

PROJECT INFORMATION DOCUMENT (PID) CONCEPT STAGE

Report No.: PIDC24713

Project Name	Dar es Salaam Urban Transport Improvement Project (P150937)
Region	AFRICA
Country	Tanzania
Sector(s)	Urban Transport (100%)
Theme(s)	City-wide Infrastructure and Service Delivery (70%), Infrastructure services for private sector development (15%), Trade facilitation and market access (10%), Other public sector governance (5%)
Lending Instrument	Investment Project Financing
Project ID	P150937
Borrower(s)	The United Republic of Tanzania
Implementing Agency	TANROADS, Dar Rapid Transit Agency (DART)
Environmental Category	A-Full Assessment
Date PID Prepared/ Updated	20-Apr-2015
Date PID Approved/ Disclosed	29-Jun-2016
Estimated Date of Appraisal Completion	30-Sep-2016
Estimated Date of Board Approval	11-Jan-2017
Concept Review Decision	Track II - The review did authorize the preparation to continue

I. Introduction and Context

Country Context

1. Tanzania has experienced strong and rapid economic growth, with annual growth in Gross Domestic Product (GDP) averaging around seven percent over the last decade. It is expected that this growth trajectory will be sustained. Despite this strong economic growth, Tanzania remains one of the poorest countries in Africa with approximately 11.9 million people in 2011/12 (28 percent of the population) still living below the poverty line. The sustained growth in GDP over the past decade has not translated well into increased employment opportunities. This is partly the result of the nature of the growth, which was partially driven by the extractive sector. A weak business environment and a largely unskilled labor force have also limited the growth of labor-intensive industries, which offer more productive jobs.

2. Tanzania is urbanizing rapidly - half of the population is expected to live in major and

secondary cities by 2030. The share of the urban population increased from 18 to 27 percent over the period of 1990 to 2012. Tanzanian cities already account for the majority of the country's physical, financial, academic, and technological capital. Economic activities in urban areas contribute approximately half of GDP. Tanzania's dominant primary city - Dar es Salaam - accounts for around 40 percent of the urban population. It is the third fastest growing city in Africa, growing at an average rate of 5.8 percent annually over the period of 2002 to 2012.

3. Improving the efficiency of cities is critical to derive greater agglomeration benefits and create productive jobs. The number of working-age Tanzanians--with an estimated 800,000 entering the market annually - has grown faster than the number of jobs. Most firms face considerable constraints that reduce their productivity and ability to hire - so job seekers are gaining employment in the informal economy. The 2014 Tanzania Country Economic Memorandum noted that: (i) cities are driving the growth of non-farm businesses; (ii) to create more jobs, the economy will need to move towards export markets; and (iii) improved productivity and efficiency of Dar es Salaam is necessary to help generate businesses and create jobs in the formal and informal sectors. To this end, improvement of the urban transport system becomes critical.

Sectoral and Institutional Context

4. The current transport system consists of roads, railways, aviation, water transport and pipelines. The road network length on the mainland of Tanzania is 92,221 km (Zanzibar has about 1,600 km of roads). This includes trunk and regional roads (34,184 km), which are managed by the Tanzania National Roads Agency (TANROADS) and the urban, district, and feeder roads with a total length of 58,037 km managed by the 133 Local Government Authorities (LGA). The Tanzania railway system has a total length of 3,681 km of which 2,706 km is meter gauge track line owned and managed by Reli Assets Holding Company (RAHCO) and operated by Tanzania Railways Limited (TRL), and 975 km is cape gauge track line owned, managed and operated by the Tanzania-Zambia Railway Authority (TAZARA). The Tanzania Port Authority (TPA) is responsible for all ocean and lake ports on the Tanzania mainland. The most important ports are Dar es Salaam, Tanga and Mtwara on the Indian Ocean mainland shore, and Mwanza, Kigoma and Itungi on the inland lakes. There are a total of 368 aerodromes, 59 of which are owned, managed and operated by the Tanzania Airports Authority (TAA), and the others by a variety of entities including national park authorities and the private sector. There are four international airports, namely, the Julius Nyerere, Kilimanjaro, Mwanza, and Zanzibar airports. The Zanzibar International Airport is managed by the Government of Zanzibar, as is the case for the Zanzibar and Pemba ports and roads. The Tanzania – Zambia (TANZAM) pipeline provides oil for the refinery in Lusaka, Zambia, via the Dar es Salaam Port.

