

## ASSURANCE FOR TAZARA INTERSECTION PROJECT



## FINAL REPORT

Prepared By:

Eng.Wambura M. Wambura & Eng.John F. Haule – Assurance Team P. O. Box 70039,

Dar es Salaam

October, 2017

## Table of Contents

## Page

LIST (	OF ACRONYMS	ii
1.0	INTRODUCTION	1
1.1	Background on the Assurance Assignment	1
1.2	Objectives of the Assurance Assignment	2
1.3	Scope of the Assurance Assignment	2
1.4	Deliverables	3
1.5.	Data Collection	3
2.0	THE TAZARA INTERSECTION IMPROVEMENT PROJECT	5
2.1	Project Background and Location	5
2.2	General Description of the Project	6
2.3	Project Scope of Works	7
2.4	Project Implementation and Supervision	8
2.4	Infrastructure Data Standard (IDS)	17
3.0	COMMENTS ON FILLING OF INFRASTRUCTURE DATA STANDARDS (IDS)	29
3.1	Missing Information in the December, 2016 Progress Report	29
3.3	General Observations	30
3.4	Additional Required Information	30
4.0	PLANNED ASSURANCE ACTIVITIES AND SCHEDULE OF EXECUTION	31
4.1	Assurance Activities	31
4.2	Constraints in Implementing the Planned Assurance Activities	32
5.0	DATA ANALYSIS	33
5.1	Identification, Analysis of Issues of Concern from Disclosed Information	33
5.2	Analysis of Quality of Works and Progress of Works	35
6.0	CONCLUSIONS AND RECOMMENDATIONS	36
6.1	Conclusions	36
6.2	Recommendations	37
70 AN	NNEVEC	20

#### LIST OF ACRONYMS

AT - Assurance Team

CBD - Central Business District

CoST - Construction Sector Transparency Initiative

GA - Grant agreement

GOJ - Government of Japan

GoT - Government of Tanzania

HQ - Head Quarters

IDS - Infrastructure Data Standard

JICA - Japan International Cooperation Agency

JPY - Japanese Yen

MP - Master Plan

MSG - Multi Stakeholder Group

NCC - National Construction Council

PEs - Procuring Entities

SMCC - Sumitomo Mitsui Construction

TANROADS - Tanzania National Roads Agency

TAZARA - Tanzania Zambia Railway Authority

ToR - Terms of Reference

VO - Variation Order

#### 1.0 INTRODUCTION

#### 1.1 Background on the Assurance Assignment

The construction sector plays a vital role in supporting social and economic development. Construction is a complex process involving many stakeholders and substantial amounts of money being exchanged through various hands, hence creating avenues for different forms of malpractices. Consequently, public sector projects have been known to be associated with increased contract prices, poor quality and severe delays resulting into non-achievement of expected value for money. The complexity of the causes and types of malpractices are such that they cannot be addressed by a single initiative.

The Construction Sector Transparency Initiative (CoST) is a multi-stakeholder initiative with a focus of improving the value for money spent on public infrastructure by increasing transparency in the delivery of construction projects. The aim of CoST is to enhance the transparency of the Procuring Entities (PEs) and construction companies by disclosing to the public information of the construction projects at all stages of the project cycle, from initial identification of the project to the final completion. The information to be collected was based on the CoST's 'Infrastructure Data Standard' (IDS) which has listed a number of information points to be disclosed at key stages throughout a project cycle, from the initial identification of the project to the final completion. The IDS covers both 'proactive and reactive disclosure' which is intended to be sufficient to inform stakeholders about relevant aspects of the project in an understandable and useful way. The IDS includes information for reactive disclosure on request.

The full list of information that was required to be disclosed as per provided IDS is outlined in **Annexes A** and **B** of this report.

Therefore, in order for CoST to achieve the planned goal of carrying out assurance activities for designated projects, which included Improvement of the TAZARA Intersection Project, the National Construction Council on behalf of CoST Tanzania invited from the short-listed individual Consultants in April, 2017 to submit proposals for providing the assurance services.

#### 1.2 Objectives of the Assurance Assignment

The objectives of the assurance assignment for the improvement of TAZARA Intersection project were as follows:

- To Collect the information from the Procuring Entities (PEs) through their quarterly reports, and where necessary consultants and contractors for the selected project in order to ensure the publication of the relevant Infrastructure Data Standard (IDS).
- To verify the accuracy and completeness of IDS disclosures on the selected project and produce reports.
- To analyse disclosed and verified data on the selected project in order to make informed judgments about the cost, time of delivery, and quality of the built infrastructure.
- To produce reports that are clearly intelligible to the non-specialist, highlighting any cause for concern the analyzed information reveals.

#### 1.3 Scope of the Assurance Assignment

The Assurance assignment covers stages from procurement to completion of both the works contract and supervision contract on the following core activities carried out mainly in two phases:

#### i) Phase 1 - Collection of information and data verification

- Extraction of information from the full monthly report and preparation of a Zero report containing all the information available from the monthly report.
- Preparation of a list of additional information that the Assurance Team needed to complete the IDS
- Verification of the information.
- To produce Interim report

#### ii) Phase 2 - Data analysis

- To undertake a more detailed analysis of the released information, paying particular attention to variations and claims, extensions of time, changes in scope etc, where applicable, whether justified
- To check the quality of the construction by making a site visit (s)

#### iii) PE to Verify information

It is important for the credibility of CoST to ensure that the information disclosed is technically accurate. To achieve this both the IDS and all reports have to be verified by the PEs.

#### 1.4 Deliverables

The following deliverables in form of reports and filled IDS have been produced in hard and soft copies to the MSG who will later disclose, as appropriate, to the public at large. The following reports have been prepared and submitted:

- A Zero report containing the IDS with the data extracted from the December 2016 monthly progress report and the list of missing information that was required to complete the IDS.
- A duly filled IDS form fully verified by the PE for the project and approved by the MSG in three copies,
- An Interim Report on phase 1, in three copies,
- A Final Report on phase 2, in three copies
- Final Report, in three copies, after receiving comments from the MSG.

#### 1.5. Data Collection

Having signed the contract for execution of the assurance assignment on 9<sup>th</sup> May 2017, the AT embarked on the collection of the required information to fill in the IDS by reviewing the project progress report of December, 2016. The review exercise for the project progress report was done from 9<sup>th</sup> to 12<sup>th</sup> May 2017 with the aim of establishing the extent of disclosed information in the report and identifying additional information required. On 12<sup>th</sup> May, 2017, the AT submitted to CoST Tanzania the draft IDS based on the information extracted from December 2016 project monthly progress report together with the list of additional information required to complete the IDS.

On 5<sup>th</sup> June, 2017 the introductory meeting was held at TANROADS Head Quarters which was attended by Mr.Clement Mworia, the CoST Tanzania Manager, Eng.Wambura M.Wambura and Eng.John F. Haule, the Assurance Team and Eng.Rajab Manger, the Project Engineer/Manager (Client's representative). Consequently, on 6<sup>th</sup> June, 2017 the Assurance Team conducted the site visit at the TAZARA Intersection Improvement project where the team

was able to meet with the Consultant's and Contractors' representatives and got some additional information required to fill in the IDS. On 14<sup>th</sup> June, 2017 the AT met again with the Project Engineer/Manager (Client's Representative) at TANROADS HQ for the purpose of getting clarifications on the information filled in the IDS for the project as well as obtaining additional information.

On 18th July, 2017 the Draft Final Report prepared based on the collected information was presented to the CoST MSG who provided comments for incorporation in the Final Report. Some of the comments on labour issues and involvement of local firms in the project required the AT to make consultation with the Client's Representative who made arrangements for visiting the site on 26th July, 2017 for the purpose of meeting the representatives of the Consultant and Contractor. During the site visit the Assurance Team had a meeting with Mr.Kiyokazu Tsuji (Resident Engineer) and Mr.Nobuhiko Maruni (Contractor's Project Manager) who provided clarifications and additional information on labour issues and involvement of local firms in the project.

#### 2.0 THE TAZARA INTERSECTION IMPROVEMENT PROJECT

#### 2.1 Project Background and Location

The Government of Tanzania (GOT) through the National Roads Agency (TANROADS), with financing from the Government of Japan (GOJ) as Grant Aid, is improving TAZARA Intersection by constructing Flyovers along Nyerere road in Dar es Salaam with a view to alleviate traffic congestion in the city.

