# Northern Corridor Quarterly Performance Dashboard

# July to September 2019



1100



# TABLE OF CONTENTS

1. QUARTERLY SUMMARY	5
2. SPECIAL FEATURE ON RAILWAY TRANSPORT ALONG THE NORTHERN TRANSPORT CORRIDOR	10
2.1 Introduction	10
2.2 Railway system in Northern Corridor Member States	12
2.3 Current status on the development of Standard Gauge Railway in Member States	18
2.4 Mombasa- Nairobi ICD SGR performance	
QUARTER ANALYSIS OF INDICATORS PERFORMANCE	27
3. MARITIME INDICATORS	
3.1 Ship Turnaround Time	
3.2 Vessel waiting time before berth at the port of Mombasa	
3.3 Vessel Productivity (Gross Moves per Hour)	31
4. PORT INDICATORS	32
4.1 Containerized Cargo Dwell Time at the Port of Mombasa	32
4.2 Time for customs clearance at the Document Processing Centre (DPC)	33
4.3 One Stop Centre Clearance Time	
4.4 Delay after customs release	35
4.5 Rwanda Revenue Authority customs average under SCT at the Port of Mombasa	35
5. CORRIDOR INDICATORS	
5.1 Transit Time in Burundi	37
5.2 Transit time in Kenya -using RECTS	37
5.3 Transit time in Rwanda	
5.4 Transit time in Uganda	42

## TABLE OF FIGURES

Figure 1: Map of East African Standard Gauge Railway Masterplan	10
Figure 2: Ship turnaround time at the port of Mombasa in hours; April to September 2018	
Figure 3: Average Vessel Waiting Time before Berth at the port of Mombasa (Apr-June) in Hours	30
Figure 4: Average containerized cargo dwell time in hours April to June	32
Figure 5: Time Taken at the Document Processing Centre (DPC)	33
Figure 6: Average Time taken at one stop center clearance in hours	34
Figure 7: Average time taken after customs release	35
Figure 8: RRA SCT release at the Port of Mombasa	36
Figure 9: Transit Time in Burundi along the Northern Corridor	37
Figure 10: Transit time from Mombasa to Malaba and Busia borders in Hours in 2019	38
Figure 11: Average transit time from Mombasa Port to various destinations	39
Figure 12: Mean Transit time in from Kagitumba to other destinations bordering Rwanda 2019	40
Figure 13: Mean Transit time in from Mombasa to Kigali and from Kigali to Rubavu/ Corniche 2019	41
Figure 14: Transit time from Kampala CBD in hours to various borders	42

## LIST OF TABLE

Table 1: 2019/2020 quarter one Performance summary	7
Table 2: Meter Gauge Railway (MGR) status	
Table 3: Development of Standard Gauge Railway (SGR)	
Table 4: Volume of cargo by type in TEUS	
Table 5: SGR standard tariff rates	
Table 6: Vessel Productivity at the port of Mombasa from April to September 2018	31



# **1. QUARTERLY SUMMARY**

This report covers the performance of Mombasa Port and Northern Corridor Community Charter indicators for the period of three months from July 2019 to September 2019. Indicators discussed in this report are featured on the Northern Corridor Performance Dashboard. The performance indicators track implementation of the various initiatives agreed upon and set in. The Charter, whose aim is to realize the full trade facilitation potential of the Mombasa Port and the Northern Corridor was first launched in 2014 and revised in 2018. The report has been develop based on data and information submitted by various stakeholders who implement their respective indicators. In addition, the report contains a special feature on railway transport in the Northern Corridor member states.

The performance on marine indicators shows that the quarterly achievement was within the port charter set targets. Vessel waiting before berth target has been steady below the set target of 24 hours implying enhanced efficiency. Mombasa sea port is a gateway port for the land locked countries of Uganda, Rwanda, Burundi, DRC and South Sudan to the world. Data shows that productivity in Gross Moves Per hour has improved two-fold compared to the port charter baseline of 16.7 Gross Moves per hour in 2013. The Rapid growth in the number of Ships making call at the Mombasa Port is an indication of the rising stature of the port in the region.



Similarly, performance on port indicators was steady implying enhanced efficiency of the Mombasa Port. This is attributable to various initiatives that have continuously been implementation towards port expansion in line with increased cargo throughput volumes. Some of them include; implementation of the fixed berthing window, upgrading of infrastructure, simplification of port clearance procedures and establishment of the Single Customs Territory (SCT) that has seen reductions in time taken to process and clear goods at the Port of Mombasa and transit borders.



