of Juba and necessary technology transfer to the other six

ports should be conducted in consideration of the present situation of port management and operation.



Major Ports in South Sudan

However, the Project purposes could not be fully achieved due to the changes of the external conditions which will be discussed later.

1-3 Project Term

The Project had originally started with the period of four years and three phases; namely Phase I was from March 2011 to March 2012, Phase II was from April 2012 to December 2013 and Phase III was from 2014 to February 2015. However, due to the external changes at the end of Phase II, the Project was temporarily suspended. Phase III was eventually conducted from June 2014 to July 2015.

2. Major Activities

2-1 Changes in External Conditions

Major specific external conditions have changed after commencement of the Project.

(1) Stagnation of River Transportation

Relations between south and north Sudan worsened just before the independence of South Sudan and the border of the two countries has been virtually closed. As a result, the flow of physical distribution between the south and north has dramatically changed. Previously, the majority of goods was transported from Kosti in Sudan to Juba using barges, while nowadays goods come to Juba from Kenya and Uganda and transported from Juba to the middle and north of South Sudan using small boats. This resulted in a drastic decrease in the number of barges calling and cargoes being handled at Juba river port.

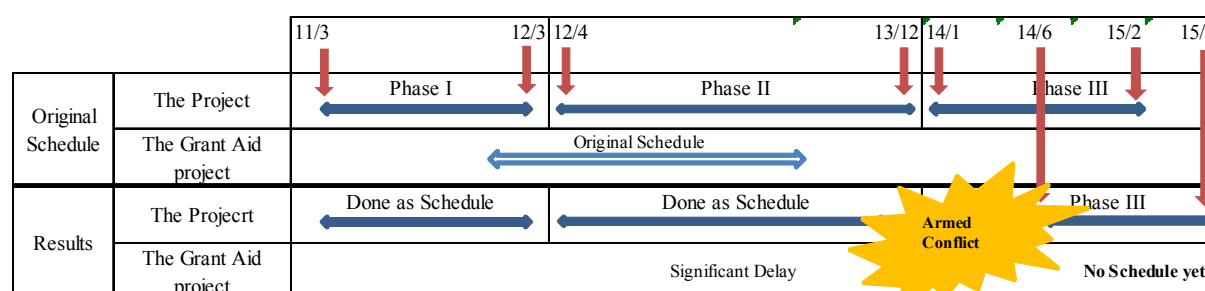
(2) Delay of JICA Grant Aid project

The highest priority of the Project was to conduct technology transfer activities in coordination with the Grant Aid project. However, as the Grant Aid project has been substantially delayed and an implementation has still not been decided, technology transfer activities on site could not be carried out.

(3) Outbreak of Armed Conflict

An armed conflict broken out on 16th December 2014 which prevented Japanese experts from going to Juba and other areas of South Sudan, and river transport itself was suspended. As a result, Phase III of the Project was delayed for six months and the experts had to work mainly in Japan.

Original Schedule of the Project and the Results



These changes of the external conditions have greatly affected the implementation of the project.

2-2 Work Plan

At the beginning of each Phase, the work plan of the Project was prepared based on the discussion of the

previous phases and approved by JCC (the work plan for Phase III was approved through e-mail because the experts could not enter South Sudan).

2-3 JCC

JCC is the unique committee for decision-making and coordination of the Project.

JCC was held six (6) times. The date and agenda of each JCC are shown in the table below.

Date and Agenda of JCCs

No.	Phase	Date	Chairperson	Agenda
1	I	May 2011	Mr. Maurice Acting Usec. MTR	• Work Plan of Phase I • Implementation System and Method of the Project
2		Feb. 2012	Capt. David Usec. MOT	• Progress of Phase I • Implementation Policy for Phase II
3	II	June 2012	Mr. Maurice Acting Usec. MOT	• Work Plan of Phase II • Public Relations Activities by JRPA
4		Feb. 2013	Mr. Maurice Acting Usec. MOT	• Progress of Phase II • Mid-Term Evaluation
5		Nov. 2013	Capt. David Usec. MTRB	• Progress of Phase II and Improvement for Achievement of the Project Goals • Evaluation of the Project by JRPA
6	III	Apr. 2015	Capt. David Usec. MTRB	• Wrap-up Presentation for the Project • Evaluation of the Project by JRPA • Terminal Evaluation

Useful and affirmative discussions among participants were conducted in each JCC and positive proposals were expressed from the South Sudanese side in the latter half of the Project.

On the other hand, the participants from concerned agencies of the environment asked questions related to the Grand Aid project such as the necessary procedures to realize the project. These questions showed that concerned agencies are very much interested in river port and river transport.

2-4 Technology Transfer Activities

Technology transfer activities in each field are described below based on WBS.

(1) Activity 1: Role and responsibility of JRPA are established and executed

Regarding Activity 1, legal framework for river ports in South Sudan was continuously examined

through Task Force¹ 1 (TF 1), seminars and workshops. A new act (river port regulation) was drafted and related regulations were examined as well. At the same time, C/P and the Team collected related laws and regulations. A river port policy requested from the South Sudanese side was drafted based on the study tour in Cambodia.

In order to materialize the drafted river port regulation, C/P and the Team were to examine the procedure of legislation and consistency of the transitional constitution by obtaining comments from not only port administration but also legislative fields. In addition, the Team invited six (6) government officials including three (3) legal specialists from South Sudan to Japan in Phase III to intensively discuss the river port policy and regulation.

Furthermore, C/P was interested in navigation development and channel maintenance including navigation aids and the Team supported C/P on these issues.

Regarding strengthening of JRPA's organization, the Team pointed out the necessity of acquiring more personnel after upgrading of the port functions which would be implemented by the Grant Aid project, and proposed a strengthening plan of JRPA's organization. Also, in terms of assigned staff, the Team made efforts to develop future core personnel of JRPA by holding workshops and providing training opportunities for JRPA.

Regarding public relations, support for public relations activities was conducted to raise the awareness amongst the port users about Juba port because it was a strong request from JRPA. The first challenge was to issue a port magazine explaining Juba port and its activities. It was the first time for JRPA staff to attempt such a task and their passion convinced us that Juba port and JRPA had a bright future. For this reason, the Team supported JRPA in forming a committee within JRPA and trained them on how to compile articles into one brochure. The first port magazine was completed in January 2013 and the second one was issued in September 2013 describing present ports and river transport condition in South Sudan.

(2) Activity 2: Budget and accounting system of JRPA are established.

Guidance on establishing budget and accounting system for JRPA was provided through Task Force 2 (TF2) and workshops.

Firstly, the following issues were confirmed as the basis of the budget and accounting system; JRPA should aim at becoming a self-sustaining body; A business plan is important for realizing financial autonomy; Tariff revenue should mainly be used for management and operation needs, i.e. maintenance and repair, and renewal of the port; The national government should provide financial support whenever

¹ Task Force is a special team to conduct technology transfer activities. Details are explained in section 3-1.

necessary; Fairness and transparency are essential for JRPA to be a reliable autonomous body.

Based on the above understanding, the following matters were examined; Methods of determining the tariffs (legal framework, tariff committee, the level of the tariff, the level of services) and required personnel for collection of tariffs, access control of persons, vehicles and ships, publishing of the annual report and financial report.

To regulate the tasks, the following regulations were drafted; the budget and accounting rule, the rules for the tariff committee, draft tariff rates and port charges and so on.

To raise the level of efficiency of administrative tasks, PC training for the JRPA staff was conducted over 12 times. In fiscal year 2013, the Team assisted JRPA and DRT/RSS in obtaining a budget to manage the port from the government.

(3) Activity 3 : Facilities of Juba port are properly managed and maintained.

Through Working Group² 3 (WG 3) of TF 3 and study tours in the third country, technology transfer was carried out mainly by the OJT (on-the-job training) scheme.

1) A method to confirm the change of shape of facility using survey equipment is introduced.

A technical method to confirm the changes of port facilities using survey equipment (laser theodolite and level) was transferred by OJT. JRPA staff who mastered the survey technique and method received a certificate.

2) Technical guidance for repair of the existing jetty and exercises of concrete structures

Technical guidance for repair of the existing jetty was done using the actual materials (two steel covering deck plates, two rubber fenders and remote controller of traveling crane). JRPA staff were able to experience the entire repair process of the pre-meeting with the contractor, supervising, and confirmation of the completion of the works.

Considering the maintenance of the new yard pavement to be developed under the Grant Aid project, JRPA staff carried out exercises to construct a concrete curb structure. It was intended to be a part of the maintenance of civil works.

3) Technical guidance for measurement, recording and analysis of water depth

Technical guidance for measurement, recording and analysis of the water depth was practiced using the handmade “water gauge” which was newly installed on the jetty by the JRPA maintenance staff under the guidance of the Team.

² Working Group is a special team to conduct technology transfer activities. Details are explained in section 3-1

4) Arrangement of materials and equipment storage area

The arrangement of materials and equipment storage area was practiced by the JRPA maintenance staff with the guidance of the Team. By grasping the actual quantities and condition of the materials and equipment, the staff of JRPA maintenance section became aware of the necessity for proper maintenance management.

5) Development of manual for maintenance works of facilities

The manuals listed below for the maintenance works of facilities and equipment were newly developed.

- ICB (Interlocking Concrete Block) Pavement Repair Method, Concrete/Asphalt Pavement Repair Method, Curb Concrete Repair Method
- Management Ledger of Port Facilities and Equipment
- Port Facility Maintenance and Maintenance Manual for Equipment

(4) Activity 4: Safe and efficient cargo handling is carried out at the port of Juba

Due to the delay in the Grant Aid project, Activity 4 could not be fully carried out; however, the technical training and guidance listed below was conducted in which it was assumed that mechanized cargo handling operation would be conducted at Juba port. Third country trainings were very useful because JRPA staff could experience actual handling activities.

1) Technical guidance on safe cargo handling

The following technology transfer activities were carried out through Working Group 1 (WG 1: port operation and procedures) and Working Group 2 (WG 2: cargo handling) of Task Force 3 (TF 3), and also by utilizing third-country training,

In consideration of the current state of the cargo handling work at Juba port, the Team emphasized the importance of safe cargo handling practices.

In addition, as cranes, forklifts and belt conveyors are scheduled to be introduced in future, the technical guidance focused on safe and efficient cargo handling. The Team prepared the "Manual for Safe Cargo Handling" and "Cargo Handling Operation Manual (Mechanized Cargo Handling)" which is applicable to the cargo handling equipment which will be introduced by the Grant Aid project.

Furthermore, Importance of holding a safety meeting prior to conducting special cargo handling works was emphasized and video footage of the current container handling operations at the port was used to demonstrate safe and unsafe practices.

2) Technical guidance on berth allocation system and port procedures

In order to promote the efficient operation of the port after the completion of new facilities, it is essential to introduce a berth allocation system and port procedures on barges' entry and departure.

On the assumption that the construction work of the Grant Aid project would begin, the Team discussed the berth allocation system and port procedures with the JRPA and port users during the stakeholders meeting. Based on the results of the discussion, the berth allocation manual and port procedure documents were prepared by the Team.

3) Preparation of cargo handling regulations

Cargo handling by sound service operators is a must for port operation.

Regarding entry of cargo handling service provider, the need for the preparation of entry conditions and criteria by the government or port management body was explained through practical example in Japan and a manual “Conditions on Cargo Handling Provider” was prepared.

(5) Activity 5: Juba port is managed and operated safety, securely and environmentally-friendly

Through WG 4 (port safety, security and environment) of TF 3, technology transfer was carried out mainly by the OJT training/exercises involving a large number of the stakeholders.

1) Development of “Port Facility Security Plan” and technical assistance

In order to develop a Port Facility Security Plan (PFSP) which is stipulated under the IMO ISPS Code (International Ships and Port facility Security Code), the conceptual idea of port security and technical terms based on the ISPS Code need to be recognized. Therefore, those were explained and examples of port security measures taken in Japanese ports were introduced through the workshops. Training/exercises which are essential elements for the implementation of PFSP were conducted based on the developed PFSP. PFSPs were developed for existing facilities and new facilities respectively.

2) Development of “Fire-Fighting Plan” and technical assistance

The concept of risk assessment which would be taken in the initial stage to prepare the Fire-Fighting Plan (FFP) was explained at the workshops. Actual calculation exercise of risk assessment using PC was conducted.

The integrated fire-fighting exercise was conducted with the cooperation of the CES Fire Department involving a large number of the stakeholders. The exercise increased awareness of the importance of fire-fighting among the participants.

The FFPs were developed for existing facilities and new facilities respectively.

An “incinerator” was installed in the port premises in order to raise awareness on the importance of cleaning and fire-fighting in the port.

The last activity which was done in the Project was the “Clean-up Operation of Juba Port”. It was conducted on 17th April 2015 by all JRPA staff and the Team jointly.

3) Development of “Oil Spill Management Plan” and technical assistance

The on-site exercise was conducted using the oil fence and oil-absorbing mats based on the Oil Spill Management Plan (OSMP).

The OSMPs were developed for existing facilities and new facilities respectively.

4) Development of draft regulation for port service providers and technical assistance

Development of draft regulation of port service providers is a part of river port regulation; therefore this issue was examined and drafted based on discussions held while developing the new river port regulation.

(6) Activity 6: Statistical data of Juba port are collected, maintained and utilized.

Through Workshop (WS: port statistics) of TF 3, formats for data collection and survey technique, support of statistical data collection, support of statistical data analysis, and development of statistical database were conducted. These activities were compiled as the “Manual for Port Statistics”.

The importance of conducting port statistics and statistical works in a systematic manner was repeatedly explained. Improving the attitude of persons in charge of statistics was also addressed. Operating rules related to statistic data collection at Juba river port concerning work contents, working hours etc. were drawn up. Work contents were instructed to staff in charge of statistics in writing from the Port Manager. In the stakeholders meeting, port users were told of the importance of statistical services and were requested to submit data. Through OJT, the technical assistance was done of which the data collected on the numbers of arrival barges was input into the statistics database on PC and a simple table and graph using Excel were created.

(7) Activity 7: Knowledge and experience accumulated at Juba port are shared among the ports in South Sudan

The Team was only able to visit the port of Mangalla and Malakal due to security reasons.

Site survey was conducted at Mangalla port in February 2012 to verify whether Mangalla port was able to be a substitute for Juba port.

Site surveys and training for port management were conducted at Malakal port for central and state government staff in August, October 2012 and February 2013. A workshop was held for the same in February 2013.

A three-day workshop on port management was held at Juba port in July 2013 in which participants included 4 central government staff from Renk, Malakal, Shambe and Mangalla ports, and 3 state staff from Malakal port. This activity was to share the knowledge and information of port management among port staff in South Sudan.

During the Project term, three study tours in Japan and six study tours in a third country were conducted, and all the study tours produced fruitful results. Among the study tours in a third country, two (2) national

government staff from Malakal port participated.

2-5 Other Important Activities

Other important activities to attain the project goals are described below.

(1) Seminar, workshop and domestic training

Seminar, workshop and domestic training conducted during the Project are as follows.

Important Seminars, Workshops and Trainings

Phase	Date	Title	Remarks
I	September 2011	Seminar on Port Management and Operation	<ul style="list-style-type: none"> • 57 participants including Ministers from MOT/RSS and MoPI/CES, and staff from Malakal port
II	June 2012	Seminar on Legislative Framework for Port Management and Operation	<ul style="list-style-type: none"> • 27 participants • Presentation by D/G for River Transport of MOT/RSS
	February 2013	Workshop on Port management in Malakal	<ul style="list-style-type: none"> • First Workshop held in Malakal • Participants from RSS and UNS
	July 2013	Training for Regional Port Staff (for three days)	<ul style="list-style-type: none"> • First Training for Regional Port Staff • 4 Port managers from RSS and 3 staff from UNS
	September 2013	Seminar for Port Users	<ul style="list-style-type: none"> • Focusing on Port Users • Presentation by Int'l Organization • More than 60 Participants
	September to November 2013	Workshop on Port Regulation	<ul style="list-style-type: none"> • Participation of Legal Advisors and Legal Experts from Ministry of Justice • Total of 3 days

(2) Supporting activity for stakeholder meeting

Stakeholder meeting is an opportunity for port users and JRPA to discuss problems and use of the port. The Team constantly encouraged and supported JRPA to hold the meeting once a month by suggesting themes and topics and requesting the cooperation of stakeholders.

(3) Capacity building for computer skills

The Team has offered computer training courses (basic and intermediate) to JRPA staff in order to introduce computers to their actual port operation. Specifically, the program includes practical exercises such as calculation of port fee and port statistics in Excel, creating a port entry sheet by Word, and drafting a presentation paper by Power Point. The Team arranged two classes to accommodate participants and gave lectures spanning two hours a week in each class.

In addition, computer skill training course was carried out in each activity respectively.

Computer Skill Course

Course	Period	Numbers of Lectures	Total Number of Participants	Number of Certificates Issued
Basic course	From 15 th May to 31 st July 2013	8 lectures per class	147	11
Intermediate I	From 26 th August to 9 th October 2013	6 lectures per class	92	11
Intermediate II	From 5 th November to 20 th November 2013	3 lectures per class	18	12

2-6 Study Tour in Japan and a third Country

Three types of “study tours out of the country” were conducted; study tours in Japan were mainly for executive class, while study tours in a third country were for manager class and staff class.

Study tours in Japan are summarized in the table below.

Phase	Period	Duration	No. of Trainees	Participant	Contents
I	Nov. – Dec. 2011	2 weeks	3	Executive Class	Upgrading of overall port management capacity
II	Nov. 2012	2 weeks	3	Executive Class	Upgrading of overall port management capacity
II	Aug. 2014	2 weeks	6	Executive Class, Legal Advisor/ Expert and Policy Planning Officer	Intensive discussion on river port policy and regulation

Study tours in a third country are summarized in the table below.

Phase	Period	Duration	Location	No.	Participant	Contents
I	Nov. – Dec. 2011	2 weeks	Kosti, Sudan	7	Staff Class	Acquiring skills on port operation, statistics, risk management, etc.
	Oct. – Nov. 2011	3 weeks	Mombasa, Kenya	4	Manager Class	Acquiring know-how on port management (tariff, safety, legislation, etc.)
II	Aug. 2012	3 weeks	Mombasa, Kenya	4	Manager Class (Malakal Port Manger joined)	Acquiring know-how on port management (tariff, safety, legislation, etc.)
	Feb. 2013	2 weeks	Mombasa, Kenya	4	Staff Class (Malakal Deputy Port Manager joined)	Acquiring skills on port operation, statistics, risk management, etc.
	Oct. 2013	1 week	Phnom Penh Shihanouke-ville, Cambodia	4	Executive Class and Policy Planning Officer	Acquiring know-how on legal system of inland transport and international agreement
III	Oct. 2014	2 weeks	Mombasa, Kenya	7	Staff Class	Acquiring skills on mechanized cargo handling and maintenance

3. Challenges and Lessons Learnt

The technology transfer activities were conducted considering the following policies throughout the Project.

3-1 Implementation System of the Project

Technology transfer activities had mainly been conducted in the framework of Task Forces (TF), Working Groups (WG) and Workshops (WS) which were established by activities at the beginning of the Project. Furthermore, continuous activities for technology transfer had been conducted by involving concerned people, agencies and entities, such as actively supporting the stakeholders meeting hosted by JRPA, holding seminars and so on. The implementation system of TF, WG and WS are as follows.

Implementation System of the Project

- 1) Task Force 1 (TF 1) : Legislative aspect
 - Activity field . . . Output 1 and Output 7
 - Major subjects . . . legislative framework, organization strengthening, training
 - Chief Director General of River Transport, Ministry of Transport, Roads and Bridges
- 2) Task Force 2 (TF 2) : Budget and Accounting aspect
 - Activity field . . . Output 2
 - Major subjects . . . budget and accounting system, port tariff
 - Chief 1st Director General, Ministry of Physical Infrastructure, CES
- 3) Task Force 3 (TF 3) : Cargo handling and operation aspect
 - Activity field . . . Output 3, Output 4, Output 5, Output 6
 - Major subjects . . . port operation and procedures (WG 1)、cargo handling (WG 2)、 maintenance of port facility & equipment (WG 3)、 safety, security and environment (WG 4)、 port statistics (WS)
 - Chief Port Manager of JRPA

Furthermore, some members of the Team stayed continuously in Juba as much as possible to conduct uninterrupted technology transfer activities. A key person from the Team was designated who set up a group management system, which allowed other team members continue conducting technology activities even in the case that the team member in charge did not stay in Juba. These systems made it possible to conduct technology transfer continuously and effectively.

3-2 On-the-Job Training (OJT) Activities

As described in section 2-1, due to big changes in the external conditions which affected the Project, it was impossible to conduct technology transfer activities in the actual construction site. Therefore, the emphasis was shifted from utilizing new facilities to conducting on-the-job training (OJT) in the field of facility maintenance and measurement, port safety/security management, processing of statistical data, training for computer skills and others. The OJT helped achieve the targets of the Project.

Under the stagnation of port activities as mentioned above, actual port management roles were considerably difficult to be recognized through table-top workshops only. Therefore, various types of individual practical OJT were introduced in order to encourage JRPA staff to be self-motivated. The OJT's theme was selected from the usual management activities which have been done in Juba port. The scheme of OJTs was discussed and mutually shared through JCC and WGs and these OJT trainings were able to successfully address the issues raised by the JRPA staff.

3-3 Activity in Phase III

Activities of Phase III commenced in June 2014, a six (6) months later than scheduled, due to the armed conflict which occurred in December 2013 and under the condition that the Team could not enter the site. Therefore, the activities of the Team were mainly preparing manuals for the port management and operation of JRPA in Japan and conducting study tours in Japan and a third country.

As the travel ban was slightly loosened in Japan in January 2015, the Team conducted the final activity in Juba from 26 March to 19 April.

3-4 Other activities

To facilitate effective technology transfer activities, the Team worked together with C/P involving many parties, introducing practical technology and skills necessary for port management and operation and conducting activities related to public relations to notify concerned parties of the actual situation of river transport and ports. Specifically, seminars and training sessions, workshops, stakeholders meetings, the third-country training, computer training, and the publication of a port magazine were conducted as technology transfer. Technology transfer was secured by repeating these activities continuously. As a result of these activities, C/P became more motivated and aware of the need to realize effective port management.

4. Achievement of the Project

4-1 Mid-Term Evaluation

Mid-term evaluation was conducted in February 2013. Outline of the evaluation results are described below.

(1) Revision of PDM

Due to the changes in the external conditions, parts of Project Design Matrix (PDM), Work Breakdown Structure (WBS) and Plan of Operation (PO) were revised based on the result of the mid-term evaluation. These revisions were approved in the 4th JCC which was held in February 2013. Contents of the revision of PDM were as follows.

