

# The Trans-Saharan Road Liaison Committee TRLC

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### STUDY OF IDENTIFICATION OF POTENTIAL TRADE BETWEEN THE MEMBER COUNTRIES OF THE TRANS-SAHARAN ROAD LIAISON COMMITTEE

Financed by the ABEDA

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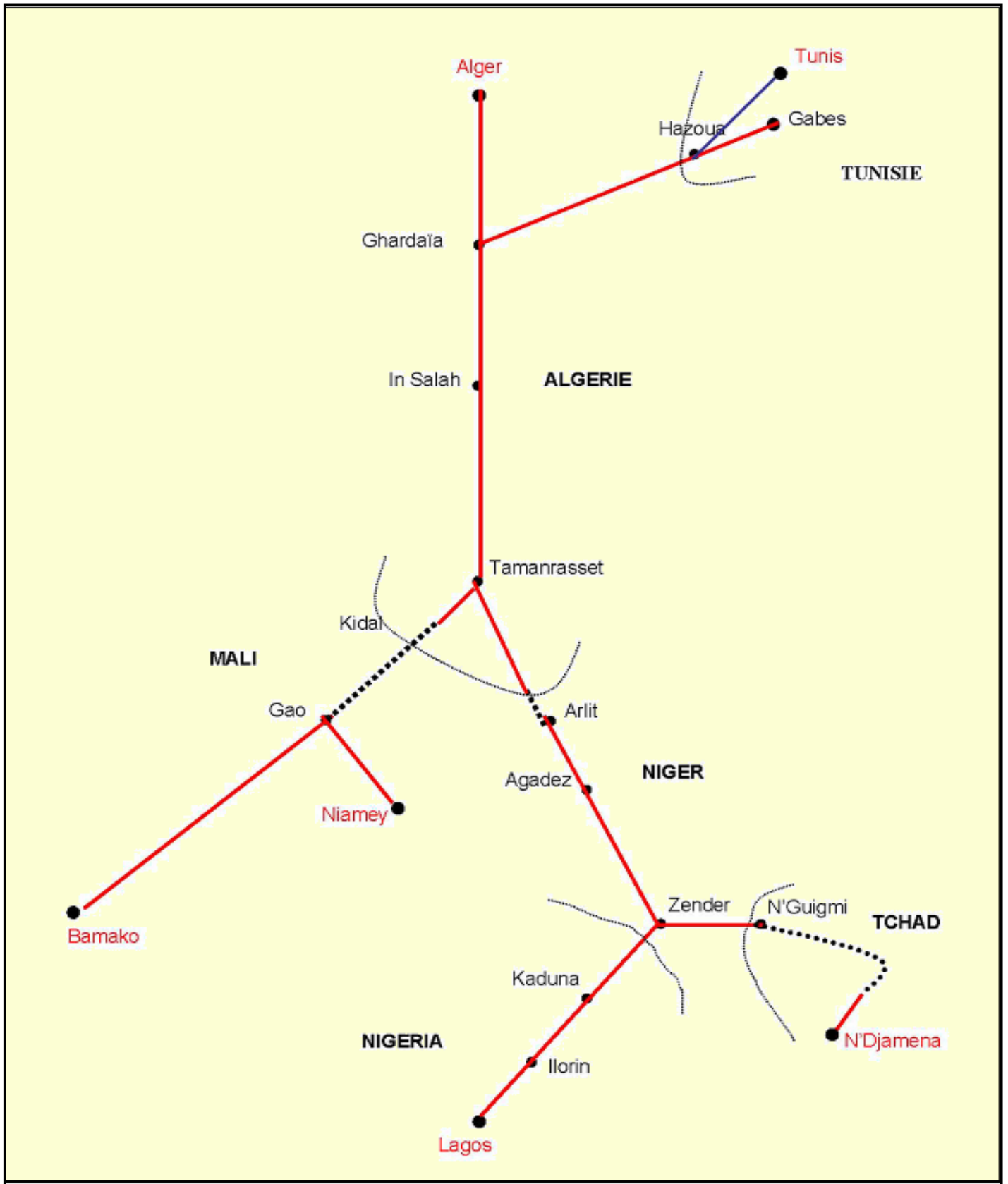
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## Schematic layout of the Trans-Saharan Road



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# PRESENTATION OF THE STUDY

## PURPOSE AND CONCLUSIONS OF THE STUDY

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This study focuses on " the identification of potential trade between the 06 member countries of the Trans-Saharan Road Liaison Committee (TRLIC): Algeria, Tunisia, Mali, Niger, Chad and Nigeria"

Generally conducted under the terms of reference, the study gave rise to the following conclusions:

### 1. The study presents the TSR in its context and its progress

- The TSR, historically first African project of its kind, is part of the African programme of road infrastructure conducted across the continent, covering 9 major roads to link the capitals of all African countries with an aim to facilitating, through trade, the economic and social development and integration of the continent.
- The TSR, in its effects on the development of trade between countries in the region, has an area of direct impact within the 6 concerned countries representing a wide geographic, demographic and economic scope:
  - 32 regions and 74 urban areas crossed
  - 4.4 million km<sup>2</sup>
  - 60 million inhabitants
- The TSR is at the following progress stage :
  - Length of the project : 9 022 km
  - Covered : 7 171 km (80%)
  - Uncovered : 1 851 km (20%)

### 2. The study identifies the potential trade between the 6 countries through:

- The volume of trade between the TRLIC member countries, generally characterized by:
  - The very limited level, in terms of total foreign trade, of these countries.
  - A double concentration of trade: Algeria-Tunisia, on the one hand, and Niger-Nigeria, on the other.
  - The existence of extensive informal trade across the borders of the 6 countries.
  - An instability relating to economic conditions in these countries particularly sensitive to the natural conditions and energy prices
  - A four-decades experience in the so-known "barter trade" initiated by Algeria to develop the economic relations between southern Algeria and the border areas of Mali and Niger
  - The positive prospects for the development of trade, in general, with the arrival of 3 new countries of the area in oil industry, Chad in its commencement, Mali and Niger in prospect.

- The marketable products (excluding oil) between these countries, identified from the evolution of exports within the recent years and characterized by a degree of specialization:
  - Manufactured goods for Algeria, Tunisia and Nigeria
  - Minerals, agricultural and livestock products for Mali, Niger and Chad.
- The comparative cost of transporting goods to landlocked countries, Mali, Niger and Chad, from ports in the Gulf of Guinea, as observed currently, and the Maghreb ports, as a new option, with:
  - The presentation of existing capacity in terms of infrastructure, distance, time and costs of various routes of transit of goods (imports and exports), from two port rows in question,
  - Analysis of the facilitations required for the international transit of goods,
  - The identification of an economic benefit of the Maghreb ports row for the supply of the 3 landlocked countries, particularly for their northern regions,
  - Recommending the opening of transit corridors Maghreb ports-landlocked countries (Mali, Niger, and Chad) with appropriate proposals in terms of infrastructures and facilitations.
- The advantages and constraints characterizing trade between the TRLC member countries, especially between the two sets of its component countries: Maghreb countries and sub-Saharan countries, related to:
  - the economic potential,
  - the membership in regional organizations.

### 3. The study puts forward two proposals for the development of trade between the 6 countries:

- **Proposal 1:**

The establishment, at the initiative of the trade ministers of the TRLC member countries, of a **common institution responsible for supporting and promoting trade between these countries**. This institution, implemented by the States concerned may, at a later stage, be transferred to the chambers of commerce.

- **Proposal 2:**

A list of **20 actions** (infrastructure projects, training and technical assistance) aiming at the enhancement of trade between the TRLC member countries, identified in the areas of production, transport and facilitations.

### 4. The study outlines the framework of the Arab-African trade, with:

- The overall situation of the economic exchanges between the Arab countries and the sub-Saharan African countries.
- The presentation of the ABEDA, within its missions and achievements.
- A list of **13 actions** (infrastructure projects, training and technical assistance), proposed by country or in common to the 4 sub-Saharan African countries and likely to:
  - Contribute to the promotion of trade in these 4 countries, between themselves and with the two Arab countries of the Maghreb, second set of the TSR area,
  - Be part of the funding policy of the ABEDA, in favour and at the request of the sub-Saharan member countries of the TRLC.

## PARTIES OF THE STUDY

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This study was developed in 2008/2009 at the request of the Secretary General of the Trans-Saharan Road Liaison Committee (TRLIC), with funding without repayment from the Arab Bank for Economic Development in Africa (ABEDA).

Following an international tender, the project was entrusted to the grouping TAEP (Kuwait)/CEGEP (Algeria).

The provisional final report has been presented by the Grouping, in Niamey- Niger on 29-30 June 2009, in the presence of:

Mr Halidou BADJÉ	Niger's Minister for Trade and Industry,
Mr Lamido Moumouni HAROUNA	Niger's Minister of Infrastructure,
Mr Abdelaziz KHELAF	Director General of the ABEDA,
Various personalities and experts representing the member countries of the TRLIC.	

Those involved directly in the development of this study or took part in its follow-up are:

<b>TRLIC</b>	: Mohamed AYADI	Secretary General of the TRLIC
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ALGERIA	: Hocine NECIB	Director of Roads
MALI	: Issa DIALLO	National Director of Roads
NIGER	: Ibrahim ALLASSANE	Director General of Public Works
Tunisia	: Moncef ACHOUR	Director General for roads and bridges
NIGERIA	: CHUMA	Deputy Director of Highways
CHAD	: Ahmat IMAM	Director General of Roads

<b>ABEDA</b>	: Mahfoud BENGRINE	Senior Expert
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<b>TAEP</b>	: Nacer GUIDDOUM	Leader, expert in transports
<b>CEGEP</b>	: Arezki ISLI	Head of Mission, economist expert
	Other experts	Experts at the headquarters of the Grouping of consultancy firms within the 6 countries, in international trade, economics, road infrastructures and transport

# I

## THE TRANS-SAHARAN ROAD - TSR – Context - current Situation - Impact area

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### 1

## THE AFRICAN CONTEXT

### An infrastructure at the heart of economic, social and political stakes at the continent level

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The Trans-Saharan Road, for which this study aims to identify potential trade between the countries it directly concerned consists of the network major links connecting the capitals of the 6 countries: Algeria, Tunisia, Niger, Mali, Chad and Nigeria.

It is at the heart of crucial economic, social and political stakes for each country and beyond, for the region and the continent. Its evolution is confronted with many constraints that its progress even helps to remove through the trade that it aims to stimulate. However, the growth and diversification of trade requires the constant support of States individually and within their bilateral and multilateral relationships.

#### **The TSR: crucial stakes related to road infrastructure**

In all the documents presenting the overall or sectoral, national or regional development policies of the TSR countries, one can observe a common understanding on the establishment of the road among the conditions par excellence for the economic and social development.

The purpose of the road, in terms of goods and people movement, is significantly emphasized through its effects on:

- Creating activities and employment, through the exploitation of natural resources for which the road guaranties the products distribution, the supply of inputs and often labour transporting,
- The implementation of complementary infrastructures in all areas (energy, water, telecommunications, administration, housing, education, health) that the activities and employment induced by the existence of the road justify but which they also make possible.
- The development of economic and social exchanges between regions, hence contributing to open access to whole populations, the regional and national economic integration, the consolidation of national unity and the establishment of goods and people security.

More so than in the current development phase of these countries, the road also appears as the only viable alternative for passengers and goods transport given the other variously impaired modes: deficient, obsolete or under-exploited rail network, archaic and under-equipped river transport, and expensive air transport.

Yet, the road is simply vital for the three landlocked countries, Niger, Mali and Chad, whose foreign trade almost in its entirety ought to transit through the road formed by the corridors connecting them mainly to the ports of the Gulf of Guinea.

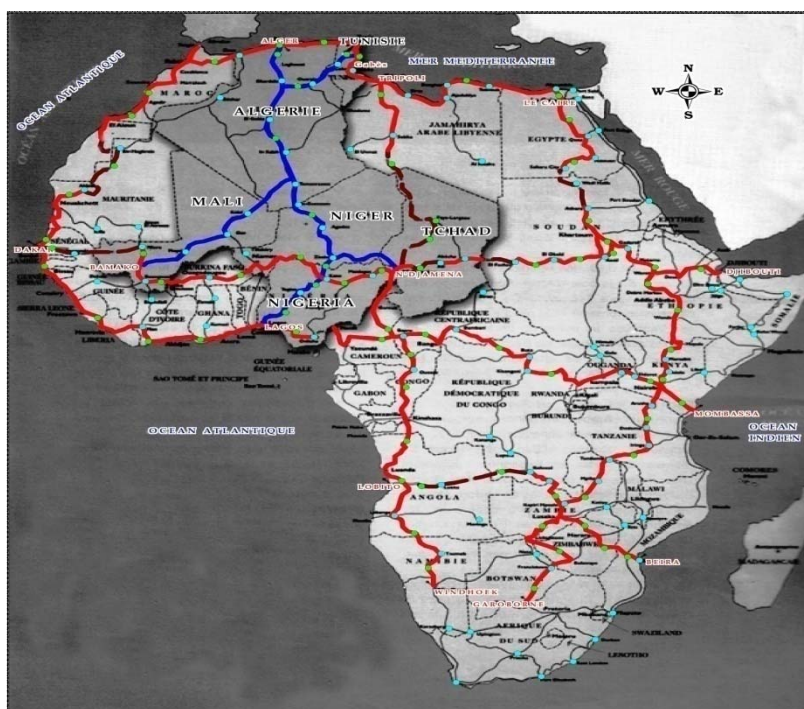
In the main, the economic policies of the states of all these countries consider the road as a major factor in the competitiveness of their domestic and foreign trade products, the economic growth and poverty alleviation.

For all these reasons, the road has a bias to the governments which include it among their priority investments whose assessment is to be conceived in more economic and social than financial terms and whose promotion should be mainly rely on a political will and a bet on the future.

### The TSR: an important link in the African road network

The TSR is part of an extensive programme of road infrastructure initiated and developed over the past forty years by the African countries as part of their political and economic organizations, primarily the African Union, the regional organizations (WAEMU, ECOWAS, CEMAC ...) and NEPAD. This programme revolves around 9 major roads:

Corridors	Countries crossed	Length Km
1 Cairo – Dakar	Egypt, Libya, Tunisia, Algeria, Morocco, Western Sahara, Mauritania, Senegal	8 636
2 Algiers – Lagos	Algeria, Niger, Nigeria	4 492
3 Tripoli – Windhoek	Libya, Chad, Cameroon, Central Africa, Congo, Congo (DR)	10 445
4 Cairo – Gaborone	Egypt, Sudan, Ethiopia, Kenya, Tanzania, Zambia, Zimbabwe, Botswana	8 984
5 Dakar – N'djamena	Senegal, Mali, Burkina Faso, Niger, Nigeria, Cameroon, Chad	4 580
6 N'djamena – Djibouti	Chad, Sudan, Ethiopia, Djibouti	4 291
7 Lagos – Dakar	Nigeria, Benin, Togo, Ghana, Côte d'Ivoire, Liberia, Sierra Leone, Guinea, Guinea Bissau, Senegal/Gambia	3 900
8 Lagos – Mombasa	Nigeria, Cameroon, Central Africa, Congo (DR), Uganda, Kenya	6 259
9 Beira – Lobito	Mozambique, Zimbabwe, Zambia, Congo (RD), Angola	3 563



==== : Trans-Saharan Road ===== Other African major roads

This programme responded to a vision of a continent endowed with basic infrastructures essential to its economic and social development, the full exploitation of its resources, its economic integration through the intensification of trade between the African countries and with the rest of the world, finally to its political cohesion, the designation “Road of African Unity” was not randomly given to the TSR at its launch.



Today, completed on average to three quarters but whose achievement carries on accelerating, this network of African roads has already profoundly changed the reality of communications and exchanges of the continent. It is supported by the cooperation programmes within regional organizations (WAEMU, ECOWAS, CEMAC...) and the international financing in favour of such infrastructures.

However, all the studies carried out show that its progress is confronted to two sets of constraints of cumulative effects:

- Constraints within each country: low density and poor conditions of roads, dilapidated fleet, embryonic road services irksome controls and insecurity, insufficient study and achievement skills, scarce national funding.
- Constraints at borders: non-harmonized or unclear rules, cumbersome entry procedures for goods and people, virtually absent hosting logistics, dominant informal trade.

All these facts combine to give the transport of passengers and goods across the continent the image of a development instrument that is still very weak in terms of diversity, density, competitiveness and security.

As part of this continental network, the TSR, articulated around the axis Algiers-Lagos, is of great importance because of its specificity:

- Its mesh, with the internal roads it is connected to and which provides an area of direct influence covering 6 countries,
- Its intervention in favour of opening up in both directions south and north of 3, the largest, of the 14 landlocked countries of the continent,
- Its determining role in establishing and strengthening relationships between the two geopolitical sets of the Maghreb and the sub-Saharan countries.

### **The TSR: relatively insufficient economic impacts**

The development and operation of the TSR in the 6 countries encounter, as it will show following the study, the same constraints as those faced by the other major roads within the African countries and at their borders for the transit of goods and people.

Up to date, the economic and social effects generated by the commissioning of the completed sections of the TSR show results that are:

- Satisfactory for trade within the countries and for the movement of goods through the transit corridors of the 3 landlocked countries (Niger, Mali, Chad), especially if one includes the informal trade that all authorities of these countries recognize as being particularly important,
- Well short of the expectations for trade between the neighbour countries, considering the volumes and values of reported bilateral imports and exports and vehicle traffic at the borders. This reality is all the more disappointing for the triangle Tamanrasset - Agadez - Gao, which is the heart of the TSR and whose road sections should be leveraged to achieve the three major objectives of the TSR: opening up of large areas northern Niger and Mali, enhancement of trade between both regions and the south of Algeria, the development of trade between the Maghreb and the sub-Saharan countries.

### **The TSR: constant attention of authorities and populations**

Despite delays in its implementation, 20% still unsurfaced to date, and a relatively small impact on trade, the TSR project continues to receive tremendous interest from authorities, in view of the investment programs, and raise great hopes among people, given the dynamism of professional organizations.

Thus, beyond the need for early completion of the sections in progress, and measures to tackle the constraints identified in the operation of roads, transport means, regulations and safety, it appears that the full confirmation of the TSR also involves the development of trade within and between the concerned countries, one of the very reasons for the construction of this road.

### **RTS: a need for the promotion of economic activities**

However, even if these exchanges are certainly made possible by the existence of the road, their development requires the creation of activities, especially in the rural development sector within the regions newly crossed and the rest of the country. To this end, the private initiative in the 6 countries concerned cannot do without the State support under its multiple forms notably the aid to entrepreneurship, to investments and projects operation.

### **The TSR: a necessary focus on economic exchanges**

All governments of the 6 countries have enrolled in their action programs promotion procedures in this sense. These policies deserve to be focused on the TSR due to the strategic nature of this infrastructure in the fight against poverty and isolation. They shall also respond to the need of strengthening the regional economic cooperation put forward by each and every one to benefit from the transfer of foreign trade flows in the wake of the globalization.

## 2

# THE ECONOMIC IMPACT AREA OF THE TRANS-SAHARAN ROAD

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### 1. Identification of the impact area

The economic impact area of the Trans-Saharan Road (TSR) is identified hereafter as consisting of three main spaces:

- **First space:**

- It consists of the regions crossed by or bordering the TSR in the 6 member countries
- The region is represented by the administrative district of each country:

Algeria : the Wilaya  
Tunisia : the Governorate  
Niger : the Region  
Mali : the Region  
Chad : the Region  
Nigeria : the State

- The regions crossed benefit directly from the Road
- The TSR is the most direct route for the border regions for their trade with the TSR member countries

- **Second space:**

- It consists of the other regions of each of these countries that are not covered by the first space
- The TSR presents an opportunity for these regions for their integration into the national road network

- **Third space:**

It consists of the countries bordering the TSR countries, most of which offer corridors for goods transport to foreign trade of the three landlocked countries of the TSR (Niger, Mali and Chad)

## 2. Presentation of the impact area

Accordingly identified, the economic impact area of the TSR is characterized as follows (2008):

- **First space:** Regions crossed

Country	Regions crossed		Area Million km <sup>2</sup>	Population Million
	Number of regions	Number of main urban areas		
Algeria	5	11	1.9	1.7
Tunisia	3	20	0.02	0.8
<b>Total Maghreb</b>	<b>8</b>	<b>31</b>	<b>1.92</b>	<b>2.5</b>
Mali	6	13	1.0	6.6
Niger	5	15	1.0	5.3
Chad	4	04	0.3	2.6
Nigeria	9	11	0.2	43.3
<b>Total Sub Sahara</b>	<b>24</b>	<b>43</b>	<b>2.5</b>	<b>57.8</b>
<b>General total</b>	<b>32</b>	<b>74</b>	<b>4.42</b>	<b>60.3</b>

- **Second space:** The rest of the country (not crossed)

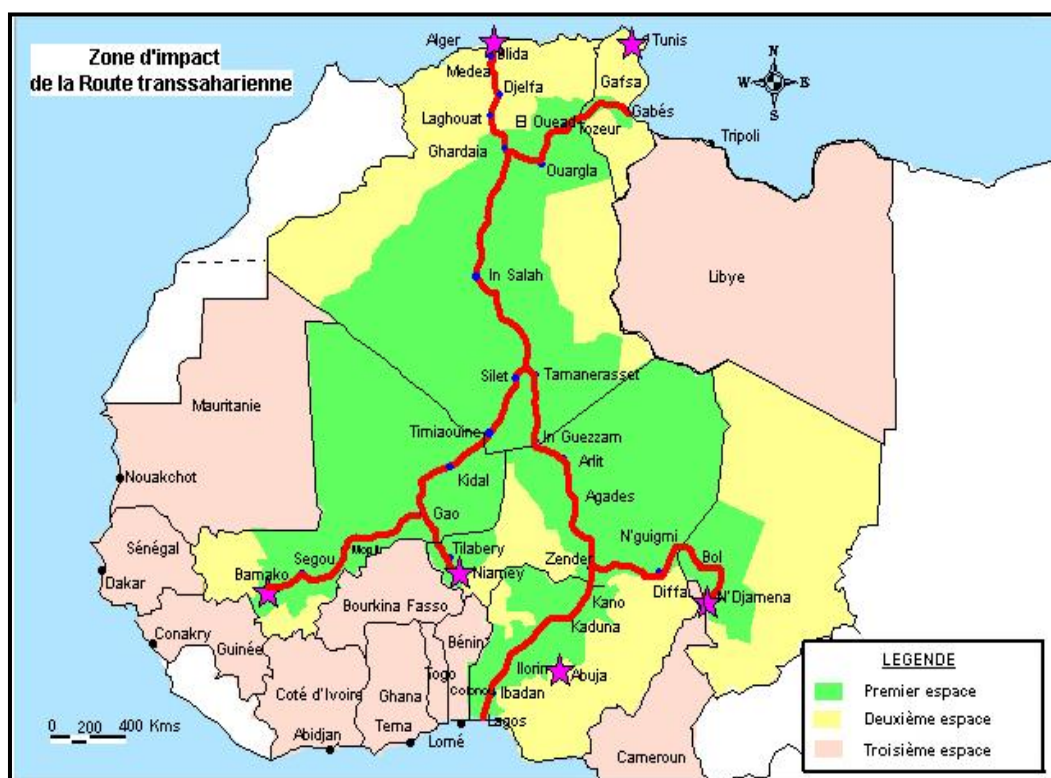
Country	Area Million Km <sup>2</sup>		Population Million		Imports US\$ Billion	Exports US\$ Billion
Algeria	(2.38)	0.48	(34.2)	32.5	38.9	75.1
Tunisia	(0.16)	0.14	(10.5)	09.7	23.0	19.7
<b>Total Maghreb</b>	<b>(2.54)</b>	<b>0.62</b>	<b>(44.7)</b>	<b>42.2</b>	<b>61.9</b>	<b>94.8</b>
Mali	(1.24)	0.24	(12.6)	06.0	2.4	0.3
Niger	(1.26)	0.26	(15.3)	10.0	0.8	0.5
Chad	(1.28)	0.98	(10.3)	07.7	1.5	5.5
Nigeria	(0.92)	0.72	(149.0)	105.7	46.5	83.1
<b>Total Sub Sahara</b>	<b>(4.70)</b>	<b>2.20</b>	<b>(187.2)</b>	<b>129.4</b>	<b>51.2</b>	<b>89.4</b>
<b>General total</b>	<b>(7.24)</b>	<b>2.82</b>	<b>(231.9)</b>	<b>171.6</b>	<b>113.1</b>	<b>184.2</b>

( ) Data between brackets: total of the country

- **Third space:** Bordering countries

Country	Area Million Km <sup>2</sup>	Population Million	Imports US \$ Billion	Exports US \$ Billion
Libya	1.76	6.3	20.7	66.2
Mauritania	1.03	1.1	1.5	1.4
<b>Total Maghreb</b>	<b>2.79</b>	<b>7.4</b>	<b>22.2</b>	<b>67.6</b>
Senegal	0.20	13.8	4.7	1.9
Guinea	0.24	10.2	1.9	1.4
Burkina Faso	0.28	15.8	1.7	0.8
Côte d'Ivoire	0.33	20.6	7.9	12.0
Ghana	0.24	23.9	9.8	5.5
Benin	0.12	8.8	1.4	0.8
Cameroon	0.48	18.9	4.4	5.3
<b>Total Sub Sahara</b>	<b>1.89</b>	<b>112.0</b>	<b>31.8</b>	<b>27.7</b>
<b>General total</b>	<b>4.68</b>	<b>119.6</b>	<b>54.0</b>	<b>95.3</b>

### 3. Diagram of the impact area



### Conclusion:

Thus, the impact area of the Trans-Saharan Road may be regarded as consisting of:

A first space representing:

- 32 crossed Regions
- 74 crossed urban areas
- 4.4 million km<sup>2</sup>
- 60 million inhabitants

A second space representing the rest of each of the 6 countries, namely:

- 2.8 million km<sup>2</sup>
- 172 million inhabitants

A third space representing the bordering countries:

- 7 countries, totalising:
- 4.7 million km<sup>2</sup>
- 120 million inhabitants
- U.S. \$ 150 billion of foreign trade against:
- U.S. \$ 297 billion for the 6 countries of the Trans-Saharan Road

### 3

## THE CURRENT SITUATION OF THE TRANS-SAHARAN ROAD

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### 1. Presentation of the Trans-Saharan Road

The proposed Trans-Saharan Road is a network of 9,022 km, consisting of a main axis from Lagos to Algiers and three connection branches towards Gabes, Bamako and N'Djamena.