To improve ease of doing business, Northern Corridor Member States set out to create a Single Customs Territory (SCT). The implementation of SCT clearance procedures began at the end of 2013. Since then, all goods are cleared into a Single Customs Territory under a duty paid and warehousing regime. The SCT is a step towards a full customs union, achievable by the removal of restrictive regulations and reducing internal border controls on goods moving between partner states. The ultimate goal is the free circulation of goods. Another key finding is the reduction in transit time on most of the routes along the Northern Corridor with the implementation of Regional Electronic Cargo Tracking System (RECTS). RECTS was implemented in March 2018 with the objective of reducing the cost of cargo transportation along the Northern Corridor. RECTS allows Revenue Authorities in Rwanda, Uganda and Kenya to jointly and electronically track and monitor goods (whose taxes have not been paid) along the Northern Corridor from Loading (Departure) to destination within Kenya, Rwanda and Uganda.

The port of Mombasa relies on road, rail, pipeline and inland waterways as the main surface modes of transport that run along the Northern Corridor transport system which is the main link to the landlocked countries. The report also features a special edition on the progress in railway mode of transport in the Northern Corridor Member States with a keen focus on the standard gauge railway development and performance. Statistics show that the total SGR throughput has been increasing steadily over the months.

Table 1 below provides summary performance on specific indicators as follows:

Category	Indicator	Target	July to Septem	ber 2019 Status	/Progress		
Maritime	Ship turnaround time (Hrs)	72	July		73		
Indicators			August		66		
			September			77	
	Vessel waiting time before	24	July			17	
	berth (Hrs)		August		23		
			September			21	
	Vessel Productivity (Gross	38 (Dec 2020)	July			33.16	
	Moves per Hour)	40 (Dec 2022)	August			33.62	
		40 (Dec 2022)	September			33.66	
Port Indi-	Containerised Cargo Dwell time	72	July	Aug	ust	September	
cators	(Hrs)		76	8	2	85	
	One Stop Centre Time (Hrs)	24	July		44		
			August		47		
			September		44		
	After customs release (Hrs)	36	July	Aug	ust	September	
			33	3	1	34	
	Document Processing Centre Time (Hrs)		1	July			2
					ne (Hrs) August	August	
			September			2	
	RRA-SCT Port Customs Release Indicators (Hours)		2019	Document Passing Time	Custom Re- lease Time	After Release Time	
			July	20	44	46	

			August	29	34	41
			September	26	43	56
Corridor Transit time Kenya in Hrs (from	72		July	August	September	
Indicators	Mombasa to:		Mombasa to Malaba			
			Mombasa to Busia			

Table 1: 2019/2020 quarter one Performance summary





# 2. SPECIAL FEATURE ON RAILWAY TRANSPORT ALONG THE NORTHERN TRANSPORT CORRIDOR

## **2.1 Introduction**

The Signing of the Standard Gauge Railway Protocol in May 2014 by the Heads of State of East Africa countries and the need for fast and efficient evacuation of bulk cargo has spawned interest of Member States in the development of railway transport system along the Northern Transport Corridor. Since the development of the Mombasa - Kampala railway over a decade ago, railway transport has been an important part in the evolution of trade logistics in the region albeit with neglect in last couple of decades. Collectively, Countries in the region have 8,041 Kilometers of railway which are mainly the aging metre gauge railway and are put to intermittent use. The renewed interest in the development of railways transport heralds a new era and presents exciting opportunities to the expanding trade logistics industry in the Northern Corridor member states and beyond. This special feature provides an insight into the status of railway transport in the different member states of Northern Corridor.

East African Regional cooperation initiatives have mainly focused on joint efforts to modernize railway network and

development of an African railway network with an ultimate objective of Member States having a common railway policy. The East African Railway Master Plan came into effect to guide the future development of the railway services in the region. The Master Plan is a proposal for rejuvenating existing railways serving Tanzania, Kenya, Uganda and extending them initially to Rwanda and Burundi and eventually, to South Sudan, Ethiopia and beyond. The Northern Corridor Transit Agreement also provides a good basis for structuring legal cooperation in railway sector among the Northern Corridor Member States. Northern Corridor Infrastructure Master Plan (2011) also provides a framework on railway development in partner states. These regional frameworks among others are expected to drive multi-lateral initiatives in railway development in the region.

The report focuses on railway transport among the northern corridor member states. Railway transport is the second most important mode of transport after road and critical for long distance freight along the main transport corridors. This mode of transport has been lacking behind in the region due to outdated railway infrastructure and ageing rolling stock and locomotives thus accounting for less than 5% of the share of goods transported along the Northern Corridor.

