

# The Trans-Saharan Road Corridor

## Towards an Economic Corridor: Commercializing and Managing the Trans-Saharan Road





# THE TRANS-SAHARAN ROAD CORRIDOR

Towards an Economic Corridor:  
Commercializing and Managing  
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The views expressed in this document are those of the authors. They do not necessarily represent the official views of the IsDB, the CLRT and its members.





## Abbreviations and Acronyms

<b>AfCFTA</b>	African Continental Free Trade Area
<b>ADB</b>	Asian Development Bank
<b>ADT</b>	Average Daily Traffic
<b>AfDB</b>	African Development Bank
<b>ASEAN</b>	Association of Southeast Asian Nations
<b>ASYCUDA</b>	Automated System for Customs Data
<b>AU</b>	African Union
<b>CAREC</b>	Central Asian Regional Economic Cooperation
<b>CEMAC</b>	Central African Economic and Monetary Community
<b>CEN-SAD</b>	Community of Sahel-Saharan States
<b>CLRT</b>	Comité de Liaison de la Route Transsaharienne
<b>ECCAS</b>	Economic Community of Central African States
<b>ECOWAS</b>	Economic Community for West African States
<b>EU</b>	European Union
<b>FDI</b>	Foreign Direct Investment
<b>GMS</b>	Greater Mekong Sub-region
<b>ICT</b>	Information and Communication Technology
<b>IsDB</b>	Islamic Development Bank
<b>LPI</b>	Logistics Performance Index
<b>MERCOSUR</b>	Southern Common Market (Mercado Común del Sur)
<b>MoU</b>	Memorandum of Understanding
<b>Mt</b>	Metric ton (1,000 kg)
<b>NAFTA</b>	North American Free Trade Agreement
<b>NC-TTCA</b>	Northern Corridor Transit Transport Coordination Authority
<b>PPPs</b>	Public-Private Partnerships
<b>SAARC</b>	South Asian Association for Regional Cooperation
<b>SACU</b>	Southern African Customs Union
<b>SADC</b>	Southern African Development Community
<b>SDGs</b>	Sustainable Development Goals
<b>SIECA</b>	Central American Common Market
<b>SSA</b>	Sub-Saharan Africa
<b>SSATP</b>	Africa Transport Policy Program
<b>TA</b>	Technical Assistance
<b>TAH</b>	Trans-African Highways (or Trans-African Road Corridors)
<b>TEN</b>	Trans-European Transport Network
<b>TIR</b>	International Transport of Goods (Transport International Routier)
<b>TRACECA</b>	Transport Corridor Europe-Caucasus-Asia
<b>TSR</b>	Trans-Saharan Road
<b>TTFA</b>	Transport and Trade Facilitation Audit
<b>UNCTAD</b>	United Nations Conference on Trade and Development
<b>UNECA</b>	United Nations Economic Commission for Africa
<b>VPoA</b>	Vienna Plan of Action
<b>WAEMU (or UEMOA)</b>	West African Economic and Monetary Union (or Union Economique et Monétaire Ouest-Africaine, UEMOA in French)
<b>WCO</b>	World Customs Organization
<b>WTO</b>	World Trade Organization
<b>WHO</b>	World Health Organization

**Note:** All references to dollars (\$) are to United States dollars, unless otherwise stated

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# EXECUTIVE SUMMARY



## 1 - Context

Trade and transport corridors, which are mainly major routes that facilitate the movement of people and goods between regions and between countries, have existed for millennia. These corridors enable regions and countries to offer high-capacity transport systems and services that reduce transport time, and trade and transport costs, by improving connectivity, efficiency and by creating economies of scale. Regional corridors are particularly important to landlocked countries, where they are economic lifelines, often providing the only overland routes to ports that lead to regional and international markets.

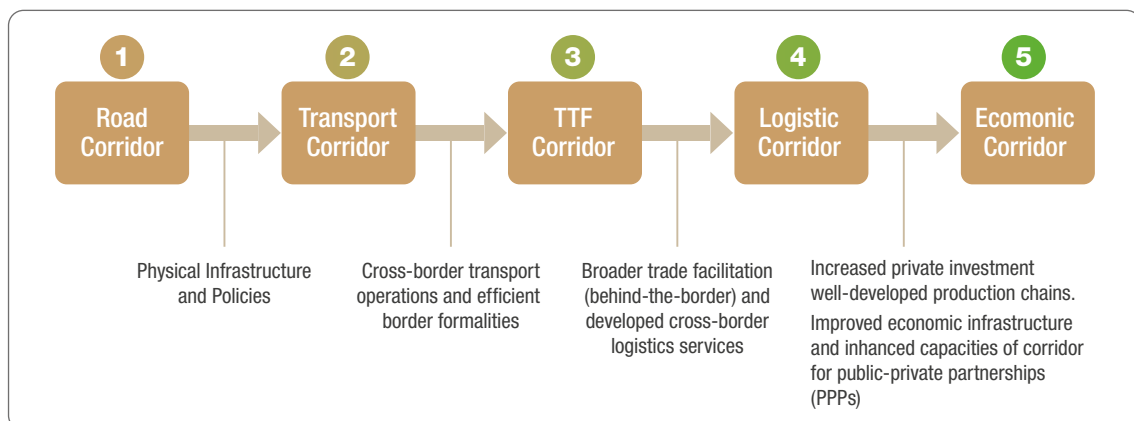
The Trans Saharan Road (TSR) corridor is one of the nine main Trans-African Highways (TAH) corridors being developed by the United Nations Economic Commission for Africa (UNECA), the African Union (AU), the Islamic Development Bank (IsDB) and the African Development Bank (AfDB) with the support of other regional and international organisations and development institutions (such as the Arab Bank for Economic Development in Africa - BADEA and UNCTAD).

The TSR corridor is also one of the oldest transnational road corridors in Africa and one of the most complete, having been proposed in 1962, with construction of sections in the Sahara starting in the 1970s. The TSR corridor links Algeria, Chad, Mali, Niger, Nigeria, and Tunisia (three port countries and three landlocked ones). The 4,500 km long North-South backbone (main road) of the corridor connects the ports of Algiers and Lagos through Algeria, Niger, and Nigeria. An additional 4,600 km of linked highways (feeders) to Tunisia, Mali, Niamey (in Niger) and Chad are considered an integral part of the TSR corridor. Some 80% of the TSR corridor is paved (asphalted) roads. The Tunisia branch connects to the ports of Tunis and Gabès.