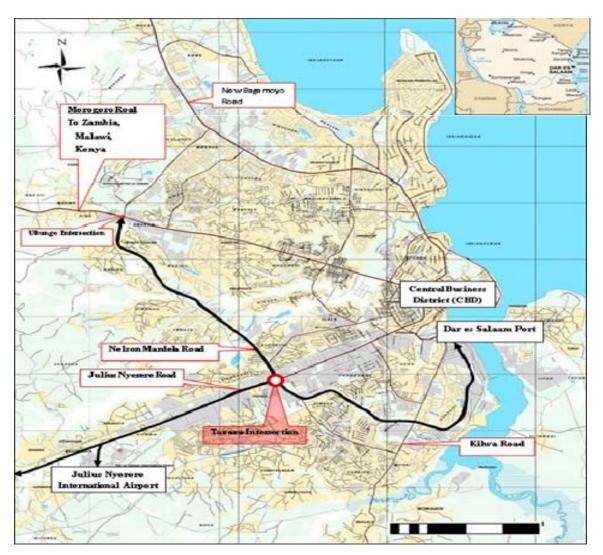
The Government of Tanzania (GOT) sent a request for implementation of the Urban Transport Policy and System Development Master Plan Study (hereinafter referred to as "M/P") for improving the transport network in the Dar es Salaam City to the Government of Japan (GOJ). In response, the GOJ entrusted Japan International Cooperation Agency (JICA) to implement the M/P formulated for the target year 2030 from April 2007 to June 2008. Priority projects were selected for implementation between 2008 and 2015 in the M/P. TAZARA Intersection was recommended to be improved by a crossing with flyover as one of the urgent projects. Based on the M/P, the GOT requested the GOJ to conduct the Dar es Salaam Transport Policy and System Development Master Plan in June 2008, which included the project for Improvement of TAZARA Intersection.

The Grant Agreement (G/A) between JICA and GOT for improvement of TAZARA Intersection Project was signed on 18th June, 2013 for phase 1 project, on 24th July, 2014 for phase 2 project and on 13th March, 2015 for phase 3 project. The amount for each project phase is Japanese Yen (JPY) 3,217,000,000, JPY 346,000,000 and JPY 1,722,000,000 respectively. Contingency up to JPY 157,000,000 out of JPY 1,722,000,000 for phase 3 is considered.

TAZARA Intersection is located eight (8) kilometers towards the Southwest from the Central Business District of Dar es Salaam city (hereinafter referred to as "CBD") as depicted in the location map below. This place is the intersection that connects Nyerere Road and the Nelson Mandela Road. The Nyerere Road is the only trunk road to connect between CBD and Julius Nyerere International Airport. Industrial areas exist along the Nyerere Road. The Nelson Mandela Road has formed one of the logistic distribution networks to connect inland areas to the Dar es Salaam Port (hereinafter referred to as "the Port") for transporting not only domestic goods but also goods to the landlocked countries. Both roads usually have heavy traffic. Therefore vehicle travelling speeds are down to about

six (6) kilometers per hour (km/h) due to confirmed traffic congestion at the TAZARA Intersection during peak hours in the morning and evening.

#### Location Map for the TAZARA Intersection



## 2.2 General Description of the Project

The Client for the project is TANROADS representing the Ministry of Works, Transport and Communications. The Supervision Consultant is the Consortium of Oriental Consultants Global Co. Ltd and Eight Japan Engineers Consultants Inc. The Contractor is Sumitomo Mitsui Construction Co. Ltd (SMCC). The contract between TANROADS and SMCC was signed on 15th October, 2015 at a lump sum contract price of JPY 4,842,000,000 and for contract period of thirty five (35) months. The contract between TANROADS and the Supervising Consultant was signed on 8th October, 2013 at original contract price of JPY

167,458,000 which was revised on 30<sup>th</sup> September, 2014 to JPY 184,165,000 after amendment. The Performance Security and Advance Payment Security were submitted on 27<sup>th</sup> October, 2015 by SMCC. Advance payment was remitted to the Contractor on 4<sup>th</sup> February, 2016. Site possession was given on 26<sup>th</sup> November, 2015 and on 25<sup>th</sup> January, 2016. The commencement date was on 1<sup>st</sup> December, 2015 while notification for start of works was issued on 4<sup>th</sup> February, 2016. Contractual completion is expected to be on 31<sup>st</sup> October, 2018.

#### 2.3 Project Scope of Works

Phase 1 project works include:

- The Flyovers with two (2) lane carriageways except Asphalt pavement work on the flyover in North side (bound for Dar es Salaam city) and superstructure construction work in North side and South side
- The approach roads with two 2 lane carriageways to the flyovers except subbase course. Base course and asphalt pavement works of the approach roads to the flyover in North side (bound for Dar es Salaam city)
- Streets(frontage roads), service roads, walkways, drainage except sub-base course, base course and asphalt pavement works of the street and services roads in North side (bound for Dar es Salaam city)
- Accessory facilities on flyovers and the approach roads

Phase 2 project works include:

- Asphalt pavement work on the flyover in North-side (bound for Dar es Salaam city
- Sub-base course, base course and asphalt pavement works of the approach roads to the flyover in North-side (bound for Dar es Salaam city)
- Sub-base course, base course and asphalt pavement works of street and service roads in North-side (bound for Dar es Salaam city).

Phase 3 project works include:

• Superstructure construction work of the flyovers with two (2) lane carriageways in North-side and South-side.

#### 2.4 Project Implementation and Supervision

The reviewed Monthly Progress Reports of December, 2016 and April, 2017 as well as the presentation to the Assurance Team by the Consultants and site visit made on 6<sup>th</sup> June, 2017 indicated that implementation of project works is continuing smoothly and is on schedule. The reports testify that the Contractor commenced mobilization and establishment activities immediately after being issued with notification to commence on 4<sup>th</sup> February, 2016 which followed after being given site possession on 26<sup>th</sup> November, 2015 and on 25<sup>th</sup> January, 2016. The establishment activities included construction of offices, laboratory, stores and workshop, yard fencing and installment of concrete batch plant. The Contractor also mobilized all the contractually required equipment, plants and materials. Likewise, the reviewed reports show that the Works Supervision Consultant, a consortium of Oriental Global Company Limited and Eight – Japan Engineering Consultants Inc of Tokyo Japan, is equally mobilized and established on site.

#### 2.4.1 The Consultant's Scope of Services

The Consultant is responsible for supervising the Contractor's activities being carried out on site on behalf of the Client. The Consultant's obligation is to discharge the following responsibilities:

- Checking and approving the construction programme, working drawings, shop drwings, samples, catalogues and other related documents submitted by the Contractor
- Checking and approving the construction materials and working methods and providing attendance to tests
- Inspecting the progress of works and making inspections of the works in conformity with the specifications and the drawings, and attending the acceptance of the works
- Technically checking applications for Interim Payment claims submitted by the Contractor as to the compliance with actual work done
- Technically checking and evaluating applications for extension of time for completion and the prolongation cost, if any, according to approved construction programme.
- Reviewing and approving the expatriate personnel proposed by the Contractor

The reviewed reports have indicated that the Consultant has successfully discharged the above responsibilities and ensured that works progress smoothly and executed based on acceptable work methods and to the required quality standards.

#### 2.4.2 The Involvement of Locals and Local Firms in the Project

#### a) Consultant

The Monthly Progress Report for April, 2017 has provided a list of thirteen (13) Consultant's mobilized staff among whom three (3) are Japanese and ten (10) are Tanzanians of which seven (7) are of technical nature. The Japanese nationals comprise of the Resident Engineer, Highway Engineer and Prestressed (PC) Bridge Engineer. The positions held by Tanzanians comprise of the Administrator, Materials Engineer, Structural Engineer, Safety Officer, Works Inspectors (4), Driver and Office Attendant. Further, the reports indicate that the project has provided opportunity for students of the University of Dar es Salaam to attend short-term training sessions through visits made to the project.

The Assurance Team considered the involvement of Tanzanians in the Consultant's Team to be adequate. However, it was noted that there is no involvement of local consulting firms for this project as sub-consultants. Further, the Assurance Team noted that lack of involvement of local consulting firms in the project has limited their participation and contribution of the project to capacity building.