Out of the total length of the rail network is 8,041.6Kilometers, Kenya accounts for 1,786.94 Km; Uganda comprises of 1,221.52 Km and DRC accounts for 5,033 Km. Most of these railway network has not been operational for a very long time. The infrastructure is also outdated since it was built between 1890s to 1950s.South Sudan has an old railway line of approximately 165 Km. Rwanda and Burundi have no railway network presently which means most trades are conducted by road.

#### Figure 1 below illustrates the proposed standard gauge railway in East Africa.

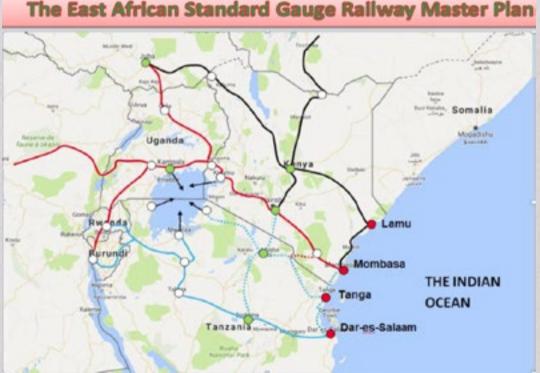


Figure 1: Map of East African Standard Gauge Railway Master plan

### 2.2 Railway System in Northern Corridor Member States



A train arrives at SGR Cargo Yard in Mombasa Kenva

line connects the Mombasa port to Nairobi and to the Ken- for the Board of Directors to enter into concession agreeya/Uganda border at Malaba. In Kenya, Kenya Railways was ments or other forms of management for the provision of established by an Act of Parliament (Cap 397) of the Laws rail transport services. This led to Kenya Railways to conof Kenya, to provide a coordinated and integrated system cede railway operations to Rift Valley Railways (RVR) Ltd within Kenya of rail and inland waterways transport services from November 1, 2006 for 25 years for freight services and inland port facilities. The Act was amended through the and 1 year for passenger services. Kenya and Uganda had

Kenya has a rail network of 1,786.94 Km of lines. The main- Kenya Railways (Amendment) Act 2005 to make it possible

a concession with RVR to operate their railway network which was terminated. The metre gauge railway line connects the Port of Mombasa to Nairobi - Nakuru– Kenya/ Uganda border at Malaba. A branch route leaves the main railway line at Nakuru and extends to Kisumu on Lake Victoria. The rail track from Mombasa to Kampala via Malaba (1,330 km) is currently the principal route for rail transit. There is a set of additional branch lines, 618 km long in total, to Magadi, Taveta (Tanzania border), Nanyuki, Kitale, Butere, Nyahururu and Solai.

According to the Northern corridor infrastructure Masterplan, the total length of the Uganda Railway network is 1,221.52 km. The main line of the Uganda rail network runs from the Kenyan border/Malaba to Kampala, a distance of 251 km with a 9 km line linking Kampala to the ferry terminals on Lake Victoria at Port Bell. The Uganda railway also includes inactive lines, the two main ones being: the 507 km Tororo-Pakwach line and the 333 km Kampala-Kasese line. The Uganda Railway, is a metre-gauge railway system and former British state-owned railway company. The line linked the interiors of Uganda and Kenya with the Indian Ocean port of Mombasa in Kenya. After a series of mergers and splits, the line is now in the hands of the Kenya Railways Corporation and the Uganda Railways Corporation.

According to the Transport Sector Strategic Plan for Rwanda, the country has no railway network presently which means most trades are conducted by road. The plan to extend a branch line from Isaka to Kigali is well advanced. The DRC ("Société Nationale des Chemins de Fer Congolais"), system has a branch line from Kabalo to Kalémie. The SNCC system is in the process of being rehabilitated. However, Rwanda is working in partnership with other Member States of the region to find a railway network. The mainline from Mombasa to Kampala is planned to join the line from Kigali-Kampala on the Northern corridor. Whereas, on the central corridor the mainline will be Isaka- Kigali will be the mainline. Kigali-Rubavu branch line will link Rwanda to DRC.

DRC has three separated railway networks with a total length of 5,033 km. The railway network is operated by three different public owned companies. The largest, SNCC operates 3,641 km in South-Eastern of Congo, of which 858 km are electrified. The large part of the SNCC network is Cape gauge, only the small section between Kisangani and Ubundu, is meter gauge. The Democratic Republic of Congo has various gauges of railway lines as follows: Matadi – Kinshasa Railway: Runs from Matadi to Kinshasa it is a 1,067mm gauge railway was re-opened in 2015 after some renovations. Matadi-Kinshasa line is a 366 km long linking the country's main port to the capital and the navigable section of the Congo River.