Item	Original PDM of Output 4	Revised PDM of Output 4
Objectively Verifiable Indicators	<ul style="list-style-type: none"> - Cargo throughput per month - Average berthing periods of vessels - The numbers of accidents, injured persons and damages to cargo at Juba River port 	<ul style="list-style-type: none"> - Drafting cargo handling manual for new facility and application on actual harbor work at Juba River Port. - Development of berth allocation system and its application at Juba River Port - Drafting regulation on cargo handling activity - The number of containers handled per hour
Means of Verification	<ul style="list-style-type: none"> - Interviews to the counterparts and port users 	<ul style="list-style-type: none"> - Draft of cargo handling manual - Interview to the counterparts and users on berth allocation - Draft of regulation of cargo handling activity - The number of containers handled per hour
Baseline (as of May 2011)	<ul style="list-style-type: none"> - The cargo handling volume at Juba River Port is about 6,000 ton/month. - The typical berthing period of vessels at Juba River Port is about 14 days. - A few minor accidents have been reported in Juba River Port. 	<ul style="list-style-type: none"> - Cargo handling manual does not exist thus needs to be developed. - Berth allocation system has not been introduced yet. - Regulation on cargo handling activity does not exist. - The number of containers handled per hour should be counted when container handling starts.

Other amendments in PDM were as follows.

Amended Part	Original PDM	Revised PDM
Output 1 : Roles and responsibilities of JRPA are established and executed.	operation manuals	institutional operation manuals
Activity 1-6 : To prepare operation manuals at each department of JRPA		
Activity 4-5 : To establish berth adjustment system at Juba Port	adjustment	allocation

Furthermore, upon the strong request from JRPA on strengthening public relations, “to support JRPA’s public relations” was added to activity 1-8 of PDM and WBS 1.5.6 of Output 1.

(2) Evaluation by five criteria

Results of the mid-term evaluation are shown in the table below. The criteria for evaluation was introduced by the Development Assistance Committee (DAC).

Evaluation Criteria	Evaluation Level	Explanation
Relevance	High	The Project purposes correspond to South Sudan’s policy and needs, Japanese ODA’s policy to South Sudan, and project approach is appropriate.
Effectiveness	Hard to measure	The new facilities have not been constructed yet as of the Mid-term evaluation.
Efficiency	Moderate	The outputs generated toward the input are balanced.
Impact	Hard to determine	It is difficult to evaluate at this stage but several positive impact have been confirmed.
Sustainability	Moderate	The policy for river transport will be likely maintained; however the technical, organizational and financial aspects still need to be clarified.

(3) Conclusion

Conclusion of the mid-term evaluation is as follows.

“The management capacity of JRPA staff has been gradually strengthened through OJT, activities through task forces, workshops and training in Japan, Kenya and Sudan. Activities corresponding to existing facilities have been implemented as planned. Furthermore, JRPA understands the needs and importance of managing and operating ports with their initiative.

On the other hand, the implementation of Japanese grant aid, which was supposed to start in January 2012, has been delayed and field surveys for understanding the current situation of all ports have not been conducted due to the unstable security conditions of the region. Moreover, the decrease or stagnation of transportation due to blockade of the transport channel between South Sudan and Sudan has adversely affected the progress of the Project.

During the rest of the project period, it is critical for the Project to conduct activities continuously in existing facilities for JRPA so that JRPA can correspond to new facilities provided by Japanese Grant aid.”

4-2 Further Revision of PDM

Based on further delay of the Grant Aid project after the mid-term evaluation, the Team proposed further revision of PDM etc. at the 5th JCC held in November 2013. Proposed revision of PDM etc. was basically agreed at the 5th JCC

The construction works of the Grant Aid project would be scheduled to start in early 2014 and be completed in April 2015 which was almost in parallel with Phase III of the Project. Full operation of the newly developed facilities and equipment would occur after completion of the Project.

Taking this situation into account, the activities related to smooth operation and monitoring of the new terminal and the activities for improvement and revision of the manuals for the new facilities and equipment seemed to be difficult. Therefore, the Team proposed revisions of PDM related to these activities abovementioned as follows.

(1) Project Purpose

Objectively Verifiable Indicator (OVI) and Means of Verification (MOV) of the project purpose were revised as follows.

Item	Original	Proposed Revision
Project Purpose	1. Management capacity of Juba port is strengthened. 2. Port management system established at Juba port is shared among the ports in South Sudan.	
Objectively Verifiable Indicator	- <u>The new facility of Juba River Port is operated efficiently.</u> - Capacities of staff at the ports in South Sudan are strengthened.	- <u>Efficient operation of the new facility of Juba River Port is examined.</u> - Capacities of staff at the ports in South Sudan are strengthened.
Means of Verification	- <u>Operation records of each division of JRPA</u> - Interviews to the counterparts and port users. - Evaluation of port management and operation by checklist	- <u>Understanding of JRPA operation manuals</u> - Interviews to the counterparts and port users. - Evaluation of port management and operation by checklist (Deleted)

(2) Output

OVI and MOVs by output was revised as follows.

Output	OVI/MOV	Original	Proposed Revision
1. Roles and responsibilities of JRPA are established and executed.	OVI	- Juba River Port is operated according to the manuals.	- (Deleted)
	MOV	- Port management and operation records	- (Deleted)
2. Budget and accounting system of JRPA are established.	OVI	- The budget and accounting documents at Juba River Port are prepared.	- A document for budgetary request is prepared and the budget is requested.

Output	OVI/MOV	Original	Proposed Revision
	MOV	- Port tariff and leasing rules are applied at Juba River Port.	- (Deleted)
		- Budget and accounting documents	- Budgetary request document
		- Port management and operation records	- (Deleted)
3. Facilities of Juba River Port are properly managed and maintained.	OVI	- The ledger of port facilities is prepared and updated.	- The ledger of port facilities is prepared.
	MOV	- The ledger and the inspection /maintenance records	- The ledger of Port facilities
4. Cargos are handled efficiently and safely at Juba port.	OVI	- Cargo handling manuals for Juba port are prepared and they are applied on actual harbor work at Juba port.	- Cargo handling manuals for Juba port are prepared.
		-Berth allocation system is developed and applied on Juba port.	-Berth allocation system is developed
		- Number of containers handled per hour is increased.	- Improvement Method of the efficiency for container handling is introduced.
5. Juba River Port is managed and operated safely, securely and environmentally-friendly.	MOV	- Management and operation records of Juba River Port	- (Deleted)

(3) Activities

Activity 3-2 and 4-4 was revised as follows.

Original	Proposed Revision
3-2 To prepare and update a ledger for facilities at Juba port.	3-2 To prepare a ledger for facilities at Juba port.
4-4 To handle cargoes at the new terminal of Juba River Port according to the manuals.	4-4 to provide direction of cargo handling based on a manual for a new terminal.

Accordingly, Plan of Operation (PO) was slightly revised.

4-3 Terminal Evaluation

Terminal evaluation was conducted in April 2015.

The terminal evaluation was conducted based on the PDM proposed at the 5th JCC.

Outline of the evaluation results are described below based on the report prepared by the terminal evaluation team.

(1) Evaluation by five criteria

Results of the terminal evaluation were shown in the table below. The criteria for evaluation was introduced by the Development Assistance Committee (DAC).

Evaluation Criteria	Evaluation Level	Explanation
Relevance	Relatively High	The Project purposes correspond to South Sudan's policy and needs, Japanese ODA policy to South Sudan, and river transportation is utilized for transportation of relief supplies and Internally Displaced Person.
Effectiveness	Rather low	The capacity of JRA staff has been improving gradually; however some of specific subjects have not been achieved due to the delay of the Grant Aid project and entry restriction of the experts into South Sudan.
Efficiency	Moderate	Efficiency could not greatly raised due to the deterioration of the security situation and the delay of the Grant Aid project; however the quality of the study tours in Japan and the third country was very high.
Impact	Moderate	It will take time to achieve the overall goal; however C/P came to understand that policy was more important than laws and regulations, which was an important outcome.
Sustainability	Moderate	The JRPA operation manual is expected to be shared among C/P/ In addition, it may be possible to add some sort of technical assistance for new facilities and equipment in the future.

(2) Conclusion

Conclusion of the terminal evaluation is as follows.

“Although the Project could not be implemented according to the schedule, both individual and organization level in the field of port management were enhanced. But further efforts are necessary to achieve the project purpose and overall goal. “

“The Project has contributed in deep for MTRB to formulate the legal framework in the field of river port and river transport. It is expected to complete this very fundamental legal system for the inland water transport including the port management.”

“South Sudanese and Japanese sides should keep in touch to monitor the situation in order to spread the Outputs of the Project nationally to and enjoy wide spillover effects.”

“Although the Project was heavily damaged by the deterioration in the security situation, the outsource occasions planned and instructed by the expert team, such as training outside South Sudan, and compiled

manual for the necessary subjects were designed as much as possible to cover the loss and delay. Both sides tried to reach the goal together under difficult circumstances. Such a sincere manner should be appreciated.”

5. Recommendation for Achieving the Overall Goal

The Project purposes could not be fully achieved due to the changes in the external conditions.

Recommendations for attaining the project purposes are as follows.

(1) Challenges in each activity field

Challenges in each activity field are briefly described below.

Regarding activity 1, draft river port policy and regulation should be authorized as soon as possible.

The organization of JRPA should be strengthened based on the prepared plan.

Regarding activity 2, a tariff committee should be established as soon as possible.

Regarding activity 3, a regular maintenance management system should be established.

Regarding activity 4, manuals for safe cargo handling and a mechanized cargo handling operation should be studied for resumption of cargo handling operation.

Regarding activity 5, exercises for risk management should be executed repeatedly based on the prepared plans.

Regarding activity 6, a manual for statistics should be studied for resumption of the port activity.

Regarding activity 7, necessary number of staff should be assigned to major ports in a timely manner.

(2) Utilization of manuals and materials

To tackle the challenges mentioned above, utilization of the JRPA operation manual and materials for river port policy and regulation prepared in the Project are essential.

Short term recommendations are pointed out in the terminal evaluation report as follows.

- As the self-contained manuals were provided by the Project, the South Sudanese side is recommended to share items with the right personnel for further understanding and utilization, both for the existing and new facilities and equipment.
- It is necessary to secure the continuity of technical development by means of some sort of technical assistance in areas where do not require special facilities and equipment.

The most crucial problem for enhancement of the capacity building at the moment is that the staff has little opportunity to engage in actual port management and operation due to the suspension of waterborne cargo transport. However, the manual for port management and operation of JRPA and the materials for policy matters should be studied for the time that waterborne cargo transport eventually resumes, and thus should be utilized and shared among concerned parties for proper management and operation of river ports in due time.

(3) Monitoring

JICA and South Sudan agreed at the 6th JCC to monitor the following items after completion of the Project for the purpose of confirming the utilization of the manuals and the status of rootage of knowledge and know-how on port management.

- 1) Progress of the authorization of the river port policy and regulation
- 2) Establishment of a tariff committee
- 3) Periodical measurement of water level
- 4) Periodical updating of the equipment ledger
- 5) Recording of accommodated barges
- 6) Periodical cleaning of port area as a routine work

The South Sudanese side will conduct above mentioned activities. These activities will be monitored by JICA South Sudan office and will be reported to JICA HQs every three months. JICA might consider the dispatch of experts to assist the monitoring and to provide the necessary technical assistance in response to the technical capabilities of the South Sudanese side.

(4) Issues to be improved

The following issues have to be urgently improved in order for technical assistance to be effective.

- 1) Working conditions of JRPA have to be urgently improved, such as office space, desks and chairs for staff, office equipment and supplies, stable power, personal computer and so on.
- 2) Budget necessary for port management and operation has to be secured.

(5) Toward the next stage

For attaining the overall goal, in addition to tackling the field of port management and operation, it is also necessary to tackle the overall issues of river transport.

Medium and long term recommendations are pointed out in the terminal evaluation report as follows.

“There are various items to be fulfilled in order to develop the inland water transport, such as ports, navigation channel, navigation rules and regulations, ship registration and inspection, ship’s crew training and license, search and rescue system, pollution prevention, navigation aids dredging etc. MTRB has been working on the river transport bill for a long time; therefore such a legal system should cover all aspects of the river transport in order to facilitate and enhance its capacity.”

On the other hand, JICA expressed their intention that the framework of future project would be discussed under conditions of the following items.

- 1) Conclusion of the contract agreement for construction works of the Grant Aid project.

- 2) Increase of cargo handling volume (the number of barges needs to recover to the equivalent level of 2011).

The Team provided basic items and information necessary for the legislation of inland waterways in addition to the river port regulation. It is expected that the South Sudanese side will make the best use of these items and information and move to the next stage in order to attain the Overall goal (“Inland water transport in South Sudan is facilitated and its capacity enhanced”). Demarcation of items which the South Sudanese side will be able to attain by themselves and items which the South Sudanese side will request JICA’s assistance is one way to prepare for the next stage.

Appendix

- 1. Project Design Matrix (PDM)**
- 2. Flowchart of the Project**
- 3. Work Breakdown Structure (WBS)**
- 4. Record of Expert Dispatch**
- 5. List of Study Tours in Japan and the Third Country**
- 6. Provided Equipment and Portable Equipment**
- 7. Minutes of Meeting**
 - (1) 1st JCC held on 4th May 2011
 - (2) 2nd JCC held on 15th February 2012
 - (3) 3rd JCC held on 15th June 2012
 - (4) 4th JCC held on 12th February 2013
 - (5) 5th JCC held on 21st November 2013
 - (6) 6th JCC held on 14th April 2015
- 8. Other Major Activities**
 - (1) Port Magazine
 - (2) Monitoring

Appendix

1. Project Design Matrix (PDM)	AP-1
2. Flowchart of the Project	AP-5
3. Work Breakdown Structure (WBS)	AP-6
4. Record of Expert Dispatch	AP-15
5. List of Study Tours in Japan and the Third Country	AP-16
6. Provided Equipment and Portable Equipment	AP-31
7. Minutes of Meeting	AP-33
(1) 1st JCC held on 4th May 2011	AP-33
(2) 2nd JCC held on 15th February 2012	AP-35
(3) 3rd JCC held on 15th June 2012	AP-38
(4) 4th JCC held on 12th February 2013	AP-41
(5) 5th JCC held on 21st November 2013	AP-47
(6) 6th JCC held on 14th April 2015	AP-51
8. Other Major Activities	AP-55
(1) Port Magazine	AP-55
(2) Monitoring	AP-73

1. Changes of PDM

1. Objectively Verifiable Indicators of Output 4 in PDM was partially revised at the beginning of the Project because of the availability of useful data. This revision was approved at the first JCC held in May 2011.
2. PDM was revised at the Mid-term evaluation conducted in February 2013 and approved at the 4th JCC. Details are explained in the completion report.
3. Further revision of PDM based on the further changes of the external conditions was proposed and basically agreed at the 5th JCC held in November 201. Details are explained in the completion report.
4. The terminal evaluation was conducted based on the latest PDM which was agreed at the 5th JCC. The latest PDM is attached in Appendix.

Project Design Matrix

Project Design Matrix

Project Title: The Project for Enhancement of Operation and Management Capacity of Inland Waterways in South Sudan (Technical Cooperation)

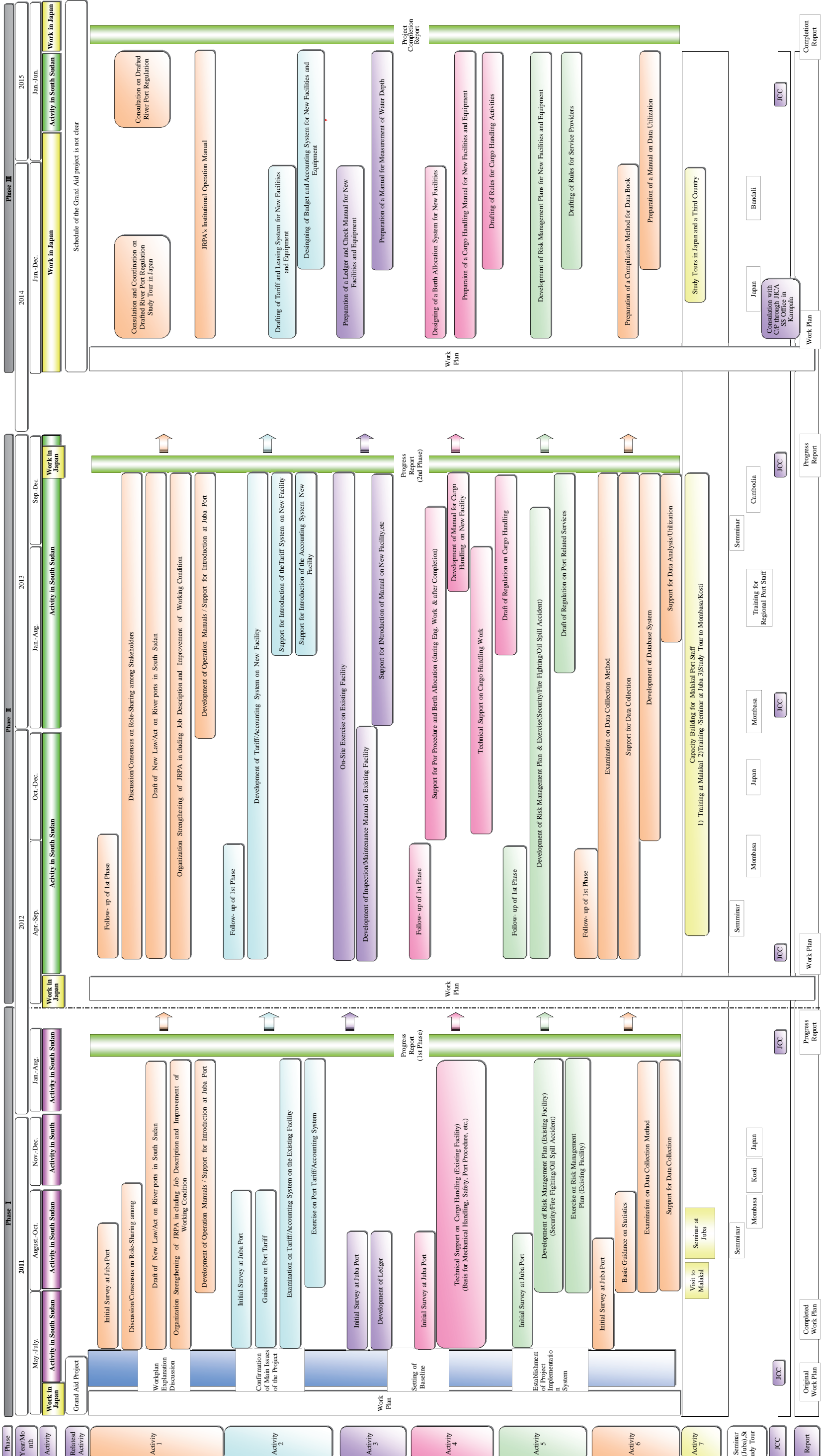
Term of Cooperation: Four years (2011~2014) revised date: 21 Nov, 2013 Version: 3
Target Area: Juba and other six ports (Bor, Shambe, Adok, Malakal, Mangalla, Renk) in South Sudan
Direct beneficiary: Staff of Juba and other six ports Indirect beneficiary: The citizens of Sudan
Counterpart: Responsible Agency, Implementing Agency : MOT/RSS, MOP/CES, JRPA(Juba River Port Administration)

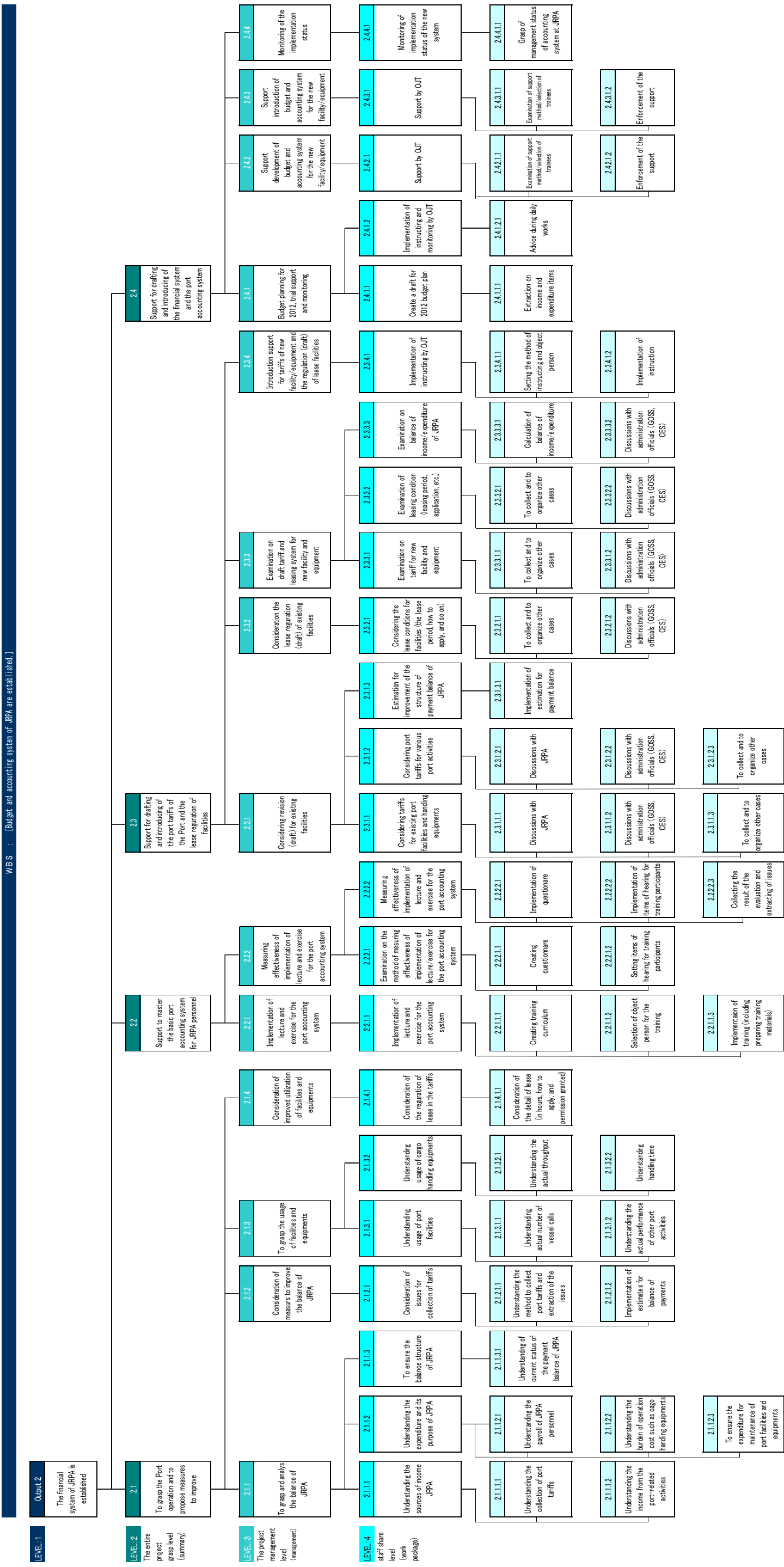
	Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumption	Baseline (As of May 2011)
Overall Goal	Inland water transport in South Sudan is facilitated and its capacity enhanced.	-Cargo handling capacities and performances at the ports in South Sudan are enhanced. -The service levels of the ports in South Sudan are improved.	-Volume of cargo handled at each port in South Sudan. -Interviews to port users.		-The cargo volume handled in Juba port is about 6,000 ton/month. -The typical berthing period of vessels at Juba port is about 14 days.
Project Purpose	1.Management capacity of Juba port is continuously strengthened. 2.Port management system established at Juba port is continuously shared among the ports in South Sudan.	-Efficient operation of the new facility of Juba River Port is examined. -Capacities of staff at the ports in South Sudan are strengthened.	-Understanding of JRPA operation manuals. -Interviews to the counterparts and port users.	-The budget for developing river ports is secured. -Port development policy does not change drastically .	- The new facility is to be constructed. -Capacity building of personnel in other ports than Juba has not been conducted so far.
Output	1. Roles and responsibilities of Juba River Port Administration(JRPA) are established and executed properly.	-Regulatory framework of port administration in South Sudan is drafted. -Institutional operation manuals of Juba port are prepared.	-Draft of the regulatory documents. -Interviews to the counterparts and port users.	-Staff members of counterpart are not transferred or resigned. -The project of improvement of Juba River Port(Grant Aid Project) are implemented without serious delay.	- Regulatory framework of port administration in South Sudan does not exist thus needs to be drafted. - Institutional operation manuals for the current facility in Juba port exist partially yet they are not utilized. - Operation mannuals for the new facility in Juba port need to be developed.
2. Budget and accounting system of JRPA are established.		-A document for budgetary request is prepared and the budget is requested. -Port tariff is drafted. -Rules for leasing port facilities are drafted.	-Budgetary request document. - Draft of port tariff and leasing rules -Interviews to the counterparts and users.		- Budget and accounting documents of JRPA do not exist thus need to be developed. - Port tariff on the current facility exists partially yet it should be examined further. - Port tariff on the new facility needs to be drafted. - Format for application and record of leasing facility exist yet they are not utilized. Regarding new facility, format and rules for leasing need to be developed.
3. Facilities of Juba port are properly managed and maintained.		-Inspection manuals are prepared. -Facilities are inspected and maintained according to the manuals. -The depth of the berths at Juba port are periodically monitored and recorded.	-Interviews to the counterparts and port users. -The ledger of Port facilities. -The berth depth records at Juba port.		-Inspection and maintenance manuals do not exist. -Format for the ledger of the current facility exist yet it is not utilized. -There has been no record of monitoring of the depth of the berths. -For new facility, inspection and maintenance manuals and the ledger need to be developed.