## 2 - The study

The present study is part of the technical assistance project, funded by the IsDB and implemented by UNCTAD and which aims to promote the commercialization of the TSR corridor and its evolution towards an economic corridor and by establishing a relevant management mechanism.

### Evolution from Transport Corridor to Economic Corridor



It is important to establish a regional transport corridor management mechanism that will ensure effective coordination and collaboration among TSR corridor stakeholders, including users and service providers. The ultimate objective of the TA project is to promote trade, improve the reliability and efficiency of transport, minimize delays and transit times through improved policies and processes, and reduce transportation costs, all of which will support transforming the road network into an economic development corridor and lay the ground for the establishment of the conditions for future regional economic integration. In line with the overall goals of the TA project and as one of the first steps, the present study includes particularly recommendations for the establishment of a cooperation framework among the TSR countries and an adequate regional trade and transport transit corridor management mechanism for the commercialization of the TSR. The study's suggestions for TSR corridor improvements and recommendations (hard and soft), including a corridor management scheme, are made mainly to transform the TSR from road corridor to transport corridor, to logistics corridor and then to an economic corridor, with the goal of regional economic integration.

### 3 - Reporting results

The report is structured in the way to base the recommendations on detailed analytical work and best practices of international experience. It highlights the corridor approach and its relevance for regional, national, and local economic development for any given country, and the overall importance of regional economic integration, especially in the case of landlocked developing countries.

It also describes in detail the TSR corridor and outlines its hard and soft (physical infrastructure and policies/regulations) situation and constraints and challenges. The report does not consider the impact of the Covid-19 pandemic or security issues in the Sahel region. The report summarizes the economic outlook (prior to 2020, the year when the Covid-19 pandemic erupted with consequent negative impacts on the global and national economies) for each of the six TSR corridor countries, reviews their trade separately and among them and the perspectives for potential increase, and reviews the logistics performance indicators for the countries and what measures could help improve the performance.

Based on the existing available information (at the time when it was carried out) and on a desk-review based trade and transport facilitation assessment/audit (TTFA) carried out for each of the TSR corridor countries, the report presents the trade and transport facilitation aspects in the TSR corridor and provides a diagnosis to assess corridor performance. The analytical part of the report looks at the barriers and challenges associated with road and transit transport as well as logistics operations along the corridor, including linkages with ports, and identifies potential measures/solutions for addressing those challenges.

The report looks at the need for improving the TSR corridor performance and makes recommendations for hard infrastructure, such as missing links, connectivity, logistics centers, border crossings modernization, etc., and soft measures, including regulations, policies, technological instruments, Information and communication technology (ICT), harmonization, and simplification of exchange of information, conventions, agreements, institutional, capacity building and mechanisms for monitoring and evaluation of corridor performance and impact evaluation. It provides some best practices from international experience for trade and transport corridor management schemes, as well as the criteria and choice options for selecting and adapting a model for specific situations.

Based on the analytical work and the international experience, the report draws the main conclusions of the study and makes recommendations for setting up a cooperation framework and the most suitable regional management mechanism/structure for the TSR corridor that would support effective operation, management as well as commercialization of the corridor. Overall, these measures would lay the foundation for establishing an economic development corridor and support regional integration. The report gives also the main elements required for an intergovernmental agreement (memorandum of un-

derstanding) establishing a mechanism for collaboration among TSR corridor member countries and a sustainable management structure for the corridor, as well as a recommendation outlining a TSR regional economic corridor development programs/projects and action plan to be supported for preparation and implementation by the governments, financial institutions and development partners.

### 4 - The relevance of a corridor approach

From an economic perspective, the function of a corridor is to promote both internal and external trade by providing more efficient transport and logistics services and trade facilitation measures, and to support connectivity and economic and social development along the routes. In the case of highway corridors, the primary reason for designating road axes and branches as part of a corridor is to focus attention on improving not only the physical routes but also the quality of the transport and other logistic services and trade facilitation measures in the corridor. This quality is measured in transit time, and cost for shipment of goods along the corridor, and the reliability of the services in terms of transit time.

When the national economic development is also targeted, the quality of the corridor may include the scope and social impact of the economic activity along the corridor. International organizations and financial institutions are increasingly supporting the corridor approach for developing countries, convinced that transport corridors are one of the direct ways to support economic integration, which is important for the growth prospects of countries, especially those that are landlocked.

### 5 - Findings and diagnostic of the analytical work

#### The TSR road corridor, its constraints, and challenges

There have been major investment efforts in road sector in the corridor by all TSR member countries, which shows the **commitment of the member states** to the corridor and its future development as an economic development vector for the sub-region. However, several missing links remain uncompleted, the roads condition is uneven between countries, and road maintenance policies and funding are lagging particularly in the three landlocked countries (Chad, Mali, and Niger).

The **traffic** (2019) on the main north-south axis is high on the sections in Algeria and Nigeria with a share of heavy traffic (trucks) of 15% in Algeria and 35% in Nigeria. On the connecting sections, the traffic is very low, except in Tunisia where the traffic from Gabès to the border with Algeria and then to Ghardaia (in Algeria on the main TSR axis) is higher than in the other connecting sections but much lower than main sections in Algeria and Nigeria.

**Road safety** remains a major challenge for all TSR corridor countries as enforcement of safety legislations is not strict for major laws and measures. This is exacerbated by lack of roadway signage, insufficient vehicle maintenance, defective and pirated auto parts, driver fatigue, and reckless and unskilled drivers. These are key contributing factors to the growing incidence of road traffic crashes and resulting injuries and fatalities.

Major issues are still to be addressed at the two main gateways of the north-south backbone of the TSR corridor, the **port of Algiers and the port of Lagos**. Despite its recent improvements (prior to 2020), the port of Algiers remains a congested port and congestion surcharges are applied regularly by shipping lines. Delays are common and dwell time remains high. Several critical factors adversely impact also on the Lagos port inefficiency. The challenges identified include transport infrastructure deficits, services and facilities deficiencies of government agencies, and deficiencies in services of the private sector operators at the port. **The port of Gabès** (as well as Radès) seems ready to play a key role as a gateway for the for the TSR corridor but would need investment in a container terminal. In addition to the well-known security issues in the Sahel region, the problems at the different **border crossings** of the TSR corridor



are due to an excessively rigorous and narrow interpretation of the regulations which causes problems and delays. No ICT use for exchange of information and no proper risk management exist at the border posts. The fact also that Algeria is not part of the International Transport of Goods (TIR) convention – it suspended the convention application in 1991 – does not help.

