

Minutes of Discussions
on the Preparatory Survey for the Project for
Implementation of Intelligent Transport System in Mombasa Region

Based on the several preliminary discussions between the Government of Republic of Kenya (hereinafter referred to as “Kenya”) and Japan International Cooperation Agency (hereinafter referred to as “JICA”) Kenya Office, JICA dispatched the Preparatory Survey Team (hereinafter referred to as “the Team”) for the Outline Design of the Project for Implementation of Intelligent Transport System in Mombasa Region (hereinafter referred to as “the Project”) to Kenya. The Team held a series of discussions with the officials of the Government of Kenya and conducted a field survey. In the course of the discussions, both sides have confirmed the main items described in the attached sheets.

Mombasa, September , 2021

川原 俊太郎

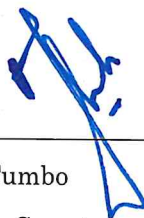
Kawahara Shuntaro

Leader

Preparatory Survey Team

Japan International Cooperation Agency

Japan



Joab Tumbo

County Secretary and Head of Public Service

County Government of Mombasa

The Republic of Kenya



ATTACHMENT

1. Objective of the Project

The objective of the Project is to ease traffic congestion and improve traffic safety through installation of ITS equipment and improvement of junctions, thereby contributing to economic development of Mombasa.

2. Title of the Preparatory Survey

Both sides confirmed the title of the Preparatory Survey as “the Preparatory Survey for the Project for Implementation of Intelligent Transport System in Mombasa Region”.

3. Project site

Both sides confirmed that the candidate sites of the Project are in Mombasa City, which is shown in Annex 1.

4. Responsible authority for the Project

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

- 4-1. The County Government of Mombasa will be the executing agency for the Project (hereinafter referred to as “the Executing Agency”). The Executing Agency shall coordinate with all the relevant authorities to ensure smooth implementation of the Project and ensure that the undertakings for the Project shall be managed by relevant authorities properly and on time. The organization chart is shown in Annex 2.

5. Items requested by the Government of Kenya

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

-Installation of traffic signals controlled by MODERATO system to some intersections and junction improvements in Mombasa City

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

- 5-3. The Government of Kenya shall submit an official request to the Government of Japan through a diplomatic channel before December 2021.



6. Procedures and Basic Principles of Japanese Grant

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

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

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

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

7. Schedule of the Survey

7-1. The Team will proceed with further survey in Kenya until beginning of October 2021.

7-2. The Team will conduct the second field survey in Kenya around middle of December 2021. The Team will decide a plan of targeted intersections of the Project.

7-3. An official request to the Government of Japan will be submitted before December, 2021.

7-3. JICA will prepare a draft Preparatory Survey Report in English and dispatch a mission to Kenya in order to explain its contents around the end of June 2022.

7-4. If the contents of the draft Preparatory Survey Report is accepted and the undertakings for the Project are fully agreed by the Kenyan side, JICA will finalize the Preparatory Survey Report and send it to Kenya around November 2022.

7-5. The above schedule is tentative and subject to change.

8. Environmental and Social Considerations

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

8-2. The Project is categorized as “B” from the following considerations:

The project is not considered to be a large-scale road, is not located in a sensitive area, and has none of the sensitive characteristics under the JICA Guidelines for Environmental and Social Considerations (April, 2010), it is not likely to have a significant adverse impact on the environment.

The Kenyan side confirmed to conduct the necessary procedures concerning the environmental assessment (including stakeholder meetings, Environmental Impact Assessment (EIA) /Initial Environmental Examination (IEE) and information disclosure, etc.) and make EIA/IEE report of the Project, if the EIA/IEE of the Project is necessary in Kenya. The EIA/IEE approval shall be received from the responsible authorities and submitted to JICA by June 2022.

8-3. If the Project will result in involuntary resettlement, the Kenyan side confirmed to prepare a Resettlement Action Plan (RAP) /Abbreviated Resettlement Action Plan (ARAP) and make it available to the public. In addition, the Kenyan side confirmed to provide the affected people with sufficient compensation and/or support in accordance with RAP/ARAP, which is consistent with JICA Guidelines for Environmental and Social Considerations (April, 2010), in a timely manner.

9. Other Relevant Issues

9-1 Selection process of the target sites of the Project

By following procedure, the Study to decide the target locations for junction improvement will be implemented.

- 1) Listing up candidate sites based on the previous studies.
- 2) Conducting site survey including traffic survey at candidate sites.
- 3) Selecting target sites among candidates ones by benefit, cost, consistency in road improvement plans, social impact and other technical constraints by the second field survey.
- 4) With the result of the second mission in Kenya and following analysis in Japan, finalizing its draft design.

9-2 Operation and maintenance of the Project

The Team reiterated the importance of sustainable operation and maintenance of the Project, and it's critical factor for success of the Project. The Kenyan side agreed operation and management of the Project is implemented by following organizations;

-Operation and Maintenance of traffic signals and ITS control center; County



Government of Mombasa

- Routine Maintenance of the intersections; County Government of Mombasa
- Periodic Maintenance of the intersections: road management agencies such as KeNHA /KURA

The Kenyan side agreed the necessity of establishment of institutional and financial arrangement plan for sustainable operation and maintenance of the Project.

9-3 Gender Mainstreaming

Both sides confirmed that following gender elements shall be duly reflected in the scope of Preparatory Survey.

- 1)Collection of information and gender disaggregated data for assessment of gender needs.
- 2)Examination of gender-responsive measures based on the assessment, such as:
 - ✓ Facility design that reflects gender-specific needs.
 - ✓ Selection of equipment that reflects gender-specific needs and ensure usability by women.

9-4 Safety Measures

Both sides confirmed that County Government of Mombasa shall take necessary measures to ensure and maintain the security of the Project site and the persons related to the implementation of the Project, in cooperation with relevant authorities during the Project period. Such security measures shall reasonably reflect needs of the Consultant/the Contractor engaging in the Project, as shown in Annex 5.

Both sides agreed that in case the additional security cost would be necessary for the implementation of the Project, such cost shall be borne by the Recipient without using the Grant.

9-5 Provision of Conveniences to the Team by Kenyan side

The Kenyan side shall, at its own expenses, provide the Team with the following items in cooperation with County Government of Mombasa and other organizations concerned.

- (1) Security-related information as well as measures to ensure the safety of the Team members;
- (2) Data and information necessary for the Study;
- (3) Counterpart personnel;
- (4) Credentials or identification cards if necessary;



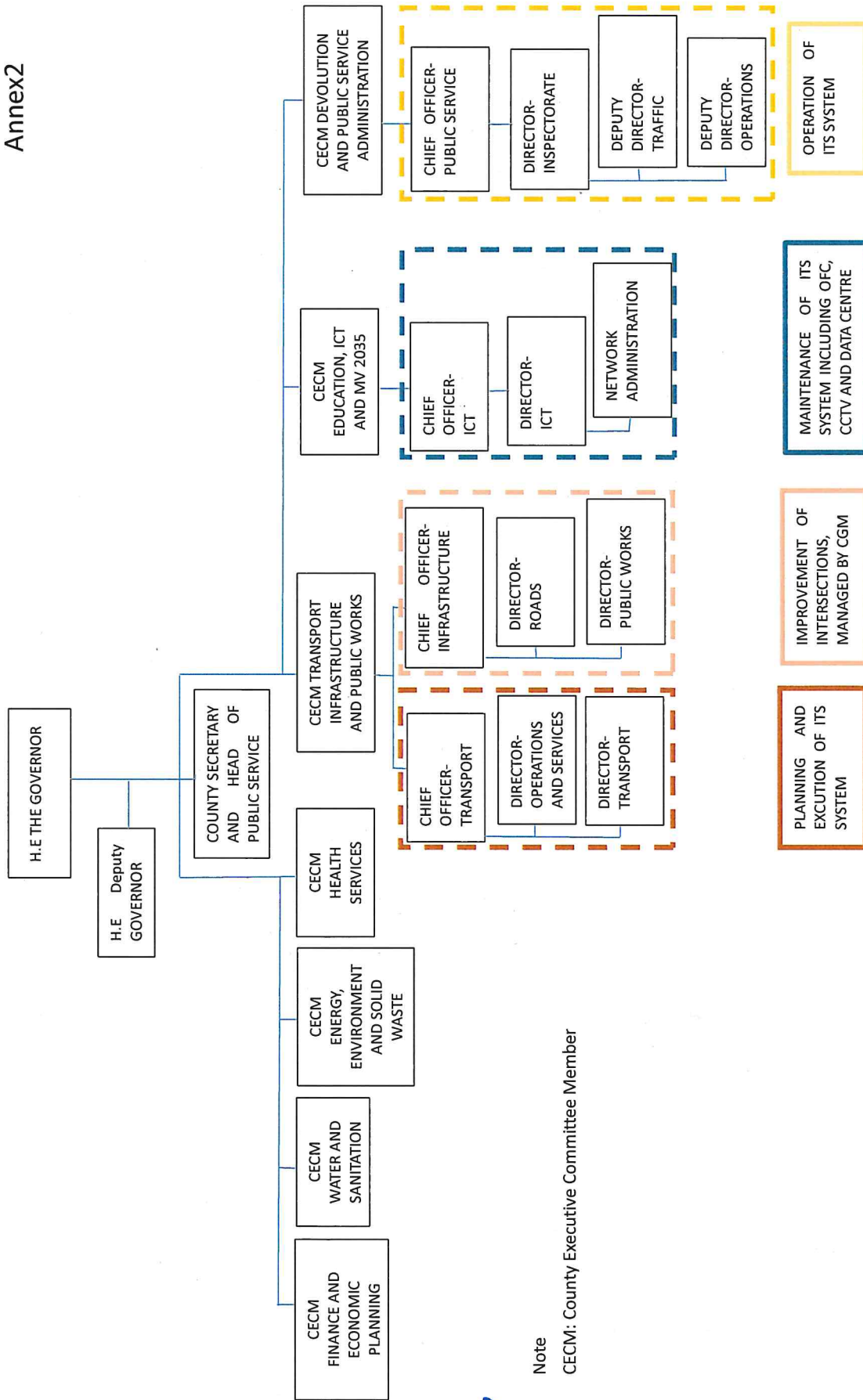
- (5) Appointments arrangement;
- (6) Entry permits necessary for the survey team members to conduct field surveys;
and
- (7) Support in obtaining other privileges and benefits if necessary.

- 【Annex 1】 Project Site
- 【Annex 2】 Organization Chart
- 【Annex 3】 Japanese Grant
- 【Annex 4】 Project Monitoring Report (template)
- 【Annex 5】 Major Undertakings to be taken by the Government of Kenya





Annex2



Note

CECM: County Executive Committee Member

JAPANESE GRANT

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

1. Procedures of Project Grants

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

(1) Preparation

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

(2) Appraisal

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

(3) Implementation

Exchange of Notes

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

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

- Agreement concluded between JICA and the Recipient

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

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

Construction works/procurement

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

(4) Ex-post Monitoring and Evaluation

- Monitoring and evaluation at post-implementation stage

2. Preparatory Survey

(1) Contents of the Survey

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

- Confirmation of the background, objectives, and benefits of the Project and also institutional capacity of

relevant agencies of the Recipient necessary for the implementation of the Project.

- Evaluation of the feasibility of the Project to be implemented under the Japanese Grant from a technical, financial, social and economic point of view.
- Confirmation of items agreed between both parties concerning the basic concept of the Project.
- Preparation of an outline design of the Project.
- Estimation of costs of the Project.
- Confirmation of Environmental and Social Considerations

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

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

(2) Selection of Consultants

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

(3) Result of the Survey

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

3. Basic Principles of Project Grants

(1) Implementation Stage

1) The E/N and the G/A

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



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

- a) The Recipient shall open an account or shall cause its designated authority to open an account under the name of the Recipient in the Bank, in principle. JICA will disburse the Japanese Grant in Japanese yen for the Recipient to cover the obligations incurred by the Recipient under the verified contracts.
- b) The Japanese Grant will be disbursed when payment requests are submitted by the Bank to JICA under an Authorization to Pay (A/P) issued by the Recipient.

3) Procurement Procedure

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

4) Selection of Consultants

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

5) Eligible source country

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

6) Contracts and Concurrence by JICA

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

7) Monitoring

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

8) Safety Measures

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

9) Construction Quality Control Meeting

Construction Quality Control Meeting (hereinafter referred to as the “Meeting”) will be held for quality assurance and smooth implementation of the Works at each stage of the Works. The member of the Meeting will be composed by the



Recipient (or executing agency), the Consultant, the Contractor and JICA. The functions of the Meeting are as followings:

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

(2) Ex-post Monitoring and Evaluation Stage

- 1) After the project completion, JICA will continue to keep in close contact with the Recipient in order to monitor that the outputs of the Project is used and maintained properly to attain its expected outcomes.
- 2) In principle, JICA will conduct ex-post evaluation of the Project after three years from the completion. It is required for the Recipient to furnish any necessary information as JICA may reasonably request.

(3) Others

1) Environmental and Social Considerations

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

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

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

3) Proper Use

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



4) Export and Re-export

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

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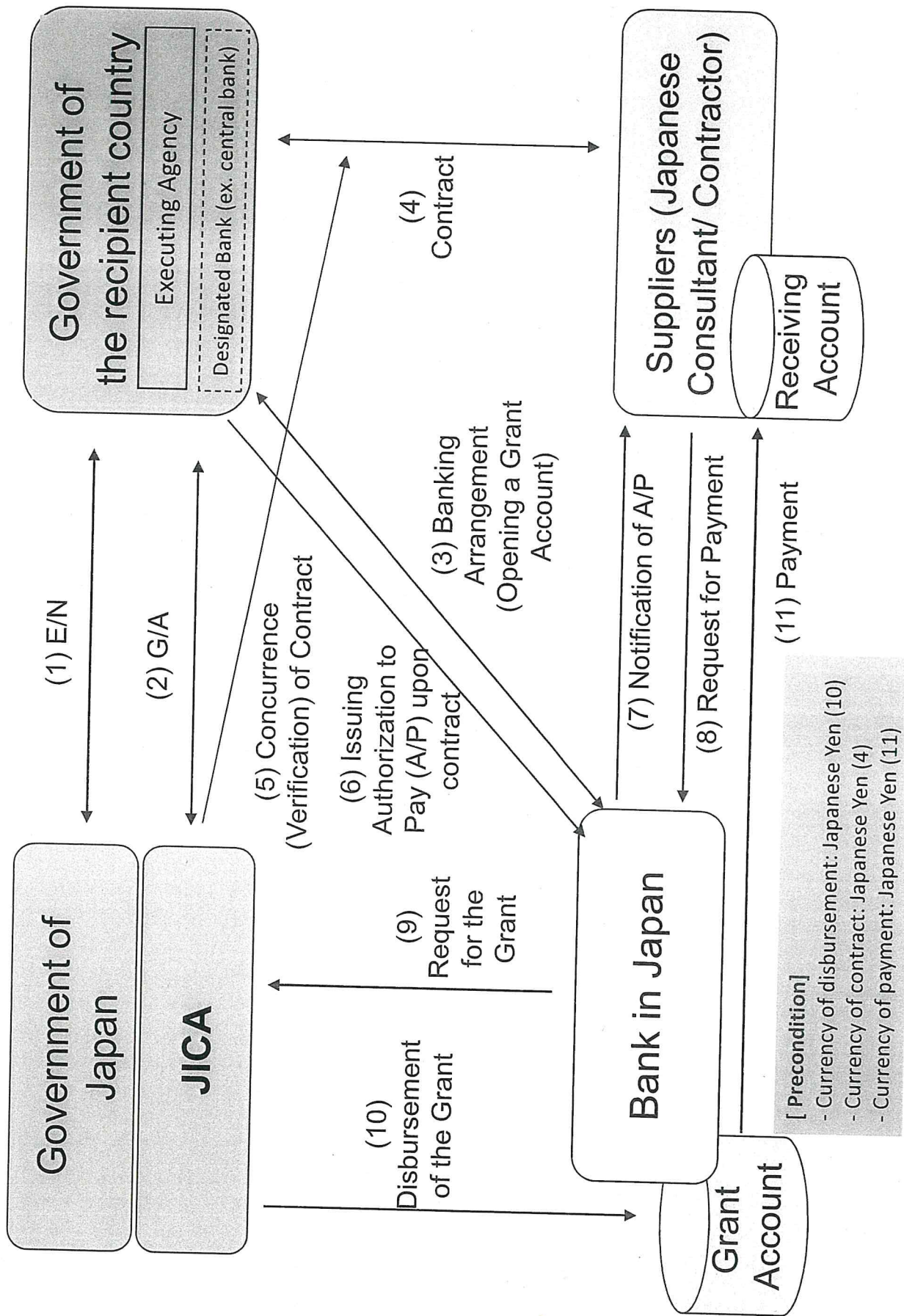
PROCEDURES OF JAPANESE GRANT

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

notes:

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

Financial Flow of Japanese Grant (A/P Type)



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

Organizational Information

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

General Information:

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



1: Project Description

1-1 Project Objective

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1-2 Project Rationale

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

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1-3 Indicators for measurement of "Effectiveness"

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

2: Details of the Project

2-1 Location

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

2-2 Scope of the work

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

Reasons for modification of scope (if any).

(PMR)

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2-3 Implementation Schedule

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

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

2-4 Obligations by the Recipient

2-4-1 Progress of Specific Obligations

See Attachment 2.

2-4-2 Activities

See Attachment 3.

2-4-3 Report on RD

See Attachment 11.

2-5 Project Cost

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

Components			Cost (Million Yen)	
	Original (proposed in the outline design)	Actual (in case of any modification)	Original ^{1),2)} (proposed in the outline design)	Actual
	1.			
Total				

Note: 1) Date of estimation:

2) Exchange rate: 1 US Dollar = Yen

2-5-2 Cost borne by the Recipient

Components			Cost (1,000 Taka)	
	Original (proposed in the outline design)	Actual (in case of any modification)	Original ^{1),2)} (proposed in the outline design)	Actual
	1.			

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

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

(PMR)

2-6 Executing Agency

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

Original (at the time of outline design)

name:

role:

financial situation:

institutional and organizational arrangement (organogram):

human resources (number and ability of staff):

Actual (PMR)

2-7 Environmental and Social Impacts

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

3: Operation and Maintenance (O&M)

3-1 Physical Arrangement

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

Original (at the time of outline design)

Actual (PMR)

3-2 Budgetary Arrangement

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

Original (at the time of outline design)

Actual (PMR)

4: Potential Risks and Mitigation Measures

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

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

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

	Contingency Plan (if applicable):
Actual Situation and Countermeasures	
(PMR)	

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

5-1 Overall evaluation

Please describe your overall evaluation on the project.

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5-2 Lessons Learnt and Recommendations

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

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

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

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Attachment

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



Monitoring sheet on price of specified materials

1. Initial Conditions (Confirmed)

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

2. Monitoring of the Unit Price of Specified Materials

(1) Method of Monitoring : ●●

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

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

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

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

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

Major Undertakings to be taken by the Government of Kenya

1. Specific obligations of the Government of Kenya which will not be funded with the Grant**(1) Before the Tender**

NO	Items	Deadline	In charge	Estimated Cost	Ref.
1	To sign the banking arrangement (B/A) with a bank in Japan (the Agent Bank) to open bank account for the Grant	within 1 month after the signing of the G/A	MOF		
2	To issue A/P to the Agent Bank for the payment to the consultant	within 1 month after the signing of the contract(s)	MOF		
3	To bear the following commissions to the Agent Bank for the banking services based upon B/A				
	1) Advising commission of A/P	within 1 month after the signing of the contract(s)	MOF		
	2) Payment commission for A/P	every payment	MOF		
4	To get approval for IEE/EIA(Conditions of approval should be fulfilled, if any) and secure the necessary budget for implementation for EMP and EMoP (and fulfilling conditions of approval, if any).	within 1 month after the signing of the G/A	CDM		
5	To secure the necessary budget and implement land acquisition and resettlement (including preparation of resettlement sites), and compensation with full replacement cost in accordance with RAP	before notice of the bidding documents	CDM		
6	To implement social monitoring, and to submit the monitoring results to JICA, by using the monitoring form, on a quarterly basis as a part of Project Monitoring Report	until land acquisition and resettlement complete	CDM		
7	To secure and clear the following lands 1) right of way of the Project 2) temporary construction yard and stock yard near the Project area 3) borrow pit and disposal site near the Project area	before notice of the bidding documents	CDM		
8	To obtain the planning, zoning, building permit	before notice of the bidding documents	CDM		
9	To clear, level and reclaim the following sites 1) remove utilities 2) existing facilities	before notice of the bidding documents	CDM KeNHA KURRA		
10	To submit Project Monitoring Report (with the result of Detailed Design)	before preparation of the bidding documents	CDM		

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

Note: CDM: Mombasa County Government

MOF:Ministry of Finance

KeNHA: Kenya National Highways Authority

KURA: Kenya Urban Roads Authority

(2) During the Project Implementation

NO	Items	Deadline	In charge	Estimated Cost	Ref.
1	To issue A/P to the Agent Bank for the payment to the supplier and the contractor	within 1 month after the signing of the contract(s)	CDM		
2	To bear the following commissions to the Agent Bank for the banking services based upon the B/A				
	1) Advising commission of A/P	within 1 month after the signing of the contract(s)	CDM		
	2) Payment commission for A/P	every payment	MOF CDM		
3	to ensure prompt unloading and customs clearance at ports of disembarkation in the country of the Recipient and to assist the Supplier(s) with internal transportation therein	during the Project	CDM		
4	To accord Japanese physical persons and/or physical persons of third countries whose services may be required in connection with the supply of the products and the services such facilities as may be necessary for their entry into the country of the Recipient and stay therein for the performance of their work	during the Project	CDM		
5	To ensure that customs duties, internal taxes and other fiscal levies which may be imposed in the country of the Recipient with respect to the purchase of the products and/or the services be exempted	during the Project	CDM		
6	To bear all the expenses, other than those covered by the Grant, necessary for the implementation of the Project	during the Project	CDM		
7	To notify JICA promptly of any incident or accident, which has, or is likely to have, a significant adverse effect on the environment, the affected communities, the public or workers.	during the construction	CDM		
8	1) To submit Project Monitoring Report	every month	CDM		
	2) To submit Project Monitoring Report (final) (including as-built drawings, equipment list, photographs, etc.)	within 1 month after issuance of Certificate of Completion for the works under the contract(s)	CDM		
9	To submit a report concerning completion of the Project	within 6 months after completion of the Project	CDM		
10	To ensure the safety of persons engaged in the implementation of the Project	during the Project	CDM		
11	To take measure necessary for security and safety of the Project -traffic control around the site and on transportation routes of construction materials -public notification	during the construction	CDM		
12	To implement EMP and EMoP	during the construction	CDM		

13	To submit results of environmental monitoring to JICA, by using the monitoring form, on a quarterly basis as a part of Project Monitoring Report	during the construction	CDM		
14	To implement RAP/ARAP (livelihood restoration program), if necessary	for a period based on livelihood restoration program	CDM		
15	To implement social monitoring, and to submit the monitoring results to JICA, by using the monitoring form, on a quarterly basis as a part of Project Monitoring Report - Period of the monitoring may be extended if affected persons' livelihoods are not sufficiently restored. Extension of the monitoring will be decided based on agreement between CDM and JICA.	- until the end of livelihood restoration program (In case that livelihood restoration program is provided) - for 2 years after land acquisition and resettlement complete (In case that livelihood restoration program is not provided)	CDM		

(3) After the Project

NO	Items	Deadline	In charge	Estimated Cost	Ref.
1	To implement EMP and EMoP	for a period based on EMP and EMoP	CDM		
2	To submit results of environmental monitoring to JICA, by using the monitoring form, semiannually - The period of environmental monitoring may be extended if any significant negative impacts on the environment are found. The extension of environmental monitoring will be decided based on the agreement between CDM and JICA.	for 3 years after the Project	CDM		
3	To maintain and use properly and effectively the facilities constructed and equipment provided under the Grant Aid 1) Allocation of maintenance cost 2) Operation and maintenance structure Routine check/Periodic inspection	After completion of the construction	CDM		

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

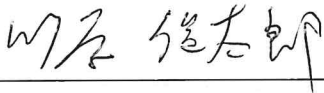
NO	Items	Deadline	Amount (Million Japanese Yen)*
1	Civil work and equipment procurement		
2	Detailed design and Supervisory Service		
3	Contingencies		
	Total		XXX

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

Minutes of Discussions
on the Preparatory Survey for the Project for
Implementation of Intelligent Transport System in Mombasa Region
(Second Field Survey)

Based on the several preliminary discussions between the Government of Republic of Kenya (hereinafter referred to as “Kenya”) and Japan International Cooperation Agency (hereinafter referred to as “JICA”) Kenya Office, JICA dispatched the Preparatory Survey Team (hereinafter referred to as “the Team”) for the Outline Design of the Project for Implementation of Intelligent Transport System in Mombasa Region (hereinafter referred to as “the Project”) to Kenya. The Team held a series of discussions with the officials of the Government of Kenya and conducted a field survey. In the course of the discussions, both sides have confirmed the main items described in the attached sheets.