South Sudan on the other hand, has an old railway line that was completed in 1961with gauge of 3ft 6in (1067mm) which is an extension of Sudan Railways from the Suda-

nese capital, Khartoum, to the city of Wåu. In 2010, the track was rehabilitated through the MDTF's US\$48.5 million National Emergency Transport Project (NETREP) with the aim of revitalizing the sector and increasing cargo and passenger transport capacity into the area, however current rail operations have been suspended due to border closures, unserviceable equipment, a lack of capacity, and non-operational rolling stock.

Vicicongo line:	From Bumbo – buta – Isiro – Mungubere	Gauge: 600 mm.
		L e n g t h : 1,235 km.
Has branch lines	to Bondo and Titule	
Great Lakes Line first sec- tion	From Kisangani to Ubundu	G a u g e : 1,000 mm
Great Lakes line second section:	From Kindu – Kabalo – Kalemie	G a u g e : 1,067 mm

Originally 1,000mm gauge but changed in 1956 to connect with the Katanga line

Katanga Line:	From Kabalo – Kabon-	Gauge:
	go – Kamina – Tenke –	1,067 mm
	Lubumbashi – Sakania	
	to Zambia	

Traffic is carried on the section between Kolwezi, Tenke, Lubumbashi and Sakania and is linked for a significant part to the mining traffic generated by DRC's Copperbelt activities. It is part of the only integrated railway network in sub-Saharan Africa. On this interconnected system goods can be transferred by rail from DRC via Zambia to the ports of Durban in South Africa and Dares-Salaam in Tanzania.

Kasai Line:	From Ilebo – Kanaga –	Gauge:
	Kamina	1,067 mm

It connects with the Katanga line at Illebo from where boats/river badges can reach Kinshasa

Katanga –	Gauge: 1,067 mm
Benguela line:	

It is a branch of the Katanga line and it was built from Tenke and runs via Kolwezi to the Dilolo (Angola border) to connect with the Benguela railway which runs from Luau to Lobito port on the Atlantic Ocean. These lines allowed passenger trains to run between Lubumbashi and Lobito and freight trains to carry copper from Zambia and Katanga region for export through Lobito



Metre Gauge Railway Cargo train

Table 2 below presents information on Meter Gauge Railway (MGR) in Northern Corridor Member states. Most of the railway lines are in poor status and some of them have not been used for a long time. These lines were constructed during the colonial era thus the condition of the rail network has deteriorated trickling down to decline in traffic. There is need for rehabilitation and upgrading of the meter gauge line is to a condition of a state of good repair.

Country	Section	Line Type	Length (Km)	Status
Kenya	Mombasa – Nairobi	Main Line	530.30	Operational
	Nairobi-Nakuru-Eldoret-Malaba	Main Line	551.88	Operational
	Nakuru- Mau summit	Branch Line	64	Operational
	Mau summit- Kisumu line	Branch Line	152.73	Operational
	Kisumu-Butere	Branch Line	69.05	Operational
	Leseru-Kitale	Branch Line	64.95	Operational
	Nairobi-Thika	Branch Line	54	Operational
	Thika-Nanyuki	Branch Line	181.43	Partially operational
	Voi-Taveta	Branch Line	118.6	Not Operational
Uganda	Malaba - Kampala	Main Line	239.62	Operational
	Kampala - Kasese	Main Line	333	Feasibility study done. This line through a short branch line connects to a cement plant and brings the railway network close to both the Rwanda and DRC borders.
	Tororo- Mbale	Branch Line	55.82	Operational
	Mbale -Pakwach	Branch Line	447.08	Not operational
	Busoga Line from Jinja – Mbulamuti – Busembatia		146	

DRC	Matadi to Kinshasa	Main Line
	Bumbo – buta – Isiro – Mungubere	Main Line
	Mungubere -Bondo	Branch Line
	Mungubere -Titule	Branch Line
	Kisangani to Ubundu	Main Line
	Kabalo – Kabongo – Kamina – Tenke – Lubumbashi – Sakania to Zambia	Main Line
	Kabalo to Kalémie	Branch Line
	Ilebo – Kanaga – Kamina	Main Line Main Line