**The main axis** crosses Algeria, Niger and Nigeria, and passes mainly through Ghardaïa and Tamanrasset, then Agadez and Zinder, and then Kano and Kaduna, over an overall length of almost 4,500 km. The main axis of the Trans-Saharan road is in the state of a surfaced road on 95% of its linear. With the completion of works on the Tamanrasset - In Guezzam section in Algeria, it remains about only a section of 238 km in the state of track between In Guezzam and Arlit in Niger.

**The Tunisian branch** connects the port of Gabes in Tunisia to the main axis of the Trans-Saharan road at the level of Ghardaïa via Gafsa and Tozeur, then El Oued, Touggourt and Ouargla in Algeria. With an overall length of 866 km, the Tunisian branch is entirely surfaced.

**The Malian branch** connects Bamako to Tamanrasset over an overall length of 2,461 km. The road is surfaced from Bamako to Gao over 1,236 km, and at the state of a 1,140 km length track between Gao and Silet, an urban area close to Tamanrasset. This track crosses Bourem, Kidal, and Timiaouine at the Algerian border.

**The Chadian branch** connects N'Djamena to the main axis of the Trans-Saharan Road at the level of Zinder in Niger, over an overall length of 1,197 km. The road is surfaced from N'Djamena with Massaguet, and under work between Massaguet and Massakory over 68 km. The Chadian branch is then, at the state of a summary track over nearly 473 km. It circumvents the Lake Chad by north and crosses Bol to join a surfaced road in Niger starting from Nguigmi.

The composition and the current situation of the Trans-Saharan Road network are summarized in the table below:

## THE TRANS-SAHARAN ROAD NETWORK

TSR	Country	Sections	Total length	Current situation	
				Track	Surfaced
Main axis	Algeria	Algiers - Tamanrasset - In Guezam	2,345		2,345
		In Guezam - Niger border	15	15	
		<b>Total Algerian sections</b>	<b>2,360</b>	<b>15</b>	<b>2,345</b>
	Niger	Algerian border - Assamaka - Arlit	223	223	
		Arilit - Agadez - Zinder - Nigerian border	784		784
		<b>Total Niger sections</b>	<b>1,007</b>	<b>223</b>	<b>784</b>
	Nigeria	Niger border Kogolam - Kano - Kaduna	363		363
		Kaduna - Ilorin - Lagos	768		768
		<b>Total Nigerian sections</b>	<b>1,131</b>		<b>1,131</b>
	<b>Total main axis</b>			<b>4,498</b>	<b>238</b>
Tunisian branch	Algeria	Ghardaïa – Tunisian border	565		565
	Tunisia	Algerian border - Gabes	301		301
	<b>Total Tunisian branch</b>			<b>866</b>	
Malian branch	Mali	Bamako - Gao	1,236		1,236
		Gao - Kidal – Algerian border	745	745	
	Algeria	Malian border - Timiaouine - Silet	395	395	
		Silet - Tit	85		85
	<b>Total Malian branch</b>			<b>2,461</b>	<b>1,140</b>
Chadian branch	Chad	Ndjamena - Massaguet	83		83
		Massaget - Massakory (*)	68		68
		Massakory - Bol- Niger border	418	418	
	Niger	Chadian border - Nguigmi	55	55	
		Nguigmi - Zinder	573		573
	<b>Total Chadian branch</b>			<b>1,197</b>	<b>473</b>
<b>Total network of the Trans-Saharan Road</b>			<b>9,022</b> <b>100%</b>	<b>1,851</b> <b>20%</b>	<b>7,171</b> <b>80%</b>

(\*) works in progress. (completion expected in 2010)

## 2. Current situation of the Trans-Saharan Road project

### In Algeria

In Algeria, the Trans-Saharan Road project covers 3,405 km. More than 85% is already surfaced whereas there is still a remaining 15 km unsurfaced road on the main axis between In Guezzam and the Algerian-Niger border. Work will be performed later this year (2009) in prolongation of the preceding section. On the Malian branch, on the other hand, only the first section Tamanrasset - Tit - Silet is covered. The section Silet - Timiaouine (Algerian – Malian border) is unsurfaced over 390 km. Detailed studies and preparation of tender documents were completed in 2007.

Additionally, during the period 2008 – 2009, the Directorate of Public Works (DTP) in the wilaya of Tamanrasset, has started work to rehabilitate and strengthen damaged sections north of Tamanrasset:

- Upgrade of 120 km between Ghardaia and In Salah
- Rehabilitation of 127 km between In Salah and Arak
- Completion of two OA on the RN1 in the area of Arak
- Upgrade of 30 km and rehabilitation of 100 km between Arak and In Amguel

The A-Road N° 55, a track of 436 km links Illizi and Djanet to the main axis of the TSR. Construction works of 76 km surfaced road between In Amguel and Idles are ongoing. Detailed studies will be launched during the year 2009 for the Idles - Bordj El Haoues over 360 km. The department of public works of Tamanrasset has selected a program marking the main roads of the wilaya.

The trade traffic of Algeria with Mali and Niger was estimated in 2007 respectively at 100 and 20 vehicles per week. Estimates carried out in November 2007 as part of a traffic study initiated by the General Secretariat of the TRLIC have determined the volume of trade flows through the borders of In Guezzam, Tinzaouatine and Timiaouine. The following table summarizes the results obtained by distinguishing between light vehicles (LV) and heavy lorries (HL).

Border post	Traffic during 7 days (Vehicle/week)			Average daily traffic (Vehicle/day)
	LV	HL	Total	
In Guezzam	28	68	96	14
Tinzaouatine	2	5	7	1
Timiaouine	0	13	13	2

Source: Traffic study on the trans-Saharan road, SAETI March 2008

### In Tunisia

In Tunisia, the Trans-Saharan Road project covers a length of 301 km between the port of Gabes and the Algerian border, via Gafsa, Tozeur, Nefta and Hazoua. The road is entirely surfaced.

### In Mali

In Mali, the Trans-Saharan road project covers a length of 1,981 km between the capital Bamako and the Algerian border, through the principal towns (Ségou, Mopti, Gao and Kidal) of 4 regions of Mali that counts 8. The road is surfaced up to Gao over 1,236 km, and unsurfaced from Gao to the Algerian border over 745 km. The current situation of the Trans-Saharan Road sections in Mali is summarized in the table below:



Sections	Length (km)	Current state	Programmed actions
Bamako – Ségou	250	Surfaced Road	To improve traffic flow and traffic safety, a programme of expansion to 2x2 lanes is being considered. Feasibility studies underway
Gao – Bourem	95	Unsurfaced	Construction of the road included in the Taoussa dam project.
Bourem - Kidal	298	Unsurfaced	Construction is envisaged within the 10th FED
Kidal-Abeibara - Bouressa - Algerian border	352	Unsurfaced	Feasibility study in 2000. Funding research in progress

The Malian section Gao - Ansongo - Labbezanga over 205 km, towards the border of Niger and Niamey, is now completely surfaced and the road is operational since November 2008, between Gao and Niamey.

### In Niger

In Niger, the Trans-Saharan Road project covers 1,635 km, consisting of a section from the main axis and another from the Chadian branch. The main axis, of a 1,007 km length, crosses the east regions, from north to south, between the Algerian border and the Nigerian border, through Assamaka, Arlit, Agadez, Zinder and Magaria. Starting from Zinder, the Chadian branch develops heading east along the Nigerian border through Gouré, Djadjiri, Diffa and Nguigmi just 55 km from the border with Chad. The current situation of the Trans-Saharan Road sections is summarized in the table below.

Sections	Length (km)	Current state	Programmed actions
Algerian border - Assamaka - Arlit	223	Unsurfaced	Studies developed in 2007 Negotiations with money lenders to fund the works
Arlit - Agadez	243	Surfaced	Rehabilitation works ongoing over 50 km
Agadez - Zinder	430	Surfaced	
Zinder - Magaria - Niger border	111	Surfaced but very degraded	Rehabilitation works under the FED cooperation programme 2008 - 2011
Zinder - Nguigmi	573	Surfaced	Rehabilitation works in progress since 2006, by segments of 60 to 140 km
Nguigmi - Chadian border	55	Unsurfaced	Development studies in progress

The link Niamey - Gao is operational since November 2008, after completion of construction and rehabilitation on the 256 km road between the capital of Niger to the Malian border.

### In Chad

In Chad, the Trans-Saharan road project covers a length of 641 km between the capital N'Djamena and the Niger border. The Trans-Saharan road project bypasses the Lake Chad from the north along an old track and connects to the East-West axis at Massaguet. The current situation of the Trans-Saharan Road sections in Chad is summarized in the table below:

Sections	Length (km)	Current state	Programmed actions
N'Djamena - Djermaya	36	Surfaced road built in 1990	Reinforced in 2007
Djermaya - Massaguet	47	Surfaced Premature degradation	Built in 2000. Reinforcement is planned
Massaguet - Massakory	68	Old track Construction work in progress	Putting into service planned for October 2010
Massakory - Bol - Niger border	490	Old track	Feasibility study in 2005. Technical studies launched in 2009

## In Nigeria

In Nigeria, the Trans-Saharan road crosses the country from north to south over 1,131 km of surfaced roads, and goes through Kano, Kaduna, Ilorin, Ibadan and Lagos. The situation of the different sections is summarized below.

Sections	Length Km	Characteristics
Lagos-Ibadan	150	Works in progress for expansion to 2 X 3 lanes
Ibadan- Ilorin	160	Project of expansion to 2 x 2 lanes
Ilorin-Jebba	105	Two-way road Acceptable conditions Expansion to 2 X 2 planned
Jebba-Mokwa	35	Two-way road Acceptable conditions PPP/BOT project is planned for an expansion to 2 X 2 lanes
Mokwa-Kaduna	318	Two-way road PPP/BOT project for two additional lanes
Kaduna-Kano	230	Road with 2 X 2 lanes in good condition
Kano-Kazaure	66	Two-way road Studies of expansion to 2 X 2 lanes in progress
Kazaure-Kongolam	67	Two-way road Acceptable conditions

On most of the alignment, the road is in relatively good condition with some four-lane sections. The inadequacies of the transport network are located mostly in access roads to the Trans-Saharan Road.

### 3. Prospects of completion of the trans-Saharan road project

Within the recent years, construction and rehabilitation of the trans-Saharan road have accelerated in Chad, Niger and Algeria. Thus, after putting the section Djermaya-Massaguet into service, Chad began the construction of the section Massaguet Massakory and initiated studies on the remaining sections up to the Nigerian border. Niger has committed since 2006 to restore almost the entire network of the surfaced TSR: Magaria-Zinder, Zinder-Nguigmi and Arlit-Agadez. In Algeria, the construction of the road Tamanrasset-In Guezzam is completed since April 2009 and arrangements are made to build the 15 km between the city of In Gezzam and the Nigerian border.

#### By 2015

With the construction of the Algerian border-Assamaka-Arlit section, the main axis Algiers-Lagos will be operational in its entirety. In 2015, it is expected the completion of construction of the Algerian border-Assamako-Arlit on 223km which is the last section to be completed on the main axis of the Road. In the light of information obtained from officials of the Ministry of Equipment, on the preparations of tender documents and detailed engineering and the ongoing negotiations with donors to finance the work, it is likely that the operation of this section to occur before 2015.

In Mali, the construction of the Gao-Bourem section (95 Km) was incorporated into the Dam Taossa project, connection up to Kidal will be covered under the tenth EDF. These two factors mean that the Gao-Kidal section will be fully constructed by 2015.

In 2000, the Algerian Ministry of Public Works, in coordination with the TRLIC conducted an economic feasibility study of the Malian branch between Silet, Kidal and Timiaouine in order to determine the optimal level of development to ensure traffic at all times.

This study concluded that a gradual adjustment of the road on the treatment of difficult passages, and to postpone the construction of the road as a whole to achieve a level of traffic sufficient to justify such development. Since then, the situation has not changed much and the conclusions and recommendations of the feasibility study are still valid. In Algeria, the current road marking program in the wilaya of Tamanrasset shall integrate the road Timiaouine Silet- to secure passengers and maintain attendance of the road.

### By 2020

By 2020, we expect the commissioning of the Chadian branch of the TSR as a whole, giving the country access to Mediterranean ports, and alleviate the Cameroonian corridor and the port of Douala, which is for Chad the only line of import and export of goods. For that, Chad has to achieve the Bol - Nigerian border section of 233 km, and Niger, will have to complete the Nguigmi-Chadian border section of 55 km, whose studies are being developed.

### Prospects of Completion – Summary table

The prospects for the completion of the remaining sections to be performed are presented by year and by level of development in the table below.

Section	By 2015		By 2020	
	Adjustments	Length (km)	Adjustments	Length (km)
Gao - Bourem	Construction of a surfaced road	95		
Bourem - Kidal	Construction of a surfaced road	298		
Kidal - Algerian border	Marked road	352	Partial adjustment (*)	352
Algerian border - Assamaka - Arlit	Construction of a surfaced road	223		
Nguigmi - Chadian border	Unsurfaced		Construction of a surfaced road	55
Massakory - Bol	Construction of a surfaced road	184		
Bol - Niger border	Unsurfaced		Construction of a surfaced road	234
Silet -Timiaouien	Marked road	390	Partial adjustment (*)	390
	<b>Total length</b>	<b>1,542</b>		<b>1,031</b>
(*) Adjustment of trying passageways				

Thus:

- By 2015, it is expected:
  - Construction in covered roads of the sections Gao-Kidal in Mali, Assamaka-Arlit in Niger and Massakory-Bol in Chad, a total of 800 km
  - The marking of the road Silet-Timiaouine (Algeria)-Kidal (Mali) along 742 km
- By 2020, it is expected:
  - The improvement into covered roads of the connection Bol-Nguigmi (Chad) along 289 km, thus completing the Chadian branch of the TSR
  - The improvement of the trying passages of the marked road Silet-Kidal

This means an evolution into covered roads as follows:

	Achieved		Expected	
	Length	% of the TSR	Length	% of the TSR
2008	7171	80%	-	-
2015	-	-	7971	88 %
2020	-	-	8260	92 %

## 4 TRANSPORT NETWORK AND ACCESS CORRIDORS TO LANDLOCKED COUNTRIES

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### ALGERIA

#### Road network

The national road network in Algeria consists of 110 125 km of roads, including over 81 000 km at the state of surfaced roads. The road development program, as provided by the Road Master Plan 2005 - 2025 aims the preservation of heritage and its extension; it includes:

- the completion of a 1,200 km highway axis in the north (east-west),
- the achievement of 500 km of motorway ring roads around the capital,
- the achievement of 17 north-south feeders connecting the highlands region to major ports,,,
- the construction of 3,700 km of access roads

#### Rail transport

The railway network covers a length of 4,696 km and consists of an East-West main line connecting the main cities in the north of the country from the Tunisian to the Moroccan border, and three North-South feeders.

#### Maritime transport

Along the Mediterranean coast, the country covers 36 ports including 11 combo ports, 2 ports dedicated for hydrocarbons, 22 fishing ports and shelters, and 1 marina.

#### Air transport

Algeria covers a total of 55 airports of various classes including 12 international airports, 10 domestic and 14 regional.

### TUNISIA

#### Road network

The national road network in Tunisia consists of 19,300 km of classified roads, including more than two thirds - 13,000 km - at the state of surfaced roads.

#### Consistence of the road network

Category	Total length (km)	Surfaced length(km)
National roads	4,080	3,930
Regional roads	6,530	5,120
Local roads	5,850	2,450
Being classified	2,570	1,240
Highways	261	261
<b>Total</b>	<b>19,292</b>	<b>13,002</b>

In response to the increasing traffic and the needs of the national economy, the Tunisian State has begun construction of an 840 km long highway network, consisting of three major axes running from Tunis:

- A 570 km long north-south highway axis, towards the Libyan border and crossing the coastal cities Hammamet, Sousse, M'saken, Sfax and Gabes;
- A 217 km long east-west highway axis, towards the Algerian border and crossing the cities of Medjez El Bab, Oued Ezzarga and Boussalem.
- A 53 km long highway axis, towards Bizerte in the north of Tunis. This axis is operational since 2002.

### Rail transport

Rail transport provides more than a third of the domestic travel through a nationwide rail network of 2,167 Km.

### Maritime transport

Presently, Tunisia counts 7 commercial ports (Rades, Sfax, Bizerte, Gabes, Sousse, Zarzis and La Goulette) and an ongoing project for a deepwater port at Enfida (75 km south of Tunis).

### Air transport

Tunisia counts 30 airports including 7 international airports (Tunis, Monastir, Djerba, Tozeur, Sfax, Tabarka and Gafsa). The country's main airport is Tunis-Carthage, located ten Km from the capital. Furthermore, a new airport located in Enfida (75 km south of Tunis) should be operational in 2010.

## MALI

### Road Network

The National Road Network of Mali accounts 89,000 km of classified roads, including 3,387 km of surfaced roads. According to roads' classification, classified road network consists of 14,102 Km of national roads (15.8%); 7,052 Km of regional roads (8%), 28,929 Km of local roads (32.5 %) and 38,941 Km of municipal roads (43.7%). It is detailed by road category in the table below:

Code	Designation	Number of connections	Length (km)
NR	National Roads	44	14,102
RR	Regional Roads	40	7,052
LR	Local Roads	836	28,929
MR	Municipal Roads	3,701	38,941
<b>Total</b>		<b>4,621</b>	<b>89,024</b>

### Rail Network

The Malian rail network consists of a single line of 643 km linking Koulikoro to the Senegalese border (Diboli) via Bamako. It is old and is part of the international connection Dakar-Bamako.

## River Network

River transport is provided during part of the year when the Niger and Senegal rivers are navigable. The network operates two international routes: Kayes - Saint-Louis (Senegal) over 100 km, and Bamako - Kankan (Guinea) over 140 km. The national network covers 1,308 km of navigable waterways on the River Niger from Koulikoro to Gao

## Air Transport

Mali counts 29 airports including 13 major airports and 16 secondary airports. Of the 13 major airports, 6 are international: Bamako-Senou, Gao-Kayes, Dag-Dag, Mopti-Ambodedjo, Sikasso-Dignangan and Tombouctou.

## Corridors and access roads

Through 7 road corridors, Mali is connected to the ports of Nouakchott, Dakar, Abidjan, Tema, Lomé, Cotonou and Conakry.

**The Mauritanian corridor:** It connects Bamako to the port of Nouakchott over 1,390 km including 618 km in the Malian territory via Didiéni, Diéma and Nioro Sahel. The difficulties encountered in the Mauritanian territory concern the silting of the desert road from Nema.

**The Senegalese corridor:** It consists of a road linking Bamako to Dakar over 1,250 km including 610 km in Mali. This link is also provided by a 1,230 long railway between Bamako and Dakar through Kita, Mahina and Kayes in the Malian territory and Kadira, Thies and Tambacounda in the Senegalese territory.

**The Ivorian corridor:** It connects Bamako to Abidjan over 1,200 km of completely surfaced roads, including 480 km in Mali passing through Bougouni, Sikasso and Zégoua. This corridor also offers the possibility of a combined road-rail transport (Bamako - Bobo Dioulasso over a 570 km long road and then Bobo Dioulasso - Abidjan by a 610 km long railway).

**The Ghanaian corridor:** It passes through Burkina Faso, connects Bamako to the port of Tema over a 1,490 km long completely surfaced road.

**The Togolese corridor:** It connects Bamako to the port of Lomé over a 1,970 km long completely surfaced road. This axis is composed of 490 km in the Malian territory, 780 km in the Burkinabe territory and 670 km in the Togolese territory. The difficulties faced by carriers using this road consist in crossing the cervical area of Aledjo in northern Togo.

**The Guinean corridor:** It connects Bamako to the port of Conakry over a 980 km long road, including 125 km in Mali. This road axis is the shortest corridor to reach the ports of the Gulf of Guinea.

**The Beninese corridor:** It connects, via Burkina Faso, Bamako to Cotonou over 2,000 km through Fana, Segou, Koutiala and Kouri.

## NIGER

The deficiency of railways, inland waterways and the underdeveloped domestic airline in Niger make of the road the only mode of transport able to ensure transport of goods and people across the country.

## Road network

The total length of Niger's road network is 18,949 km, including 3,912 km of surfaced roads. Earth roads account for 75% of the network, against 25% for surfaced roads. From 1960 to 1980, the network length was multiplied by 2.7.

The longest section is formed by the so-called "road of unity" linking Tillaberi (capital of the West Region) to Diffa (capital of the East Region) via the capital Niamey. Two other important liaisons connect the Southern band to the Northern areas: the link Tahoua - Agadez - Arlit ("Uranium road"), which is designed for economical delivery of uranium, and the Zinder - Agadez road.

## Air network

It is mainly composed of 3 international airports located in Niamey, Zinder and Agadez, and 3 secondary airports located in Tahoua, Maradi and Diffa.

## Corridors and access roads

Through 5 road corridors, Niger is connected to the ports of Cotonou, Lomé, Abidjan, Lagos and Tema.

**The Beninese corridor:** It connects Niamey to Cotonou over 1,060 km. It also offers the possibility of a combined road-rail transport (Niamey - Parakou on a 622 km long road and then Parakou - Cotonou on a 438 km long railway).

**The Ivorian corridor:** It passes by Burkina Faso, connects Niamey to Abidjan over 1,660 km. It is thus the longest corridor to reach the ports of the Gulf of Guinea. It also offers the possibility of a combined road-rail transport (Niamey - Ouagadougou by road and then Ouagadougou - Abidjan by rail).

**The Ghanaian corridor:** It passes by Burkina Faso, connects Niamey to the port of Tema over a 1,490 km long road (130 km in the Niger territory, 460 km in the Burkinabe territory and 900 km within Ghana). On this line is noticed an unsurfaced section of nearly 100 km between Burkina Faso and Ghana.

**The Nigerian corridor:** It connects Maradi to Lagos over a 1,420 km long surfaced road from end to end. This corridor also offers the possibility of a combined road – rail transport (Zinder - Kaon over 250 km of road and then Kano - Lagos over 1,150 km of railway).

**The Togolese corridor:** It connects Niamey to the port of Lomé over a 1,240 km long completely surfaced road. This corridor crosses Burkina Faso over nearly 550 km. The difficulties encountered by carriers using this road consist in crossing the cervical area of Aledjo in northern Togo.

## CHAD

The road network covers a total length of 40 000 km, including 1500 km of surfaced roads.

The country accounts 55 airports including 4 international ones.

## Corridors and access roads

Chad is a very landlocked country; the nearest port is Douala in Cameroon, located more than 1,700 km from the capital N'djamena. Other ports are even more distant: Cotonou is 2,000 km far, Lomé is 2,100 km far, Lagos is 2,100 km far, and Port Sudan is 3,350 km far.

The National Program aims at diversifying access roads to coastlines and gives priority to three key strategies of the permanent national network.



**The Sudanese corridor:** It connects N'Djamena to Port Sudan by a road crossing Chad from east to west over nearly 1,063 Km, and through Mongo, Mangalmé, Umm Hadjeres and Abeche. On this axis, over 74 km are now surfaced and 226 km are under construction.

**The Cameroonian corridor:** It includes nearly 586 km of the Chadian territory between N'djamena, Moundou and the Cameroonian border. On this axis, more than 80% of the road is surfaced since March 2005.

**The Niger corridor:** (N'djamena - Massakory - Bol – Niger border) It also represents the section of the Chadian branch of the Trans-Saharan road linking N'Djamena and the Niger road network from Nguigmi and Diffa. On this axis, 83 km were completed between N'Djamena and Massaguet and 68 km are under work between Massaguet and Massakory.

Access to the port of Lagos in Nigeria, involves crossing northern Cameroon over 100 km to reach Kaduna, Kano and then Maiduguri where it can carry on by road or by rail.

## **NIGERIA**

**Road network:** It consists of 194 394 km, including over 80 197 of surfaced roads and 2 234 km of motorways.

**Rail Network:** Today, with 3798 km. It is envisaged to extend the network in Abuja and other industrial lines of Abuja, Abuja Kaduna, Minna Abuja and east-west of Abuja, Uyo, Calabar.

**Maritime Transport:** It covers 6 ports along the Atlantic coast (Calabar, Lagos, Onne, Harcourt Gauche, Warri and Salari).

**Air Transport:** It counts 70 airports including 5 international: Lagos, Abuja, Harcourt Gauche, Kano and Enugu.

## II TRADE POTENTIAL

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### The analysis framework

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Trade potential between the member countries of the TRLC, or TSR area (Trans-Saharan Road) is analyzed according to the following four axes:

1. In the first axis: analysis of the volume of trade achieved between these countries within the last decade to capture the main features of these exchanges in their level and their evolution.
2. In the second axis: identification, through the recent exports recorded between the 6 countries, of the main components of exchanges and the products with great trade potential in the area.
3. The third axis deals with costs, time and facilitations for the movement of foreign trade goods for the 3 landlocked countries of the region (Mali, Niger, Chad) from the ports of the Gulf of Guinea, in the current state, and the Maghreb ports as a possibility to consider.
4. The fourth axis, finally, proceeds to the review of the advantages and constraints that can nowadays be observed in the foreign trade of these countries between the two sets formed by the two Maghreb countries on the one hand, and the 4 sub-Saharan countries, on the other.