#### b) Contractor

The review of the Monthly Progress reports and information provided by Consultant and Contractor indicates the implementation of the project is carried out by both the main contractor and sub-contractors. It was noted and informed that Bridge works except piling foundation works are being carried out by the main contractor while sub-contractors have been assigned to carry-out the following:

#### CoST Tanzania:

- Piling foundation works (US\$.580,586)
- foundation Mediterranean Group EA (T) Limited which is registered in Tanzania under foreign category Class 1 with CRB Reg.No.SPC1/355/08/2016. The subcontractor provides tools, equipment and labour while the Main Contractor is responsible for main materials.
- Road works including pavement and Drainage works

(US\$4,740,000 for Road works & Pavement; and US\$.636,973 for Drainage works)

- MAC Contractors Company Limited which is registered in Tanzania under local category Class 2 with CRB Reg.No.C2/0021/07/2005. The subcontractor provides tools, equipment, labour and materials.
- Supply of Labour for Laba Contractors
   Bridge works registered in Ta

(Wage including commission for Unskilled labour: TSh.17,600 per day and for Skilled Labour:TSh. 23,500 per day)

- Limited which is registered in Tanzania under local category Class 6 with CRB Reg.No.C6/1382/04/2016. The subcontractor provides labour, Personal Protective Equipment (PPE) and working tools.
- Supply of Security Services for the Camp and at works sites.
  - (Wage including commission for supply of security services at the rate of TSh.625,000 per day for maintaining normal security; and TSh.17,700 per day for Supervisors.
- Security Ultimate Security Company Limited e Camp which is responsible for supply of security staff and related materials and security gear and equipment.

Likewise, the Assurance Team reviewed the Monthly Progress Report for April, 2017 on the part of the Contractor with Sub-Contractors on issues pertaining to involvement of locals and local firms. The reports indicate that the Contractors manpower comprising that of Sub-contractors include expatriates and locals. The list of eighty four (84) staff for the Main Contractor indicates that twenty five (25) are foreign comprising of six (6) Japanese who hold top positions including Project Manager, Chief Construction Manager and Chief Engineer; seventeen (17) Filipinos who are mainly middle cadre Engineers, Managers and Quantity Surveyor; one Chinese who is a Carpentry Manager and one Indian who is an Assistant Manager. The fifty nine (59) locals as well comprise of Site Engineers, middle cadre Chief Engineers and Quantity Surveyors, Safety Officers, Laboratory Technicians, Quantity Surveyor, CAD Operators, Surveyors, Crane Operators, Excavator Operators, Mechanics, Store Keepers, Accountants and other administrative posts and drivers.

The review made to Sub-Contractors based on the Monthly Progress reports indicate that MAC Contractors has twenty (20) staff who are all locals. They comprise of Engineers, Quantity Surveyors, Surveyors, Technicians, Supervisors, Carpenters, Masons, Steel fixers, Mechanics and other related cadres. Mediterranean Company has nine (9) staff who are all Tanzanians and comprise of Project Engineer, Project Coordinator, Operator, Rigger, Mechanic, Welder, Electrician, Helper and Security. Laba Contractors apart from supply of local labour to the project including about fifty six (56) skilled workers, has nine (9) staff who are all locals and comprise of skilled workers, foremen, electrician, batching plant helper, rigger, surveyor, laboratory and workshop staff. Ultimate Security has two (2) shift leaders, ten (10) un-armed guards and one dog handler.

The Assurance Team considered the involvement of Tanzanians on the part of the Contractor to be adequate including issues of local participation and contribution of the project to capacity building.

#### 2.4.3 Construction Programme and Method Statement

The Contractor is executing the project based on the programme of works and method statements approved by the Consultant which however are subject to amendment or updating whenever required to suit particular site conditions. The Contractor constantly prepares detailed method statements for each type of work for submission to the Consultant in due set times. The detailed method statements

address issues of quality of works, health and safety concerns on site and convenient accommodation of traffic during execution of construction activities. During site visit made on 6th 2017 the Assurance confirmed that good housekeeping is maintained at all times and appropriate methods for accommodating passing traffic safely are in place including placing accordingly maintained warning signs and barricades as well as making arrangements with traffic police to conveniently manage the traffic flow during construction. Further safety mitigation measures deployed on site include providing workers with safety



belts especially those working in high elevated places such as pier columns, etc. in order to keep them safe from accidents. Furthermore, morning safety toolbox meetings and danger prediction campaigns are held with workers prior to starting work in order to sensitize them on the responsibility for safety awareness and identifying hazards that are likely to occur. The Assurance Team noted existence of approved Safety Management Plan which covers Health and Environmental issues as well and Traffic Management Plan. Both plans are implemented accordingly including being able to be updated to address specific events pertinent to site conditions.



Meeting with Traffic Police for Traffic Management and Control & Work Groups Safety Toolbox Every Morning prior to commencement of Works



The Actual View of TAZARA Intersection as of May 2017 showing Ongoing Construction and Convenient Management of Traffic Flow

As a result of adherence to Safety and Traffic Management Plans, reports indicate that the Construction Accidents, Lost Time due to Accidents and Fatal Accidents are all rated zero because none has occurred since commencement of the project up to mid May 2017 when the Assurance Team visited the site. **Annex** C provides the Sequence of execution of various key activities and adherence to quality standards and associated appropriate work methods.

#### 2.4.4 Quality Control and Tests

It was noted by the Assurance Team that the project has adequate controls for ensuring that works are executed in compliance with specifications. This has been achieved through setting up a quality control system which requires all materials and each activity to be executed to have Request for Inspection (RFI) that involves visual checking, elevations measuring, testing and approval processes to be undertaken. The RFI is prepared by the Contractor well in advance for approval by the Consultant after carrying out the necessary checks, measurements and testing. Furthermore, the investigations for sources for earthwork materials, pavement materials and concrete materials was undertaken to enable the sources to get approval by the Consultant based on level of compliance to specifications. Equally, all mix designs, trial mixes and blending of

materials done by the Contractor are subjected to conformance tests prior to approval by the Consultant. Further, acceptance of any executed work is subjected to compliance tests for such work to stipulated specifications where conformance is judged by comparing the actual tests and measurements to set specification requirements.

Generally, the Assurance Team after reviewing the test results included in the Monthly Progress reports and visiting the site, testifies that the project has appropriate and adequate control measures at each stage of work execution including sources of materials, materials used and works which provides a guarantee that the completed works meet the stipulated quality standards and specification requirements.

#### 2.4.5 Payment for the Consultant and Contractor

The Assurance Team reviewed the payment issues pertaining to the project with respect to the Consultant and Contractor. It has been noted that payments are done based on the contractually set disbursement schedule for each phase and term of construction. The Schedule is indicated in the Monthly Progress reports including amounts, requirement for payment, dates for certificates and dates for payment. The requirements for payments are such that 40% Advance is paid after receiving verification by JICA, 1st Interim of 30% paid after completion of 50% or more of work, 2nd Interim of 20% is paid after completion of 85% or more of work and the final 10% is paid after completion of the work.

The review made to amounts paid based on Monthly Progress Report for the month of April, 2017 indicates that the Consultant had been paid three (3) Interim Payments amounting to JPY 71,770,000 for Phase 1, two (2) Interim Payments amounting to JPY 12,180,000 for Phase 2 and two (2) Interim Payments amounting to JPY 102,555,000 for Phase 3. The payments include 40% advance.

It was further noted that the Contractor had been paid three (3) Interim Payments amounting to JPY 1,118,929,000 for Phase 1, one Interim Payment amounting to JPY 131,440,000 for Phase 2 and one Interim Payment amounting to JPY 628,226,000 for Phase 3.

Generally, the Assurance Team noted that the payments are done in timely manner and in accordance with the Disbursement Schedule and upon fulfillment of the set requirements for payment. The monthly reports also include information on contractual refunds to the Consultant and Contractor made by TANROADS mostly with respect to payments made to the Engineers Registration Board (ERB) and for registration, annual fees and license fee and related renewals for Consultant's and Contractor's engineering category staff. Also the refund covers registration and annual fees paid to Contractors Registration Board (CRB) and Stamp Duty paid to Tanzania Revenue Authority (TRA) by the Contractor.

#### 2.4.6 Labour Issues

During discussions with CoST MSG on 18th July 2017, one of the comments was centered on the labour strike which happened early July, 2017 at the TAZARA Intersection Improvement project which was in different local media. Therefore, the Assurance Team was assigned to make a follow-up and include in the report what transpired and the reason behind and how the strike was resolved.