**Dry ports and inland container depots** are developing slowly in the TSR countries. Several inland container depots are under private management in Chad, Niger, and Mali. The private operators invested also in the construction and development of closed, secured warehouses, as well as in bonded warehouses. The initiatives are, however, not implemented in all TSR countries.

Overall **environmental sustainability** aspects are not given appropriate attention. Policies to promote economic growth should reflect the depletion over time of the non renewable resources, as well as the impact of economic activity on the environment with special emphasis on climate change—and the need to protect biodiversity and reduce greenhouse gas emissions. Environmentally sustainable policies are essential for economic sustainable growth in general and for limiting externalities such as air pollution, greenhouse gas emissions and climate change.

Increased transport and trade activities requires measures to reduce externalities and heightens the need to shift to sustainable patterns. Integrating sustainable criteria into corridor infrastructure development and operations should therefore be considered to support efficient long-term sustainable and inclusive development. Recent accelerated growth in technological advances and innovations suggests a significant potential for such technologies to support sustainability-building efforts.

## The TSR corridor countries economic outlook, trade exchange, and logistics performance

The study reviewed the **economic outlook** of the member countries of the TSR corridor, based on available data from different international organizations and specialized agencies without analyzing or predicting the devastating effects of the Covid-19. According to the IMF Africa Economic Outlook (2022), Sub-Sahara Africa GDP contracted by 2.1% in 2020 and grew by a modest 3.7% in 2021. The outlook for 2022 shows an increase by 0.1% only to 3.8%<sup>1</sup>. The economic data considered for the review was the one prior to 2020, the year when the Covid-19 pandemic erupted with consequent negative impacts on the global and national economies. The data prior to 2020 is also more significant for the trade of the TSR countries, and among themselves, as well as for their logistics performance.

Together Nigeria and Algeria represent 77% of the total population and 88% of the total GDP of the TSR corridor countries. The TSR corridor countries represent some 27% of the total GDP of Africa and 25% of its population. Oil and gas represent about 95% of Algeria's export receipts. The Nigerian economy is one of the largest in Africa, and since the late 1960s it has been based primarily on the **oil industry**.

The analytical work highlighted the differences of the economies of the six TSR countries, among which three are low-income landlocked countries and two are middle-income ones. Despite the economic differences, the countries present however some similarities in their respective **logistics performance index** (LPI) and main issues and aspects to address to improve their rankings. The improvements could be supported by joint efforts to promote trade and commercialization of the TSR corridor and implement the trade, transport, and transit facilitations measures along the corridor in a structured, efficient, and organized manner.

The existing data and its analysis show that the trade between the TSR countries is on a rather low level. It is estimated that just about 1% of Algeria's total trade is with Africa outside of the Maghreb area. The trade between Niger and the Maghreb area is reported to be approximately 10 heavy trucks per day<sup>2</sup>.

<sup>1</sup> IMF Regional Economic Outlook Sub-Saharan Africa (October 2021).

<sup>2</sup> Based on available data for the years 2014 to 2017, and 2018 when available. Data from AfDB, World Bank, CIA World Fact Book, and others.

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This number may underestimate the total trade since there is probably some informal trade is not captured by the statistics.

As example of the informal activities across borders, the data collected shows that informal trade between Algeria and Mali is important in supplying northern Mali and allowing regions in the north to benefit from prices lower than if supplies came from the south of the country.

Economically, even without considering the Algerian subsidies on transport and goods, it is understandable that Kidal, and even Gao, gravitate toward Algeria because transit times are between seven and eight days to Algiers as opposed to at least 17 days to Dakar (Senegal) or via the southern road to Abidjan (Côte d'Ivoire) or Tema (Ghana). In addition, the cost of shipping transport is much lower at ports in North Africa than those in West Africa.<sup>3</sup> Any project for the development of the TSR road corridor towards an economic corridor and modernizing the border crossings, especially when supported by international development partners, should address the informal trade and the adequate integration of the population benefiting from the related activities into the mainstream regional economic development.

It is not necessarily the volume of trade between the countries that matters, as this will develop over time when the TSR countries respond to the needs of each other as well as to their own domestic economic development along the corridor. What matters at this stage is rather the trade logistics policies and the volume of goods that transits between the TSR countries (going through the countries or some of them) whether the goods are destined to or originating from one of them. What matters is how effectively and efficiently the transport and transit facilitation measures improve all steps and aspects of the supply chain and logistics system, especially in terms of time and cost.

The perspectives and the main products that are potentially marketable between the TSR corridor countries (and to the rest of Africa) were analyzed and discussed in a CLRT study of 2009 and reviewed and updated in the analytical work of the present study.<sup>4</sup> The main products recognized as advantageously marketable between the TSR countries are those exported by each country in significant quantities over several years between these countries.

The analytical work of the present study highlighted that once the identified non-tariff barriers are addressed through the suggested trade and transport facilitation measures, the trade between the TSR countries will increase. As highlighted also by the CLRT study of 2009, the opportunities for development are in two main areas: (i) *for the sub-Saharan countries*: export of mining, agricultural and food products, and import of manufactured goods, including mechanical products, electricity, chemicals and pharmaceuticals, textiles, construction materials, agri-food; (ii) *for Algeria and Tunisia*: export of manufactured goods, including mechanical products, electricity, chemicals and pharmaceuticals, textiles, construction materials, agri-food, and import of mineral, agricultural and food products, and direct investment in water resources, energy, mining, transport logistics.

### Trade and transport facilitation aspects in TSR corridor and TSR diagnostic and performance assessment

The efforts made so far, since the 70s, on the TSR corridor have mainly focused on the road infrastructure side. While these have yielded remarkable achievements in highway construction, there is still a lot to be done on the road missing links, road maintenance policies, funding and sustainability, road safety, speed limits, the port accesses, the dry ports and customs depots, as well as the border crossings/posts.

Regarding transport, transit and trade facilitation, the analytical work of the present study and the available evidence from different documents, as well as the diagnosis they provide, highlighted the low level of importance given to the soft aspects, which results in poor performance of the corridor. The analysis shows that much is still to be done to address issues related to: (i) customs processes, exchange of

<sup>3</sup> Algeria–Mali Trade: The Normality of Informality, Sami Bensassi, Anne Brockmeyer, Mathieu Pellerin, Gaël Raballand, Democracy and Economic Development, Economic Research Forum, 2015, <http://documents1.worldbank.org/curated/en/839641468186541299/pdf/101137-WP-P148610-PUBLIC-Box393259B.pdf>.