5. The objective defined for urban transport under the National Transport Policy (NTP) 2013 (draft) is to establish and increase smooth traffic flow and carrying capacity of the road network to move passengers, quickly, efficiently, and safely at minimum cost in large cities. The policy statement requires the Government of Tanzania (GoT) in collaboration with other stakeholders to: (i) prioritize the development of a Bus Rapid Transit (BRT) system and the associated feeder bus networks for Dar es Salaam in the short to medium term. In the long-term an integrated mass transit system (road / rail / water) will be developed for Dar es Salaam; (ii) promote, through fiscal incentives, the purchase and use of high occupancy public transport vehicles and deliberately discourage the use of private vehicles once the public transport system is efficient; and (iii) provide infrastructure to support public transport e.g., bus lanes, and facilities for pedestrians and passengers.

6. To effectively implement the Transport Policy, the GoT has prepared a 10-year Transport Sector Investment Program (TSIP) (2007/08 to 2016/17). The first phase of the TSIP between 2007/08 and 2011/12 was not fully implemented as only about US\$2.55 billion out of the required US\$6.14 billion was expended. This was mainly due to: (i) limited financial resources; (ii) implementation delays mainly arising from inadequate capacity for project preparation and procurement; and (iii) institutional and structural problems in some of the institutions, especially those managing railways. The second phase of TSIP (2012/13 to 2016/17) is estimated to require investments totaling US\$8.4 billion. One of the key factors considered in the development of the TSIP is to reduce congestion in urban areas, especially Dar es Salaam and emerging cities, and establish quality mass transit services. The current congestion is estimated to lead to losses of about US\$0.5 billion in Dar es Salaam city annually from loss in man hours, fuel consumption, and other vehicle operating costs (VOC).

7. Improvement of the Central Transport Corridor is a priority under the Big Results Now (BRN) initiative of 2013-2015. The GoT launched the BRN initiative in 2013 and one of its six priority areas is the Central Transport Corridor starting from Dar es Salaam port to the border with neighboring countries. The BRN prioritized improvement of the Dar es Salaam Port, the Central Corridor Railway, and the Central Corridor Trunk road. The development of the BRT and the improvements at Ubungu Junction are essential to improving the efficiency of the central corridor within Dar es Salaam. The whole program is estimated to cost about 3.8 trillion Tanzania Shillings (TZS) (about US\$2.4 billion) and aims to reduce the travel time of the transit freight trucks from the Port of Dar es Salaam to the Burundi border (Kabanga) and Rwanda border (Rusumo) from 84 to 60 hours. In addition, the BRN identified the BRT as one of the three Projects to be delivered through Public Private Partnership (PPP) by end of 2015 with an estimated private sector investment of about US\$70 million.

Relationship to CAS

8. The Dar es Salaam Urban Transport Improvement Project (DUTP) supports the Bank's twin goals of reducing extreme poverty and enhancing shared prosperity, as it facilitates economic growth, trade facilitation and access to jobs. Addressing of the Ubungu intersection transport bottleneck in Dar es Salaam city helps to reduce the transport costs and facilitates access to the sea port therefore contributing to the economic growth of Tanzania and neighboring countries served by the Central and Dar es Salaam corridors. Strengthening of delivery of a high quality mass transit system helps to provide high quality transport system to the urban poor living along the project influence area.

9. The DUTP is aligned with the Tanzania Country Assistance Strategy (CAS) of FY12-FY15 and the CAS Progress Report discussed with the Board of Executive Directors in July 2014. The activities under the proposed project were identified in the CAS lending program under the proposed scale-up of IDA's Second Central Transport Corridor Project (CTCP2) through provision of an Additional Financing. The proposed DUTP replaces the initially proposed second AF to CTCP2. The improvement of the Central Corridor transportation system is described under the 'Productive Investments for Growth of Labor-Intensive Industries and Job Creation' strategic cluster of the CAS Progress Report. Its outcomes are also aligned to the 'Increased Access to and Quality of Transport Services' CAS outcome.

II. Proposed Development Objective(s)

Proposed Development Objective(s) (From PCN)

10. The proposed Project Development objective (PDO) is to reduce delays at the Ubungo intersection, and improve the bus rapid transit operations and management capacity in Dar es Salaam city, to the benefit of all roads users.

Key Results (From PCN)

11. The achievement of the PDO will be monitored through the following proposed key results indicators:

- (i) Reduction of travel time by articulated trucks from Mbezi Luis to the Dar es Salaam Port through Ubungo;
- (ii) Average rush hour travel time by public transport users from Kimara to Kivukoni through Ubungo;
- (iii) Satisfactory rating of public BRT feeder transport users along Shekilango, Urafiki to Kigogo, and Fire station to Muhimbili roads; and
- (iv) Quality of BRT operations compared to international standards (Low/Average/High).