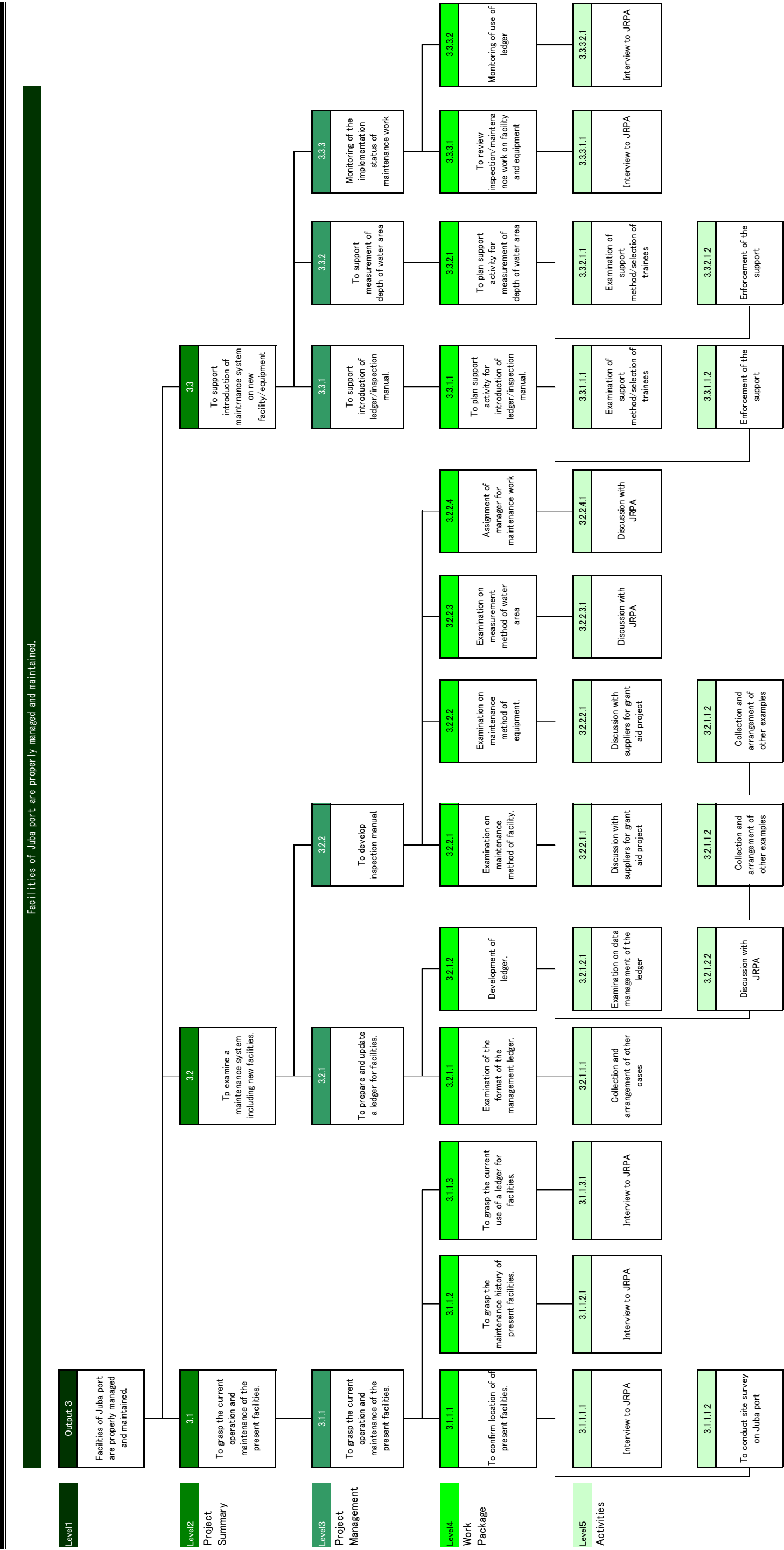
Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumption	Baseline (As of May 2011)
4.Cargos are handled efficiently and safely at Juba port.	<ul style="list-style-type: none"> -Cargo handling manuals for Juba port are prepared. -Berth allocation system is developed -A rule for cargo handling services at Juba port is drafted. -Improvement Method of the efficiency for container handling is introduced. 	<ul style="list-style-type: none"> -Cargo handling manuals -Interview to the counterparts and users on berth allocation -Draft of a rule of cargo handling services -Number of containers handling per hour 		<ul style="list-style-type: none"> -Cargo handling manual do not exist thus need to be developed. -Berth allocation system is not introduced yet. -Regulation on cargo handling activity do not exist. -Number of container handling per hour should be counted when container handling will start. •30 min. per 20ft container •2 hours per 40 ft container (Baseline (as of July 2013))
5.Juba port is managed and operated safely, securely and environmentally-friendly.	<ul style="list-style-type: none"> -Rules regulating port service providers are drafted. -Port security plan is prepared and trainings and exercises are implemented. -Fire fighting plan is prepared and fire fighting exercise is implemented according to the plan. -Crisis management plan including oil spill disaster is prepared. -An exercise against oil spill disaster is implemented. 	<ul style="list-style-type: none"> -Interviews to the counterparts and port users. -Reports of trainings and exercises. 		<ul style="list-style-type: none"> -Rules regulating port service provides of Juba port do not exist. -Contact list for security exists yet security plan does not exist. Related exercise has not been adequately conducted. -Contact list for fire fighting exists yet fire fighting plan does not exist. Related exercise has not been adequately conducted. -Contact list for crisis management exists yet crisis management plan does not exist. Related exercise has not been adequately conducted.
6. Statistical data of Juba port are collected, maintained and utilized.	<ul style="list-style-type: none"> -Manuals to collect port statistics and data are prepared. -Database is developed and utilized. -Brief port statistics report is prepared. 	<ul style="list-style-type: none"> -Interviews to the counterparts. -Collected data in the database. -Port statistics report. 		<ul style="list-style-type: none"> -Format for collection of statistics data exists yet it is not utilized. -Format for data inventory exists yet it is not utilized. -Database needs to be developed and utilized. -Port statistics report has not been prepared so far.
7.Knowledge and experience accumulated at Juba port are shared among the ports in South Sudan.	<ul style="list-style-type: none"> -The numbers of trainings and seminars provided for the staff from other ports. -The numbers of staff attended trainings and seminars from other ports. 	<ul style="list-style-type: none"> -Reports of trainings and seminars. -Interviews to the counterparts. -Questionnaires from attendants. 		<ul style="list-style-type: none"> -Capacity building of personnel in other ports than Juba has not been conducted so far.

Activities	Inputs	Important Assumption
1-1. To review and analyse current situation of ports in South Sudan. 1-2. To clarify roles and responsibilities of each stakeholder (national and local governments, JRPA and shipping companies etc.). 1-3 To draft divisions of roles among the ports in South Sudan. 1-4. To draft regulatory framework of port administration in South Sudan including JRPA. 1-5. To clarify the roles of each department of JRPA. 1-6. To prepare Institutional operation manuals at each department of JRPA. 1-7. To operate Juba port according to the manuals. 1-8. To promote public relations	<Japanese side> (1) Dispatch of Experts; • Team Leader/Port Policy • Assistant Leader/Port Administration • Port Management • Port Accounting System/Statistics • Port Operation(1) • Port Operation(2) • Port Safety Management(1) • Port Safety Management(2)/Port Security • Facility Maintenance(Infrastructure) • Facility Maintenance(Equipment) <South Sudanese side> 1)Assignment of Counterparts 2) Facility -Office space for the project 3) Arrangements for access to the necessary information, permission to project activities, and securing safety 4) Budget allocation • Allocation of counterpart budget • Operation and maintenance cost of provided equipments	-Counterpart staff are assigned at other six ports than Juba Port.
2-1. To review current port operation at Juba port. 2-2. To review and analyse financial status of JRPA. 2-3. To review current usage of facilities at Juba port. 2-4. To draft budget and accounting system including port tariff and leasing system of Juba port. 2-5. To prepare and implement budget plan of JRPA.		
3-1. To review and analyze current maintenance and management conditions of facilities at Juba port. 3-2.To prepare a ledger for facilities atJuba port. 3-3. To prepare inspection manuals for port facilities. 3-4. To inspect and maintain facilities of Juba port according to the manuals and the ledger. 3-5. To monitor and record the depth of berths according to the manuals.		
4-1. To review and analyze current cargo handling operation at Juba port. 4-2. To prepare cargo handling manuals for Juba port. 4-3. To organize technical trainings for cargo handling staff at Juba port. 4-4.To provide direction of cargo handling based on a manual for a new terminal. 4-5. To establish berth allocation system at Juba port. 4-6. To draft a rule for cargo handling services at Juba port.	Pre-Conditions -Public security in South Sudan is not deteriorated.	
5-1. To review current situation of port management at Juba port 5-2. To prepare a security plan and implement an exercise at Juba port. 5-3. To prepare fire fighting plan and implement an exercise at Juba port. 5-4. To draft rules regulating port related service providers at Juba port. 5-5. To prepare a crisis management plan against disasters including oil spill and implement an exercise at Juba port.		
Activities	Important Assumption	
6-1. To review existing statistical data at Juba port. 6-2. To design data collection format and system for Juba port. 6-3. To design database system and manuals for Juba port. 6-4. To organize technical training for data collection and analysis at Juba port.		
7-1. To review and analyze current situation of port management and operation of other six ports. 7-2. To provide trainings and seminars for other six ports.		

