Technical Design of Project Route 1 - Salient Features and Technical Specification

OPERATION	
Trailing Load (Freight)	*3000 Tonnes Gross (2250 Tonnes Payload) Maximum. (Eg 30 No x 100 Tonne Petroleum Products/Aggregat es/Met al Products/Bulk Cement etc. or 40 No Mixed Container/Grain/Livestock/Farm Products etc.
Trailing Load (Passenger Train)	*600 Tonnes (10 x Passenger Coaches (@ 23m) + DVT/Baggage
Predicted Journey Time Addis to D/ Dawa	Passenger Train 4 Hours (Fastest Train, 160 Kph)
Predicted Journey Time Addis to D/Dawa	Freight Train 8 Hours (Fastest Train, 120 Kph)
Predicted Journey Time D/D to Djibouti	Passenger Train 3 Hours (Fastest Train 160 Kph)
Predicted Journey Time D/D to Djibouti	Freight Train 6 Hours (Fastest Train 120 Kph)
INFRASTRUCTURE	Can GIS/Alignment Team Assess This ASAP – Muluken Follow Up
Overbridge (Road over Rail)	*Work in Progress
Underbridge (Rail over Road)	*W ork in Progress
Intersection Bridge (Rail over Rail)	*Work in Progress
Culvert	*W ork in Progress
Viaduct	*Work in Progress
Tunnel	*Work in Progress
Earthworks	*W ork in Progress



Technical Design of Project Route 1 - Salient Features and Technical Specification

MISCELLANEOUS	
Level crossings	To be avoided – use grade separation wherever possible. Where necessary in urban/developed areas, remote controlled and monitored by CCTV.
Lineside Fencing	Animal proof fence to be provided in the open country with accommodation crossings or elevated sections to suit environment and wildlife.
Mars halling Yards	Simple layout (to suit current capacity requirements with provision for future capacity aspirations).
Strategic Maintenance Depots	Addis Ababa (Gelan) or Adama (to be decided on completion of AAU Transport Planning Studies and associated Capacity Assessment + Rail Infrastructure Requirements) and Dire Dawa.
General Maintenance Depots	At intervals of about 90 km, or convenient town or city. Provision to be made for stabiling of "on track" maintenance plant (tamping /ail grinding machines etc., provision also to be made to stable diesel rescue locomotives for recovery of broken down trains.
Towns served	See Route Corridor Schematic Diagrams.
Station structures	Platforms (length circa 300m, number to be determined by capacity assessment/performance modelling), ticket offices, train maintenance/cleaning sheds, shopping complex at main stations.
Environment	Compliant with national regulation. Pay particular attention to wild life conservation, forests and water ways and water towers.

Investment Program

• Components in Development

Chinese EXIM and Development Bank are being expected to grant a loan for the construction of this railway.

Investment Program

• Investment Opportunities

55% of the total investment will be expected from Foreign funding and 45% of the total investment will be from the project owner(Ethiopia Government).



Project Description: Mekele – Tadrourah Railway

Market Demand Characteristics

Passenger demand forecast

Yea r	2007	2010	2015	2018	2020	2025	2030
Estimated passenger (Mil) at CARG 2.5%	4.35	4.61	5.10	5.42	5.64	6.24	6.89

Freight demand forecast

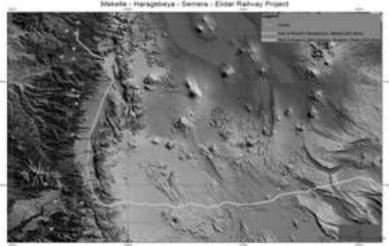
Year	2010	2012	2015	2018	2020	2025	2030
Estimated freight (Mil tons)	2.10	2.89	4.68	7.58	10.44	14.23	19.8
Domestic freight (50%)	1.05	1.45	2.34	3.79	5.22	7.11	9.9
Total freight	3.15	4.34	7.02	11.37	17.66	21.34	29.7



Project Description: Mekele - Tadjourah Railway

Technical Design of Project

of Project Plan of Mekele - Tadj ourah and the main centres of population which will be served along line.



Project Description: Mekele - Tadjourah Railway

Technical Design of Project

Mekele - Tadjourah Salient Features and Technical Specifications

Same as Addis Ababa - Djibouti



Project Description: Mekele – Tadjourah Railway

Investment Program

• Components Currently in Progress

300 million USD has been granted as a loan from government of India via AU.



Project Description: Mekele - Tadjourah Railway

Investment Program

• Investment Opportunities

55% of the total investment will be expected from Foreign funding and 45% of the total investment will be from the project owner(Ethiopia Government).



Contacts

Dr.Eng.Getachew Betru General Manager Ethiopian Railways Corporation

Debo Tunka

Head, Engineering and Project Implementation Department Ethiopian Railways Corporation

P.O.Box 27558-1000

Tel: +251-11-618-9465 (Off) +251-91-181-6999 (Mob)

Addis Ababa, ETHIOPIA

Email: debotunka@yahoo.com



Information Sources

- Central Statistical Agency, Ethiopia
- Study by the TAG, Ministry of Transport
- Bankable Feasbility Study Reports of the Projects, ERC



