

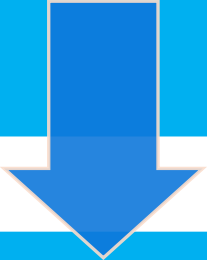
Trans African Corridors for **transport and trade
facilitation and their connection to the Transeuropean
Transport Networks, Role of Rail, Corridor 11:
Diagnostic Study**

SC2 working party on Rail transport (SC.2), Meeting 16/11/23 UNECE

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Topics to discuss: which are the needs in Africa in relation to railway infrastructure and operation?, what is the potential of railways and especially rail passenger transport in East Africa? How these railways, can be connected to Transeuropean Transport Networks with multimodal transport(sea - rail - road)?

Which are the Trans African Corridors for transport and trade facilitation?

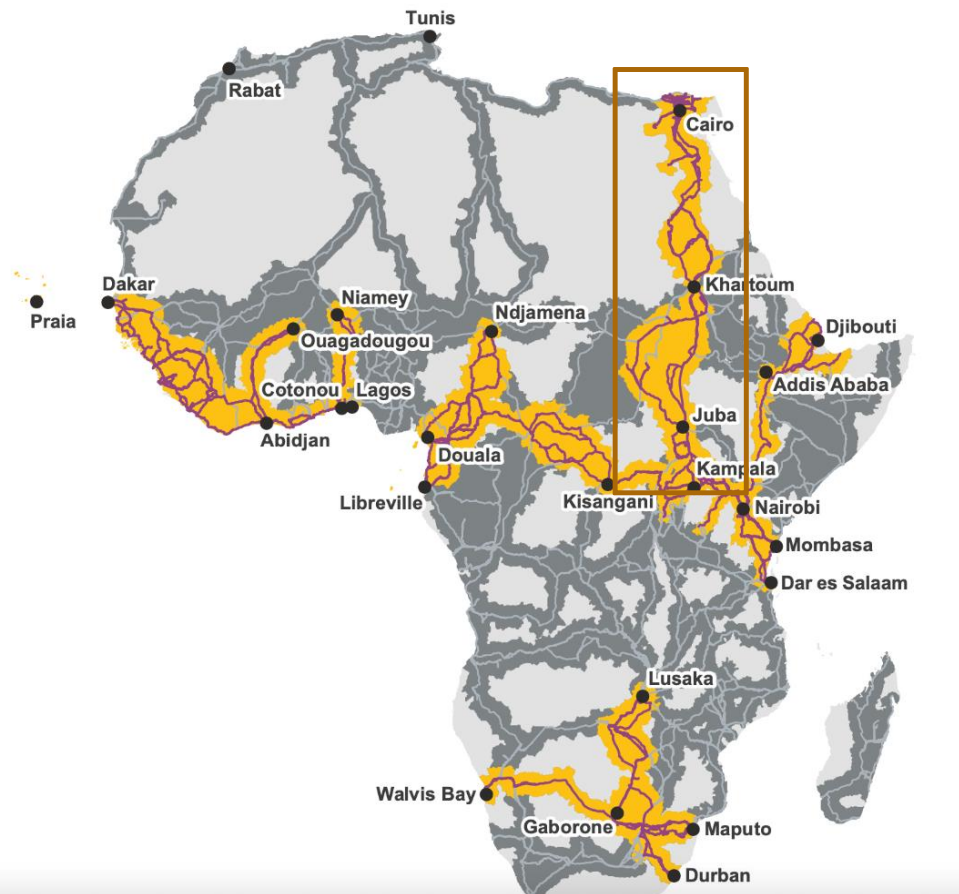


A Diagnostic Study for CORRIDOR 11 was funded by EC DG INTPA and was conducted by Stantec in 2023 and outlines the status of rail



There is a potential for a future connection of C11 to TEN-T, via the ports of Alexandria, Egypt and Volos, Greece

Trans African Corridors C7, C8, C11 - diagnostic study 3



Global Gateway Strategic Transport Corridors – identification of investments in the Horn of Africa region:

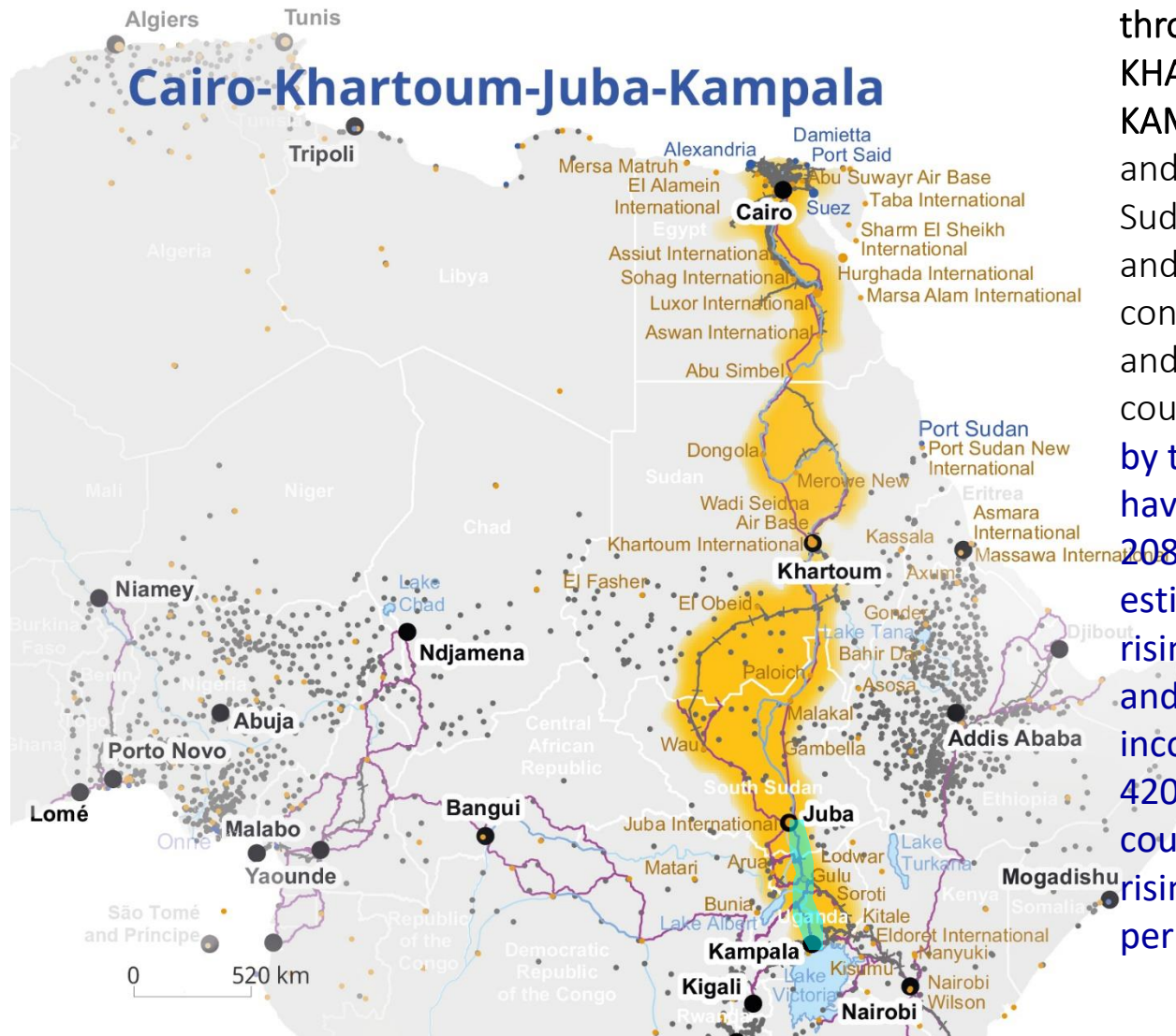
In the context of the 6th EU-AU Summit held in 2020, Europe has proposed to support quality connectivity infrastructure for smart, fair and affordable mobility and trade within Africa and in between Africa and Europe.

The **Global Gateway Africa-Europe Investment Package** aims at supporting strategic, sustainable and secure transport corridors and support value chains, services and jobs that can benefit industries in both Africa and Europe.

Eleven Strategic Corridors have been identified, in line with the PIDA priorities and as a contribution to the operationalisation of the African Continental Free Trade Area (AfCFTA) and the Agenda 2063 of the African Union.

https://ec.europa.eu/commission/presscorner/detail/en/FS_22_1122

Corridor 11 Cairo-Khartoum-Juba-Kampala



Corridor 11 runs through CAIRO-KHARTOUM-JUBA-KAMPALA and serves Egypt, Sudan, South Sudan and Uganda. It consists of rail, road and river links. The countries be served by the corridor, 11, have a population of 208 million(2021 estimates), which is rising with a high rate and a per capita income of USD 252 to 4200, depending the country, which is rising by up to 10% per year.