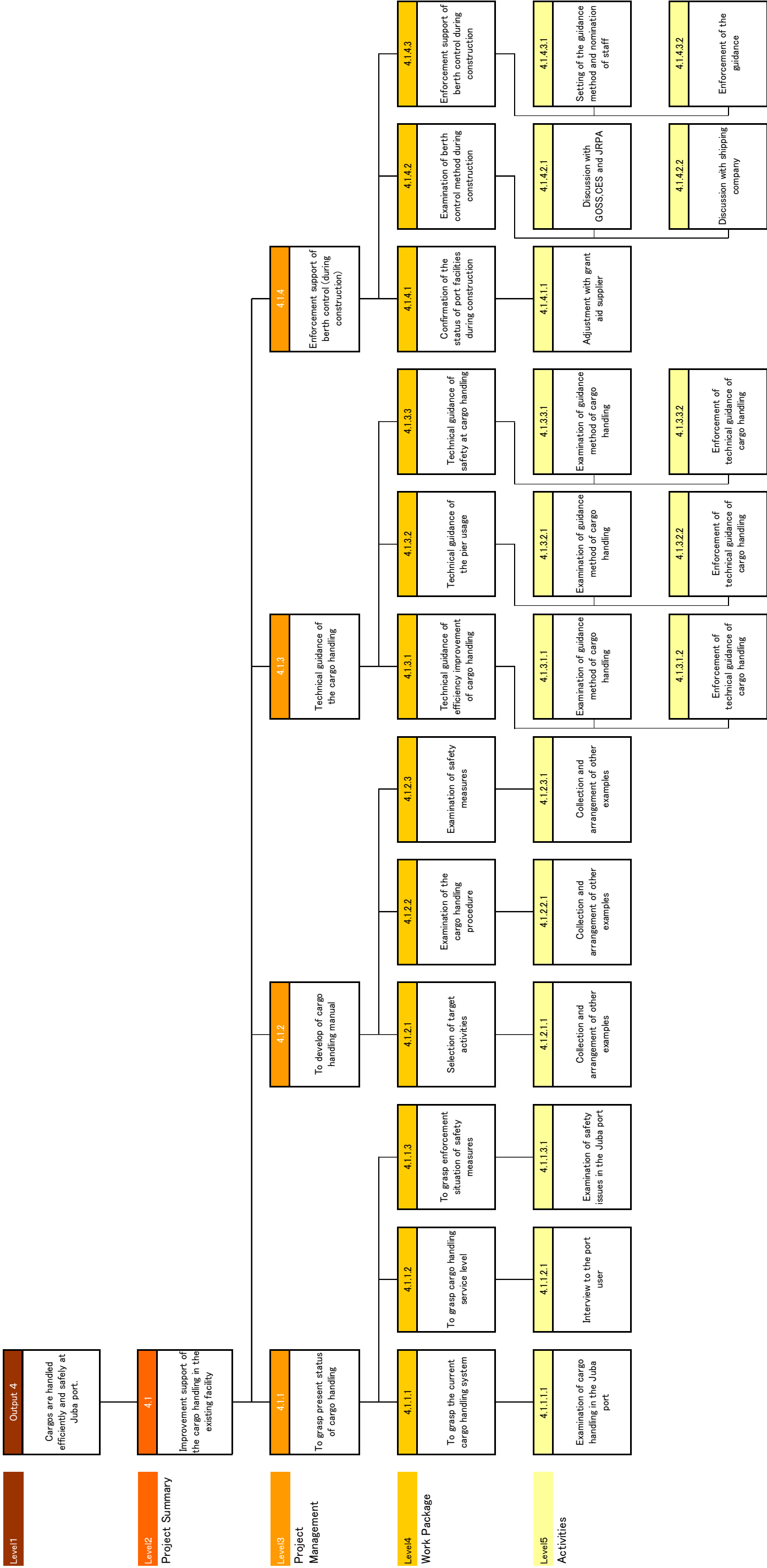
2. Flowchart of the Project



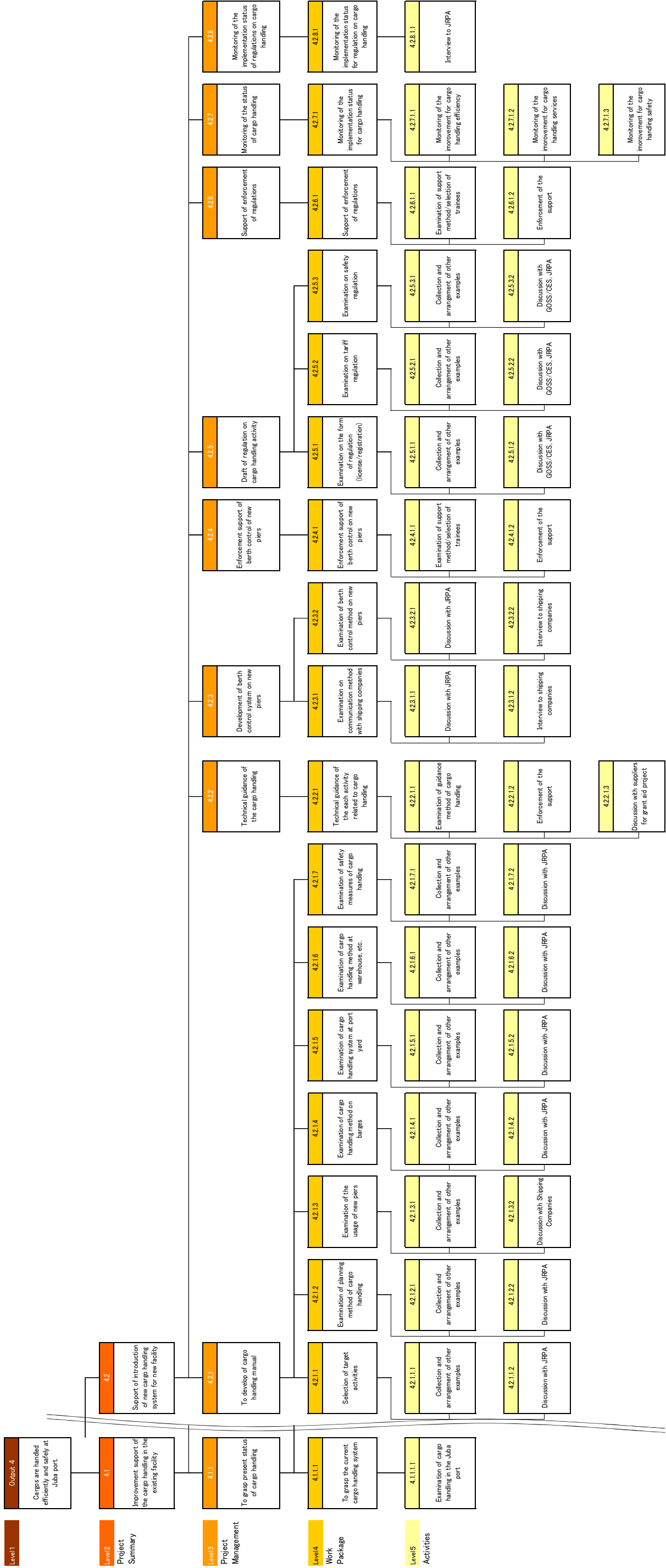


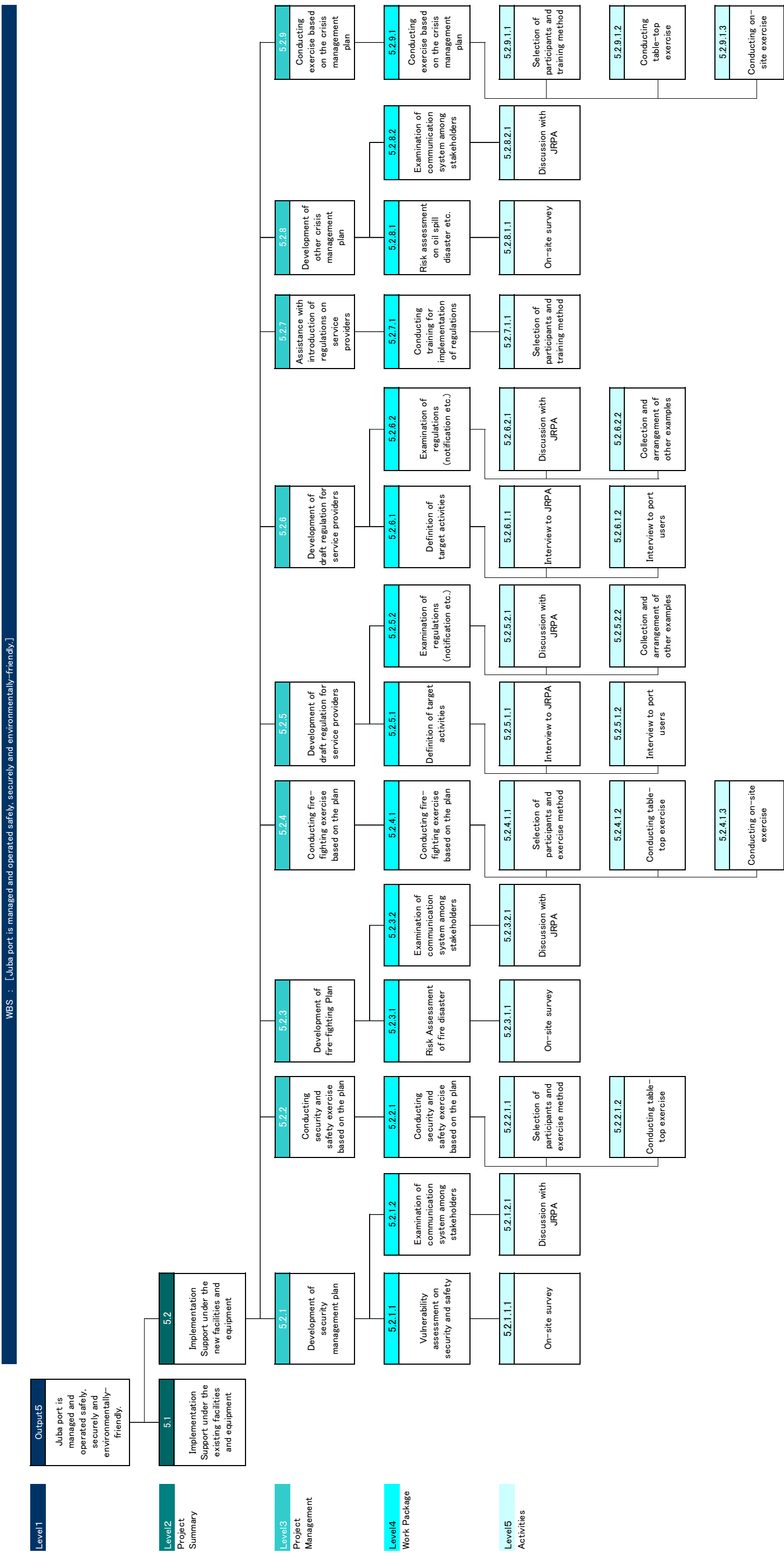


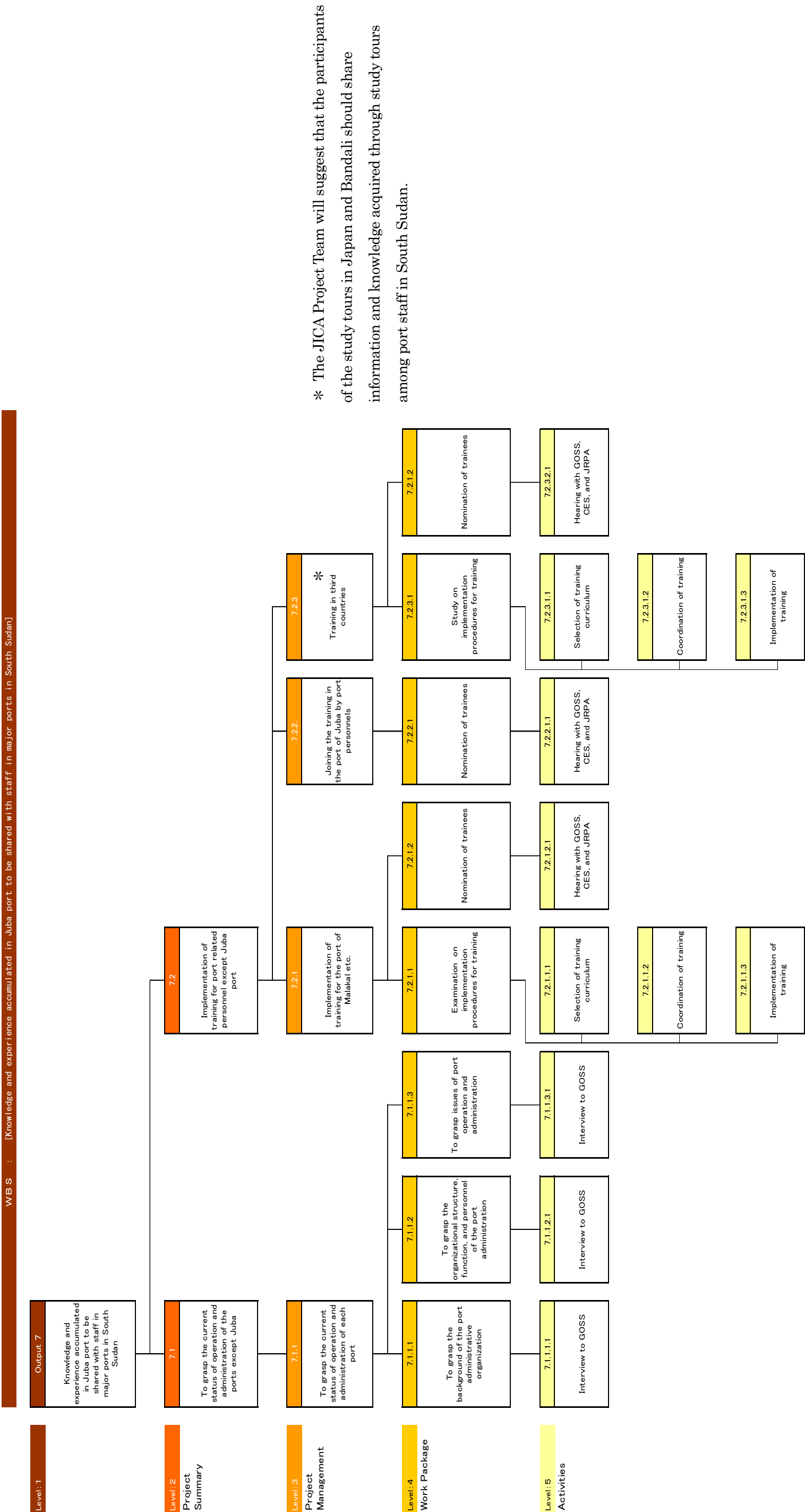
WBS : [Cargos are handled efficiently and safely at Juba port.]



WBS : [Cargos are handled efficiently and safely at Juba port.]







4. Record of Expert Dispatch

MM Table

Task in Charge		Expert	Organiza- tion	2011												2012												2013												2014												2015																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------|--|--------|-------------------|---------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|-----|-----|-----|--|--|--|--|--|--|--|--|------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--
--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	----	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
				Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
				Work in South Sudan																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
																																																																																																																																																																																																																																																																																					</																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															

5. List of Study Tours in Japan and the Third Country

A. Study Tour in Japan

Study tours in Japan are summarized below.

(1) Training Period : 22nd November – 10th December 2011

Participants : Executive Class

No.	Name	Organization	Title (in charge)
1	Maurice Rehan Deng	MOT/RSS	Director General (Directorate of River Transport)
2	James Pal Reat	MOT/RSS	Director for Port Development (Directorate of River Transport)
3	Emmanuel Matayo Wani	MoPI/CES	Director General (Directorate of Housing and Construction)

(2) Training Period : 11th – 23rd November 2012

Participants : Executive Class

No.	Name	Organization	Title (in charge)
1	Abdu Silye Mustafa Lako	MOT/RSS	Director General (Directorate of River Transport)
2	Zubier Taban Zakayo Kazango	JRPA	Port Manager
3	Lino Schebesta Demba Kenyi	MoPI/CES	Director General (Directorate of Transport and Communication)

(3) Training Period : 11th – 23rd August 2014

Participants : Executive Class, Legal Advisor/Expert and Policy Planning Officer

No.	Name	Organization	Title (in charge)
1	Abdu Silye Mustafa Lako	MOTRB/RSS	Director General (Directorate of River Transport)
2	Goduang Diu Dhol	MOTRB/RSS	Head of Legal Advisor assigned to MOTRB (Ministry of Justice)
3	Morgan Yuggu Edward Lado	MOJ/RSS	Legal Advisor assigned to MOTRB (Ministry of Justice)
4	Kkok Manyok S Chol	MOTRB/RSS	Policy and Research Officer (Directorate of River Transport)
5	Mayen Albino Nyier Polic	MOJ/RSS	Legal Counsel (Directorate of Legislation, Ministry of Justice)
6	Ladu Samuel Taban Laki	MoPI/CES	Director for Construction (Directorate of Transport and Communication)

*The Project for Enhancement of Operations and Management Capacity of Inland Waterway
In the Republic of South Sudan
Completion Report
Appendix 5: List of Study Tours in Japan and the Third Country*

The schedule of each study tour in Japan is as follows.

(1) Schedule of the Study Tour in Japan (November to December 2011)

Date		Time	Contents	Lecturer / Attendant	Venue
22-Nov	Tue	15:15~16:50	South Sudan Juba → Kenya Nairobi	—	—
23-Nov	Wed	All day	Application for Japan entry visas in Nairobi	JICA	—
24-Nov	Thu	All day	Application for Japan entry visas in Nairobi	JICA	—
25-Nov	Fri	All day	Application for Japan entry visas in Nairobi, Nairobi(23:20)→Bangkok(13:00)	JICA	—
26-Nov	Sat	All day	Arrival at Bangkok(13:00), Bangkok(23:15)→Narita(Sun at 07:05)	—	-
27-Nov	Sun	All day	Arrival at Narita, Japan (ETA 07:05)	JICA	—
28-Nov	Mon	9:00~10:30	JICA Briefing	JICA, OCDI	Yokohama
		10:30~11:30	JICA Orientation	JICA, OCDI	Yokohama
		13:00~15:00	Moving (Yokohama→Tokyo)	JICA, OCDI	-
		15:00~15:30	Courtesy call to MLIT	MLIT	Tokyo
		16:00~16:30	Courtesy call to JICA	JICA	Tokyo
		17:00~17:30	Courtesy call to OCDI	OCDI	Tokyo
		17:30~19:30	Welcome Party at Tokyo	JICA, MLIT and OCDI	Tokyo
		19:30~21:00	Moving (Tokyo→Yokohama)	JICA, OCDI	-
29-Nov	Tue	9:00~10:00	Moving (Yokohama→Tokyo)	JICA, OCDI	—
		10:00~11:30	Lecture: Japan's ports and economic development	OCDI	OCDI
		13:00~14:30	Lecture: Outline of Japan's ports and port legislation	MLIT	OCDI
		15:00~16:30	Lecture: Trends of world ports and harbors	IAPH	OCDI
		16:30~18:00	Moving (Tokyo→Yokohama)	JICA, OCDI	—
30-Nov	Wed	10:00~13:50	Moving by train (ShinYokohama→Shin Osaka→Wakayama)	JICA, OCDI	-
		15:00~16:30	Field Study: Hinterland of Wakayama city	JICA, OCDI	Wakayama-Shimotsu port
1-Dec	Thu	9:00~10:00	Courtesy Call on Wakayama prefecture administration office	Port authority, JICA, OCDI	Wakayama-Shimotsu port
		10:00~11:00	Study: Rolls of port administrator of Wakayama-Shimotsu port Field Study: Wakayama-Shimotsu port	Port authority, JICA, OCDI	Wakayama-Shimotsu port
		11:00~12:00	Field Study: Wakayama-Shimotsu port (Mouth of Kino river)	Port authority, JICA, OCDI	Wakayama-Shimotsu port
		13:30~17:30	Field Study: Yuasa Port (including Tsunami breakerwater)	Yuasa Port, JICA, OCDI	Yuasa port
2-Dec	Fri	10:00~11:40	Moving by train (Wakayama→Kyoto)	JICA, OCDI	-
		14:00~16:30	Field Study: Example of river transport (Yodo river)	JICA, OCDI	Kyoto
3-Dec	Sat	9:00~12:00	Field Study: Example of river transport (Lake Biwa Canal inkline)	JICA, OCDI	Kyoto
		15:00~17:01	Moving by train (Kyoto→Yokohama)	JICA, OCDI	-
4-Dec	Sun	All day	Drafting of Action plan / Preparing of Questionnaire	—	PC room in YIC

*The Project for Enhancement of Operations and Management Capacity of Inland Waterway
In the Republic of South Sudan
Completion Report
Appendix 5: List of Study Tours in Japan and the Third Country*

Date		Time	Contents	Lecturer / Attendant	Venue
5-Dec	Mon	8:30-10:00	Moving (Yokohama->Tokyo)	OCDI	—
		13:00-14:30	Lecture: Port Statistics in the South Sudanese river ports	OCDI	OCDI at Tokyo
		15:00-16:30	Practice: Improvement of future legislation of South Sudanese ports - discussions for action plan	OCDI	OCDI at Tokyo
		16:30-18:00	Moving by train (Tokyo→Yokohama)	OCDI	-
6-Dec	Tue	10:00-10:30	Courtesy call to Yokohama port office	City of Yokohama – Port & Harbor Bureau, JICA, OCDI	Yokohama port
		10:30-12:00	Lecture: Planning & Process of Formulating Port Policies of Port of Yokohama, Port site seeing	City of Yokohama – Port & Harbor Bureau, JICA, OCDI	Yokohama port
		13:30-16:30	Field Study of Yokohama port	City of Yokohama – Port & Harbor Bureau, JICA, OCDI	Yokohama port
7-Dec	Wed	9:00-10:30	Moving (Yokohama->Kurihama)	JICA, OCDI	-
		11:00-12:00	Field Study: Yokosuka Port	OCDI	Yokosuka
		13:30-16:00	Study tour: Laboratory of Port and Airport research institute	PARI	Kurihama
		16:00-17:30	Moving by train (Kurihama→Yokohama)	JICA, OCDI	-
8-Dec	Thu	9:00-10:30	Moving (Yokohama->Tokyo)	JICA, OCDI	—
		10:30-11:30	Courtesy call to Tokyo port office	City of Tokyo – Port & Harbor Bureau, JICA, OCDI	Tokyo
		11:30-12:30	Lecture: Planning & Process of Formulating Port Policies of Port of Tokyo, Port site seeing	City of Tokyo – Port & Harbor Bureau, JICA, OCDI	Tokyo
		14:00-16:30	Field Study of Tokyo port	City of Tokyo – Port & Harbor Bureau, JICA, OCDI	Tokyo
		16:30-18:00	Moving by train (Tokyo→Yokohama)	JICA, OCDI	-
9-Dec	Fri	9:00-11:30	Final Report/ Evaluation and Presentation of action plan/ Completion ceremony	JICA and OCDI	JICA Yokohama
		12:00-13:30	Farewell lunch at Yokohama	JICA and OCDI	JICA Yokohama
		13:00-16:00	Moving (Yokohama → Narita)	JICA	—
		18:05-23:15	Japan/Narita JL707(ETD 18:05)→ Bangkok (23:15)	JICA	—
10-Dec	Sat	00:40-06:10	Bangkok(KQ887)→Nairobi	JICA	—
		07:45-09:20	Nairobi(0745)→Jubba(0920)	-	
Note: The abbreviations are indicated below.					
JICA:		Japan International Cooperation Agency			
MLIT:		Ministry of Land, Infrastructure, Transport & Tourism			
OCDI:		the Overseas Coastal Area Development Institute of Japan			
IAPH:		the International association of Ports & Harbors			
YIC:		JICA Yokohama Training Center			

*The Project for Enhancement of Operations and Management Capacity of Inland Waterway
In the Republic of South Sudan
Completion Report
Appendix 5: List of Study Tours in Japan and the Third Country*

(2) Schedule of the Study Tour in Japan (November 2012)

The Project for Enhancement of Operation and Management Capacity of Inland Waterway in South Sudan

Schedule (Draft)
as of 6th July, 2012

Schedule for Japan Study Tour

DURATION: 6/Nov. ~24/Nov., 2012 (*)

Revision 4

Date	Time	Contents	Lecturer / Attendant	Venue	Accommodation	Remarks
6-Nov	Tue	15:15~16:50	South Sudan Juba → Kenya Nairobi	—	Nairobi	KQ353
7-Nov	Wed	All day	Application for Japan entry visas in Nairobi	JICA	Nairobi	Japan Visa application at Nairobi
8-Nov	Thu	All day	Application for Japan entry visas in Nairobi	JICA	Nairobi	Japan Visa application at Nairobi
9-Nov	Fri	All day	Application for Japan entry visas in Nairobi, ETD Nairobi (23:20) → Bangkok (13:00)	JICA	In Airplane	Japan Visa application at Nairobi
10-Nov	Sat	All day	ETA Bangkok(13:00), ETD Bangkok(23:15) → Narita (Sun at 07:05 ETA)	—	In Airplane	Nairobi → Bangkok (Flight KQ860)
11-Nov	Sun	~07:05	Japan/ Narita arrival (ETA 07:05)	JICA	YIC	JICA Yokohama Tel. +81-(0)45-663-3251
12-Nov	Mon	9:30~10:30	JICA Briefing	JICA, OCIDI	Yokohama	YIC Brief explanation of the training contents and notices to be cared Explanation of study tour and distribution of questionnaire
		10:30~11:30	JICA Orientation	JICA, OCIDI	Yokohama	
		13:00~15:00	Moving (Yokohama→Tokyo)	JICA, OCIDI	-	
		15:00~15:30	Courtesy call to MLIT	MLIT	Tokyo	
		16:00~16:30	Courtesy call to JICA	JICA	Tokyo	
		17:00~17:30	Courtesy call to OCIDI	OCIDI	Tokyo	
13-Nov	Tue	17:30~19:30	Moving (Tokyo→Yokohama)	JICA, OCIDI	-	YIC
		9:00~10:00	Moving (Yokohama→Tokyo)	JICA, OCIDI	—	
		10:00~11:30	Lecture: Japan's ports and economic development	OCIDI	OCIDI	
		13:00~14:30	Lecture: Port Administration and Public Relations	OCIDI	OCIDI	
		15:00~16:30	Lecture: Maintenance of Port and Harbour facility	OCIDI	OCIDI	
		18:00~20:00	Welcome Party at Tokyo (18:00~20:00)	OCIDI	Kasumigaseki	
14-Nov	Wed	20:00~21:30	Moving (Tokyo→Yokohama)	JICA, OCIDI	—	YIC
		9:00~11:00	Moving (Yokohama→Tokyo)	JICA, OCIDI	—	
		11:00~11:30	Courtesy call to Tokyo port office	City of Tokyo - Port & Harbor Bureau, JICA, OCIDI	Tokyo	
		11:30~12:30	Lecture: Planning & Process of Formulating Port Policies of Port of Tokyo, Port site seeing	City of Tokyo - Port & Harbor Bureau, JICA, OCIDI	Tokyo	
		14:00~16:30	Field Study of Tokyo port	City of Tokyo - Port & Harbor Bureau, JICA, OCIDI	Tokyo	
		16:30~18:00	Moving by train (Tokyo→Yokohama)	JICA, OCIDI	-	
15-Nov	Thu	10:00~10:30	Courtesy call to Yokohama port office	City of Yokohama - Port & Harbor Bureau, JICA, OCIDI	Yokohama port	YIC
		10:30~12:00	Lecture: Planning & Process of Formulating Port Policies of Port of Yokohama, Port site seeing	City of Yokohama - Port & Harbor Bureau, JICA, OCIDI	Yokohama port	
		13:30~16:30	Field Study of Yokohama port	City of Yokohama - Port & Harbor Bureau, JICA, OCIDI	Yokohama port	
16-Nov	Fri	10:00~11:30	Lecture: Maintenance of Japanese Port Infrastructure	OCIDI	YIC	YIC
		13:00~13:30	Moving by bus (YIC→Yokohama Port)	OCIDI	Yokohama	
		13:30~16:00	Field Study: Maintenance of Yokohama Port Infrastructure	OCIDI	Yokohama	
		15:00~17:00	Moving by bus (YIC→Yokohama Port)	OCIDI	YIC	
17-Nov	Sat	All day	Drafting of Action plan / Preparing of Questionnaire	—	PC room in YIC	YIC
18-Nov	Sun	All day	Drafting of Action plan / Preparing of Questionnaire	—	PC room in YIC	YIC
19-Nov	Mon	All day	Moving by airplane (Yokohama→Fukuoka)	-	—	JICA Kyushu (Yahata)
20-Nov	Tue	9:30~10:00	Courtesy call to Fukuoka city port office	City of Fukuoka - Port & Harbor Bureau, JICA, OCIDI	Fukuoka port	-
		10:00~11:00	Lecture: Planning & Process of Formulating Port Policies of Port of Fukuoka	City of Fukuoka - Port & Harbor Bureau, JICA, OCIDI	Fukuoka port	-
		11:00~12:30	Field Study of Fukuoka port	City of Fukuoka - Port & Harbor Bureau, JICA, OCIDI	Fukuoka port	-
		All day	Moving by airplane (Fukuoka → Yokohama)	City of Fukuoka - Port & Harbor Bureau, JICA, OCIDI	Fukuoka port	YIC
21-Nov	Wed	8:30~10:00	Moving (Yokohama→Tokyo)	OCIDI	—	YIC
		10:00~11:30	Lecture: Application of Japan's port legislation to the South Sudanese ports	OCIDI	OCIDI at Tokyo	
		13:00~14:30	Lecture: Port Statistics in the South Sudanese river ports	OCIDI	OCIDI at Tokyo	
		15:00~16:30	Practice: Improvement of future legislation of South Sudanese ports - discussions for action plan	OCIDI	OCIDI at Tokyo	
		16:30~18:00	Moving by train (Tokyo→Yokohama)	OCIDI	-	
22-Nov	Thu	9:30~11:30	Presentation of Final Report	JICA, OCIDI	YIC	YIC
		13:00~16:30	Evaluation and Presentation of action plan/Completion ceremony	JICA, OCIDI	YIC	
23-Nov	Fri	13:00~16:00	Moving (Yokohama → Narita)	JICA	-	-
		18:05~23:15	Airport Narita JL707(ETD 18:05)→Bangkok (23:15)	JICA	—	Airplane JL707
24-Nov	Sat	00:40~06:10	Bangkok (KQ887 0040)→Nairobi (0610)	JICA	—	Nairobi KQ887
		07:45~09:20	Nairobi (0745) → Juba (0920)	—	—	Juba KQ350

(*) Note: This schedule shall be revised, when required. The abbreviations are indicated below.

JICA: Japan International Cooperation Agency
MLIT: Ministry of Land, Infrastructure, Transport & Tourism
OCIDI: Overseas Coastal Area Development Institute of Japan
YIC: JICA Yokohama Training Center

*The Project for Enhancement of Operations and Management Capacity of Inland Waterway
In the Republic of South Sudan
Completion Report
Appendix 5: List of Study Tours in Japan and the Third Country*

(3) Schedule of the Study Tour in Japan (August 2014)

date	time		course	lecturer or coordinator		Training room	Stay
				name	position		
8/11		~	Ariival at Narita(Japan)				JICA Tokyo
8/12	9:30	~ 11:30	Briefing by JICA			JICA Tokyo	JICA Tokyo
	11:30	~ 12:00	Programe briefing by OCDI	Akira Koyama	Advisor of OCDI	JICA Tokyo	
	14:00	~ 15:00	Courtesy call at JICA	Masanori Kawano	JICA	JICA HQ	
	16:00	~ 17:00	Courtesy call at Ministry of Land, Infrastructure and Transport(MLIT)		MLIT	MLIT	
	17:30	~ 19:30	Welcome ceremony		OCDI	Tokyo	
8/13	9:30	~ 12:00	Port law(1)	Takumaro Kimura	Chiba University	OCDI	JICA Tokyo
	13:30	~ 17:00	Port law(2)	Ichio Motono	OCDI	OCDI	
8/14	9:30	~ 12:00	International river transportation(1)	Megumi Suzuki	University of Fukushima	OCDI	JICA Tokyo
	13:30	~ 15:30	International river transportation(2)		Maritime Bureau, MLIT	OCDI	
	15:30	~ 17:00	International river transportation(3)	Ichio Motono	OCDI	OCDI	
8/15	9:30	~ 12:00	Port policy(1)	Akira Koyama	OCDI	OCDI	JICA Tokyo
	13:30	~ 17:00	Port policy(2)	Akira Koyama	OCDI	OCDI	
8/16		~	Drafting action plan				JICA Tokyo
		~	Drafting action plan				
8/17		~	Drafting action plan				JICA Tokyo
		~	Drafting action plan				
8/18	9:30	~ 12:00	Port law(3)	Ichio Motono	OCDI	OCDI	JICA Nagoya
	13:30	~ 14:30	Port law(4)	Ichio Motono	OCDI	OCDI	
	14:30	~ 17:30	Travel to Nagoya				
8/19	10:30	~ 12:00	Briefing on Nagoya port		Nagoya Port Authority	Nagoya Port	JICA Tokyo
	13:00	~ 16:00	Site survey		Nagoya Port Authority	Nagoya Port	
		~	Travel to Tokyo				
8/20	10:00	~ 12:00	Navigation control at Tokyo Bay		Tokyo Bay Vessel Traffic ServiceCenter, Coast Guard	Coast Guard	JICA Tokyo
	13:30	~ 16:00	Channel development at Tokyo Bay		Tokyo Bay Channel development Office, MLIT	MLIT	
8/21	9:30	~ 12:00	Port law(5)	Ichio Motono	OCDI	OCDI	JICA Tokyo
	13:00	~ 17:00	Site survey at Tokyo port				
8/22	10:00	~ 11:30	Presentation on Action plan, evaluation	Akira Koyama	OCDI	JICA Tokyo	JICA Tokyo
	11:30	~ 12:00	Closing	Masanori Kawano	JICA	JICA Tokyo	
8/23		~	Departure from Narita				
		~					

B. Study Tour in the Third Country

Study Tour in the third country are summarized below.