Mombasa, December , 2021



Kawahara Shuntaro

Leader

Preparatory Survey Team

Japan International Cooperation Agency

Japan



Joab Tumbo
County Secretary and Head of Public Service
County Government of Mombasa
The Republic of Kenya

ATTACHMENT

1. Project Site

Both sides confirmed that the candidate sites of the Project are in Mombasa City, which is shown in Annex 1.

2. Items Requested by the Government of Kenya

2-1. As a result of discussions, both sides confirmed that the items requested by the Government of Kenya are as follows:

-Installation of traffic signals controlled by MODERATO system to some intersections and junction improvements in Mombasa City

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

2-3. The Government of Kenya shall submit an official request to the Government of Japan through a diplomatic channel before April 2022.

3. Schedule of the Survey

3-1. JICA will prepare a draft Preparatory Survey Report in English and dispatch a mission to Kenya in order to explain its contents around the end of June 2022.

3-2. If the contents of the draft Preparatory Survey Report is accepted and the undertakings for the Project are fully agreed by the Kenyan side, JICA will finalize the Preparatory Survey Report and send it to Kenya around November 2022.

3-3. The above schedule is tentative and subject to change.

4. Candidate Target Junctions of the Project

The Team explained that selection of the candidate target junction of the Project where improvement will be implemented or traffic signals and related equipment will be installed has been selected by following procedure.

1) Listing up candidate sites based on the previous studies.

2) Conducting site survey including traffic survey at candidate sites.

3) Selecting target sites among candidates ones by benefit, cost, consistency in road improvement plans, social impact and other technical constraints.

The Team explained candidate target junctions of the Project would be 24 junctions as shown in Annex 1, although the number of target junctions could be decreased,



considering effect and budget constraints, etc. The Kenyan side has understood that the Team would consider draft design and estimate necessary cost of the Project.

5. Installation of Fiber Cable Network

The Kenyan side explained that the installation of fiber cable network to some necessary sections would be implemented by Fiberlink Ltd.. The Team requested the Kenyan side, to share the basic consent between Fiberlink Ltd. and County Government of Mombasa (hereinafter referred to as "CGM"), to JICA Kenyan office by April 2022, as the installation of fiber cable network at an adequate timing is essential.

6. Relocation of Utilities

The Team emphasized that the delay of relocation of utilities could negatively affect the smooth implementation of the Project. In response to JICA's concern, the Kenyan side agreed that CGM would take necessary actions for the relocation of utilities before and during Project implementation.

CGM, with support of the Preparatory Survey team will find out the procedures, expected bottlenecks, and cost for the relocation of utilities, which will be reviewed by both sides at the timing of the mission for explanation on Draft Final Report of Preparatory Survey in June 2022.

7. Environmental and Social Considerations

7-1. The Kenyan side confirmed to give due environmental and social considerations before and during implementation, and after completion of the Project, in accordance with the JICA Guidelines for Environmental and Social Considerations (April, 2010).

7-2. The Project is categorized as "B" from the following considerations:

The project is not considered to be a large-scale road, is not located in a sensitive area, and has none of the sensitive characteristics under the JICA Guidelines for Environmental and Social Considerations (April, 2010), it is not likely to have a significant adverse impact on the environment.

The Kenyan side confirmed to conduct the necessary procedures concerning the environmental assessment (including stakeholder meetings, Environmental Impact Assessment (EIA) and information disclosure, etc. and make EIA report of the Project. The EIA approval shall be received from the responsible authorities and submitted to JICA by June 2022.

7-3. If the Project will result in involuntary resettlement, the Kenyan side confirmed to prepare a Resettlement Action Plan (RAP) /Abbreviated Resettlement Action Plan (ARAP) and make it available to the public. In addition, the Kenyan side confirmed to provide the affected people with sufficient compensation and/or support in accordance with RAP/ARAP, which is consistent with JICA Guidelines for Environmental and Social Considerations (April, 2010), in a timely manner.

8. Other Relevant Issues

8-1. Gender Mainstreaming

Both sides confirmed that the gender mainstreaming should be incorporated into the Project. In particular, both sides agreed on the following gender elements to be integrated into the Project.

- (a) In the selection of the target junctions of installation of pedestrian signals, usability of vulnerable road users should be considered.
- (b) In the construction, equal pay for equal work and facilities for female workers should be installed.
- (c) In the setting of traffic signals, safety crossing of vulnerable pedestrians should be considered.

8-2. Safety Measures

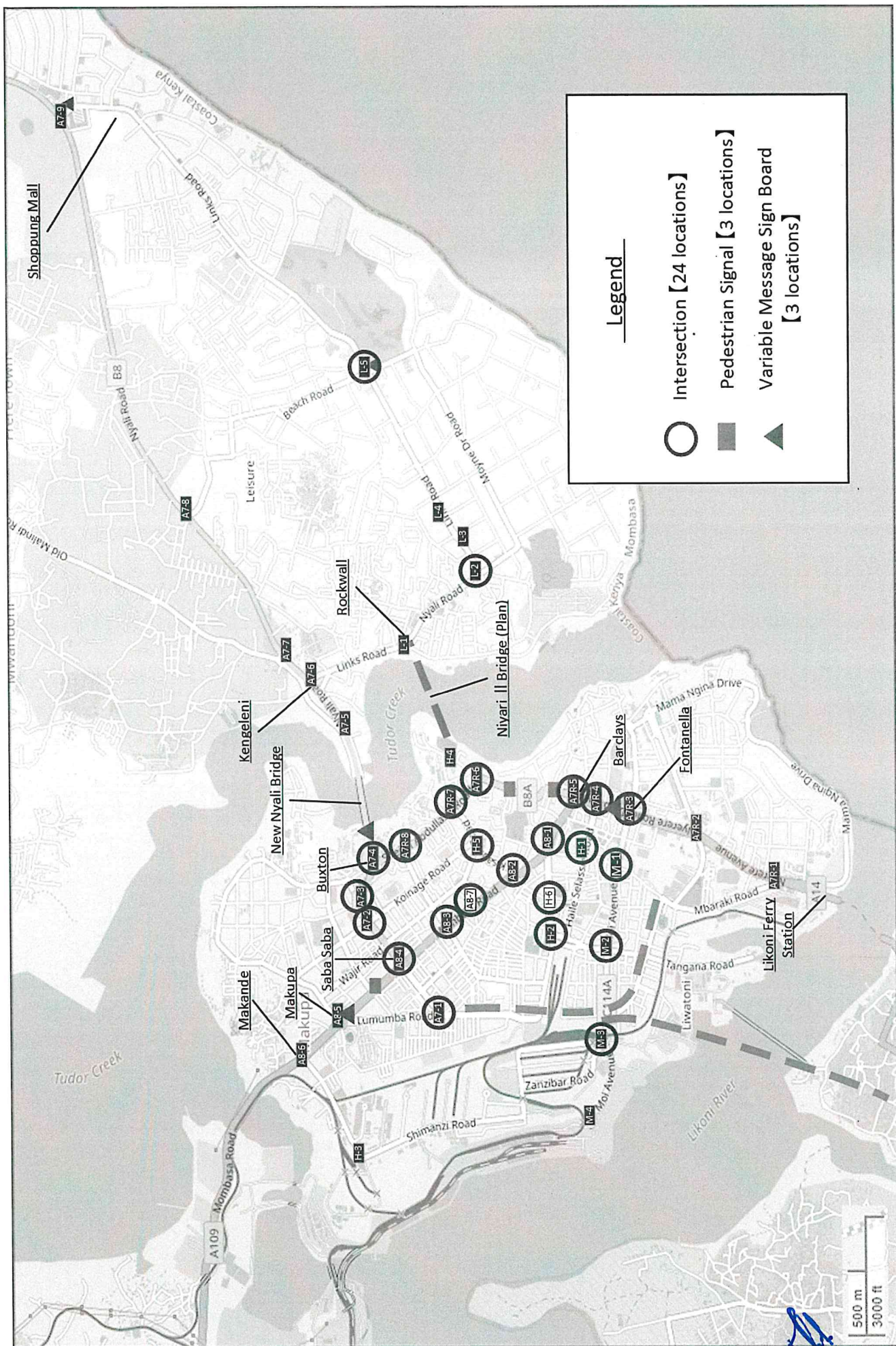
Both sides confirmed that County Government of Mombasa shall take necessary measures to ensure and maintain the security of the Project site and the persons related to the implementation of the Project, in cooperation with relevant authorities during the Project period. Such security measures shall reasonably reflect needs of the Consultant/the Contractor engaging in the Project, as shown in Annex 2.

Both sides agreed that in case the additional security cost would be necessary for the implementation of the Project, such cost shall be borne by the Recipient without using the Grant.

【Annex 1】 Project Site

【Annex 2】 Major Undertakings to be taken by the Government of Kenya





Major Undertakings to be taken by the Government of Kenya

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

(1) Before the Tender

NO	Items	Deadline	In charge	Estimated Cost	Ref.
1	To sign the banking arrangement (B/A) with a bank in Japan (the Agent Bank) to open bank account for the Grant	within 1 month after the signing of the G/A	CGM		
2	To issue A/P to the Agent Bank for the payment to the consultant	within 1 month after the signing of the contract(s)	CGM		
3	To bear the following commissions to the Agent Bank for the banking services based upon B/A				
	1) Advising commission of A/P	within 1 month after the signing of the contract(s)	CGM		
	2) Payment commission for A/P	every payment	CGM		
4	To get approval for IEE/EIA(Conditions of approval should be fulfilled, if any) and secure the necessary budget for implementation for EMP and EMoP (and fulfilling conditions of approval, if any).	within 1 month after the signing of the G/A	CGM		
5	To secure the necessary budget and implement land acquisition and resettlement (including preparation of resettlement sites), and compensation with full replacement cost in accordance with RAP	before notice of the bidding documents	CGM		
6	To implement social monitoring, and to submit the monitoring results to JICA, by using the monitoring form, on a quarterly basis as a part of Project Monitoring Report	until land acquisition and resettlement complete	CGM		
7	To secure and clear the following lands 1) right of way of the Project 2) temporary construction yard and stock yard near the Project area 3) borrow pit and disposal site near the Project area	before notice of the bidding documents	CGM		
8	To obtain the planning, zoning, building permit	before notice of the bidding documents	CGM		
9	To clear, level and reclaim the following sites 1) remove utilities 2) existing facilities	before notice of the bidding documents	CGM KeNHA KURRA Kenya Power		
10	To submit Project Monitoring Report (with the result of Detailed Design)	before preparation of the bidding documents	CGM		

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

Note: CGM: Mombasa County Government

MOF: Ministry of Finance

KeNHA: Kenya National Highways Authority

KURA: Kenya Urban Roads Authority

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(2) During the Project Implementation

NO	Items	Deadline	In charge	Estimated Cost	Ref.
1	To issue A/P to the Agent Bank for the payment to the supplier and the contractor	within 1 month after the signing of the contract(s)	CGM		
2	To bear the following commissions to the Agent Bank for the banking services based upon the B/A				
	1) Advising commission of A/P	within 1 month after the signing of the contract(s)	CGM		
	2) Payment commission for A/P	every payment	CGM		
3	to ensure prompt unloading and customs clearance at ports of disembarkation in the country of the Recipient and to assist the Supplier(s) with internal transportation therein	during the Project	CGM		
4	To accord Japanese physical persons and/or physical persons of third countries whose services may be required in connection with the supply of the products and the services such facilities as may be necessary for their entry into the country of the Recipient and stay therein for the performance of their work	during the Project	CGM		
5	To ensure that customs duties, internal taxes and other fiscal levies which may be imposed in the country of the Recipient with respect to the purchase of the products and/or the services be exempted	during the Project	CGM		
6	To bear all the expenses, other than those covered by the Grant, necessary for the implementation of the Project	during the Project	CGM		
7	To notify JICA promptly of any incident or accident, which has, or is likely to have, a significant adverse effect on the environment, the affected communities, the public or workers.	during the construction	CGM		
8	1) To submit Project Monitoring Report	every month	CGM		
	2) To submit Project Monitoring Report (final) (including as-built drawings, equipment list, photographs, etc.)	within 1 month after issuance of Certificate of Completion for the works under the contract(s)	CGM		
9	To submit a report concerning completion of the Project	within 6 months after completion of the Project	CGM		
10	To ensure the safety of persons engaged in the implementation of the Project	during the Project	CGM		
11	To take measure necessary for security and safety of the Project -traffic control around the site and on transportation routes of construction materials -public notification	during the construction	CGM		
12	To implement EMP and EMoP	during the construction	CGM		
13	To submit results of environmental monitoring to JICA, by using the monitoring form, on a quarterly basis as a part of Project Monitoring Report	during the construction	CGM		
14	To implement RAP/ARAP (livelihood restoration program), if necessary	for a period based on livelihood restoration	CGM		

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		program			
15	To implement social monitoring, and to submit the monitoring results to JICA, by using the monitoring form, on a quarterly basis as a part of Project Monitoring Report - Period of the monitoring may be extended if affected persons' livelihoods are not sufficiently restored. Extension of the monitoring will be decided based on agreement between CGM and JICA.	- until the end of livelihood restoration program (In case that livelihood restoration program is provided) - for 2 years after land acquisition and resettlement complete (In case that livelihood restoration program is not provided)	CGM		

(3) After the Project

NO	Items	Deadline	In charge	Estimated Cost	Ref.
1	To implement EMP and EMoP	for a period based on EMP and EMoP	CGM		
2	To submit results of environmental monitoring to JICA, by using the monitoring form, semiannually - The period of environmental monitoring may be extended if any significant negative impacts on the environment are found. The extension of environmental monitoring will be decided based on the agreement between CGM and JICA.	for 3 years after the Project	CGM		
3	To maintain and use properly and effectively the facilities constructed and equipment provided under the Grant Aid 1) Allocation of maintenance cost 2) Operation and maintenance structure Routine check/Periodic inspection	After completion of the construction	CGM		

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

NO	Items	Deadline	Amount (Million Japanese Yen)*
1	Civil work and equipment procurement		
2	Detailed design and Supervisory Service		
3	Contingencies		
	Total		XXX

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

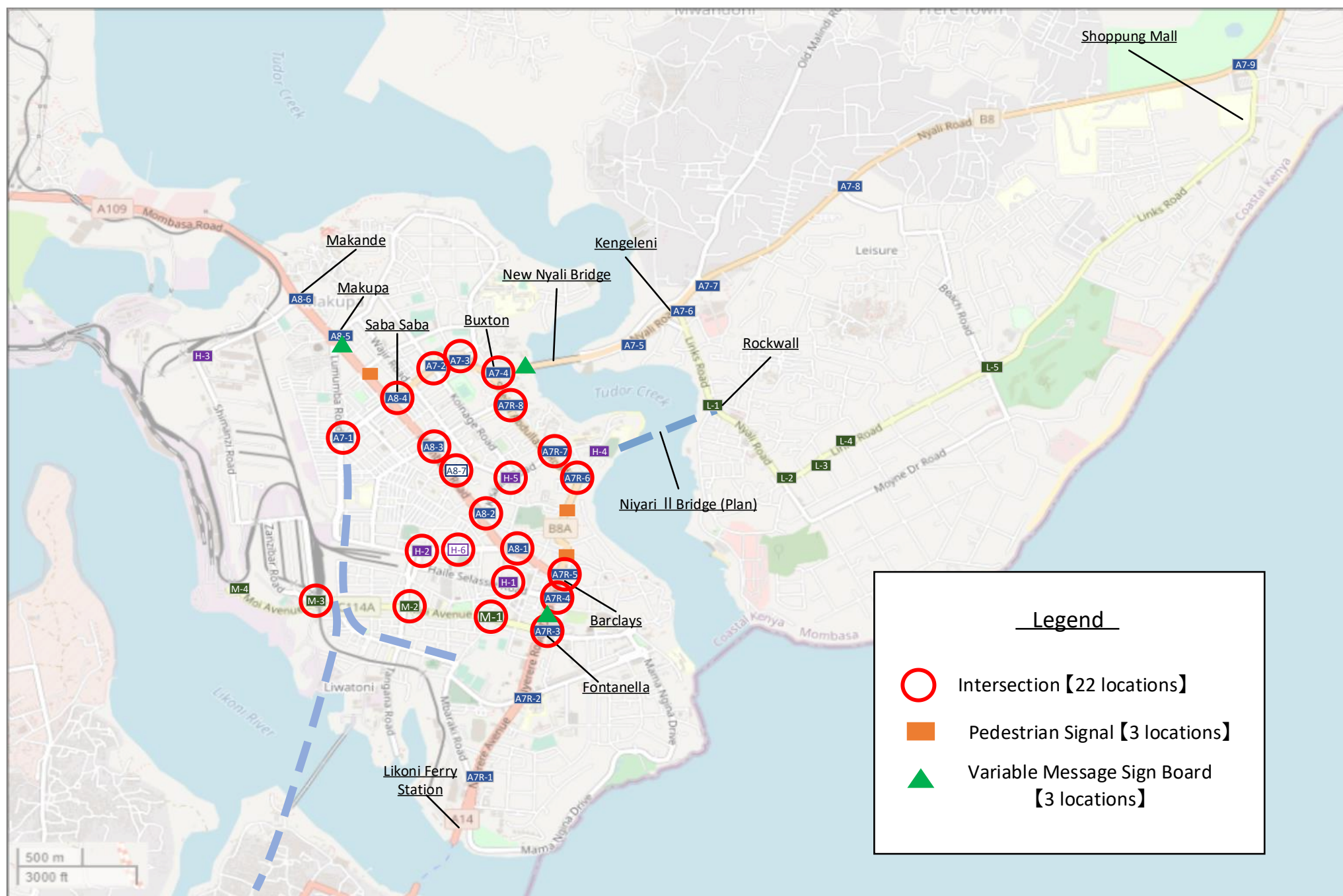
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Minutes of Discussions
on the Preparatory Survey for the Project for
Implementation of Intelligent Transport System in Mombasa Region
(Progress Meeting)

Based on the several preliminary discussions between the Government of Republic of Kenya (hereinafter referred to as “Kenya”) and Japan International Cooperation Agency (hereinafter referred to as “JICA”) Kenya Office, JICA side and Kenya side have confirmed the two items described below.

1. Both side confirmed that the one-way operation and closure of road which have effect on the Project for Implementation of Intelligent Transport System in Mombasa Region (hereinafter referred to as “the Project”), implemented by County Government of Mombasa, is a temporary operation, and this operation will be finished before commencement of the operation of traffic signals implemented by the Project.
2. Both side confirmed that intersection L-2, and L-5 are excluded from the scope of the Project. The candidate sites of the Project are shown in Annex1.

13 April, 2022



Minutes of Discussions
on the Preparatory Survey for the Project for
the Implementation of Intelligent Transport System in Mombasa Region
(Explanation on Draft Preparatory Survey Report)

With reference to the Minutes of Discussions signed between County Government of Mombasa (hereinafter referred to as “CGM”) and Japan International Cooperation Agency (hereinafter referred to as “JICA”) on September 30 2021 and December 8 2021, and in response to the request from the Government of Republic of Kenya (hereinafter referred to as “Kenya”) dated January 28, 2022, JICA organized the Preparatory Survey Team (hereinafter referred to as the “Team”) for the explanation of Draft Preparatory Survey Report (hereinafter referred to as the “Draft Report”) for the Project for the Implementation of Intelligent Transport System in Mombasa Region (hereinafter referred to as the “Project”).

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

Mombasa, March 21, 2024



Kawahara Shuntaro

Leader

Preparatory Survey Team

Japan International Cooperation Agency

Japan



Jeizan Faruk

County Secretary and Head of Public Service

County Government of Mombasa

The Republic of Kenya

ATTACHEMENT

1. Objective of the Project

The objective of the Project is to ease traffic congestion and improve traffic safety through installation of ITS equipment and improvement of junctions, thereby contributing to economic development of Mombasa Region.

2. Title of the Project

Both sides confirmed the title of the Project is modified as the “Project for the Implementation of Intelligent Transport System in Mombasa County”.

3. Project Sites

Both sides confirmed that the sites of the Project are in Mombasa County, which is shown in Annex 1.

4. Responsible authority for the Project

Both sides confirmed that CGM will be the executing agency for the Project (hereinafter referred to as “the Executing Agency”).

The Executing Agency shall coordinate with all the relevant authorities to ensure smooth implementation of the Project and ensure that the undertakings for the Project shall be taken care by relevant authorities properly and on time. The organization chart, which includes demarcation of task such as execution of the Project, data analysis, operation, and maintenance of the ITS system among relevant departments, is shown in Annex 2.