# 1

## THE VOLUME OF TRADE BETWEEN THE MEMBER COUNTRIES OF THE TRLC

### Presentation

This analysis of trade between the TRLC member countries (Algeria, Tunisia, Niger, Mali, Chad, Nigeria) of the TSR area (Trans-Saharan Road) is based on the economic information, including customs, collected from the 6 countries.

According to various studies and reports available, it seems that much of the trade flows are not subject to registration and barter trade is still an important activity.

This analysis was to examine trade flows (imports and exports in values, \$) of each country with 5 other countries of the TSR to grasp their main characteristics in terms of volume, structure and evolution.

These exchanges are presented, in 2 parts: overall and by country

In order to facilitate reading the tables and understanding the comments:

- The amounts are rounded off
- The figure 0 (zero) can either mean the absence of trade or trade in an insignificant amount compared to the other amounts

## A Overall trade

The analysis of trade within the TSR is performed, taking into account the structure of imports and exports by country for the years 2004 to 2006.

### Imports

Imports are characterized by steady and relatively high growth during this period, even by taking into account the strong price increases recorded during the period.

**Imports of the TSR by country (US\$ Million)**

	2004	2005	2006
Algeria	112.8	148.0	171.8
Mali	9.6	40.1	10.8
Niger	58.2	51.0	61.3
Nigeria	11.1	35.0	37.9
Chad	1.6	1.6	2.5
Tunisia	74.4	134.3	204.6
<b>TSR Zone</b>	<b>267.8</b>	<b>410.6</b>	<b>489.2</b>
Evolution		+ 53 %	+19 %

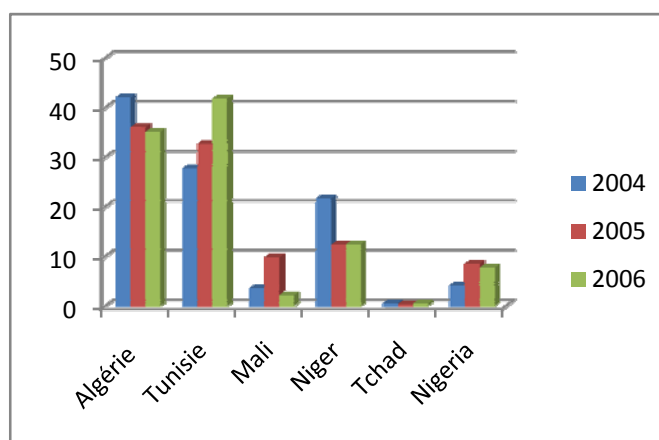
This characteristic of increased trade at imports is followed by a high concentration of trade within the Maghreb countries and Niger, however, with a redistribution of shares in the Maghreb for the benefit of Tunisia.

Tunisian imports from the TSR area are more important, and the Maghreb share increased from nearly 70% in 2004 to over 76% in 2006.

This development confirms that within the TSR area, the two main partners in terms of trade are Algeria and Tunisia.

**Structure of the TSR area imports by country (in %)**

	2004	2005	2006
Algeria	42.1	36.1	35.1
Tunisia	27.8	32.7	41.8
Mali	3.6	9.8	2.2
Niger	21.7	12.4	12.5
Chad	0.6	0.4	0.5
Nigeria	4.2	8.5	7.8
TSR	100	100	100



Thus, by country and year, the structure of total imports of the TSR for 2006 is as follows:

- Algeria and Tunisia explain 70% of import flows in the TSR area in 2004 and 76% in 2006.
- The remaining imports are covered by the other 4 countries of the TSR area with preponderance for Niger.

## Exports

The intra TSR exports are experiencing an unexpected development, characterized by abrupt structural changes. Indeed, a review of developments in the years 2004-2006 shows that:

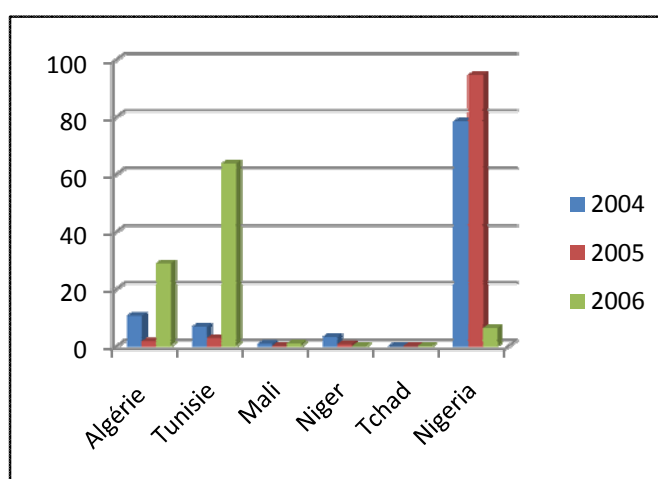
- The intra TSR exports experience a significant fluctuation, with a 300% increase in current values, in 2005 and a 95% decrease, in 2006.
- Nigeria who accounted for almost 80% of the export flows within the TSR (78.4% in 2004 and 94.6% in 2005) saw its share drop sharply to 6.3% in 2006.
- This development was in favour of Tunisia and Algeria who saw their shares increase to 63.1% and 28.9% respectively.

Exports of the TSR by country (US\$ Million)

	2004	2005	2006
Algeria	181.2	116.3	99.3
Mali	13.6	4.3	3.2
Niger	56.3	46.2	0.1
Nigeria	1,336.3	6,448.4	21.4
Chad	0.4	0.3	0.4
Tunisia	117.0	200.2	218.5
TSR Zone	1,704.7	6,815.7	343.2
Evolution		+ 300 %	- 95 %

Structure of the TSR area exports by country (in%)

	2004	2005	2006
Algeria	10.6	1.7	28.9
Tunisia	6.9	2.9	63.7
Mali	0.8	0.1	0.9
Niger	3.3	0.7	0
Chad	0	0	0.1
Nigeria	78.4	94.6	6.3
TSR	100	100	100



## B Trade by country

### 1. Algeria

#### Imports

- On the whole, Algeria's imports from the TSR area grew from US\$ 26 million in 1999 to US\$ 293 million in 2008.
- They represent a 25% average rate of annual growth over the period 1999-2008.
- These changes in current values and in dollars are to be put into perspective primarily in 2007 due to the sharp increase in international prices.
- Despite this strong growth, imports from the TSR area account on average for a small proportion of Algeria's total imports, 0.7% over the period 1999-2008.
- Even more, within the TSR area, Tunisia is the leading provider of Algeria with almost 99% of the market share in 2008 against nearly 94.5% in 1999.
- **These elements show that for Algeria import trade with the TSR countries is marginal and is highly concentrated on a single partner: Tunisia.**

Algeria:  
Imports from other countries of the TSR area  
and total imports of the country(thousand US\$)

	Imports from other countries of the TSR area					Total Imports from other countries of the TSR area	Total imports of the country
	Mali	Niger	Nigeria	Chad	Tunisia		
1999	4	10	1,523	3	25,080	26,620	9,171,500
2000	485	817	2,068	95	42,655	46,120	9,169,000
2001	0	0	908	2	59,290	60,200	10,012,740
2002	0	1	2,369	25	102,355	104,750	12,528,520
2003	0	9	5,509	237	91,340	97,095	13,143,950
2004	0	0	2,428	2	110,395	112,825	16,984,100
2005	2	702	3,275	1	144,060	148,040	20,724,920
2006	230	0	1,493	16 8	169,970	171,865	21,070,850
2007	163	30	952	25	212,620	213,790	26,402,600
2008	1	396	1,222	26	291,460	293,105	36,338,700

**Algeria:**  
**Imports from the other countries of the TSR area:**  
**Share of these countries and share in total imports of the country**

	Share of the other countries of the TSR area in imports from this area						Share of imports from the other countries of the TSR area in total imports of the country
	Mali	Niger	Nigeria	Chad	Tunisia	Total	
1999	0.0	0.0	5.7	0.0	94.2	100	0.3
2001	0.0	0.0	1.5	0.0	98.5	100	0.6
2002	0.0	0.0	2.3	0.0	97.7	100	0.9
2003	0.0	0.0	5.7	0.2	94.1	100	0.7
2004	0.0	0.0	2.2	0.0	97.8	100	0.6
2005	0.0	0.5	2.2	0.0	97.3	100	0.7
2006	0.1	0.0	0.9	0.1	98.9	100	0.8
2007	0.1	0.0	0.4	0.0	99.5	100	0.8
2008	0.0	0.1	0.4	0.0	99.4	100	0.8

## Exports

- As regards exports, a similar observation can be made, however with a more striking growth pattern.
- Indeed, analysis of the evolution of exports from Algeria towards the TSR area shows they represented US\$ 94 million in 2000, rising to 745 million in 2008, fluctuating slightly all through this period.

**Algeria:**  
**Exports towards the other countries of the TSR area**  
**and total exports of the country (thousand US\$)**

	Exports towards other countries of the TSR area					Total exports towards other countries of the TSR area	Total exports of the country
	Mali	Niger	Nigeria	Chad	Tunisia		
2000	1	50	19,655	4	74,410	94,120	22,025,430
2003	45	238	8,215	1	80,550	89,050	24,458,340
2004	29	772	16,015	4	164,455	181,275	28,990,610
2005	156	194	16,225	0	99,805	116,380	46,000,360
2006	349	696	1,272	28	96,970	99,315	50,612,020
2007	623	650,550	4,536	56	85,570	741,335	60,071,260
2008	635	192,700	36,100	5	515,695	745,135	76,669,480

- In terms of export structure, Tunisia emerges again, on average within the period, as Algeria's first partner.
- The marginal nature of Algeria's exports towards the TSR area should also be noted. They represent 0.63% of total exports in 2004 and 0.97% in 2008.

**Algeria:**  
**Exports towards the other countries of the TSR area:**  
**Share of these countries and share in total exports of the country**

	Share of the other countries of the TSR area in exports towards this area						Share of exports towards the other countries of the TSR area in total exports of the country
	Mali	Niger	Nigeria	Chad	Tunisia	Total	
<b>2000</b>	0.0	0.0	20.1	0.0	79.0	100	0.4 %
<b>2003</b>	0.0	0.0	9.2	0.0	90.4	100	0.3 %
<b>2004</b>	0.0	0.4	8.8	0.0	90.7	100	0.6 %
<b>2005</b>	0.1	0.2	13.9	0.0	85.7	100	0.2 %
<b>2006</b>	0.3	0.7	1.3	0.0	97.6	100	0.2 %
<b>2007</b>	0.1	87.7	0.6	0.0	11.5	100	1.2 %
<b>2008</b>	0.1	25.8	4.8	0.0	69.2	100	1.0 %

- These few characteristics show that Algeria does not cover a significant trade with countries of the TSR area, that both imports and exports account for less than 1% of global trade, and within the area, Tunisia emerges as Algeria's main partner.
- Indeed, considering the value of imports by section (section includes a set of products from the same family, the section value is equal or superior to DA 100 million or approximately US\$ 1.5 million), led to confirm that to this threshold, Tunisia is the only country of the area for which nearly 22 sections are imported in 2008, against 3 in 1999.
- This increase suggests that the strong prices increase is likely to explain the raise in the imported values, the threshold of DA 1 million or US\$ 150 000, the number of products and, more aggregately, the number of sections imported is, obviously, more important, especially for Tunisia. The other countries at this level are virtually absent.
- **These observations show that, overall, except Tunisia, Algeria's trade with the TSR area are almost zero, when it comes to imports.**

#### **The barter trade between Algeria, Mali and Niger**

- It should be noted that the barter trade with Mali and Niger, is a regulated activity (Interministerial Order of December 14, 1994, Ministry of Commerce).
- Such trade is exceptional and intended for the populations of 3 wilayas: Adrar, Illizi and Tamanrasset.
- It covers a defined list of products, and may be exercised by all natural or legal persons residing in one of these wilayas, registered in the register of commerce as a wholesaler and have storage and transport facilities.
- In addition, goods imported within this framework can only be marketed in the above-mentioned wilayas.
- The Algerian products authorized for export (barter) are the common dates, frezza dates, domestic salt, plastic objects, aluminium, cast iron, iron and steel, blankets, local handicrafts (excluding wool carpets).
- Products imported from Mali and Niger are: living livestock, henna, green tea, spices, dried meat, fabrics and turbans, millet, rancid butter for local consumption, dried pulses , rice and mangoes.



- **Imports from Niger within the barter trade**

- Imports from Niger, as part of the barter trade in 2007 and 2008, amounted respectively to US\$ 1.9 million and US\$ 1.3 million.
- They consist of the following products:

Products	2007 (Thousand \$)	2008 (Thousand \$)
Livestock	82,638	68,234
Millet	9,224	2,931
Green tea	27,390	3,513
Henna	641	4,068
Spices	2,538	1,556
Mangoes	3,372	5,680
Industrial salt	5,352	-
Dried fabric	6,630	-
Total (Thousand DA)	<b>137,786</b>	<b>85,984</b>
Total (Thousand \$)	<b>1,983</b>	<b>1,329</b>

- In 2007 and 2008, taking into account normal trade imports between Algeria and Niger, total imports from Niger are as follows: US\$ 2,013,310 in 2007 and US\$ 1,725,138 in 2008.
- **Therefore, total imports from Niger under barter trade account for 98.5% and 77% in 2007 and 2008. The barter trade emerges as the main import activity; and regular trade (excluding barter trade) with Niger, when it comes to imports, is therefore extremely limited.**

- **Exports towards Niger within the barter trade**

When it comes to exports, the main product exported towards Niger is the date

Dried dates	2007	2008
Value (Thousand DA)	172,033	135,499
Value (Thousand \$)	2,476	2,094

These exports represent only a tiny fraction of exports from Algeria to Niger, about 1% on average.

- **Foreign trade (barter trade) with Mali**

- Imports under the barter trade from Mali amounted to US\$ 55 thousand in 2007 and US\$ 318 thousand in 2008; they focus on the following products:

Products	2007	2008
Green tea	2,265	20,400
Millet	272	96
Mangoes	1,320	86
Total (Thousand DA)	<b>3,857</b>	<b>20,582</b>
Total (Thousand \$)	<b>55</b>	<b>318</b>

- In 2007 and 2008, taking into account the regular trade (excluding barter trade) on imports between Algeria and Mali, total imports from Mali amount to US\$ 218 thousand in 2007 and US\$ 319 thousand in 2008.

- In total, imports under barter trade represent 25% and 99% in 2007 and 2008.
- The barter trade appears to be an important activity and regular trade with Mali, when it comes to imports, is therefore extremely limited.
- As regards exports, and as for Niger, the only product exported by Algeria to Mali is the dried date. Transactions focused on amounts of US\$ 199 thousands in 2007 and US\$ 115 thousand in 2008.
- They represent 25% in 2007 and 15% in 2008 of total exports (including barter trade)

### Fraudulent trade

- The value of seized goods allows getting an idea of the extent of fraudulent trade between Algeria, Mali and Niger. Seizures evaluated in DA focused on the following products:

Products	2006	2007	2008
Fuels	16,675	1,888	1,523
Cigarettes	12,923	9,787	4,828
Livestock	180	208	-
Vehicles	33,666	41,565	14,174
Total (Thousand DA)	<b>63,445</b>	<b>53,449</b>	<b>20,525</b>
Total (Thousand \$)	<b>874</b>	<b>769</b>	<b>317</b>

- These data give an indication on the extent of non legal market trade and remains problematic when analyzing the quality of trade within the area given that, according to some estimates, seizures only concern a tiny part of the total fraudulent goods.

## 2. Tunisia

### Imports

- Tunisia's imports from the TSR area amounted to US\$ 94 million in 2001 and expand to nearly US\$ 297 million in 2007.
- They have almost been multiplied by 3 between 2001 and 2007.
- As regards the strong increases in trade flows, particularly since 2000, it is again important to note that the international situation is striking at least since 2003 by strong price increases, particularly for commodities. This observation is particularly valid for the year 2007, where it is clearly visible that the increase in imports is strongly influenced by price increases.

**Tunisia:**  
**Imports from other countries of the TSR area**  
**and total imports of the country(thousand US\$)**

	Imports from other countries of the TSR area					Total Imports from other countries of the TSR area	Total imports of the country
	Algeria	Mali	Niger	Nigeria	Chad		
<b>2002</b>	90,210	3,574	23	172	1	93,980	9,514,720
<b>2003</b>	129,860	5,324	9	11	6	135,210	10,882,870
<b>2004</b>	71,945	2,421	21	19	24	74,430	12,450,080
<b>2005</b>	132,300	2,006	0	24	0	134,330	13,000,900
<b>2006</b>	202,395	2,098	0	113	4	204,610	15,627,730
<b>2007</b>	295,035	1,291	7	762	0	297,095	18,797,920

- This significant increase in trade with the TSR area is back in perspective since it is strongly correlated to a general increase in imports of goods.
- Indeed, assessment of imports structure within the TSR area and the share of the latter in the total imports show that in fact trade characteristics are stable and are heavily concentrated on one major partner, Algeria.
- Moreover, imports from the TSR area are marginal and represent less than 2% of Tunisia's imports.

**Tunisia:**  
**Imports from the other countries of the TSR area:**  
**Share of these countries and share in total imports of the country**

	Share of the other countries of the TSR area in imports from this area						Share of imports from the other countries of the TSR area in total imports of the country
	Algeria	Mali	Niger	Nigeria	Chad	Total	
<b>2002</b>	96.0	3.8	0.0	0.2	0.0	100	1.0 %
<b>2003</b>	96.0	3.9	0.0	0.0	0.0	100	1.2 %
<b>2004</b>	96.7	3.3	0.0	0.0	0.0	100	0.6 %
<b>2005</b>	98.5	1.5	0.0	0.0	0.0	100	1.0 %
<b>2006</b>	98.9	1.0	0.0	0.1	0.0	100	1.3 %
<b>2007</b>	99.3	0.4	0.0	0.3	0.0	100	1.6 %

### Exports

- As regards exports, the evolution is extremely encountered, and this also applies to imports.
- This characteristic of erratic trade evolution in the TSR area is valid for at least the three countries that have just been reviewed.

**Tunisia:**  
**Exports towards the other countries of the TSR area**  
**and total exports of the country (thousand US\$)**

	Exports towards other countries of the TSR area					Total exports towards other countries of the TSR area	Total exports of the country
	Algeria	Mali	Niger	Nigeria	Chad		
<b>2002</b>	89,130	3,284	12,481	1,512	598	107,005	6,865,210
<b>2003</b>	103,415	4,505	12,613	746	381	121,660	8,017,520
<b>2004</b>	104,290	4,367	6,330	1,525	583	117,095	9,541,385
<b>2005</b>	178,360	7,930	9,679	2,712	1,604	200,285	10,371,130
<b>2006</b>	195,455	7,664	9,584	3,350	2,507	218,560	12,154,765
<b>2007</b>	282,535	8,732	11,175	40,555	3,088	346,085	14,930,460

- Tunisia's exports increased from US\$ 107 million in 2001 to nearly US\$ 346 million in 2007.
- These significant increases are strongly correlated to the growth of total exports, which are also experiencing a double-digit growth rate. These increases are of course expressed in nominal values and hide the sharp price movements, particularly recorded since 2000.
- In terms of structure, the comments already made on the structure of imports remain.
- Indeed, Tunisia's exports to the TSR area are polarized on one partner, Algeria, which represents over 80% of exports towards this area.

**Tunisia:**  
**Exports towards the other countries of the TSR area:**  
**Share of these countries and share in total exports of the country**

	Share of the other countries of the TSR area in exports towards this area						Share of exports towards the other countries of the TSR area in total exports of the country
	Algeria	Mali	Niger	Nigeria	Chad	Total	
<b>2002</b>	83.3	3.1	11.7	1.4	0.6	1.6	1.6
<b>2003</b>	85.0	3.7	10.4	0.6	0.3	1.5	1.5
<b>2004</b>	89.1	3.7	5.4	1.3	0.5	1.2	1.2
<b>2005</b>	89.1	4.0	4.8	1.4	0.8	1.9	1.9
<b>2006</b>	89.4	3.5	4.4	1.5	1.1	1.8	1.8
<b>2007</b>	81.6	2.5	3.2	11.7	0.9	2.3	2.3

- As regards exports, the marginal nature of exports towards the TSR area is again valid.
- Indeed, Tunisia's exports towards the TSR area merely represent 2% of its total exports.

### 3. Mali

#### Imports

- Total imports of Mali from the TSR area grew from US\$ 5 million in 2002 to 10.9 million in 2006.
- The analysis of annual growth rates of imports from the TSR area does not show any clear evolution tendency.
- Indeed, in 2003 and 2002 the growth rate is 79%, it increased to 5% in 2004, 320% in 2005 and -73% in 2006.
- This erratic evolution of imports from the TSR area can already allow noticing that Mali's trade is characterized by a big variability.

**Mali:**  
Imports from other countries of the TSR area  
and total imports of the country(thousand US\$)

	Imports from other countries of the TSR area					Total Imports from other countries of the TSR area	Total imports of the country
	Algeria	Tunisia	Niger	Nigeria	Chad		
<b>2002</b>	373	1,645	95	2,972	0	5,085	557,225
<b>2003</b>	747	3,235	220	4,925	13	9,140	740,540
<b>2004</b>	917	3,294	368	5,041	10	9,630	745,330
<b>2005</b>	1,212	5,335	267	33,594	37	40,445	780,825
<b>2006</b>	936	6,738	752	2,414	10	10,850	975,670

- The analysis of the structure of Mali's imports from the TSR area suggests they are trivial since they represent less than ½ per cent of Mali's total imports.
- Moreover, and as for the other TRLIC countries, Mali's imports within the TSR area are characterized by their concentration and also the instability of this concentration.
- Thus, Tunisia and Nigeria emerge as the countries trading the most with Mali.

**Mali:**  
Imports from the other countries of the TSR area:  
Share of these countries and share in total imports of the country

	Share of the other countries of the TSR area in imports from this area						Share of imports from the other countries of the TSR area in total imports of the country
	Algeria	Tunisia	Niger	Nigeria	Chad	Total	
<b>2002</b>	7.3	32.4	1.9	58.4	0.0	100	0.0
<b>2003</b>	8.2	35.4	2.4	53.9	0.1	100	0.0
<b>2004</b>	9.5	34.2	3.8	52.4	0.1	100	0.0
<b>2005</b>	3.0	13.2	0.7	83.1	0.1	100	0.1
<b>2006</b>	8.6	62.1	6.9	22.3	0.1	100	0.0

## Exports

- The comments made on imports remain valid as regards exports towards the TSR area.
- Indeed, they are also characterized by high volatility, and this is shown by the analysis of annual growth rates that represented 89% in 2003, 10% in 2004, -68% in 2005 and 2006.
- Moreover, the value of Mali's exports towards the TSR area represents less than US \$ 5 million, although they peaked at more than US\$ 12 million in 2003 and 2004.

**Mali:**  
**Exports towards the other countries of the TSR area  
and total exports of the country (thousand US\$)**

	Exports towards other countries of the TSR area					Total exports towards other countries of the TSR area	Total exports of the country
	Algeria	Tunisia	Niger	Nigeria	Chad		
<b>2002</b>	222	5,214	977	49	33	6,495	792,070
<b>2003</b>	162	1,416	8,719	2,026	2	12,325	874,305
<b>2004</b>	1,216	2,477	8,052	1,466	409	13,620	590,450
<b>2005</b>	377	1,392	2,038	520	23	4,350	585,360
<b>2006</b>	166	1,725	1,230	64	70	3,255	316,340

- The analysis of the structure of Mali's exports towards the TSR area allows the conclusion that they are negligible since they represent on average less than 1% of total exports.
- Moreover, the trade concentration phenomenon by country is also present but is less marked (focusing on Tunisia and Niger).

**Mali:**  
**Exports towards the other countries of the TSR area:  
Share of these countries and share in total exports of the country**

	Share of the other countries of the TSR area in exports towards this area						Share of exports towards the other countries of the TSR area in total exports of the country
	Algeria	Tunisia	Niger	Nigeria	Chad	Total	
<b>2002</b>	3.4	80.3	15.0	0.8	0.5	100	0.8
<b>2003</b>	1.3	11.5	70.7	16.4	0.0	100	1.4
<b>2004</b>	8.9	18.2	59.1	10.8	3.0	100	2.3
<b>2005</b>	8.7	32.0	46.8	12.0	0.5	100	0.7
<b>2006</b>	5.1	53.0	37.8	2.0	2.1	100	1.0
<b>2007</b>	3.4	80.3	15.0	0.8	0.5	100	0.8

### 3. Niger

#### Imports

- For Niger, imports from the TSR area rose from US\$ 28.9 million in 1999 to over US\$ 54 million in 2007.
- Therefore, they experienced a significant increase in annual average (8.5%) over the period.
- Imports from the TSR area, represent a noteworthy share in Niger's total imports and represent on average 9.4% of total imports over the period.

**Niger:**  
**Imports from other countries of the TSR area**  
**and total imports of the country(thousand US\$)**

	Imports from other countries of the TSR area					Total Imports from other countries of the TSR area	Total imports of the country
	Algeria	Mali	Nigeria	Chad	Tunisia		
<b>1999</b>	1,510	647	25,165	0	1,663	28,985	315,150
<b>2000</b>	1,180	1,217	28,325	9	1,844	32,575	280,815
<b>2001</b>	1,365	945	33,415	0	3,960	39,685	324,360
<b>2002</b>	2,617	561	29,065	11	7,723	39,980	394,640
<b>2003</b>	4,573	472	38,325	0	9,385	52,755	494,170
<b>2004</b>	4,820	1,472	46,530	5	5,408	58,235	625,375
<b>2005</b>	4,230	975	40,460	0	5,425	51,090	684,870
<b>2006</b>	3,925	667	52,070	13	4695	61,370	798,380
<b>2007</b>	4,823	943	44,825	3	3,821	54,415	867,850

- It is worth noting, as to what has been analyzed for Algeria, a regional concentration phenomenon, as imports from Nigeria are dominant and represent in average over 80% of total imports from the TSR area.
- The second supplier of Niger is Tunisia with a 10% average share and the third largest supplier is Algeria, with a 6.6% average share.
- The other countries only represent a marginal share in Niger's imports from the TSR area.