- (1) Training Period and Location : 24th October – 11th November 2011, Mombasa, Kenya

Participants : Manager Class

No.	Name	Organization	Title (in charge)
1	Zubier Taban Zakayo Kazango	JRPA	Port Manger
2	Ayuen Sammuel Anyieth	JRPA	Accounting and Clerk
3	Michael Mogga Wani	JRPA	Administrator
4	David Wani Sisto	JRPA	Storeman

- (2) Training Period and Location : 27th November – 3rd December 2011, Kosti, Sudan

Participants : Staff Class

No.	Name	Organization	Title (in charge)
1	Charles Juma Seyis	JRPA	Cargo Inspector
2	Santo Chock Ngor	JRPA	Diver Master
3	Moda Nelson	JRPA	Inspector
4	Chaplain Jansuk	JRPA	Accountant
5	James Wani Raphael	JRPA	Assistant Crane Operator
6	Iskandar Hassen Tombe	JRPA	Electrician
7	James Albino Juma	JRPA	Operation

- (3) Training Period and Location : 20th August – 8th September 2012, Mombasa, Kenya

Participants : Manager Class

No.	Name	Organization	Title (in charge)
1	John Jambu	JRPA	Deputy Port Manger
2	Charles Juma Seyis	JRPA	Cargo Inspector
3	Chaplain Jansuk	JRPA	Statistics
4	Bol Gordon	Malakal Port	Port Manager

- (4) Training Period and Location : 4th – 15th February 2013, Mombasa, Kenya

Participants : Staff Class

No.	Name	Organization	Title (in charge)
1	Kamal Award Farjalla	JRPA	Electrician
2	James Wani Rephael	JRPA	Assistant Crane Operator
3	James Albino Juma	JRPA	Operation
4	Nicolas Ramadan Elsapana	Malakal Port	Deputy Port Manager

- (5) Training Period and Location : 14th – 18th October 2013

Participants : Executive Class and Policy Planning Officer

No.	Name	Organization	Title (in charge)
1	Abudu Silye Mustafa Lako	MOT/RSS	Director General (Directorate of River Transport)
2	Kok Manyok S Chol	MOT/RSS	Policy and Research Officer (Directorate of River Transport)

*The Project for Enhancement of Operations and Management Capacity of Inland Waterway
In the Republic of South Sudan
Completion Report
Appendix 5: List of Study Tours in Japan and the Third Country*

3	Ladu Samuel Taban Laki	MoPI/CES	Director General (Directorate of Transport and Communication)
4	Zubier Taban Zakayo Kazango	JRPA	Port Manager

(6) Training Period and Location : 6th – 17th October 2014

Participants : Staff Class

No.	Name	Organization	Title (in charge)
1	Yugu Kamal Awad Frajalla	JRPA	Electrical Engineer (Maintenance Department)
2	Jidiona Joel Paulino Lado	JRPA	Crane & Generator Operator (Operation Department)
3	Chok Santo Chok Ngor	JRPA	Harbor Master (Harbor & Safety Control)
4	Daniel Kamal Emmanuel Laila	JRPA	Crane Operator (Cargo Handling)
5	Ladu William Wurda Daniel	JRPA	Crane Operator (Cargo Handling)
6	Legge James Wani Raphael	JRPA	Mechanic (Maintenance Department)
7	Iscandar Hassan Tombe	JRPA	Electrician (Maintenance Department)

*The Project for Enhancement of Operations and Management Capacity of Inland Waterway
In the Republic of South Sudan
Completion Report
Appendix 5: List of Study Tours in Japan and the Third Country*

Schedule of each study tour in the third country is as follows.

- (1) Schedule of the Study Tour in Mombasa, Kenya (October to November 2011)

WEEK 1 OF 3

TRAINING PROGRAMME JUBA RIVER PORT ADMINISTRATION STAFF 24TH OCTOBER TO 11TH NOVEMBER 2011							
DAY/DATE	0800 - 1000	1000 - 1030	1030 - 1200	1200 - 1400	1400 - 1500	1500 - 1530	1530 - 1700
MONDAY 24.10.2011	Registration/ Introduction Trainees' Expectations J. Nguma		Role of Sea Ports H. Lugho		Port legislation S. Kyandih		Port legislation S. Kyandih
TUESDAY 25.10.2011	Conventional cargo Operations M. Golicha		Conventional cargo Operations M. Golicha		Conventional cargo Operations M. Golicha		Conventional cargo Operations M. Golicha
WEDNESDAY 26.10.2011	Bulk Cargo Operations B. Mwajambia		Bulk Cargo Operations B. Mwajambia		Field Visit (Grain Bulk Handlers Ltd) A. Boto / B. Mwajambia		Field Visit (Grain Bulk Handlers Ltd) A. Boto / B. Mwajambia
THURSDAY 27.10.2011	Bulk Cargo Operations B. Mwajambia		Bulk Cargo Operations B. Mwajambia		Field Visit (Shimazi Oil Terminal) A. Boto/ B. Mwajambia		Field Visit (Shimazi Oil Terminal) A. Boto / B. Mwajambia
FRIDAY 28.10.2011	Organizational Structure A. Mutiso		Organizational Structure A. Mutiso		Port procedures/ Documentation E. Ngwatu		Port procedures/ Documentation E. Ngwatu

WEEK 2 OF 3

DAY/DATE	0800 - 1000	1000 - 1030	1030 - 1200	1200 - 1400	1400 - 1500	1500 - 1530	1530 - 1700
MONDAY 31.10.2011	Container Operations H. Lugho		Container Operations H. Lugho		Container Operations H. Lugho		Container Operations H. Lugho
TUESDAY 01.11.2011	Container Operations H. Lugho		Container Operations H. Lugho		Field Visit (Container Terminal) A. Boto /H. Lugho		Field Visit (Container Terminal) A. Boto /H. Lugho
WEDNESDAY 02.11.2011	Marine Operations Capt. Ali Abdile		Marine Operations Capt. Ali Abdile		Port Visit (Watch Tower) A. Boto Boto/ Capt. Ali Abdile		Visit (Watch Tower) A. Boto /Capt. Ali Abdile
THURSDAY 03.11.2011	Handling of hazardous cargo Mwazondo Amir		Handling of hazardous cargo Mwazondo Amir		Handling of hazardous cargo Mwazondo Amir		Handling of hazardous cargo Mwazondo Amir
FRIDAY 04.11.2011	Risk Management P. Mwaka		Risk Management P. Mwaka		Safety and Environment P. Mwaka		Safety and Environment P. Mwaka
SATURDAY 05.11.2011	Small Ports Visit (Mombasa - Malindi)		Small Ports Visit (Mombasa - Malindi)		Small Ports Visit (Mombasa - Malindi)		Small Ports Visit (Mombasa - Malindi)

*The Project for Enhancement of Operations and Management Capacity of Inland Waterway
In the Republic of South Sudan
Completion Report
Appendix 5: List of Study Tours in Japan and the Third Country*

WEEK 3 OF 3

DAY/DATE	0800 - 1000	1000 - 1030	1030 - 1200	1200 - 1400	1400 - 1500	1500 - 1530	1530 - 1700
MONDAY 07.11.2011	Port Equipment N. Nyamao		Port Equipment N. Nyamao		Port Technical Services N. Nyamao		Port Technical Services N. Nyamao
TUESDAY 08.11.2011	Equipment/ Infrastructure and maintenance Eng. B. Nuru		Equipment/ Infrastructure and maintenance Eng. B. Nuru		Port Visit (Terminal Engineering/Mechanical) A. Boto /N. Nyamao		Port Visit Terminal Engineering/Mechanical A. Boto /N. Nyamao
WEDNESDAY 09.11.2011	Port Tariff W. Abubakar		Port Tariff W. Abubakar		Field Visit (Old Port) A. Boto		Field Visit (Old Port) A. Boto
THURSDAY 10.11.2011	Port Statistics/Reports P. Odera		Port Statistics/Reports P. Odera		Wet Visit (KOT & English Point) A. Boto		Wet Visit (KOT & English Point) A. Boto
FRIDAY 11.11.2011	Security Management R. Mazerah		Security Management R. Mazerah		Security Management R. Mazerah		Evaluation including Presentation by Trainees

(2) Schedule of the Study Tour in Kosti, Sudan (November to December 2011)

	In the morning (0830-1200)	In the afternoon (1400-1700)
November 20	<ol style="list-style-type: none"> 1. Orientation 2. The history of the Nile river transportation 3. Site visit(customs monitor room, SSMO, loading department) 	<ol style="list-style-type: none"> 1. 1, Site visit (repair department, quay , rehabilitation department) 2. 2, Site visit(custom and chairperson at labor union interview) 3. 3, The history of the Nile river transportation
November 21	<ol style="list-style-type: none"> 1. Visit SRTC company and KEER company at Labak port 2. Visit Kosti new port and Dry port 	<ol style="list-style-type: none"> 1. Visit account department, supply department, general affairs department
November 22	<ol style="list-style-type: none"> 1. Port operation (business flow, required document, published by invoice procedure, fare and demurrage, budget) 2. Trainee understanding announcement 	<ol style="list-style-type: none"> 1. Port operation (the business experiences such as the published by documents office work in the on-site office, the warehouse import procedure) 2. Trainee understanding announcement
November 23	<ol style="list-style-type: none"> 1. Port operation (kind of the freight and assortment, communication with shipper / consignee, the insurance and the responsibility) 2. Trainee opinion announcement 	<ol style="list-style-type: none"> 1. Port operation (cargo handling, charge account, loading plan) 2. Site visit (barge) 3. Trainee opinion announcement
November 24	<ol style="list-style-type: none"> 1. Cargo handling (about function of the port, the crane and other apparatuses, a heavy industrial machine for containers) 2. Skill & the knowledge handbook 3. Trainee opinion announcement and debate 	<ol style="list-style-type: none"> 1. Cargo handling outdoors training (handling explanation and the driving training of the mobile crane and the top lifter)

*The Project for Enhancement of Operations and Management Capacity of Inland Waterway
In the Republic of South Sudan
Completion Report*

Appendix 5: List of Study Tours in Japan and the Third Country

November 25 Friday	Picnic to the park in the Kinana sugar mill	* The presentation of the report was demanded from a trainee later how you felt natural environments in a picnic
November 26	A holiday	
November 27	<ol style="list-style-type: none"> 1. Safety and security 2. Fire and fire extinguishing (lecture about the handling of the fire extinguisher) 	<ol style="list-style-type: none"> 1. Safety and security (about preservation in the port, general safety including the knowledge of the security) 2. Fire-fighting drill (oil firefighting drill) 3. Trainee opinion announcement and debate
November 28	<ol style="list-style-type: none"> 1. Assignment of shipping plan and ship docking plan 2. Indication and debate of problems of the Juba port by the trainee 	<ol style="list-style-type: none"> 1. Site visit (tugboat, oil tanker, floating crane, repairing ship in the floating dock) 2. 2, Trainee opinion announcement and debate
November 29	<ol style="list-style-type: none"> 1. Maintenance (the present conditions confirmation of the institution, periodic inspection and repair plan, repair at the time of the damage, maintenance plan, stock and the management of the spare part, budget of maintenance) 2. Trainee opinion announcement and debate 	<ol style="list-style-type: none"> 1. Maintenance (the maintenance check plan of the apparatuses such as top lifter, dynamo, crane, heavy industrial machine, spare part 2. 2, Trainee opinion announcement and debate
November 30	<ol style="list-style-type: none"> 1. Presentation preparations about the ambition 2. Tugboat embarkation experience 	<ol style="list-style-type: none"> 1. Presentation preparations (training contents review)
December 1	<ol style="list-style-type: none"> 1. Presentation by the trainee 2. Discussion toward the future 3. A closing ceremony 	

*The Project for Enhancement of Operations and Management Capacity of Inland Waterway
In the Republic of South Sudan
Completion Report
Appendix 5: List of Study Tours in Japan and the Third Country*

(3) Schedule of the Study Tour in Mombasa, Kenya (August 2012)

WEEK 1 OF 3

TRAINING PROGRAMME JUBA RIVER PORT ADMINISTRATION STAFF 20TH AUGUST 8TH SEPTEMBER 2012							
DAY/DATE	0800 - 1000	1000 - 1030	1030 - 1200	1200 - 1400	1400 - 1500	1500 - 1530	1530 - 1700
MONDAY 20.08.2012	Registration/ Introduction Trainees' Expectations J. Nguma		Role of Sea Ports H. Lugho		Port legislation S. Kyandih		Port legislation S. Kyandih
TUESDAY 21.08.2012	Conventional cargo Operations M. Golicha		Conventional cargo Operations M. Golicha		Conventional cargo Operations M. Golicha		Conventional cargo Operations M. Golicha
WEDNESDAY 22.08.2012	Bulk Cargo Operations B. Mwajambia		Bulk Cargo Operations B. Mwajambia		Field Visit (Grain Bulk Handlers Ltd) A. Boto / B. Mwajambia		Field Visit (Grain Bulk Handlers Ltd) A. Boto / B. Mwajambia
THURSDAY 23.08.2012	Bulk Cargo Operations B. Mwajambia		Bulk Cargo Operations B. Mwajambia		Field Visit (Shimazi Oil Terminal) A. Boto/ B. Mwajambia		Field Visit (Shimazi Oil Terminal) A. Boto / B. Mwajambia
FRIDAY 24.08.2012	Port Administration A. Mutiso		Port Administration Models B. Mwajambia		Port procedures/ Documentation E. Ngwatu		Port procedures/ Documentation E. Ngwatu
SATURDAY 25.08.2012	Container Operations H. Lugho		Container Operations H. Lugho		Container Operations H. Lugho		Container Operations H. Lugho

WEEK 2 OF 3

DAY/DATE	0800 - 1000	1000 - 1030	1030 - 1200	1200 - 1400	1400 - 1500	1500 - 1530	1530 - 1700
MONDAY 27.08.2012	Container Operations H. Lugho		Container Operations H. Lugho		Field Visit (Container Terminal) A. Boto /H. Lugho		Field Visit (Container Terminal) A. Boto /H. Lugho
TUESDAY 28.08.2012	Marine Operations Capt. Ali Abdile		Marine Operations Capt. Ali Abdile		Port Visit (Watch Tower) A. Boto/ Capt. Ali Abdile		Visit (Watch Tower) A. Boto /Capt. Ali Abdile
WEDNESDAY 29.08.2012	Handling of hazardous cargo Mwazondo Amir		Handling of hazardous cargo Mwazondo Amir		Handling of hazardous cargo Mwazondo Amir		Handling of hazardous cargo Mwazondo Amir
THURSDAY 30.08.2012	Risk Management P. Mwaka		Risk Management P. Mwaka		Safety and Environment P. Mwaka		Safety and Environment P. Mwaka
FRIDAY 31.08.2012	Port Equipment N. Nyamao		Port Equipment N. Nyamao		Port Technical Services N. Nyamao		Port Technical Services N. Nyamao

*The Project for Enhancement of Operations and Management Capacity of Inland Waterway
In the Republic of South Sudan
Completion Report
Appendix 5: List of Study Tours in Japan and the Third Country*

SATURDAY 01.09.2012	Small Ports Visit (Mombasa - Malindi)		Small Ports Visit (Mombasa - Malindi)		Small Ports Visit (Mombasa - Malindi)		Small Ports Visit (Mombasa - Malindi)
--------------------------------------	--	--	--	--	--	--	--

WEEK 3 OF 3

DAY/DATE	0800 - 1000	1000 - 1030	1030 - 1200	1200 - 1400	1400 - 1500	1500 - 1530	1530 - 1700
MONDAY 03.09.2012	Equipment/ Infrastructure and maintenance Eng. B. Nuru		Equipment/ Infrastructure and maintenance Eng. B. Nuru		Port Visit (Terminal Engineering/Mechanical) A. Boto /N. Nyamao		Port Visit (Terminal Engineering/Mechanical) A. Boto /N. Nyamao
TUESDAY 04.09.2012	Port Tariff W. Abubakar		Port Tariff W. Abubakar		Field Visit (Old Port) A. Boto		Field Visit (Old Port) A. Boto
WEDNESDAY 05.09.2012	Port Statistics/Reports P. Odera		Port Statistics/Reports P. Odera		Port Statistics/Reports P. Odera		Port Statistics/Reports P. Odera
THURSDAY 06.09.2012	Security Management R. Mazerah		Security Management R. Mazerah		Security Management R. Mazerah		Evaluation including Presentation by Trainees
FRIDAY 07.09.2012	VISIT TO INLAND CONTAINER DEPOTS (NRB). Benefits of ICDS		VISIT TO INLAND CONTAINER DEPOTS (NRB). ICD Layout & services		VISIT TO INLAND CONTAINER DEPOTS (NRB). Documentation at ICDS		VISIT TO INLAND CONTAINER DEPOTS (NRB). Labour & equipment allocation at ICDS
SATURDAY	PARTICIPANTS DEPART FOR JUBA						

*The Project for Enhancement of Operations and Management Capacity of Inland Waterway
In the Republic of South Sudan
Completion Report
Appendix 5: List of Study Tours in Japan and the Third Country*

(4) Schedule of the Study Tour in Mombasa, Kenya (February 2013)

WEEK 1 OF 2					
TRAINING PROGRAMME					
BASIC PORT MANAGEMENT for SENIOR MANAGERS					
From 4 th February 2013 to 15 th February 2013					
DAY/ DATE	0800 - 1000	1030 - 1200	1200 - 1300	1400 - 1500	1530 - 1700
MON 4/2/13	Registration/ Introduction Trainees' Expectations	Role of Sea Ports		Equipment/ infrastructure & maintenance	Equipment/ infrastructure & maintenance
TUE 5/2/13	Visit Forklift and mobile crane section			Visit Forklift and mobile crane section	
WED 6/2/13	Organizational Structure	Port Administration Models		Port procedures/ Documentation	Port procedures/ Documentation
THURS 7/2/13	Visit Terminal Engineering (Terminal Tractors and Toploaders section)			Visit Terminal Engineering (Terminal Tractors and Toploaders section)	
FRI 8/2/13	Port Statistics / Report	Port Statistics / Reports		Port Tariff	Port Tariff
SAT 9/2/13	Small Ports Visit (Mombasa - Malindi)				
WEEK 2 OF 2					
DAY/ DATE	0800 - 1000	1030-1200	1200 - 1300	1400 - 1500	1530 - 1700
MONDAY 11.2.13	Risk Management	Risk Management		Safety and Environment	Safety and Envrincment
TUES 12.2.13	Visit Terminal Operations(ship to shore gantries section)			Visit Terminal Operations(ship to shore gantries section)	
WED 13.2.13	Security Management	Security Management		Marine Operations	Marine Operations
THURS 14.2.13	Visit Civil Engineering	Visit Civil Engineering		Visit Civil Engineering	Visit Civil Engineering
FRIDAY 15.2.13	Handling of hazardous cargo	Handling of hazardous cargo		Course Evaluation	Closing Ceremony
SAT 16.2.13	Participants Depart for Juba.				

(5) Schedule of the Study Tour in Cambodia (October 2013)

Date	Time	Venue and Contents	Remarks
Mon. 14 Oct.	9:00-14:00	Courtesy Call at PPAP HE. Hay Bavy CEO ➤ Explanation of Background and History of PPAP Establishment ➤ Site Visit of PP Port & New Port	PPAP: Phnom Penh Autonomous Port
Mon, 14 Oct.	16:00-17:00	Courtesy Call at JICA Cambodia Mr. Ito SR. of Office ➤ Outline of the port projects by JICA	
Tue, 15 Oct	All Day	Site visit of Kongpong Chhnnang Port Area	
Wed, 16 Oct.	8:00-13:00	Site Visit of Neak Leoung Bridge and Ferry Port	
Wed, 16 Oct.	14:30-16:00	Workshop on Inland Waterways & Port Policy in General Department of Transport (GDT)	

*The Project for Enhancement of Operations and Management Capacity of Inland Waterway
In the Republic of South Sudan
Completion Report
Appendix 5: List of Study Tours in Japan and the Third Country*

		<ul style="list-style-type: none"> ➤ Inland Transportation; H.E. Sokhom Vireakphal ➤ Port Policy; Mr. Mak Sideth ➤ Transportation in Cambodia; Mr. Shimada 	
Thu. 17 Oct.	9:00-10:30	Courtesy Call at CDC H.E. Heng Sokun <ul style="list-style-type: none"> ➤ Rebuilding process of the nation and contribution of infrastructures to economic growth 	CDC: Council for the Development of Cambodia
Thu. 17 Oct	11:00-12:30	Attend the Port Policy Seminar	
Thu. 17 Oct	13:30-15:00	Courtesy Call at MRC Mr. Soursay Phoumavong & Mr. Ton Nu Thi Thanh Yen <ul style="list-style-type: none"> ➤ Outline of Mekong river agreement and present issues MRC is working on 	MRC: Mekong River Commission
Fri. 18 Oct	8:00-12:30	Move to SHV	
Fri. 18 Oct	13:30-16:00	Courtesy Call at PAS H.E. Lou Kim CHHUN <ul style="list-style-type: none"> ➤ Characteristics of ocean international port and issues on port management ➤ Site Visit of SHV Port 	PAS: Sihanoukville Autonomous Port

(6) Schedule of the Study Tour in Mombasa, Kenya (October 2014)

Week 1 of 2

DAY/DATE	0800 – 1000	1000 – 1030	1030 – 1230	12.30 - 1400	1400 - 1500	1500 - 1530	1530 - 1700
Monday 06.10.2014	Registration/ introduction, trainee’s expectations Nyamao/Mbalanya	TB	Introduction to the Port of Msa, Bandari College. E. Mbalanya	L	Lecture : Outline of Craft & Forklift Nyamao	TB	Lecture: Cargo Handling & Safety Kimura
Tuesday 07.10.2014	Repair of the Crane and Forklift Nyamao	TB	Maintenance of the Crane and Forklift Nyamao	L	Best Practices Nyamao		
Wednesday 08.10.2014	Operation of cargo handling equipment. Nyamao			L	Cargo terminal tour. Nyamao		
Thursday 09.10.2014	Cargo handling operations using crane. Nyamao			L	Laws and regulations of safety in cargo handling. J. Libanze		
Friday 10.10.2014	Cargo handling operations using forklift. Nyamao			L	Cargo handling operations using forklift. Nyamao		
Saturday 11.10.2014	Small ports visit (Mombasa – Malindi)						

*The Project for Enhancement of Operations and Management Capacity of Inland Waterway
In the Republic of South Sudan
Completion Report
Appendix 5: List of Study Tours in Japan and the Third Country*

Week 2 of 2

DAY/DATE	0800 – 1000	1000 – 1030	1030 – 1230	12.30 - 1400	1400 - 1500	1500 - 1530	1530 - 1700
Monday 13.10.2014	Inspection of Cargo Handling Equipment. J. Libanze			L	Repair & replacement of parts of Cargo Handling Equipment. Nyamao		
Tuesday 14.10.2014	Tour of Container Terminal construction site Nguma/Nyamao		Repairs & maintenance of Civil Works Hasebe	L	Repair, trouble shooting Hydraulics, Schematic drawings & replacement of parts of Cargo Handling Equipment. Nyamao		
Wednesday 15.10.2014	Outline and Repair Method for Asphalt Otiu			L	Repair of Asphalt pavement Otiu		
Thursday 16.10.2014	Outline and Repair Method for interlocking. Tenay/Nyaga			L	Outline and Repair Method for interlocking. Tenay/Nyaga		
Friday 17.10.2014	Maintenance of civil structure (Concrete & Steel) Nyobange			L	Course Evaluation/ Closing ceremony.		
Saturday 18.10.2014	Depart for Juba						
	Course Coordinator- Abdalla Boto Training Officer –Joseph T Nguma						

6. List of Provided Equipment and Portable Equipment

Provided Equipment and Portable Equipment

(1) Training for Infrastructure maintenance

Maintenance training for existing jetty and crane

Item	Quantity
Fender (Type D 25×30×1.8, brand new)	2 nos
Deck Panel (0.2×1m×2m, used)	2 nos
Remote controller for crane	1 set

Survey training

Item	Quantity
Total Station	1 set
Automatic Level	1 set
Measuring Tape	1 set
Sounding Lead (for depth measurement)	1 set

(2) Water Level Measurement

Installation of water level gauge at the existing jetty

Item	Quantity
Installation of water level gauge	1 set
Life jacket	5 nos

(3) Practical training for security and safety management

Training	Equipment / Material	Quantity	Remarks
Port Security Training (carried out 2 times)	Airtime for mobile phones	20 nos	10 nos x 2 times (10SSP/no) for communication
Firefighting / fire protection training (carried out 1 time)	Training Fee by CES Fire Department HQ	1 LS (for 10 people)	Fire Engine x 1 Firefighter x 10
	Fire extinguishers	3 nos	
	Airtime for mobile phones	10 nos	10 nos (10SSP/no) for communication

*The Project for Enhancement of Operations and Management Capacity of Inland Waterway
In the Republic of South Sudan
Completion Report
Appendix 6: Provided Equipment and Portable Equipment*

Training	Equipment / Material	Quantity	Remarks
Oil Spill Training (carried out 2times)	Oil absorbing Mattress	200 nos	
	Labor for miscellaneous works	10 man.day	10 man.day x 1 time

(4) Training for acquiring computer skills

The following lap top computers used for PC training were handed over to the counterpart organization.