<sup>4</sup> CLRT (2009).

information, risk management, ICT use; (ii) lack of trade promotion and facilitation; (iii) lack of logistics services and capacity building in these services; (iv) weak trucking industry and transport services; (v) high cost and lengthy time of transport and transit through the supply chain, and ports congestion; (vi) uneven use of national single window platform and processes, and unoptimized and ineffective when they exist. Due to the constraints along the corridor roads and the challenges hampering the overall corridor performance, the transport costs and times are too high by international standards and compared to other African sub-regions and groups of countries even with landlocked ones.

In addition, the TSR corridor lacks harmonization, at the national and regional levels, of procedures and processes in support of corridor performance, particularly: (i) institutional, legal, and regulatory context; (ii) disparity of transboundary issues such as axle loads, vehicle insurance and inspection; (iii) relevant conventions ratification and enforcement; (iv) addressing the landlocked and transit specificities, needs and requirements; (v) use of ICT, data collection, treatment and knowledge-sharing; (vi) overall economic corridor coordination and management, monitoring and evaluation, performance.

Well-performing trade and transport corridors can have significant impacts, reducing trade costs and time and enhancing the competitiveness of communities, cities, regions, and countries, especially where the countries are landlocked.

## 6 - Need for improving the TSR corridor performance

The political will of the governments of the TSR corridor and their commitment are reflected in the massive investments in the road infrastructure so far and their willingness to implement additional needed actions to achieve regional economic integration. The report details the most critical improvements needed and issues to be addressed – in sequences and phases – to move gradually from road corridor to transport corridor, to logistics corridor, to economic development corridor, to regional economic corridor, and, finally, regional economic integration.

The efforts for improvements require significant resources from all development partners, with a focus on promoting unfettered, efficient, and cost-effective access to the sea for the landlocked countries, improvement of transport infrastructure and services, completing missing links in the corridor, reducing costs and non-tariff barriers through simplification and standardization of regulations and procedures, and enhancing of digital development. With the needed sustainable improvements, the TSR corridor should also aim at becoming competitive for the landlocked countries, particularly Mali and Chad, which both have alternative routes to the sea.

Once the measures (hard and soft) to address the constraints of the trade and transport facilitation and the performance of the logistics and the supply chain are put in place and operational, including as part of the African Continental Free Trade Area (AfCFTA) agreement, trade will develop and increase between the TSR corridor countries and from the countries to the rest of Africa. The performance of the corridor and its competitiveness can trigger greater inter-continental trade and will position the TSR corridor as a main trade link between northern, central, and western Africa.

### Evolution from road corridor to economic corridor, to regional economic integration

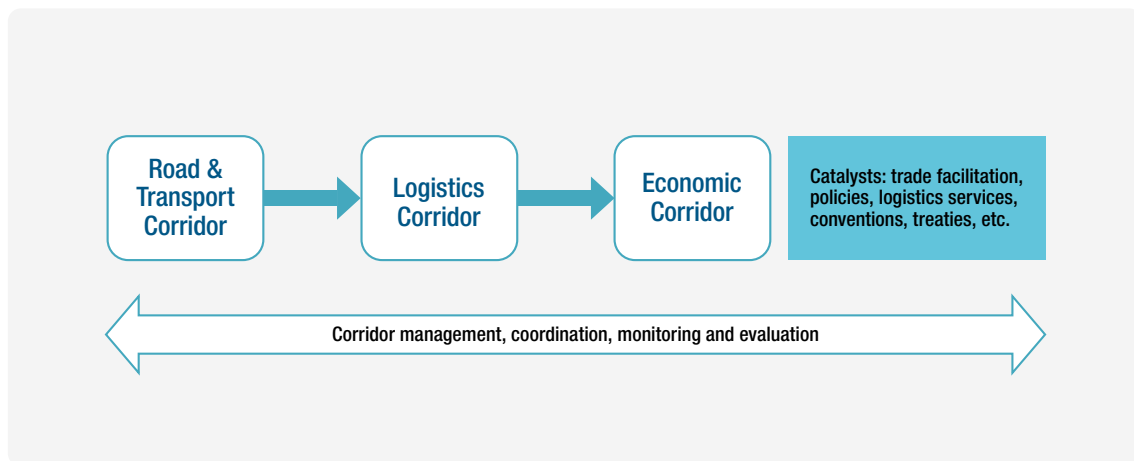
The TSR corridor governments are aiming for sub-regional and regional economic integration. This objective lines up with the goals of the AU and the support strategies of the international development partners and UN agencies (such as UNCTAD) and international financial institutions (IFIs, such as ISDB which puts regional integration as a priority focus). The AfDB has also made regional economic integration one of the focus areas of its overarching twin objectives of the ten-year strategy (2013-2022), which are the achievement of inclusive growth and the transition to green growth.

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The hard and soft improvements needed are complex, multi-sector, multi-dimension, and multi-country (at national and regional levels). For proper implementation they need to be planned, sequenced, and prioritized for effective and efficient performance of the corridor. They also involve several government levels and agencies as well as private sector. Adequate coordination is needed together with tight monitoring, evaluation and knowledge and best practice sharing. This requires a proper management and coordination scheme that integrates all aspects with a holistic vision and adequate planning, coordination of multiple actors, disciplines, sectors, and cross-cutting dimensions, and supported by appropriate monitoring and evaluation mechanisms.

The suggestions of TSR improvements and recommendations given under the present study, including a corridor management mechanism, are intended to move the TSR gradually from road corridor to transport, logistics and economic corridor as shown below.

### STAGES OF DEVELOPMENT OF AN ECONOMIC CORRIDOR



### Improvements to TSR corridor for evolution, performance and competitiveness

To maximize gains from a region's potential, it is important that the countries ensure adequate infrastructure connectivity. Among various connecting infrastructure, transport plays an important role in poverty reduction, inclusive growth, trade, and economic integration. Connectivity entails hard physical infrastructure within and across countries. The development and functionality of such hard infrastructure can only be ensured if it is supported by proper soft infrastructure, namely a framework consisting of effective policies, strategies, regulations, governance, institutions, systems, procedures, and knowledge.

For most countries the lack, or inadequacy of implementation mechanisms jeopardizes the development of seamless transit systems. Although the financing needs for soft infrastructure are much lower than those of hard, they are nonetheless complex, and require more time to develop and massive regional and national efforts of efficient planning, coordination, and management.