The Assurance Team during the meeting held on 26<sup>th</sup> July, 2017 with the Consultant and Contractor enquired about this issue from the Consultant and Contractor who provided information about the issue of workers strike as follows:

- The workers being supplied by Laba Contractors (the Sub-Consultant) for the flyover bridge construction staged a successful strike on 3<sup>rd</sup> and 4<sup>th</sup> July 2017.
- The workers, both skilled and unskilled, were not satisfied with work conditions and thus had seven (7) demands that needed to be addressed including: *lack of workers employment contracts; demand for raising the currently paid TSh.10,000/= per day for unskilled labourer and TSh.14,000/= for skilled labourers; None registration to social security funds; demand for payments of wages to be made through banks; demand for National Health Insurance coverage; and demand for provision of drinking water and food at the work place.*
- The Assurance Team was informed that workers working for road works and drainage works were not involved in the strike.
- The District Commissioner in collaboration with the Regional Legal Officer and officers from the Labour department from the Regional Commissioner's Office intervened by reconciling the parties to the labour dispute which surfaced in the form of a strike (i.e. Laba Contractor who is their employer and Workers Representatives) through holding discussions which enabled both parties to reach agreements for labourers to stop the strike and resume to work and the employer to address their demands.

- The reconciliation meeting agreed on the following resolutions which were countersigned by the parties:
  - The currently paid TSh.10,000/= per day for unskilled labourer and TSh.14,000/= for skilled labourers should be raised effective from 1<sup>st</sup> August, 2017 to TSh.12,500/= per day for unskilled labourer and TSh.16,500/= for skilled labourers;
  - New employment contracts should be signed between the parties effective from 1<sup>st</sup> August, 2017;
  - Laba Contractor should discuss with the Main Contractor on how to address the issue of providing drinking water and food to workers on site
  - Annual leave should be granted to workers after working for twelve (12) months
  - The worker will not be entitled for payment on the days that the worker did not work (No Work No Pay)
  - Contributions to Social Security Funds should commence effective from the first day of working
  - Payments to workers should be effected through accounts opened by workers at CRDB, NMB or NBC banks.

## 2.4 Infrastructure Data Standard (IDS)

#### Core<sup>1</sup> data points for proactive disclosure

S/No.	PROJECT STAGE		ASPECT	REMARKS
1.	PROJECT IDENTIFICATION	Project Name:	Improvement of TAZARA Intersection (phase 1, 2 and 3).	
		Project Location:	TAZARA Intersection in Dar es Salaam City in Tanzania.	
		Purpose:	To improve TAZARA intersection with a view to alleviate traffic congestion in the city.	
2.	PROJECT PREPARATION	Project Scope (main output):	<ul> <li>Construction of two bridges (Flyovers) having two lanes each and of length 425m each; with a provision of median space of 12m wide between them along Julius Nyerere road (for future BRT project).</li> <li>Construction of roads of length 1,077m and 1,185m with double lanes, on North and South sides respectively of the flyovers along Julius Nyerere road.</li> <li>Construction of road of length 252m along Nelson Mandela road.</li> <li>Construction of service roads and walk ways along sides of both roads (Nyerere road and Mandela road).</li> <li>Drainage works and installation of drainage structures</li> <li>Traffic and street lighting including road furniture and road marking.</li> </ul>	
		Environmental impact:	Environmental and Social Impact assessments were conducted. Issues on dust and sound effects are addressed in accordance with the Plan and included in the monthly progress reports.	Basic Design Report

<sup>&</sup>lt;sup>1</sup>Core items are a simplified list of substantive items of data, excluding the items included in the full list only for identification (e.g. project owner, contact details)

S/No.	PROJECT STAGE		ASPECT	REMARKS
		Land and settlement impact:	The utilities and TAZARA fence were surveyed and taken care of by TANROADS.	Basic Design Report
		Funding sources:	Japan Grant Aid Program/Government of United Republic of Tanzania	
		Project Budget:	From GOJ: JPY 5,195,000,000 equivalent to TSh. 93.44 Billions	Grant agreement No. 1 JPY 3,127,000,000.
			From GOT: TSh. 8.26 Billions	Grant Agreement No. 2 JPY 346,000,000. Grant Agreement No. 3 JPY 1,722,000,000.
		Project budget approval date:	<ul> <li>Grant agreement No. 1 of JPY 3,127,000,000 was approved on 18th June, 2013,</li> <li>Grant Agreement No. 2 of JPY 346,000,000 was approved on 24th July, 2014, and</li> <li>Grant Agreement No. 3 of JPY 1,722,000,000 was approved on 13th March, 2015</li> </ul>	Grant agreement serves as budget for the project.
3.	PROCUREMENT	Procurement process:	Competitive bidding was done covering Japanese firms only due to requirements of the grant.	The entire procurement process was carried out in Japan.
		Contract type:	Fixed Contracts for both works and consultancy services.	
		Contract status (current):	The contract is at implementation stage.	

Number of firms tendering:  Four (4) firms collected bidding documents for works but only two (2) submitted. Two firms (2) tendered for consultancy services.  Cost estimate:  First cost estimate was JPY 3,127,000,000. Second cost estimate was JPY 3,127,000,000. Final cost estimate was JPY 3,127,000, which was lower than bidders submission which led second grangeremen JPY 346,00 and made estimate to JPY 3,473,000, This estim was also 1 than bidd submission led to the Grant agreemen JPY 1,722,000, and made agreemen JPY 1,722	S/No	PROJECT STAGE		ASPECT	REMARKS
was JPY 3,473,000,000. Final cost estimate was JPY 3,127,000, which was lower that bidders submissio which led second gragreemen JPY 346,00 and made estimate t JPY 3,473,000, This estim was also 1 than bidd submissio led to the Grant agreemen JPY 1,722,000, and made	<i>3)</i> 1NO.	1 ROJECT STAGE		Four (4) firms collected bidding documents for works but only two (2) submitted. Two firms (2) tendered for consultancy	Done in Japan.
and made			Ü	services.  First cost estimate was JPY 3,127,000,000. Second cost estimate was JPY 3,473,000,000. Final cost estimate was JPY	3,127,000,000 which was lower than bidders submissions which led to second grant agreement of JPY 346,000,000 and made the estimate to be JPY 3,473,000,000. This estimate was also lower than bidders submission and led to the third Grant agreement of
C1 C					1,722,000,000 and made the final estimate to

S/No.	PROJECT STAGE		ASPECT	REMARKS
				be JPY 5,195,000,000
		Contract title:	Improvement of TAZARA Intersection	
		Contract firm(s):	Contractor: Sumitomo Mitsui construction Co. Ltd of Japan	
			Consultant: The Consortium of Oriental Consultants Global Co. Ltd and Eight – Japan Engineering Consultant Inc , Japan	
		Contract price:	For Works: JPY 4,841,165,000 (JPY 2,942,000,000 for Phase 1; JPY 328,600,000 for Phase 2; and JPY 1,570,565,000 for Phase 3)	
			For Consultancy services: JPY 348,074,000 (Phase 1 original agreement was JPY 167,458,000 and amended to JPY 184,165,000. Phase 2 is JPY 17,400,000 and Phase 3 is JPY 146,509,000)	
		Contract scope of work:	<ul> <li>Phase 1</li> <li>The Flyovers with two (2) lane carriageways except Asphalt pavement work on the flyover in North side (bound for Dar es Salaam city) and superstructure construction work in North side and South side.</li> <li>The approach roads with two 2 lane carriageways to the flyovers except sub-base course. Base course and asphalt pavement works of the approach roads to the flyover in North side (bound for Dar es Salaam city).</li> <li>Streets(frontage roads), service roads, walkways, drainage except sub-base course, base course and asphalt pavement works of the street and services roads in North side (bound for Dar es Salaam city)</li> <li>Accessory facilities on flyovers and the approach roads</li> </ul>	

S/No.	PROJECT STAGE		ASPECT	REMARKS
			<ul> <li>Phase 2</li> <li>Asphalt pavement work on the flyover in North-side (bound for Dar Es Salaam city)</li> <li>Sub-base course, base course and asphalt pavement works of the approach roads to the flyover in North-side (bound for Dar Es Salaam city)</li> <li>Sub-base course, base course and asphalt pavement works of street and service roads in North-side (bound for Dar es Salaam city)</li> </ul>	
			<ul> <li>Phase 3</li> <li>Superstructure construction work of the flyovers with two (2) lane carriageways in North-side and South-side</li> </ul>	
		Contract Date, Contract start date and duration:	The contract between Client and Contractor was signed on 15 <sup>th</sup> October, 2015 for duration of 35 months. The commencement date was on 1 <sup>st</sup> December, 2015 while notification for start of works was issued on 4 <sup>th</sup> February, 2016	
4.	Project Completion	Project status (current):	As of end of May, 2017 the project progress was at 40.6% against 40.7% which was the planned progress.	
		Completion cost (projected):	For contractor: JPY 4,841,165,000 For Consultant: JPY 348,074,000	
		Completion date (projected):	31st October, 2018	
		Scope at completion	Expected to be the same as the original scope.	