No.	Item	Type • S/N
1	Laptop PC	Dell Inspiron N5110 S/N:2QQPNR1C/P
2	Laptop PC	Dell Inspiron N5510 S/N: HPQPNR1C/P
3	Laptop PC	Dell Inspiron N5040 S/N: 59T6RR1
4	Laptop PC	Compaq Presario CQ58
5	Laptop PC	HP 620

(5) The following survey equipment was brought to JICA South Sudan Office or stored at the port office for further technical assistance program.

No.	Item	Store Location
1	Automatic Level SOKKIA B40 S/N:156939	JICA South Sudan Office
2	Tripod for Auto Level	Port Office
3	Stuff	Port Office
4	Total Station Leica Builder 505 Equip. No. 4625197 Art. No. 772726 S/N: 913891	JICA South Sudan Office
5	Tripod for Total Station	Port Office
6	Sounding Lead	Port Office
7	Measuring Tape	Port Office
8	Life Jacket x 5	Port Office

7. Minutes of Meeting

(1) 1st JCC (4th May 2011)

Record of Meeting (1st Joint Coordination Committee(JCC) for “The Project for Enhancement of Operation and Management Capacity of Inland Waterway in South Sudan”(the Project))

The 1st JCC meeting was held on the 4th May, at the Undersecretary meeting room, Ministry of Transport and Roads(MTR), GOSS, with the attendance of 22 members (attendance members: Attachment1) . The meeting was chaired by Eng. Mauriee Rehan, the Director General of River Transport, MTR, GOSS.

At the beginning of the meeting, the chairman expressed appreciation to JCC members and expectation to the Project, followed by explanation by JICA South Sudan Field Office about the principles of JICA’s Technical Cooperation.

As the first agenda, JICA expert team explained Workplan and PDM(Project Design Matrix) of the Project . The JCC members approved Workplan and PDM(Project Design Matrix) , after giving some comments.

Then, the progress of the Project (establishment of Task Force) was reported and comments were exchanged among the members on study tours. JCC members expressed their expectation to study tours for effective capacity enhancement and intention for providing necessary support in the implementation of the study tours.

All JCC members expressed their intention for continuous support and cooperation on the Project.

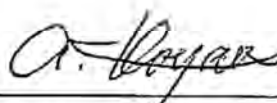
Date: _____

Date: _____

04/05/2011


04-05-2011

Eng. Mauriee Rehan (Chairman of JCC)
Director General for River Transport
Ministry of Transport and Roads
GOSS



Akira KOYAMA
JICA Expert Team (Leader/
Port Policy)

Attendant List of the 1st JCC

	Name	Office	Position
1	Eng. Mauriee Rehan	River Transport, MTR	Director General
2	Mr. Gabuel Makur Amuor	Roads and Bridges, MTR	Director General
3	Mr. Luka Nyakero	River Transport, MTR	Director for River Administration
4	Mr. James Reat	River Transport, MTR	Director for Port Development
5	Mr. Zubeir T. Zakayo	JRPA	JRPA Manager
6	Eng. Lino Schebesta D. Kenyi	Communication & Transport, CES	Director General
7	Mr. Chnstrphr Lokuri	Commerce & Supply, CES	D/Director
8	Eng. James Adam Boy	Ministry of Water Resources & Irrigation	Director General, Hydrology and Project
9	Mr. Pohino Choty	Ministry of Regional Cooperation	Assistant Director
10	Mr. Lewis Sore Gore George	MoPI, CES	1 st Director General
11	Emmanuel Matayo	MoPI, CES	Director General, Housing
12	Jacob D. Djadoke	NRTC	Chairman of E.O.S.C
13	Yasuhiko Wada	JICA Office	Deputy Resident Representative
14	Makiko Kimura	JICA Office	Project Formulation Advisor
15	Akira Koyama	JICA Team	Team Leader
16	Motohisa Abe	JICA Team	Assistant Team Leader
17	Masakazu Okuno	JICA Team	Port Management
17	Masahiko Tanaka	JICA Team	Accounting System / Statistics
19	Tokio Ueno	JICA Team	Safety Management
20	Fuminori Imanaka	JICA Team	Facility Maintenance (Infrastructure)
21	Kiyoshi Mukai	JICA Team	Facility Maintenance (Equipment)
22	Tatsuo Kawabata	JICA Team	Project Administration

(2) 2nd JCC (15th February 2012)

Record of Meeting (2nd Joint Coordination Committee (JCC) for “The Project for Enhancement of Operation and Management Capacity of Inland Waterway in South Sudan” (the Project))

The 2nd JCC meeting was held on 15th February 2012, at the conference room of Juba Grand Hotel, with the attendance of 14 members (The attendance list is attached as Attachment 1). The meeting was chaired by Captain David Martin Hassan, Undersecretary of Ministry of Transport, Republic of South Sudan.

At the beginning of the meeting, the chairman expressed appreciation to JCC members and invited Mr. Wada, Deputy Representative at JICA South Sudan Office, who made an opening remark.

As the first agenda, JICA expert team explained the outline of the Project and the progress achieved in the 1st Phase.

Then, the challenges and issues for improvements which were found during the 1st Phase were explained both by JICA expert team and the South Sudanese side as follows;

- 1) Strengthen of JCC members,
- 2) Arrangement of staff in JRPA and working environment,
- 3) Strengthening of TF1 members,
- 4) Organization of a system for the establishment of new law/act,
- 5) Provision of information of the major ports in South Sudan, and
- 6) Provision and disclosure of information.

South Sudanese and Japanese side mutually agreed on their efforts for the improvements. Regarding the item 1), Undersecretary expressed his intention to become a regular member of the JCC.

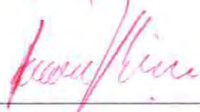
During the meeting, both side actively participated in discussion which are summarized as follows.

- ✓ Regarding study tours, South Sudanese side requested improvements such as longer period of the tours or more specialized curriculum by considering trainees' expertise or assigned job at JRPA. Japanese side proposed further discussion among both sides by taking into account various factors such as budget constraint, and both side agreed on this.

- ✓ South Sudanese side requested support by the Japanese side in the establishment of River Transport Bill. Japanese side commented that although the JICA Expert made a draft items for new act only on river ports, there is a possibility of cooperation. Japanese side proposed further discussion among both sides regarding the detail of cooperation which was accepted by the South Sudanese side.
- ✓ South Sudanese side requested provision of information regarding the expansion project in Juba port, because this is a good opportunity for them to learn about actual development of a port. Japanese side commented that they will make an effort for this.

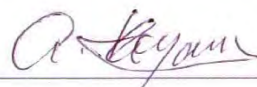
Finally, all JCC members expressed their intention of continuous involvement and cooperation to the Project.

Date: 26/02/2012



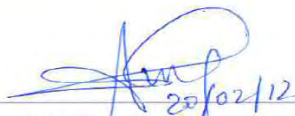
Captain David Martin Hassan
Undersecretary of Ministry of
Transport, Republic of South Sudan

Date: 20 Feb. 2012



Akira KOYAMA
JICA Expert Team (Leader/Port Policy)

Date: _____



Abdu SILYE
Director General for River Transport,
Ministry of Transport, Republic of
South Sudan

Date: 20th/02/2012



John JAMBU
Deputy Manager,
Juba River Port Administration

Attendance List of the 2nd JCC

	NAME	ORGANIZATION	POSITION
1	Mr. David Martin Hassan	MOT	Undersecretary
2	Mr. Abdu Silye	MOT	D/G River Transport
3	Mr. Manyok Simon	MOT	Policy and Research
4	Mr. Zubeir Taban	JRPA	Port Manager
5	Mr. John Jambu	JRPA	Dep. Port manager
6	Mr. Eng. James Adam Boy	MWRI	D/G Hydrology
7	Mr. Yasuhiko Wada	JICA	Dep. Representative
8	Ms. Makiko Kimura	JICA	Project Formulation Advisor
9	Mr. Ryo Ishikawa	Embassy of Japan	Second Secretary
10	Mr. Akira Koyama	JICA Team	Team Leader / Port Policy
11	Mr. Motohisa Abe	JICA Team	Assistant Leader / Port Administration
12	Mr. Masakazu Okuno	JICA Team	Port Management
13	Mr. Kensuke Tsujino	JICA Team	Port Operation (1)
14	Mr. Eiji Hasabe	JICA Team	Port Safety Management (2)

(3) 3rd JCC (15th June 2012)

Record of Meeting (3rd Joint Coordination Committee (JCC) for “The Project for Enhancement of Operation and Management Capacity of Inland Waterway in the Republic of South Sudan” (the Project))

The 3rd JCC meeting was held on 15th June 2012, at the conference room of Juba Grand Hotel, with the attendance of 14 members (The attendance list is attached as Attachment 1). The meeting was chaired by Eng. Maurice Rehan, Director General of Ministry of Transport (Acting Undersecretary for the 3rd JCC), the Republic of South Sudan.

At the beginning of the meeting, the chairman expressed a short opening remark with the objective of the meeting, that is, to discuss and have an approval on the Work Plan which specifies capacity building methods for the 2nd phase of the Project.

Then, the following six issues were discussed regarding the Work Plan,

- 1) Project Target/Activities,
- 2) Method of Technical Cooperation including OJT (On the Job Training) Based Capacity Building,
- 3) Study Tours,
- 4) Implementation System including Reorganization of TFs (Task Forces),
- 5) Improvement for the 2nd phase of the project,
- and,
- 6) Necessary Arrangements.

During the meeting, both side actively participated in discussion which are summarized as follows.

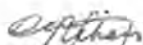
- ✓ South Sudanese side expressed expectations on capacity building at other major ports than Juba port. Japanese side explained that capacity building activities for the staff of Malakal port are planned and an actual condition of the port such as the number of operational port staff will be considered at the time of conducting the capacity building activities.
- ✓ South Sudanese side requested a support for their “port magazine” which is to make the river ports and related activities known to the public. Japanese side expressed their intention to cooperate in the field of public relations.
- ✓ South Sudanese side indicated significance to work with other Ministries in the field of regulatory framework, in particular with the Ministry of Water Resource

and Irrigation. The delegation from the Ministry expressed their intention to support the Project.

- ✓ South Sudanese side pointed out that an on-the-job training activity using survey instruments is very effective; however, it takes time to acquire such technique. Japanese side replied that an expert in charge of facility maintenance is assigned who is able to dedicate to the technical transfer activity, and that another expert is also able to support such activity continuously.
- ✓ JICA official emphasized the necessity of further efforts in the 2nd phase². In particular three issues were mentioned; appropriate assignment of staff to the Task Forces, appropriate utilization and maintenance of the resources provided during the 2nd phase², such as laptops or survey instruments, and significance of public relations in order to gain visibility of the Project to the public.

Finally, all JCC members agreed that the Work Plan was approved, and expressed their intention for further active commitment to the Project.

Date: 19-06-2012




Maurice REHAN
Director General for Road Safety,
Ministry of Transport,
Republic of South Sudan
(Acting Undersecretary for the 3rd JCC)

Date: 19/June/2012



Akira KOYAMA
JICA Expert Team (Leader/Port Policy)

Date: 19/06/12



Abdu SILYE
Director General for River Transport,
Ministry of Transport,
Republic of South Sudan

Date: 19/6/2012



Emmanuel Matayo Wani
1st Director General,
Ministry of Physical Infrastructure,
Central Equatoria State,
Republic of South Sudan

Attendant List of the 3rd JCC

	NAME	OFFICE / POSITION
1	Eng. Maurice Rehan	Acting Undersecretary, MoT/RoSS
2	Abdu Silye	DG for River Transport, MoT/RoSS
3	Emmanuel Matayo	1st DG, MoPI/CES
4	Manyok S, Chol	Policy Analysis, MoT/RoSS
5	Marcel Raimo	Department of Land & Transport, MoPI/CES
6	Zubeir Taban	JRPA
7	John Jambu	JRPA
8	John Paguir	Ministry of Finance and Economic Planning, RoSS
9	Simon Otoung	Ministry of Water Resource and Irrigation, RoSS
10	Yasuo Iwata	Embassy Of Japan
11	Makiko Kimura	JICA South Sudan Office
12	Akira Koyama	JICA Team
13	Motohisa Abe	JICA Team
14	Eiji Hasebe	JICA Team

(4) 4th JCC (12th February 2013)

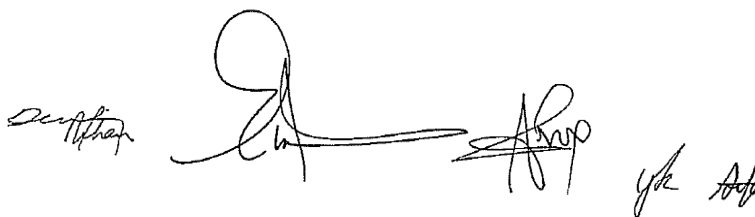
**MINUTES OF MEETINGS
BETWEEN
THE JAPANESE MID-TERM REVIEW TEAM
AND
AUTHORITIES CONCERNED OF THE REPUBLIC OF SOUTH SUDAN
ON
JAPANESE TECHNICAL COOPERATION
THE PROJECT FOR ENHANCEMENT OF OPERATION AND
MANAGEMENT CAPACITY OF INLAND WATERWAY IN SOUTH SUDAN**

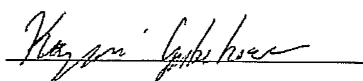
The Japanese Mid-Term Review Team (hereinafter referred to as "the Team"), organized by the Japan International Cooperation Agency (hereinafter referred to as "JICA") and headed by Mr. Yukihiro KOIZUMI, visited the Republic of South Sudan (hereinafter referred to as "RSS") from 29th January to 13th February 2013, for the purpose of the mid-term review of the Project for Enhancement of Operation and Management Capacity of Inland Waterway in South Sudan (hereinafter referred to as "the Project").

During its stay in the RSS, the Team reviewed the progress and achievement of the Project and had a series of discussions pertinent to the project implementation to include 4th Joint Coordinating Committee (hereinafter referred to as "JCC") with the authorities concerned with the Project.


As a result of the discussions, the Team and South Sudan authorities concerned agreed to report to their respective Governments the matters referred in the document attached hereto.

Juba, 12th February, 2013

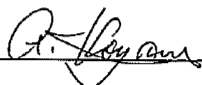




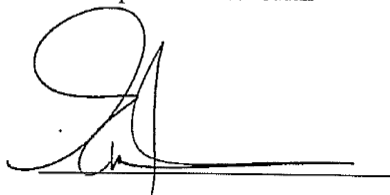
Eng Yukihiro KOIZUMI
Leader
Japanese Mid-Term Review Team
Japan International Cooperation Agency



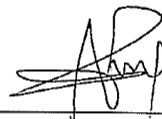
Eng Maurice Rehan DENG
Acting Undersecretary,
Ministry of Transport,
The Republic of South Sudan



Eng Akira KOYAMA
JICA Expert Team (Leader/Port Policy)



Eng Emmanuel Matayo WANI
1st Director General,
Ministry of Physical Infrastructure,
Central Equatoria State
The Republic of South Sudan



Eng Abdu SILYE
Director General for River Transport,
Ministry of Transport,
The Republic of South Sudan

THE ATTACHED DOCUMENT

1. Mid-Term Review of the Project

Through data collection, interview and discussion related to the Project, Joint Mid-Term Review Report was compiled as attachment 1.

Both sides examined and accepted the report.

2. Revision of Project Design Matrix (PDM)

The Team recommended the revision of current version of PDM (version 1) in the Joint Mid-Term Review Report for more efficient implementation of the Project. As a result of discussions at JCC, JCC accepted the revised PDM as attachment 2.

Furthermore, the Team also pointed out that it would be hard to measure indicators of the Project Purpose and the Overall Goal at the termination of the Project.

Both sides understood that these indicators should be modified and also agreed that the revision of these indicators would be conducted in about six months.

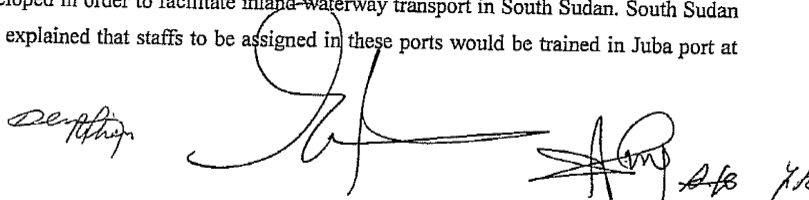
3. Revision of Plan of Operation (PO) in accordance with the schedule of the Japanese Grant Aid Project

The Team highly recommended the revision of PO in Joint Mid-Term Review Report in accordance with the Japanese Grant Aid Project, named "The Project for Improvement of Juba River Port" (hereinafter referred to as "the Grant Aid Project"), as a conclusion of the E/N at 17th Jan 2013, for more efficient implementation of the Project. In the latter half of the 2nd phase of the Project, berth allocation for arriving vessels, the method of cargo handling, port entry procedure and effective technical transfer activities would be considered and coordinated with the Grant Aid Project.

As a result of discussions at JCC, JCC accepted the revised PO as attachment 3.

4. Conducting technical transfer to other targeted six ports

Both sides recognized that the capacity of other ports except Juba port would be developed in order to facilitate inland-waterway transport in South Sudan. South Sudan side explained that staffs to be assigned in these ports would be trained in Juba port at



first and then, would be dispatched to these ports. The Team expressed that the expert team would support staffs to be assigned to these ports through capacity building at Juba port.

5. Improvement of the work environment

The Team pointed out that the appropriate work environment is required for efficient and sustainable implementation of the Project. South Sudan side expressed that CES has already allocated SSP 60,000 in FY 2012/13 for the improvement of work environment. The Team requested full implementation of the allocated budget, and securing necessary budget in FY 2013/14.

6. Practical implementation of the port management system installed by the Project

The Team confirmed that the capacity of the JRPA (hereinafter referred to as "JRPA") staff who participated in on-the-job training and other activities has gradually been strengthened. On the other hand, the practical implementation and continuous maintenance of the port management system installed by the Project has been partly conducted by JRPA initiative because of the various hindrances, such as poor work environment, an unexpected budgetary deficit, lack of related acts, etc. The Team requested the expert team to promote and support JRPA to draw its own initiative.

7. Other relevant issues

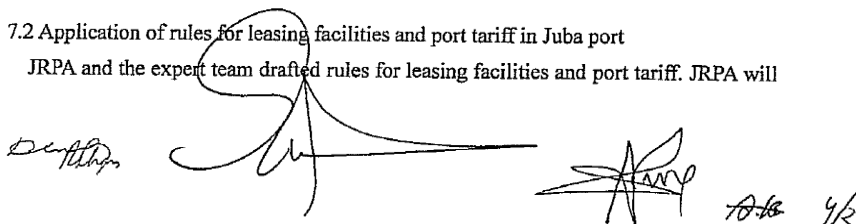
7.1 Arrangement of staff in JRPA and securing management cost

JRPA and the expert team drafted the organization strengthening plan of JRPA, which was prepared by Activity 1-5, including future organization structure and staff positions after the completion of the Grant Aid Project. It is necessary that appropriate staff members according to the plan are secured in a timely manner.

Regarding the management cost, South Sudan side expressed that Ministry of Transport (hereinafter referred to as "MOT") has requested "the sharing of port revenue collection with Ministry of Finance and Economic Planning" so that JRPA could acquire sustainable fund from the port revenue.

7.2 Application of rules for leasing facilities and port tariff in Juba port

JRPA and the expert team drafted rules for leasing facilities and port tariff. JRPA will

The block contains several handwritten signatures and initials. From left to right, there is a signature that appears to be 'D. Smith', a large stylized signature, another signature, and the initials 'AK' and 'YK'.

examine the draft and apply these on actual port operation in consultation with stakeholders, and see if this works well or not. The expert team will monitor the process. These exercises are significantly important actions.