Table 2: Meter Gauge Railway (MGR) status

# **2.3 Current status on the development of Standard Gauge Railway in Member States**

In June 2013, the first infrastructure Summit of the Presidents of Kenva, Rwanda and Uganda held in Uganda put in place mechanisms for fast tracking the development of the Standard Gauge Railway (SGR) system linking Rwanda and Uganda to the port of Mombasa to enable faster socio-economic transformation of the East and Central Africa Economies. These led to the signing of the Tripartite Agreement for the development and operation of a Standard Gauge Railway between Mombasa-Kampala-Kigali with a branch lines to Kisumu (Kenya) and Pakwach/Gul-Nimule (Uganda) between the Republics of Kenya, Rwanda and Uganda in August 2013. To enable development and operationalization of a Seamless Railway network from Mombasa to Kigali and Juba, the Summit of the Northern Corridor Integration Projects vide the 3rd Joint Communiqué directed the Partner States to develop a Standard Gauge Railway Protocol for the development and operations of the Standard Gauge Railways. The Protocol was signed by Kenya, Uganda, South Sudan and Rwanda in May 2014.

The SGR was to be developed in various stages. In Kenya, there would be 736-mile rail from Mombasa through Nairobi to Malaba (Uganda border) and branching off to Kisumu (Kenya). Then there would be an 870-mile rail from Malaba to Uganda's capital Kampala, and linking to four towns in South-western Uganda before finally rolling on

to Rwanda at Mirima Hills/Kagitumba border; a 125-mile line from Mirima Hills to Kigali and an extra 93-mile line to other towns inside Rwanda.



SGR Container yard at ICD Nairobi

The efforts to develop the SGR with the same design standards from Mombasa to Nairobi, Kampala, Kigali and Juba are at various stages of development. Currently Kenya has completed the SGR line from Mombasa to Nairobi. The Mombasa-Nairobi SGR is the first step in the grand plan to build an East Africa railway. The 485



km-long Standard Gauge line from the port of Mombasa to Nairobi Inland Container Deport (ICD) is complete and in full use. Commercial operations of the Standard Gauge Railway (SGR) freight train service began cargo operations in January 2018. The phase extending the line from Nairobi to Naivasha through Maai Mahiu is also complete and was launched on 16thof October 2019. The next phase is to extend the line from Naivasha to Kisumu a distance of 257km. Kenya failed to secure \$3.6billon funding from China for the final piece of its SGR to Malaba border post. It was to be the third phase of the line connecting Uganda – onwards to Rwanda from Mombasa. However, the government is seeking other alternative options of financing the line from Naivasha to Kisumu port then later to Malaba border through the building bridges initiative.

The Government of Uganda continues to make significant progress in the development of Standard Gauge Railway in the country. The contractor China Harbor and Engineering Co. Ltd. (CHEC) carried out preliminary works (engineering surveys, geotechnical investigations, hydrological assessments, etc) to ascertain the conditions on the route. The country has also undertaken a mineralogy assessment study aimed at ensuring that the railway does not traverse areas with high mineral potential which may require future diversion of the railway. Furthermore, the clearance of the corridor exercise is ongoing in Namutumba District to ensure that the railway corridor is fully protected from encroachment. The SGR design have been approved to China Class 1 railway standard (http://sgr.go.ug/specifications). The proposed single-track line is planned to have a Standard Gauge (1.435 m) at a speed of 100kph for



A section of Standard Gauge Railway in Kenya

study of Kigali-Rubavu railway line ongoing. The detailed design study on Dar es Salaam-Isaka-Kigali-Keza-Musongati railway line is currently underway.

South Sudan has finalized the preliminary engineering design of the new Nimule-Juba SGR line. Juba has completed the Engineering Procurement and Construction contract for the line, which has been signed. In addition,the preparation for a bankable feasibility study for the Nimule-Juba SGR line was completed in December 2018. Thereafter, it will seek funding from the China Exim Bank. The Juba-Nimule line is pro-

containerized freight and 120 kph for passengers. The adopted structure gauge is the Chinese structure gauge for double track and double stack well wagons and double-decker passenger coaches and overhead 25 kV 50 Hz electrification.

According to the Ministry of Infrastructure, Rwanda (MININFRA) annual report 2017/2018, the construction of the SGR from Mombasa-Nairobi; Nairobi-Malaba; Malaba-Kampala and Kampala-Kigali, the preliminary Engineering design was completed and approved. Feasibility

posed to have 8 train stations. The new line will have laying railway track and sleeper with overall length of 210.9 Km including 165 Km of main line rail and 45.9 Km of station rail. The total earth work quantity of 15,923,800 m3.