For its performance and competitiveness, the TSR corridor would require hard infrastructure (missing links, border crossings, etc.) and soft measures (regulations, policies, technological instruments, ICT, harmonization, and simplification of exchange of information, conventions, institutional, capacity building, etc.), and to put in place effective and efficient regional transit systems on which landlocked countries depend for trade with and through their neighbors, and to facilitate the movement of goods and vehicles.

Facilitating trade flows between countries in the same subregion requires not only an adequate transport infrastructure, but also competitive and reliable transport and transit services. However, both requirements can be met effectively only to the extent allowed by the legal framework governing their opera-

tions. Future regional economic integration can be achieved not only by the harmonization of national policies, but also by the preparation, ratification, and implementation of multilateral legal instruments. These instruments provide the framework needed to underpin the sustainable development of trade flows, which support economic growth and employment generation.

The required improvements for the TSR corridor performance and competitiveness are complex and they need to be adequately planned, sequenced, and prioritized for proper and efficient implementation. They also involve several levels of government and agencies as well as the private sector. Close coordination and proper management scheme are needed together with tight monitoring, evaluation and knowledge and sharing of best practices.

### **Potential benefits from improved transport connectivity, transit, trade, and trade facilitation**

Major benefits will result from a well-performing and competitive TSR economic corridor, especially on the transit regime, the cross-border supply chains and trade facilitation, the inclusiveness, equity, and sustainability, and on improving trade and competitiveness through reducing cost and time of travel. International experience shows that improving connectivity (nationally, regionally, and globally) tends to have a positive impact on trade competitiveness and, ultimately, job creation and income growth. The drop in the cost of transport will improve opportunities for trade and the movement of people.

## **7 - Corridor management schemes: international experience and practices**

Based on international experience and best practices in trade and transport corridor management and using objective selection criteria as detailed in the report, this study shows what model of coordination and management scheme could be adapted and adopted for the TSR corridor.

### **International experience for transport, transit, and trade corridor management schemes**

Several international organizations place emphasis on the facilitation of cross-country and inter-state trade along corridors. They particularly focus on identifying impediments to the efficient movement of traffic and seek to promote appropriate strategies for minimizing hurdles to such movement. This objective is also consistent with the SDGs, the Almaty Program of Action (2003) and the Vienna Program of Action (VPoA) for Landlocked Developing Countries for the Decade 2014-2024. Promoting the development of efficient and well-performing corridors can also be an effective mechanism for delivering on the SDGs and for reaping the full potential of the AfCFTA, which presents a major opportunity for the continent to boost intra-African trade and economic diversification, accelerate growth and value chain development as well as improve Africa's position in the global marketplace.

One of the contributory factors to the problems faced along corridors is the absence of appropriate institutions able to coordinate, proactively interventions to remove obstacles to movement. Corridors with management institutions have sometimes shown significant improvements in their operations. Institutions have been instrumental in facilitating dialogue between corridor stakeholders and harmonizing procedures and documentation used in transport and transit operations, resulting in reduced transit time and cost.

A corridor organization also provides a point of focus for stakeholders' efforts and a forum for identifying any major constraints on corridor performance. It also provides a focus for the lending programs of multinational organizations. While there have been variations in approach to the analysis of international trade corridors, a limited number of models have been applied.

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The study reviewed some international experience and best practices for transport and trade corridor management, including the sustainable financing of the corridor management structure. The experience presented encompasses different regions and sub-regions, different models of management and different types of support. The review included several examples of corridors in Africa, their management models, the constraints they faced, and lessons learned. The international regional experience included: the Trans-European Transport Network (TEN-T network) in Europe; the Greater Mekong Sub-region (GMS), the Association of South-East Asian Nations (ASEAN); the South Asian Association for Regional Cooperation (SAARC); the Central Asian Regional Economic Cooperation Program (CAREC); Economic Community for West African States (ECOWAS).

The examples of corridor management schemes covered under the study included: TRACECA (Transport Corridor Europe-Caucasus-Asia), Can-Mex (Canada to Mexico) corridors, Central American Common Market (SIECA), East Africa Northern Corridor, Southern Africa Maputo Corridor, Trans-Kalahari Corridor, Dar es Salaam Corridor, Lagos-Abidjan Corridor.

### Lessons learned from cases of corridor development and management

The review shows that the most successful multilateral corridor development programs have taken place within customs unions since these simplify the border-crossing procedures. In the case of the TEN-T network in the EU, the formalities for border-crossing were addressed as part of the technical annexes to the treaty. It was also highlighted that in general three aspects should be examined. The first concerns the characteristics of an international corridor and the parameters that define its performance. The second relates to the mechanisms available for improving corridor performance, especially at the border crossings. The third considers management techniques available for coordinating the development of corridors. International experience in trade and transport corridor development provides policymakers and development practitioners a wide range of lessons including those for treatment of transit, and a series of practical lessons that will help identify and address priority areas for policy reform and trade and transport facilitation programs.

### Criteria for selecting and adapting a management model for the TSR corridor

The recommendations made in this study for improvements of the TSR corridor are linked to each other. They need to be implemented in the proposed sequences to have maximum impact. Unless there is an institutional arrangement that oversees their implementation, such coordinated plan of action is unlikely to happen. Experience in different trade corridors shows that a proper management mechanism can effectively bring the needed coordination. It can ensure that the trade facilitation measures implemented in one country are supported by comparable measures in other countries in the corridor. It can also ensure that the actions within any country are implemented under a holistic cooperation framework. The coordination that such a mechanism/scheme can bring is particularly important for transport infrastructure, where the investments of one country depend entirely for their success on the presence of comparable infrastructure in the neighboring countries along the corridor.

The criteria and guiding principles for selecting and adapting a model for a trade and transport corridor management scheme should cover: (i) what are the objectives of the corridor development; (ii) what will be the activities of a corridor management system; (iii) what type and form of organization of a management system; (iv) what will be the sustainable funding of the management scheme; (v) what is the political will and commitment of countries, and the operational readiness of a management scheme, i.e. how fast it can be operational.