III. Preliminary Description**Concept Description**

12. Ubungo intersection is the main gateway along both the Central Transport Corridor and Dar es Salaam Corridor for the traffic into and out of Dar es Salaam city. Apart from bringing agricultural supplies to the city, the two corridors are critical for hinterland connection of the Port of Dar es Salaam to and from neighboring countries of Uganda, Rwanda, Burundi, DRC, Zambia, and Malawi. The junction also intersects the freight traffic (mainly to and from the Port) with the BRT Corridor along the Morogoro road. The BRT system was established through CTCP2. Ubungo is already one of the most congested intersections in Dar es Salaam, therefore its improvement is critical for traffic mobility in the city as well as for the economic growth within the region.

13. Improvement of key BRT feeder routes would facilitate the efficiency of the BRT operation. The Dar es Salaam BRT system is designed to be operated through trunk BRT service (using 177 buses, 18 meters length and 140 passengers capacity) and feeder BRT service (using 128 buses each with 12 meters length and of 80 passengers capacity). The CTCP2 supported the infrastructure for BRT trunk system comprising of 20.9 km of trunk roadway corridor, two BRT bus depots, five BRT bus terminals, 27 stations, and four feeder transfer stations. The roadway corridor comprises of two exclusive BRT bus lanes (with overtaking lanes at stations), four mixed traffic lanes, two cycle lanes, and two pedestrian lanes. The feeder services are through mixed traffic roads along 57.9 km of roads. The poor pavement condition and traffic congestion in some of the key feeder routes would have a negative impact on the operation of the BRT feeder services. It would also be necessary to introduce an innovative long-term performance based maintenance program to ensure adequate care is provided to the BRT assets.

14. The newly created Dar Rapid Transit Agency (DART) requires to be strengthened to be able to manage the BRT operations by the private sector. The management of the system is quite a complex undertaking for a country that currently has no scheduled urban transport services. DART is currently a semi-autonomous agency under the Prime Minister's office – Regional Administration and Local Government (PMO-RALG). The Agency has a Ministerial Advisory Board with advisory role to the Permanent Secretary and Minister of PMO-RALG. The capacity strengthening for

agencies responsible for management of the BRT operations is critical for successful introduction of the BRT system in Tanzania. It is critical to ensure that the structure and mandates of the agency are aligned with the role of overseeing BRT operations including the flexibility of decision-making under commercial demands. It is therefore essential to support the transformation process of DART agency.

15. It is essential to support the designs of the future phases of the Dar es Salaam BRT system. The entire Dar es Salaam BRT system comprises of six phases totaling 130.3 km of the trunk system. Phases 2 and 3 were designed under CTCP2, and the African Development Bank (AfDB) and Korea Exim-Bank are jointly appraising the financing for BRT phase 2. The remaining phases of the BRT system need to be designed.

16. The design of the DUTP and selectivity of interventions are based on: (i) the overall impact in resolving public transport bottlenecks in the city; (ii) economic impact nationally and internationally through transport corridors; (iii) introducing new innovations in public transport operation; and (iv) an opportunity to strengthen urban transport management capacity and to ensure long-term sustainability of the bus rapid transit system.

17. The main components proposed include: (i) Ubungo grade separated intersection; (ii) BRT phase 1 complementary infrastructure and services; and (iii) BRT system management capacity strengthening and technical assistance.

18. Component 1 - Improvement of Ubungo Intersection: The project plans to support the construction of a flyover at the Ubungo intersection. The traffic network analysis done under the Dar es Salaam transport master-plan study (2008) identified it among the three most critical intersections needing to be grade-separated.

19. The traffic survey conducted in February 2014 indicated a peak hour traffic volume of 6,704 vehicles. 16 percent of right turning vehicles from upcountry to the direction of the Port are articulated and trailer freight trucks. The study noted an average delay of 711 seconds per vehicle, which was forecast to increase to 2,560 seconds per vehicle in 2034. Four design options were developed in line with available space constraints. The selected option would reduce average delay to 12 seconds per vehicle upon completion of the intersection.

20. The conceptual design of the grade separated intersection was completed in July 2014 and the detailed engineering design of the preferred option was completed in November 2014. The selected option would have the traffic directly along the BRT corridor and all left turning traffic remaining at the ground level. The right turning traffic would be elevated through ramps to the first level and the Nelson Mandela – Sam Nujoma direct traffic would be at the second level. The selected design has a flyover along the ‘Nelson Mandela – Sam Nujoma roads’ in the direction of another flyover being implemented at TAZARA, through JICA support.