Transport Infrastructure:
Current situation, Perspectives
Corridor 11

Transport Infrastructure condition C11

- The C11 virtually does not exist now as there is no transport starting in Cairo and ending in Kampala. The reason is that the C11 has missing links in terms of infrastructure, while there are obstacles also in terms of trade facilitation.
- The transport infrastructure in **Egypt** is in good condition, and many investments are going on, on railways, roads and less on river transport.
- In **Sudan**, the **roads** are in very a mediocre condition and have not been rehabilitated for the last 20 years. The **railways** are in a bad condition and need total rehabilitation, especially for the corridor from north to south. Railways are not operating now on the N-S axis. The **river transport** is nearly non-existing from Khartoum to the border with Egypt.
- In **South Sudan**, the **railways** do not exist, there is only an abandoned line from the border with Sudan (and from there to Babanosa - also an abandoned line) to the city of Wau. **River transport** is taking place at some locations and connections, mainly for local traders, small quantities, and humanitarian aid. The **roads** are in a bad state and unpaved, except the road from Juba to Nimule at the border with Uganda.
- In **Uganda**, the **roads** are in good condition. There is also a road with tolls from Entebbe airport to the capital Kampala (90 km). They are investing in rehabilitating/improving/upgrading the existing roads. The **railways** are not in good condition and need rehabilitation and upgrading.

Need for Standards Harmonisation⁷

- The corridor consists of links (of roads, railways) with non-harmonized standards.
- In the railways, except for missing links and non-operational sections, there are also differences in the rail gauge, which need to be harmonised with the standard gauge (1,435 mm wide), which is the prevailing gauge internationally and has many advantages.

Summary of rail gauges and links in the 4 countries of C11

- **Egypt:** **standard gauge**, 1.435 mm wide. There is no rail connection to the rail network of Sudan and moreover there is break-of-gauge 1.435 mm /1.067 mm.
- **Sudan:** **narrow-gauge**, 1.067-m, single-track. Connects to Egypt from Wadi Halfa to Aswan only through Lake Nasser ferry. Some areas have 0.6 meters wide gauge. There is no standard gauge railway in Sudan.
- **South Sudan:** **narrow-gauge** (1.067 mm), single-track line, 248 kilometres only – non-operational currently, that connects Babonosa (Sudan) with the city of Wau in South Sudan.
- **Uganda:** All existing railway is of **metric gauge** (1.000 mm). A new **standard** gauge rail network is planned. The only railway line still operating is the Malaba–Kampala line. Uganda has an international Railway link only with Kenya (same gauge of 1.000 mm) and Tanzania through a train ferry; (same gauge of 1.000 mm).