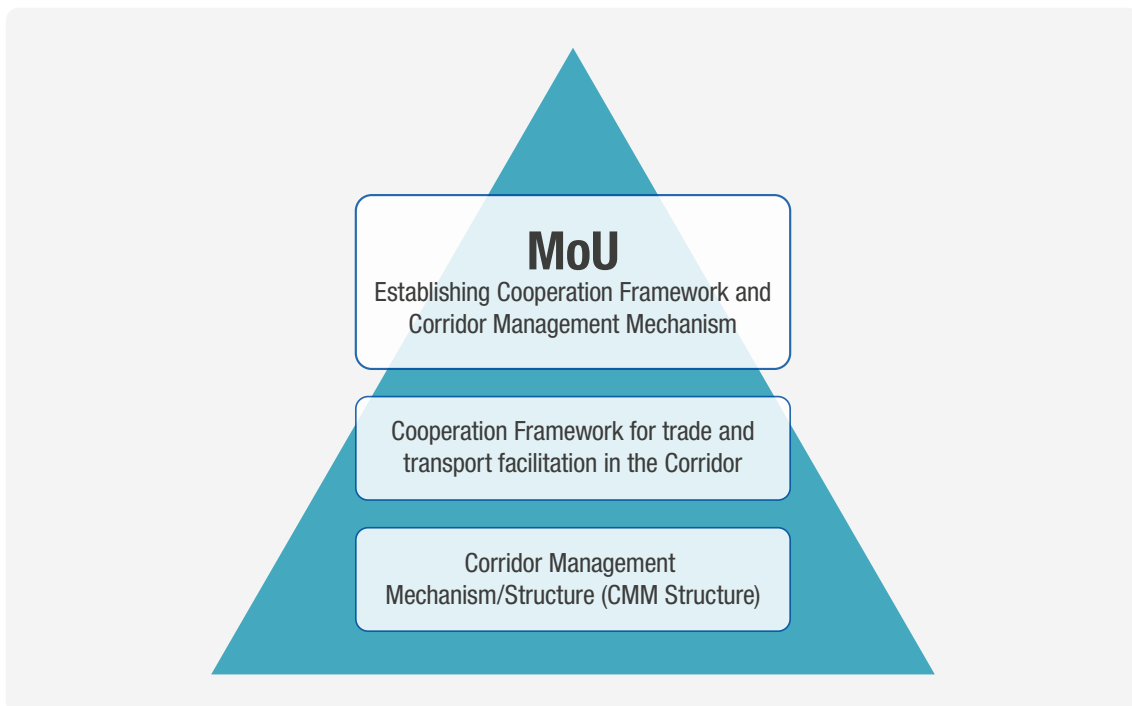
## 8 - Recommendation for the TSR corridor management scheme and functioning

Following the review of international experience and best practice in trade, transport and transit corridor management schemes and drawing upon insights from the analytical work carried out, the study makes a proposal for a regional management scheme to be adopted for the TSR corridor, its structure, composition, responsibilities, and financial sustainability. The structure would ensure coordination of the trade and transport and transit facilitation measures, support their effective implementation and overall smooth operation of the corridor, carry out management and commercialization of the corridor as well as performance monitoring, training, and knowledge sharing.

### Proposed model of management scheme for the TSR corridor

Examining different cases and best practices from experiences elsewhere and applying the set of criteria and guiding principles on how and what model to select for the TSR corridor, allowed to propose a management scheme for the TSR corridor. The proposal for legal and institutional arrangements for the management of the TSR corridor is summarized in the following figure.

#### LEGAL AND INSTITUTIONAL ARRANGEMENTS



The study proposes a three-component arrangement: (i) a Memorandum of Understanding (MoU) between the TSR corridor countries establishing a Cooperation Framework and a Corridor Management Structure/Mechanism; (ii) a Cooperation Framework (CF) among the TSR corridor countries for trade and transport facilitation and other relevant aspects; (iii) a formal institutional Corridor Management Mechanism/Structure. These three components once adopted and enforced by the TSR corridor countries would support the evolution towards an economic corridor and lay the ground for the ultimate objective of regional integration.



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The TSR corridor countries recognize the crucial importance of efficient, reliable, and safe transport infrastructure and services to regional integration and the sustainable economic and social development of the countries. The analytical work that led to the suggested legal and institutional governance and arrangements for the TSR Corridor is outlined in the report. The details and proposed aspects to be covered under the MoU, CF and CMM structure are included in Annexes 4, 5, and 6 of the report.

### The Memorandum of Understanding (MoU)

The proposed MoU is without prejudice to the competence of the signing ministries delegated by their respective governments of the TSR countries. For the sake of flexibility, all cooperation activities in the context of the MoU are based on the voluntary commitment of the parties and other stakeholders involved, and the MoU remains in force unless terminated in writing by any of the parties.

### The Cooperation Framework (CF)

The strategic cooperation framework would outline the long-term common targets/strategy for member countries and their development partners, particularly to increase coordination and effectiveness of facilitation measures, and to avoid inconsistency in facilitation efforts and conflict between different existing facilitation agreements or measures. The framework would constitute an effective legal regime and give the long-term common targets for essential and critical issues for transit transport facilitation, particularly: road transport permits & traffic rights; visas for professional drivers & crew; temporary importation of road vehicles; road safety; insurance of vehicles; vehicle weights and dimensions; vehicle registration and inspection certificates.

To provide a focus for collaborative efforts, cooperation and exchange of experiences among the TSR corridor member countries, some of the key modalities suggested are: (i) building an effective legal regime especially for accession to selected international facilitation conventions; (ii) sub-regional and bilateral agreements; (iii) wider applications of new technologies (including green technologies); (iv) development of professional training; (v) establishment/strengthening of national facilitation coordination mechanisms; (vi) promotion of joint control at modernized border crossings; (vii) promotion of economic zones at border crossings, dry ports and logistics centers; (viii) further application of facilitation tools.

For the TSR Corridor countries, the establishment of efficient transit transport systems through cross-border corridor arrangement schemes can provide genuine partnerships between landlocked and transit countries based on mutual benefits deriving from the specific actions that the countries major stakeholders may agree to undertake in the VPoA.

The framework encourages the landlocked and transit countries to join relevant international conventions, particularly the TIR Convention, the Harmonization Convention, and the Revised Kyoto Convention given their potential benefits, as well as agreements with a view to promote the harmonization, simplification and standardization of rules, formalities, and documentation transport. It is a platform for effective information exchange, including information protection issues, limitations on the use of information and provides for harmonization of information requirements in line with international standards.