**Niger:**  
**Imports from the other countries of the TSR area:**  
**Share of these countries and share in total imports of the country**

	Share of the other countries of the TSR area in imports from this area						Share of imports from the other countries of the TSR area in total imports of the country
	Algeria	Mali	Nigeria	Chad	Tunisia	Total	
<b>1999</b>	5.2	2.2	86.8	0.0	5.7	100	9.2 %
<b>2000</b>	3.6	3.7	87.0	0.0	5.7	100	11.6 %
<b>2001</b>	3.4	2.4	84.2	0.0	1.0	100	12.2 %
<b>2002</b>	6.5	1.4	72.7	0.0	1.3	100	10.1 %
<b>2003</b>	8.7	0.9	72.6	0.0	1.8	100	10.7 %
<b>2004</b>	8.3	2.5	79.9	0.0	9.3	100	9.3 %
<b>2005</b>	8.3	1.9	79.2	0.0	1.6	100	7.5 %
<b>2006</b>	6.4	1.1	84.8	0.0	7.7	100	7.7 %
<b>2007</b>	8.9	1.7	82.4	0.0	7.0	100	6.3 %

## Exports

- As regard exports, no clear tendency is reflected in the evolution of trade with the TSR area.
- The concentration phenomenon per country is almost complete, and Nigeria remains Niger's exclusive client within the TSR area, with a 98 % average share over the period 2000-2007.

**Niger:**  
**Exports towards the other countries of the TSR area**  
**and total exports of the country (thousand US\$)**

	Exports towards other countries of the TSR area					Total exports towards other countries of the TSR area	Total exports of the country
	Algeria	Mali	Nigeria	Chad	Tunisia		
<b>2000</b>	317	363	77,995	415	0	79,090	269,000
<b>2001</b>	340	294	61,465	638	3	62,740	385,000
<b>2002</b>	388	195	53,745	132	0	54,460	246,000
<b>2003</b>	297	379	59,220	99	0	59,995	293,000
<b>2004</b>	288	1,353	54,345	383	0	56,370	280,000
<b>2005</b>	266	1,121	44,780	58	0	46,225	280,000
<b>2006</b>	1	0	144	0	0	145	222,000
<b>2007</b>	132	118	40,335	0	0	40,585	222,000

**Niger:**  
**Exports towards the other countries of the TSR area:**  
**Share of these countries and share in total exports of the country**

	Share of the other countries of the TSR area in exports towards this area						Share of exports towards the other countries of the TSR area in total exports of the country
	Algeria	Mali	Nigeria	Chad	Tunisia	Total	
<b>2000</b>	0.4	0.5	98.6	0.5	0.0	100	29.4 %
<b>2001</b>	0.5	0.5	98.0	1.0	0.0	100	16.3 %
<b>2002</b>	0.7	0.4	98.7	0.2	0.0	100	22.1 %
<b>2003</b>	0.5	0.6	98.7	0.2	0.0	100	20.4 %
<b>2004</b>	0.5	2.4	96.4	0.7	0.0	100	20.1 %
<b>2005</b>	0.6	2.4	96.9	0.1	0.0	100	17.8 %
<b>2006</b>	0.8	0.3	98.9	0.1	0.0	100	0 %
<b>2007</b>	0.3	0.3	99.4	0.0	0.0	100	18.3 %

## 5. Chad

### Imports

- Based on the data of 2005, the table below shows that Nigeria is about the only country Chad trades with when it comes to imports.
- The other countries of the TSR intervene with very insignificant quantities.

2005	Amounts FCFA Million	%
Nigeria	60,017	99.7
Niger	71	0.1
Tunisia	50	0.1
Mali	44	0.1
Algeria	2	0.0
<b>Total</b>	<b>60,184</b>	<b>100</b>

### Exports

- Exports in 2005 show a predominance for oil sector :

Exports 2005	Amounts FCFA Million	%
Off hydrocarbons	93,650	6
Oil	1,453,850	94
<b>Total</b>	<b>1,547,500</b>	<b>100</b>

- The main countries for Chad's exports off hydrocarbon are represented as follows :

2005	Amounts FCFA Million	%	Products
Nigeria	36,907	39	Livestock: 67 % Cotton: 26 %
France	26,497	28	Cotton: 26 %
Sudan	17,033	18	Floor: 95 %

Thus:

- 3 countries cover 85 % of the country's exports
- Nigeria is the only country of the TSR area concerned with Chad's exports.

## 6. Nigeria

### Imports

- Nigeria's total imports amount to US\$ 33 billion in 2007 and US\$ 23 billion in 2006.
- Imports from the TSR area amount to US\$ 38 million in 2006 and US\$ 51 million in 2007.
- These imports from the TSR area only represent 0.2% of Nigeria's total imports.

**Nigeria:**  
Imports from other countries of the TSR area  
and total imports of the country (thousand US\$)

	Imports from other countries of the TSR area					Total Imports from other countries of the TSR area	Total imports of the country
	Algeria	Mali	Niger	Tunisia	Chad		
<b>2000</b>	942	197	0	706	600	2,445	61,1130
<b>2001</b>	909	1,227	264	3,392	228	6,020	85,990
<b>2002</b>	57	63	1,195	455	150	1,920	96,015
<b>2003</b>	667	519	1,310	898	446	3,840	128,085
<b>2004</b>	2 804	3,580	1,200	3,257	279	11,120	123,560
<b>2005</b>	64	27,769	2,284	4,932	36	35,085	134,935
<b>2006</b>	783	18,802	13,755	4,331	294	37,965	237,290
<b>2007</b>	38,552	197	1,131	11,245	0	51,125	340,845

- The structure of imports from the TSR area, by country, is particular given the strong instability of share of the other countries of the area.
- Indeed, no conclusion could be drawn on Nigeria's trade networks, at least when analyzing the structure of imports from the TSR area, by country.

**Nigeria:**  
Imports from the other countries of the TSR area:  
Share of these countries and share in total imports of the country

	Share of the other countries of the TSR area in imports from this area						Share of imports from the other countries of the TSR area in total imports of the country
	Algeria	Mali	Niger	Tunisia	Chad	Total	
<b>2000</b>	38.5	8.1	0.0	28.9	24.5	100	0.04 %
<b>2001</b>	15.1	20.4	4.4	56.3	3.8	100	0.07 %
<b>2002</b>	3.0	3.3	62.2	23.7	7.8	100	0.02 %
<b>2003</b>	17.3	13.5	34.1	23.4	11.6	100	0.03 %
<b>2004</b>	25.2	32.2	10.8	29.3	2.5	100	0.09 %
<b>2005</b>	0.2	79.1	6.5	14.1	0.1	100	0.26 %
<b>2006</b>	2.1	49.5	36.2	11.4	0.8	100	0.16 %
<b>2007</b>	75.4	0.4	2.2	22.0	0.0	100	0.15 %

## Exports

- Nigeria's total exports amount to US\$ 59.5 billion in 2006 and US\$ 56.4 billion in 2007.
- Exports towards the TSR area amount to US\$ 21.5 million in 2006 and US\$ 83.3 million in 2007.
- The structure of exports towards the TSR area, by country, shows a certain concentration of exchanges with Niger and Algeria.
- However, the structure of exchanges, by country, shows a large variability that makes it difficult to determine any evolution tendency in exchanges, at least within the TSR area.

**Nigeria:**  
Exports towards the other countries of the TSR area  
and total exports of the country (thousand US\$)

	Exports towards other countries of the TSR area					Total exports towards other countries of the TSR area	Total exports of the country
	Algeria	Mali	Niger	Tunisia	Chad		
<b>2000</b>	0	4,861	386	0	1,833	7,080	236,000
<b>2001</b>	0	24,710	2,098	0	2,087	28,895	180,600
<b>2002</b>	635	233	74	0	333	1,275	127,500
<b>2003</b>	473	3,799	762	0	6,766	11,800	236,000
<b>2004</b>	35,318	2,204	1,075	0	629,593	668,190	388,500
<b>2005</b>	53,139	4,804	14,447	0	0	72,390	517,100
<b>2006</b>	300	2,517	4,731	0	13,943	21,490	537,200
<b>2007</b>	1,602	2,270	73,995	1,401	4,046	83,315	555,400

**Nigeria:**  
Exports towards the other countries of the TSR area:  
Share of these countries and share in total exports of the country

	Share of the other countries of the TSR area in exports towards this area						Share of exports towards the other countries of the TSR area in total exports of the country
	Algeria	Mali	Niger	Tunisia	Chad	Total	
<b>2000</b>	0.0	68.6	5.5	0.0	25.9	100	0.03 %
<b>2001</b>	0.0	85.5	7.3	0.0	7.2	100	0.16 %
<b>2002</b>	49.8	18.3	5.8	0.0	26.1	100	0.01 %
<b>2003</b>	4.0	32.2	6.5	0.0	57.3	100	0.05 %
<b>2004</b>	5.3	0.3	0.2	0.0	94.2	100	1.72 %
<b>2005</b>	73.4	6.6	20.0	0.0	0.0	100	0.14 %
<b>2006</b>	1.4	11.7	22.0	0.0	64.9	100	0.04 %
<b>2007</b>	1.9	2.7	88.8	1.7	4.9	100	0.15 %

## 2 THE MAIN PRODUCTS THAT ARE POTENTIALLY MARKETABLE BETWEEN THE MEMBER COUNTRIES OF THE TRLC

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### Analysis framework

- The main products recognized as “advantageously marketable” between the TRLC countries are those exported by each country in significant quantities over several years between these countries (TSR area)
- The analysis is conducted according to each chapter of the harmonized system classification, of the World Customs Organization, for the countries whose data are available (Algeria, Tunisia, Mali, Niger)
- The analysis takes into account the data available following the work of information collection from the countries concerned.
- The member countries of the TRLC is presented hereafter as the TSR area (Trans-Saharan Road)

## 1. Algeria

Data about Algeria allowed performing an analysis of the export potential by combining the products exported by product family. The classification used is that of user groups falling into the following categories:

UG1: Food, beverages, tobacco  
 UG2: Energy and lubricants  
 UG3: Raw materials  
 UG4: Crude products  
 UG5: Semi-finished products  
 UG6: Agricultural equipment  
 UG7: Industrial equipment  
 UG8: Industrial consumer goods  
 UG9: Industrial gold

This aggregation was performed over the years 2004 to 2008. It establishes clearly the following general features:

- Algerian exports remain focused on hydrocarbons. They represented 75% of Algeria's total exports to the TSR area in 2004 and 88% in 2008
- However, Algeria has a potential for export toward the TSR area in following product groups:

UG1: Food, beverages, tobacco  
 UG5: Semi-finished products  
 UG7: Industrial equipment  
 UG8: Industrial consumer goods

Product groups	Main products
Foodstuff, beverages, tobacco	Soya oil, wheat semolina, onions and shallots, yogurt, dates
Semi-finished products	Iron or steel laminated products, cement, zinc and alloys, ammonia, tanned hides and skins
Industrial equipment	Tires and rubber
Industrial Consumer Goods	Plastic packaging and transport items

The second group of products for which Algeria would have a potential for is the UG8 "Industrial consumer goods". Indeed, Algeria's exports to the TSR area for this group increased from 17% of total exports in 2004 to 34.5% in 2008. This development means that the potential becomes stronger and, besides, the phenomenon of country concentration is lower, since this group of products is subject to export towards the whole countries of the area, with preponderance for Tunisia.

**Algeria:**  
**Exports by group of products (2008): in thousand US \$**

Group of products	Intended Country of the TSR area					Total exports of Algeria towards the other countries of the TSR area for the groups of products	Total exports of Algeria for the groups of products
	Mali	Niger	Nigeria	Chad	Tunisia		
1. Food, beverages, tobacco	146	6,759			11,237	18,142	121,110
2. Energy and lubricants		184,282	30,629		444,966	659,878	74,872,682
3. Raw materials	2	3	2		129	137	7,773
4. Crude products	10	1,045		5	196	1,256	330,050
5. Semi-finished products		654	1,847		53,771	56,272	1,385,828
6. Agricultural equipment			3		110	113	1,112
7. Industrial equipment	248	74	3,595		1,179	5,096	74,735
8. Industrial consumer goods	231	274	98		5,157	5,760	16,696
9. Industrial gold						0	15,762
<b>Total</b>	<b>636</b>	<b>193,091</b>	<b>36,175</b>	<b>5</b>	<b>516,747</b>	<b>746,655</b>	<b>76,825,749</b>

**Algeria:**  
**Exports by group of products (2008): share of the groups of products for each country (%)**

	Share of the groups of products for each intended country					Share of the groups of products in the total exports of Algeria
	Mali	Niger	Nigeria	Chad	Tunisia	
1. Food, beverages, tobacco	22.9	3.5	0.0	0.0	2.2	2.4
2. Energy and lubricants	0.0	95.4	84.7	0.0	86.1	88.4
3. Raw materials	0.2	0.0	0.0	0.0	0.0	0.0
4. Crude products	1.5	0.5	0.0	100.0	0.0	0.2
5. Semi-finished products	0.0	0.3	5.1	0.0	10.4	7.5
6. Agricultural equipment	0.0	0.0	0.0	0.0	0.0	0.0
7. Industrial equipment	39.0	0.0	9.9	0.0	0.2	0.7
8. Industrial consumer goods	36.3	0.1	0.3	0.0	1.0	0.8
9. Industrial gold	0.0	0.0	0.0	0.0	0.0	0.0
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>



**Algeria:**  
**Exports by group of products (2008): share of each country by group of product (%)**

	Share of the intended countries by group of product					Share of the groups of products in the total exports of Algeria
	Mali	Niger	Nigeria	Chad	Tunisia	
1. Food, beverages, tobacco	0.8	37.3	0.0	0.0	61.9	15.0
2. Energy and lubricants	0.0	27.9	4.6	0.0	67.4	0.9
3. Raw materials	1.1	2.5	1.8	0.0	94.6	1.8
4. Crude products	0.8	83.2	0.0	0.4	15.6	0.4
5. Semi-finished products	0.0	1.2	3.3	0.0	95.6	4.1
6. Agricultural equipment	0.0	0.0	3.0	0.0	97.0	10.2
7. Industrial equipment	4.9	1.5	70.5	0.0	23.1	6.8
8. Industrial consumer goods	4.0	4.8	1.7	0.0	89.5	34.5
9. Industrial gold	0.0	0.0	0.0	0.0	0.0	0.0

## 2. Tunisia

The reclassification of Tunisia's imports, according to the harmonized system, performed for the years 2004 and 2006, establishes clearly the following general features:

- The country has an export potential on sections 4,5,6,15,16,17,18, as shown in the tables below, corresponding to the years 2006 through the amounts and shares of these sections.
- The products of these sections concerned by the Tunisian exports can be grouped into 4 major groups of products:

Product groups	Main products
Foodstuff, beverages, tobacco	Sweets, extracts, essences and concentrates, cheese, peppers, milked flour, preparations for soups, canned and frozen fish
Semi-products	Dicalcium phosphate, towers and masts (iron and steel), cement, glass packaging and transport items
Industrial equipment	trailers and semi trailers for vehicles, tanks and containers (cast iron, iron, steel), parts and accessories for meters (gas, liquid, electricity) fishing boats, bathroom fixtures
Industrial Consumer Goods	Preparations for cleaning and laundry, medicines, paper towels, household-type refrigerators, shoes

- Algeria covers 89% of Tunisia's total exports towards the TSR area.
- As for Algeria, Tunisia has a more diverse export potential but also characterized by a concentration on a single country of the RTS, Algeria.

**Tunisia:**  
**Exports towards the TSR area, by section (in thousand DT)**  
2006

Section	Algeria	Mali	Niger	Nigeria	Chad	TSR
1	107	0				107
2	2,020	529	481	9	0	3,040
3	3,691	85	255			4,032
4	27,802	1,052	7,271	2,340	84	38,551
5	23,246	685	415	0	1,251	25,598
6	18,155	1,011	1,010	26	1,179	21,381
7	7,451	874	677	92	422	9,518
8	10		3			12
9	1,137	97				1,234
10	13,725	699	578	67		15,070
11	2,224	417	341	0	20	3,003
12	395	11	133		788	1,328
13	16,348	250	68	0	0	16,666
14	0	0				0
15	31,965	670	35	0	35	32,705
16	32,386	3,292	672	598	470	37,419
17	39,669	61	9	0	28	39,768
18	25,891	1	187	0	8	26,087
19						0
20	3,127	72	129	75	0	3,403
21						0
<b>Total</b>	<b>249,353</b>	<b>9,809</b>	<b>12,266</b>	<b>3,207</b>	<b>4,287</b>	<b>278,924</b>

**Tunisia:**  
**Share of exports towards the TSR area, by country**  
 2006

Section	Algeria	Mali	Niger	Nigeria	Chad	TSR
1	0.0	0.0	0.0	0.0	0.0	0.0
2	0.8	5.4	3.9	0.3	0.0	1.1
3	1.5	0.9	2.1	0.0	0.0	1.4
4	11.1	10.7	59.3	73.0	2.0	13.8
5	9.3	7.0	3.4	0.0	29.2	9.2
6	7.3	10.3	8.2	0.8	27.5	7.7
7	3.0	8.9	5.5	2.9	9.9	3.4
8	0.0	0.0	0.0	0.0	0.0	0.0
9	0.5	1.0	0.0	0.0	0.0	0.4
10	5.5	7.1	4.7	2.1	0.0	5.4
11	0.9	4.3	2.8	0.0	0.5	1.1
12	0.2	0.1	1.1	0.0	18.4	0.5
13	6.6	2.6	0.6	0.0	0.0	6.0
14	0.0	0.0	0.0	0.0	0.0	0.0
15	12.8	6.8	0.3	0.0	0.8	11.7
16	13.0	33.6	5.5	18.6	11.0	13.4
17	15.9	0.6	0.1	0.0	0.7	14.3
18	10.4	0.0	1.5	0.0	0.2	9.4
19	0.0	0.0	0.0	0.0	0.0	0.0
20	1.3	0.7	1.1	2.3	0.0	1.2
21	0.0	0.0	0.0	0.0	0.0	0.0
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

**Tunisia:**  
**Share of exports towards the TSR area, by section**  
 2006

Section	Algeria	Mali	Niger	Nigeria	Chad	RTS
1	100.0	0.0	0.0	0.0	0.0	100.0
2	66.5	17.4	15.8	0.3	0.0	100.0
3	91.5	2.1	6.3	0.0	0.0	100.0
4	72.1	2.7	18.9	6.1	0.2	100.0
5	90.8	2.7	1.6	0.0	4.9	100.0
6	84.9	4.7	4.7	0.1	5.5	100.0
7	78.3	9.2	7.1	1.0	4.4	100.0
8	78.9	0.0	21.1	0.0	0.0	100.0
9	92.1	7.9	0.0	0.0	0.0	100.0
10	91.1	4.6	3.8	0.4	0.0	100.0
11	74.1	13.9	11.4	0.0	0.7	100.0
12	29.7	0.9	10.0	0.0	59.4	100.0
13	98.1	1.5	0.4	0.0	0.0	100.0
14	0	0	0	0	0	0
15	97.7	2.0	0.1	0.0	0.1	100.0
16	86.5	8.8	1.8	1.6	1.3	100.0
17	99.8	0.2	0.0	0.0	0.1	100.0
18	99.3	0.0	0.7	0.0	0.0	100.0
19	0	0	0	0	0	0
20	91.9	2.1	3.8	2.2	0.0	100.0
21	0	0	0	0	0	0
<b>Total</b>	<b>89.4</b>	<b>3.5</b>	<b>4.4</b>	<b>1.1</b>	<b>1.5</b>	<b>100.0</b>

### 3. Mali

Mali's main export products towards the TSR area are, according to the classification of Mali (FCFA Million):

#### Algeria

Section	Main significant products in the section	2003	2004	2005	2006	2007	Average
01	Live animals: camels	888	588	2	844	932	650
12	Shoes		54	16			14
94	Furniture			110			22
<b>Total</b>	Value of exports towards Algeria	<b>944</b>	<b>642</b>	<b>199</b>	<b>870</b>	<b>932</b>	<b>717</b>

#### Tunisia

Section	Main significant products in the section	2003	2004	2005	2006	2007	Average
52	Cotton	795	1 300	730	899	525	850
<b>Total</b>	Value of exports towards Tunisia	<b>822</b>	<b>1 309</b>	<b>734</b>	<b>902</b>	<b>535</b>	<b>860</b>

#### Niger

Section	Main significant products in the section	2003	2004	2005	2006	2007	Average
01	Live animals: camels, bovines, sheep, goats	4 384	3 275	268	368	570	1 773
10	Cereals : mil, sorghum		668	580	60		261
39	Plastic items	24					5
84	Hardware	217		36	35	8	59
85	Electricals	51	6	17	59		26
87	Automotive Accessories	278		84	39	68	94
<b>Total</b>	Value of exports towards Niger	<b>5 067</b>	<b>4 253</b>	<b>1 075</b>	<b>644</b>	<b>803</b>	<b>2 368</b>

#### Chad

Section	Main significant products in the section	2003	2004	2005	2006	2007	Average
84	Hardware		124			8	26
87	Automotive Accessories		36	12	35		16
<b>Total</b>	Value of exports towards Chad	<b>1</b>	<b>216</b>	<b>12</b>	<b>36</b>	<b>41</b>	<b>61</b>

#### Nigeria

Section	Main significant products in the section	2003	2004	2005	2006	2007	Average
01	Live animals: camels, bovines, sheep, goats	1 173	17			850	408
08	Fruits : mangoes			2	14	11	6
52	Cotton		743	258			200
<b>Total</b>	Value of exports towards Nigeria	<b>1 178</b>	<b>774</b>	<b>274</b>	<b>34</b>	<b>897</b>	<b>631</b>

Representing for the whole area, an annual average over 5 years (2003-2007) as follows:

Section	Products	Value	%	TSR destination Countries (in order)
01	Live animals: camels, bovines, sheep, goats	2 831	61 %	Niger, Algeria, Nigeria
52	Cotton	1 050	23 %	Tunisia, Nigeria
10	Cereals : mil, sorghum	261	06 %	Niger
	Others	495	10 %	Niger, Nigeria
	Total exports towards the other countries of the area	<b>4 637</b>	<b>100</b>	<b>Niger, Tunisia, Algeria</b>

#### 4. Niger

The aggregation of data collected by chapter and section has enabled the analysis of Niger's exports over the period 1998-2007 towards the countries of the TSR area and emphasize that:

- Niger's main exports are products of two sections:
  - Section 1: "Live animals and animal kingdom"
  - Section 2: "vegetable products"
- Indeed, throughout the period analyzed, these two product categories represent more than 80% of Niger's exports to countries of the TSR area.
- Accordingly, overall this period, the distribution of Niger's exports for these two sections is presented as follows:

	Share of sections	
	in exports towards the TSR area	in exports towards Nigeria
Section 1	75.25	99.50
Section 2	18.25	97.25

- Nigeria is the main partner of Niger, with 98% of Niger's exports on the two main categories of products exported by Niger towards the TSR area.
- A more detailed analysis of Niger's exports leads to the following conclusion:
  - within section 1, Chapter 1 describing the exports of live animals emerges
  - within section 2, chapter 7 (vegetables, roots and tubers) predominates

	2000	2001	2002	2003	2004	2005	2006	2007
Chapter 1	96.2	90.3	85.1	89.9	92.6	94.0	98.6	99.1
Chapter 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Chapter 3	3.7	9.3	14.5	9.9	7.4	5.8	1.4	0.9
Chapter 4	0.1	0.4	0.4	0.1	0.1	0.1	0.0	0.0
Chapter 5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Section 1</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

	2000	2001	2002	2003	2004	2005	2006	2007
Chapter 6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Chapter 7	72.6	83.2	68.5	72.8	76.1	80.5	55.0	50.4
Chapter 8	4.1	5.7	8.7	4.7	2.1	2.9	9.1	10.2
Chapter 9	1.4	2.7	3.9	3.1	2.3	4.6	7.7	5.3
Chapter 10	0.2	0.2	0.3	0.1	5.0	0.3	1.5	0.5
Chapter 11	0.0	0.1	0.2	0.2	0.4	0.5	0.7	0.4
Chapter 12	214	8.0	18.3	19.2	14.1	11.2	26.0	33.2
Chapter 13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Chapter 14	0.3	0.0	0.1	0.0	0.0	0.0	0.1	0.0
<b>Section 2</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

- For Niger, the main export products corresponding to those chapters, are:

Dominant positions of the nomenclature		Products concerned
Section	Chapter	
1	1	Live animals: camels, horses, donkeys, bovines, sheep, goats,
2	7	Cowpeas, onions, peanuts

## 5. Chad

The data related to 2006, a year considered to be representative of Chad's exports within the last decade show/

- A single partner within the TSR area, namely Nigeria, with yet some exports to Algeria, although negligible.