5. Contents of the Draft Report

After the explanation of the contents of the Draft Report by the Team, the Kenyan side agreed to its contents. JICA will finalize the Preparatory Survey Report based on the confirmed items. The report will be sent to the Kenyan side around July, 2024.

6. Cost estimate

Both sides confirmed that the cost estimation including the contingency explained by the Team is provisional and will be examined further by the Government of Japan for its approval. The contingency would cover the additional cost against natural disaster, unexpected natural conditions, etc.

7. Confidentiality of the cost estimate and technical specifications

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

8. Procedures and Basic Principles of Japanese Grant

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

9. Timeline for the Project Implementation

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

10. Expected outcomes and indicators.

Both sides agreed that key indicators for expected outcomes are as follows. The Kenyan side will be responsible for the achievement of agreed key indicators targeted in year 2030 and shall monitor the progress for Ex-Post Evaluation based on those indicators.

[Quantitative indicators]

Indicator	Basic Value (2021)	Target (2030) [3 years after completion]
Average Travel time (minutes) at traffic peak hour *1	approx. 9.4 minutes	approx. 6.5 minutes
Average Travel speed (km/h) at traffic peak hour *1	approx. 12.3 km/h	approx. 17.8 km/h
Overall benefits of the target intersection (mill yen/year) *2	—	approx. 480 mill yen/year

*1 : Saba Saba Intersection to Barclay intersection (approx. 2km). Evening peak.

*2 : Economic benefit of travel time reduction resulting from difference in estimated travel time between "With the Project Case" and "Without the Project Case" when the road improvement projects (Roads connecting Nairobi direction(A109) and Mombasa port area (A8 and A14) on Mombasa Island) are completed in 2030.



[Qualitative indicators]

- 1) Mitigation of traffic congestion in Mombasa Island by the Project will contribute to vitalization of economic activity.
- 2) The convenience and safety of vehicles, passengers and pedestrians will be enhanced.

11. Ex-Post Evaluation

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

12. Undertakings of the Project

Both sides confirmed the undertakings of the Project as described in Annex 5. With regard to exemption of customs duties, internal taxes and other fiscal levies as stipulated in No. 5 of (2) During the Project Implementation of Annex 5, both sides confirmed that such customs duties, internal taxes and other fiscal levies shall be clarified in the bid documents by the Executing Agency during the implementation stage of the Project. Both sides confirmed general tax exemption procedure as is shown in the Annex 6. Detail contents and procedure of tax exemption will be formally agreed between the Government of Japan and the Government of Kenya.

The Kenyan side assured to take the necessary measures and coordination including allocation of the necessary budget which are preconditions of implementation of the Project. It is further agreed that the costs are indicative, i.e., at Outline Design level. More accurate costs will be calculated at the Detailed Design stage.

Both sides also confirmed that the Annex 5 will be used as an attachment of Grant Agreement (G/A).

Both sides confirmed that the Executing Agency shall take necessary measures to ensure and maintain the security of the Project site and the persons related to the implementation of the Project, in cooperation with relevant authorities such as police during the Project period. Such security measures shall reasonably reflect needs of the Consultant and the Contractor engaging in the Project, as shown in Annex 5.

Both sides agreed that in case the additional security cost would be necessary for the implementation of the Project, such cost shall be borne by the Recipient without using the Grant.



13. Monitoring during the implementation

The Project will be monitored by the Executing Agency and reported to JICA by using the form of Project Monitoring Report (hereinafter referred to as the “PMR”) attached as Annex 7. The timing of submission of the PMR is described in Annex 5.

14. Project completion

Both sides confirmed that the Project completes when all the facilities constructed, and equipment procured by the Grant are in operation. The completion of the Project will be reported to JICA promptly, but in any event not later than six (6) months after completion of the Project.

15. Items and measures to be considered for smooth implementation of the Project.

Both sides confirmed the items and measures to be considered for the smooth implementation of the Project as described in Annex5 and 8.

15-1. Installation of fiber cable network

Both sides confirmed that the Kenyan side explained that the installation of some sections of fiber cable network specified by the Draft Report would be implemented by the Executing Agency before announcement of the tender process as is described in Annex5.

15-2. Relocation of utilities and existing facilities.

the Executing Agency will coordinate relevant entities to complete relocation of utilities and existing facilities before announcement of the tender process.

15-3. Construction of the new traffic management center building

Both sides confirmed that the operation room for the equipment provided by the Project will be located at the new traffic management center building at the premise of Inspectorate Unit, and that its construction should be completed before announcement of the tender process of the Project as is described in Annex5. Kenyan side explained that its construction, of which budget is planned to be secured in fiscal year 2024-25, is expected to be completed in April 2025.

15-4. Operation and Maintenance

The Team explained necessary organizational structure and cost to ensure sustainable and effective operation and maintenance of the equipment implemented by the Project as is mentioned in the Draft Report and the Annex 8. Kenyan side assured to properly allocate necessary human and fiscal resources.



Both sides confirmed that capacity of operation and maintenance of the equipment is expected to be enhanced by the Technical Cooperation Project committed by the Government of Japan on May 23, 2022. Operation and Maintenance scheme of ITS equipment will be further elaborated in the course of the Technical Cooperation Project. In this connection, both sides confirmed that it is favorable that the Technical Cooperation Project will commence approximately 1.5 years prior to operation of the equipment provided by the Project.

Kenyan side explained that, as vandalism is one of crucial issues on operation and maintenance, it expects security patrol and existing CCTV and provided by the Project will mitigate vandalism.

16. Environmental and Social Considerations

16-1. General Issues

16-1-1. Environmental Guidelines and Environmental Category

The Team explained that ‘JICA Guidelines for Environmental and Social Considerations (April 2010)’ (hereinafter referred to as the “Guidelines”) is applicable for the Project. The Project is categorized as B because the Project is not considered to be a large-scale road, is not located in a sensitive area, and has none of the sensitive characteristics under the Guidelines, it is not likely to have a significant adverse impact on the environment.

16-1-2. Environmental Checklist

The environmental and social considerations including major impacts and relevant mitigation measures are summarized in the Environmental Checklist attached as Annex 9. Both sides confirmed that in case of major modification of the content of the Environmental Checklist, the Kenyan side shall submit the modified version to JICA in a timely manner.

16-2. Environmental Issues

16-2-1. Environmental Impact Assessment (EIA)

Both sides confirmed the Environmental Impact Assessment (hereinafter referred to as “EIA”) report will be approved by The National Environment Management Authority (hereinafter referred to as “NEMA”) in July 2024.

16-2-2. Environmental Management Plan and Environmental Monitoring Plan

Both sides confirmed Environmental Management Plan (EMP) and



Environmental Monitoring Plan (EMoP) of the Project is as Annex 10, respectively. Both side agreed that environmental mitigation measures and monitoring shall be conducted based on the EMP and EMoP, which may be updated during the detailed design stage.

16-3. Social Issues

16-3-1. Land Acquisition and Resettlement

Both sides confirmed that land acquisition and resettlement due to the Project would not be necessary and any households would not be relocated due to the implementation of the Project.

16-4. Environmental and Social Monitoring

16-4-1. Environmental Monitoring

Both sides agreed that the Kenyan side will submit results of environmental monitoring to JICA by using the monitoring form attached as Annex 11. The timing of submission of the monitoring form is described in Annex 5. In case JICA finds that there is a need for improvement in a situation with respect to environmental considerations after the agreed monitoring period, JICA may request to extend the period of monitoring and reporting until JICA confirms the issues have been properly addressed. The extension of the monitoring will be decided in accordance with the agreement between the Kenyan side and JICA.

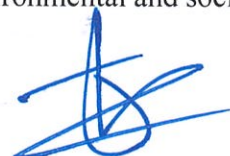
16-4-2. Social Monitoring

Both sides confirmed that the Kenyan side will implement social monitoring about complains, infections disease, occupational health, and traffic accident. Both sides agreed that the Executing Agency will submit results of social monitoring to JICA by using the monitoring form attached as Annex 11. In case there is a remaining issue that needs to be addressed, JICA may request to extend the period of monitoring and reporting until JICA confirms the issues have been properly addressed and solved. The extension of the monitoring will be decided in accordance with the agreement between the Kenyan side and JICA.

16-4-3. Information Disclosure of Monitoring Results

Both sides confirmed that the Kenyan side will disclose results of environmental and social monitoring to local stakeholders through their website / in their field offices.

The Kenyan side agreed JICA will disclose results of environmental and social



monitoring submitted by the Kenyan side as the monitoring forms attached as Annex11 on its website.

17. Other Relevant Issues

17-1. Disclosure of Information

Both sides confirmed that the Preparatory Survey Report from which project cost is excluded will be disclosed to the public after completion of the Preparatory Survey. The comprehensive report including the project cost will be disclosed to the public after all the contracts under the Project are concluded.

17-2. Gender Mainstreaming

Both sides confirmed that the gender mainstreaming should be incorporated into the Project. In particular, both sides agreed on the following gender elements to be integrated into the Project.

- (a) In the construction stage, workers should be equally paid for equal work, and the work office should be equipped with facilities for female workers.
- (b) In the setting of traffic signals, safety crossing of vulnerable pedestrians should be considered.

17-3. Climate Change Mitigation

Both sides confirmed that the Project contributes to climate change mitigation through the reduction of CO2 by improving traffic flow.

17-4. Safety Measures

Both sides confirmed that ensuring human safety and respect for basic human rights have the top priority in ODA construction works, and that the Kenyan side causes the stakeholders involved in the Project to follow “The Guidance for the Management of Safety for Construction Works in Japanese ODA Projects” which has been published on JICA’s URL below.

https://www.jica.go.jp/english/our_work/types_of_assistance/c8h0vm00008zx0m8-att/guidance_en.pdf

17-5. Coordination with relevant agencies

Both sides confirmed that following coordination is required for the Kenyan side for the Project:

- Discussion on detailed function of the equipment provided by the Project with KeNHA and KURA before completion of detailed design of the Project;
- Preliminary approval of intersection improvement from KeNHA and KURA

before completion of detailed design of the Project;

- Coordination with KeNHA on additional signals to be installed for Mombasa Gate Bridge Project near future, which will be integrated to the signal system of the Project;
- Coordination with KeNHA on information exchange between Traffic Management Centre of the Project and Control Centre of Mombasa Gate Bridge Project which will be constructed near future;
- Type acceptance/approval from Communications Authority of Kenya (hereinafter referred to as "CA") of any electronic equipment that will be used in the Project; and
- Authorization from CA of any frequencies that will be used in the Project, if necessary.

17-6. Data Protection Impact Assessment

Kenyan side explained that Data Protection Impact Assessment (hereinafter referred to as the "DPIA") should be submitted at least 60 days prior to activation and collection of data. Both sides confirmed that the Executing Agency will carry out DPIA with support of Japanese experts dispatched through the new technical cooperation project.

17-7. Management of bank account of the Project

Both sides confirmed that the Executing Agency will be responsible for management of bank account of the Project subject to delegation of authority by the National Treasury.

17-8. Consultant during for the Project implementation stage

County Government of Mombasa should satisfy itself on the capacity of a consultant though due diligence, and also reserve the right to reject the consultant recommended by JICA.

17-9. Grant financing status

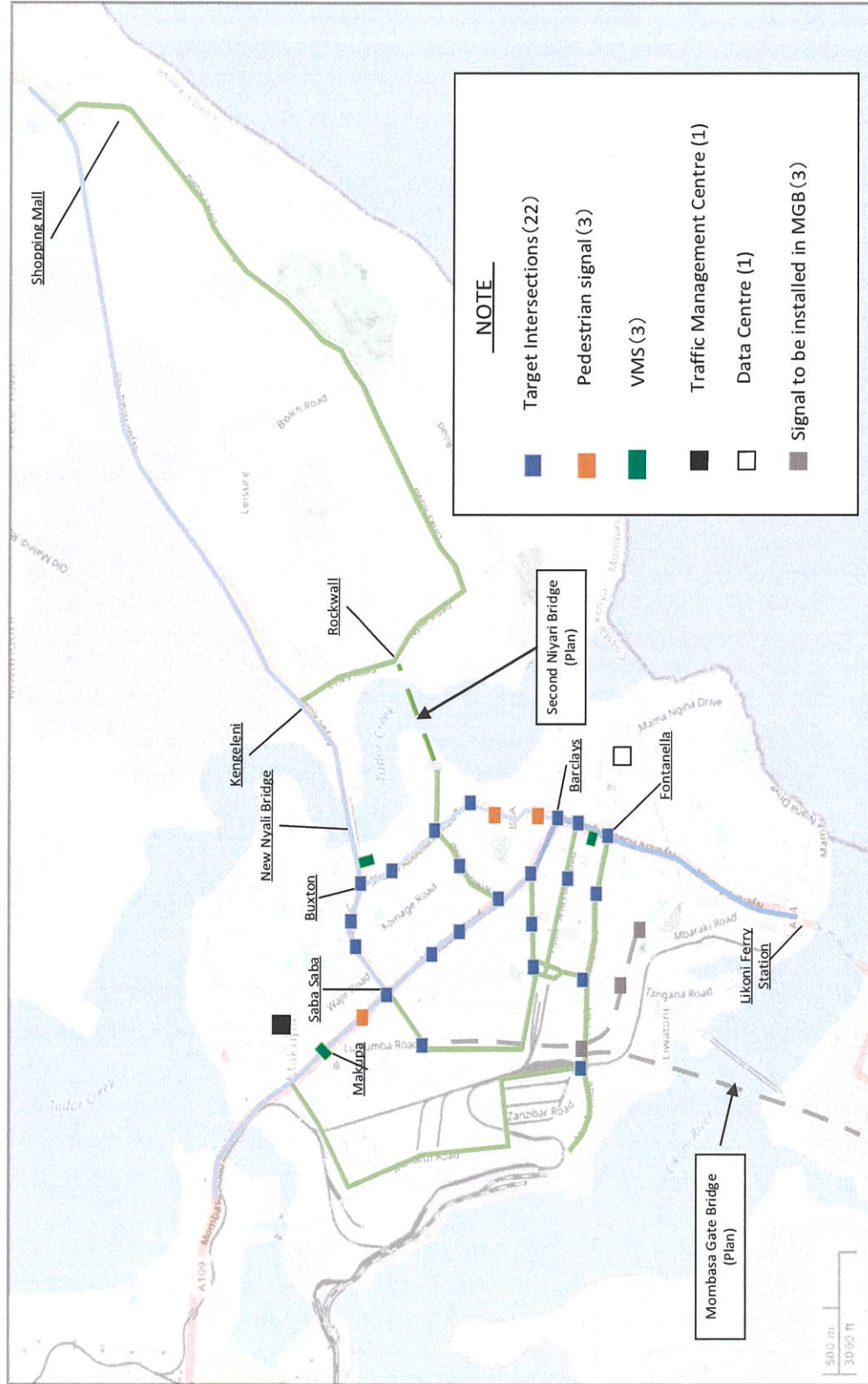
JICA requests for counterpart fund as described in Annex 5. However, both sides confirmed that such contribution by CGM and the Government of Kenya does not nullify the "a hundred percent grant status" of the project. The scope of the Project for consultancy, construction of facilities and procurement of equipment is 100% financed by Japanese grant.

End



Annex 1: Project Site
Annex 2: Organization Chart
Annex 3: Japanese Grant
Annex 4: Project Implementation Schedule
Annex 5: Major Undertakings to be taken by the Government of Republic of Kenya
Annex 6: Procedure of Tax Exemption for Japanese Grand Aid Project
Annex 7: Project Monitoring Report (template)
Annex 8: Items and measures to be considered for smooth implementation of the Project
Annex 9: Environmental Check List
Annex 10: Environmental Management Plan / Environmental Monitoring Plan
Annex 11: Environmental and Social Monitoring Form

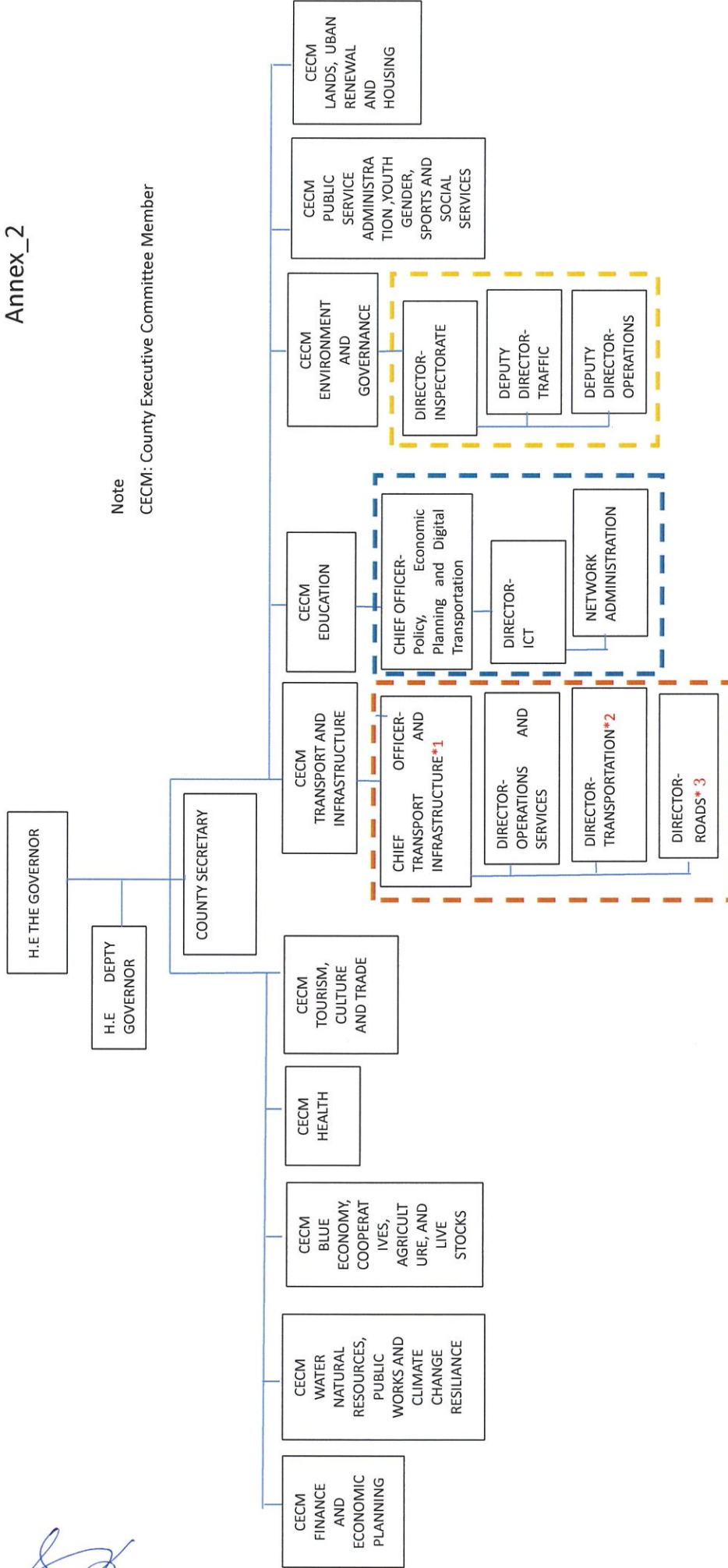




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Annex_2



Note
CECM: County Executive Committee Member

*1 EXECUTION OF THE PROJECT
*2 DATA ANALYSIS AND MAINTENANCE OF ITS SYSTEM
*3 IMPROVEMENT OF INTERSECTIONS, MANAGED BY CGM

MAINTENANCE OF OFC AND NETWORK

OBSERVATION OF ITS EQUIPMENT OPERATION OF ITS SYSTEM, AND TRAFFIC MANAGEMENT

JAPANESE GRANT

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

1. Procedures of Project Grants

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

(1) Preparation

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

(2) Appraisal

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

(3) Implementation

Exchange of Notes

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

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

- Agreement concluded between JICA and the Recipient

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

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

Construction works/procurement

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

(4) Ex-post Monitoring and Evaluation

- Monitoring and evaluation at post-implementation stage

2. Preparatory Survey

(1) Contents of the Survey

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

- Confirmation of the background, objectives, and benefits of the Project and also institutional capacity of relevant agencies of the Recipient necessary for the implementation of the Project.

- Evaluation of the feasibility of the Project to be implemented under the Japanese Grant from a technical, financial, social and economic point of view.
- Confirmation of items agreed between both parties concerning the basic concept of the Project.
- Preparation of an outline design of the Project.
- Estimation of costs of the Project.
- Confirmation of Environmental and Social Considerations

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

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

(2) Selection of Consultants

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

(3) Result of the Survey

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

3. Basic Principles of Project Grants

(1) Implementation Stage

1) The E/N and the G/A

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

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

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

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

3) Procurement Procedure

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

4) Selection of Consultants

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

5) Eligible source country

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

6) Contracts and Concurrence by JICA

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

7) Monitoring

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

8) Safety Measures

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

9) Construction Quality Control Meeting

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



followings:

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

(2) Ex-post Monitoring and Evaluation Stage

- 1) After the project completion, JICA will continue to keep in close contact with the Recipient in order to monitor that the outputs of the Project is used and maintained properly to attain its expected outcomes.
- 2) In principle, JICA will conduct ex-post evaluation of the Project after three years from the completion. It is required for the Recipient to furnish any necessary information as JICA may reasonably request.

(3) Others

1) Environmental and Social Considerations

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

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

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

3) Measures to ensure more efficient implementation of the Grant

- i) In the event that the E/N and the G/A concerning a project cannot be signed by the end of the following Japanese fiscal year of the cabinet decision concerned by the GOJ, the authorities concerned of the two Governments will discuss the cancellation of the project.
- ii) In the event that the period, specified in the G/A, during which the grant is available expires before the completion



of the disbursement, the authorities concerned of the GOJ will thoroughly review the status, situation and perspective of the implementation of the project concerned before extending the said period. The authorities concerned of the two Governments will discuss the termination of the project including a refund, unless there are concrete prospects for its completion.

iii) Regardless of the period mentioned in ii) above, the authorities concerned of the two Governments will, in the event that five years have passed since the cabinet decision concerned by the GOJ before the completion of the disbursement, except as otherwise confirmed between them, discuss the termination of a project including a refund, unless there are concrete prospects for its completion.