The table 3 below gives a summary of SGR development

Section	Length (Km)	Status			
Kenya: Proposed SG	R Network - I	Northern Corridor			
Phase 1 Mombasa - Nairobi	472	Fully operational with diesel haulage			
Phase 2A Nairobi-Mai Mahiu- Suswa	120	Launched for passenger. Cargo freight to be implemented by December 2019.			
Phase 2B Naivasha - Kisumu	262	In process of securing funding			
Phase 2C Kisumu - Malaba	107	In process of securing funding			
Other Sections Voi - Taveta	105	Been out of commission. KRC plans to revamp the meter gauge line			
TOTAL	1,066 Km				
LAPSSET CORRIDOR Lamu – Isiolo - Nakdok Nairobi – Isiolo - Moyale		The railway project preliminary designs are complete for the Kenyan and Ethiopian route and expected to proceed to the Detailed Engineering Design stage. The Government Kenya and the Government of Ethiopia have signed a Bilateral Agreement to jointly pursue the development of the LAPSSET Standard Gauge Railway. A Memorandum of Understanding (MoU) has been signed between LCDA and Inter-Governmental Authority on Development (IGAD) to facilitate the financing of this stage though an Infrastructure Proj- ect Preparatory Fund (IPPF) available through the New Partnership for Af- rican Development (NEPAD). Feasibility study and detailed design on the Kenyan side completed.			
Jganda: Proposed SGR Network - Northern Corridor					

Phase 1 Malaba - Kam- pala	258	Preliminary works commenced June 2015			
Tororo – Gulu – Nimule	760	Preliminary works commenced June 2015			
Gulu - Pakwach		Feasibility study for the reopening of this line was completed.			
Phase 2 Kampala – Bi- hanga – Mirama hills	294	In process of securing funding			
Bihanga – Kasese - Mpondwe	377	In process of securing funding			
<b>RWANDA:</b> Proposed	RWANDA: Proposed SGR Network –Northern Corridor				
Kigali- Kampala		Preliminary Engineering design was completed and approved			
Central corridor Isaka- Kigali SGR		The Dar es salaam-Isaka-Kigali/Keza-Musongati railway project jointly imple- mented by the governments of Tanzania and Rwanda got a boost as Heads of States committed to take a step further from previous negotiations. As at 2017/2018 FY, the design review and updating of feasibility study is ongoing. Mobilization of funds for construction of Dar es Salaam-Isaka-Kigali Railway line(MININFRA annual report 2017/18)			
SOUTH SUDAN: Proposed SGR Network –Northern Corridor					
Juba-Nimule	165	Finalized the preliminary engineering design			
BURUNDI: Proposed SGR Network					
Central corridor Mu- songati Railway					

Table 3: Development of Standard Gauge Railway (SGR)

## 2.4 Mombasa- Nairobi ICD SGR performance

The Mombasa-Nairobi SGR is the first step in the grand plan to build an East Africa railway network that will eventually link Kenya with Uganda, Rwanda, Burundi and South Sudan. The 485 km-long Standard Gauge line from the port of Mombasa to Nairobi Inland Container Deport (ICD) is complete and in full use since. Commercial operations of the Standard Gauge Railway (SGR) freight train service began cargo operations in January 2018 while passenger services was operationalized in June 2017. The passenger service operates between Mombasa and Nairobi and vice versa. Currently there are 2 passenger trains departing both Mombasa and Nairobi daily.



ICDN SGR Cargo Yard

Source: KPA

The ICDN is equipped with 4 Railway Mounted Gantry cranes, 8 Rubber Tyred Gantry cranes, 10 Reach Stackers, 30 Terminal Tractors, 67 Trailers and 16 Fork lifts to support loading and offloading operations at the ICD.

The standard gauge rail has 56 locomotives operating from the port of Mombasa to ICD Nairobi at Embakasi out of which 8 are used for shunting, 43 locomotives are used for freight services and 5 are used for passenger services.

#### VOLUME

Prior to SGR implementation, cargo haulage by train was lacking behind in the region due to outdated railway infrastructure and ageing rolling stock and locomotives thus accounting for less than 5% of the share of goods transported along the Northern Corridor. However, upon completion of construction of the SGR the share of cargo transported by railway has been increasing significantly registering 20 percent share of the total throughput since the launch of SGR freight services in January 2018. Table 4 presents cargo haulage by SGR between Mombasa and Nairobi ICD. Overall total TEUs moved by SGR was approximately 571,876 TEUs for the period January 2018 to September 2019,out of which exports constituted 34 percent and imports recorded a share of 66 percent.

Comparing January to September of 2018 and 2019, the volume of cargo haulage by SGR grew by 95 percent from 160,587 TEUs recorded in 2018. Analysis over the same period shows notable increase of empty containers that are railed back to Mombasa without cargo accounting for the growth of 172 percent in 2019.