#### CoST Tanzania:

S/No.	PROJECT STAGE		ASPECT	REMARKS
		(projected):		
		Reasons for project changes:	No project changes	No project changes anticipated.
		Reference to audit and evaluation reports:	None	
5.	Implementation	Variation to contract price:	None	Negotiated Fixed contract; No variations.
		Escalation of contract price:	None	Negotiated Fixed contract; No escalations.
		Variation to contract duration:	None	Fixed contract duration.
		Variation to contract scope:	None	Fixed contract scope.
		Reasons for price changes:	No price changes	
		Reasons for scope and duration changes:	No scope and duration changes	none

## **Information for Reactive Disclosure on Request**

S/No.	PROJECT STAGE		ASPECT	REMARKS
1.	Identification and Preparation	Multi-year program & Budget:	The Government of Tanzania officially applied for Japan's grant aid for the improvement of TAZARA intersection in July, 2008. The budget is JPY 5,195,000,000.	
		Project brief or Feasibility study:	Presented in Basic Design Report.	
		Environmental and social impact assessment:	Environmental and social impact assessments were conducted. Issues on dust and sound effects are addressed in accordance with the plan and included in the monthly progress reports.	
		Resettlement and compensation plan:	The utilities and TAZARA fence were surveyed and taken care of by TANROADS.	
		Project officials and roles:	Masaki Okada - In the capacity of Ambassador Extraordinary and plenipotentiary of Japan to the United Republic of Tanzania- Signed the 1st and 2nd Exchange Notes (Grant Agreements) for Japan side.	
			Dr. William Augustao Mgimwa - In the capacity of Minister for Finance The United Republic of Tanzania- Signed the 1st Exchange Note (grant Agreement) for Tanzania side.	
			Kozuyoshi Matsunaga – In the capacity of Charge d'Affaires a.i Embassy of Japan in the United Republic of Tazania - Signed the 3 <sup>rd</sup> Exchange note (Grant Agreement) for Japan side.	

S/No.	PROJECT STAGE		ASPECT	REMARKS
			Dr. Servacius B. Likwelile - In the capacity of Permanent Secretary, Ministry of Finance, the United Republic of Tanzania - Signed the 2 <sup>nd</sup> and 3 <sup>rd</sup> Exchange Notes (Grant agreements) for Tanzania side.	
			Kiyofumi Konishi - In the capacity of Director General, Economic Infrastructure Department Japan International Cooperation Agency (JICA) - Prepared the Preface for the Basic Design Report.	
		Financial agreement:	Grant agreement between JICA and GOT was signed on 18th June, 2013 for phase 1 project; on 24th July, 2014 for phase 2 project; and on 13th March, 2015 for phase 3 project.	
		Procurement plan:	The project was included in the TANROADS procurement plan for financial year 2013/2014.	
		Project approval decision:	Was done by the Government of Tanzania and Government of Japan.	
2.	Procurement	Contract officials and roles:	Eng. Patrick Mfugale - In the capacity of Chief Executive, Tanzania National Roads Agency- Signed both Works and Consultancy services contracts for Client Side.	
			Akihiko Hirotani - In the capacity of President, Oriental Consultants Global Co. Ltd - Signed Consultancy Services Contract.	
			Ishiro Aoki - In the capacity of General manager, Civil Work Marketing Department, International Division, Sumitomo Mitsui Construction Co. Ltd Signed Works Contract.	

S/No.	PROJECT STAGE		ASPECT	REMARKS
			Takahiro Sasaki - In the capacity of Director General, Financial cooperation Implementation Department, Japan International Cooperation Agency - Verified both contracts for Consultancy and Contractor.	
		Procurement method:	Competitive bidding was done covering Japanese firms only due to requirements of the grant.	
		Tender documents:	Japanese tendering system.	Procurement process was done in Japan
		Tender evaluation results:	Direct negotiation with one contractor.	After failure to get a contractor in three rounds of invitation to bids
		Project design report:	Basic design report caters for design report.	
		Financial agreement:	Grant agreement between JICA and GOT was signed on 18 <sup>th</sup> June, 2013 for phase 1 project, on 24 <sup>th</sup> July, 2014 for phase 2 project and on 13 <sup>th</sup> March, 2015 for phase 3 project.	
3.	Contract	Contract agreement and conditions:	The contract for works was signed on 15th October 2015 for duration of 35 months with mixed conditions of contract (mainly FIDIC and Japanese)	
		Registration and ownership of firms:	Registration of companies is in Japan.	
		Specifications and drawings:	There are specifications and drawings; however modified specifications are being used.	

#### CoST Tanzania:

S/No.	PROJECT STAGE		ASPECT	REMARKS
4.	Completion	Implementation progress reports:	Progress reports are being prepared on monthly basis.	
		Budget amendment decision:	Initial budget was JPY 3,127,000,000 which was approved on 18th June, 2013, amended to JPY 3,473,000,000 and approved on 24th July, 2014 and again amended to JPY 5,195,000,000 and approved on 13th March, 2015.	First budget was lower than bidders submissions which led to second grant agreement of JPY 346,000,000 and made the budget to be JPY 3,473,000,000. This budget was also lower than bidders submission and led to the third Grant agreement of JPY 1,722,000,000 and made the final estimated budget
				to be JPY 5,195,000,000
		Project completion report:	None	The project is not yet completed
		Project evaluation	None	The project is not yet completed

S/No.	PROJECT STAGE		ASPECT	REMARKS
		report:  Technical audit reports:	So far no technical audit has been conducted.	
		Financial audit reports:	No financial audit has been conducted.	
5.	Implementation	List of variations, changes, amendments:	No variation	None
		List of escalation approvals:	None	None
		Quality assurance reports:	Prepared	Prepared and included in Monthly Progress Reports.
		Disbursement records or payment certificates:	For Contractor:  Phase 1: JPY 497,302,000 which is 40% advance payment for Term 1 & 2, paid on 4th February, 2016. JPY 372,976,000 which is 30% 1st interim for term 1 & 2, paid on 9th February, 2017. JPY 248,651,000 which is 20% 2nd Interim of term 1 & 2, paid on 30th March, 2017.  Phase 2: JPY 131,440,000 which is 40% advance payment, paid on 4th February, 2016.  Phase 3: JPY 628,226,000 which is 40% advance payment, paid on 4th February, 2016.	Phase 1 has 4 terms while phases 2 and 3 have no terms. Terms 1 &2 are combined during payment while terms 3 and 4 of phase 1 as well as phases 2 and 3 are not in payment combination.

S/No.	PROJECT STAGE	ASPECT		REMARKS
			For Consultant:  Phase 1: JPY 31,898,000 which is 40% 1st Interim for Term 1 & 2, Paid on 4th February, 2016. JPY 23,923,000 which is 30% 2nd Interim for Term 1 & 2, paid on 9th February, 2017. JPY 15,949,000 which is 20% 3rd Interim for Term 1 & 2, paid on 30th March, 2017.  Phase 2: JPY 6,960,000 which is 40% advance payment, paid on 7th January, 2016. JPY 5,220,000 which is 30% 1st Interim, paid on 7th January, 2016.  Phase 3: JPY 58,603,000 which is 40% advance payment, paid on 7th January, 2016. JPY 43,952,000 which is 30% 1st Interim, paid on 7th January, 2016.	
		Contract amendments:	Works: No amendments to contract.  Consultancy services:  1st amendment was on 21st March, 2014 (for phase 1 only), 2nd amendment was on 30th September, 2014 (for phase 1 only) which changed the contract agreement to JPY 184,165,000, 3rd amendment was on 15th January, 2015 (for phase 1 only), 4th amendment was on 8th May, 2015 (for phase 1 and phase 2), 5th amendment was on 1st July,2015 (Novation agreement; amendment of company name) (for phase 1 and phase 2) and 6th amendment was on 15th October, 2015 (for phase 1, phase 2 and phase 3)	
		Financial audit reports:	No financial audit has been conducted to date.	None

# 3.0 COMMENTS ON FILLING OF INFRASTRUCTURE DATA STANDARDS (IDS)

#### 3.1 Missing Information in the December, 2016 Progress Report

The Assurance Team extracted all information that was available from the December, 2016 monthly progress report of the TAZARA Intersection Improvement project. However, there was some other information required to complete the IDS which were missing in the report. The missing information in order of project stages was as follows:

#### a) Identification and Preparation stage:

The following information was missing in the December, 2016 monthly progress report: Multi-year program & Budget, Project brief or Feasibility study, Environmental and social impact assessment, Project Budget and budget approval date, Resettlement and compensation plan, Project officials and roles, Financial agreement, Project design report, Procurement plan and Project approval decision.