Intended country	Value (million FCFA)	%
Nigeria	40,573	31.73%
Algeria	31	0.02%
Total	127,884	100.00%

- Thus, the main products exported toward Nigeria (excluding oil) are:

Total	Customs value	Share
	<b>32 459</b>	<b>100,0%</b>
Oxen	25,774	79.4%
Cotton, not carded or combed	3,367	10.4%
Other bovine	905	2.8%
Cottonseeds	809	2.5%
Cottonseed oil, crude	416	1.3%
Camels	213	0.7%
Female camels	130	0.4%
Gum Arabic	123	0.4%
Groundnuts	104	0.3%

## 6. Nigeria

The following tables show the main products exported by Nigeria towards other countries of the area for the year 2007, a year considered to be representative of Nigeria's exports within the last decade:

**Nigeria's exports, by product, by country of the TSR area (2007) - (\$ thousand)**

Algeria			
Main products		Value	%
1	Hair Products	437	27.3
2	Rubber derived products	298	18.6
3	Products made of sugar	237	14.8
4	Natural gum arabic	165	10.3
5	Starch	154	09.6
<b>Total of the 5 main products</b>		<b>1 291</b>	<b>80.6</b>
Others		311	19.4
<b>Total</b>		<b>1 602</b>	<b>100</b>

Tunisia			
Main products		Value	%
1	Cereals (Bran, wheat residues)	1 206	85.6
2	Others	203	14.4
<b>Total</b>		<b>1 409</b>	<b>100</b>

Mali			
Main products		Value	%
1	Printed cotton	1 930	85.0
2	Others	340	15.0
<b>Total</b>		<b>2 270</b>	<b>100</b>

Niger			
Main products		Value	%
1	Crude oil	38 836	52.1
2	Minerals (aluminum, lead, zinc, silver, anthracite)	12 548	16.8
3	Boats (trailers, dredging)	3 485	04.7
4	Natural rubber, latex, used tires	2 691	03.6
5	Cigarettes	2 510	02.9
6	Fish, seafood	2 157	02.9
7	Cocoa (beans, pasta, butter, powder, chocolate)	1 851	02.5
8	Wheat, grain	1 464	01.9
9	Boots, shoes	1 337	01.8
10	Sesame Seeds	1 095	01.5
<b>Total of the 10 main products</b>		<b>67 974</b>	<b>91.3</b>
Others		6 479	08.7
<b>Total</b>		<b>74 453</b>	<b>100</b>

<b>Chad</b>			
Main products		Value	%
1	Shoes	2 524	62.4
2	Plastic items	1 334	33.0
<b>Total of the 2 main products</b>		<b>3 858</b>	<b>95.4</b>
	Autres	187	04.6
<b>Total</b>		<b>4 045</b>	<b>100</b>

These data support the following conclusion:

- Niger is Nigeria's main export partner (80% excluding oil and 90% including oil)
- Oil and minerals represent the dominant exports towards Niger, Nigeria's main export partner within the TSR area
- Manufactured products take a large place, compared to agricultural products, in Nigeria's exports towards all countries of the TSR area



### 3

## TRANSPORT COSTS: MAGHREB PORTS/GUINEA GULF PORTS, FOR THE LANDLOCKED TRLC MEMBER COUNTRIES

### INTRODUCTION

#### Foreign trade of the 3 landlocked countries: Mali, Niger, Chad

This analysis purpose is to compare the conditions of transport and transit for the landlocked TRLC member countries Mali, Niger and Chad through the two main respective ways:

- the ports of the Gulf of Guinea, in the current state,
- the Maghreb ports, as a possibility to consider

- **The volume of trade:**

Overall, the annual volume of maritime trade for 2006 is as follows:

Pays	Imports			Exports		
	Quantity (Million tons)	% of foreign trade	Main Products	Quantity (Million tons)	% of foreign trade	Main Products
<b>Mali</b>	2.80	87 %	Oil products Foodstuffs Building Materials Capital goods Chemicals	0.42	13 %	Minerals Agricultural Products
<b>Niger</b>	1.37	96 %		0.06	4 %	
<b>Chad</b>	4.14	66 %		2.10	34 %	
<b>Total</b>	8.31			2.58		

**That is to say: for the three countries:**

- 10.9 million tons for the entire foreign trade, including:
- 8.3 million tons for imports, i.e. 76%
- 2.6 million tons for exports, i.e. 24%

• **Distribution of trade by continent**

The geographical distribution of foreign trade provides an overview of the origins and destinations of freight and lighting for the comparative analysis of all links in the chain of trade routing through the various corridors.

<b>Mali</b>	<b>2006</b>	<b>Africa</b>	<b>Europe</b>	<b>Asia</b>	<b>America</b>
	Imports %	46.4	28.8	15.7	08.3
	Exports %	79.1	05.6	14.2	01.1

<b>Niger</b>	<b>2006</b>	<b>Africa</b>	<b>Europe</b>	<b>Asia</b>	<b>America</b>
	Imports %	04.0	45.0	41.0	10.0
	Exports %	30.0	68.0	01.0	01.0

<b>Chad</b>	<b>2006</b>	<b>Africa</b>	<b>Europe</b>	<b>Asia</b>	<b>America</b>
	Imports %	13.7	32.4	43.0	10.9
	Exports %	06.0	05.0	14.8	74.2 *

\* the significant high level of Chad's exports towards America is justified by the hydrocarbons production of the country.

**For the three countries, this represents a total of:**

	<b>Africa</b>	<b>Europe</b>	<b>Asia</b>	<b>America</b>
Imports %	<b>23 %</b>	<b>33 %</b>	<b>33 %</b>	<b>10 %</b>
Exports %	<b>19 %</b>	<b>5 %</b>	<b>14 %</b>	<b>61 %</b>

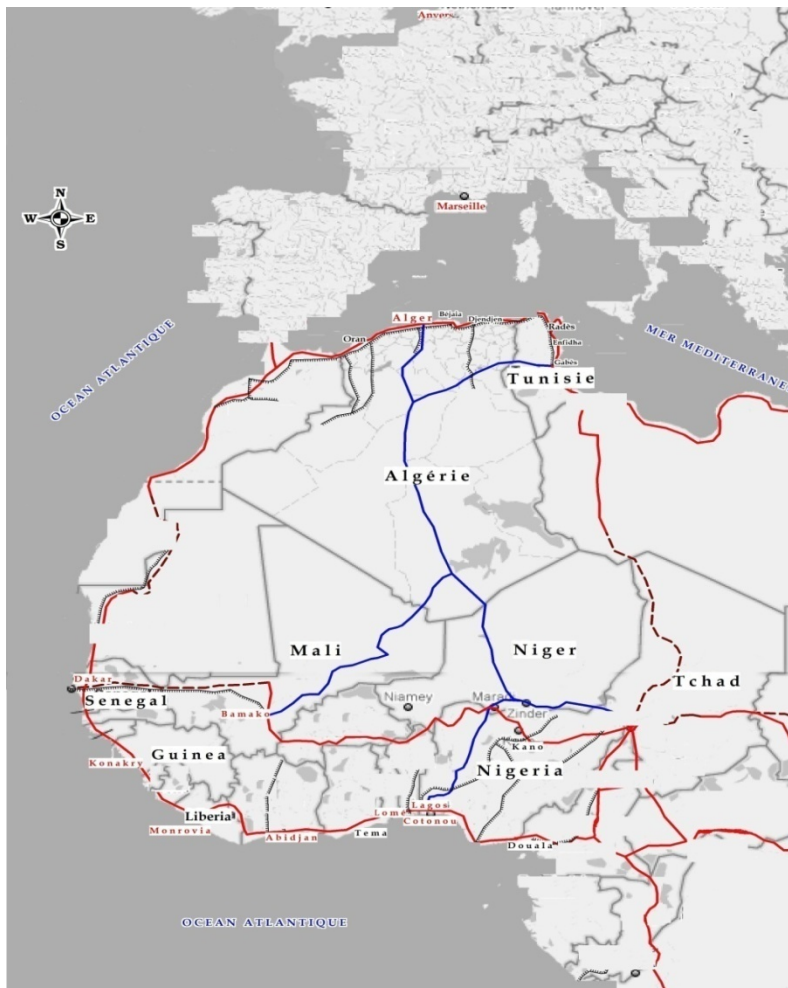
## A TRANSPORT SUPPLY

The process of foreign trade routing of the three landlocked TRLIC member countries Niger, Mali and Chad, is achieved through sea and land (road and rail) transport, the transition from one to the other constituting a bulk breaking occurring at the level of port infrastructure.

Studies carried out by international institutions on the different corridors using ports of the Gulf of Guinea evaluate, on average, for landlocked countries such as Niger, Mali and Chad, costs by mode of transport and transit, spreading globally as follows:

- Shipping services : 40%
- Port Facilities : 23%
- Inland transport : 37%

The map below shows the geographical area where the movement of foreign trade for the 3 landlocked countries (Mali, Niger, Chad) takes place in its Euro-African part



## 1.1 Shipping services

As mentioned previously,

- The majority of cargoes comes from or is intended for Europe and Asia, which absorb a large share of trade with these countries.
- European ports are points of consolidation of goods from all parts of the world for their transfer to Africa and vice versa, from Africa to the rest of the world.

Based on the statistics available and needed to identify the precise geographical areas of embarkation and disembarkation in Europe and Asia, it is recommended to take into account the following representative ports:

- For northern Europe: Antwerp, the other main ports of the area being close to each other such as Rotterdam and Hamburg,
- For Southern Europe: Marseille, Algeciras and Malta for the Mediterranean transshipment of cargoes from Asia to the sub-Saharan countries.

### Shipping distance and duration:

Shipping services in these traffic generating areas is summarized in the table below, which includes the traditional corridors of the Gulf of Guinea and West Africa as well as possible alternative corridors through the Mediterranean ports of TRLIC Maghreb countries. Therefore, by row port, shipment services distance and minimum duration are as follows:

Shipping duration is estimated on the following basis:

- It does not take into account the geographical factor
- It is calculated on the basis of an average speed of 12 knots
- It does not consider variances that may occur over long distances as the case for the port rows Europe - West Africa and Gulf of Guinea and lengthen the periods about 2 to 6 days depending on situations.
- It does not include the duration of stops made between West African ports
- It does not include the period required for the load of goods.

Thus, for each port row, shipping distances and the minimum time are:

#### Port row Northern Europe: Antwerp

Destination : West African and Gulf of Guinea ports			Destination : Maghreb ports		
Ports	Distance In nautical miles (1)	Shipping duration (days and hours)	Ports	Distance In nautical miles (1)	Shipping duration (days and hours)
Dakar	2,587	09 d	Oran	1,601	05 d + 13 h
Abidjan	3,735	13 d	Algiers	1,778	06 d + 04 h
Tema	3,978	13 d + 20 h	Bejaia	1,968	06 d + 20 h
Lomé	4,064	14 d + 03 h	Djendjen	1,968	06 d + 20 h
Cotonou	4,117	14 d + 07 h	Tunis/Rades	2,160	07 d
Lagos	4,176	14 d	Gabes	2,401	08 d + 08 h
Douala	4,555	15 d + 20 h			

(1): 1 Mille = 1,852 Km

## Port row Southern Europe:

Destination : West African and Gulf of Guinea ports			Destination : Maghreb ports		
Ports	Distance In nautical miles (1)	Shipping duration (days and hours)	Ports	Distance In nautical miles (1)	Shipping duration (days and hours)
<u>From MALTA to :</u> Dakar Abidjan Tema Lomé Cotonou Lagos Douala	2,482 3,637 3,873 3,959 4,019 4,078 4,449	08 d + 15 h 12 d + 15 h 13 d + 11 h 13 d + 18 h 13 d + 23 h 14 d 15 d + 11 h	<u>From MALTA to :</u> Oran Algiers Bejaia Djendjen Tunis/Rades Gabes	769 573 470 470 231 263	02 d + 02 h 01 d + 02 h 01 d 01 d 19 h 22 h
<u>From MARSEILLE to :</u> Dakar Abidjan Tema Lomé Cotonou Lagos Douala	2,188 3,343 3,579 3,665 3,725 3,784 4,155	07 d + 14 h 11 d + 15 h 12 d + 10 h 12 d + 17 h 12 d + 22 h 13 d + 03 h 14 d + 10 h	<u>From MARSEILLE to :</u> Oran Algiers Bejaia Djendjen Tunis/Rades Gabes	534 279 396 396 472 704	01 d + 20 h 23 h 01 d + 09 h 01 d + 09 h 01 d + 15 h 02 d + 11 h
<u>From ALGECIRAS to:</u> Dakar Abidjan Tema Lomé Cotonou Lagos Douala	1,502 2,657 2,893 2,979 3,039 3,098 3,469	05 d + 05 h 09 d + 05 h 10 d + 01 h 10 d + 08 h 10 d + 13 h 10 d + 18 h 12 d + 01 h	<u>From ALGECIRAS to:</u> Oran Algiers Bejaia Djendjen Tunis/Rades Gabes	237 414 515 515 796 1,037	20 h 1 d + 11 h 1 d + 19 h 1 d + 19 h 2 d + 18 h 3 d + 14 h

(1) : 1 Mile = 1,852 Km

**Conclusion on the routing time of shipping services**

**These estimates show that because of the distance, minimum time is:**

**5 times lower through the Maghreb ports (3 days) compared to the ports of the Gulf of Guinea (15 days), with respect to the Southern Europe port rows**

**2 times lower through the Maghreb ports (8 days) compared to the ports of the Gulf of Guinea (16 days), with respect to the Northern Europe port rows**

## Costs of shipping services

Costs here are estimated on the following basis:

- The basic unit is the 40-foot container containing 30 tons (maximum allowed).
- The cost of shipping a container is provided by shipping companies or retained by studies conducted by international institutions.
- The amounts have all been converted into US\$ for comparison purposes.
- The amounts are valid for the West African ports serving Mali and Niger.
- The amounts indicated for the shipping and port link are unchanged for all destinations of the same country, transit being via the same port.

The costs for the transport of a container are accordingly recorded:

Ports of origin	Destination ports	Transport cost for a 40-foot container (\$)
Southern Europe : Marseille	Maghreb	1,300
	Gulf of Guinea	3,650
Northern Europe : Antwerp	Maghreb	1,800
	Gulf of Guinea	4,500 to 7,000

### Conclusion for the costs of shipping services

**Costs of shipping services, proportional to distance and routing time are therefore lesser for the Maghreb ports compared to the ports of the Gulf of Guinea:**

- 2.8 times on the liaison Southern Europe
- 2.5 to 3.5 times on the liaison Northern Europe

## **1.2 Shipping companies in foreign trade haulage:**

### **Role of the shipping companies in the invoice**

It is therefore possible to consider that the transport cost on the sea link would be theoretically reduced for the Maghreb ports, proportionally to distance. However, this deduction should be adjusted by taking into account other factors also contributing to reduce transport costs. It is the prevailing role of shipping companies in the trade haulage of landlocked countries. The level of freight rates charged by these companies depends in particular on available transport capacity and organization of the maritime freight market.

In the 1970s, under pressure from the demands of developing countries, we had witnessed the emergence of new shipping companies developed by the coastal developing countries; shipping companies have been created in Senegal, Côte d'Ivoire, Ghana, Cameroon, Nigeria and Benin.

The emergence of these new companies has been an additional transport supply in support of the maritime trade of these countries and the landlocked ones. In fact, given the small size of these companies and their limited experience, impact on the level of freight rates would have been an insignificant effect without the control of trade flows.

### **International distribution of freight**

Within the framework of the UNCTAD, an international convention on the Code of Conduct for Liner Conferences was adopted in 1974. It aimed at distributing tonnages between old and new companies developed by the developing countries, thus allowing them to contribute in the haulage of flows generated by their economies. This Convention instituted actually a formula for traffic sharing called "40/40/20".

Thus, the companies in developing countries get their share of the shipping market to 40% on regular liner shipping serving their country, 40% are covered by the former foreign companies engaged on these traditional liners and the remaining 20% being entrusted to third parties (foreign newcomers on the sea network).

Some other developing countries such as Algeria did not expect the adoption of these provisions and opted very early for an equal distribution with their partners (50/50) within the framework of bilateral maritime transport agreements.

Besides the traffic sharing clause, this convention and the bilateral agreements set up bodies for monitoring and regulating traffic and shipping conferences also set freight rates. Thus, despite the limited maritime transport capacities set by these countries, their companies could operate chartering to support their rightful freight. This new transport supply, the terms of freight booking and the powers conferred by liner conferences allowed actually acting on the level of shipping costs.

### **Weakness of African shipping companies given the concentration of the maritime transport on some international major companies**

However, this situation should have changed drastically in the late 1980s. Since then, and as a result of a number of factors, including the introduction and development of new transport technologies such as containerization and management level, these companies could not adapt to the changing new picture of the shipping market. In addition, under pressure from international financial institutions during this period, shipping companies have disappeared in West Africa and the Gulf of Guinea or were reduced in size.

Naturally, with the strong tendency towards consolidation, shipping traffic is concentrated within a very small number of carriers such as Maerks (Danish), MSC (Italian), CMA-CGM (French). In addition to the opacity in the setting of freight rates charged on the basis of Incoterms (terms of reference in international trade fixing responsibility for loading, transportation, insurance and delivery) used in transactions with these landlocked countries, the competition rules limited to a few large maritime transport operators have not produced the expected effects of genuine competition in the level of transport costs.

The Maghreb TRLC countries, Algeria and Tunisia, are also served by foreign shipping companies that conquered a very important part of their maritime transport market. However, these countries still have their own companies involved in the haulage of their foreign trade and also use charter resources.

These companies consist of a reliable fleet of merchant ships able to contribute in the maritime transport of landlocked countries using alternative Maghreb corridors, from or towards European ports. They could represent a potential supply for the additional haulage of foreign trade of the landlocked countries through their ports also widely covered by the extra-African companies. This perspective may even be a factor of consolidation for these fleets on their market.

Comparatively, the Maghreb ports present the advantage of being served by national shipping companies, consequently offering additional capacities to enhance competition with the extra-African companies.

## **1.2 Port capacities and services**

### **Ports in the link of the transport chain**

The ports handle the transfer of cargo between the two modes of transport by land and sea. Their handling of cargoes depends mainly on the level of port facilities and means for the transfer of goods.

The evolution of transport technologies shows a clear tendency towards the development of containerization. They are units that do not require breaking bulk thus enabling the quick transit from the shipper to consignee with shorter deadlines and lower costs on all links of the transport chain. In addition to better securing of goods, packaging container is certainly beneficial when it comes to long distances and successive appeals to different modes of sea transport, port handling, roads and rails.

To exemplify the significant development of containerization, container traffic in TEUs (Twenty-foot container Equivalent Unit) increased:

- On the port row Dakar/Cotonou : from 0.5 to 2.6 million TEUs, between 1980 and 2006
- In Tunisian ports : from 280,000 to 350,000 TEUs, between 2002 and 2006
- In Algerian ports : from 710,000 to 880,000 TEUs, between 2004 and 2006
- Worldwide : from 264 to 383 million TEUs, between 2002 and 2005

Therefore, one can observe a gradual establishment of suitable facilities enabling ports to provide benefits to the expectations of traders. Investments for this purpose allowed capturing traffic at the expense of other ports that have failed to equip themselves accordingly and integrate these procedures induced by new transport technologies.



## **The ports of the coastal countries of West Africa and the Gulf of Guinea:**

For ships accommodation, coastal countries of West Africa and the Gulf of Guinea cover several ports, but many of them are either specialized exclusively in the export of domestic raw materials or intended primarily to satisfy the domestic market.

By cons, the ports in this geographical area such as Dakar (Senegal), Abidjan (Côte d'Ivoire), Lagos (Nigeria), Lomé (Togo), Tema (Ghana), Cotonou (Benin) and Douala (Cameroon) have a more regional service vocation. By their most suitable characteristics and appropriate equipment for ships accommodation and processing, they represent a genuine sea opening for the landlocked countries in the transportation of their trade products.

**Dakar**, though representing a natural route for supplies of Mali, the foreign trade of this country has gradually shifted to the port of Abidjan and then the port of Lomé in Togo and Tema in Ghana, in the wake of the Ivorian crisis. Located almost equidistant to the port of Abidjan, Dakar could again capture a significant proportion of Mali's traffic through the improvement of road and rail networks.

**Abidjan** is the largest port in the region both in size (800 hectares) and in number and linear of specialized and multipurpose berths. It can also accommodate large-ton ships, the port including 10 to 15m draughts. Abidjan is a major transit and transshipment port with regional ambitions. It is equipped with a large container terminal and 3 gantries, 378,000 m<sup>2</sup> of quay surface, large warehouses and stores. This port is served mainly by roads but also by rails. For Mali, Abidjan is the main transit port for 70% of its foreign trade, the Senegalese corridor being less used because of the poor condition of the railways and roads linking the two countries. It is also the traditional recourse for Niger.

**Tema**, second major port of Ghana, offers interesting solutions for the 3 countries of the hinterland which are Burkina Faso, Niger and Mali, in particular regarding its performance in the processing of containers and the good state of the country's road network.

**Lomé** is the largest deep waters port in the West African sub region. Mainly used for regional purposes, the port of Lomé is facing competition from other nearby ports such Tema and Cotonou. Its traffic estimated at 6 million tons in average for countries such as Sahel landlocked countries, Burkina Faso, Niger and Mali. Through this competition, the port of Lomé has many facilities and inducements for operators of the Sahel countries, such as the provision of warehouses, free zones, a service 'Solidarity on the sea', periodic secure ferrying of goods to landlocked countries.

**Cotonou** channels most of Niger's foreign trade. This port, whose capacity to accommodate ships consists of a main dock of 1,500 m, a container berth and a jetty for ro-ro ships. Mali also exploits this port but in a lesser extent since it has other alternative corridors such as Abidjan for the export of cotton, Lomé for oil products and Tema for other products. Cotonou, although smaller in size, has, along with Lomé, captured the traffic of Niger and much of Mali's because of the political situation in Côte d'Ivoire. This port covers 100,000 m<sup>2</sup> of asphalt quay area, 3 container terminals, a storage capacity of 70,000 m<sup>2</sup> (stores, covered warehouses...). Compared to the port of Lomé, Cotonou provides the means for rail and road connection enabling more favorable services in terms of corridor towards or from Niger, for the transit of 90% of its goods, and Mali.

**Lagos** port is geared towards the Nigerian hinterland given the importance of its traffic and its domestic needs. It would alone accounts for 25% of all ports in the region. It intervenes in a part of Niger's foreign trade.

**Douala** represents the main transit port for Chadian goods at import or export. Other ports in the countries of Central and West Africa has a large area of 1 000 hectares, accessible by a channel of 50 km and can accommodate 7m draught ships. For the processing of cargoes, the port of Douala is relatively well equipped, and continues to modernize its facilities with specialized investment on container processing and transfer of goods outside the port areas.

## **The ports of the Maghreb countries**

The Maghreb countries cover extensive port facilities located along the Mediterranean coast.

### In Algeria

- 10 ports ensure the flow of foreign trade of over 130 million tons in 2007. Two of them specialize in hydrocarbons export: Bethioua-Arzew and Skikda. The other eight commercial ports are, from west to east, Ghazaouet, Oran, Mostaganem, Tenes, Algiers, Bejaia, Annaba and Djendjen.
- Among the latter, Oran, Algiers, Bejaia and Djendjen were selected for the purpose of this study. Considerations taken are
  - Their position in the passage of foreign trade since they deal with the bulk of shipping excluding hydrocarbons.
  - They can accommodate large-ton ships. The port of Djendjen, major new infrastructure commissioned in 1998, has a 16 m draught.
  - They include specialized platforms and facilities.
  - They are closer to the Trans-Saharan Road.
- The ports of Oran, Algiers, Bejaia and Djendjen comprise container terminals. Oran is currently doubling the capacity of containers accommodated by the extension of its terminal. Algiers treats the bulk of container traffic with ambition to expand its terminal to achieve as of this year an annual capacity of 700,000 TEUs. Bejaia has 2 gantries of 65 tons lifting capacity and 5 units of storage and stacking gantries. Djendjen, the Algerian larger dry-cargo port, aspires to become a major transshipment and transit port in the Mediterranean with predictive capacities for the processing of 1.5 million TEUs by 2015.
- In order to increase their productivity, the Algerian ports also concluded partnership agreements by creating subsidiaries with large global companies for the management of container terminals, the objective being to increase the number of containers in transit. Thus, the port of Bejaia created in the early 2000s, a joint venture with Singapore Portek. The same actions were undertaken by the ports of Algiers and Djendjen, each of them having also created a joint venture with Dubai Port World (DPW) to manage their container terminals.
- All Algerian ports mentioned here present the advantage of being connected to modern infrastructures for goods disembarkment as discussed in the paragraphs devoted to inland services and connection to the Trans-Saharan Road.

### In Tunisia

- Tunisia covers 7 commercial ports. They are from north to south: Bizerte, Tunis/Rades (port complex of tunis), Sousse, Sfax, La Skhira (petroleum port), Gabes and Zarzis. They processed 24.5 million tons of goods in 2008. The ports taken into consideration are Rades and Gabes, the first one because of the high concentration of traffic in containers and trailers, the second because of its proximity to connect with the Trans-Saharan Road.

- At the Tunisian ports, containerisation has also emerged as the fastest way for goods port transit. The port of Rades is an illustration of this development. It processes most of the Tunisian container traffic and is also the first Tunisian ro-ro port. Currently dealing with 312,137 TEU, the capacity of this port will shortly increase to 400,000 in 2010 and 700,000 in 2020. Besides, a new terminal and a logistics platform are being rehabilitated on this port.
- Gabès processes bulk mass cargo.
- It should be noted that Tunisia has started a major project to achieve a new deep-water port in Enfidha (75 km in the south of Tunis); it shall allow the disembarkment of goods containers on Asia-Europe direction through the Mediterranean.