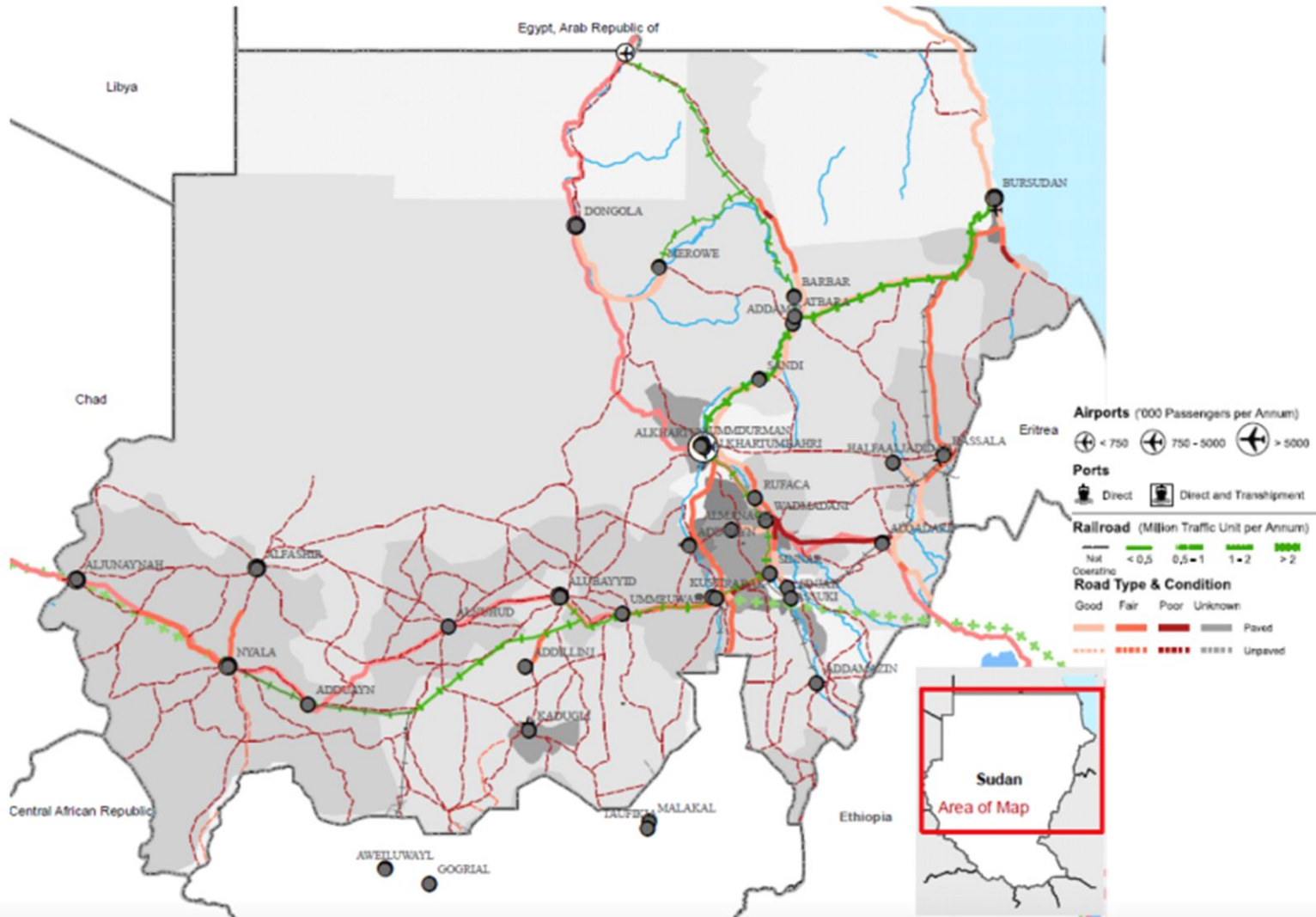
Missing rail links C11 ⁹

Table: missing links and other gaps, C11- need to conduct FS

country	railways
Egypt	Rail link from Aswan to Sudan border (Wadi Halfa) <i>[Tendered?]</i>
Sudan	Rail link to Egypt's rail network is non existing <i>[only by ferry]</i> but other links also are in so bad status that are not operational; no standard gauge network
South Sudan	Rail link narrow gauge (1067 mm) from Sudan border to Wau to Uganda border, no standard gauge network
Uganda	Railways: direct link Kampala - Gulu - South Sudan border, no standard gauge network