#### b) Procurement stage:

The following information was missing in the December, 2016 monthly progress report: Contract officials and roles, Procurement method, Cost estimate, Tender documents, Number of firms tendering, Tender evaluation results and Contract type

#### c) Contract stage:

Information on Contract agreement and conditions, Registration and ownership of firms and Specifications and drawings was missing in the December, 2016 monthly progress report.

## d) Completion stage:

The following information was missing in the December, 2016 monthly progress report: Implementation progress reports, Budget amendment decision, Project completion report, Project evaluation report, Technical audit reports, Financial audit reports, Scope at completion (projected), Reasons for project changes, Reference to audit and evaluation reports.

#### e) Implementation stage:

The following information was missing in the December, 2016 monthly progress report: List of variations, changes, amendments, List of escalation approvals, Quality assurance reports, Disbursement records or payment certificates, Variation to contract price, Escalation of contract price, Variation to contract duration, Variation to contract scope, Reasons for price changes, Reasons for scope and duration changes, Contract amendments and Financial audit reports

## 3.2 Challenges Encountered in Filling the IDS

The challenges encountered in filling the IDS were on lack of information on the Budget and Cost Estimation of the project whereby there was no specific budget set for the project instead the Grant Agreements between the Government of Tanzania and the Government of Japan were treated as the budget. Further, the cost estimation and the dates for signing the grant agreements were treated as the project budget approval dates.

Another challenge encountered was lack of information on tender evaluation as the Assurance Team could not be availed with the evaluation report for review since all the procurement processes were done in Japan as per grant Agreement.

#### 3.3 General Observations

The Assurance Team had the following observations to take note of:

- By the time this report was prepared, there was no any variation order found to be issued; no payment for price escalation was considered; and no formal claim was found to be submitted.
- Mixed conditions of contract have been used for this project (mainly FIDIC and Japanese), and
- A range of specifications are being used for this project depending on specific type of work. It was noted that Tanzanian specifications, AASHTO and Japanese specifications are mostly being adopted.

## 3.4 Additional Required Information

Additional information required includes project detailed design report, detailed cost estimation done by Consultant and results of bids evaluation reports for both consultant and contractor.

# 4.0 PLANNED ASSURANCE ACTIVITIES AND SCHEDULE OF EXECUTION

## **4.1 Assurance Activities**

S/No.	ACTIVITY/DELIVERABLE	DATES	BASIS	REMARKS
1.	The Contract Signing and Commencement Date.	On 09th May, 2017		Done
2.	Reviewing the December 2016 Monthly Progress Report and Establishing the extent of disclosed Information and Additional Information required.	09 <sup>th</sup> – 14 <sup>th</sup> May 2017		Done
3.	Submission of the following: i).Draft IDS based on information extracted from the TANROADS TAZARA December 2016 Monthly Report ii).List of additional required information to complete the IDS.	By 12 <sup>th</sup> May, 2017	As specified in ToR under Section 4.4, i.e. "within 5 working Days after Contract Signing."	Done on 12 <sup>th</sup> May, 2017
4.	<ul><li>i).Introductory Meetings at TANROADS    HQ and/or at TAZARA Intersection    Project Site</li><li>ii).Conducting Initial Site Visit at TAZARA</li></ul>	On 15 <sup>th</sup> May, 2017		Introductory Meeting was held on 5th June 2017  Initial site visit was made on 6th June 2017
5.	Submission of the Zero Report containing Draft IDS based on information extracted from the TANROADS TAZARA December 2016 Monthly Report.	By 16 <sup>th</sup> May, 2017	As specified in ToR under Section 4.4, i.e. "within 5 working Days after Contract Signing."	Done
6.	Receipt of additional information from TANROADS.	By 19 <sup>th</sup> May, 2017		Done on 14 <sup>th</sup> June 2017
7.	Reviewing the Additional Information submitted by TANROADS and incorporation in the IDS Form and Subsequent Verification by TANROADS	20 <sup>th</sup> - 24 <sup>th</sup> May 2017		Done Between 15 <sup>th</sup> and 20 <sup>th</sup> June 2017
8.	Submission of a Dully Filled IDS Form verified by TANROADS.	By 25th May, 2017	As specified in ToR under Section 4.4, i.e. "within 7 working days after submission of Zero Report."	Done
9.	Compilation of the Interim Report for Phase 1.	26 <sup>th</sup> - 31 <sup>st</sup> May, 2017		Done
10.	Submission of an <b>Interim Report</b> on Phase 1.	By 1 <sup>st</sup> June, 2017	As specified in ToR under Section 4.4, i.e. "within 5 working days after submission of IDS Form."	Done

S/No.	ACTIVITY/DELIVERABLE	DATES	BASIS	REMARKS
11.	Analysis of the Collected and Verified Information including Conducting Additional Site Visit.	2 <sup>nd</sup> – 9 <sup>th</sup> June, 2017		Done
12.	Submission of the <b>Draft Final Report</b> on Phase 2.	By 12 <sup>th</sup> June, 2017	As specified in ToR under Section 4.4, i.e. "within 7 working days after submission of an Interim Report."	Submitted and Presented on 18 <sup>th</sup> July, 2017.
13.	Receipt of Comments from CoST MSG on Draft Final Report.	By 16 <sup>th</sup> June, 2017		AT Presented the Draft Report to the MSG on 18th July, 2017 who provided comments.
14.	Compilation of Comments from CoST MSG in the and Preparation of the <b>Final Report</b> .	19 <sup>th</sup> – 29 <sup>th</sup> June, 2017		Comments from CoST MSG compiled on 18th July, 2017
15.	Submission of a <b>Final Report</b> on Phase 2 incorporating Comments received from the CoST MSG.	By 30 <sup>th</sup> June, 2017	As specified in ToR under Section 4.4, i.e. "14 working days after receiving comments from the MSG."	25 <sup>th</sup> July, 2017

NB. Introductory Meeting at TANROADS was delayed for 20 days.

## 4.2 Constraints in Implementing the Planned Assurance Activities

Delay of Introductory Meetings at TANROADS HQ and site visit at TAZARA Intersection Project site whereby both were scheduled to be on 15<sup>th</sup> May, 2017 but instead the introductory Meeting was held on 5<sup>th</sup> June 2017 and the initial site visit was on 6<sup>th</sup> June 2017. There was a delay of 20 days.

#### 5.0 DATA ANALYSIS

## 5.1 Identification, Analysis of Issues of Concern from Disclosed Information

a) The identification of the project for Improvement of TAZARA Intersection has been done with the express purpose of contributing to alleviation of traffic congestion in the city. The Basic Design Report indicates that the Government of Tanzania demanded strongly to add the BRT lane. However, during preparation phase, the scope has been limited to construction of two flyovers along Julius Nyerere road without inclusion of overpass for Bus Rapid Transit (BRT).

The explanations relating to none inclusion of the BRT overpass in the ongoing project that its construction and operation method were yet to be determined and that the land sufficient for construction of the BRT overpass lane has been secured are considered by the Assurance Team to be much outweighed by the advantages with regard to issues pertaining to construction methods which were not comparatively evaluated by the Consultants who authored the Basic Design Report. Further, the report does not have strong recommendations on the need to have a BRT Overpass lane to match with the fact that the Government had strong demands that this project should include an elevated BRT lane. Therefore, due to the likelihood of the BRT lanes to be constructed at grade and BRT buses controlled by traffic, it is likely that the intersection will be congested gradually overtime due to increased number of vehicles which may lead to decreased efficiency of the entire system at the intersection.

- b) The fact that vehicles using TAZARA Flyover will eventually pass through signalized intersections positioned towards the downstream sides in both directions, it is likely that the road segments from the signalized intersections upstream towards TAZARA Flyover will eventually be congested due to being subjected to control by downstream signalized intersection. This phenomenon is real and is likely to lead into reduced efficiency of the flyover system.
- c) There was no disclosure of detailed cost estimates for the project as well as for detailed designs. Likewise there was no disclosure for the results of bid evaluation for both the contractor and consultant. Consequently, it is becomes very difficult to make a judgment on the adequacy of designs for various structural members and materials such as Pre-stressed concrete and cables, performance of the main girder beam over long span, etc. Further, one cannot make an informed judgment on whether the project is being delivered at relatively excessive costs or not.