4) Proper Use

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

5) Export and Re-export

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



PROCEDURES OF JAPANESE GRANT

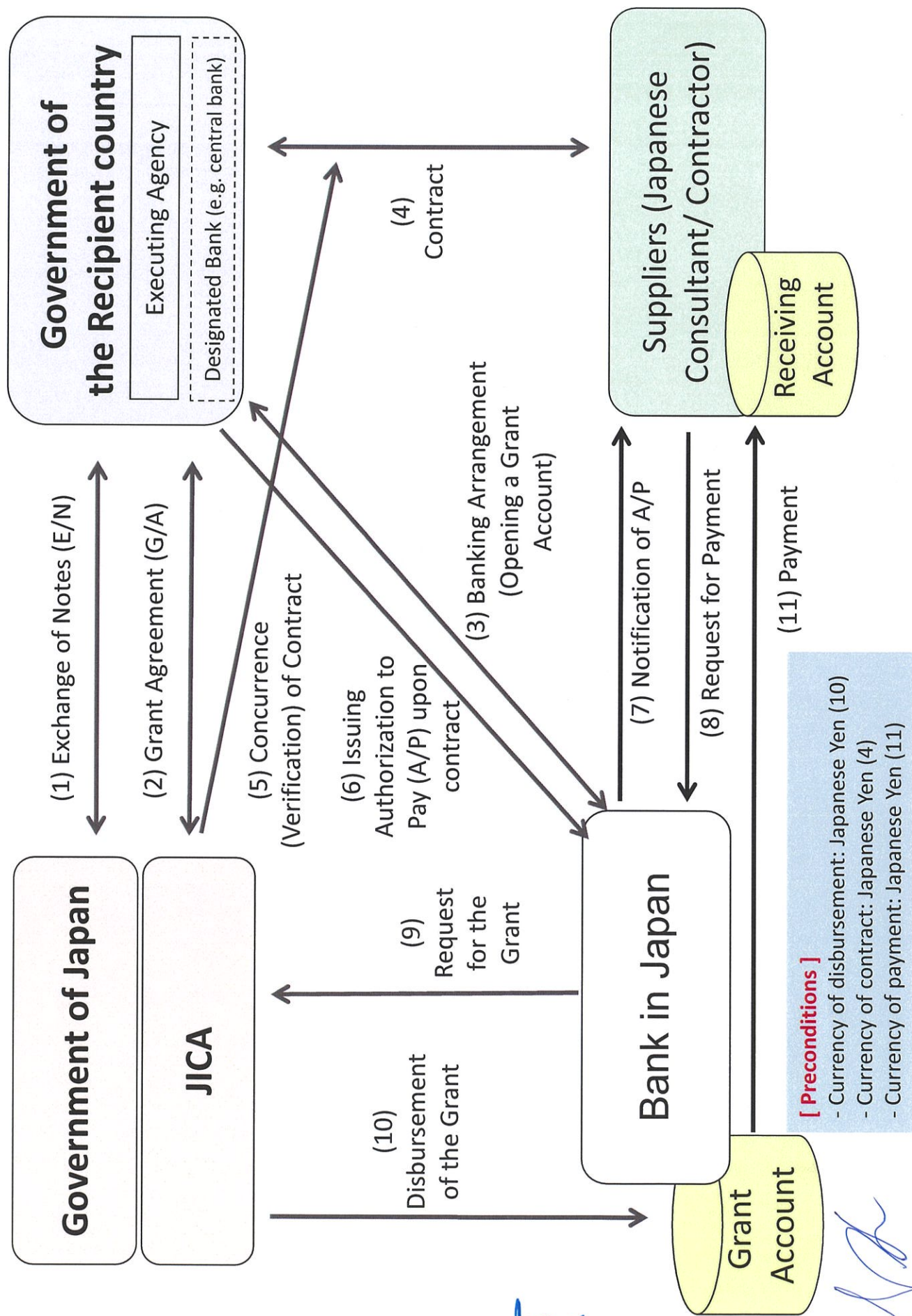
Stage	Procedures	Remarks	Recipient Government	Japanese Government	JICA	Consultants	Contractors	Agent Bank
Official Request	Request for grants through diplomatic channel	Request shall be submitted before appraisal stage.	x	x				
1. Preparation	(1) Preparatory Survey Preparation of outline design and cost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

notes:

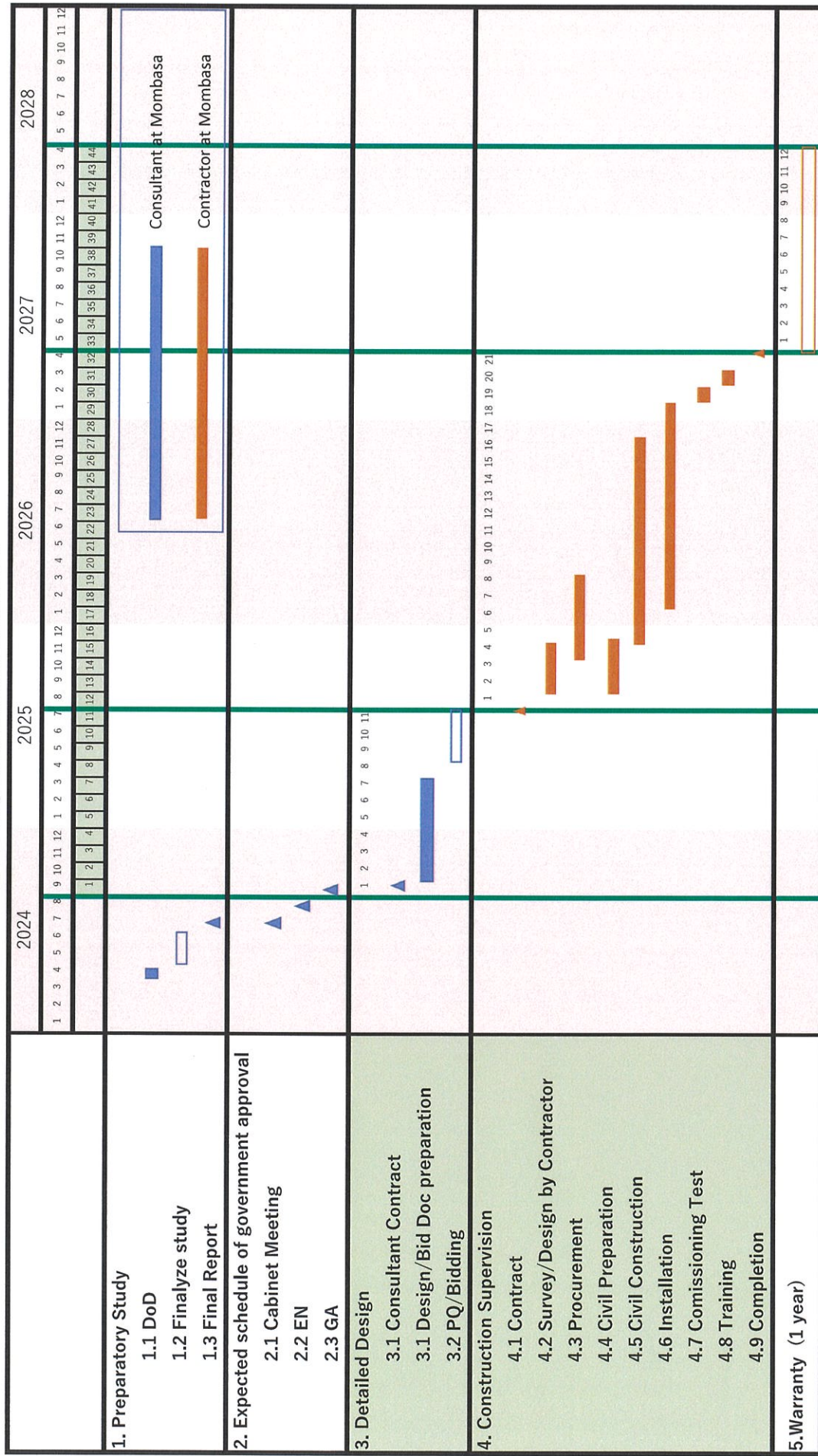
1. Project Monitoring Report and Report for Project Completion shall be submitted to JICA as agreed in the G/A.

2. Concurrence by JICA is required for allocation of grant for remaining amount and/or contingencies as agreed in the G/A.

Financial Flow of Japanese Grant (A/P Type)



Project Implementation Schedule





Major Undertakings to be taken by the Government of Republic of Kenya

1. Specific obligations of the Government of Republic of Kenya which will not be funded with the Grant**(1) Before the Tender**

NO	Items	Deadline	In charge	Estimated Cost (KES)	Ref.
1	To sign the banking arrangement (B/A) with a bank in Japan (the Agent Bank) to open bank account for the Grant	within 1 month after the signing of the G/A	CGM (NT)	approx. 3,000,000	
2	To issue A/P to the Agent Bank for the payment to the consultant	within 1 month after the signing of the contract(s)	CGM (NT)		
3	To bear the following commissions to the Agent Bank for the banking services based upon B/A				
	1) Advising commission of A/P Commissioning Fee	within 1 month after the signing of the contract(s)	CGM		
	2) Payment commission for A/P	every payment	CGM		
4	To approve EIA(Conditions of approval should be fulfilled, if any) and secure the necessary budget for implementation for EMP and EMoP (and fulfilling conditions of approval, if any). Commission Fee	until July, 2024	CGM	approx. 3,000,000	
5	To implement social monitoring, and to submit the monitoring results to JICA, by using the monitoring form, on a quarterly basis as a part of Project Monitoring Report	until land acquisition and resettlement completion	CGM		
6	To secure and clear the following lands	before announcement of the tender process	CGM		
	1) main camp yard, temporary construction yard and stock yard near the Project area				
	2) borrow pit and disposal site near the Project area	before announcement of the tender process	CGM	3,000,000	
	3) To complete construction of new traffic management center building to accommodate the provided equipment, which will later include raised floor, air-conditioning system, electrical fittings, lighting fixtures and interior finishes.		CGM	13,265,000	
	4) Implementation of additional Optical Fiber network		CGM		
7	To discuss on intersection design	During detailed design	CGM KURA KeNHA		

8	To clear, level and reclaim the following sites 1) Removal of the ornament structures, power facilities, communication cables, advertisement board and lighting from the roundabouts with cooperation of the stakeholders.	before announcement of the tender process	CGM	5,000,000	
9	To submit Project Monitoring Report (with the result of Detailed Design)	before announcement of the tender process	CGM		

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

Note: CGM : Mombasa County Government

NT : The National Treasury and Economic Planning

KeNHA : Kenya National Highways Authority

KURA: Kenya Urban Roads Authority

(2) During the Project Implementation

NO	Items	Deadline	In charge	Estimated Cost (KES)	Ref.
1	To issue A/P to the Agent Bank for the payment to the supplier and the contractor	within 1 month after the signing of the contract(s)	CGM (NT)	approx. 3,000,000	
2	To bear the following commissions to the Agent Bank for the banking services based upon the B/A 1) Advising commission of A/P	within 1 month after the signing of the contract(s)	CGM (NT)		
	2) Payment commission for A/P	every payment	CGM (NT)		
3	To ensure prompt unloading and customs clearance at ports of disembarkation in the country of the Recipient and to assist the Supplier(s) with internal transportation therein	during the Project	CGM		
4	To accord Japanese physical persons and/or physical persons of third countries whose services may be required in connection with the supply of the products and the services such facilities as may be necessary for their entry into the country of the Recipient and stay therein for the performance of their work	during the Project	CGM		
5	To ensure that customs duties, internal taxes and other fiscal levies which may be imposed in the country of the Recipient with respect to the purchase of the products and/or the services be exempted.	during the Project	CGM NT		
6	To bear all the expenses, other than those covered by the Grant, necessary for the implementation of the Project	during the Project	CGM		
7	To notify JICA promptly of any incident or accident, which has, or is likely to have, a significant adverse effect on the environment, the affected communities, the public or workers.	during the construction	CGM		
8	1) To submit Project Monitoring Report	every month	CGM		
	2) To submit Project Monitoring Report (final) (including as-built drawings, equipment list, photographs, etc.)	within 1 month after issuance of Certificate of Completion for the works under the contract(s)	CGM		
9	To submit a report concerning completion of the Project	within 6 months after completion of the Project	CGM		

10	To provide Data Centre and Traffic Management Centre with facilities for distribution of electricity, water supply and drainage and other incidental facilities necessary for the implementation of the Project outside the site(s), 1) Electric power distributing line to the equipment.	before start of the equipment installation	CGM	2,370,000	
	2) Communication line to the equipment	Before start of the equipment installation	CGM (Fiber Link)	2,770,000	
	3) Relocating and adding Mobile Radio Communication System to new Traffic Management Centre.	During/before installation	CGM	300,000	
11	To ensure the safety of persons engaged in the implementation of the Project.	during the Project	CGM		
12	To take measures necessary for security and safety of the Project -traffic control around the site and on transportation routes of construction materials -public notification -immediate action in case of accident -information of security.	during the construction	CGM		
13	To implement EMP and EMoP	during the construction	CGM		
14	To submit results of environmental monitoring to JICA, by using the monitoring form, on a quarterly basis as a part of Project Monitoring Report	during the construction	CGM		
15	To implement social monitoring, and to submit the monitoring results to JICA, by using the monitoring form, on a quarterly basis as a part of Project Monitoring Report	during the construction	CGM		

(3) After the Project

NO	Items	Deadline	In charge	Estimated Cost	Ref.
1	To implement EMP and EMoP	during warranty period	CGM	6,600,000 1 year only	
2	To submit results of environmental monitoring to JICA, by using the monitoring form, semiannually - The period of environmental monitoring may be extended if any significant negative impacts on the environment are found. The extension of environmental monitoring will be decided based on the agreement between CGM and JICA.	for 3 years after completion of the Project	CGM		
3	To maintain and use properly and effectively the facilities constructed and equipment provided under the Grant Aid 1) Allocation of maintenance cost Maintenance Contract fee Communication Bill 2) Operation and maintenance structure Maintenance Contract Assignment of personnel for Operation and maintenance	After completion of the construction	CGM	9,900,900 10,693,069 /Year	

Procedure of Tax Exemption for Japanese Grand Aid Project

Annex 6

Tax items	Measure	Relevant Authorities and Application procedure
Corporate Tax imposed on Japanese Companies	Exempt (Advanced)	[Case 1] There is an existing office in Kenya. ① Apply to found the branch for the project in the registered PIN to KRA. ② Submit copies of the E/N, G/A and contract and apply tax exemption to KRA. ③ Use the same PIN as the existing PIN for tax exemption. ④ Close the branch at the end of the project. Duration : 6 months [Case 2: No office in Kenya] ① Establish a company and apply a PIN to KRA. ② Apply for exemption application to CGM as the new company. ③ Tax exemption is made to KRA from NTP. Duration : 6 months
Income Tax for Japanese Nationals	Exempt (Advanced)	[Case-1] Apply by individual ① Obtain a stay permission and a foreigner registration certificate from Immigration Office. ② Obtain a PIN from KRA web site. ③ Submit copies of E/N, G/A and contract with the EA and apply tax exemption to KRA. Duration: 6 months [Case-2] Request CGM to do the procedure ① Submit the documents related to permission of stay (E/N, G/A and contract with the CGM) to CGM. ② Application of PIN will be made to KRA with a tax exemption letter from NTP. Duration : 6 months

【Abbreviations】 NTP: National Treasury and Planning / EA: Executing Agency / KRA : Kenya Revenue Authority/ PIN : Personal Identification Number / E/N: Exchange of Note / G/A : Grant Agreement

Tax items	Measure	Relevant Authorities and Application procedure
VAT for Normal Goods and Equipment	Exempt (Advanced)	① Contractor applies for the tax exemption through CGM with necessary documents, including the whole material/equipment list (i.e., master list). ② After receiving the documents from the contractor, CGM will make a request to MM for the tax exemption. ③ MM writes to NTP for request of the tax exemption. ④ NTP approves the request and issues a tax exemption certificate. ⑤ Before the actual procurement of the goods and equipment, contractor requests KRA for the exemption of VAT with proforma invoice with the approved master list. Duration: 2 months in EA and MM, 2 months in NTP, 2-3 months in KRA
All imported items which attract duties	Exempt (Advanced)	① Contractor applies for the tax exemption through CGM with necessary documents, including the whole material/equipment list (i.e., master list). ② After receiving the documents from the contractor, CGM writes to NTP for request of the tax exemption. ③ NTP approves the request and issue a tax exemption certificate. ④ Contractor requests KRA for the exemption of custom duties for the individual items to be imported with shipping documents and the approved master list. ⑤ KRA issues a duty free note upon verification of the documents. Duration: 2 months in CGM, 2 months in NTP, 2-3 months in KRA

【Abbreviations】 NTP: National Treasury and Planning / EA: Executing Agency / KRA : Kenya Revenue Authority/ PIN : Personal Identification Number / E/N: Exchange of Note / G/A : Grant Agreement



<u>Project Monitoring Report</u> on <u>Project Name</u> <u>Grant Agreement No. XXXXXXXX</u> 20XX, Month
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Organizational Information

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

General Information:

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




1: Project Description

1-1 Project Objective

--

1-2 Project Rationale

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

--

1-3 Indicators for measurement of "Effectiveness"

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

2: Details of the Project

2-1 Location

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

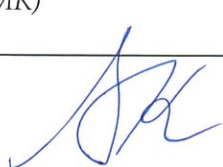
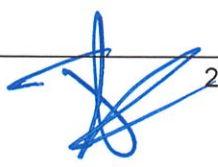
2-2 Scope of the work

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

Reasons for modification of scope (if any).

(PMR)

--

  2

2-3 Implementation Schedule

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

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

2-4 Obligations by the Recipient

2-4-1 Progress of Specific Obligations

See Attachment 2.

2-4-2 Activities

See Attachment 3.

2-4-3 Report on RD

See Attachment 11.

2-5 Project Cost

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

Components			Cost (Million Yen)	
	Original (proposed in the outline design)	Actual (in case of any modification)	Original ^{1),2)} (proposed in the outline design)	Actual
	1.			
Total				

Note: 1) Date of estimation:

2) Exchange rate: 1 US Dollar = Yen

2-5-2 Cost borne by the Recipient

Components			Cost (1,000 Taka)	
	Original (proposed in the outline design)	Actual (in case of any modification)	Original ^{1),2)} (proposed in the outline design)	Actual
	1.			

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

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

(PMR)

2-6 Executing Agency

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

Original (at the time of outline design)

name:

role:

financial situation:

institutional and organizational arrangement (organogram):

human resources (number and ability of staff):

Actual (PMR)

2-7 Environmental and Social Impacts

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

3: Operation and Maintenance (O&M)

3-1 Physical Arrangement

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

Original (at the time of outline design)

Actual (PMR)

3-2 Budgetary Arrangement

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

Original (at the time of outline design)

Actual (PMR)

4: Potential Risks and Mitigation Measures

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

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

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

	Contingency Plan (if applicable):
Actual Situation and Countermeasures	
(PMR)	

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

5-1 Overall evaluation

Please describe your overall evaluation on the project.

--

5-2 Lessons Learnt and Recommendations

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

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

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

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Attachment

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



Monitoring sheet on price of specified materials

1. Initial Conditions (Confirmed)

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

2. Monitoring of the Unit Price of Specified Materials

(1) Method of Monitoring : ●●

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

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

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

-
-
-



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

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



Report on the Management of Safety for Construction Works

Month/Year 2022 年 × 月	Cumulative number of labor 労働延人数	Cumulative number of public accident 公衆災害件数	Cumulative hours worked 延べ実労働時 間数	Number of deaths and injuries due to industrial accidents 労働災害による死傷者				Frequency rate 度数率	Severity rate 強度率
				Death and injuries 死傷者数	Aggregated number of calendar days absent 延べ休業日数	Aggregated number of work- days lost 延べ労働損失日数			
This Month 当月				Death 死者					
				More than 4 calendar days absent 休業 4 日以上					
				1 to 3 calendar days absent 休業 1～3 日					
				Total 計					
Total including this month 当月迄累計				Death 死者					
				More than 4 calendar days absent 休業 4 日以上					
				1 to 3 calendar days absent 休業 1～3 日					
				Total 計					
Note 注)				1. Frequency rate is the frequency of occurrence of industrial accidents. Frequency rate = (Number of deaths and injuries due to industrial accidents ÷ Cumulative hours worked) × 1,000,000 度数率 = (労働災害による死傷者数 ÷ 延べ実労働時間数) × 100 万時間 2. Severity rate is degree of seriousness of the industrial accident. Severity rate = (Aggregated number of work-days lost ÷ Cumulative hours worked) × 1,000 強度率 = (延べ労働損失日数 ÷ 延べ実労働時間数) 1000 時間 3. Aggregated number of work-days lost = Aggregated number of calendar days absent × (300 ÷ 365) Death (7,500 days) : death as a result of an industrial accident includes not only instantaneous death but also death as a result of occupational injury or disease. 延べ労働損失日数 = 延べ休業日数 × (300 ÷ 365) ・ ・ ・ 死亡 7500 日 (即死のほか負傷が原因で死亡したものを含む) 4. Frequency rate and severity rate are rounding off the third decimal place. 度数率・強度率は小数点第 3 位以下四捨五入					



Date:

Ref. No.