Transport

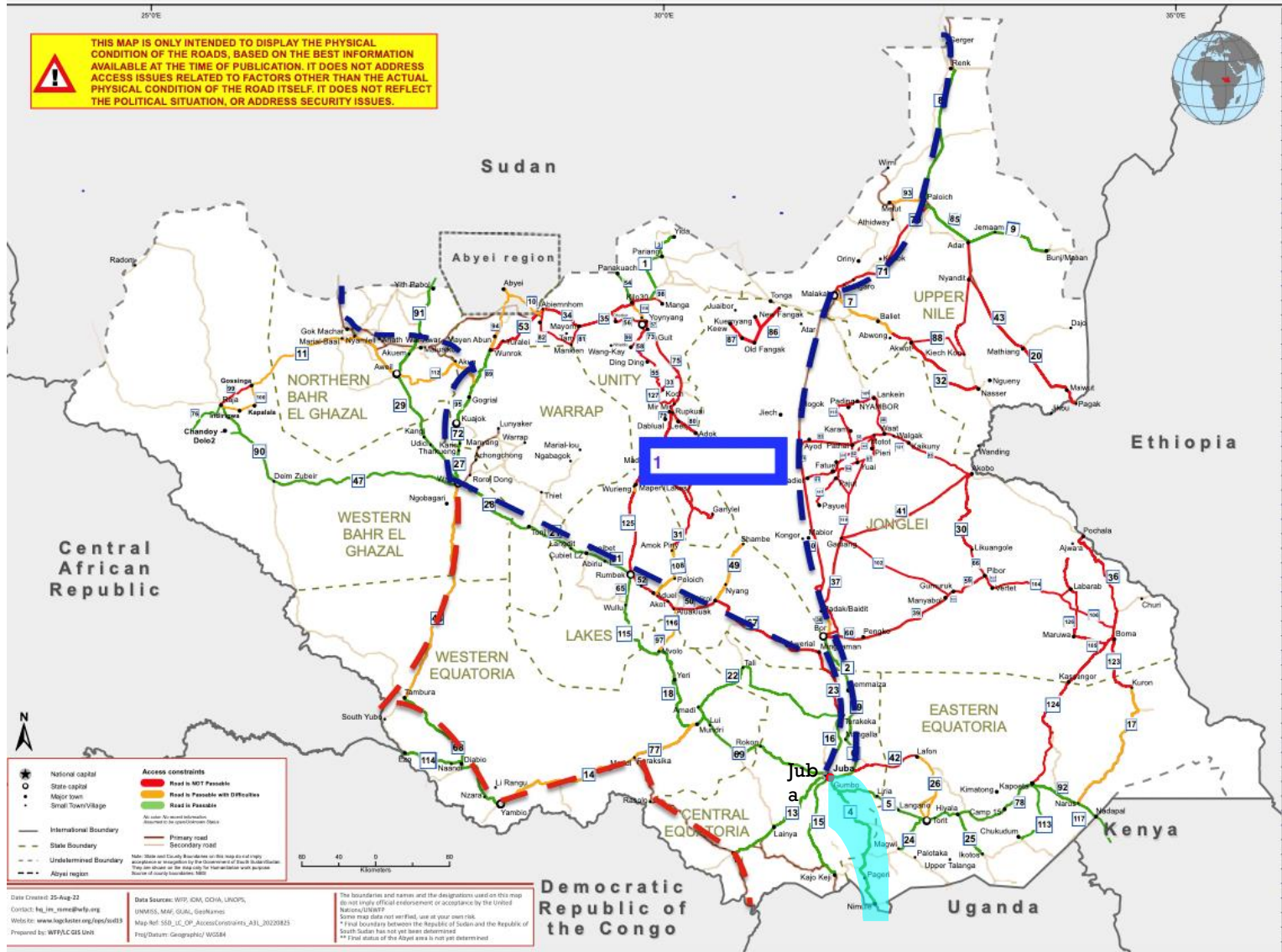
Figure 4. National and regional transport network in all parts of Sudan



Source: AICD.

Map showing the transport network of Sudan (Source: Africa infrastructure country diagnostic, COUNTRY REPORT Sudan's Infrastructure: A Continental Perspective, Rupa Ranganathan and Cecilia Briceño-Garmendia, JUNE 2011, IBRD, WB)

EUD Expert view about Possible alternative transport corridors in South Sudan, August 2022¹



Map of transport network South Sudan , Source: LC

A feasibility study for a new line from Kampala to Gulu-Juba, standard gauge also with a new bridge over river Nile, is needed.

