



Ethiopian Railways Corporation (ERC)

Project Brief Outline



**ETHIOPIAN RAILWAYS
CORPORATION (ERC)**

ERC Project Brief Outline

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ETHIOPIAN RAILWAYS
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Background/Rationale

Historical Role of the Railway

- Ethiopia, the seat of African Union, has a more than 100 year old meter gauge 781 Km diesel railway owned jointly with the Government of Djibouti and operated by CDE (Chemin de fer Djibouti Ethiopien).
- This railway, which was established during the reign of Emperor Menelik II, in addition to its deterioration and malfunctioning due to age, almost abandoned due to its incapability of supporting the current demand of freight and passenger mobility.
- In its times, it has served as a major means of passenger and freight transport to the Eastern part of the country and contributed to the Establishment and expansion of major economically active urban centers along its line like Bishoftu (Debrezeit), Adama (Nazret), Diredawa, Mieso, etc.
- The railway has a significant place in the cultural songs, proverbs, poetry, etc of the country. Especially for the city Diredawa, railway is the soul that exists in the flesh of the villages, the streets, the squares which is revealed by their names.
- Therefore, the people and the land of Ethiopia are not new to the service of railway. However, due to the current growth momentum of the country, they need a modern and reliable railway system that can accommodate and facilitate the growth.



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Background/Rationale

Current Transport Demand and Options

- At present the dominant mode is road transport which serves about 95% of interurban and almost 100% of urban motorized passenger and freight transport.
- The other main land transport system is the Addis-Djibouti railway which for reasons of age, management, investment problem and poor service quality to customers handles only about 3% of the countries foreign trade.
- Modern motorized transport serves about 30% of the total national transport demand and the balance of 70% use the traditional non-motorized transport means (NMT).
- Although great improvements have been made in the expansion of road network, the country still suffers from limited connectivity, high cost and poor quality of services. In particular, the assessment of the sector indicates that the existing transport system could not adequately cope up with expected growth of the economy and mobility needs of the people.



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Background/Rationale

Current Transport Demand and Options /...contd./

Comparison of performance of Road, Rail, Maritime, and Air modes of Transport between 2002 and 2007.

S	Type of transport	2002	2003	2004	2005	2006
Road Transport						
R1	Total passenger carried (million)	110	808	114	817	273
	Passenger km in million	1111	7603	1111	1117	3111
	Revenue in passenger km	10.8%	11.8%	11.1%	11.1%	11.1%
R2	Freight service Tonn km in million	94	1111	1711	1111	1111
	Revenue in freight movement	11	11.1%	11.1%	11.1%	11.1%
Rail Transport						
R3	Total passenger carried (million)	1.111	1.111	1.111	1.111	1.111
	Passenger km in million	11.1	11	11.1	11	11
	Revenue in passenger km	11.1%	11.1%	11.1%	11.1%	11.1%
R4	Freight service Tonn km in million	11	11	11	11	11
	Revenue in freight movement	11.1%	11.1%	11.1%	11.1%	11.1%
Maritime Transport						
M1	Freight service Tonn km in million	1.11	1.11	1.11	1.11	1.1
	Revenue in freight movement	1.1%	1.1%	1.1%	1.1%	1.1%
Air Transport						
A1	Total passenger carried (million)	1.111	1.111	1.111	1.11	1.111
	Passenger km in million	1111	1111	1111	1111	1111
	Revenue in passenger km	11.1%	11.1%	11.1%	11.1%	11.1%
A2	Freight service Tonn km in million	11	11	11.11	11.11	11.11
	Revenue in freight movement	11.1%	11.1%	11.1%	11.1%	11.1%

Source: Ministry of Transport, Ministry of Transport and Communication, Ethiopian Government.



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Background/Rationale

Importance of Standard Gauge Railway to Ethiopian Economy and Ethio-Djibouti Corridor

Transportation shortfalls which are hindering further development of the above objectives are therefore summarised as follows:-

- For a landlocked country spread over a geographical area of 1.1 million square kilometres, a road length of 37,000 km is very small
 - The percentage of paved roads (13%) is also very small and also a problem.
 - There is a low density of vehicle ownership, just over 2 per 1000 population. Also, 70% of the vehicles are old and antiquated, and modern vehicle numbers are not growing due to a lack of investment.
 - Air transportation has its limitations due to cost and location limitations.
 - The existing railway is dilapidated and incurring increasing operating losses due to regular derailments and worsening performance shortfalls.
 - The cost of transportation is making the cost of Ethiopia's exports less competitive, as well as increasing the cost of imported goods.

Ethiopia therefore needs a modern, economic, time saving and long lasting transportation system which will make the cost of exports more competitive and reduce those of imported goods and will lead to inclusive growth.

New railroad connecting the length and breadth of the Country seems to be the solution.



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Vision for Standard Gauge Railway Development

The Governments' appropriate socio-economic reforms, sustainable macro-economic policies, and successful sectoral and regional strategies and programs have unleashed the potentials for accelerated development.

This accelerating development will be adversely affected unless development in the transportation sector is attained with sufficient capacity.