### Summary of indicators on port capacities

Summary:  
Indicators on port capacities  
for containers transport in some ports concerned

Ports	Number of berths	Quay linear (meters)	Draughts	Total area (ha)	Container terminals	Gantries	Number of containers processed/year
Algiers	36	8,609	11	184	1	-	419,000
Bejaia	24	2,200	13	156	1	1	250,000
Djendjen		1,995	16	180	In progress	In progress	-
Rades	14	1,770	9	55	1	-	312,000
Gabès	12	1,830	10/12	80	-	-	-
Dakar	38	4,900	9/12	105	-	-	375,000
Abidjan	20	6,000	10/15	1,000	1	3	600,000
Tema	14	2,615	9.6	166	-	-	-
Lomé	9	1,170	11	81	-	-	-
Cotonou	12	1,980	10	60	1	1	-
Douala			7	1,000	1	2	100,000
Marseille	108	2,127	11.5/14		2	13	866,000
Malta		2,368	15/17	610,200	2		1,900,000
Algeciras		2,970	14/16		2	19	3,200,000

#### Conclusions on port capacities

##### For the ports of West Africa and the Gulf of Guinea:

The ports of **Dakar, Abidjan, Tema, Lomé, Cotonou and Yaounde** emerged in the management of foreign trade of the 3 landlocked countries, Mali, Niger and Chad. Their capacities continue to improve in terms of equipment and management.

##### For the Maghreb ports:

**In Algeria:** the 3 Algerian ports, **Algiers, Bejaia** and **Djendjen** present the best conditions for the maritime trade flow of landlocked countries. These 3 ports, close to Europe, well-equipped with great capacities, are also connected to a good roads and railways network.

**In Tunisia:** Among the Tunisian ports, **Rades** presents similar advantages in terms of proximity to Europe and much of transshipment ports such as Malta for example. Over 90% of container or ro-ro traffic is processed by Rades. In addition, its processing capabilities are being expanded. This port is currently the most designated Tunisian port to serve the landlocked countries. It is also connected to a good roads and railways network. A new port in **Enfidha** (75km south of Tunis) shall strengthen these capacities as of 2010.

## Port transit: duration

The waiting time of harboured ships, stay at port and cargo port transit constitutes a key factor in the flow of trade between countries, the performance of ports and on shipping costs. The following table gives the times recorded today for the different ports.

**Indicators on port management (2006)**  
for containers transport in some ports concerned  
(waiting time on port before disembarkement not included) in hours

Ports	Waiting on harbour	Port Transit	Total
Alger	18	150	168
Béjaïa	3	36	39
T/Rades	5	36	41
Abidjan	2	45	47
Tema	10	40	110
Lomé	5	25	120
Cotonou	15	20	180
Douala			576

## Port transit: costs

- Costs here are estimated on the following basis:
  - The basic unit is the 40-foot container containing 30 tons (maximum allowed).
  - The cost of shipping a container is provided by shipping companies or retained by studies conducted by international institutions.
  - The amounts have all been converted into US\$ for comparison purposes.
  - The amounts are valid for the West African ports serving Mali and Niger.
  - The amounts indicated for the shipping and port link are unchanged for all destinations of the same country, transit being via the same port.

Accordingly, port transit cost for a 40-foot container would be as follows:

**Port transit costs (2006)**  
for containers transport in some ports concerned

Ports	Costs (in €)
Algiers	400
Béjaïa	200
Rades	220
Dakar	300
Douala	350

### Conclusions on port services

#### Port transit time:

For the Maghreb ports: 39 to 168 days  
For the ports of the Gulf of Guinea: 47 to 576 days

#### Port transit costs:

For the Maghreb ports: 200 to 400 €  
For the ports of the Gulf of Guinea: 300 to 350 €

### 1.3 Inland haulage

- **The inland corridors currently used: from the ports of West Africa and the Gulf of Guinea**

The 3 landlocked countries channel the goods of their foreign trade through road and rail corridors connecting them to the ports of West Africa and the Gulf of Guinea.

Country	Major ports of entry of goods for the country						
	Dakar	Abidjan	Tema	Lomé	Cotonou	Lagos	Douala
Mali	X	X	X	X	X		
Niger			X	X	X	X	
Chad							X

- **New inland corridors potentially exploitable: from the Maghreb ports**

The potential Maghreb ports are:

For Algeria: Algiers, Bejaia, Djendjen

For Tunisia: Tunis-Rades, Enfidha

- **Distance and routing time**

Basis of estimates of routing time:

- Maghreb section: an average of 500 km/day
- Sub-Saharan section: Data from studies of international organizations and shipping companies serving the three landlocked countries
- For the potential corridors (Maghreb ports)

**Distance and duration of inland haulage  
between two representative Maghreb ports and main cities of the landlocked countries**

Country	Port	City	Distance (Km)	Routing time (days)
Mali	Algiers	Bamako	4,193	20
		Gao	2,597	8
		Kidal	2,297	7
	Tunis	Bamako	4,800	22
		Gao	3,204	10
		Kidal	2,854	9
Niger	Algiers	Niamey	3,685	16
		Arlit	2,542	7
		Agadez	2,785	8
		Zender	3,215	13
	Tunis	Niamey	4,292	18
		Arlit	3,149	9
		Agadez	3,392	10
		Zender	3,822	15
Chad	Algiers	N'Djamena	4,505	30
	Tunis	N'Djamena	5,112	32

**Distance and duration of inland haulage  
between the ports of West Africa/Gulf of Guinea and main cities of the landlocked countries**

Country	Port	City	Distance (Km)	Routing time (days)
Mali	Dakar	Bamako	1,400	13
		Gao	2,650	17
		Kidal	2,950	18
	Abidjan	Bamako	1,150	19
		Gao	2,050	22
		Kidal	2,400	23
	Tema	Bamako	2,000	22
		Gao	1,900	23
		Kidal	2,250	24
	Lomé	Bamako	2,000	23
		Gao	1,600	24
		Kidal	1,900	24
Cotonou	Bamako	2,036	18	
	Gao	1,500	16	
	Kidal	1,850	17	
Niger	Tema	Niamey	1,400	22
		Arlit	2,750	23
		Agadez	2,500	22
		Zender	2,300	21
	Lomé	Niamey	1,200	17
		Arlit	2,400	22
		Agadez	2,150	21
		Zender	2,160	19
	Cotonou	Niamey	1,056	17
		Arlit	2,180	20
		Agadez	1,940	19
		Zender	1,695	18
	Lagos	Niamey	1,200	15
		Arlit	2,020	19
		Agadez	1,780	17
		Zender	1,450	15
Chad	Douala	N'Djamena	1,800	15

- **Aggregate data on routing time and distance**

Comparison between the corridors for the inland haulage of goods of the 3 landlocked countries show:

**Distance:**

- In favour of the port row of West Africa and Gulf of Guinea for the southern regions of these countries,
- In favour of the Maghreb port row for the northern regions of these countries.

	Capitals of the 3 landlocked countries	Northern cities of the landlocked countries
Maghreb port row	3,685 to 5,112 Km	2,297.to 5,112 Km
Gulf of guinea port row	1,050 to 2,000 Km	2,200 to 2,950 Km

## Routing time

Taking into account all factors relating to distance, state of roads, means of transport, various conditions (traffic controls and customs):

- In favour of the port row of West Africa and Gulf of Guinea for the southern regions of these countries,
- In favour of the Maghreb port row for the northern regions of these countries.

	Capitals of the 3 landlocked countries	Northern cities of the landlocked countries
Maghreb port row	16 to 32 days	7 to 10 days
Gulf of guinea port row	13 to 22 days	16 to 24 days

**Note:** for the same distance, indicative routing time in Europe is:

Route: Barcelona-Amsterdam:

Distance: 1 800 km

Routing time: 10 hours

i.e. ½ the routing time in the TSR area

## Inland transport costs

### The basis of cost estimates

- Same basic unit, the container and per ton
- The cost of land transport per ton/km is multiplied by the distance between the port in question and destination city.
- Determining the cost per ton/km is obtained from data collected as follows:
  - o Algeria: an average based on tonnage of transport means used and accepted standards, the level of tariffs depending on distances beyond 1,000 km and whether the road crossed is surfaced or not
  - o Tunisia: an average based on tonnage of transport means used and accepted standards, the level of tariffs depending on distances beyond 30km.
  - o Mali and Niger: the cost per ton/km has been calculated on the basis of activity reports of organizations such as shipper observatories and committees.
  - o Chad: the World Bank
- For all these countries, costs denominated in their respective currencies (Algerian dinar, Tunisian dinar, CFA franc) have been converted into US dollars (cents) based on today's rate obtained via internet. But for Chad, the data were taken directly in US dollars (cents) from a recent report by the World Bank.
- The railway is not taken into account because of the inevitable breaking bulk it requires in the transshipment with road transport, the railway being unable to ensure the land end to end in both landlocked and coastal countries of West Africa or the Maghreb. Such bulk breakings necessarily involve additional costs and time.

### Inland transport costs per ton/km

These modalities allowed observing the following inland transport costs per ton/km:

#### Inland transport costs (U.S. cents/ton/km)

Route	Estimate cost
Douala-N'djamena	0.20
East Africa	0.20
Algeria	0.06 to 0.11
Tunisia	0.08

## Costs assessed

On this basis, transport costs in US\$ per ton/km are assessed as follows on each of the main dominant corridors considered:

**Costs per ton/km of routes on different corridors (US\$)**

Port of origin	Destination city				
	Mali		Niger		Chad
	Gao	Bamako	Agadez	Arlit	N'Djamena
Bejaia / Djendjen	149	245	160	130	264
Tunis / Rades	246	292	261	242	393
Abidjan	140	92			
Cotonou			106	134	
Douala					360

### Conclusion on inland transport costs

The analysis of inland transport costs shows that that:

- The tariffs practiced (ton/km) in the two Maghreb countries are lower than those in force in the sub-Saharan countries
- The level of tariffs on the liaison with Chad from ports of the Gulf of Guinea is excessive
- For cities of northern Mali, Niger and N'Djamena, the Maghreb corridor is more advantageous
- Inland transport costs are more interesting from the ports of the Gulf of Guinea for southern cities of Mali and Niger



## **B**

# **TRANSIT FACILITATIONS**

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### **2.1 International legal instruments**

#### **International instruments:**

The Geneva Conventions of 1958, bolstered by that of Montego Bay (Jamaica) in 1982 on the maritime Law, establish a principle of international law. They stipulate that the landlocked States have a right of access from the sea and enjoy freedom of transit through the territory of the transit State. This principle confers rights and obligations to coastal states and landlocked states that other international or regional conventions, sectoral and specific, aim to clarify. One could list the followings for example:

- The 1965 International Convention on transit trade of landlocked countries. It aims to provide landlocked countries with a non-discriminatory treatment for transit through the coastal countries.
- The International Convention of the International Maritime Organization amended in 1965 to facilitate maritime traffic by including facilities to provide for the port passage of goods, cost reduction and simplification of administrative formalities.
- The 1972 Customs Convention on Containers, aiming at complying with technical standards of construction and the temporary customs regime in the transit of containers.
- The 1975 Customs Convention on the international transport of goods establishing the safeguards procedures for goods in transit and more known as the TIR Convention. This agreement is in the arsenal of international conventions, the legal instrument essential to the fluidity of transit of maritime trade involving landlocked countries. The implementation of its provisions requires action at both the regulatory and institutional levels.

Other numerous international conventions of a more specific character have been established but they do not relate particularly the landlocked countries. They deal with different aspects related to transport modes, international trade, legal responsibilities...

#### **Regional instruments:**

##### The countries of West and Central Africa

Regionally, the countries of West and Central Africa cooperate in the field of transport and transit within the institutional framework for the following landlocked countries considered:

For Mali and Niger:

- The Economic Community of West African States (ECOWAS)
- The West African Economic and Monetary Union (WAEMU)

For Chad:

- The Economic and Monetary Community of Central Africa (CEMAC)
- The Economic Community of Central African States (ECCAS)

It is within this context that the transport and transit facilitation measures are taken, in concert, especially regarding the port passages, road and rail links between coastal and landlocked countries. It is worth mentioning the main regional conventions governing these areas of activity, including:

- The Convention on interstate road transit (ISRT) and the Convention on interstate road transport (TIR) with regard to West Africa,
- The Convention on interstate transport and interstate transit system (TIPAC) for Central Africa.

These instruments are supplemented by bilateral agreements, regulations, decisions and recommendations regarding issues related to insurance, security systems, including roadside checks. The landlocked countries of the region also use arrangements with coastal countries in negotiating bilateral governmental agreements. These agreements cover all the links in the chain of foreign trade haulage. They are:

- Sea and port agreements, setting out the principles of granting port facilities such as space concession, specialized facilities, berthing priorities, allocation of berths, ships processing and other various benefits,
- Road and railway agreements on traffic rules, regulation of transit transport,
- Transit agreements on corridor operation, transit procedures ...

### The Maghreb countries

The Maghreb countries are, on their side, governed by the Convention of 1993 on road transport of people and goods and on transit between the countries of the Arab Maghreb Union (AMU). This ratified Convention is in force within the five countries that are Libya, Tunisia, Algeria, Morocco and Mauritania.

Bilateral agreements were also awarded, in the fields of road transport and transit, by Algeria with:

- Niger, agreement ratified by the decree of December 17, 2000,
- Tunisia, agreement ratified by the decree of November 26, 2002,
- Nigeria, agreement ratified by the decree of June 23, 2005.

Agreements of similar nature have been negotiated with Mali and Chad, but have not yet been signed or ratified.

Chad and Cameroon are bound by agreements on road transport and transit and arrangements on land freight sharing.

## **2.1 Procedures and incentives**

### **Institutions:**

At the institutional level, many administrative structures were created in both coastal and landlocked countries of West Africa and the Gulf of Guinea, including:

- The facilitation committees recommended by the International Convention of 1965 adopted under the auspices of the International Maritime Organization,
- The national shippers' councils comprising the foreign trade operators,
- Observatories of malpractice in the conduct of the transit process.

The Maghreb countries also acceding to the Convention of 1965, as amended, have established national facilitation committees gathering, under the auspices of the Ministries responsible for transport, all organizations and bodies able to contribute to a better flow of foreign trade.

- Algeria has also decentralized the activities of this committee to each local authority with a port by setting up local facilitation committees serving under the authority of the Wali. In this respect, it is however worth mentioning that according to the report of the institution, activities and achievements are rather modest. In view of the establishment and development of a corridor serving the landlocked countries, it is necessary to reactivate the facilitation Committee.
- Tunisia, with the application of the TIR Convention with, at least its European partner, countries has a relative experience in the field of facilitation both in the procedures and the adaptation of its regulations. The West African coastal countries, as mentioned before, have a more experienced regulatory system. Besides, they have organs responsible for compliance with legislation by involving administrations and operators including shippers and carriers.

### **The port transit of goods:**

The passage of goods at port represents a milestone not only because of costs but mainly for the waiting time and stay on harbour and quay for ships in warehouses for cargoes. These delays can be reduced for landlocked countries by allowing them:

- to have exclusive embankments and storage areas
- to receive priority of berthing for ships whose cargoes are designed for them or allocation of berths,
- get the favourable handling conditions and exemptions or reductions on benefit costs,
- the presence of landlocked countries representatives in the Board of Directors of ports and the opening of freight offices under authority of the shippers Councils in these countries.

Inducements of this kind have been made by the ports of West Africa and the Gulf of Guinea in the context of port competition aiming for each coastal country at receiving transit traffic to and from landlocked countries.

Foreign trade of sub-Saharan landlocked countries usually exploits the corridors of the Gulf of Guinea. The Maghreb countries in question have no experience in the field. It will in fact extend to landlocked countries benefitting from such advantages granted to national operators regarding quay areas, storage areas, berthing priority. Algerian and Tunisian States and operators should consider negotiations to conclude agreements and arrangements with these countries.

### **Customs clearance:**

Measures contributing also to the facilitation helped improve the customs clearance of people and goods. They mainly concern the following three levels:

- Instituting a single operation point: this measure virtually applied in all the ports of West Africa allowed reducing delays in customs clearance at port to 14 days against 24 days previously, 3 days against 8 days regarding containerized cargoes.
- Establishment of form D15 for customs declarations and transit certificate, a unique customs document enabling a better flow of customs clearance.
- Adoption of simplified immigration procedures for people and operators of transit process, including issuance of visas on the spot and other documents for borders crossing.

Such measures should be extended to goods and people passing through the potential corridors of Algeria and Tunisia. In particular and with regard to Algeria, the transit procedure should be specified, as it constitutes a prerequisite for the development of transit corridors.

### **Inland transport:**

Regarding the inland transport of goods, the multiplicity of controls and barriers staking road journeys generates unpredictable significant delays and additional costs, such factors encumbering transport costs. Hundreds of road checkpoints were recorded on journeys not exceeding 1,000 km. Within the framework of cooperation relationships, the countries of the region agree to limit the number of controls to reduce haulage times.

Another important advantage that is worth mentioning consists in agreeing on a formula for land freight sharing between carriers of coastal countries and those of landlocked countries. Freight offices were established for the management and distribution of freight. Hence, for example, Chadian inland traffic between Chad and Cameroon is split around 35 and 65%. The proportion elsewhere in the region varies between 45 and 55% of inland traffic respectively provided by the carriers of transit countries and the landlocked countries generating freight.

Other benefits consist in the equity in transport resources and infrastructure such as the railways in Benin held up to 37% by Niger and whose organization is common to both countries.

The Maghreb countries have no such experience of the countries of West Africa, Gulf of Guinea and Central Africa on goods transit. Despite some transactions through Algeria to Nigeria in the 1980s or Tunisia, these specific operations are insufficient to draw conclusions or make an assessment as a basis for comparison in all aspects of the transit process to or from landlocked countries.

Therefore, the administrative facilities and other potential benefits as regard ports, organization and implementation of Maghreb corridors shall be discussed within the recommendations section. In addition to international, regional and national legal instruments as well as the process of procedures and incentives regarding granted benefits, issues related to logistics are a key element in the efficiency of the transit process.

### **2.3 Transit logistics**

#### The development of containerization:

Containerization has experienced a rapid development within the recent years as a new transport technique. The introduction of the container helps ensure rapid transit of cargoes without breaking bulk from the transport chain.

The introduction of this new technique certainly allows gaining considerable time by shortening the handling time, stay of ships and cargoes in ports and inland transport time. But over the whole journey, containerization leads, to be efficient, to the introduction of appropriate means, organization and procedures.

In terms of shipping services, ships of a new type appeared, adapted for such transport. Their size is growing to meet imperatives of profitability and volume of international trade. It is expected that, in destination of West and Central Africa, these ships shall cover a capacity of 4,000 TEUs in the very near future, implying draughts of over 15 meters for ports of these countries.

### Processing:

A regards port operations, particularly handling, gantries with lifting capacities able to move 20 and 40 feet containers are needed. The performance of container terminals whatever their extent is significantly diminished without such equipment. Therefore, the average productivity is less than 9 containers per hour at the ports that are not equipped with these means against 30 for southern Europe countries and 24 for Bejaia (Algeria) which includes two 65-tons lifting gantries. For these handling operations, the port of Rades (Tunisia) uses either cranes on board (ship) or shore cranes.

All ports mentioned above, with the exception of Gabes in Tunisia, have container terminals, but those equipped with gantry cranes are not numerous as stated before.

### Staff:

Containerization also involves the adjustment of staff working on each link in the chain of transport and transit by appropriate training in the areas of handling, inland transport, administrative and commercial management, customs, monitoring full containers and return.

One of the causes of transit dysfunction is due to the clearance from the customs of declaration D15 by lorry drivers. It is often established that in many cases the latter proceed with great delays to the regularization of administrative operations with the Customs Administration of the transit countries, particularly in respect with bond support.

### New transport techniques:

The commissioning of ro-ro ships has also allowed significant time savings in the transport and transit of goods. The technique involves the use of trailers supported from ships directly by road tractors. This technique being less recent than the container, most ports have ramps for ships called Ro Ro (roll on roll of) with front/rear openings.

These new transport techniques also require organization and structures for quick transit. The port passage is considered to be the longest part in time, and delays at this stage are bigger than those recorded on the inland section of the chain. For example, of the 39 days (excluding shipping services) necessary for transiting from Douala to N'Djamena, 24 days are dedicated for crossing port, ie: over 60% of the total inland journey.

### Dry ports:

To improve traffic flows and relieve port congestion, some countries were compelled to design and implement clearing areas outside ports called dry ports, intermodal platforms or port logistic platforms. This kind of infrastructure can also be grouped in a bonded area so constructed to provide all services required for transit operations and regulate road and rail traffic.

These facilities have been conducted in Mali and Cameroon.

In Algeria, 5 container transit centres are underway. They are:

- at the port of Bejaia, the creation of a port logistics company whose new site is located in the immediate vicinity of the port. The operating company, besides using consistent road facilities, has also signed an agreement with the Algerian railways company whose network extends south to Touggourt with a subsequent extension to Hassi Messaoud,
- at the port of Djendjen, a major transshipment port, the development of a large container terminal,
- at the ports of Skikda and Annaba, the creation of a company with partnership for the management of port logistics,
- at the port of Oran, the extension of 24 hectares of the terminal for transshipment activities,
- at the port of Algiers, the creation of a port logistics company on the current site of the dry port Rouïba about 30 km from the port.

In Tunisia, the port of Rades is a platform whose extent and organization can process almost all containers. To the south, 75 km from Tunis, the construction of a major deepwater port is programmed in Infidha with areas of logistics activities. This port would include a container area of 200 hectares and a terminal of 35 hectares with immediate connections with major roads and railways.

**Conclusion on the facilitations for goods transit**

**The ports in the Gulf of Guinea constitute, at this stage, a definite advantage arising mainly from the experience in this field compared to the Maghreb ports.**

**This comparative advantage appears at each of the points discussed, such as:**

- **The number of regional and bilateral agreements governing transit relations with the landlocked countries**
- **Incentive schemes granted**
- **The specific procedures established**
- **Development of modern facilities and equipment for the handling of containers**
- **Conditions for customs clearance of goods...**

## **C**

# **RECOMMENDATIONS**

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### **1. The basic recommendation**

#### The recommendation

**The opening of corridors for the shipment of trade goods of the 3 landlocked countries Mali, Niger, Chad, from the ports of Algeria and Tunisia,**

#### Justifications

This recommendation is justified by the data collected on the conditions (distance, time and costs) of transporting goods for these 3 countries on the maritime, port and inland links from the Maghreb and the Gulf of Guinea, namely:

- Conditions of maritime services favourable for the Maghreb ports compared to the ports of the Gulf of Guinea, according to the two respective departure port rows of southern and northern Europe:
  - In terms of minimum time: 2 and 5 times lower
  - In terms of costs: 2.8 and 3.5 times lower
- The existence of Maghreb port capacities particularly appropriate in terms of infrastructure and equipment for the transit of goods:
  - For Algeria: the ports of Algiers, Bejaia and Djendjen
  - For Tunisia: the port of Rades and in perspective the port of Enfidha
- Port transit time on average 3 times lower for the concerned Maghreb ports.
- The routing time for inland transport of goods, 2 times lower on average through the Maghreb corridors to serve the northern regions of the 3 landlocked countries.
- Inland transport costs slightly favourable for the Maghreb corridors to serve the northern regions of Mali and Niger, and Chad.

### **2. Auxiliary recommendations**

#### **The improvement of the legislation and procedures**

##### For Algeria:

- Define via regulations the terms and conditions of application of the TIR Convention, to which Algeria is part.
- Designate the guarantor body under that agreement and specify its operating rules.
- Proclaim implementing provisions brought about by the ratification of bilateral agreements then negotiate and adopt such agreements with Mali and Chad.
- Adapt the national legislation in Algeria with the requirements of the fluidity of transit by reviewing the decisions on customs documentation on land transit.
- Relax the procedures for the granting of visas to transport crews in transit.

#### For Tunisia:

- Expand the programme of measures undertaken to facilitate the Tunisian trade transport and transit of goods and crews of landlocked countries using the corridor of the Trans-Saharan road by the Tunisian ports, through:
  - the establishment of the single checkpoint,
  - the standardization of foreign trade documentation (technical inspection, customs declarations, transport bundle ...),
  - assessing the status of implementation of agreements and arrangements with the TRLC member countries.

#### **The development of the trans-Saharan corridor all along the Algerian and Tunisian sections**

- Carry out all through the itinerary basic and signalization infrastructures allowing private investment to provide capacities for accommodation, resting, parking, housing, maintenance, fuel supply, provisioning , communication equipment for emergency alerts and in case of breakdown or other serious situation and setting up medical devices.
- Define the control policies, its location and conveying conditions and design safety devices.

#### **The adoption of facilitation mechanisms**

- Reactivate the National Maritime Facilitation Committee in Algeria and extend its competency to road and rail field as well as land borders. This committee could also establish a consultation body for the follow-up of facilitation measures.
- Establish a structure in each of the two countries, responsible for the monitoring, evaluation and control of transit freight, the extension of the regime applicable to the matter and the consultation between the various departments involved with the corresponding ones of the landlocked countries.
- Develop and enact a regulatory scheme allowing fluidity throughout the transit process. Its implementation is a prerequisite for the development of this activity and therefore facilitating trade communication between the TRLC member countries. Such a system should be inspired by the existing regulations in Algeria and Tunisia and integrate in the regulation of each country specific aspects related to the constraints of remoteness and the commitments under relevant international conventions.
- Adopt incentives to operators of landlocked countries by examining various possibilities to grant benefits with respect to certain taxes or commercial reductions for their reliability, granting port areas or exclusive areas at the level of dry ports and logistics platforms. As part of port reforms initiated in Algeria and Tunisia, it is important to consider the concession of spaces and infrastructures specialised in the port public domain (berth, areas for container terminals, grain carriers ...).
- Establish partnership agreements between the inland transport operators and agree on a freight sharing formula and commercial arrangements with the Maghreb ship-owners for the maritime freight.



### **3. The trade volume likely to transit through a corridor to be opened from the Maghreb ports**

#### **The estimated volume:**

The total goods trade of the 4 sub-Saharan countries is being channelled through the corridors linking these countries to the ports of West Africa and the Gulf of Guinea.