As an important benefit, the cooperation framework will be the occasion for strategies and experience sharing on promoting customs cooperation. Customs administrations would modernize their customs transit regimes, based on the World Customs Organization (WCO) Transit Guidelines to facilitate movement, and support economic development of the landlocked countries. They would enhance cooperation with other border regulatory agencies to effectively implement the World Trade Organization (WTO) Trade Facilitation Agreement (TFA) and would cooperate with each other to ensure smooth movement of transit goods, including data exchange of transit goods. All six TSR corridor countries have signed the AfCFTA agreement, which should accelerate harmonization of transit agreements, transport regulatory requirements, standards, systems and customs procedures guided by the objectives of the AfCFTA.



## The Corridor Management Mechanism/Structure (CMM)

Based on the international experience review, the selection criteria, and guiding principles, the institutional setup suggested for the management mechanism/structure of the TSR corridor is a two-tier arrangement comprising an Oversight Committee (or Steering Committee) and a Permanent Executive Secretariat. The oversight committee would include high-level representatives of ministries or national agencies responsible for transport, public works, trade, and customs. Representatives of port authorities, transport regulation and road safety agencies, as well as the private sector (trucking industry, logistics operators, freight forwarders) could be added as the TSR governments may agree on.

The role of the Oversight Committee would be limited to helping address and solve any issues and policies that may hamper trade, logistics, transit, and transport facilitation. The Oversight Committee may elect a smaller group to act on its behalf. The committee can also agree with the Permanent Executive Secretariat to establish such working groups as may be required to address specific issues. The oversight committee would meet once a year, rotating through each of the member countries. The corridor executive secretariat would organize the meetings of the committee.

The Oversight Committee would be supported by a Permanent Executive Secretariat, i.e. the main coordinating, managing and technical body of the corridor management structure. The Secretariat would at a minimum have the following positions: (i) a Secretary General; (ii) a transport and trade facilitation expert; (iii) an administrative assistant. The Secretary General may, in consultation with the Oversight Committee, appoint such persons as members of the secretariat as may be required for the proper discharge of the secretariat's functions. Any member country may, to support the work of the secretariat, second a person to serve as a full- or part-time in the secretariat, subject to such conditions as the Secretary General may determine in consultation with the Oversight Committee. Members are encouraged to make in-kind contributions to the initial setup of the Permanent Secretariat, such as equipment and travel costs.

The scheme for discharging responsibilities of the proposed corridor management mechanism includes, and may not be limited to: (i) monitoring performance of transport operation along the corridor, and the concerned national, regional and global supply chains; (ii) disseminating results of monitoring through conferences, publications, and media at all levels; (iii) informing and engaging corridor member state authorities and other relevant stakeholders; (iv) supporting common/standard procedures and regulations development and implementation; (v) supporting capacity building initiatives of key institutions engaged in trade and transport operations (customs, clearing and forwarding agents, insurance companies, transport infrastructure management agencies, transport, and logistics operators, etc.); (vi) networking with international, regional, and local partners concerned with trade and transport corridor management, and exchange of experience.

The main functions of the Executive Secretariat would cover such areas as: organizing oversight committee's meetings and stakeholder workshops, finalizing meetings minutes and reports; supervising and providing technical advice to the advisory/working groups; liaising with and participating in development of policies, regulations, standards, safety, risk management, harmonization mechanisms; promoting and marketing the corridor through dissemination of information, publication of a newsletter and a website, participation in exhibitions and trade fairs and by undertaking marketing visits; establishing productive working relationships with other regional corridors and institutions, and international organizations.

As supported by the model selecting criteria and guiding principles, to expedite establishing the proposed management mechanism for the TSR corridor, and for the sake of operational efficiency, it is suggested to build on the existing CLRT. The member countries of the TSR corridor may want to amend the organic statutes of the CLRT to include the Oversight Committee and the Executive Permanent Secretariat with their prerogatives, roles, responsibilities, and composition as described above.

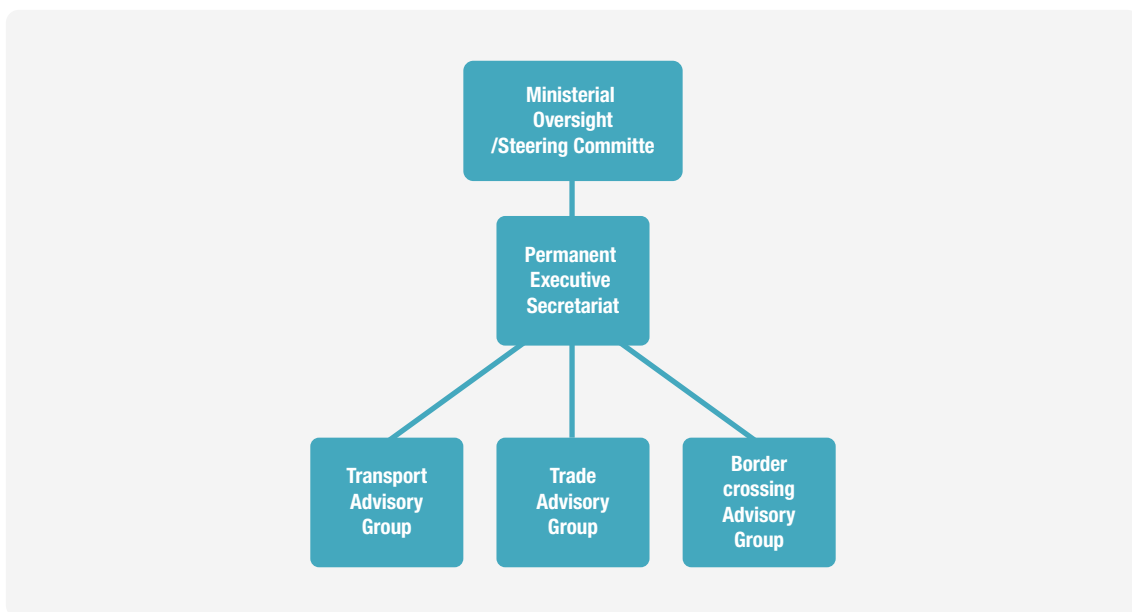
It is suggested to rename the CLRT and give it a name that would relate to the economic corridor vision, the wider approach of trade, logistics, transport, and transit facilitation corridor as well as the function of corridor coordination and management. The new suggested name of the structure could

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be “Trans-Saharan Economic Corridor Coordination Committee” (Comité de Liaison et Coordination du Corridor Economique Transsaharien”, CLCCET). The existing legal statutes of the CLRT would be revised and amended. These have not been ratified by the countries concerned; they were simply approved by the representative of each of the member countries on the Committee.