JAPAN INTERNATIONAL COOPERATION AGENCY

JICA KENYA OFFICE

[Address specified in the Article 5 of the Grant Agreement]

Attention: Chief Representative

Ladies and Gentlemen:

NOTICE CONCERNING PROGRESS OF PROJECT

Reference : Grant Agreement, dated 署名日(signed date of the G/A), for プロジェクト名(name of the Project)

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

[Common]

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

[Construction]

- ☐ Monthly progress [Month/Year]

[Procurement of Equipment]

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

- ☐ Other _____

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

Very truly yours,

[Signature]

[Name of the signer]

[Title of the signer]

[Name of the executing agency]



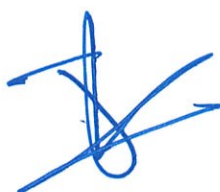
cc:

Director General

Financial Cooperation Implementation Department

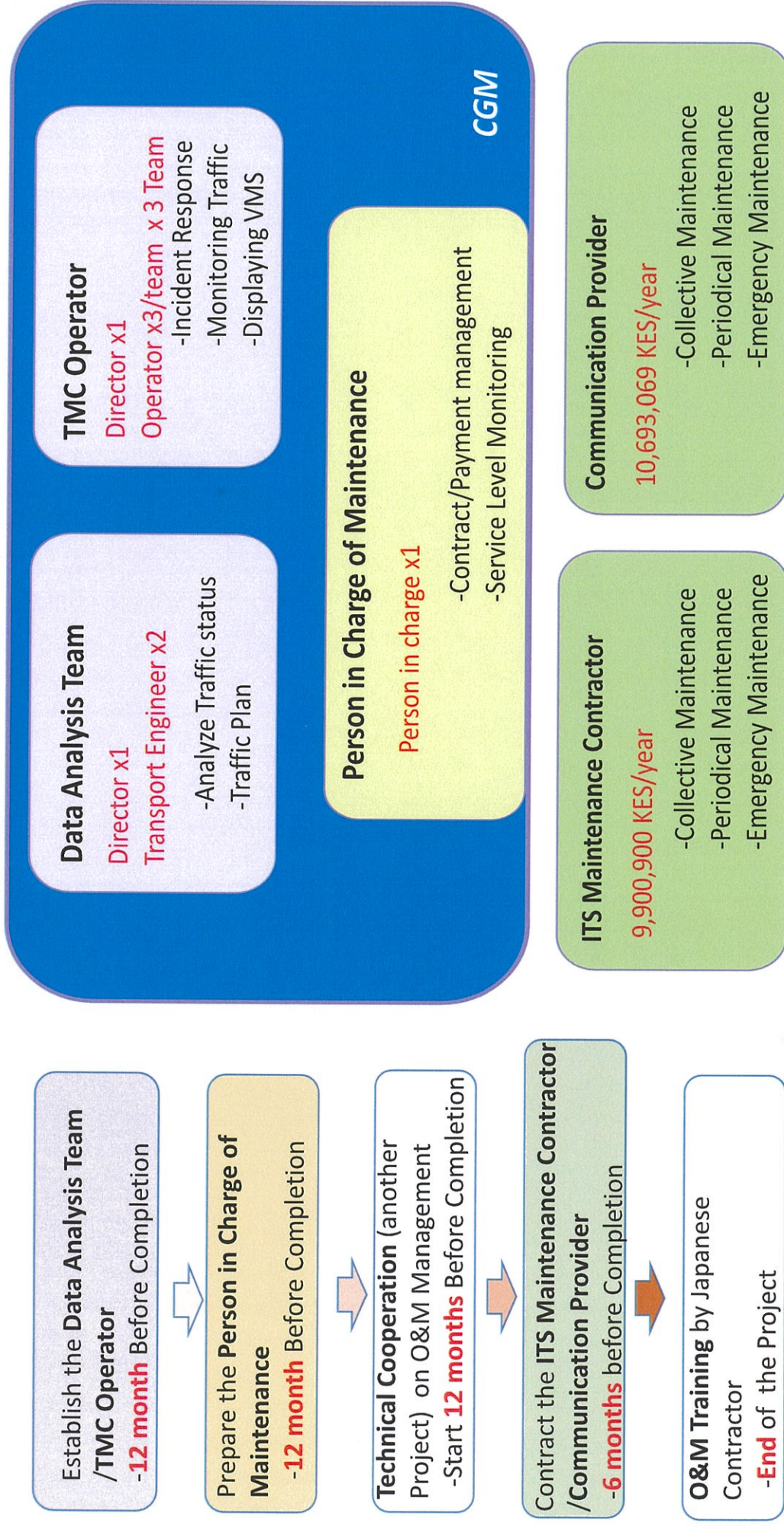
Japan International Cooperation Agency

[Address specified in the Article 5 of the Grant Agreement]



Items and measures to be considered for smooth implementation of the Project

< O&M Structure to be established during the Project >

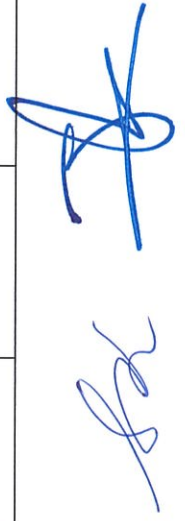


SA

Annex_9

Environmental Checklist

Category	Environmental Item	Main Check Items	Yes: Y No: N	Confirmation of Environmental Considerations (Reasons, Mitigation Measures)
1 Permits and Explanation	(1) EIA and Environmental Permits	(a) Have EIA reports been already prepared in official process? (b) Have EIA reports been approved by authorities of the host country's government? (c) Have EIA reports been unconditionally approved? If conditions are imposed on the approval of EIA reports, are the conditions satisfied? (d) In addition to the above approvals, have other required environmental permits been obtained from the appropriate regulatory authorities of the host country's government?	(a) N (b) N (c) Y (d) N	(a) EIA report is required and being prepared currently. It will be submitted during the study. (b) EIA is being prepared currently. (c) EIA approval will be issued with condition. (d) Only EIA approval is required regarding environmental and social considerations.
	(2) Explanation to the Local Stakeholders	(a) Have contents of the project and the potential impacts been adequately explained to the Local stakeholders based on appropriate procedures, including information disclosure? Is understanding obtained from the Local stakeholders? (b) Have the comment from the stakeholders (such as local residents) been reflected to the project design?	(a) Y (b) N	(a) Stakeholder meeting was held for explain the project to representatives related organizations on 9 December 2021. Negative comments such as asking cancellation of the project were not received. (b) During EIA reviewing procedure, EIA information is disclosed to the public and public comments will be collected.
	(3) Examination of Alternatives	(a) Have alternative plans of the project been examined with social and environmental considerations?	(a) Y	(a) Target intersections were selected from longlist with considerations on effectiveness of development and environmental and social impact as well.



2 Pollution Control	(1) Air Quality	(a) Is there a possibility that air pollutants emitted from the project related sources, such as vehicles traffic will affect ambient air quality? Does ambient air quality comply with the country's air quality standards? Are any mitigating measures taken? (b) Where industrial areas already exist near the route, is there a possibility that the project will make air pollution worse?	(a) Y (b) N	(a) Impact on air quality is temporally caused due to use of construction machines and vehicles. (b) In some of intersections, baseline air quality is already exceeded standard. Thus, based on the Environment Management Plan, mitigation measures is necessary to be taken.
	(2) Water Quality	(a) Is there a possibility that soil runoff from the bare lands resulting from earthmoving activities, such as cutting and filling will cause water quality degradation in downstream water areas? (b) Is there a possibility that surface runoff from roads will contaminate water sources, such as groundwater? (c) Do effluents from various facilities, such as parking areas/service areas comply with the country's effluent standards and ambient water quality standards? Is there a possibility that the effluents will cause areas not to comply with the country's ambient water quality standards?	(a) N (b) N (c) N	(a) The project is conducted within existing intersections and cutting and landfilling work is not included in the construction work. (b) Drained water from the surface of the road will be drained into drainage along the road and there is no impact to water resources such as ground water. (c) The project is improvement of existing intersections. Thus, wastewater is not generated in the project.
	(3) Wastes	(a) Are wastes generated from the project facilities, such as parking areas/service areas, properly treated and disposed of in accordance with the country's regulations?	(a) N	(a) The project is improvement of existing intersections. Thus, waste is generated during only construction stage and the construction waste is disposed to Mwakirunge landfill site.
	(4) Noise and Vibration	(a) Do noise and vibrations from the vehicle and train traffic comply with the country's standards?	(a) Y	(a) The project proponent shall comply with noise and vibration standard.



	(1) Protected Areas	(a) Is the project site located in protected areas designated by the country's laws or international treaties and conventions? Is there a possibility that the project will affect the protected areas? (a) Does the project site encompass primeval forests, tropical rain forests, ecologically valuable habitats (e.g., coral reefs, mangroves, or tidal flats)? (b) Does the project site encompass the protected habitats of endangered species designated by the country's laws or international treaties and conventions? (c) If significant ecological impacts are anticipated, are adequate protection measures taken to reduce the impacts on the ecosystem? (d) Are adequate protection measures taken to prevent impacts, such as disruption of migration routes, habitat fragmentation, and traffic accident of wildlife and livestock? (e) Is there a possibility that installation of roads will cause impacts, such as destruction of forest, poaching, desertification, reduction in wetland areas, and disturbance of ecosystems due to introduction of exotic (non-native invasive) species and pests? Are adequate measures for preventing such impacts considered? (f) In cases the project site is located at undeveloped areas, is	(a) N (a) N (b) N (c) N (d) N (e) N (f) N	(a) The project is conducted within existing intersections and there is no protected area. (a) The project is conducted within existing intersections and there is no forest area and ecologically important habitat. (b) The project is conducted within existing intersections and there is no ecologically important habitat. (c) The project is conducted within existing intersections and there is no impact on ecosystem. (d) The project is conducted within existing intersections and there is no impact on ecosystem. (e) The project is conducted within existing intersections and there is no impact on ecosystem. (f) The project is conducted within existing intersections and there is no land that newly developed.
3 Natural Environment	(2) Ecosystem			



	there a possibility that the new development will result in extensive loss of natural environments?			
(3) Hydrology	(a) Is there a possibility that alteration of topographic features and installation of structures, such as tunnels will adversely affect surface water and groundwater flows?	(a) N	(a) The project is conducted within existing intersections and there is no impact on hydrology.	
(4) Topography and Geology	(a) Is there any soft ground on the route that may cause slope failures or landslides? Are adequate measures considered to prevent slope failures or landslides, where needed? (b) Is there a possibility that civil works, such as cutting and filling will cause slope failures or landslides? Are adequate measures considered to prevent slope failures or landslides? (c) Is there a possibility that soil runoff will result from cut and fill areas, waste soil disposal sites, and borrow sites? Are adequate measures taken to prevent soil runoff?	(a) N (b) N (c) N	(a) The project is conducted within existing intersections and there is no risk on soft-ground such as land slide. (b) The project is conducted within existing intersections and cutting and landfill work are not included in construction work. (c) The project is conducted within existing intersections and cutting and landfill work are not included in construction work.	



4 Social Environment	(1) Resettlement	(a) Is involuntary resettlement caused by project implementation? If involuntary resettlement is caused, are efforts made to minimize the impacts caused by the resettlement?(b) Is adequate explanation on compensation and resettlement assistance given to affected people prior to resettlement?(c) Is the resettlement plan, including compensation with full replacement costs, restoration of livelihoods and living standards developed based on socioeconomic studies on resettlement?(d) Are the compensations going to be paid prior to the resettlement?(e) Are the compensation policies prepared in document?(f) Does the resettlement plan pay particular attention to vulnerable groups or people, including women, children, the elderly, people below the poverty line, ethnic minorities, and indigenous peoples?(g) Are agreements with the affected people obtained prior to resettlement?(h) Is the organizational framework established to properly implement resettlement? Are the capacity and budget secured to implement the plan?(i) Are any plans developed to monitor the impacts of resettlement?(j) Is the grievance redress mechanism established?	(a) N(b) - (c) - (d) - (e) - (f) - (g) - (h) - (i) - (j) Y	(a) There is no people who require involuntary resettlement because the project is implemented within existing intersections. (b) No resettlement is required. (c) No resettlement is required. (d) No resettlement is required. (e) No resettlement is required. (f) No resettlement is required. (g) No resettlement is required. (h) No resettlement is required. (i) No resettlement is required. (j) Grievance mechanism is established for the project.
	(2) Living and Livelihood	(a) Where roads are newly installed, is there a possibility that the project will affect the existing means of transportation and the associated workers? Is there a possibility that the project will cause significant impacts, such as extensive alteration of existing	(a) N (b) N (c) Y (d) N	(a) The project is conducted within existing intersections and there is no land that newly developed. (b) There is street vendors in target intersections however they can move easily, thus, they can move to out of construction area and




		land uses, changes in sources of livelihood, or unemployment? Are adequate measures considered for preventing these impacts? (b) Is there any possibility that the project will adversely affect the living conditions of the inhabitants other than the target population? Are adequate measures considered to reduce the impacts, if necessary? (c) Is there any possibility that diseases, including infectious diseases, such as HIV will be brought due to immigration of workers associated with the project? Are adequate considerations given to public health, if necessary? (d) Is there any possibility that the project will adversely affect road traffic in the surrounding areas (e.g., increase of traffic congestion and traffic accidents)? (e) Is there any possibility that roads will impede the movement of inhabitants? (f) Is there any possibility that structures associated with roads (such as bridges) will cause a sun shading and radio interference?	(e) N (f) N	continue their business during construction. (c) Risk of infectious disease such as COVID-19 and HIV/AIDS may become higher than usual due to increase of construction workers during construction. Measures such as distributing of masks and condom will be taken. (d) The project is improvement of intersection, thus, traffic congestions will be moderated. (e) The project is improvement of intersection, thus, traffic congestions will be moderated. (f) The project is improvement of intersection and no impact on a sun shading and radio interference.
4 Social Environment	(3) Heritage	(a) Is there a possibility that the project will damage the local archeological, historical, cultural, and religious heritage? Are	(a) N	(a) There is no cultural heritage site within target intersections.



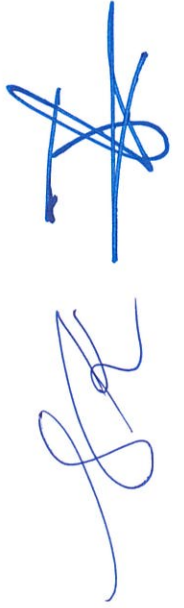
	adequate measures considered to protect these sites in accordance with the country's laws?			
(4) Landscape	(a) Is there a possibility that the project will adversely affect the local landscape? Are necessary measures taken?	(a) N	(a) There is no impact on landscape because the project is improvement of existing intersection.	
(5) Ethnic Minorities and Indigenous Peoples	(a) Are considerations given to reduce impacts on the culture and lifestyle of ethnic minorities and indigenous peoples? (b) Are all of the rights of ethnic minorities and indigenous peoples in relation to land and resources to be respected?	(a) - (b) -	(a) There is no indigenous people and ethnic minority in the project area. (b) There is no indigenous people and ethnic minority in the project area.	
(6) Working Conditions	(a) Is the project proponent not violating any laws and ordinances associated with the working conditions of the country which the project proponent should observe in the project? (b) Are tangible safety considerations in place for individuals involved in the project, such as the installation of safety equipment which prevents industrial accidents, and management of hazardous materials? (c) Are intangible measures being planned and implemented for individuals involved in the project, such as the establishment of a safety and health program, and safety training (including traffic safety and public health) for workers etc.? (d) Are appropriate measures being taken to ensure that security guards involved in the project not to violate safety of other individuals involved, or local residents?	(a) Y (b) Y (c) Y (d) Y	(a) The project proponent shall comply with legislation related to occupational health. (b) The project proponent shall conduct measures to protect workers. (c) The project proponent shall provide workers for safety. (d) During construction, staffs who manage safety of traffic will take measures to protect local people from accident.	



5 Others	(1) Impacts during Construction	(a) Are adequate measures considered to reduce impacts during construction (e.g., noise, vibrations, turbid water, dust, exhaust gases, and wastes)? (b) If construction activities adversely affect the natural environment (ecosystem), are adequate measures considered to reduce impacts? (c) If construction activities adversely affect the social environment, are adequate measures considered to reduce impacts?	(a) Y (b) N (c) N	(a) Mitigation measures are conducted based on Environment Management Plan. (b) The project is conducted within existing intersections, thus, no impact on ecosystem. (c) There is no people who require resettlement and land acquisition is also not required because the project is conducted within existing intersections.
	(2) Monitoring	(a) Does the proponent develop and implement monitoring program for the environmental items that are considered to have potential impacts? (b) What are the items, methods and frequencies of the monitoring program? (c) Does the proponent establish an adequate monitoring framework (organization, personnel, equipment, and adequate budget to sustain the monitoring framework)? (d) Are any regulatory requirements pertaining to the monitoring report system identified, such as the format and frequency of reports from the proponent to the regulatory authorities?	(a) Y (b) - (c) Y (d) Y	(a) Environment Monitoring plan is prepared based on study and responsible organizations for monitoring is also included in the plan. (b) Environment Monitoring plan stipulates items/parameters, methodology and frequency. (c) Implementation structures are considered for environmental and social considerations. (d) Environment Monitoring plan stipulates methodology and frequency of reporting.



6 Note	Reference to Checklist of Other Sectors	(a) Where necessary, pertinent items described in the Forestry Projects checklist should also be checked (e.g., projects including large areas of deforestation). (b) Where necessary, pertinent items described in the Power Transmission and Distribution Lines checklist should also be checked (e.g., projects including installation of power transmission lines and/or electric distribution facilities).	(a) - (b) -	(a) No deforestation is conducted in the project. (b) The project doesn't include Power Transmission and Distribution Lines development.
	Note on Using Environmental Checklist	(a) If necessary, the impacts to transboundary or global issues should be confirmed, if necessary (e.g., the project includes factors that may cause problems, such as transboundary waste treatment, acid rain, destruction of the ozone layer, or global warming).	(a) N	(a) The project will contribute GHG emission reduction.



Environment Management Plan (EMP)

No.	Items	Environmental Management Plan	Implementing Organization	Responsible Organization	Cost
Pre-Construction Stage					
1	All	- Prior to construction, EIA approval is necessary. - Information of construction such as period and location is announced to the public	Consultant/ Contractor	CGM	To be determined
Construction Stage					
1	Air Quality	- Prepare and regular maintenance of construction machineries and vehicles to minimize air pollutants - Recommendation of idling stop activities - Water sprinkling to reduce particulate matter - Avoidance of long exposure of stocked soil to strong winds by applying canvas covers - Periodical monitoring air quality to comply with air quality standards	Contractor	CGM	Included in the construction cost
2	Waste	- Prepare the construction solid waste management plan in consideration with County's waste management system (waste will be landfilled in Mwakirunge landfill site) - Proper handling of hazardous waste on site - Education on waste treatment for workers	Contractor	CGM	Included in the construction cost
3	Noise and Vibration	- Regular maintenance of construction machineries - Announcement of construction work to surround locators - To avoid disturbance of daily life, performing of noisy activities during daytime, if possible - Adoption of lower noise and vibration construction method and machines - For hauling trucks, compliance with road weight limit standards to avoid ground vibration - Periodical monitoring of noise and vibration to comply with national standards	Contractor	CGM	Included in the construction cost
4	Existing	- Coordination with CGM for the	Contractor	CGM	Included in




No.	Items	Environmental Management Plan	Implementing Organization	Responsible Organization	Cost
	Social Infrastructure and Services	implementation of a traffic management scheme			the construction cost
5	Gender	- Positive employment of women for light works in construction activities such as cleaning with fair salary and other conditions - Prepare toilet and dressing spaces for women workers - Education on gender equality for workers	Contractor	CGM	Included in the construction cost
6	Children's Right	- Restrict child labor (workers under 14 years old) in contract with punishment - Report list of workers with their age information	Contractor	CGM	Included in the construction cost
7	Infectious Diseases such as HIV/AIDS	- Education on infectious diseases for workers - Preparation of occupational health management plan - Ensure COVID-19 protocol (Periodical PCR-Test)	Contractor	CGM	Included in the construction cost
8	Labor Environment including Safety	- Education on occupational safety for workers - Provision of first-aid stations, safety equipment - Implementation of standard health and safety protocols, such as wearing of proper and complete PPE	Contractor	CGM	Included in the construction cost
9	Accident	- Periodic maintenance of machineries and vehicles - Safety patrol - Sign boards	Contractor	CGM	Included in the construction cost

Source:JST

Environment Monitoring Plan (EMoP)

No	Environmental Item	Items	Location	Frequency	Responsible agent	Supervisor	Cost
Construction Stage							
1	All	Visual Check to confirm the implementation of mitigation measures	Construction sites	Daily or Weekly	Contractor	CGM	Included in the construction cost
2	Air Quality	PM10, PM2.5, SO ₂ , CO, NO ₂	Construction sites	Quarterly	Contractor	CGM	Included in the construction cost

No	Environmental Item	Items	Location	Frequency	Responsible agent	Supervisor	Cost
3	Waste	Types and amount of solid waste	Temporal waste storage	Once every three-month or collection period	Contractor	CGM	Included in the construction cost
4	Noise and Vibration	Sound level and vibration.	Construction sites	Quarterly	Contractor	CGM	Included in the construction cost
5	Infectious Diseases such as HIV/AIDS	Visible observation, interview, grievance records, record of education	Construction sites	Once a month	Contractor	CGM	Included in the construction cost
6	Labor Environment including Safety	Visible observation, interview, grievance records, record of education, record of safety patrol, sign boards	Construction sites	Once a month	Contractor	CGM	Included in the construction cost
7	Accident	Record of accident, record of education, sign boards	Construction sites and surrounding areas	Once a month, on demand	Contractor	CGM	Included in the construction cost
Operation Stage							
8	Air Quality	PM10, PM2.5, SO ₂ , CO, NO ₂	22 intersections	Quarterly	CGM	CGM	CGM
9	Noise and Vibration	Sound level and vibration.	22 intersections	Quarterly	CGM	CGM	CGM

Source: JST

Monitoring Form**Construction Phase****1. Response/ Action to Comments and Instruction from Authorities and the Public**

Comments or Instructions		Response/ Action which was taken by contractor
Authority (Government)		
Public (Residents)		

*Please add table if necessary

2. Pollution**Air quality**

Measurement point (coordinate)		Location description			
Measurement date		(yyyy/mm/dd)			
Parameter	Unit	Measured Value	Kenya Standard Value	International Standard Value (WHO/WB)	Note (Frequency, Source, Implant Recipients etc.)
PM2.5	µg/m ³		75(24hr)	25(24hr)*WHO	
SO ₂	µg/m ³		125(24hr)	20(24hr)*WHO	
NO ₂	µg/m ³		150(24hr)	200(1hr) *WB	
CO	mg/m ³		10(1hr)	-	

*Please add table if necessary

Waste (Disposal Site)

Item	Photo of the disposal site	Observations (e.g. Distance from the residence, messy/ tidy)	Note (Frequency, data source etc.)
Status of the disposal site			

*Please add table if necessary



Noise & Vibration

Measurement point (coordinate)			Location description		
Measurement date			(yyyy/mm/dd)		
Parameter	Unit	Measured Value	Applied Standard Value	International Standard Value (WB)	Note (Frequency, Source, Implant Recipients etc.)
Noise	dB	(Leq)	75 (Day time) 65 (Night time) *Kenya standard value	55 (Residential Area, Daytime)	
Vibration	dB	(L _{Max})	70 (Day time) 65 (Night time) *Japanese standard value	-	

*Please add table if necessary

3. Social**Existing Social Infrastructure and Service**

Item	Village	Complain	Measures to be taken	Note
Complain from surrounding communities				

*Please add table if necessary

Infectious disease & HIV/AIDS

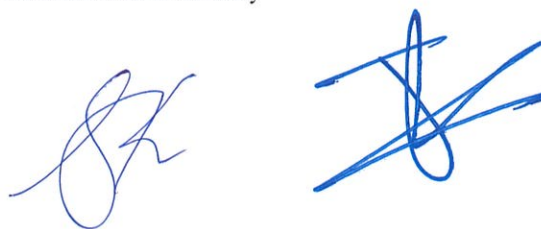
Item	Date	Location	Number of participants	Description of awareness activity *Please attach material of awareness activity if any	Note
Awareness of Infectious Disease					

*Please add table if necessary

Occupational Health & Safety

Item	Description of accident	Causes for accident	Note
Record of accidents			

*Please add table if necessary



4. Others

Accident

Item	Description of accident	Causes for accident	Note
Record of traffic accident caused by construction vehicles			

*Please add table if necessary

Operation Phase

1. Response/ Action to Comments and Instruction from Authorities and the Public

Comments or Instructions		Response/ Action which was taken by project proponent
Authority (Government)		
Public (Residents)		

*Please add table if necessary

2. Pollution

Air quality

Measurement point (coordinate)			Location description		
Measurement date			(yyyy/mm/dd)		
Parameter	Unit	Measured Value	Kenya Standard Value	International Standard Value (WHO/WB)	Note (Frequency, Source, Implant Recipients etc.)
PM2.5	µg/m ³		75(24hr)	25(24hr)*WHO	
SO ₂	µg/m ³		125(24hr)	20(24hr)*WHO	
NO ₂	µg/m ³		150(24hr)	200(1hr) *WB	
CO	mg/m ³		10(1hr)	-	

*Please add table if necessary

Noise & Vibration

Measurement point (coordinate)			Location description		
Measurement date			(yyyy/mm/dd)		
Parameter	Unit	Measured Value	Kenya Standard Value	International Standard Value (WB)	Note (Frequency, Source, Implant Recipients etc.)
Noise	dB	(Leq)	75 (Day time) 65 (Night time)	55 (Residential Area, Daytime)	

			*Kenya standard value		
Vibration	dB	(L _{Max})	70 (Day time) 65 (Night time) *Japanese standard value	-	

*Please add table if necessary

Technical Note
on the Preparatory Survey for the Project for
Implementation of Intelligent Transport System in
Mombasa Region

In response to the request from the Government of the Republic of Kenya, the Government of Japan decided to conduct a Preparatory Survey for the Project for Implementation of Intelligent Transport System in Mombasa Region (hereinafter referred to as “the Project”), and entrusted the Preparatory Survey to Japan International Cooperation Agency (hereinafter referred to as “JICA”).