- Opening a corridor for the transit of goods from the Maghreb ports would currently represent a **minimum annual volume of 1 million tons**
- This volume is estimated on the assumption of 25% of foreign trade of only two countries, Mali and Niger

#### **The expected impacts:**

Among the effects generated by the provisional transit of the volume of freight through the corridor Mali/Niger - Maghreb ports may be noted:

- The creation of an additional port traffic of 15% for a Maghreb port such as Bejaia
- The creation of an additional road traffic of 130 trucks of 20 tons/day at Algeria's borders with Mali and Niger (currently 17 vehicles of all kinds/day)

## 4 ADVANTAGES AND CONSTRAINTS ON TRADE BETWEEN THE MEMBER COUNTRIES OF THE TRLC

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### Presentation

It is proposed to introduce the constraints to the development of trade between the TRLC member countries on the following basis:

- Member countries of the TRLC are distinguished into two major groups:
  - The Maghreb countries: Algeria, Tunisia
  - The Sub-Saharan countries: Landlocked (Niger, Mali and Chad) and coastal (Nigeria)
- The presentation of the constraints is complemented by the strengths or advantages allowing a better assessment of the situation.
- This is complemented by the framework of the regional organizations these countries are members of and which is another important factor of influence on trade of these countries.

## **1. Advantages and constraints**

- **The two Maghreb countries, Algeria-Tunisia in their trade with the sub-Saharan countries of the TRLC**

### **Advantages**

#### **In terms of trade production potential**

- Exports: supply in both countries in a wide range of industrial products: food, appliances, vehicles, chemicals, drugs and date production.
- Imports: expanding demand for agricultural products and livestock in the southern regions of Algeria neighbouring Mali and Niger.
- Oil and significant and sustainable induced revenues for development funding.
- Major investment programs underway in road and air transport infrastructures in southern Algeria.
- Real development prospects in progress for the town of Tamanrasset following the water pipe project In Salah-Tamanrasset (800 km): development of SMEs and intensifying trade with sub-Saharan countries.

#### **In terms of communications**

- Countries with a coastline on the Mediterranean and with large commercial ports likely to serve as a basis for new transit corridors for goods from Mali and Niger in particular.
- TSR, Algerian branch: surfaced up to the border of Niger (2,345 km).
- TSR, branch linking Tunisia, surfaced (565 km).
- Significant transport facilities experienced in transporting goods in the south and the great south of Algeria.
- Developed air transport and hotlines with Bamako and Niamey.

#### **In terms of facilitations**

- Traditional trade flows between the border populations Algeria - Mali – Niger.
- Export promotion policies structured and active in both countries, support for exporters, organization of fairs and exhibitions.
- Trade representations in the embassies and showrooms for Tunisian products open in embassies.
- Large capacity for training and research in terms of transports and trade in both countries.
- Development of trade between Algeria and Niger and Mali within the so-called "barter trade" Since 1968.
- Security of people and goods carried on the national section of the TSR.

### **Constraints**

#### **In terms of trade production potential**

- Chronic weakness of the volume of trade with sub-Saharan countries.
- Lack of commercial action from Algerian companies with potential for exports towards the Sub-Saharan countries.
- Traditional orientation of importers to Western and Asian markets and lack of acquaintance for the sub-Saharan countries' potential.
- Pressure of imported manufactured goods from Asian countries (China, India, Pakistan, Turkey ...) on the domestic production and export capacity.

### **In terms of communications**

- Large geographic areas with low population density at the borders of sub-Saharan countries.
- TSR: section Tamanrasset - border with Mali unachieved (395 km).
- Conditions not yet sufficient for the opening of corridors for the transit of goods towards the sub-Saharan countries: organization and handling in ports, logistics platforms.
- Lack of banking network in support of Algerian operators in the countries of the TRLC.

### **In terms of facilitations**

- Lack of regularity in the organization of fairs and exhibitions of products of both countries towards the sub-Saharan countries.

- **The Sub-Saharan countries Mali, Niger, Chad, Nigeria in their trade between themselves and with the other TRLC Maghreb countries**

### **Advantages**

#### **In terms of trade production potential**

- Exports: supply in livestock products (livestock, meat, leather and skins), agriculture products (cotton peanut, onion, Arabic gum) and fishing products.
- Imports: demand for agricultural inputs (fertilizers, pesticides, irrigation equipment, tools ...) food, medicines, building materials, capital goods.
- Development of mining (oil, gold and uranium) and effects on demand for capital goods and consumer goods.
- Economic development plans in all countries focused on key products and communications infrastructures.
- Realization of structuring projects: Zender Refinery, Kandadji Dam on the Niger, Lake Chad area...

#### **In terms of communications**

- Exploitation by the three landlocked countries of many corridors for the transit of goods with the ports of the Gulf of Guinea and west Africa: Cotonou, Lomé, Tema, Lagos, Abidjan, Douala, Dakar.
- Nigerian Branch of the TSR of 1,130 km completed at 100% with two-lane sections
- Section of RTS surfaced: Bamako - Gao (1,236 km), Arlit - Agadez - Zender - Nigeria border (784 km), Zender - Nguigmi (573 km).

#### **In terms of facilitations**

- Active institutions for promotion and organization of operators: chambers of commerce, shippers and carriers professional organisations.
- Organization of the Trans-Saharan Fair in Niamey by the Chamber of Commerce, Industry and Crafts (3 editions).
- Experience in promoting trade with Algeria within the so-called "barter trade" on 16 products since 1968.

#### **In terms of cooperation**

- Common regional organisation (WAEMU) for Mali and Niger
- Common Monetary Area (CFA Franc) for Mali, Niger and Chad
- Common regional organisation (ECOWAS) for Chad and Nigeria

leading to: participation in common development programs, removal of tariff barriers and harmonization of regulations.

## **Constraints**

### **In terms of trade production potential**

- Exports: Weaknesses in the key areas of agricultural production:
  - Packaging and storage: cold rooms, warehouses ...
  - Agricultural inputs: fertilizers, pesticides, fuel ...
  - Processing industry
  - Health and quality inspection
  - Acquaintance with foreign markets
- Imports: limited people's purchasing power and net lending of the production sector.
- In general: weakness of the economic and social development factors:
  - Funding (investment and operation): public, banking, foreign,
  - Energy: electricity, fuel,
  - Human resources: skilled labour and entrepreneurs,
  - Difficult modernization of the agricultural production system to all the links in the chain: traditional distribution circuits (producers - wholesale - markets) extensive farming, low instruction of operators and unfavourable financial environment,
  - Programs and projects delayed by a lack in funding.

### **In terms of communications**

- General geographical constraints in the north-east: low population density and road network.
- Trying road traffic because of the unachieved sections of the TRS:
  - Gao - Kidal - Algerian border (745 km)
  - Arlit - Assamaka - Algerian border (223 km)
  - Nguigmi - Chad border (55 km)
- Improper use of roads: limited resistance (thickness), reduced axle load, low provided control for overloads, high transport costs.
- Fleet: low competitiveness of the carriers
  - Dilapidated
  - Inadequate for transporting goods and livestock (refrigerated and specialized trucks)
  - Without maintenance capacity (repair and spare parts)
- Transparency of trade (quantities, costs) limited by the generally recognized importance of the informal sector in all products and all borders.

### **In terms of facilitations**

- Higher overall costs of products shipped from maritime countries:
  - Long port operations,
  - Several controls and complex formalities (police, gendarmerie, customs) on the roads and at borders,
  - Double taxation of goods in transit (port and border),
  - Poaching and insecurity on roads.

- Constraints related to customs regulations:
  - Misclassification of goods,
  - Difficulty of enforcing the rules of origin,
  - Incomplete reduction of customs duties,
  - Persistence of various taxes,
- Lack of acquaintance with the operators (traders, carriers...) with national and international regulations governing the transport and trade of goods.
- Insufficient capacity of market research and surveys.

## **2. Trade within the framework of regional organizations: Advantages and constraints**

### **2.1 TRLC countries within the WTO and regional organizations concerned with trade**

With the establishment of African regional organizations such as WAEMU, ECOWAS and CEMAC, sub-Saharan countries institutionally structured geographical economic spaces aiming eventually at building a true regional union of free trade.

Moreover, the northern countries (Algeria, Tunisia) form since 17/02/1989 part of the Arab Maghreb Union (AMU), whose purpose is to achieve economic integration among the member countries but also to work closely to establish the African economic integration as stipulated in the Abuja Treaty of 1991.

The following table shows the conditions of membership of the TRLC member countries in the WTO and various economic and political regional organizations:

**TRLIC countries within the WTO  
and regional economic and political organizations**

Organisations	Presentation	Membership of the TRLIC countries					
		Algeria	Tunisia	Mali	Niger	Chad	Nigeria
<b>WTO</b>	Missions : Rules of trade between countries worldwide Creation : 1995 Headquarters : Geneva Members : 153	Obs.	X 1995		X 1996		X 1995
<b>AMU</b> Arab Maghreb Union	Missions : Economic and politic integration Creation : 1989 Headquarters : Rabat Members : 5	X	X				
<b>WAEMU</b> West African Economic and Monetary Union	Missions : Economic integration Creation : 1994 Headquarters : Ouagadougou Members : 8			X	X		
<b>ECOWAS</b> Economic Community of West African States	Missions : Economic integration Peacekeeping Creation : 1975 Headquarters : Abuja Members : 15			X	X		X
<b>CEMAC</b> Economic and Monetary Community of Central Africa	Missions : Economic integration Creation : 1994 Headquarters : Bangui Members : 6					X	
<b>CEN-SAD</b> Community of Sahel-Saharan States	Missions : Overall economic union Creation : 1998 Headquarters : Tripoli Members : 28		X	X	X	X	X

## 2.2 Advantages and constraints of belonging to different regional organizations

- **Advantages:**

Belonging to different regional organizations presents advantages allowing to significantly enhancing the promotion of trade between the TRLC countries mainly for the following factors:

- The ease of establishing agreements between the regional organizations of different areas.
- The existence of potential in terms of exchange networks and structures.
- The existence of a framework for cooperation and harmonization of regulations through the WAEMU, ECOWAS and CEMAC.
- The complementarity in the formation of cross-border markets and local economies among the countries of the TRLC area.
- The improved efficiency and greater ability in solving problems and constraints faced by the concerned countries.
- The coordination of economic policies and reinforcement of credibility with operators.
- The ability to work towards the construction of a specific trade market between the TRLC countries in the respective interest of the different economic zones.
- The coordination of economic policies and the increasing negotiation power of common projects with international money lenders.

- **Constraints:**

- The lack of institutional framework to promote exchanges between the TRLC countries given that the landlocked countries belonging to the WAEMU and CEMAC are subject to trade, customs and tax rules prohibiting them from establishing new bilateral trade agreements outside their area of membership without prior approval from the regional institutions.
- The absence and lack of harmonization of customs, tax and administrative laws.
- The existence of customs and banking barriers hampering the development of trade and the creation of additional contracts between North and sub-Saharan countries.
- The inadequate banking systems and transfer procedures between different regional structures.
- The lack of harmonization of agreements and conventions governing the transfers and transports between the various spaces to which the TRLC member countries belong.
- The insufficient information and lack of consultation framework between operators of different areas on trade potential and opportunities.
- The lack of support and management of economic actors of the different areas to guide and support them in promoting trade between the TRLC member countries.
- The lack of professional regional organizations gathering economic actors belonging to different regional organizations.

## 2.3 Recommendations

It should be noted that the promotion of trade between the Maghreb countries (Tunisia, Algeria) and the sub-Saharan countries (Mali, Niger, Chad, Nigeria), necessarily requires an approach to regional economic integration that has any chance of success as based not only on institutions but also on regional economic groupings and organizations of the private sector enabling it effectively to create trade networks and structures at various levels.

As such, it is important to note that the sectors to ensure economic and trade integration are represented by medium-sized companies, traders or import and export structures of different forms characterized by shortcomings in management and weaknesses in the knowledge of markets and potential trade between the TRLC countries.

To overcome these difficulties which are a real handicap to a harmonious development of trade between the TRLC member countries, it is recommended in this study to create an institution for the promotion of trade in the Trans-Saharan road area presented hereafter.



**III  
PROPOSALS  
FOR THE DEVELOPMENT OF TRADE  
BETWEEN THE MEMBER COUNTRIES  
OF THE TRLC**

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**1  
CREATION OF AN INSTITUTION  
FOR THE PROMOTION OF TRADE  
BETWEEN THE MEMBER COUNTRIES OF THE TRLC**

**2  
ACTIONS BY COUNTRY  
TO ENHANCE TRADE  
BETWEEN THE MEMBER COUNTRIES OF THE TRLC**

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## **Proposal 1**

### **CREATION OF AN INSTITUTION FOR THE PROMOTION OF TRADE BETWEEN THE MEMBER COUNTRIES OF THE TRLC**

Following analysis of trade between member countries of the CLRT through their volume, their potential and the constraints on their development, the study suggests a project to create an institution to promote trade by creating a:

#### **Committee for the support and promotion of trade between the member countries of CLRT**

To this end, it is proposed below for this institution:

- An explanatory statement
- An organization project

## A Explanatory statement

The following considerations argue for the creation of an institution for the promotion of trade between the member countries of the TRLIC:

1. A major objective of the TSR is the development of trade between the countries directly affected by this major communication infrastructure, in particular, and between the two large groups of the continent formed by the Maghreb countries and the sub-Saharan countries, in general.
2. Without a doubt, the TRS, by its sections, contributed to the development of production activities in the regions crossed and increased trade between these regions and the rest of the country on the one hand, and between countries concerned and its neighbours on the other.
3. It must be noted however that trade between the countries of the TSR remained to this day to a low level both in terms of bilateral trade and trade between the Maghreb and sub-Saharan countries.
4. This study has shown the many constraints affecting trade as well as advantages involved in each country and at all levels: production, communication, facilitation and cooperation.
5. All national and local authorities met in the six countries were unanimous in lamenting the slow pace that the TSR experienced and continues to experience, indicating their belief in its key role in the development of trade.
6. If the follow-up of the TSR and its promotion within regional and international coordination and funding institutions is fully borne by the TRLIC, the evolution of trade around the road is not subject to a systematic action and does not benefit from the action of a special organization.
7. The development of trade around the TSR begins with trade emerging spontaneously at the opening of any new section of the road.
8. Nevertheless, this development takes its full dimension as it is maintained by:
  - Activities for the production of agricultural and industrial goods, the *raison d'être* of these exchanges,
  - Basic infrastructure necessary for these production activities: energy, water, transport infrastructure, telecommunications,,
  - Means of road transport of goods and passenger,
  - Measures facilitating and promoting the various plans: funding, taxation, exports, agreements between countries ...
9. Of course, all these measures are part of development policies and institutions in charge in each country and are subject to bilateral and multilateral agreements between countries.
10. But just as the physical development of the TSR found in the TRLIC a framework reflecting the will of the six countries to support the economic integration project par excellence for a specific work of coordination, monitoring and promotion, investigation and analysis of this study allowed to observe the need to a similar framework for trade.

11. In view of that, the study proposes the creation of a specific institution for the promotion of trade between the member countries of the TRLC with the following principles of action:

- Coordination of national administrations in charge of foreign trade to eliminate the major constraints on the development of trade and which are under their purview.
- Missions targeted promotional events leading to projects with direct impacts on the development of trade.
- Look for support from banking institutions, such as the ABEDA, whose intervention in the funding of projects is crucial to the promotion of bilateral trade as well as trade between the Maghreb and the sub-Saharan countries.

## **B** **An organization project**

For the creation of the mentioned institution, an organization is suggested based on the following conditions inspired the creation and operation of the TRLIC:

### **1. Creation**

- The instance is created by the Ministers in charge of Foreign Trade of the 6 countries
- The institution is called:

#### **Committee for the support and promotion of trade between the member countries of the trans-Saharan Road Liaison Committee**

As an abbreviation: TRLIC - Commerce

### **2. Missions**

The institution is to:

- carry out the specific studies relevant to trade that are of interest to two members or more of the TRLIC and having a direct link with the TSR:
  - study of the TRLIC markets for products with export potential in one or several of these countries,
  - feasibility study of projects for the production, transport or marketing of products from countries of the TRLIC that are of high export potential,
  - study of measures of trade facilitation in the areas of transit and the coordination between government and professional organizations.
- follow up the projects of trade promotion between the countries of the TRLIC to be submitted for funding from regional and international banks:
  - identification of projects among those that were subject to studies carried out within the framework of mission 1,
  - preparation of project documents on the basis of funding applications,
  - informing the TRLIC member countries on the progress of the projects submitted to funding.
- establish an annual report on trade between the countries of the TRLIC (annual update of the results of this study from its resulted database) .
- Overall:
  - Provide support to existing regional organizations to facilitate the promotion of trade within the TSR area.
  - Contribute in removing administrative customs, tax and banking constraints hampering the development of trade between the TSR member countries.
  - Suggest measures and actions to be implemented to promote cooperation and transnational relations of the TSR space.
  - Organize information and consultation meetings between the bodies responsible for trade promotion.
  - Contribute to strengthen the capacity of bodies and structures in charge of developing trade through seminars and training courses for representatives of each country of the TSR.
  - Support the creation of regional unions of economic operators and professional organizations.

- Organize and coordinate meetings of regional chambers of commerce to create a union of chambers of the TSR space.
- Facilitate the mobilization and implementation of funding projects promoting economic integration in the TSR space area.
- Help eliminate the obstacles impeding development and intra-regional partnership.

### **3. Status**

The institution has a legal status allowing it to operate independently and benefit from the immunities, privileges and facilities granted by each country in this field.

### **4. Composition**

The Committee is composed of representatives of the member States (one member and one alternate) responsible at the national authorities in charge of foreign trade.

The Committee consists of an Executive Secretariat:

- in charge of implementing the decisions of the Committee, holding its ordinary and extraordinary meetings, representing the Committee in its responsibilities before the institutions of development and funding institutions and ensuring the administrative and financial management of the Committee,
- Led by an Executive Secretary appointed by the Committee for a determined mandate, and who may be assisted by professionals.

### **5. Funding**

The budget of the institution is funded by:

- The annual mandatory dues of the member states
- Funds from bilateral and multilateral donors

### **6. Possible evolution**

The development of the Committee's activities may be considered progressively with:

- a large contribution of the Institutions of export promotion and chambers of commerce of the countries concerned,
- structure of the Committee's relations with the regional economic integration organizations and the funding institutions,
- the possibility of transferring its business to the Chambers of Commerce of the TRLIC countries whose coordination has been organized.

## **Proposal 2**

### **ACTIONS BY COUNTRY TO ENHANCE TRADE BETWEEN THE MEMBER COUNTRIES OF THE TRLC**

The Study has identified actions to be suggested in order to enhance trade between the member countries of the TRLC.

These actions are identified given that all countries, individually or through regional organizations, have implemented:

- plans for economic and social development with projects in all sectors and to directly or indirectly accelerate trade with the African countries in general and the TRLC member countries in particular,
- programs for the harmonization of regulations for transport, customs procedures and other facilitations.

Thus, the measures included here are:

#### **1. Targeted actions among those that:**

- have an impact as direct as possible in the acceleration of trade between the countries at the bilateral level and in terms of relations between the two major groups of the TRLC member countries (Maghreb and sub-Saharan countries),
- respond to the constraints on trade between these countries, production potential, communication, facilitation and cooperation, excluding road infrastructures and in particular the completion of the TSR which concern the current TRLC,
- were very often reiterated by the authorities met within this study works,
- can easily engender projects eligible for priority funding from money lenders.

## 2. Actions for each country or common to many of them

Country concerned	Projects
<b>Algeria</b>	<ul style="list-style-type: none"> <li>- Consider a development plan for the Small and medium Industry in Tamanrasset</li> <li>- Implement an action plan to open a corridor for transit of goods from one Algerian port or more to the sub-Saharan countries: port organization, logistics platforms, traffic easing</li> <li>- Strengthen and develop the necessary autonomy to bank branches in Tamanrasset</li> <li>- Restore the regularity of the international fair of Tamanrasset "Assihar" by its <b>annual</b> organisation</li> <li>- Study the conditions for declared import of livestock from Mali and Niger</li> <li>- Strengthen the facilitation of entry into and residence in Algeria, particularly in Tamanrasset, for professionals from sub-Saharan countries</li> </ul>
<b>Tunisia</b>	<ul style="list-style-type: none"> <li>- Implement an action plan to open a corridor for transit of goods from Enfidha port to the sub-Saharan countries: port organization, logistics platforms, traffic easing</li> </ul>
<b>Mali</b>	<ul style="list-style-type: none"> <li>- Make a network of boreholes for livestock rearing along the Algerian border</li> <li>- Improve healthcare in the livestock sector</li> <li>- Renew the national goods vehicle fleet, based on: <ul style="list-style-type: none"> <li>. A program of maintenance capacity development (equipment and training)</li> <li>. The formation of economic interest groups between carriers</li> </ul> </li> </ul>
<b>Niger</b>	<ul style="list-style-type: none"> <li>- Improve healthcare in the livestock sector</li> <li>- Renew the national goods vehicle fleet, based on: <ul style="list-style-type: none"> <li>. A program of maintenance capacity development (equipment and training)</li> <li>. The formation of economic interest groups between carriers</li> </ul> </li> <li>- Achieve the dry port of Niamey</li> <li>- Support the Trans-Saharan fair of Niamey</li> <li>- Support the International Fair of livestock and leather</li> </ul>
<b>Chad</b>	<ul style="list-style-type: none"> <li>- Renew the national goods vehicle fleet, based on: <ul style="list-style-type: none"> <li>. A program of maintenance capacity development (equipment and training)</li> <li>. The formation of economic interest groups between carriers</li> </ul> </li> </ul>
<b>Nigeria</b>	<ul style="list-style-type: none"> <li>- Reinforce the institutional and organizational capacities of the NEPC</li> </ul>
<b>Common actions</b>	<ul style="list-style-type: none"> <li>- A training course to facilitate <b>foreign trade regulations</b> required to conduct ongoing outreach to operators and their associations (to be located in the chambers of commerce or export promotion agencies)</li> <li>- A training course to facilitate <b>international road transport regulations</b> required to conduct ongoing outreach to operators and their associations (to be located in the chambers of commerce or export promotion agencies)</li> <li>- A program to train specialists in national and international <b>market studies</b> (to be located in the chambers of commerce or export promotion agencies)</li> </ul>



# IV

## THE ARAB-AFRICAN TRADE AND THE ROLE OF THE ABEDA

### 1 THE ARAB-AFRICAN TRADE

Africa and the Arab world are, by the meeting of two continents, linked by many cohesion factors that are about geography, history, ethnic background, economy and culture. Their economic exchanges are now supported by all of these links, but controlled by the situation of these two geopolitical regions in terms of resources, political and economic organization.

#### 1. Two major geopolitical spaces

Africa and the Arab world can be presented in two major geopolitical regions:

##### The geopolitical space of sub-Saharan Africa:

	Sub-region	Number of countries	Population Million	GDP Billion US \$	GDP per capita US \$
1	The Sahel	5	58.2	39.8	683.8
2	West Africa	11	228.3	285.6	1 250.9
3	Central Africa	7	39.4	85.8	2 177.6
4	Great lakes countries	4	111.7	32.8	293.6
5	Southern Africa	9	84.8	155.7	1836.1
6	The Indian Ocean	4	21.8	19.2	881.5
7	Eastern Africa	8	293.5	300.0	1 022.1
8	South Africa	1	48.6	300.4	6181.0
	<b>Total</b>	<b>49</b>	<b>886.3</b>	<b>1, 219.3</b>	<b>Average 1,375.7</b>

##### Regional organizations on economic and political integration in sub-Saharan Africa:

	Sub-region	Number of countries	Population Million	GDP Billion US \$	GDP per capita US \$
1	ECOWAS	15	283.4	321.8	1,135.5
2	WAEMU	7	82.7	63.4	766.6
3	CEMAC	7	39.4	85.8	2,177.6
4	SADC	13	197.28	477.9	2,422.2
5	COMESA	18	379.1	456.3	1,203.6
6	EAC	3	108.4	67.0	618.1
	<b>Total</b>	<b>63</b>	<b>1,090.28</b>	<b>1,472.2</b>	<b>Average 1,350.3</b>

##### The geopolitical space of the Arab world

	Sub-region	Number of countries	Population Million	GDP Billion US \$	GDP per capita US \$
1	Middle East	12	127	1,305	10,200
2	North Africa	5	90	416	4,600
3	Eastern Africa	4	132	222	1,600
4	Indian Ocean (Comoros)	1	0.8	0.6	700
	<b>Total</b>	<b>22</b>	<b>349.8</b>	<b>1,943.6</b>	<b>Average 5,500</b>

**Regional organizations  
on economic and political integration in sub-Saharan Africa:**

	Sub-region	Number of countries	Population Million	GDP Billion US \$	GDP per capita US \$
1	CCPA Gulf	6	65	1,129	17,400
2	AMU	5	90	416	4,600
	<b>Total</b>	<b>11</b>	<b>155</b>	<b>1,545</b>	<b>Average 9,900</b>

## 2. Significant potential trade

Arab African trade is seen through the strengths and weaknesses intrinsic to each of the two sets of countries and their common relations. This trade is then presented in its potential and conditions for raising its standards.

### 2.1 Advantages for the development of Arab African trade

- **Advantages of the Arab world**

- Significant mineral resources and agro-pastoral potential.
- Capacities in industrial development with great potential for importing raw materials and exporting manufactured goods.
- Markets in large demand for agri-food goods.
- Significant financial surplus from oil and gas in search for investment opportunities abroad.

- **Advantages of the sub-Saharan African countries**

- Significant mineral resources and agro-pastoral potential.
- An arable land area used at only 10%.
- A growing demand for consumer goods and equipment arising from the process of ongoing development and population growth.