21. Component 2 - BRT phase 1 complementary infrastructure (9 km): The complementary infrastructure and services planned to be supported includes the rehabilitation of three feeder routes, introduction of long-term performance based maintenance contract for BRT phase 1 infrastructure. Feeder roads proposed to be rehabilitated includes Shekilango street (3.8 km), Fire station – Muhimbili (1.75 km), and Kigogo junction – Urafiki via Usafirishaji (3.4 km). The proposed rehabilitation works would include provision of bus bays/stops, bicycle lanes and pedestrians

walkways.

22. The project will also help to establish a long-term contract for maintenance of the BRT infrastructure. This will help demonstrate to the Government on how to ensure adequate and timely maintenance of the BRT infrastructure.

23. Component 3 - BRT system management, capacity strengthening, and technical assistance. On a short to medium term, the project will support capacity strengthening to DART, through the provision of technical assistance, including introduction of an exchange program with successful BRT operators from other parts of the world, for hands-on knowledge transfer. Support will also be provided in the preparation and facilitation of Government approvals for the transformation of DART to become a more autonomous entity. The Surface and Marine Regulatory authority (SUMATRA) would also receive support to put in place a regulatory framework for mass transit system.

24. The Project will also provide technical assistance for further design work and road safety and ICT innovations. The detailed design works to be supported would include the BRT phases 4, 5, and 6. The project will leverage the investments to introduce innovations and best practices including: (i) conducting an impact evaluation of the BRT system on the livelihood of the poor; (ii) introduction of open data system in the public transport in Dar es Salaam; (iii) coordinate with Dar es Salaam Metropolitan Development Program (DMDP) on the development of the transit and pedestrian oriented design principles for the BRT corridor; and (iv) coordinate with DMDP in the development of strategies for integrated transit and land-use planning.

25. Cost table:

Component 1 - Improvement of Ubungo Intersection: the total cost for the proposed interventions amounts to US\$90.0 million inclusive of GoT's contribution of US\$8.0 million for implementation of RAP and IDA allocation of US\$82.0 million.

Component 2 - BRT Phase 1 complementary infrastructure and services: the total cost is US\$24.4 million inclusive of US\$4.0 million for implementation of RAP and IDA allocation of US\$8.5 million (financing gap of US\$11.9 million).

Component 3 - Capacity Strengthening for BRT management and Technical assistance: an estimated total of US\$9.5 million from IDA.

Physical and Price- Contingencies: Total of US\$19.1 million (financing gap).

The estimated Total of US\$143.0 million inclusive of about US\$12 million from GoT and US \$100.0 million from IDA and a financing gap of US\$31 million. (See cost Table in Annex 3)

IV. Safeguard Policies that might apply

Safeguard Policies Triggered by the Project	Yes	No	TBD
Environmental Assessment OP/BP 4.01	x		
Natural Habitats OP/BP 4.04		x	

Forests OP/BP 4.36		x	
Pest Management OP 4.09		x	
Physical Cultural Resources OP/BP 4.11	x		
Indigenous Peoples OP/BP 4.10		x	
Involuntary Resettlement OP/BP 4.12	x		
Safety of Dams OP/BP 4.37		x	
Projects on International Waterways OP/BP 7.50		x	
Projects in Disputed Areas OP/BP 7.60		x	

V. Financing (in USD Million)

Total Project Cost:	260.00	Total Bank Financing:	225.00
Financing Gap:	22.00		
Financing Source			Amount
BORROWER/RECIPIENT			13.00
International Development Association (IDA)			225.00
Total			238.00

VI. Contact point

World Bank

Contact: Yonas Eliesikia Mchomvu
 Title: Sr Transport. Spec.
 Tel: 5355+3253
 Email: ymchomvu@worldbank.org

Borrower/Client/Recipient

Name: The United Republic of Tanzania
 Contact: Servacius Likwelile
 Title: Permanent Secretary
 Tel: 255222119190
 Email: sblikwelile@yahoo.com

Implementing Agencies

Name: TANROADS
 Contact: Eng. Patrick Mfugale
 Title: Chief Executive
 Tel: (255-22) 215-0932
 Email: tanroadshq@tanroads.org

Name: Dar Rapid Transit Agency (DART)
 Contact: Ronald Lwakatare
 Title: Ag. Chief Executive
 Tel: +255 22 2461093/4/6
 Email: ce@dart.go.tz

VII. For more information contact:

The InfoShop
The World Bank
1818 H Street, NW
Washington, D.C. 20433
Telephone: (202) 458-4500
Fax: (202) 522-1500
Web: <http://www.worldbank.org/infoshop>