JICA sent the Preparatory Survey Team for the Outline Design (hereinafter referred to as “the Team”) to Mombasa. The Team held a series of discussions with the officials of County Government of Mombasa (CGM) for 1st Survey at Mombasa. In the course of the discussions, both sides have confirmed the main items described in the attachment. The Team will proceed for further works in the future.

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

Mombasa, October 1st, 2021



Masato Okuda

Chief Consultant
Preparatory Survey Team

Japan International Cooperation Agency
Japan



Eng. Albert T. Keno

County Chief Officer- Transport
Department of Transport, Infrastructure &
Public Works

County Government of Mombasa
Republic of Kenya

ATTACHMENT

1. Confirmation of Presentation of Outline of the 1st Survey

The Team explained the Presentation of the Outline of 1st Survey based on the previous discussions and CGM agreed in principle with the contents.

2. Discussion on the contents

2.1 Basic Policy for Intersection selection

CGM agreed on 31 intersections selected by the Team for further selection.

The Team explain A7-6 to A7-9 on A7 corridor, south side of New Nyali Bridge to be considered due to importance of the locations. The Team said that it is not easy to incorporate the three intersections in the Project because there is a plan by KENHA to widen A7 corridor and include flyover on A7-6, A7-8 and A7-9. CGM agreed.

Kenyan side requested in several discussion with KENHA/KURA that A8-5 and A8-6 should remain as existing intersections to allow operation for heavy truck movement for northern corridor. Team understood the situation on the site.

Despite H-3 having no further consideration for signal installation CGM requested for repair of the intersection due to it being damaged by heavy truck movements.

For the case of A8-5, the intersection is still under consideration for signal installation and shall be considered for intersection improvement.

The same situation applies for A8-6.

Further selection will be done by the Team from 31 locations to about 25 locations in consideration of traffic count survey results and any another necessary factors.

2.2 Basic Policy for ITS Components

CGM requested the expansion of existing camera system to cover intersections of the Project and effective use of camera system.

The Team explained the 4types of effective use of the camera system as follows.

1. Incident detection
2. Section travel time finding
3. Illegal Parking detection
4. Red light violation detection.

They recommended the need for the project to have the first two functionalities as a

mo

Kenno

priority.

CGM on the other hand requested **strongly** that all the four functionalities of the cameras should be considered.

The Team explained that three (3) locations of VMS should be considered inside the island showing travel time, accidents, and congestion points, etc. CGM agreed.

The Team explained a sample image of the proposed Control Centre with a Videowall. CGM agreed and will prepare a suitable room in the building at Shimanzi.

2.3 Basic Policy for Intersection Improvement

The Team explained on the pavement improvement method and recommended PCCP to be used for existing PCCP road and recommended to use Modified Asphalt Pavement with Polymer for existing Asphalt Road. CGM confirmed that KENHA have used Modified Asphalt Pavement with Polymer at some of their roads.

2.4 Basic Policy for Pedestrian Signal method

The Team explained the high priority locations for installation of the pedestrian signals are three. However, two of the locations have changed from the original plan to different locations. CGM agreed.

2.5 Basic Policy for selecting Communication method

The Team recommended the loop network to provide communication between the intersection signals, Control Centre, and Data Centre. CGM agreed and will request the communication service provider to enhance redundancy for the Project.

2.6 Consideration of Operation & Maintenance

The Team **strongly recommended** that the operation of the ITS should be done by existing operation team, but maintenance structure should be done by a maintenance contractor and additional budget for maintenance is needed. CGM confirmed.

2.7 Consideration and schedule of Environment study

The Team explained according to discussion with NEMA that all project is necessary to conduct EIA in Kenya but project will be categorized into a low risk and Environmental Impact Assessment Summary Project Report is necessary to submit and then approval will be issued. It takes 5 days for issuance of approval.

The Team also explained on the information from NEMA and subcontractor that the most concerned impact of this project activity is removal of roundabout including monument.



CGM confirmed and will support further.

2.8 Soft Components and Technical Cooperation Project

The Team explained the necessary training items after introducing the ITS system for sustainable and effective usage of the system as Soft Components and Technical Cooperation Project. CGM requested the above training should start from the installation period. CGM further, **strongly** requested for inclusion of the technical cooperation project to be considered alongside the Grant Aid project.

2.9 Traffic Count Survey and further analysis

The Team explained the progress of the survey and further analysis using STRADA and micro simulation. CGM requested updated data of STRADA and some training on STRADA.

2.10 Major Undertaking to be taken by the Government of Kenya (Cost Item)

The Team explained the necessary undertakings to be bearded by Kenyan side categorized into three; Before the Tender, During the Project Implementation and After the project. CGM agreed and the Team will estimate such cost through consultations with CGM.

2.11 To be done and supported by Kenyan side

The Team explained the necessary items to be done and supported as follows:

1. Finance (Budget) data for 3-5 years for evaluation of financial capability for operation and maintenance of the System.
2. Completion of POC (Proof of Concept) on CCTV system by the end of 2021 and handover the equipment to CGM by contractor.
3. Formal Request of Grant Project by the end of 2021.

CGM agreed and informed the Team that a Formal Request was sent to Central Government already.



PREPARATORY SURVEY
FOR
THE PROJECT FOR IMPLEMENTATION OF
INTELLIGENT TRANSPORT SYSTEM
IN
MOMBASA REGION

Outline of the 1st Survey

September 30th 2021

NIPPON KOEI CO., LTD.
Katahira & Engineers International
Ingerosec Corporation

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Agenda

1. Collection of Basic Information
2. Basic Policy for Intersection selection
3. Basic Policy for selection of ITS Components
4. Basic Policy for Intersection Improvement method
5. Basic Policy for Pedestrian Signal method
6. Basic Policy for selecting Communication method
7. Consideration of Operation & Maintenance system
8. Consideration and schedule of Environment study
9. Soft Components
10. Traffic Count survey and further analysis
11. Consideration for Northern Economic Corridor
12. Major Undertakings to be taken by the government of Kenya (Cost Item)
13. Basic Policy for Work Demarcation of Power and Communication
14. To be done and supported by Kenyan side
15. Further schedule

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1. Collection of Basic Information

1.3 Work Demarcation between CGM (Inspectorate), National Traffic Police and NTSA (National Transport Safety Authority)

	CGM: Transport/Inspectorate	National Traffic Police	NTSA
Traffic control	⊙	⊙	
Enforcement	○	⊙ (Court matter)	
Traffic Regulation	⊙		
Traffic accident data		⊙	○
CCTV	⊙	⊙	
Driver's license, Vehicle inspection			⊙
Plate Number Database	○		⊙

Preparatory Survey for The Project for Implementation of Intelligent Transport System in Mombasa Region

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1. Collection of Basic Information

1.3 Existing ITS System and Related situation

➤ ITS System by CGM

- ✓ CCTV Monitoring and Control Centre
- ✓ CCTV Monitoring System
- ✓ Transceiver Communication System

➤ ITS System by National Traffic Police

- ✓ ICC (Integrated Command Control Centre)
- ✓ CCTV Monitoring System
- ✓ ANPR system for black list monitoring for security
- ✓ Transceiver Communication System

➤ RFID Standardization by NTSA

- ✓ RFID has been standardized by NTSA

Preparatory Survey for The Project for Implementation of Intelligent Transport System in Mombasa Region

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1. Collection of Basic Information

1.4 Existing Communication System of CGM

<Existing Communication System>

- **Communication Network among County Government Agencies.**
 - ✓ Optical fiber network (internet and MPLS service) is being deployed by FIBRE LINK under the CONTRACT FOR PROVISION OF INTERNET AND MPLS FOR COUNTY GOVERNMENT OF MOMBASA
- **Communication Network for existing CCTV owned by CGM**
 - ✓ Optical fiber network (dedicated line service) is being deployed by FIBRE LINK
 - ✓ Since the CCTV implementation project has been proceeding under the Proof of Concept(POC) scheme. After the completion of the implementation, the payment for the installation and the maintenance during the POC period will be made and the new contract for the maintenance will be concluded.

Preparatory Survey for The Project for Implementation of Intelligent Transport System in Mombasa Region

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1. Collection of Basic Information

1.4 Existing Communication System

(1) Existing Service Level Agreement(SLA) by FIBRE LINK

Expected Restoration times and associated credits for Critical Faults

Item	Description	Credits
1.	Continuous critical failure not exceeding 6 hours.	No credit
2.	Continuous critical failure between 6-8 hours.	1 day credit
3.	Continuous critical failure between 8-48 hours.	1 week credit
4.	Continuous critical failure exceeding 48 hours.	Half a month credit

※ Critical Faults: Primary Backbone Router Down, Customer Network Down

Expected Restoration times and associated credits for Major Faults

Item	Description	Credits
1.	Continuous major failure not exceeding 8 hours.	No credit
2.	Continuous major failure between 8-24 hours.	1 day credit
3.	Continuous major failure between 24-48 hours.	3 days credit

※ Major Faults: Service impaired or backbone failover, Router Down, Customer Network Impaired

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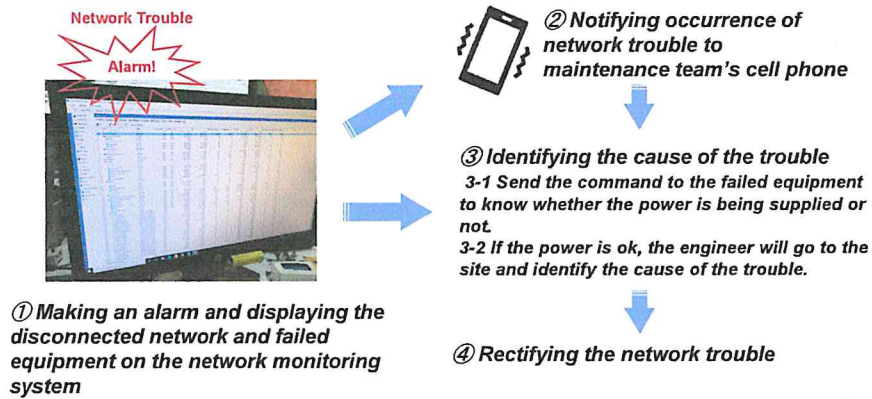
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1. Collection of Basic Information

1.4 Existing Communication System

(2) Optical Fiber Network Maintenance System

The maintenance system for the existing communication system by FIBRE LINK.



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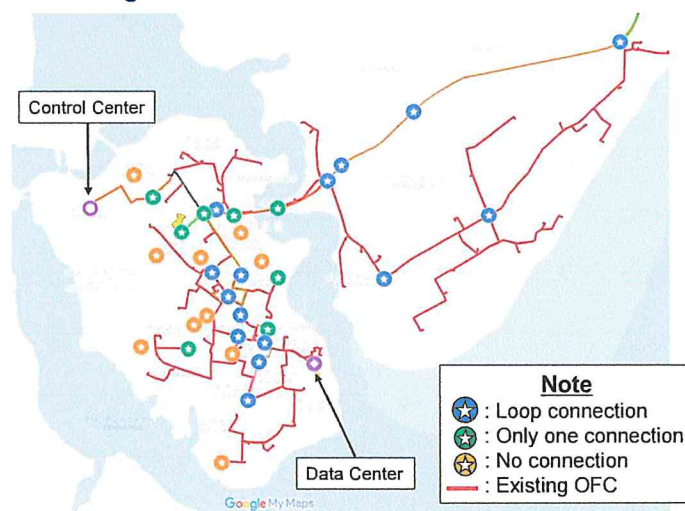
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1. Collection of Basic Information

1.4 Existing Communication System

➢ Existing Communication Network of FIBRE LINK



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1. Collection of Basic Information

1.5 Existing Maintenance System

➤ Existing CCTV Maintenance Situation

(1) Maintenance Service Contract

- ✓ Since the CCTV implementation project has not yet completed, installation and operation is being conducted as a proof of concept (POC).
- ✓ After completion of the project, the maintenance contract between CCTV provider, FIBRE LINK (communication company) and CGM will be made for CCTV and Communication for CCTV.

(2) Maintenance Situation

- ✓ Actual maintenance work for CCTV is limited and not sufficient by CCTV provider.

(3) Current Issues

- ✓ POC will be completed at the end of 2021, and Maintenance work will start according to maintenance contract.

1. Collection of Basic Information

1.6 Existing issue for traffic on Mombasa

- Chronical congestion at peak hours
- Seriously deteriorated pavement by large-sized vehicle and low quality of used materials
- Too many numbers of Mataz, especially at major destinations
- Insufficient capacity of intersections
- Illegal encroachment of roads by street vendors
- Illegal parking around intersection
- Many pedestrians walk in the median since it is used as parking lot.
- Lack of grade separate intersections
- Lack of bridges which connecting island and surrounding land
- Vehicle movement at intersection cannot be proceeded at peak hours without inspector/police
- Lack of Pedestrian crossing
- Unclear or disappearance of marking
- No accumulated and no analysis of traffic data
- Lack of discipline

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2. Basic Policy for Intersection selection

1. No Further Consideration; 8 locations

A7R-1	Major traffic is only for ferry users transporting between centre of City and Ferry station. Waiting place by many Matatsu.
M4	Major traffic is only for Track waiting for Port entrance at the rotary in front of Port Gate.
H3	There is some traffic of Track, but not cross intersection with some volumes of traffic.
H4	Traffic is very low and road is narrow now.
A7-5	There is no intersection but underpass crossing only.
L1	There is not much traffic at normal operation without Happy Hour operation.
L3	Small roundabout with less traffic crossing
L4	Small roundabout with less traffic crossing

2. To be Considered further; 7 locations

A8-6	Entrance/Exit of industrial area but median is blocked and Track from Nairobi can not turn right for industrial area directory and go/u-turn at Maputa roundabout and come back and turn left for industrial area.
A8-5	Many Tracks from A8-6 who want to go for industrial area, u-turn at the roundabout, but existing roundabout is big with 3 lines and not serious congested as of now.
M3	There is some Track traffic but, not so much general traffic and not many pedestrians.
A7-6	There is a road widening project starts from this year for three years between A7-6 and A7-9. A7-6 will be flyover.
A7-7	There is a road widening project starts from this year for three years between A7-6 and A7-9. A7-7 will be big affected by this widening project.
A7-8	There is a road widening project starts from this year for three years between A7-6 and A7-9. A7-8 will be flyover.
A7-9	There is a road widening project starts from this year for three years between A7-6 and A7-9. A7-8 will be flyover.

3. Almost selected: According survey, following two intersection is included as almost selected. 24 locations

A8-7	There is some distance between A8-3 and A8-2. And heavy traffic at peak hour between A8 and Kolnaga Road.
H6	Heavy traffic between A8-2 and Haile Selassie Road through H6 at peak hour.

Preparatory Survey for The Project for Implementation of Intelligent Transport System in Mombasa Region

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3. Basic Policy for selection of ITS Components

3.1 Basic Policy for ITS Development

- A) . Improve the travel time inside of city
- B) . Reduce the accident
- C) . Utilization of big data for road management and future plan

3.2 Issues of Current System

- The current system lacks ergonomic considerations, making it impossible for the operator to check all the images on the monitor.
- There is no quantitative data to analyze the traffic status for current and future.
- There is no information to provide users both on trip and pre-trip
- There is no way to utilize optimally for existing roads
- The operators cannot manipulate even simple existing system
- Road users have only limited chance to know their violation activities.
- There is no system to identify the violated vehicles
- It is difficult to know the minimum interruption timing to traffic for road/system maintenance work without data.

Preparatory Survey for The Project for Implementation of Intelligent Transport System in Mombasa Region

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3. Basic Policy for selection of ITS Components

3.3 Methods to Achieve the Policy

- Optimization of traffic control (Accident reduction, Improvement of traffic flow)
- Quick response for handling incidents/accidents.
- Accident data collection and analysis for further safety.
- Provide the traffic information to users to enhance the traffic flow.
- Accumulate the data to analyze the traffic status for future traffic planning.

Item	The Summary of Camera System	Match with Methods A) B) C) D) E)	Remarks
Incident detection	- Single CCTV camera enable to detect various incident and categorize by type of incidents. - It can be installed at black spot to detect the dangerous driving vehicles.	○ ○ ○ ○ ○	- The captured incidents will be displayed on Videowall. - Missing of incidents will not happen.
Section travel time finding	- By identifying the license plate, the section travel time between ANPR camera positions can be analyzed. - Mount the ANPR onto the ultrasonic sensor pole for signal system locating more than 150m upstream of the intersection.	○ ○ ○	- This information is useful for MGB also. - Analyzing with incident data, the categorization of traffic status by cause, time, can be accumulated for future planning..
Illegal parking detection	- System issues the alert when vehicle come into the prohibited parking zone by continuous camera monitoring. - It can be installed at busy intersection with parking prohibited zone such as Lebanon intersection.	○ ○	- This enforcement can prevent from deterioration of intersection capacity. - Inspector needs to be site to catch the violated parking vehicle. ⇒ fully automatic is difficult.
Red light violation detection	- Red Light Violation Detection system can be installed Blackspot intersection. - System is composed of ANPR and incident detection camera which are connecting signal	○ ○	- The system will be complicated and gantry for all lanes are required. - The accident database categorized by cause for accident analysis does not exist.

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3. Basic Policy for selection of ITS Components

CCTV for Incident Detection

Single CCTV camera enable to detect and record the various incident and categorize by types of incidents.



Effect:

- Automatic detection reduce the missing incident currently occur.
- Response time will be faster since it issues the alert when incidents are detected.
- As a result, the number of accident will reduce and ensure the smooth flow.

Issue:

- Both incident detection camera and ANPR camera per lane are required for enforcement.
- The system cannot enforce the violated vehicles without database.
- ANPR cannot identify the number under the bumper to bumper situation.

Preparatory Survey for The Project for Implementation of Intelligent Transport System in Mombasa Region

CCTV to Find the Travel Time by Section



Effect:

- The AI based CCTV cameras will be set as the map above. the system analyze the travel time of major sections between cameras.
- It can be useful data source for providing travel time information to users through VMS and traffic volume will be organized.
- Accumulated data can be used for future project preparation or evaluation of project.
- Selection of VMS location shall be considered future road network.

Preparatory Survey for The Project for Implementation of Intelligent Transport System in Mombasa Region

CCTV for Parking Violation



Effect:

- Automatic detection reduce the missing illegal parking currently occur.
- Response time will be faster since it issues the alert when illegal parkings are detected.
- As a result, the safe & smooth flow can ensure.

Issue:

- Both illegal parking detection camera and ANPR camera are required for enforcement.
- The system cannot enforce the violated vehicles without database.
- ANPR cannot identify the number under the bumper to bumper situation.
- Clear notification of parking prohibited zone by signage and marking.

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CCTV for Red Light Violation Detection

Red Light Violation Detection system can be installed blackspot intersection.

The system must be connected to a traffic signal system or require high accuracy traffic light color recognition with number plate recognition.



Effect:

- This system contributes the avoidance of collision accident.
- Both violation detection camera and ANPR camera per lane are required for enforcement.
- The system cannot enforce the violated vehicles without database.
- Both vehicles and pedestrians do not familiar with signal control system. Thus, awareness of traffic signal rules shall be raised amongst residence.