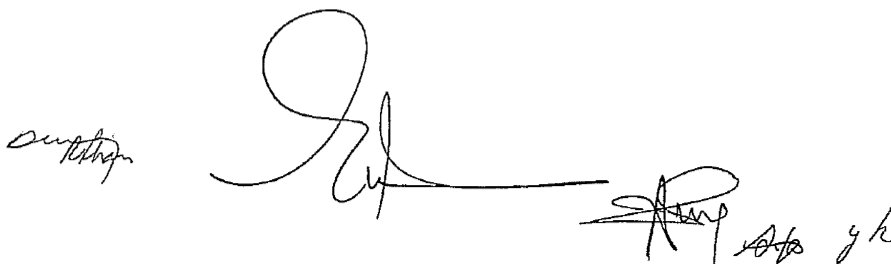
7.3 Provision of financial data of Juba port

A budget and accounting system which can be function in JRPA is under examination. The financial data of Juba port and relevant organization are necessary for conducting the Project activities. The expert team requested South Sudan side to disclose the data relating revenue from the port. South Sudan side agreed to share the data as necessary.

7.4 Provision of information of the major ports and the Nile River in South Sudan, and introduction of information on international inland waterway

The expert team has conducted on-site visits at three ports: Juba, Malakal, and Mangalla. For other ports and navigation conditions along the Nile River, the expert team faced a difficulty in accessing information due to tight security measures. The expert team requested support by MOT/RSS or state governments in obtaining information. South Sudan side agreed provision of the information as much as possible.

On the other hand, South Sudan side requested the expert team to introduce outline of international inland waterway. The expert team agreed to offer the information.



Attendant List of the 4th JCC

No.	NAME	OFFICE / POSITION	Remarks
1	Eng. Maurice Rehan	Ag/Undersecretary	
2	Abdu Silye	MoT, DRT	
3	Emmanuel Mattayo	MoPI, 1 st DG	
4	Lewis Core George	MoPI, Advisor	
5	Lino Schebastia D. Kenyi	Director General	
6	Yukihiro Koizumi	JICA Mid-term Evaluation Mission Leader	
7	Tomoki Kobayashi	JICA South Sudan Office	
8	Zubeir Taban	JRPA, Port Manager	
9	Emmanuel Eli	JRPA, Deputy Port Manager	
10	John Jambu	JRPA, Deputy Port Manager	
11	Masanori Kawano	JICA Mid-term Evaluation Mission	
12	Chiaki Yamada	JICA Mid-term Evaluation Mission	
13	Makiko Kimura	JICA South Sudan Office	
14	Manyok S. Chol	DRT, Policy and Research	
15	Simon Otoung	MWRT	
16	Daniel Lado Laboyo	Ministry of Environment, CES	
17	Paul Gore Santo	Ministry of Environment, CES	
18	Moses Mayar	Ministry of Commerce and Infrastructure	
19	Christopher Lokuri	Commerce & Supply, CES	
20	Jacob Daniel	SSTC, Chairman	
21	Abdalla Wani	Ministry of Environment, RSS	
22	Akira Koyama	JICA Team	
23	Ichio Motono	JICA Team	
24	Eiji Hasebe	JICA Team	
25	Tatsuo Kawabata	JICA Team	
26	Kiyoshi Mukai	JICA Team	
27	Osamu Kunita	JICA Team	
28	Iskandar Hassan	JRPA	
29	Joel Paulino	JRPA	

(5) 5th JCC (21st November 2013)

**Record of Meeting on the 5th Joint Coordination Committee
for the Project for Enhancement of Operation and Management Capacity of Inland
Waterways in the Republic of South Sudan**

The 5th JCC 5th Joint Coordination Committee (hereinafter "JCC") for the Project for Enhancement of Operation and Management Capacity of Inland Waterways in the Republic of South Sudan (hereinafter "the Project") was held from 2:00 PM to 4:00 PM on 21st November, 2013 in the conference room of Juba Grand Hotel. The meeting was chaired by Capt. David Martin Hassan, Undersecretary of Ministry of Transport, Roads and Bridges (hereinafter MTR&B) of the Republic of South Sudan. Twenty two members attended the meeting.

At the beginning of the meeting, the chairman expressed appreciation to JCC members and invited Mr Tomoki Kobayashi, Deputy Representative of JICA South Sudan Office to give the opening remarks.

As the first agenda, the JICA project team explained the progress achieved in the 2nd Phase and major activities of the 3rd Phase. Next, Mr Zubier Zakayo, port manager of Juba River Port Administration, gave an evaluation of the Project from the perspective of the South Sudan side.

In order to make the technology transfer activities of the 3rd Phase effective, following improvement proposal for the Project was discussed in the meeting.

- (1). Strengthening of Institutional Framework and Improvement of Working Conditions of JRPA Staff
- (2). Budget Allocation
- (3). Information Sharing and Discussions with Senior Officials
- (4). Securing Close Relationship between the Grant Aid Project and the Project
- (5). Securing Safety and Security in Juba River Port
- (6). Structural Reinforcement of Technology Transfer
- (7). Formulation of a Port Policy and a Master Plan for Inland Waterways and Assistance in Developing Regulatory Framework for Cross Border Transportation in the Nile River



1/3



South Sudan side and Japanese side mutually agreed to work towards realizing the improvement measures. During the meeting both sides actively participated in the discussions which are summarized as follows.

- a) Regarding the strengthening of institutional framework and improvement of working conditions of JRPA staff, Japanese side pointed out that it is necessary to identify the role of each staff and arrange the chain of command as an organization and to improve working conditions. JRPA also explained that it is urgently required to improve present working conditions to develop staff's abilities more effectively. As a result, South Sudan side recognized the importance of improvement of working conditions for JRPA staff. JRPA expressed that it would assign a responsible personnel in each section.
- b) Regarding the budget allocation, the national budget and central state budget for JRPA were both approved, however the funds have not been received on account of shortage of the revenues. Japanese side requested that JRPA make efforts to ensure that funding for operating and managing Juba port properly and building JRPA staff's capacity effectively is secured in fiscal year 2013. In addition, it proposed to prioritize expenditure items in case the budget is inadequate to meet all needs during next fiscal year of 2014. South Sudan side stated to do its best to realize the funding allocation to the port in FY 2013 and formulate budget in FY 2014 as requested.
- c) Regarding information sharing and discussions with senior officials in South Sudan, Japanese side requested South Sudan side to share updated information and exchange opinions on basic issues among decision makers of the central government and state governments. For instance, port regulation, securing necessary budget and personnel, demarcation of national and state government will be possible basic issues. South Sudan side agreed to share the information with decision makers in a timely manner.
- d) Regarding the need to secure a close relationship between the grant aid project and the capacity building project, both sides agreed that effective technology transfer on port operation and maintenance has to be considered in coordination with the Grant Aid project. South Sudan side expressed to direct contractors of the Grant Aid project to closely work together to build JRPA staff capacity effectively.
- e) Regarding the need to secure safety and security in Juba port, JRPA expressed to take appropriate measures. In addition, JRPA stated that there was need to support Environment, Operation and Safety Committee to conduct awareness programmes to all stakeholders within the port that will facilitate to curtail disasters. JICA project team agreed to support the Committee activity.
- f) Regarding structural reinforcement of technology transfer, for instance, MTR&B worked positively to formulate port regulation by involving representatives from

2/3

Ministry of Justice and legal officer of State Government. Furthermore, JRPA flexibly shifted its organization to effectively learn machinery crane operational skills. Japanese side expressed to support their active attitude for establishing a port operation system in South Sudan.

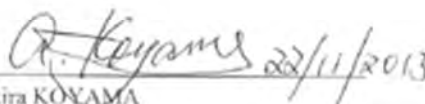
- g) South Sudan side requested the JICA project team to assist in formulating a port policy, a master plan of inland waterway transportation and in developing a regulatory framework for cross border transportation in the Nile River. Japanese side stated that though some of these works were outside the scope of the capacity building project, JICA project team would provide related information during their activities to the extent possible.

Finally, all JCC members agree the progress report of the 2nd Phase of the Project, and expressed their intention for further active commitment to the Project.

Date 21st November, 2013



Captain David Martin HASSAN
Undersecretary of Ministry of Transport,
Roads and Bridges.
Republic of South Sudan

 22/11/2013

Akira KOYAMA
Leader of JICA project team-

For/  22/11/2013.

John BULLEN
The First Director General,
Ministry of Physical Infrastructure,
Central Equatoria State
Republic of South Sudan

 22/11/13

Abdu SILYE
Director General of River Transport,
Ministry of Transport, Roads and Bridges,
Republic of South Sudan

Attendant List of the 5th JCC

	NAME	OFFICE / POSITION
1.	Capt. David Martin Hassan	Undersecretary of Transport, Ministry of Transport, Roads and Bridges
2.	Eng. Maurice Rehan Deng	Director General of Road safety and Transport, Ministry of Transport, Roads and Bridges
3.	Abdu Silye	Director General, Directorate of River Transport, Ministry of Transport, Roads and Bridges
4.	Oka Alier	Director General, for Water Resource Management, Ministry of Electricity, Dams, Irrigation & water Resources
5.	John Pan	Director General, Ministry of Finance, Commerce, Investment and Economic Planning
6.		Ministry of Foreign affairs and International Cooperation
7.	Manyok simon	Policy and Researcher, Ministry of Transport, Roads and Bridges
8.	Samuel Laki	DG, Transport and Communication of Ministry of Physical Infrastructure, CES
9.	Kenyi Christopher Lokuri Bansuk	Deputy Director of Supply, Directorate of Commerce and Supply, Ministry of Commerce and Industries (CES)
10	Jele Lukudu Jambu Mabe	Director, Ministry of Finance and Economic Planning, CES
11.	Paul Gore	A/Inspector for Environmental Control, Ministry of Environment CES
12	Zubeir Taban	JRPA, Port Manager
13.	Emmanuel Eli	JRPA, Deputy Port Manager
14.	John Jambu	JRPA, Deputy Port Manager
15.	Jacob Daniel	Chairman , Nile Barges
16.	Atsushi Hanatani	JICA South Sudan office
17.	Koji Demizu	JICA South Sudan office
18.	Akira Koyama	JICA Team
19.	Ichio Motono	JICA Team
20.	Eiji Hasebe	JICA Team
21.	Kunita Osamu	JICA Team
22	Manaka Hiromichi	JICA Team

(6) 6th JCC (14th April 2015)

**MINUTES OF MEETING ON
THE JOINT COORDINATION COMMITTEE FOR
THE PROJECT FOR ENHANCEMENT OF OPERATION AND MANAGEMENT
CAPACITY OF INLAND WATERWAY IN SOUTH SUDAN
BETWEEN
JAPAN INTERNATIONAL COOPERATION AGENCY
AND AUTHORITIES CONCERNED OF
THE REPUBLIC OF SOUTH SUDAN
(TERMINAL EVALUATION)**

The Japanese side of Terminal Evaluation Team (hereinafter referred to as "the Evaluation Team") organized by the Japan International Cooperation Agency (hereinafter referred to as "JICA"), headed by Mr. Yoshimoto KOYANAGI, stayed the Republic of South Sudan (hereinafter referred to as "South Sudan") from April 5 to 17, 2015, for the purpose of conducting a Terminal Evaluation of "The Project for Enhancement of Operation and Management Capacity of Inland Waterway in South Sudan (hereinafter referred to as "the Project").


During its stay in South Sudan, the Evaluation Team had a series of discussions and exchanged views with authorities concerned of the Government of South Sudan.

The result of the Terminal Evaluation was explained and discussed at the Joint Coordination Committee (hereinafter referred to as "JCC") Meeting.

As a result of the discussions, both sides agreed to the matters in the documents attached hereto.


Juba, April 14, 2015


Eng. Yoshimoto KOYANAGI
Leader
Joint Terminal Evaluation Team
Japan International Cooperation Agency


For/Capt. David Martin HASSAN
Undersecretary
Ministry of Transport, Roads and Bridges
Republic of South Sudan


Eng. Akira KOYAMA
Leader
JICA Project Team


For/Eng. John BULLEN
The First Director General
Ministry of Physical Infrastructure
Central Equatoria State
Republic of South Sudan


Eng. Abdu SILYE
Director General of River Transport
Ministry of Transport, Roads and Bridges
Republic of South Sudan

ATTACHED DOCUMENT

1. Wrap-up Presentation by the Project Team

The project team expressed their thanks for the cooperation of the South Sudanese side for the last four (4) years. The project team confirmed that the capacity of the Juba River Port Administration (hereinafter referred to as "JRPA") staff and other members has gradually been improved though the project is halfway to the original target. The project team also expressed their expectation that all the staff related to river ports will utilize the JRPA Operation Manual and the Materials for River Port Policy and Regulation for proper management and operation of river ports.

2. Project Evaluation by the South Sudanese side

The South Sudanese side expressed their thanks to JICA and the project team for execution of the project for four (4) years and evaluated that the capacity of the staff has steadily been strengthened. However, the South Sudanese sides pointed out there are still issues and problems on management and operation of river ports, and therefore strongly requested to JICA to continue to extend cooperation in the field of river ports and inland waterway.

3. Terminal Evaluation of the Project

The Terminal Evaluation of the Project was conducted by the Evaluation Team. The JCC accepted the Joint Terminal Evaluation Report attached as Annex-1.

4. Condition of the Consideration of the Future Project

JICA and representatives of the government of South Sudan agreed the following items as conditions to discuss the framework (objectives, outputs, duration, etc.) of future project (hereinafter referred to as "Phase II") taking into considerations the surrounding situation in South Sudan such as security, society, etc.,

- 1) Conclusion of the contract agreement for construction works of the Grant Aid project "The Project for Improvement of Juba River Port"
- 2) Increase of cargo handling volume (Assume the number of barges recovers to the equivalent amount of 2011)

5. Monitoring after the completion of the Project

JICA and representatives of the government of South Sudan agreed to monitor the following items after the completion of the Project, for the purpose of consideration of preparation of Phase II project. The monitoring will be done by JICA South Sudan office and will be reported to JICA HQs every three months. JICA might consider the dispatch of experts to assist the monitoring and to provide the necessary technical

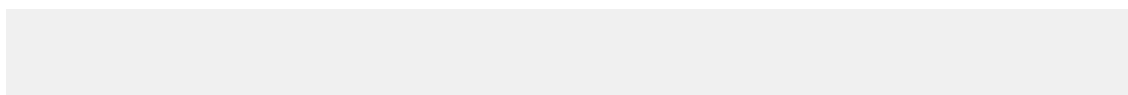
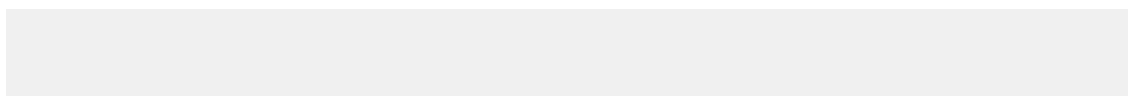
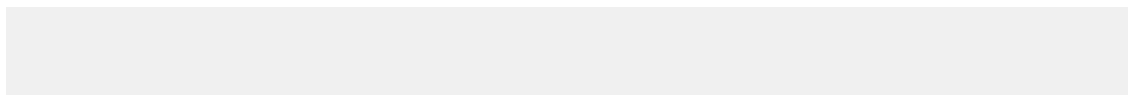
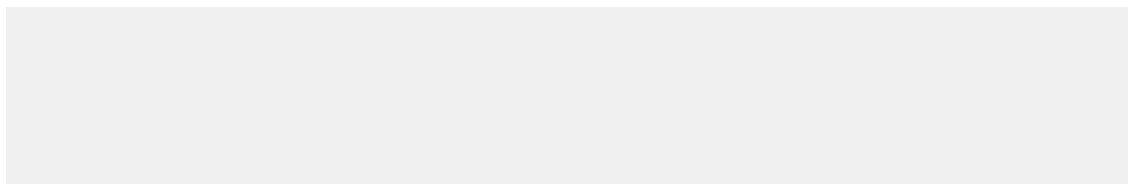


assistance in response to the technical capabilities of the South Sudanese side.

- 1) Progress of the authorization of the river port policy and regulation
- 2) Establishment of a tariff committee
- 3) Periodical measurement of water level
- 4) Periodical updating of the equipment ledger
- 5) Recording of barges accommodated
- 6) Periodical cleaning of port area as a routine work

END

Annex-1: Joint Terminal Evaluation Review Report



A handwritten signature in black ink.

AR

A handwritten signature in green ink, with a small '2' written above it.

A handwritten signature in blue ink.

A handwritten signature in green ink.

Attendant List of the 6th JCC

	NAME	OFFICE / POSITION
1.	Capt. David Martin Hassan	Undersecretary of Transport, Ministry of Transport, Roads and Bridges
2.	Eng. Maurice Rehan Deng	Director General of Road safety and Transport, Ministry of Transport, Roads and Bridges
3.	Abdu Silye	Director General, Directorate of River Transport, Ministry of Transport, Roads and Bridges
4.	Chuf Isaac Chol	Senior Inspector, for Water Resource Management, Ministry of Electricity, Dams, Irrigation & water Resources
5.	Peter Garahang	Ministry of Foreign affairs and International Cooperation
6.	Paul Lodovic Muras	Assistant Inspector South Sudan National Bureau of Standards
7.	Manyok Simon	Policy and Researcher, Ministry of Transport, Roads and Bridges
8.	Lino Schebesta D, Kenyi	Acting Director General Directorate of Transport CES
9.	Paul Gore Santo	Inspector Bio-Diversity Directorate of Environment CES
10.	Zubeir Taban	JRPA, Port Manager
11.	David Wani	JRPA, store keeper
12.	James Albino	JRPA, operations
13.	Moda Nelson	JRPA, statistics
14.	Kamal Awad	JRPA, maintenance
15.	James Wani	JRPA, maintenance
16.	Suzie Fostina	JRPA, clerk
17.	Bol Gordon	Malakal Port Manager
18.	Jacob Daniel	Advisor , Nile Barges
19.	Koyanagi	Terminal evaluation team, JICA head quarters
20.	Masaya Omae	Terminal evaluation team
21.	Yoshimoto Kobayashi	JICA South Sudan Office
22.	Akira Koyama	JICA Team
23.	Eiji Hasebe	JICA Team
24.	Mitsuhiro Fujimoto	JICA Team
25.	Tetsuo Ikenaga	JICA Team
26.	Masaomi Komoto	JICA Team

8. Other Major Activities

(1) Port Magazine

Port Magazine I



JUBA RIVER PORT MAGAZINE



Greeting

On my behalf and on behalf of Juba River Port Administration, I would like to express my sincere appreciation and thanks to all my staff and port users that have worked diligently to make **Juba River port Magazine** a success.

I hope that this magazine will contribute to the promotion of port activities and to the enhancement of friendly relations among the JRPA, port users as well as the public.

Finally, I also wish to express my sincere gratitude to all officials of the JICA expert team for their total commitment and support in making the port magazine a success.



**Port Manager of JRPA
Mr. Zubier Taban Zakayo**

Overview of the port of Juba



Juba River Port is located in Juba city, South Sudan along the White Nile River.

The port is of great socioeconomic importance to the people of south Sudan as it is the lifeline supporting the reconstruction of South Sudan. The port is linked with the hub port of Kosti in North Sudan via the White Nile River.

Before CPA, Juba River Port existed as a stopping point controlled by Sudanese Army Force (SAF) and was use for the transport of weapons during the civil war.

After the establishment of the Government of Southern Sudan, Juba River Port came into existence as a result of the Pilot project (Jetty facility) of Juba Town Master Plan and the surrounding areas using a grant from the Japanese Government.

In 2009, the Ministry of Transport and Roads, (GOSS) took over responsibility of Juba River Port. After the official commissioning of the Constructed Jetty by the Japanese Government, Juba River Port Administration was established and some staff from the Ministry were assigned to manage the operations in collaboration with Ministry of Physical Infrastructure Central Equatorial State (CES).

After independence, congestion occurred at Juba River Port due to the bulk transport of the following various commodities from North Sudan; general cargoes, liquid bulk cargoes, the cargoes of internally displaced peoples (I D PS) and cargoes of international assistance UN.

Juba River Port Administration (JRPA) was established jointly by the Ministry of Transport and Roads (currently the Ministry of Transport), the Government of South Sudan (currently the Republic of South Sudan) and the Ministry of Physical Infrastructure, Central Equatoria State.

Infrastructure

➤ Port facilities

Jetty

Length 35m Width 16m

Depth(dry season) 2.2m

Rubber fender (V type)



Crane

Loading 1.5 tons



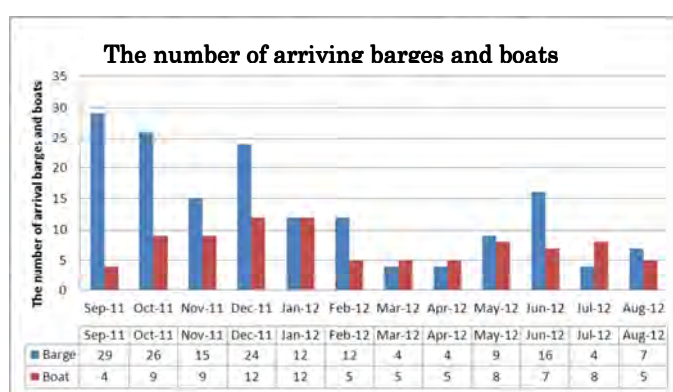
Cargo Volume

The graph below shows the transition in the number of arrival barges/boats.

Blue bar shows the number of arriving barges and red bar shows the number of arriving boats.

The number of arriving barges has dropped by half since January 2012.

Data were obtained from departure orders.



Information from JRPA

● CHALLENGES / CONSTRAINTS ; JUBA RIVER PORT

- Lack of security fence to control entrance and exit from the ports' premises
- Presence of pot holes, mango trees at the port area is making operation difficult especially during rainy season when the operation space is flooded.
- Inadequate number of staff with limited technical knowledge of port operations and management.
- Lack of port equipment making handling of heavy cargoes difficult.
- Few companies that are operating along the Nile have obtained shipping license or have been registered.
- Barge/tugboats and boats are tied to the bark of mango trees due to a lack of mooring facilities .
- Security Agencies; There are numerous agencies at the port including;
 - River Transport police
 - Criminal Investigation Department (CID)
 - Military Intelligence (MI)
 - Military Police
 - National Security
 - Professional Standards Security
 - Fire Brigade

Presence of these numerous security personnel from different units at the port is making operation difficult due to their interferences with the Port Administration as well as port users and also failure by some of them to implement Port Administration's instructions.

- Prolonged stay of IDP's at the port. Initially, Juba River Port had received more than 30,000 IDPs before the recent shipment of 12,000 IDP's by air. Some of the IDPs have settled in the port and are creating congestion at the port as well as making maneuvering of large trucks and fuel tankers very difficult.
- Some of the Disarmament, Demobilization and Reintegration DDR have also made the port area a place of residence and this limits operations and maneuvering space for the port.
- Safety and Environmental Situation; Due to the presence of various settlers, disposal of human waste in the port premises has become a sanitation issue. The port is also littered with plastic bottles, polythene bags and other solid wastes.