- d) The review of the project implementation with regard to involvement of locals and firms revealed that there are no sub-consultants engaged in this project. However, the involvement of locals in various professional and other construction related cadres was found to be adequate based on the assessment made on the staff recruited by the Consultant, Contractor and subcontractors. It was noted also that there are subcontractors working with the main contractor which is a commendable effort as it has a significant and positiv5e contribution to the capacity building initiative of local contracting firms.
- e) Information released shows that the procurement process for both the Contractor and Consultants was carried out in Japan. Obviously, the entire procurement process was affected in one way or another by the prevailing situation in Japan. Consequently, reports indicate that although the detailed design was completed in February 2012 and Exchange Note of 3,127,000,000 Japanese Yen signed in June 2013, the works contract was signed on 15th October, 2015 at a cost of JPY.4,842,000,000. This information suggests that there was a significant delay in commencement of the project. The registered delay is likely to have been caused by lack of interest of Japanese firms to work outside their country due to vast work opportunities that were available in Japan. The information on procurement process indicates that the tendering process was initiated in January 2014. However, only four contractors showed interest but their submitted were found to exceed the available budget. The second round of the tendering process was initiated in September 2014. However, the same trend of inadequate competition and higher bids than the available budget led to a third round of tendering process to commence in May, 2015. This also had the same results. Consequently, the Government of Japan had to increase the budget for the project from the initial amount of JPY. 3,127,000,000 by JPY.346,000,000 to cater for increased bid prices noted during the first round of tendering. This was effected through Exchange Note No.2 signed in July 2014. Due to the similar trend noted during the second round of tendering, additional amount of JPY.1,722,000,000 was granted through Exchange Note signed in March, 2015. This increased the project budget to JPY.5,195,000,000 which is about 66% increase in budget compared to the original budgeted amount of JPY.3,127,000,000.

Based on the above described situation, there is a very high likelihood that the TAZARA Intersection Improvement Project is being implemented at relatively very high cost resulting from factoring in the bids the conditions that were prevalent in Japan. It is therefore, considered that the initially budgeted amount of JPY.3,127,000,000 in June 2013 could be sufficient to execute the project to completion had the

procurement process been based on the Tanzania conditions. Likewise, the procurement process could take a relatively shorter timeframe leading into early start and completion of the project.

f) The strike which happened in early July, 2017 was an indication that labour issues were not appropriately managed and required immediate attention. The strike enabled the issues on daily wage levels of TSh.10,000/= being paid to unskilled labourers and TSh.14,000/= for skilled labourers to be disclosed in Monthly Progress reports including other concerns pertaining to need for workers employment contracts; demand for raising the wages; need for workers to have registration with social security funds; need for payments of wages to be made through banks; need for workers to have National Health Insurance coverage; and need workers to be provided with drinking water and food at the work place. The resolution signed by the parties is a highly commendable effort towards improving the working conditions of labourers in construction sites.

## 5.2 Analysis of Quality of Works and Progress of Works

- (a) The Assurance Team noted that the reported cumulative progress achieved up to the end of May 2017, was at 40.6% against 40.7% which was the planned progress the project. The noted lag of 0.1% is noted and was explained to be due to effects of rainfall which fell between January 2017 and April, 2017. Generally, the records on the progress achieved which show equality with planned progress is an indicator that the project is being implemented smoothly.
- (b) The Assurance Team noted during review of provided monthly progress reports and site visit made on 6th June, 2017, that adequate control for ensuring that works are executed in compliance with specifications are adequate. Appropriate quality control system entails all materials and each activity to be executed by the Contractor to have Request for Inspection well in advance for approval by the Consultant. It was noted that the approval process by the Consultant involves carrying out the necessary checks, measurements and testing. The set quality control system also requires investigations for sources of materials for earthworks, pavement and concrete to be undertaken for respective sources to be granted approval by the Consultant. The Assurance Team also noted that all mix designs, trial mixes and blending of materials done by the Contractor are subjected to conformance tests prior to approval by the Consultant. Acceptance of any executed work is also subjected to compliance tests based on stipulated specifications where judgment for conformance is determined by comparing the actual tests and measurements to set specification requirements.

Furthermore, it was noted that the Consultant has adequate team of professional staff to enable the overseeing responsibility for works executed by the Contractor to be effectively and timely done. Records on status of mobilization by the Contractor of various sets of equipment also is a significant factor which enable works to be executed in accordance with appropriate work methods takes on board all issues of quality.

Generally, the quality control issues are competently attended to an extent that it is guaranteed that the completed works will meet the stipulated quality standards and specification requirements. This is due to the fact that all processes and materials as well as material sources are subjected to strict quality control system. Therefore the Assurance Team is confident that the project has appropriate and adequate control measures at each stage of work execution including sources of materials, materials used and works which provides an assurance that all completed works meet the set quality standards.

## 6.0 CONCLUSIONS AND RECOMMENDATIONS

### 6.1 Conclusions

- a) The TAZARA Intersection Improvement project under the financing by the Grant Aid from the Government of Japan amounting to JPY.5,195,000,000 is expected to make a positive contribution towards alleviating traffic congestion in the city. However, non inclusion of an elevated BRT lane in the project coupled with existence of signalized intersections towards the downstream directions of the traffic flows passing on the flyover, and the use of signalized intersection for traffic from Ubungo and Port directions may reduce the efficiency of the flyover intervention. Furthermore, it is likely that construction of an elevated BRT lane at a later stage may be relatively more expensive and cumbersome due to requirements for more sophisticated work methods for guaranteeing timely completion, safety and quality work standards.
- b) Lack of disclosed information pertaining to detailed cost estimates for the project, detailed designs including calculations and results of bid evaluations for both the contractor and consultant, makes it very difficult for one including the public and Government to make an informed judgment on various key aspects of interest including issues of adequacy of designs for various structural members and materials such as Pre-stressed concrete and cables, performance of the main girder beam over long span, etc; whether the project is being delivered at relatively excessive costs or not.

- c) The capacity building initiative for local consulting firms through involvement in the TAZARA Intersection Improvement project has not been incorporated in the implementation strategy for the project. However, local professionals and local contractors have adequate provision for their involvement in the project implementation. This initiative will have a positive contribution towards capacity building of local staff and local contractors through their participation in the implementation of the project.
- d) The entire procurement processes for both works and consultancy services were carried out in Japan due to grant requirements. However, this strategy has implications that the Japanese conditions have been factored in the procurement process for the project being implemented in Tanzania. Consequently, project commencement was excessively delayed and additionally bid offers from Japanese contractors were in excess of the budgeted amounts set for each of the three tendering rounds. However, the tendering process in three rounds could not secure the Contractor as earlier planned following which and negotiations had to be deployed.
- e) Despite the fact that project implementation was running smoothly where by the end of May 2017 the project progress was at 40.6% against 40.7% which was the planned progress, the strike that happened in early July 2017 revealed that there were labour issues that needed to be addressed. The resolution signed by the parties was a commendable effort which assisted in resolving the dispute through discussions.

#### 6.2 Recommendations

- a) TANROADS should carry out feasibility study and prepare project estimated budget which reflect local conditions for the grant aid projects in order to benchmark issues pertaining to project budget and costs as well as to facilitate the judgment on the reasonableness of the cost of the project and adherence to Value for Money principles.
- b) For transparency purposes, TANROADS should require submission of copies of the bid evaluation reports carried out in Japan or any other foreign country for both works and consultancy services.
- c) TANRAODS should ensure that pertinent labour issues are adequately incorporated in the Monthly Progress Reports in order to disclose and address in a timely manner any relevant concerns from labourer that if not attended may lead to unnecessary labour disputes and strikes.
- d) TANROADS should ensure that project implementation strategies incorporate adequately the issue of capacity building for local

- professional staff, Consultants and Contractors. The related pertinent issues should feature adequately in the Monthly Progress Reports.
- e) CoST should consider introducing more parameters to be covered in the disclosures through Infrastructure Data Standards (IDS) for construction projects. Notable issues to be covered should include:
  - Labour issues (e.g. wages for both skilled and unskilled, provision of the basic needs at the workplace, etc.)
  - Capacity Building for the local staff and firms
- f) TANROADS should peer review the designs for various components of the Flyover (such as PC Cables, girder beam along longer spans, prestressed concrete, etc.) to make sure that they can adequately and safely carry out anticipated loads.