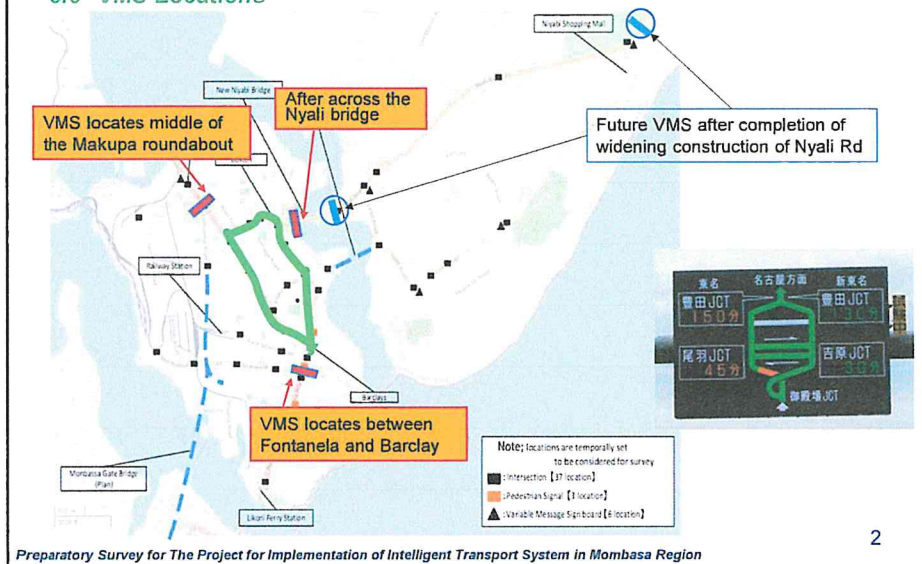
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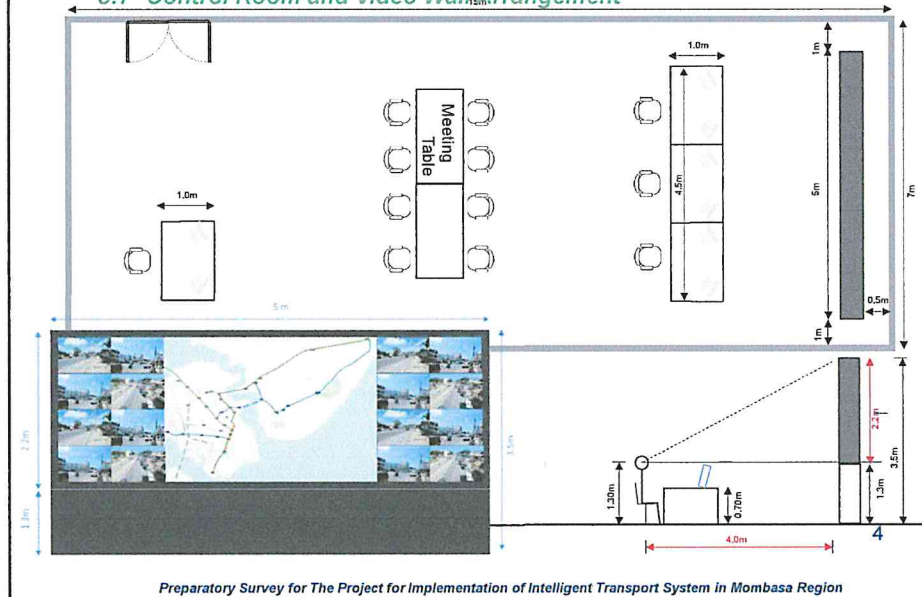
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3.6 VMS Locations



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3.7 Control Room and Video Wall Arrangement



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4. Basic Policy for Intersection Improvement method

4.1 Basic Improvement method

- Ensure the safety by compacting the intersection and setting the refuge for pedestrian
- Ensure the necessary light turn lane by shifting median

A8-2 Lebanone



A8-4 Saba Saba



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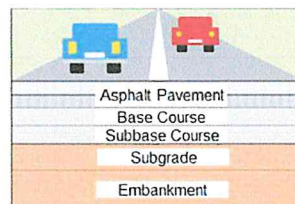
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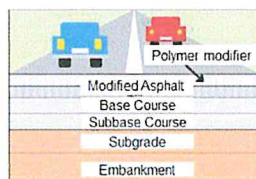
4. Basic Policy for Intersection Improvement method

4.2 Pavement Improvement

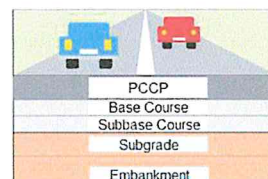
Existing Pavement	Pavement condition	Addition al lanes	Policy for Improvement
Portland Cement Concrete Pavement	Good	Yes	PCCP
		No	No improvement
	Bad	Yes	PCCP
Asphalt Pavement	Good	Yes	Modified Asphalt Pavement with Polymer or PCCP
		No	No improvement
	Bad	Yes	Modified Asphalt Pavement with Polymer or PCCP
		No	Repaving Modified Asphalt Pavement with Polymer or PCCP



Asphalt Pavement



Modified Asphalt Pavement with Polymer



Portland Cement Concrete Pavement

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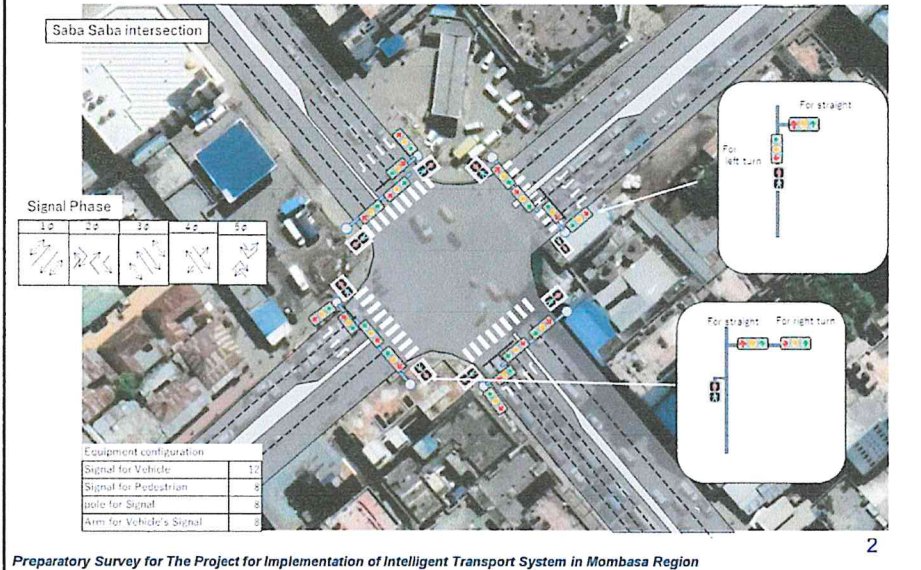
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4. Basic Policy for Intersection Improvement method

4.3 Signal system at intersection



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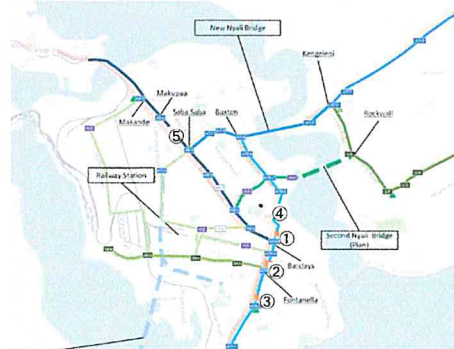
5. Basic Policy for Pedestrian Signal method

5.1 Conditions for Installation of Traffic Signal

1. Location being near by schools, kindergartens and nurseries and needs to secure the safety for students, children, disabled person, elderly person etc.
2. Location where it's hard to cross due to a lot of traffic volume and absence of pedestrian crossing bridge despite having many pedestrians to cross.
3. Location having the round-trip traffic volume on main road of 300 vehicles/hour at most.
4. Location located at more than 150m away from adjacent intersection.

5.2 Selection of Pedestrian Signal Locations

- ① **High priority:** Located at approx. 250m away from the Barclays. Having a lot of pedestrians due to being near by supermarkets. The road is bending, which makes visibility for pedestrians bad.
- ② **Less priority:** Pedestrian crossing is planned to be installed at Fontenanella intersection in this project.
- ③ **Less priority:** Pedestrians are less most of the time except for arrivals and departure time of ferry. Located at less than 50m from the roundabout which makes vehicle speed slow and secure the safety of pedestrians to cross.
- ④ **High priority:** Located at approx. 300m away from ①. Having a lot of pedestrians due to being near by supermarkets.
- ⑤ **High priority:** Located at approx. 300m away from Saba Saba and Makupa. Having a lot of pedestrians due to being nearby hospitals, markets etc.



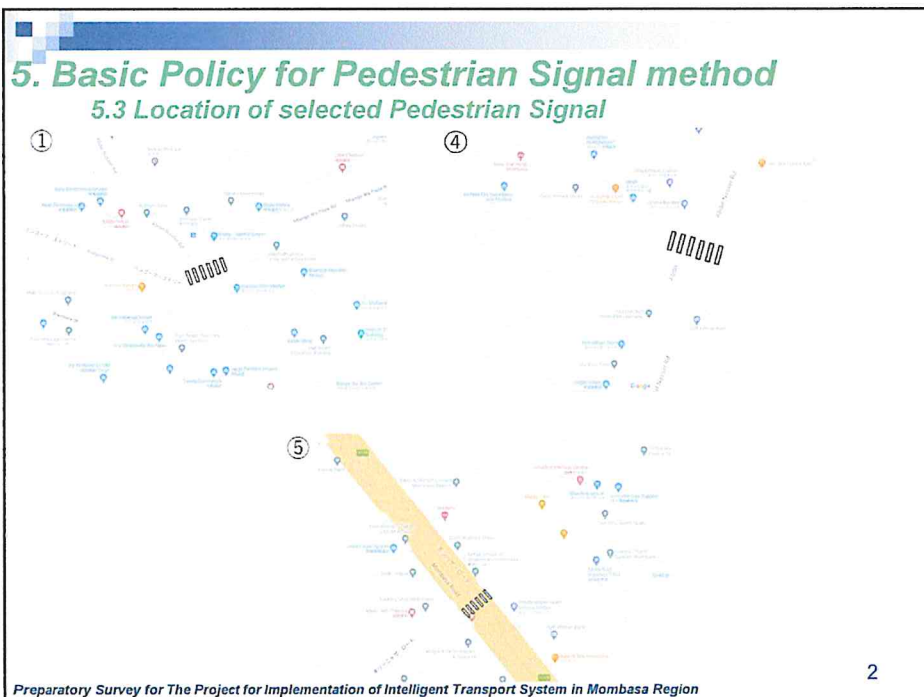
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6. Basic Policy for selecting Communication method

6.1 There are 2 Options how to connect the traffic signal

	Option 1 Loop Network(OFC Redundancy)	Option 2 Star network(Only one OFC)
Advantages	•High redundancy ⇒Communication is possible even if OFC is cut off somewhere.	•Reduce installation cost ⇒No need to lay a new OFC in two directions. So, installation cost is decrease.
Challenges	•High installation cost ⇒Some places have to installation of new OFC in two directions. So, installation cost is increase.	•No Redundancy ⇒If the OFC is cut off somewhere, there are places where communication is not possible.
Cost	•Installation cost (Initial Cost) $12\\$/m \times 10,000m = 120,000\\$ = 13,200,000\text{KSh}$ •Communication cost* (Running Cost per Month) $30,000 \times 31\text{intersections} = 930,000\text{KSh}$ •Communication cost* (Running Cost per year) $930,000\text{KSh} \times 12 = 11,160,000\text{KSh}$	•Installation cost (Initial Cost) $12\\$/m \times 2,200m = 26,400\\$ = 2,904,000\text{KSh}$ •Communication cost* (Running Cost per Month) $30,000 \times 31\text{intersections} = 930,000\text{KSh}$ •Communication cost* (Running Cost per year) $930,000\text{KSh} \times 12 = 11,160,000\text{KSh}$

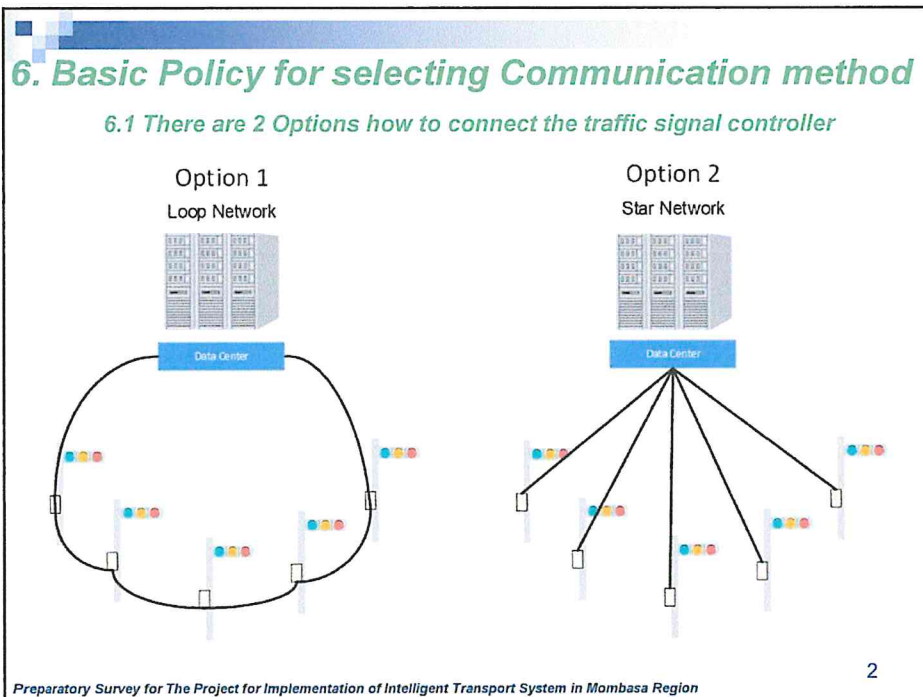
*Communication cost is calculated 30Mbps per intersection 1Mbps=1,000KSh

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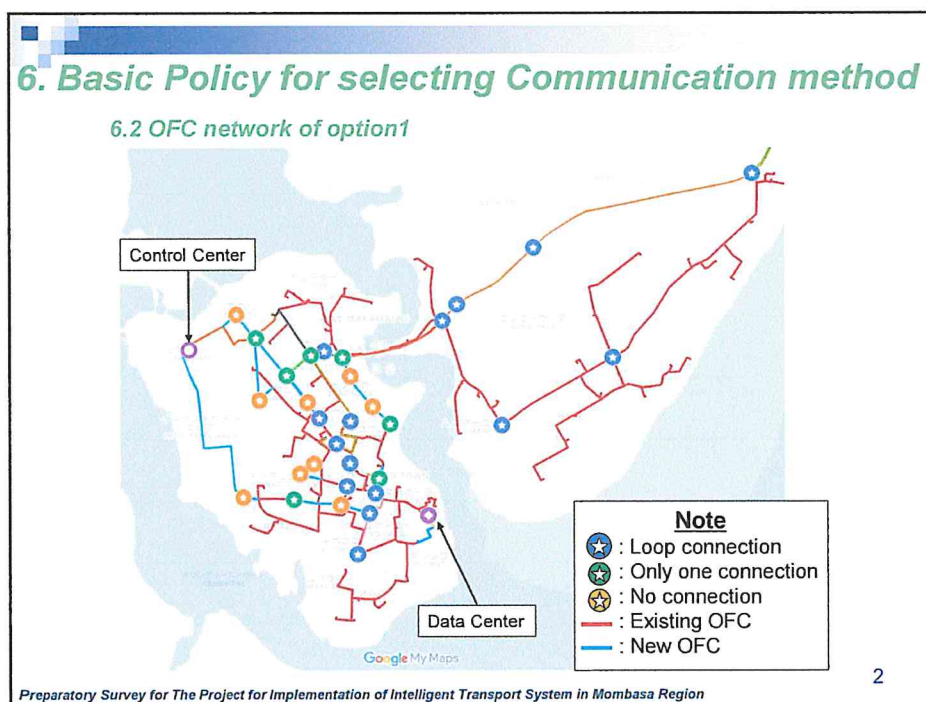
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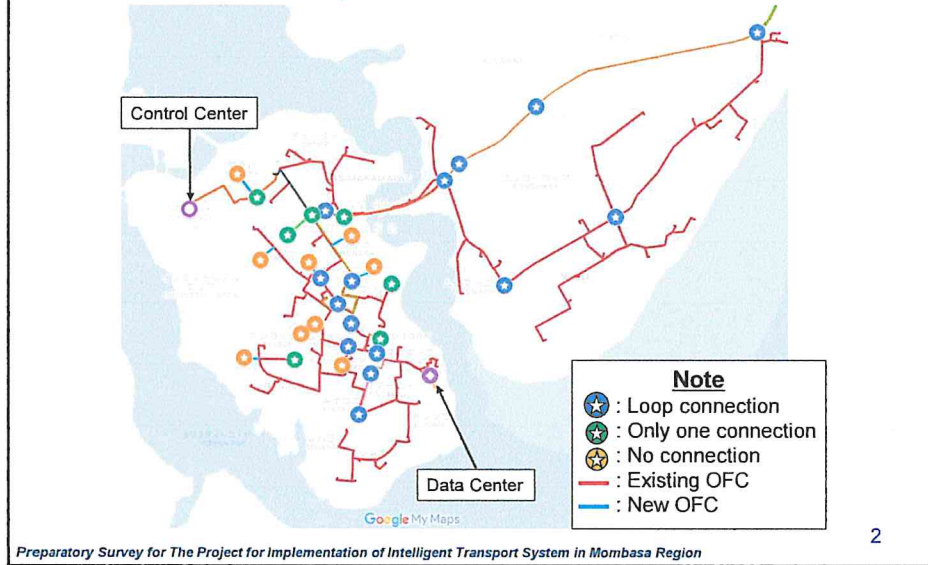
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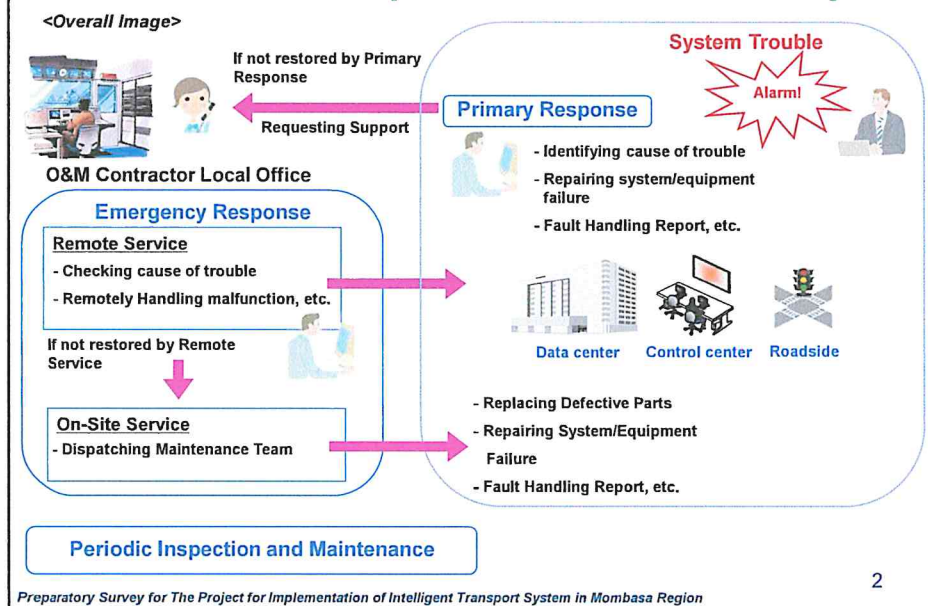
6. Basic Policy for selecting Communication method

6.2 OFC network of option2



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7. Consideration of Operation & Maintenance system



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7. Consideration of Operation & Maintenance system

Type	Main Items of Operation & Maintenance
Operation (by CGM Inspectorate)	<General> - Observing operation status of signal system, servers installed at Data Center from operator console - Checking the error log of each server - Calculation of Availability quarterly based on incident reports <Primary Response at Fault> - Identifying the situations and causes of system malfunctions - Requesting Maintenance Team for response - Reporting the status of system/equipment
Maintenance	<Emergency Response> (Remote Service) - Identifying situations and causes of system malfunction, rectifying malfunction remotely (On-site Service) - Identifying the defective/damaged equipment and parts and replacing defective/damaged equipment and parts with spare parts, repairing retrieved defective/damaged parts <Periodic Inspection & Maintenance> - Visual checking, Cleaning, etc. <System Adjustment> - System parameter setting based on the accumulated traffic data (annually).

Preparatory Survey for The Project for Implementation of Intelligent Transport System in Mombasa Region

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7. Consideration of Operation & Maintenance system

<Approximate Cost for the Maintenance>

No.	Item	Unit	Qty	Unit Price		Total		Remarks
				JPY	KSH	JPY	KSH	
1.	Operation by CGM Inspectorate							
1.1	Cost of remote service (remote service)	month	0.0	-	-	-	-	- Labor costs
1.2	Cost of remote service (remote service)	month	0.0	-	-	-	-	- Labor costs
1.3	Cost of Telephone reception	month	0.0	-	-	-	-	- Labor costs
1.4	General overhead costs	month	0.0	-	-	-	-	-
	Subtotal							
2.	Periodic Inspection & Maintenance							
2.1	Local inspection expenses	time	2.0		294,000	-	588,000	Twice a year
2.2	General overhead costs	time	2.0	-	1,688,000	-	3,376,000	Twice a year
	Subtotal						3,964,000	
3.	Emergency Response (Remote Service)							
3.1	Remote service from maintenance office	time	60.0		11,700	-	702,000	60 times/year
3.2	General overhead costs	month	12.0		154,000	-	1,848,000	
	Subtotal						2,550,000	
4.	Emergency Response (On-site Service)							
4.1	Central System Servers							
1)	Cost of Local engineer	number	1.0	-	30,000	-	30,000	Labor costs
2)	Equipment & Material	number	1.0	-	-	-	-	
3)	General overhead costs	number	1.0	-	75,000	-	75,000	
	Subtotal						105,000	
4.2	Roadside Equipment							
1)	Cost of Local engineer	number	3.0	-	84,000	-	252,000	Labor costs
2)	Equipment & Material	number	3.0	504,000	-	1,512,000	-	DOP price
3)	General overhead costs	number	3.0	-	525,000	-	1,575,000	
	Subtotal					1,692,000	1,827,000	
	Total					1,692,000	8,445,000	
5.	Administrative Cost	%	10%			169,200	844,000	
	Total					1,861,000	9,289,000	
	Grand Total (KSH)						11,151,000	

Preparatory Survey for The Project for Implementation of Intelligent Transport System in Mombasa Region

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8. Soft Components

- The contents of **Soft Components** in grant aid need to be coordinated with the contents of the next **Technical Cooperation Project** to be planned.
- **Necessary items after introducing the ITS system**
 - Instruction manual . . . Manufacturer of grant aid ?
 - Maintenance plan (item, outsourced contract draft . . . ?
 - Operation manual (operational structure, draft contract for outsourcing) . . . ?
 - OJT (including training in Japan) . . . ?
 - Public relations following traffic signal
 - Formulation of urban traffic management plan . . . ?
 - Traffic safety (3E; Engineering, Enforcement, Education) . . . ?

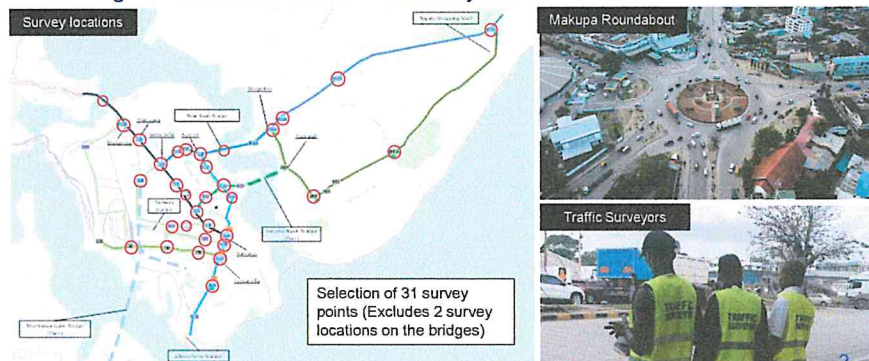
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9. Traffic Count survey and further analysis

- **Traffic Count survey**
 - ✓ 31 traffic survey locations were selected by the JICA survey team
 - ✓ The traffic survey was started on 13th, Sep and will be completed by 2nd, Oct.
- **Further Analysis**
 - ✓ Future traffic volume will be estimated from the survey results, and used for intersection improvement design.
 - ✓ Traffic simulation based on the survey results will be conducted and the signal introduction effect will be analyzed.



Preparatory Survey for The Project for Implementation of Intelligent Transport System in Mombasa Region

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10. Consideration and schedule of Environment study

- Confirmation to NEMA regarding EIA procedure (updated info. is next slide)
[Based on the meeting with NEMA Director, JST, Mr. Ali (CGM): 27th Sep.]
 - ✓ All project is necessary to conduct EIA in Kenya, however, projects will be categorized into high, medium, or low risk project based on the impact of projects
 - ✓ Since impact of this project may be not significant, this project is not categorized as high risk project and categorized as low or medium risk project
 - ✓ Environmental Impact Assessment Summary Project Report is necessary to submit and then approval will be issued. It takes 5 days for issuance of approval.
 - ✓ Only certified consultant can submit The Summary Project Report
 - ✓ The Summary Project Report is received in NEMA Mombasa
 - ✓ Contents of the Summary Project Report is including nature of the project, location of the project, and availability of supportive infrastructure etc.
 - ✓ Site observation with NEMA is necessary
- Hiring certified local consultant as sub-contractor (contract is already concluded)
- Site observation with NEMA and sub-contractor was conducted on 30th Sep.