2018	IMPORTS	EXPORT	EXPORT (EMPTY)	<b>TOTAL TEUS</b>
Jan	934	316	442	1,692
Feb	2,808	513	636	3,957
Mar	9,161	1,214	1,118	11,493
Apr	12,154	767	2,015	14,936
Мау	12,854	1,175	5,501	19,530
Jun	16,767	1,167	5,845	23,779
Jul	19,529	1,126	8,275	28,930

19,652	1,034	8,144	28,830	
19,323	1,133	6,984	27,440	
21,172	1,178	8,652	31,002	
20,888	1,012	10,710	32,610	
22,410	1,066	10,297	33,773	
177,652	11,701	68,619	257,972	
IMPORTS	EXPORT	EXPORT (EMPTY)	<b>TOTAL TEUS</b>	
23,836	1,077	11,895	36,808	
19,030	1,188	11,298	31,516	9
19,200	1,199	10,559	30,958	201
22,323	1,071	9,993	33,387	18/
22,066	1,065	10,706	33,837	120
21,315	1,104	11,654	34,073	VQ2
24,236	1,367	14,214	39,817	A- 1
23,150	1,302	12,499	36,951	Source: KPA- ICDN 2018/2019
21,975	1,297	13,285	36,557	Irce
197,131	10,670	106,103	313,904	Sol
	19,323 21,172 20,888 22,410 <b>177,652</b> <b>IMPORTS</b> 23,836 19,030 19,200 22,323 22,066 21,315 24,236 23,150 21,975	19,3231,13321,1721,17820,8881,01222,4101,066177,65211,701IMPORTSEXPORT23,8361,07719,0301,18819,2001,19922,3231,07122,0661,06521,3151,10424,2361,36723,1501,30221,9751,297	19,3231,1336,98421,1721,1788,65220,8881,01210,71022,4101,06610,297177,65211,70168,619IMPORTSEXPORTEXPORT (EMPTY)23,8361,07711,89519,0301,18811,29819,2001,19910,55922,3231,0719,99322,3231,0719,99322,0661,06510,70621,3151,10411,65424,2361,36714,21423,1501,30212,49921,9751,29713,285	19,3231,1336,98427,44021,1721,1788,65231,00220,8881,01210,71032,61022,4101,06610,29733,773177,65211,70168,619257,972IMPORTSEXPORTEXPORT (EMPTY)TOTAL TEUS23,8361,07711,89536,80819,0301,18811,29831,51619,0301,18910,55930,95822,3231,0719,99333,38722,0661,06510,70633,83721,3151,10411,65434,07324,2361,36714,21439,81723,1501,30212,49936,95121,9751,29713,28536,557

Table 4: Volume of cargo by type in TEUS

#### **SGR Freight charges**

#### SGR-ICD NAIVASHA

Table 5 refers to the standard charges for cargo haulage by SGR to and from Kilindini (Port Reitz) – ICD Nairobi/ Nairobi Freight Terminus. Rates are not inclusive of last mile cost. Transporting cargo from Nairobi to Mombasa will cost \$250 for a 20-foot container while a 40-foot container weighing up to 20 tonnes will cost \$350 and \$375 for those weighing to between 21-30 tonnes. Kenya Railways has been charging Sh30,000 to transport a 40-foot container from Nairobi to Mombasa irrespective of weight. President Uhuru Kenyatta officially launched the inaugural Phase 2A of the Nairobi-Naivasha Standard Gauge Railway (SGR) line on Wednesday, 16th of October 2019for passenger services. The freight services is yet to be launched. The line has four passenger stations namely; Ongata Rongai, Ngong, Mai Mahiu and Suswa and one inter-change station at Nachu station. Access roads need to be upgraded to allow the locals to access the stations with ease i.e. the link to Ngong road from Ngong station and the link

		Rate- Loaded Container (USD)		Rate – Empty Container (USD)		
Size	Weight Range in Tons	Up direction	Down Direc- tion	Ex Movement by Rail	Ex Movement by Road	
20 -foot container	Full range	500	250	100	150	
40-foot container	Up to 20 Tonnes	700	350	100	150	
	21- 30 Tonnes	750	375	100	150	

#### Table 5: SGR standard tariff rates

Hauling the 20-foot container from Mombasa to Nairobi will cost US\$ 500 while a larger 40-foot container will cost up to US\$700 from the promotional cost of USD 400 introduced in January 2018 reflecting a 79.9 per cent rise in bid to raise more revenue to pay the Chinese operator. Source: Kenya Railways Corporation (KRC) 2017-2019

road to the Ongata Rongai Stations.