This would be a good occasion and opportunity to revise the statutes, amend and have them officially ratified by the TSR corridor member countries. It would also be the occasion to address the funding (on a sustainable basis) of the corridor management mechanism. The existing CLRT secretariat (which would be kept, to become the Executive Permanent Secretariat) would also need to be strengthened in terms of composition, staffing, competencies, and equipment (ICT) as suggested above, as well as sustainable financial support. The proposed corridor management structure is summarized in the figure below.

### CORRIDOR MANAGEMENT MECHANISM (CMM)\*



\*Amend existing CLRT organic statutes<sup>5</sup> to setup the CMM



### Funding of the TSR corridor management structure and its costs

The proposed corridor structure (especially the Permanent Secretariat and its activities) needs reliable sources of income to be able to finance its functions. The activities will likely be reflected in action plans prepared by the governments with contribution of the TSR management structure. The plans generally aim at enhancing the performance of all players in the logistical chain. Implementation of the action

<sup>5</sup> Available at: <http://www.clrtafrique.com/index.php>.

plans rests with the governments or the business community (shippers, transporters, clearing agencies, port authority, etc.) should they see the benefits of making contribution. Two critical aspects should be properly addressed: the overall sustainability of the corridor management scheme, and the financial sustainability, without which the scheme collapses. Any corridor management requires stable sources of funding to achieve its goals. These aspects would be laid out in the legal instrument defining the strategic cooperation framework and statutes of the corridor management structure.

Typically, the main costs associated with establishing corridor management structure would be secretariat office accommodation, salaries, and benefits of secretariat staff; information dissemination; corridor performance monitoring; studies and technical proposals to enhance corridor performance; and oversight committee and stakeholder coordination meetings. Funding arrangements could initially include membership (countries, autonomous agencies, etc.) fees, contributions by governments, traffic-based usage fees (if feasible initially), and donor support (through trade and transport facilitation projects and/or programs). Experience shows that in the first instance membership contributions and/or donor funding are necessary to establish and support a corridor management structure.

## 9 - The way forward: proposed regional program and action plan for support by TSR countries and development partners

The present study report gives a proposal for regional program/projects to be prepared and implemented in phases with the technical and financial assistance of international development partners (such as IsDB, UNCTAD, etc.). This would also include the arrangements for overall monitoring and evaluation of the program, its achievements, results and impacts as well as the progress towards regional economic integration.

Experience has shown, especially in Africa region, that regional projects involving several countries, several sectors, investments and complex policies, regulations and reforms are better identified, prepared, and implemented when they are supported (TA and financing) by international development organizations and IFIs. It is therefore suggested that the program/projects proposed below, and which involve hard and soft activities be identified, prepared, and implemented with the financial and technical support of international partners. The following provides the broad outlines of the proposed operation which, if agreed between the governments and the international partners (UNCTAD, IsDB, etc.) would be prepared as a “bankable operation” and according to the project cycle steps, rules and guidelines. The overall objective of the proposed TSR regional economic corridor development program/project is to promote trade within the subregion and between the subregion and the rest of Africa and the world, commercialize the corridor, support it to evolve gradually towards an economic corridor, and support economic development along the corridor. The program would be implemented in two or three phases.

The objective of a **first phase** could be to lay the ground for increased trade within the subregion and between the subregion and the rest of the world. The **second and eventually a third** phase would follow with sets of investments and policies. The objectives of this second phase (trigger and promote trade within the subregion and between the subregion and the rest of Africa and the world, and support economic development along the corridor) will be achieved by integrating customs systems and harmonizing customs regulations, improving infrastructure at border crossings, and modernizing them, joining and ratifying relevant conventions, and rehabilitating and reconstructing key road missing links as well as logistics systems and transport services.

The beneficiaries of the project include people and entities that directly benefit from the infrastructure financed by the project, as well as private and public participants in the trading process. The private sector participants include exporters and importers, and the providers of transport and logistics services (e.g. trucking companies, warehousing, customs brokers, and freight forwarders). The public sector participants include customs agencies and others requiring border inspection, highways, transport, and

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ports agencies. Travelers and tourism would also benefit. Improved facilities and procedures will reduce the transport cost, shorten their waiting time, and improve their travelling conditions.

Proposed program/projects phases and components: **the first phase** of the program would be prepared relatively quickly and implemented over a short period of time (two years), and would consist of:

- setting up the scheme for TSR corridor management and the institutional arrangements for program preparation and implementation (including MoU, CF, and CMM);
- setting up the regional strategic trade and transport facilitation improvements framework;
- trade promotion and corridor commercialization strategy and plan (including marketing plan), trigger intercontinental trade and integration into the global supply chain;
- support for ratifying conventions, agreements (TIR and other relevant conventions) and trigger position of the TSR corridor as a trade link between north, central and western Africa;
- preparation of next phase of the program;
- program implementation and monitoring, with clear performance indicators.

**The second phase** of the program/project, over a longer period (five years) would comprise four components consisting of:

Follow up of soft measures, i.e., institutional arrangements and regional trade framework improvements

- continuous support to TSR Corridor management scheme;
- modernization and harmonization of customs and related services, ICTs;
- regulation and competitiveness of logistics and transport services; and
- Consultations between governments and businesses to support trade development among members countries.

Hard Infrastructure improvements

- completing missing highway links, rehabilitation, maintenance of road corridors, addressing road safety issues, improving physical and digital connectivity (road and ICT) for economic and social development along the TSR corridor, developing required infrastructure including logistics centers/parks and dry ports, addressing ports issues, accesses, and efficiency;
- connecting TSR countries production centers with markets and integrating local production centers into African and global supply chains including through development of required trade and logistics infrastructure and services along the corridors;
- supporting export of main products that have been identified as potentially marketable between the TSR countries and to the rest of Africa .
- upgrading and modernizing border crossings infrastructure and facilities;
- promoting ICT connectivity and green technologies;
- adopting environmentally sustainable policies essential for long-term, inclusive development;
- supporting exchange of information about import, export and transit processes and procedures.

Preparation of potential follow-up investments and national development projects

- technical studies and environmental and social impact assessments of the major investments proposed for follow-up;
- trade development between the TSR corridor countries and between the countries and the rest of Africa and the world;
- prepare national economic and social development projects.
- Program implementation and monitoring and evaluation
- management activities associated with program implementation;
- establishing and implementing a comprehensive monitoring and evaluation (M&E) system with clear performance indicators (such as: traffic volumes, transport cost, turn-around time of trucks, port dwell time, border post transit times, variation of all these times);
- training and capacity building of concerned government agencies and entities.