## 7.0 ANNEXES

Annex A: The Infrastructure Data Standard: *Core*<sup>2</sup> Data Points for Proactive Disclosure

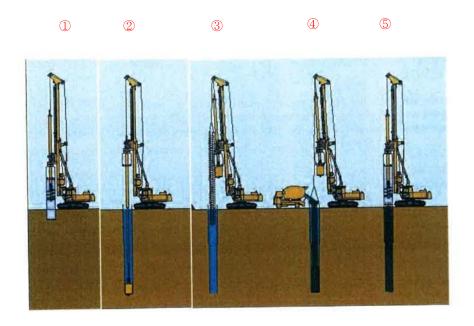
Project phase	Project data	Contract phase	Contract data
a).Project Identification	1.Project name 2.Project Location 3.Purpose	d).Procurement	1.Procurement process 2.Contract type 3.Contract status (current)
b).Project Preparation	<ul> <li>1.Project Scope (main output)</li> <li>2.Environmental impact</li> <li>3.Land and settlement impact</li> <li>4.Funding sources</li> <li>5.Project Budget</li> <li>6.Project budget approval date</li> </ul>		<ul> <li>4.Number of firms tendering</li> <li>5.Cost estimate</li> <li>6.Contract title</li> <li>7.Contract firm(s)</li> <li>8.Contract price</li> <li>9.Contract scope of work</li> <li>10.Contract start date and duration</li> </ul>
c).Project Completion	<ul> <li>1.Project status (current)</li> <li>2.Completion cost (projected)</li> <li>3.Completion date (projected)</li> <li>4.Scope at completion (projected)</li> <li>5.Reasons for project changes</li> <li>6.Reference to audit and evaluation reports</li> </ul>	e).Implementation	<ul> <li>1.Variation to contract price</li> <li>2.Escalation of contract price</li> <li>3.Variation to contract duration</li> <li>4.Variation to contract scope</li> <li>5.Reasons for price changes</li> <li>6.Reasons for scope and duration changes</li> </ul>

<sup>&</sup>lt;sup>2</sup>Core items are a simplified list of substantive items of data, excluding the items included in the full list only for identification (e.g. project owner, contact details)

# Annex B: The Infrastructure Data Standard - Information for Reactive Disclosure on Request

Project information	Contract information	
a).Identification and Preparation	c).Procurement	
1.Multi-year program & Budget	1.Contract officials and roles	
2.Project brief or Feasibility study	2.Procurement method	
3.Environmental and social impact assessment	3.Tender documents	
4.Resettlement and compensation plan	4.Tender evaluation results	
5.Project officials and roles	5.Project design report	
6.Financial agreement	d).Contract	
7.Procurement plan	1.Contract agreement and conditions	
8.Project approval decision	2.Registration and ownership of firms	
	3.Specifications and drawings	
b).Completion	e).Implementation	
1.Implementation progress reports	1.List of variations, changes, amendments	
2.Budget amendment decision	2.List of escalation approvals	
3.Project completion report	3.Quality assurance reports	
4.Project evaluation report	4.Disbursement records or payment certificates	
5.Technical audit reports	5.Contract amendments	
6.Financial audit reports		

# ANNEX C: PROGRESS PHOTOS SHOWING SEQUENCING OF BORE PILING WORKS, PIER COLUMNS AND MAIN FLYOVER **BRIDGE AND SAFETY ISSUES**



Sequence of Bored Piling Work

### Key:

- ①Installing Temporary Casing, ②Excavation of Pile Bore Hole,
- 3Fixing Re-bar Cage,
- 4 Pouring Concrete with Tremie Pipe,
- **5**Extracting Temporary Casing



Taking Position of Bored Pile Casing



**Excavation for Bore Hole** 



Installation of Re-bar Cage



Installation of Tremie Pipe



Concreting with Tremie Pipe



**Extraction of Casing Pipe** 



**Driving Steel Sheet Piles for Cofferdam** 



Pile Head Treatment after Excavation



**Bottom Re-bars for Pile Cap** 



Installation of Pre-fabricated Re-bars for Pier Column



Ready for Pile Cap Concreting



Concreting Pile Cap



Concreting Pier Column [1st Lift]



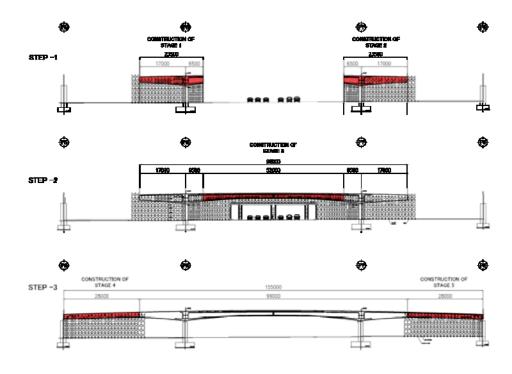
Concreting Pier Column [2nd Lift]



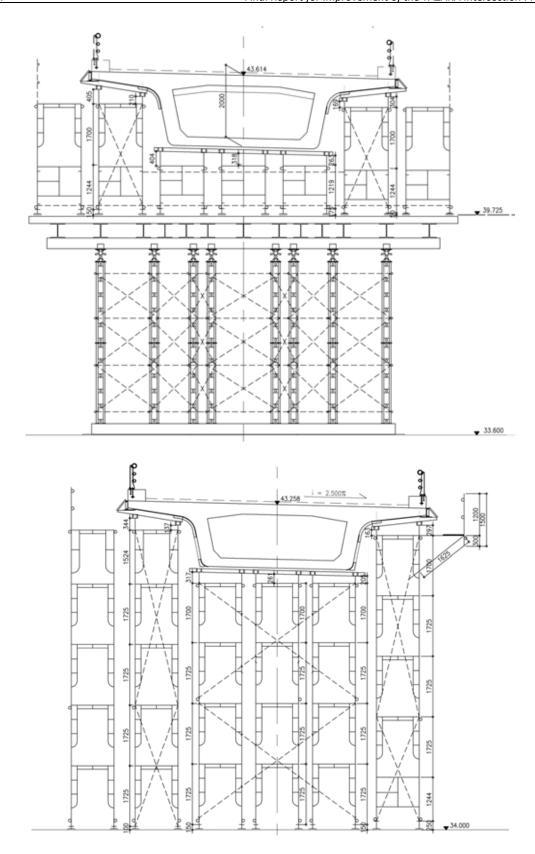
Concreting Pier Column [2nd Lift]



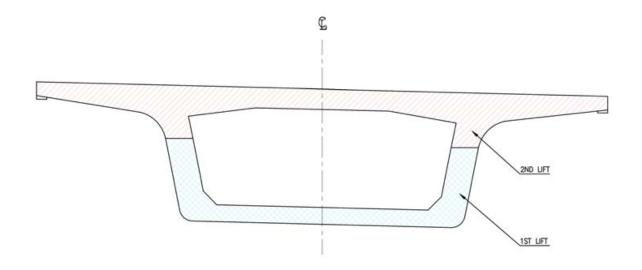
Back Filling & Removing Sheet Piles



Sequencing Work for Main Flyover Bridge



Scarfolding for the Main Bridge



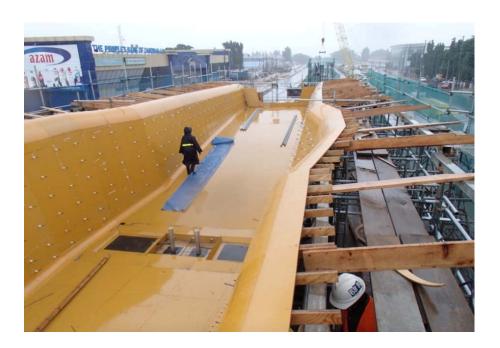
Concrete Casting for Main Bridge Box Gilder (1st & 2nd 2nd Cast)



Scaffolding for Box Girder



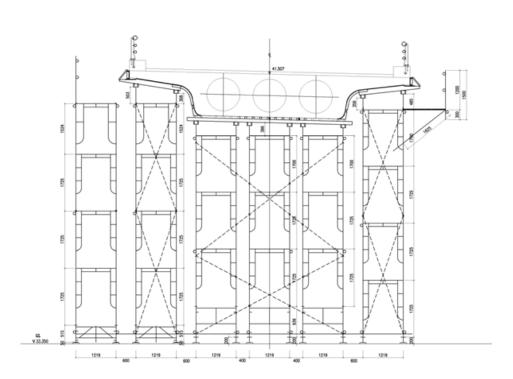
Staging for Box Gilder Works



Formwork for Box Girder



Concreting Works for Box Girder



Scaffolding for Approach Bridge



Scaffolding Work for Hollow Slab



Formwork for Hollow Slab



Formwork of Pre-stressed Concrete (PC) Anchor for Hollow Slab



Reinforcement Bars Fixing Works for Hollow Slab



Reinforcement Bar and Pre-stressed Concrete (PC) Cable Work for Hollow Slab



Safety Awareness Meeting Held in the Morning Before Commencement of Works



Groups Safety Toolbox Meeting Being Held Every Morning Before Starting Execution of Works



Meeting with Traffic Police for Traffic Control and Management Issues