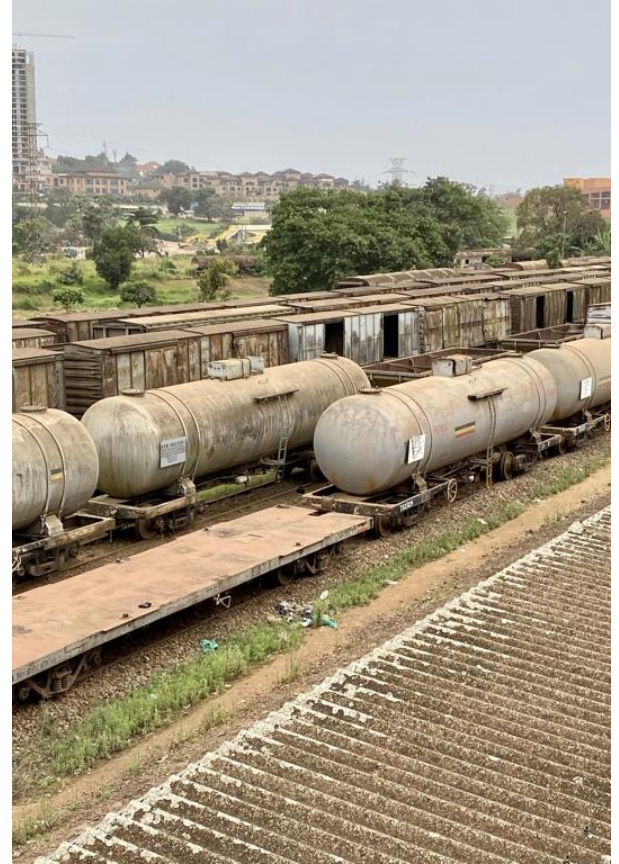


Uganda Railways: Currently operating metric gauge but is interested in developing a standard gauge railway. The entry point to Uganda is from the Kenya border at Malaba to Tororo in Uganda and from there to Kampala (the only 269 km of rail operating now - out of the 1260 km length of the rail metric whole network). The 365 km from Tororo to Gulu is still under delayed rehabilitation. The line is planned to reach Nimule and be upgraded to standard gauge like many other rail lines, but funds and connection with Kenya still need to be made available. The Kampala-Kasese, near the border with Kongo to the west, is also planned for standard gauge on a slightly different alignment. There are rail ferries on Lake Victoria for wagons from Tanzania for freight. For the Gulu - Pakwach, a feasibility study was carried out with the financing of the Islamic bank.

Uganda Railways (source LC)



Railways Sudan



Railways Uganda

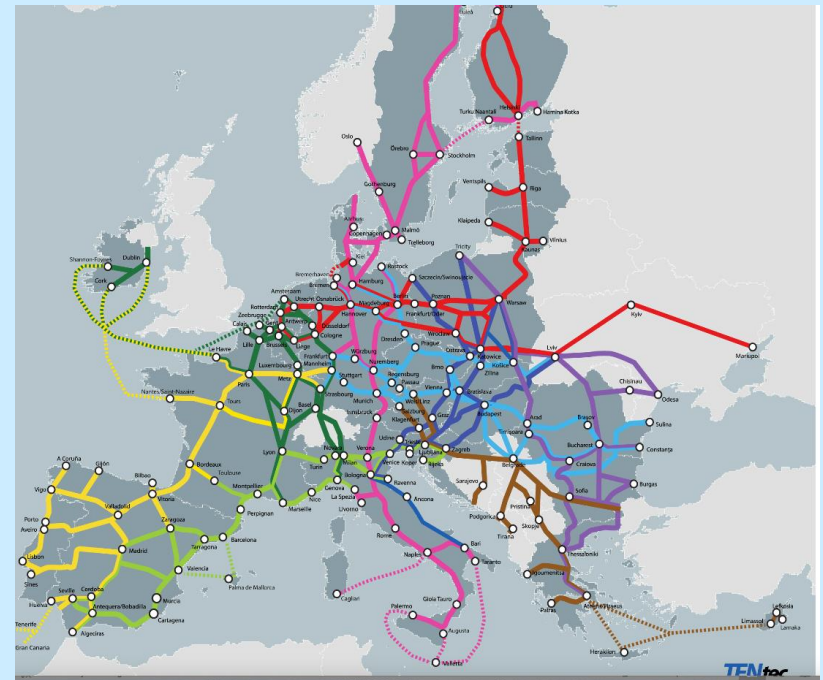
Conclusions about C11

15

- Need to **conduct feasibility studies for the links along Corridor 11, for building missing links or rehabilitating and/or upgrading existing links**
- **Egypt:** Railways are efficient compared to the other countries in the region, but can be improved, all railroads are SGR.
- **Sudan:** -war situation; Railways (narrow gauge, 1067 mm) to be completely revamped; priorities to the Nord-South axis to be given;-Any land transport connection with S. Sudan to be improved; However due to Sudan civil war, no proposals for projects would be feasible now. It should only be pointed out that many needs were registered during the mission on March 2023, and no update since then.
- **South Sudan:** Railways are abandoned, their partial improvement may be studied. Focus must be put on the corridor from Juba to Kampala (through Nimule(SS) and Gulu(U)), which is part of C11. Only road connection currently exists.
- **Uganda :** -More development in the railway field is needed, e.g., completion and put into operations the Tororo-Gulu rlw; -Studies of Lake Victoria's exploitation by railway ferries are needed.
- Need to Conduct (Sudan, S. Sudan) or update (Uganda) the **national transport plans** and conduct **regional transport model**
- **Capacity building** and related training should be offered to the Ministries of Transport, and the Railways in all C11 countries for planning, needs assessment, program and project management, rail infrastructure maintenance and management, rail rolling stock maintenance, safety management and quality management systems
- Need for **maintenance equipment and rolling stock for railways.**