Recommendations / Way Forward

- There is a need to install a security fence for control at the main gate.
- Leveling port area with murram to eliminate pot holes and provide smooth area for operation and maneuvering of heavy trucks.
- It is necessary to provide the port with one mobile crane and a fire fighting vehicle.
- It is necessary to educate companies on the need to register and obtain licenses at the Transport Ministry.
- There is a need to discuss the large number of security organs level and either reduce the member or allow the River Transport Police to be in charge.
- The port administration has repeatedly discussed the issue of IDP settlement at the port with relevant authorities like SSRC, IOM, UNHCR and the City Mayor but no Sdrtion has been found to see how they could resolve and nothing was done, so I would like to request your authority to further look a solution for this issue.
- Presence of some DDR personnel at the port, there is a need to contact their unit through your higher management.
- There is a need to restore the environmental situation at the port by providing a budget to clear the grass, collect plastic bottles, polythene bags and other solid wastes; banners promoting awareness of the need to keep Juba River Port clean should be designed.

● **Location of berth and cargo type in Juba port**

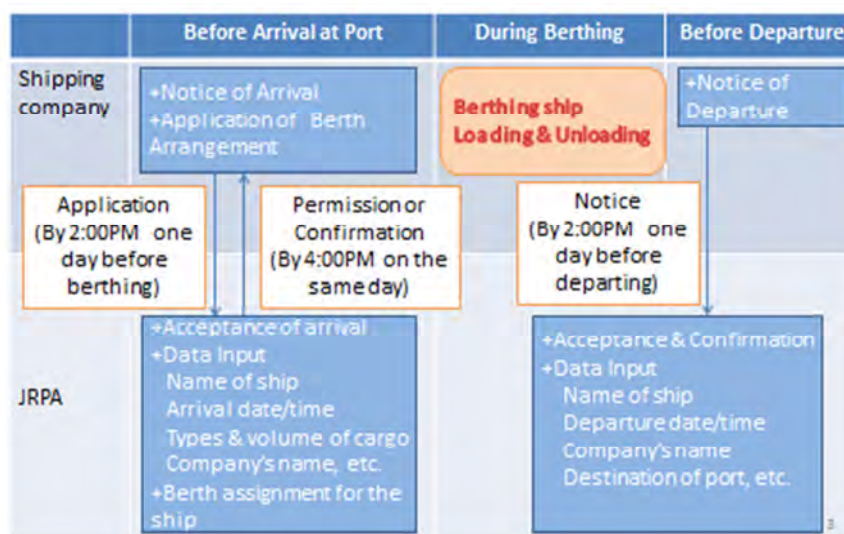


Pier No.	Cargo Type	Pier type
1	Light heavy cargo	Jetty, Depth 2.5m, 1.25t crane
2	Fuel oil	dike
3	Loading general cargo	dike
4	Loading general Cargo	dike
5	Loading/Off loading vehicle	dike

6	Off loading general cargo	dike
7	Off loading general cargo	dike
8	Off loading general cargo	dike
9	Anchoring for empty vessel	basin

- **Regulation of procedure of berth allocation**

Ship arrival and other berth allocation will follow the procedure shown below



- **Future Plan of JUBA River Port**



Expansion Project of Juba River port

Government of Japan will provide new additional piers, large handling machines, forklifts, or warehouse. The port area will be entirely paved.

Project implementation status;

Recently, an Exchange Note on technical detailing the expansion Project for Juba River port improvements was signed by Ministry of Foreign Affairs and International Cooperation and the Japanese Government.

- JICA technical team came to Juba to prepare detailed designs of the port and immediately signed contract of consultancy service with the Ministry of Transport in July 2012.
- Construction works will commence in the middle of 2013.

- **On the job Training**

(in cooperation with JICA Technical Cooperation team)

- **Monitoring of facility by survey instruments**

For monitoring of port facilities, knowledge and skill on how to use survey instruments and structural knowledge of the facilities are essential.



- **Repair work on the existing pier/crane**

Replacement of Fender, Covering Plates, and Remote Controller of the Crane should be overseen by JRPA. JICA team will provide guidance on how to check replacement work conducted by a contractor.



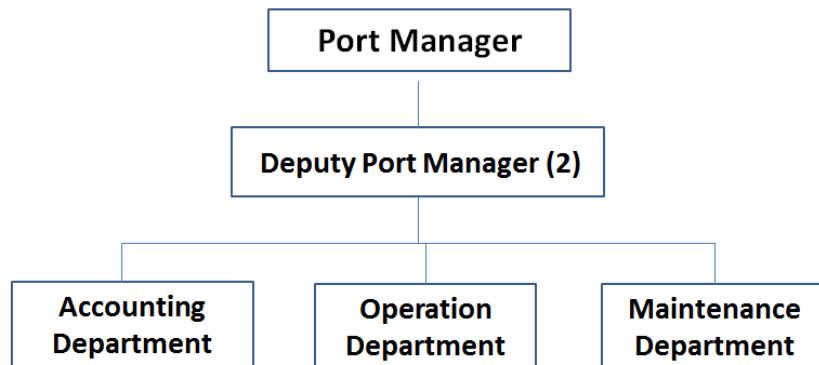
- **Exercises on risk management plan**

Port needs a contingency plan to ensure safe operating. Communication exercises and fire fighting exercises are conducted regularly in Juba port.



Organization of JRPA

There are twenty two staff members in JRPA



Contact/Address

JUBA RIVER PORT ADMINISTRATION

Port Manager of JRPA Mr. Zubier Taban Zakayo

- E-mail: zakayokazango@yahoo.com
- Tel : 0956194600

Receptionist Mr. James Albino

- E-mail: James-Albino@ymail.com
- Tel : 0955282693



JUBA RIVER PORT MAGAZINE

(VOL. II)



September 2013

JUBA RIVER PORT ADMINISTRATION (JRPA)

River Transport and Major Ports in South Sudan

1. River Transport Route

Inland water transport in South Sudan is comprised of a river transport system along the White Nile River and its tributaries. The White Nile is one of the two main branches of the Nile River, which rises from Burundi, Rwanda and Lake Victoria in East Africa and flows to South Sudan via Nimule, through Juba, Bor and the vast swamps of “the Sudd”, Lake No, Malakal, Melut, El Renk and Kosti, before meeting with the Blue Nile at Khartoum in Sudan. The Southern reach of the White Nile, between Kosti and Juba is about 1,436 km and is considered navigable. The Bahr el Ghazal River, a tributary of the White Nile is also navigable all year round from the main route where it joins the White Nile at Lake No to Meshra Al Reik or Machar Achol and for more than half of the year to Wau. At the moment a large part of the river is not navigable because of blockage by silt.

The Sobat River, another tributary, is navigable between Malakal and Abwong. It stretches from Abwong to Nasir, Akobo and Pibor are navigable for more than six months of the year. The Sobat area and indeed most of the flood-prone areas of Upper Nile Region depend on river transport annually during the period June - October.

South Sudan is yet to establish an authority on inland river navigation. The Authority when established would be responsible for safety, dredging, navigation aids and the registering of vessels and barges.

2. River Ports

The Nile River, traversing South Sudan from the source of the Nile in Rwanda, Burundi and through Uganda, provides an important inland transport route. Its overall usefulness has been limited by natural features, including a number of waterfalls and silted shallow stretches that restrict the carrying capacities of barges, especially the period of low water and river sharp bends. Another impediment has been the spread of water hyacinth, as well as the lack of navigation aids.

At present only two sections of the Nile have commercial transport services. The more important is the 500 km stretch of the White Nile from Kosti in Sudan to Malakal in South Sudan, which is served reasonably regularly. Occasional services are also being provided between Malakal and Juba, a distance of 936 km.





There are seven major river ports alongside the White Nile in South Sudan, from north to south, Renk, Malakal, Adok, Shambe, Bor, Mangala and Juba. Infrastructures for the river ports are not only lacking, but the existing facilities are unsafe for any commercial business. Port equipment and facilities such as cranes, wharves, oil facilities, offices, power supply




and sanitation are inadequate. Port condition in each port is described in following pages. In addition, most ports and piers along the river lack accessibility to the hinterland due to the poor condition of the roads connecting them to the main roads, rendering inter-modal connectivity very costly and cumbersome.




States, state capitals and major settlements in South Sudan
October 2012



Snapshot in Each Major Port

Port	Present condition
<p>Renk port</p>  <p>Satellite view of Renk</p>  <p>Jetty in Renk</p>	<p>Renk is located near the border with (North) Sudan and near the border in Upper Nile State. Renk port is located at the outskirts of Renk Town. There is a pontoon which can accommodate one or two barges with a backyard.</p> <p>In the north side of the jetty, there is a site for small vessels. Cargo handling equipment can be provided on an on-request basis and porter service is also available. The port is located 600m from town and the access road from the port to the town is not paved. Renk port has a jetty with 40 meters in length and 10 meters in width.</p> <ol style="list-style-type: none"> 1). Port entering for pusher and barges: Pusher and barges can enter the port 2). Container handling availability: Containers can be handled at Renk but a crane has to be hired which makes it very expensive. 3). Warehouse availability: There is a large warehouse for sorghum but no general warehouse space is available. There is no fueling station for ships either.
<p>Malakal port</p>  <p>View of Malakal</p> 	<p>Malakal Port is located in the one of the largest cities, Malakal in Upper Nile State. Malakal Port is one of the most important river ports within the inland waterway which is located on the middle between Kosti in Sudan (North) and Juba in South Sudan.</p> <p>Inland transport from/to the port covers the whole area in Upper Nile state as the hinterland. The transport from/to Ethiopia by the inland waterway is considered for the future.</p> <p>Cargo handling equipment can be provided on request by the owner of the goods but because a small boat capsized in the middle of the port navigation is dangerous, especially during the summer season when the water is shallow.</p> <ol style="list-style-type: none"> 1). Port entering for pusher and barges: River vessels can access the eroded facility of the port. 2). Container handling availability: Containers are handled

	<p>here but the crane is in poor condition since the port lacks a maintenance facility. It should be urgently repaired.</p> <p>Presently, there is only one mobile crane which is very costly to access it.</p> <p>3). Warehouse availability: There is no warehouse availability in the port or fueling stations for ships.</p>
<p>Adok port</p>  <p>Satellite view of Adok</p>	<p>Adok Port is located in the city of Adok in Unity State. It is mainly a port for boats with passenger cargo.</p> <p>1). Port entering for pusher and barges: River vessels can berth on a natural bank of the port but the port has lacks proper facilities.</p> <p>2). Container handling availability: Discharge of container cargo is not possible due to lack of handling equipment like cranes, fork lift</p> <p>3). Warehouse availability: There is no storage facility.</p>
<p>Shambe port</p>  <p>Jetty at Shambe</p>  <p>Yard and warehouse at Shambe</p>	<p>Shambe Port is located in the Shambe National Reserve yet relatively near to one of the major cities, Yirol in Lakes State which is 45miles away from Shambe port. Rumbek, a capital city of lake state, is 75miles away from Yirol but the road condition from Shambe to these towns are rough especially during rainy season. Shambe port has one jetty which was renovated by the Sudan Union. The jetty is 25m by 50m in length and 3m in depth in rainy season, can accommodate three barges at once.</p> <p>The problem of the port is the shallow water in front of the port: barge can access the port only in wet season. Thus, dredging work is necessary.</p> <p>During loading and off-loading of cargo, shipping companies must hire local people as porters. It is also difficult for steamers since it is curved 2km from the main river to the port.</p> <p>1). Port entering for pusher and barges: Pushers and barges can enter the port but only during rainy season</p> <p>2). Container handling availability: There is no container availability in Shambe port</p> <p>3). Warehouse availability: There are four twenty feet container as a warehouse at the port.</p>

<p>Bor port</p>  <p>Satellite view of Bor</p>	<p>Bor Port is located in the city of Bor, in Jonglei State. Bor port is located near Bor Town. The port does not have a jetty/pontoon. A natural bank can be used but it can accommodate only two barges. Cargo handling equipment can be provided on an on-request basis.</p> <p>River vessels call at the port and therefore porter service is available but there is no container availability and no warehouse at all.</p> <ol style="list-style-type: none"> 1). Port entering for pusher and barges: Pushers and barges can enter the port. 2). Container handling availability: Containers can be handled at Bor but a crane has to be hired which makes it very expensive. 3). Warehouse availability: No warehouse at the port.
<p>Mangala port</p>  <p>Jetty at Mangala port</p>  <p>Road between Juba and Mangala.</p>	<p>Mangala Port is located in Central Equatoria State. Mangala Port, which was constructed in 2010, is located about 70 km north from Juba City. In this sense the port is not far from the capital. The length of the pier is about 60m, and depth the water is more than 5m.</p> <p>However, the road is not paved all the way from Juba to Mangala. In particular, three quarters of the way to Mangala side is very poor. There are many irregularities which prevent vehicle traffic even in dry season. Total traveling time is around 2 hours by vehicle from Juba city.</p> <p>At present, Mangala is a privatized port which was constructed by an Indian company known as Tri-star and the port is mainly serving as a fuel depot by Tri-star to UN and also being used for government commodities.</p> <p>The port is wide and well paved for containers and crane settlement is stable but there is no storage facility at all.</p>

Juba port



Container handling at Juba port



Present jetty with 25 meter in length and steel plate structure. A 1.5 tons capacity crane is installed. (view from river).



Overview of Jetty in Juba port. A barge is berthing at the jetty and motor boats are surrounding the Jetty.

Juba port is located in the city of Juba, capital of South Sudan. Currently Juba port has one jetty (length 35m) with a crane (loading capacity: 1.5ton), and natural bank (length about 300m). The port has a yard yet it is in a rough condition. Cargo handling equipment can be provided on a request basis from cargo owner but it is very expensive and porter service is available but not regulated.

- 1). Port entering for pusher and barges: River vessels carrying cargo call at Juba port but it lacks pullouts.
- 2). Container handling availability: Containers can be handled at Juba but a crane has to be hired which makes it very expensive.
- 3). Warehouse availability: There is no warehouse facility at Juba port.

Juba port expansion project will start soon. A new jetty will be additionally constructed by JICA by 2015 at present port site. After completion, Juba port has a jetty (205m in length, 2.5m in depth), a mobile crane (150ton capacity), warehouse (1,700 square meters) and administration office in 5.4 ha land side area. It will enable to handle containers.



A bird's-eye view of Juba port expansion project

Major Barge Operators stationed in Juba Port

Transit time from Juba to Kosti (North bound) is 7 days and from Kosti to Juba (South bound) is 21 days. This does not include loading and unloading on the way. In general, four barges are pushed by a pusher. The average capacity of a barge is 400 ton.



A pusher berthing



Three barges berthing



Manual cargo loading

Barge Operator	Nile Barge Ltd
Pusher and Barges	Two pushers, 10 barges at present (Additionally one barge is in Sudan)
Service frequency	16 times per annum for 2 pushers
Main calling port	Juba-Mangala-Bor-Shambe-Adok-Malakal-Kodok-Melut-Kaka-Renk
Contact person	Mr. Jacob, Operation manager: +211 956447225 / 0922202055

Barge Operator	Keer Marine
Pusher and Barges	Two pushers, eight barges at present (Additionally two pusher, 8-10 barges are in Sudan)
Service frequency	18 times per annum for 2 pushers
Main calling port	Juba-Mangala-Bor-Shambe-Adok-Malakal-Kodok-Melut-Kaka-Renk
Contact person	Abdu Said Dawed, Operation Manager: +211956930208

Barge Operator	Tri Star
Pusher and Barges	N/A
Service frequency	N/A
Main calling port	N/A
Contact person	Operations Manager, Shako: +211 921414847

Agent	SSTC (South Sudan Transport Company) An agent of Nile River Transport and Sudan River Transport
Pusher and Barges	Twenty one (21) Pushers and above one Hundred and six (106) Barges

Service frequency	189 times per annum for 21 pushers
Main calling port	Juba-Mangala-Bor-Shambe-Adok-Malakal-Kodok-Melut-Kaka-Renk
Contact person	Edward Lomeling: +211 922005002

Motor Boat	Motor Boat Union
Pusher and Barges	Motor boat can carry up to 50 – 100 tons of bulky cargo.
Main calling port	Juba-Mangala-Bor-Shambe-Adok-Fangak-Malakal-Merut-Renk
Contact person	Paul Machar: +211 95570115

Contact/Address

JUBA RIVER PORT ADMINISTRATION

Port Manager of JRPA Mr. Zubier Taban Zakayo

E-mail: zakayokazango@yahoo.com

Tel : 0956194600

Receptionist

Mr. James Albino

E-mail: James-Albino@ymail.com

Tel : 0955282693



(2) Monitoring

Monitoring after leaving of the project team

April 2015

The JICA Project Team

Monitoring is very important for the nest step

Monitoring Items

The JICA Project Team would like to monitor the following items after leaving. We would like to ask the South Sudanese side to report the following items to the JICA South Sudan Office.

1. Progress of the authorization of river port policy and regulation
2. Establishment of a tariff committee
3. Periodical measurement of water level
4. Periodical updating of the equipment ledger
5. Recording of barges accommodated
6. Cleaning of port area as a routine work

Reporting system of monitoring items is as follows

Reporting of Monitoring Items

A sustainable reporting system for monitoring:

- Results of monitoring have to be reported to JICA South Sudan Office every three months.
- Responsible person for reporting is Mr. Simon of DTR for item 1 & 2 and Mr. Emmanuel of JRPA for item 3,4,5 & 6.
- Formats for reporting are prepared by the JICA project team.

Monitoring items under JRPA

JRPA is responsible for the following monitoring items. Leaders of each monitoring item have to report the results to **Mr. Emmanuel**. The leader for each monitoring item and interval for reporting are shown in the table below.

Formats for monitoring is prepared by the team

Monitoring Item	Leader for Reporting	Interval
3. Periodical measurement of water level	Mr. James Wani	Every two (2) weeks
4. Periodical updating of the equipment ledger	Mr. David Wani	Once a month
5. Recording of barges accommodated	Mr. Charles	Once a month
6. Cleaning-up of port area as a routine work	Mr. Santo	Once a month

Monitoring Items under DRT

Monitoring Item 1: Progress of the authorization of river port policy and regulation

Reporting Format

Date (dd/mm/yy)	Progress of Status	Remarks
	Policy	
	Regulation	
	Policy	
	Regulation	
	Policy	
	Regulation	
	Policy	
	Regulation	

Mr. Simon has to report the results of monitoring to the JICA South Sudan office every three months.

Monitoring Items under DRT

Monitoring Item 2: Establishment of a tariff committee

Reporting Format

Date (dd/mm/yy)	Progress/Status for establishment	Remarks

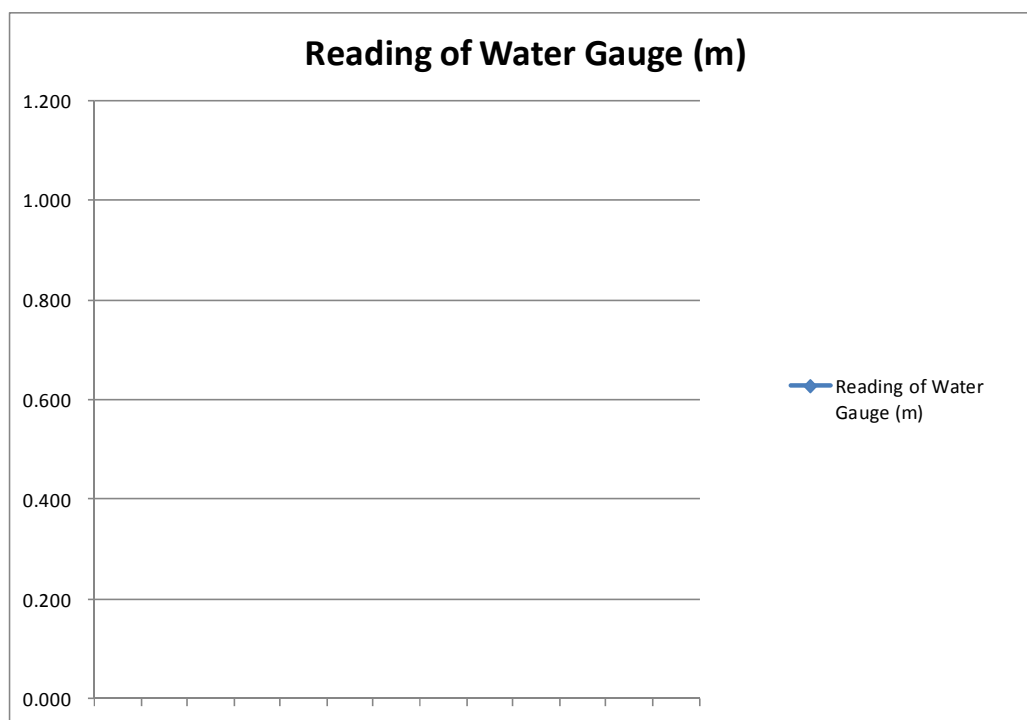
Mr. Simon has to report the results of monitoring to the JICA South Sudan office **every three months**.

Monitoring Item 3: Measurement of Water Level

Signed by:

Year	Date	Reading of Water Gauge (m)	Actual Elevation (m)	Remarks	Checked by
2015					

(Note: Survey shall be conducted by every 2 weeks.)



No. 1

[illegible]

Authorized by Mr. Emanuel Eli

Verified by Mr. David Wani

Monitoring Item 4. EQUIPMENT LEDGER

No. 2

Equipment No.	Name of Equipment	Sub No.	Component	Unit	Qty	Brought Out			Return			Remarks (e.g. Defects, Damage, etc.)			Brought Out			Return			Remarks (e.g. Defects, Damage, etc.)			Brought Out			Return			Remarks (e.g. Defects, Damage, etc.)		
						Date	Time	Number	Name	Date	Time	Number	Name	Date	Time	Number	Name	Date	Time	Number	Name	Date	Time	Number	Name	Date	Time	Number	Name	Date	Time	Number
H0000001	Pillar	1-1	4m x 20cm	set	1																											
		1-2	20cm x 20cm	set	1																											
		1-3	20cm x 20cm	set	1																											
		1-4	20cm x 20cm	set	1																											
H0000002	Old Bureau		10m	set	10																											
H0000003	Defect Bureau		10-200 20m	set	3																											
H0000004	Radio		25m x 20m	set	12																											
H0000005	Fire	12-1	Exco Bulb 100g	set	4																											
		12-2	Protein Type	set	4																											
H0000006	Storage	13-1	1200-571-1800 4 eggs	set	12																											
		13-2	1200-471-2000 2 eggs	set	9																											
H0000007	Landing	14-1	SSN305-40-100 1 egg	set	2																											
		14-2																														
		14-3	SSN305-40-100 1 egg	set	1																											
H0000008	Connector		Joint Support	set	1																											
H0000009			200	set	2																											

Monitoring Item5: Barges accommodated at Juba river port

[illegible]

Monitoring Item 6: Cleaning of Port Area

Signed by:

Year	Date	Cleaning Area	Checked by	Remarks
2015				

(Note: Cleaning shall be conducted by monthly basis.)