- **Advantages in common**

- The development potential of two major regional markets: West Africa - Sahel – Maghreb market and East Africa - Middle East market: 380 million inhabitants and a GDP of 755 billion dollars.
- The adhesion to several regional economic integration organizations.
- The existence of Arab and Islamic development and financial institutions in Africa operational since several decades:
  - The Arab Fund for Economic and Social Development
  - The Saudi Fund for Development
  - The Islamic Fund for Development
  - The Abu Dhabi Fund for Development
  - The Arab Bank for Economic Development in Africa (ABEDA)
  - The OPEC Fund
- The opportunity for both sets of countries, through their cooperation, to diversify their trade and to limit their strong bias toward the current industrial countries and major emerging countries.

## 2.2 Constraints to the development of trade

### Constraints in the Arab countries:

- Orientation of trade sustainably focused towards industrialized countries (Europe, North America, Japan) and major emerging countries of Asia (Turkey, Pakistan, India and China).

### Constraints in the sub-Saharan countries

- The low economic weight of sub-Saharan Africa in the world with 1.5% of GDP and 1.3% of exports, as well as a downward trend.
- The trend of trade in sub-Saharan countries made up of raw materials (mineral and agricultural) for export against consumer goods and equipment.
- The low level of trade between African countries themselves, 8%, against 85% with Europe and Asia.
- The general weakness of the development factors in these countries:
  - Financial resources
  - Funding system
  - Basic infrastructure: energy, communications
  - Qualified human resources
  - Company and the private sector
  - Institutions: administration, regulation and promotion

### Constraints in common

- The marginal nature of Arab-African trade, with 2% of world trade.
- The low volume of trade and private direct investment between Arab-African countries in the same trade.
- The orientation of trade of the two sets towards former colonial powers and Asian countries, including China.
- The small number of Arab-African partnerships in the implementation of development projects.
- The lack of organizations or regional Arab-African institutions working to promote trade in a sustainable and coordinated way.
- The lack of common professional organizations to boost trade and the establishment of reliable trade networks.

## 3. Potential areas of trade development

Beyond the observed constraints, it appears that economic exchanges between the two sets of countries in this phase may find their opportunities for development in two main areas:

### • For the sub-Saharan countries

- The export of mining, agricultural and food products
- The import of manufactured goods: mechanical, electricity, chemicals and pharmaceuticals, textiles, construction materials, agri-food

### • For the Arab countries

- The export of manufactured goods: mechanical, electricity, chemicals and pharmaceuticals, textiles, construction materials, agri-food
- The import of mineral, agricultural and food products
- Direct investment in:
  - . The development of water, energy and mines resources
  - . The Development of agro-pastoral resources and the related processing industry
  - . The development of logistics for the transport, storage, conservation and processing of manufactured or imported products

#### **4. Conditions for trade promotion**

The development of trade between the two sets of countries is conditioned by economic development policies pursued by each country to remove all the constraints encountered. These policies, however, would benefit from measures that drive in a special way trade between these countries, such as:

- The strengthening of regional organizations in their efforts to facilitate trade: harmonization of procedures and instruments and joint training of agents for trade promotion.
- The establishment of coordination structures of the Chambers of Commerce and professional organizations composed of representatives of the Arab-African economic area.
- The involvement of regional and international money lenders in the funding of projects targeted for their direct impact on the acceleration of trade between the countries concerned.

## 2 The ABEDA in the development of Arab-African trade

### 1. Missions of the ABEDA

The Arab Bank for the Development in Africa - ABEDA - was created in 1973 by the Arab league as a means of socio-economic development for the sub-Saharan countries without interfering in the financing of projects in the countries of the Arab world.

It has the following objectives:

- Participate in the funding of socio-economic development actions of the sub-Saharan countries.
- Encourage investment of Arab capital in African development.
- Participate in the allocation of resources for technical assistance related to development.

The ABEDA is the only Arab institution, whose field of intervention is exclusively African (sub-Saharan area).

### 2. Achievements of the ABEDA

During the period 1975-2007, the ABEDA granted:

- EUR 2.5 billion to help finance 412 projects in 43 countries

This funding is as follows:

- Infrastructure Sector: 56.6%
- Agriculture Sector: 25.6%
- Energy Sector: 06.7%
- Others: 11.1%

### 3. The ABEDA within the TRLC member countries

Up to date, the ABEDA is involved in the funding of the following projects within the 4 sub-Saharan countries of the TRLC:

#### ABEDA Projects within the 4 sub-Saharan countries of the TRLC:

Pays	Period	Operations				Sectors
		Projects		Technical support		
		Number	Amount Mn US\$	Number	Amount Mn US\$	
<b>Mali</b>	1976/2008 – 33 years	17	86	3	1	- Roads - Airports - Hydraulics - Agriculture - Fishing industry - Training - Studies
<b>Niger</b>	2002/2009 – 07 years	8	44	5	1	
<b>Chad</b>	2003/2008 – 05 years	7	53.5	3	0.5	
<b>Nigeria</b>	2006 – 01 year	1	8	1	-	
<b>Total TSR</b>		<b>33</b>	<b>191.5</b>	<b>12</b>	<b>2.5</b>	
<b>Total Africa</b>			<b>736</b>		<b>41</b>	

### Projects that may be taken into account by the ABEDA

The projects to be considered for funding by the ABEDA and presented below are the projects of the above-mentioned program of actions, excluded from the actions that do not require special funding.

One may mention the following projects:

Country concerned	Projects
<b>Mali</b>	<ul style="list-style-type: none"> <li>- Make a network of boreholes for livestock rearing along the Algerian border</li> <li>- Improve healthcare in the livestock sector</li> <li>- Renew the national goods vehicle fleet, based on:               <ul style="list-style-type: none"> <li>. A program of maintenance capacity development (equipment and training)</li> <li>. The formation of economic interest groups between carriers</li> </ul> </li> </ul>
<b>Niger</b>	<ul style="list-style-type: none"> <li>- Improve healthcare in the livestock sector</li> <li>- Renew the national goods vehicle fleet, based on:               <ul style="list-style-type: none"> <li>. A program of maintenance capacity development (equipment and training)</li> <li>. The formation of economic interest groups between carriers</li> </ul> </li> <li>- Achieve the dry port of Niamey</li> <li>- Support the Trans-Saharan fair of Niamey</li> <li>- Support the International Fair of livestock and leather</li> </ul>
<b>Chad</b>	<ul style="list-style-type: none"> <li>- Renew the national goods vehicle fleet, based on:               <ul style="list-style-type: none"> <li>. A program of maintenance capacity development (equipment and training)</li> <li>. The formation of economic interest groups between carriers</li> </ul> </li> </ul>
<b>Nigeria</b>	<ul style="list-style-type: none"> <li>- Reinforce the institutional and organizational capacities of the NEPC</li> </ul>
<b>Common actions</b>	<ul style="list-style-type: none"> <li>- A training course to facilitate <b>foreign trade regulations</b> required to conduct ongoing outreach to operators and their associations (to be located in the chambers of commerce or export promotion agencies)</li> <li>- A training course to facilitate <b>international road transport regulations</b> required to conduct ongoing outreach to operators and their associations (to be located in the chambers of commerce or export promotion agencies)</li> <li>- A program to train specialists in national and international <b>market studies</b> (to be located in the chambers of commerce or export promotion agencies)</li> </ul>

## **VI APPENDICES**

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- 1. RELATED STUDIES**
- 2. VISITS AND MEETINGS ALL THROUGH THE STUDY**
- 3. TERMS OF REFERENCE OF THE STUDY**

# 1 RELATED STUDIES

	Author	Date	Object	Content
1	Ministry of Transports and Public Works of Mali	February 1989	Feasibility Study and implementation of the Bamako-Dakar road (by the south)	Consideration of the technical and economic feasibility of a road linking Bamako to the Senegalese road network from Saraya, a conurbation close to the border
2	Ministry of Public Works of Algeria	1996	Feasibility study of the Tamanrasset - In Guezzam road.	<ul style="list-style-type: none"> <li>- Technical study</li> <li>- Environmental Study</li> <li>- Economic justification for a gradual adjustment of the most degraded sections of the road (160 km x 400 km).</li> </ul>
3	Ministry of Public Works of Algeria	2000	Feasibility study of the Silet-Kidal road	<ul style="list-style-type: none"> <li>- Determining the optimal itinerary of the Malian branch of the Trans-Saharan road between Kidal and Silet</li> <li>- Definition of an economically viable level of development.</li> </ul>
4	Ministry of infrastructure and spatial planning of Niger	October 2001	Economic feasibility study of the Arlit-Assamaka road	Developing solutions for road adjustment and analysis of physical and socioeconomic environment of the transport sector.
5	Economic Commission for Africa - UNDP	October 2002	Status of the implementation of the Trans-African roads	Presentation of African corridors and state of projects implementation in each country
6	Ministry of transports and tourism of Niger	October 2004	National strategy of transports, roads and road transport	<ul style="list-style-type: none"> <li>- Objectives of Niger's road policy</li> <li>- Action Plan for the implementation of identified projects</li> </ul>
7	Ministry of Infrastructures of Chad	December 2005	National strategy of transports 2006 – 2010	<ul style="list-style-type: none"> <li>- State strategies for the development of transport infrastructure</li> <li>- Action Plan for the implementation of identified projects.</li> </ul>
8	Ministry of public works and transports of Chad	August 2005	Study of technical and economic feasibility and environmental impact of the Trans-Saharan Road Massakory-Bol-Niger border	<ul style="list-style-type: none"> <li>- Technical study</li> <li>- Socio-economic study</li> <li>- Environmental study</li> <li>- Cost-benefit analysis to determine the optimal level of development of each of the three sections of the road</li> </ul>
9	Ministry of public works and transports of Mali	March 2006	Transport policies and strategies and transport infrastructure development by 2020	Introducing the vision of the Malian authorities on internal and external opening up of the country and funding opportunities for priority infrastructure projects that can be achieved within the next 10-20 years



## 2 VISITS AND MEETINGS ALL THROUGH THE STUDY

The investigative work conducted under this study benefited from discussions with all authorities in charge for the 6 TRLC countries met in different ways and who have been the source of the information collected:

### Institutions concerned by the meetings:

	Algeria	Tunisia	Mali	Niger	Chad	Nigeria	Total
Diplomacy	2	1	2	2	1	1	9
Administrations	8	3	2	4	4	9	30
Professional organisations	5	2	3	6	2	5	23
Companies	3	1	3	4	2	2	15
Total	15	6	7	12	7	15	77

### Officials met:

	Algeria	Tunisia	Mali	Niger	Chad	Nigeria	Total
Ministers				2	1		3
Officials of the foreign affairs, Ambassadors, consuls,	3	1	2	2	1	2	11
Executives of ministries and public institutions	6	6	5	8	17	19	61
Persons in charge of chambers of commerce, associations	4	2	5	2	3	8	24
Operators : importers, exporters, transporters	7	1	6	10	3	3	30
Total	11	9	12	14	22	29	129

## INSTITUTIONS CONCERNED BY THE VISITS AND MEETINGS

### In Algeria

Algiers: September - October 2008

Visited Institutions		Officials met
Ministries	Foreign affairs	- Director - Sub-Director
	Trade	- Director General of foreign trade - Director of bilateral trade relations
	Transport	- General Director of the SNTR - Director of Maritime transport - President of SOGEPORTS
Organisations	National Agency for Export Promotion	- Director General
	Chamber of Commerce	- Director General
Embassies	Niger	- The Ambassador
	Tunisia	- The Ambassador
	Chad	- The Ambassador

**Tamanrasset: 02 - 09 March 2009**

<b>Visited institution</b>	<b>Officials met</b>
Wilaya of Tamanrasset	<ul style="list-style-type: none"> <li>- The Wali</li> <li>- The Secretary General</li> <li>- The Head of Cabinet</li> </ul>
Directorates of Wilaya	<ul style="list-style-type: none"> <li>- Director of Public works</li> <li>- Director of transports</li> <li>- Director of trade</li> <li>- Director of taxes</li> <li>- Director of territorial planning and management</li> </ul>
Regional Directorate of Customs	<ul style="list-style-type: none"> <li>- Deputy Regional Director for Technical Affairs</li> <li>- Divisional Inspector of Tamarasset</li> </ul>
Consulates	- Consul General of Niger
	- Consul General of Mali
Daïra of In Guezzam	<ul style="list-style-type: none"> <li>- The Head of Daira</li> <li>- President of the municipality</li> <li>- The Vice-President</li> <li>- The divisional inspector of customs</li> <li>- An investor in agriculture</li> </ul>
The Chamber of Commerce	<ul style="list-style-type: none"> <li>- President of the Chamber</li> <li>- Director of the Chamber</li> <li>- Members of the office</li> </ul>
Exporters	<ul style="list-style-type: none"> <li>- Exporters within the framework of barter trade</li> <li>- Exporters within the framework of ordinary trade</li> </ul>
Delegation from the Chamber of Commerce of Agadez, present in Tamanrasset at the Hassihar.	<ul style="list-style-type: none"> <li>- President of the Chamber of Agadez</li> <li>- Regional Director of Trade, Industry and Normalization</li> <li>- Vice President of the Chamber</li> <li>- Secretary General of the union of traders of Agadez</li> <li>- Chairman of Professional Tourism and hotel business.</li> </ul>

**In Tunisia: 12 - 14 November 2008**

Visited Institutions		Officials met
Ministries	Equipment	- Director General for roads and bridges - Deputy Director General for roads and bridges - Director of maintenance
	Transports	- Director General of land transport - Director General of merchant shipping
	Trade	- Director of foreign trade
	CEPEX	- Director of trade - Researcher
Organisations and companies	Chamber of commerce and industry	- Director General
	SCIT (Company of international trade in Tunisia)	- CEO

**In Niger: 28 and 29 October 2008**

Visited Institutions		Officials met
Ministries	Equipment	- Secretary General - Director General of public works
	Transports and civil air force	- Minister - Adviser - Director of land, maritime and river Transports
	Industry, trade and Normalisation	- Minister - Adviser - Director of foreign trade
	Economy and Finances	- Interim Director General: National Customs - Director General: National Institute of Statistics
Organisations	Chamber of commerce, industry and crafts	- Secretary General - Director of trade promotion - Director of administrative affairs - Adviser
	National Syndicate for goods transport	- Secretary General - Treasurer

**In Mali: 30 and 31 October 2008**

Visited Institutions		Officials met
Ministries	Equipment and Transport	- Adviser to the Minister - Director of Public works - Director of transports
	Trade	- Assistant Director of foreign trade
Organisations	Chamber of commerce, industry and crafts	- Vice-President - President of KIDAL section
	National Syndicate for goods transport	- Secretary General
	National Council of shippers	- President

**In Chad: 06 - 10 January 2009**

Visited Institutions		Officials met
Ministries	Trade and Industry	- Minister - Secretary General - Adviser - Director of Trade - Director of Studies
	Infrastructures	- Secretary General - Director General of Roads - Coordinator of transport projects - Director of Surface Transport - Director of the National Bureau of Freight BNF
	Agriculture	- Director of water management - Director of environment - Director of statistics
	Finances and budget	- Director General of Customs and Indirect taxes - Director of Studies - Director of foreign trade Accounting and Statistics - Managing Director : National Institute of Statistics
	Chamber of commerce industry and crafts	- President of the chamber
Organisations	National Syndicate for goods transport	- Secretary General - Treasurer

### In Nigeria

Visited Institutions	Officials met
Federal Ministry Of Commerce and Industry	<ul style="list-style-type: none"> <li>- Director Trade</li> <li>- Deputy Director</li> <li>- Assistant Director</li> <li>- Assistant Chief Commercial Officer</li> <li>- Assistant Chief Admin Officer (Bilateral Trade)</li> </ul>
Federal Ministry of Public Works	<ul style="list-style-type: none"> <li>- Director Highway Planning and Design</li> <li>- Deputy Director Highway Planning</li> </ul>
Federal Ministry of Finance	<ul style="list-style-type: none"> <li>- Director, International Economic Relations</li> <li>- Deputy Director (IDF)</li> <li>- Deputy Director</li> <li>- Special Assistant</li> </ul>
Nigerian Export –Import Bank (NEXIM)	<ul style="list-style-type: none"> <li>- Executive Director</li> </ul>
National Planning Commission	<ul style="list-style-type: none"> <li>- Deputy Director (Multilateral)</li> </ul>
Nigerian Export Promotion Council	<ul style="list-style-type: none"> <li>- Ag-Executive Director</li> <li>- AGM Market Developments</li> </ul>
National Bureau of Statistics	<ul style="list-style-type: none"> <li>- Statistician II</li> </ul>
African Export-Import Bank (FREXIMBANK)	<ul style="list-style-type: none"> <li>- Secretary</li> </ul>
Nigerian Investment Promotion Commission	<ul style="list-style-type: none"> <li>- Deputy Director (Investment Relations)</li> <li>- Public Relations Officer</li> </ul>
Nigeria Customs Service	<ul style="list-style-type: none"> <li>- Ag. Comptroller</li> <li>- Assistant Comptroller</li> </ul>
Ministry of Foreign Affairs	<ul style="list-style-type: none"> <li>- Deputy Chief of Protocol</li> <li>- Clerical Officer</li> </ul>
Federal Ministry of Transport	<ul style="list-style-type: none"> <li>- Maritime Services Department</li> <li>- Assistant Chief Admin Officer</li> <li>- Road Transport Section</li> </ul>
Federal Ministry of Aviation	<ul style="list-style-type: none"> <li>- Director General, International Relations</li> </ul>
Chamber of Commerce	<ul style="list-style-type: none"> <li>- Director General</li> <li>- Administration Manager</li> </ul>

### 3

## STUDY OF IDENTIFICATION OF POTENTIAL TRADE BETWEEN THE MEMBER COUNTRIES OF THE TRANS-SAHARAN ROAD LIAISON COMMITTEE

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### TERMS OF REFERENCE

Algeria, Mali, Niger and Tunisia, decided in the beginning of the sixties to build a Trans-Saharan Road liaison (TSR) in order to facilitate and encourage the movements of people and goods between the Maghreb countries and the Sub-Saharan countries. Nigeria and Chad joined the group later on.

The project aimed at:

- improving access to the disinherited Saharan zones,
- enhancing exchanges, especially thanks to the Mediterranean ports opening to the sub-Saharan countries,
- and in a broader way, developing trade.

In 1966, a Trans-Saharan Road Liaison Committee (TRLC) was established to supervise this important realization and ensure the coordination and experience sharing between the member countries.

In Algeria, the first building work began in the early seventies from El-Goléa, following an economic feasibility study financed by the UNDP. The objective of this study was to establish the economic interest of the project by analyzing the layout alternatives and the type of infrastructure (Rail or Road) that were the most adapted to the economic and geographical context. After more than a quarter century, one should note that this project created between the administrations of public works of the member countries of the TRLC, strong technical bonds of dialogue and coordination that the seminars and the engineering training courses organized by the TRLC came to reinforce firmly. More than 3,500 km were completed and 1,500 km remain in the condition of natural track. Work is ongoing within all six countries of the Committee.

The Trans-Saharan Road project improved access to very vast areas in each member country and contributed to the development of several agglomerations such as Tamanrasset in Algeria, for instance.

Yet, trade by remains weak between the two banks of the Sahara for various reasons, mainly the defective condition of the transport road infrastructure. Indeed, on the Nigerian branch, which counts 840 km between Tamanrasset and Agadez, almost half this linear remains in the condition of natural track even though the embedment works progress in both countries. On the Malian branch, connection between Tamanrasset (Silet) and Kidal, equal to 750 km, remains in the condition of natural track over 680 km.

However, the state of tracks in the Sahara does not constitute an insuperable hurdle to trade given that they exist since mists of time. Between Assamaka (border of Niger) and Arlit, the traffic was estimated at some 100 vehicles/day in 2002, with 65% of heavy lorries. A traffic study was launched by the Secretariat General of the Committee in 2007. The results shall be known at the beginning of 2008.

In order to improve the level of trade, the Committee worked out in 1999 a facilitation study on trade along the Trans-Saharan Road, and then organized an international seminar in March 2004 focused on trade along the TSR. The seminar brought together, for each member country, the representatives of: embassies accredited in Algiers, Ministries for Trade, Chambers of commerce and industry, Ministries of public works, Ministries of Transport and companies. The acts of this seminar are available on the TRLC website: [www.clrt-dz.com](http://www.clrt-dz.com).

Highlights of this seminar include recommendation 24 relating to the creation of a regional authority in charge of promoting trade (ICPEC) between the member countries of the TRLC. During the 46th session of the TRLC held in Bamako on 12 and 13 September 2006, the Ministers in charge of roads within the member countries of the TRLC, as well as the representatives of the United Nations Economic Commission for Africa (ECA) and the African Union (AU) recalled that trade constitutes a major objective for the construction of the project and that it was very important to encourage and implement the necessary measures for the creation of the abovementioned ICPEC.

The Secretary General of the TRLC was designated for the development of this study in order to meet this expectation.

### **1. Purpose of the study**

The study aims at valorising the economic impact of the Trans-Saharan road project, particularly:

- a) research on trade enhancement and increase,
- b) identification of trade and economic potentialities that can be exploited between:
  - the member countries of the TRLC,
  - the Sub-Saharan African countries and the Maghreb Arab countries to benefit from the Mediterranean ports.

It also aims at making initiative proposals in the institutional, legal and investment plan that would be necessary in developing the co-operation between these countries. Without neglecting the facilitation aspects nor the physical barriers, reports of the studies shall focus much more on the products and services the countries could develop either individually or mutually in order to increase trade.

In addition, the report is intended to constitute the rationale to support the idea of creating the ICPEC: authority in charge of promoting trade between the member countries of the TRLC, in accordance with the abovementioned recommendation of the international seminar of Algiers (2004).

The final report of the study shall constitute a database to be used by institutions and people interested, for various reasons, by the development of trade between the countries that benefit from the repercussions of the Trans-Saharan Road construction.

The study shall be conducted by a consultancy firm or a group of Arab and African experts specialized in international relations, trade, statistics, economy, and roads.



## 2. Content of the study

The study shall cover the following chapters and be concluded by a final summary report:

1. A chapter for identification of the economic impact zone of the TSR project, with description of the geographical distribution of the principal economic agglomerations and their interaction, and presentation of the main economic resources: animal, vegetal, agricultural, mining and industrial products. The study of the zones of influence should be approached broadly to integrate the immediate as well as the distant zones that could benefit from the services brought by the TSR.
2. A chapter devoted to the analysis of the TSR network and its connectivity with the other national and regional main roads in order to outline a support to trade between the sub-Saharan countries and the Maghreb countries. A brief prospective chart of the transport plan centred on the RTS shall be proposed, along with the physical description of the connections by major roads and the situation of the studies.
3. A chapter analyzes and summarizes conclusions of the studies related to the present study and carried out either by the member countries of the TRLC, or by an international institution, within the recent few years. In order to enhance trade, this same report shall file the projects programmed in the development schemes of Governments in the zones crossed by the Trans-Saharan Road, and to list (describe them briefly) the projects that are advanced enough to be subjected to a funding research.
4. A chapter including the list of the (main) products in the sub-Saharan countries that are advantageously marketable towards the Maghreb countries. This list shall open possibilities of trade funding by the BADEA. Similarly, a list identifying the (main) products in the Maghreb countries that are advantageously marketable towards the sub-Saharan countries, for the same reasons as previously. A section summarising the operations in progress or planned in each country of the TRLC and which would be likely to constitute, in the medium or long run, an advantageous resource of trade with the other countries of the TRLC
5. A chapter on volume of trade, by big product families (to establish the nature of trade) between the countries of the TRLC, on one hand, and between the sub Saharan member countries of the TRLC and the Maghreb countries, on the other hand.
6. A chapter outlines the advantages in transport costs while comparing, for the north parts of the landlocked countries, access through the Maghreb ports with access through the gulf of Guinea.
7. A chapter analyzing the results of: i) the discussions with local officials (administrations, Embassies and economic entities, ii) the collected information, iii) the observations taken on site.
8. A chapter devoted to the constraints impeding the development of trade between the member countries of the TRLC with precise examples and recommendations likely to reduce handicaps and current difficulties.
9. A final report and conclusions along with proposals for an action plan aiming at improving and increasing the level of trade.

### **3. Schedule and progress reports**

The consultant will organize its services in a logical order and ensure that the team involved in the study understands at any time the specializations needed for the performance of the latter.

The work program will be submitted to the contracting authority.

### **4. Inception Report**

A month following the notification of beginning of the feasibility study, the consultant will provide an inception report showing the means used and will submit to the approval of the contracting authority the provisions it intends to adopt for the organization of the study.

### **5. Approval of the study**

It is recommended to the consultant, whenever it is possible, to submit the approval of his report.

Approval of the study will be given in two stages.

- Provisional approval will be served by the Secretary General of the TRLC to the consultant within a maximum of three months following submission of the report. This provisional approval means that all the points of the contract have been fulfilled.

In the interval of three months, the consultant will take its provisions to give a presentation of the report. This presentation will take place in Algiers before: the authorities responsible for roads in the TRLC member countries, representatives of the ABEDA, TRLC members, experts in the areas of the study representing institutions concerned with the economic impact of the Trans-Saharan Road project (ECA, AU, ABEDA and NEPAD). Following this presentation, the consultant will be given provisional approval along with probable comments.

- Three months following the notification of the provisional approval, the consultant shall submit the final report (including all the items of the study listed in 2) for its approval that should take place within a month.

### **6. Composition and qualifications of the consultant team**

#### **Assisting the contracting authority**

The consultant shall involve, in this mission, a team which consisting of at least:

- Economist expert, Head of mission
- Assistant Head of mission
- Economist expert in transports
- Local consultant within each country

The contracting authority shall provide the consultant with all previous studies and data available to carry out this study.

It will also assist the consultant in obtaining all the administrative permits required within the TRLC member countries.