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10. Consideration and schedule of Environment study

- Submission (Explanation) of detailed information of project activity to NEMA
[Based on the meeting with NEMA official, JST(Maeda), Repcon: 30th Sep.]
 - ✓ Previously NEMA instructed JST to prepare PSR, however, NEMA would like to reconfirm required procedure of EIA for this project based on detailed project activities and site observation result.
 - ✓ JST will have meeting with NEMA on 1st Oct.(tomorrow) to confirm EIA procedure
- The most concerned impact of this project activity is removal of roundabout including monument



Dolphins at A7R-2
(Belong to Mombasa cement)



Kettle at A7R-3 (Fontanella)
(Arab cultural monument)



Newly rehabilitated one at M-3
(Constricting new monument?)

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18th Sep.

11. Consideration for Northern Economic Corridor

- Traffic volume related to Mombasa Port has been decreasing due to the construction of a new berth at main land and the start of operation of SGR in December 2018 (20% of container cargo is borne by SGR).
- However, traffic related to the northern corridor still uses the island road, which is affected by traffic congestion on the island and is also a cause of traffic congestion. This project is effective for the development of the northern corridor and **Free and Open Indo-Pacific (FOIP)**
- NTCCTA is implementing efforts to facilitate traffic in the northern corridor with the cooperation of member countries. Simplification of border crossing procedures, one-stop, etc.

Hearing results of

Northern Corridor Transit and Transport Coordination Authority (NCTTCA)

NCTTCA is an organization created by a treaty in 1985 to cooperate with the six countries of Kenya, Burundi, Congo, Rwanda, Uganda, and South Sudan along the development of the Northern Corridor starting from Mombasa. The headquarters is in Mombasa.

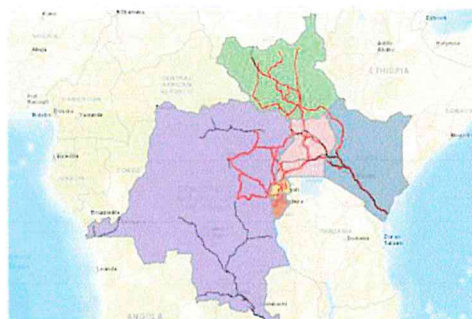
Preparatory Survey for The Project for Implementation of Intelligent Transport System in Mombasa Region

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11. Consideration for Northern Economic Corridor

NORTHERN CORRIDOR MEMBER STATES



Route of Transport
 ● Mombasa
 ● Nairobi
 ● Kampala
 ● Addis Ababa
 ● Juba
 ● Khartoum
 ● Dar es Salaam

— Road
 — Rail



SGR Mombasa Terminal

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12. Major Undertakings to be taken by the Government of Kenya (Cost Item)

<Before the Tender>

NO	Items	Deadline	In charge	Estimated Cost	Ref.
	To secure and clear the following lands				
	1) right of way of the Project				
	2) temporary construction yard and stock yard near the Project area	before notice of the bidding documents	CGM		
7	3) borrow pit and disposal site near the Project area				
	4) Renovating Centers to accommodate the provided equipment, which includes upgrading of air-conditioning system, replacement of electrical fittings and lighting fixtures, refurbishing of interior finishes, if necessary.				
	To clear, level and reclaim the following sites	before notice of the bidding documents	CGM		
9	1) remove utilities		KeNHA		
	2) existing facilities		KURRA		

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12. Major Undertakings to be taken by the Government of Kenya (Cost Item)

<During the Project Implementation>

NO	Items	Deadline	In charge	Estimated Cost	Ref.
5	To ensure that customs duties, internal taxes and other fiscal levies which may be imposed in the country of the Recipient with respect to the purchase of the products and/or the services be exempted	during the Project	CGM		
6	To bear all the expenses, other than those covered by the Grant, necessary for the implementation of the Project	during the Project	CGM		
	1) Providing power supply and communication necessary for the provided equipment at site, Data Center and Control Centre	Before equipment at sites	CGM		
	If any necessary for the Project	During the Project	CGM		
11	To take measure necessary for security and safety of the Project -traffic control around the site and on transportation routes of construction materials -public notification	during the construction	CGM		
14	To implement RAP/ARAP (livelihood restoration program), if necessary	for a period based on livelihood restoration program	CGM		

Preparatory Survey for The Project for Implementation of Intelligent Transport System in Mombasa Region

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12. Major Undertakings to be taken by the Government of Kenya (Cost Item)

<After the Project>

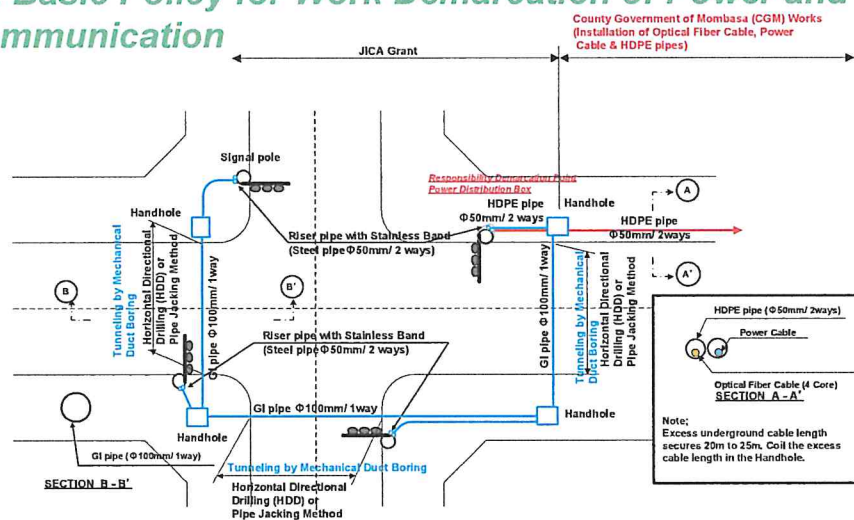
NO	Items	Deadline	In charge	Estimated Cost	Ref.
3	To maintain and use properly and effectively the facilities constructed and equipment provided under the Grant Aid 1) Allocation of maintenance cost 2) Operation and maintenance structure 3) Routine check/Periodic inspection	After completion of the construction	CGM		

Preparatory Survey for The Project for Implementation of Intelligent Transport System in Mombasa Region

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13. Basic Policy for Work Demarcation of Power and Communication



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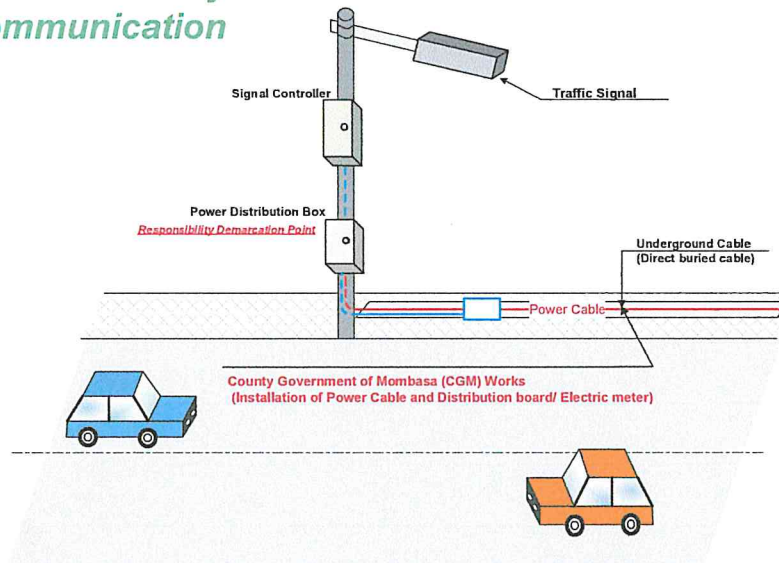
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13. Basic Policy for Work Demarcation of Power and Communication



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14. To be done and supported by Kenyan side

1. Finance (Budget) data for 3-5 years for evaluation of financial capability for operation and maintenance

➤ Traffic Sector/ICT Sector/ Inspectorate sector

2. Completion POC successfully by the end of 2021 and handover the equipment to CGM

3. Formal request of Grant Project by the end of 2021

Preparatory Survey for The Project for Implementation of Intelligent Transport System in Mombasa Region

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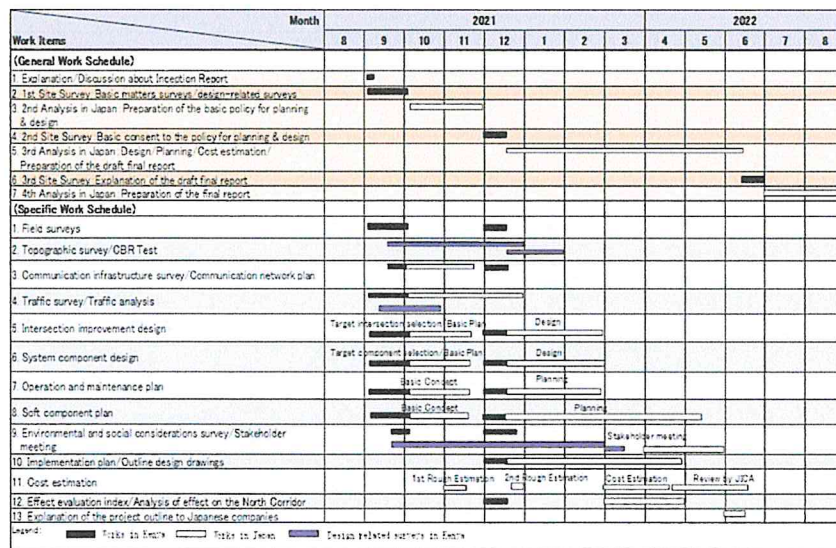
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15. Further Schedule



Preparatory Survey for The Project for Implementation of Intelligent Transport System in Mombasa Region

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Major Undertakings to be taken by the Government of Kenya

Sep 30. 2021

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

(1) Before the Tender

NO	Items	Deadline	In charge	Estimated Cost	Ref.
1	To sign the banking arrangement (B/A) with a bank in Japan (the Agent Bank) to open bank account for the Grant	within 1 month after the signing of the G/A	MOF		
2	To issue A/P to the Agent Bank for the payment to the consultant	within 1 month after the signing of the contract(s)	MOF		
3	To bear the following commissions to the Agent Bank for the banking services based upon B/A				
	1) Advising commission of A/P	within 1 month after the signing of the contract(s)	MOF		
	2) Payment commission for A/P	every payment	MOF		
4	To get approval for IEE/EIA(Conditions of approval should be fulfilled, if any) and secure the necessary budget for implementation for EMP and EMoP (and fulfilling conditions of approval, if any).	within 1 month after the signing of the G/A	CGM		
5	To secure the necessary budget and implement land acquisition and resettlement (including preparation of resettlement sites), and compensation with full replacement cost in accordance with RAP	before notice of the bidding documents	CGM		
6	To implement social monitoring, and to submit the monitoring results to JICA, by using the monitoring form, on a quarterly basis as a part of Project Monitoring Report	until land acquisition and resettlement complete	CGM		
7	To secure and clear the following lands 1) right of way of the Project 2) temporary construction yard and stock yard near the Project area 3) borrow pit and disposal site near the Project area 4) Renovating Centers to accommodate the provided equipment, which includes upgrading of air-conditioning system, replacement of electrical fittings and lighting fixtures, refurbishing of interior finishes, if necessary.	before notice of the bidding documents	CGM		
8	To obtain the planning, zoning, building permit	before notice of the bidding documents	CGM		
9	To clear, level and reclaim the following sites 1) remove utilities 2) existing facilities	before notice of the bidding documents	CGM KeNHA KURRA		
10	To submit Project Monitoring Report (with the result of Detailed Design)	before preparation of the bidding documents	CGM		

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

Note: CGM : County Government of Mombasa

MOF:Ministry of Finance

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KeNHA:Kenya National Highways Authority

KURA: Kenya Urban Roads Authority

(2) During the Project Implementation

NO	Items	Deadline	In charge	Estimated Cost	Ref.
1	To issue A/P to the Agent Bank for the payment to the supplier and the contractor	within 1 month after the signing of the contract(s)	CGM		
2	To bear the following commissions to the Agent Bank for the banking services based upon the B/A				
	1) Advising commission of A/P	within 1 month after the signing of the contract(s)	CGM		
	2) Payment commission for A/P	every payment	MOF CGM		
3	to ensure prompt unloading and customs clearance at ports of disembarkation in the country of the Recipient and to assist the Supplier(s) with internal transportation therein	during the Project	CGM		
4	To accord Japanese physical persons and/or physical persons of third countries whose services may be required in connection with the supply of the products and the services such facilities as may be necessary for their entry into the country of the Recipient and stay therein for the performance of their work	during the Project	CGM		
5	To ensure that customs duties, internal taxes and other fiscal levies which may be imposed in the country of the Recipient with respect to the purchase of the products and/or the services be exempted	during the Project	CGM		
6	To bear all the expenses, other than those covered by the Grant, necessary for the implementation of the Project	during the Project	CGM		
	1) Providing power supply and communication necessary for the provided equipment at site and Control Centre	Before equipment at sites	CGM		
	2) If any necessary for the Project	During the Project	CGM		
7	To notify JICA promptly of any incident or accident, which has, or is likely to have, a significant adverse effect on the environment, the affected communities, the public or workers.	during the construction	CGM		
8	1)To submit Project Monitoring Report	every month	CGM		
	2)To submit Project Monitoring Report (final) (including as-built drawings, equipment list, photographs, etc.)	within 1 month after issuance of Certificate of Completion for the works under the contract(s)	CGM		
9	To submit a report concerning completion of the Project	within 6 months after completion of the Project	CGM		

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10	To ensure the safety of persons engaged in the implementation of the Project	during the Project	CGM		
11	To take measure necessary for security and safety of the Project -traffic control around the site and on transportation routes of construction materials -public notification	during the construction	CGM		
12	To implement EMP and EMoP	during the construction	CGM		
13	To submit results of environmental monitoring to JICA, by using the monitoring form, on a quarterly basis as a part of Project Monitoring Report	during the construction	CGM		
14	To implement RAP/ARAP (livelihood restoration program), if necessary	for a period based on livelihood restoration program	CGM		
15	To implement social monitoring, and to submit the monitoring results to JICA, by using the monitoring form, on a quarterly basis as a part of Project Monitoring Report - Period of the monitoring may be extended if affected persons' livelihoods are not sufficiently restored. Extension of the monitoring will be decided based on agreement between CGM and JICA.	- until the end of livelihood restoration program (In case that livelihood restoration program is provided) - for 2 years after land acquisition and resettlement complete (In case that livelihood restoration program is not provided)	CGM		

(3) After the Project

NO	Items	Deadline	In charge	Estimated Cost	Ref.
1	To implement EMP and EMoP	for a period based on EMP and EMoP	CGM		
2	To submit results of environmental monitoring to JICA, by using the monitoring form, semiannually - The period of environmental monitoring may be extended if any significant negative impacts on the environment are found. The extension of environmental monitoring will be decided based on the agreement between CGM and JICA.	for 3 years after the Project	CGM		
3	To maintain and use properly and effectively the facilities constructed and equipment provided under the Grant Aid 1) Allocation of maintenance cost 2) Operation and maintenance structure 3) Routine check/Periodic inspection	After completion of the construction	CGM		

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

NO	Items	Deadline	Amount (Million)
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DKens

			Japanese Yen)*
1	Civil work and equipment procurement		
2	Detailed design and Supervisory Service		
3	Contingencies		
	Total		XXX

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

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Technical Note
on the Preparatory Survey for the Project for
Implementation of Intelligent Transport System in
Mombasa Region

In response to the request from the Government of the Republic of Kenya, the Government of Japan decided to conduct a Preparatory Survey for the Project for Implementation of Intelligent Transport System in Mombasa Region (hereinafter referred to as “the Project”), and entrusted the Preparatory Survey to Japan International Cooperation Agency (hereinafter referred to as “JICA”).

JICA sent the Preparatory Survey Team for the Outline Design (hereinafter referred to as “the Team”) to Mombasa. The Team held a series of discussions with the officials of County Government of Mombasa (CGM) for 2nd Survey at Mombasa. In the course of the discussions, both sides have confirmed the main items described in the attachment. The Team will proceed for further works in the future.

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

Mombasa, December 17th, 2021



Masato Okuda

Chief Consultant
Preparatory Survey Team

Japan International Cooperation Agency
Japan



Eng. Albert T. Keno

County Chief Officer- Transport
Department of Transport, Infrastructure &
Public Works

County Government of Mombasa
Republic of Kenya

ATTACHMENT

1. Confirmation of Presentation of progress of the 2nd Survey and Basic Design Concept

The Team explained the Presentation of the Progress of 2nd Survey and Basic Concept of Design based on the previous discussions and CGM agreed in principle with the contents.

2. Discussion on the contents

2.1 Intersection selection

The Team explained the selecting method on the selected 24 intersections so far and CGM agreed.

The Team explained the number of target intersections can be decreased considering effect and budget constraints and lower priority intersection is judged as follows and CGM agreed:

- Lowest priority of 2 intersections (L-2 and L-5) due to low traffic and isolated although Happy hour operation.
- 2nd lowest priority of 2 intersections (H-1 and H-5) due to low traffic although connection with Core loop and near school/market.
- 3rd lowest priority of 2 intersections (A7-2 and A8-7) due to the intersections being too close to A7-3 and A8-3 Respectively.

2.2 ITS Components

The Team explained the following is the target ITS Components and CGM agreed.

1. Expansion of the existing CCTV System (important 5 location)
2. Accumulation and analysis of traffic information
3. Providing traffic information through VMS (3 locations)
4. Data Centre for control server and storage server
5. Control Centre with Video wall

The Team and CGM decided the location of Control Centre shall be in the building of Operation and Service division, Public Works Building in Shimanzi and The Team provided a sample layout of the proposed Control Centre with a Videowall.

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2.3 Intersection Improvement

The Team explained on the following pavement improvement method and scope and CGM agreed:

(Basic Concept)

- PCCP to be used for existing PCCP road
- Modified Asphalt Pavement with Polymer to be used for existing Asphalt Road.
- Pavement will be applied where median and RA is to be removed and where the existing paving is poor.

(Scope of intersection)

- The section from the starting point for right / left turn shift of each inflow to the intersection.
- For inflow areas where right/left turn lanes are not installed, the section from 30m upstream to the stop line.

(Scope of Median strip improvement)

- Right-turn lane length (minimum 30m) + sliding length (30~40m).

2.4 Pedestrian Signal method

The Team explained the high priority locations for installation of the pedestrian signals are three. However, two of the locations have changed from the original plan to different locations. CGM agreed on new locations.

2.5 Communication method

The Team recommended the loop network to provide communication between the intersection signals, Control Centre, and Data Centre. CGM recommended the FIBRE LINK (existing service provider) as communication provider for the Project. CGM and FIBER LINK agreed to enhance redundancy for the Project before tender.

2.6 Consideration of Operation & Maintenance

As per the request from CGM to consider Japanese ITS Manufacturer to be included in ITS O&M contract(activity), O&M scheme was proposed by the Team for further consideration.

2.7 Consideration and schedule of Environment study

1) EIA procedure,

The following points were confirmed with NEMA

Time for reviewing EIA including ARAP(Abbreviated Resettlement Action Plan) by

no

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NEMA is regulated as 3 months. Thus, EIA will be submitted by end of January 2022 to receive EIA License by June 2022.

- ARAP is not separately reviewed and approved from EIA document.
- Any payment is not required to NEMA for reviewing EIA and issuance of EIA license.
- NEMA agreed with the proposed ideas regarding gender considerations of the project and recommended to state such gender considerations in EIA document.

2) Removal of monuments within roundabout,

The following points were confirmed with the National Museums of Kenya

- The monument on roundabout, the kettle at Fontanella intersection, is not a “monument” defined by NATIONAL MUSEUMS AND HERITAGE ACT. The monument, the kettle at Fontanella intersection, is one of structures (works) for beautification of Mombasa city. Further consultations shall be held with CGM Department of Youth Gender Sports and Cultural Affairs on the procedure of removing and preserving the beautifications within roundabouts.

2.8 Construction Plan

The Team explained the Construction Plan as follows, and CGM, KURA and KeNHA agreed.

- Construction of half of the road and both direction of traffic will be controlled on another half of the road.
- Road construction will be done during day time basically, but night time construction will be done for special congested area and center space of intersection.

2.9 Major Undertaking to be taken by the Government of Kenya (Cost Item)

The Team explained the necessary undertakings to be shouldered by the Kenyan side categorized into three; Before the Tender, During the Project Implementation and After the project. CGM agreed.

1. Before the Tender

1)Secure material yard (including security equipment):

- Main camp yard need to be shown by CGM by middle of January 2022.
- Vacant land in the CGM facility at Shimanzi will be prepared as the sub camp yard.

2)Secure disposal sites for construction waste:

- Disposal site in Mwakirunge will be prepared

3)Secure the location of the traffic control center and data center (including facilities

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related to lighting, air conditioning, security, and emergency power supply) :

-The space in the CGM office at Shimanzi will be prepared as the traffic control center. The existing data center of CGM can be available to host the servers of the Project.

4)Power equipment:

The Team will provide CAD design drawings to Kenya Power by the end of Jan 2022 and Kenya Power will prepare detailed replacement plan including the cost by April 2022. CGM will ensure the budget and formally request the replacement to Kenya Power by Jan 2023.

5)Monuments

Monuments in the target RA will be relocated or removed by the CGM, which will not be an issue in environmental perspective according to NEMA.

6)Parking lots

Parking lots in target intersection will be removed by the CGM.

7)Other facilities that interfere with intersection improvement work:

Using facilities that interfere with intersection improvement works will be removed by CGM. Un-used facilities interfere with intersection improvement can be removed by the Project.

2. During the Project Implementation

Necessary power supply and telecommunication supply for construction and installation of facilities will be supplied by CGM

3. After the Project

-Keeping necessary contract on Operation and Maintenance

2.10 To be done and supported by Kenyan side

The Team explained the necessary items to be done and supported as follows:

1. Finance (Budget) data for 3-5 years for evaluation of financial capability for operation and maintenance of the System.
2. Completion of Contract Agreement between CGM and CCTV Provider to be finalized by March 2022 and handover the equipment to CGM by contractor.
3. Formal Request of Grant Project by the end of 2021.

CGM agreed and informed the Team that a Formal Request was sent to Central Government already.