The Ministry of Transport of Federal Democratic Republic of Ethiopia was found to be prudent to develop Railway in the country.

A Technical Advisory Group (TAG) has been Formed (under Ministry of Transport) to indicate framework for Railway network in Ethiopia.

With a mission of developing railway infrastructure and providing freight and passenger transport services in Ethiopia, Ethiopian Railways Corporation (ERC) was established on 28 November 2007 by Regulation 141/2007 of the Council of Ministers of FDRE.



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Vision for Standard Gauge Railway Development

Identification of railway corridors by the TAG

The TAG unequivocally justified introduction of railway system across Ethiopia as primary national mass transport system on following grounds:

- Geographical necessities
- Alternative means of transport
- Throughput in transportation system
- Operating Costs
- Combining Road and rail system
- Saving in travel Time
- Employment generation
- Increase in demand
- Social benefits



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Vision for Standard Gauge Railway Development

Identification of railway corridors by the TAG /...contd./

As a result, the TAG has identified 14 railway projects in three groups as:

GROUP A

No	Project	Estimated Length (Km)
1	Addis Ababa-Dessie-Mekele	722
2	Modjo- Jima	328
3	Modjo-Nekmpt	348
4	Bahir Dar-Wodeiya-Mile-Djibouti	655
5	Addis Ababa-DireDawa-Djibouti	650

GROUP B

No	Project	Estimated Length (Km)
1	Adama-Dera-Seru-Ginir	300
2	Modjo-Awassa-Arbaminch	400
3	Bahir Dar-Gondar (Azezo)	170

GROUP C

No	Project	Estimated Length (Km)
1	Azezo-Metema	180
2	Jima-Bonga-Ethiopia Border	253
3	Arbaminch-Moyale	370
4	Diredawa-Jigjiga-Togowuchale	200
5	Nekmpt-Gimbi-Asossa	300
6	Nekempt-Gimbi-Dembidolo-Gambella	280

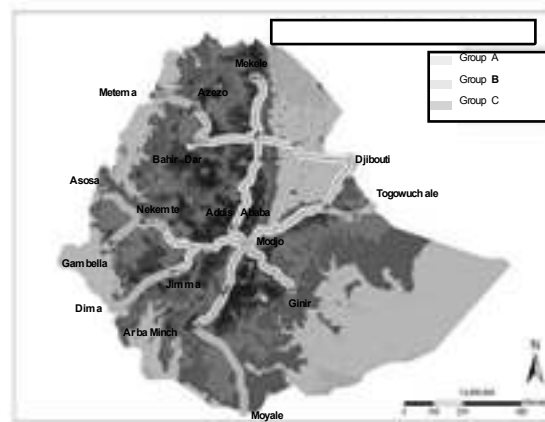


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Identification of railway corridors by the TAG /...contd./

**Identified
Railway
Corridors
by the TAG**



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Prioritization of railway corridors by the TAG

Socio-economic indicators or criteria have been utilized to prioritize for the development of National Railway Network

Analysis is done based on data collected from different studies under woreda level.

- Population Served By the Railway Link (20%)
- The existing agriculture production and future potential of the Woredas crosses by the link (20%)
- Existing livestock potentials for the Woredas (10%)
- The Availability of mining and the types of mines soon ready for immediate production (10%)
- Contribution of the link for National and International trade and access (5%)
- Existing Road density and distribution on the Woredas crosses by the link (5%)
- Investment cost for the link (30%)

The Existing Addis Ababa-Dire Dawa-Djibouti link is considered to be the first priority as it has already developed huge corridor traffic and hence is not included in the analysis.



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Prioritization of railway corridors by the TAG /...contd./

The result of prioritization of corridors by the TAG

GROUP A			GROUP B			GROUP C		
Project	Total (100%)	Rank	Project	Total (100%)	Rank	Project	Total (100%)	Rank
Addis Ababa-Dessie-Mekele	69.7	2	Adama-Dera-Seru-Ginir	47.1	3	Azezo-Metema	72.3	3
Modjo-Jima	77.8	1	Modjo-Awassa-Arbaminch	77.1	1	Jima-Bonga-Ethiopia Border	77.9	2
Modjo-Nekmpt	66.7	3	Bahir Dar-Gondar (Azezo)	63.4	2	Arbaminch-Moyale	47.4	6
Bahir Dar-Wodeiya-Mile-Djibouti	52.1	4				Diredawa-Jigjiga-Togowuchale	78.7	1
						Nekmpt-Gimbi-Asossa	63.5	5
						Nekmpt-Gimbi-Dembidolo-Gambella	66.3	4



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Consequently, the Ethiopian Railways Corporation (ERC) has been established by the Council of Ministers Regulation No. 141/2007 to carry out the following purposes:

- To Build Railway Infrastructures,
- To Operate Cargo Railway Transport Services,
- To Provide Passenger Railway Transport Services,
- To Engage in other related activities necessary for the attainment of its purpose.

Based on the Recommendation of TAG , Ethiopian Railways Corporation (ERC) has selected eight alignments utilizing the modern decision tools of GIS and Remote Sensing.