- The European Union is planning to complete the development of the Trans European Transport network till 2030, offering high-quality multimodal connections to all capital cities and all main transport corridors of the Union

The connection to 3rd countries is also getting higher importance



- The European union on the 21st December 2021 has presented the new strategy called Global Gateway with the objective to promote sustainable transport connections and networks internationally, with a budget of €300 billion euros , between years 2021-2027
- The aim is to face the climate change and to protect the environment and promote competitive Global logistic
- Major importance presents the expansion of the Trans European transport networks to the Mediterranean and Africa, their relative financing and provision of technical assistance, major importance has the Transafrican corridor that starts from Egypt(C11)



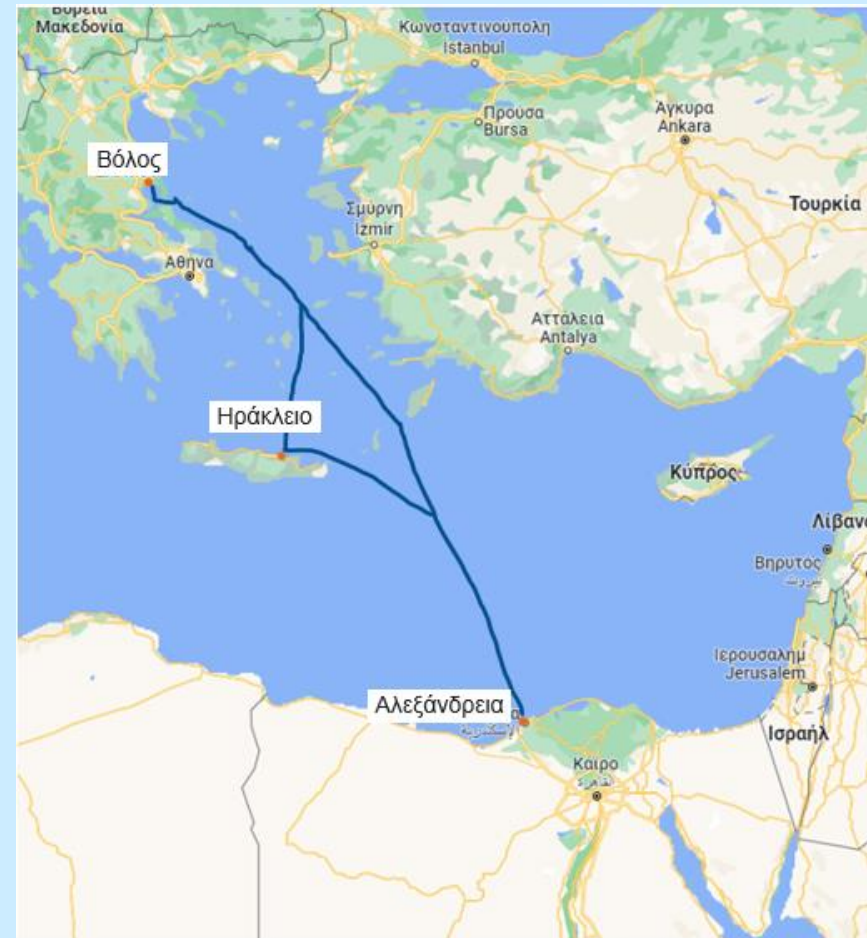
Global Gateway: up to €300 billion for the European Union's strategy to boost sustainable links around the world

Sea Connection between the port of Volos and Alexandria with F/B

18

This is an initiative of the VOLOS PORT AUTHORITY with the HELLENIC CHAMBERS & BUSINESS TRANSPORT ASSOCIATION (HCBTA) and other Greek stakeholders in cooperation with the port of Alexandria

The ports of Volos and Alexandria have the appropriate location and Infrastructure and are well-connected to the road and rail networks. Thus these offer reliable connection to the TEN-T and the C11 respectively. And can connect the countries of East Africa and Middle East to the European Union through Greece, an EU country. A feasibility study to define the latent demand and the appropriate type of vessel for the sea connection is on the way to be conducted. With a operating speed of 25 nautical miles per hour the travel duration is about 27 hours



THANK YOU FOR YOUR ATTENTION !