President Uhuru has also commissioned works on the Inland Container Depot (ICD) located within the planned Dry Port near Mai Mahiu town.

# **QUARTER ANALYSIS OF INDICATORS PERFORMANCE**

This report is part of the series of quarterly reports prepared by the Northern Corridor Transit and Transport Coordination Authority (NCTTCA) in furtherance of its mandate to monitor and report regularly on the performance of the Corridor. It covers the performance of Mombasa Port and Northern Corridor Charter indicators for the period of three months from July to September 2019. Indicators discussed in the report presents the performance status on the implementation of the Mombasa Port Community Charter on quarterly basis. The performance indicators have been monitored to track various initiatives agreed upon since the Charter was signed in 2014 and reviewed in 2018 to enhance efficiency of the port and the corridor. A comparison is made with the same quarter of previous years.

# **3. MARITIME INDICATORS**

Maritime indicators track container vessel movement from the time of arrival of the ship at the port area, until exit of the vessel from the Port area. This takes into account arrival from sea into anchorage, berthing time and pilotage outward movement. The report focuses on performance of the container vessel movements by looking at waiting time before berth and the ship turnaround time at the port of Mombasa in the quarter ending September 2019.

# 3.1 Ship Turnaround Time

Ship turnaround time is measured from the time the ship arrives at the port area (Fairway Buoy) to the time it leaves the port area demarcated by the fairway buoy.



A ship waits to offload at the Port of Mombasa

Figure 2 shows average turnaround time for the quarter ending September over the period 2016 to 2019. This is a critical key performance indicator of port efficiency, as an increase in ship turnaround time indicates inefficiencies on the part of multiple stakeholders involved in servicing the vessels and clearing the cargo from the port. Statistics illustrates a varying performance for the ship turnaround time ranging from a high of 77 hours in September 2019 and a low of 66 hours in August 2019. It is important to

note that there are has been continuously implementation of initiatives towards port expansion in line with increased cargo throughput volumes. Furthermore, stakeholders key to these targets such as Kenya Ports Authority (KPA),Kenya Revenue Authority (KRA), Kenya Trade Network Agency (KENTRADE)and Kenya National Highways Authority (KeNHA) have completed a number of major projects that may have impacted positively on this improvement in ship turnaround times.

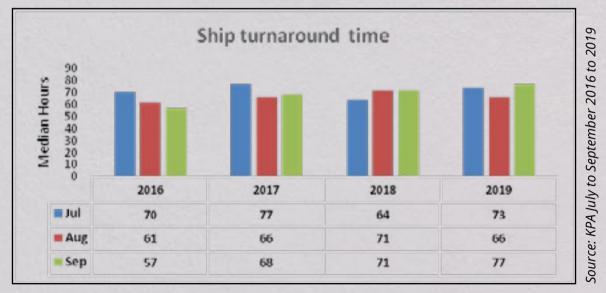


Figure 2: Ship turnaround time at the port of Mombasa in hours; April to September 2018

# 3.2 Vessel waiting time before berth at the port of Mombasa

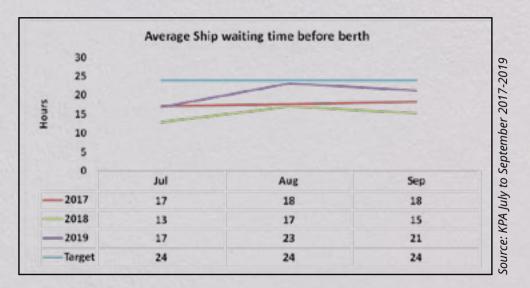
This time is measured from the time the vessel arrives at the fairway buoy to the time of its first berth.

Vessel waiting time is a subset of the ship turnaround time and another key determinant of port efficiency. If the vessel waiting time is high, it may result in a port delay surcharge being imposed on cargo destined for the port, and consequently increase the cost of goods in the countries served by the port.



A vessel prepares to dock at the Port of Mombasa

From the figure 3 below, overall vessel waiting time before berth at the port of Mombasa shows tremendous performance of less than one day (24 hours) over the period quarter under review since 2017. The performance could be attributed to the introduction of an online exchange of documents by stakeholders. In addition, there has been increased investment in both shore and off shore equipment's which includes acquisition of modern tugboats and pilot boats that have boosted berthing operations.



*Figure 3: Average Vessel Waiting Time before Berth at the port of Mombasa (Apr-June) in Hours* 

# **3.3 Vessel Productivity (Gross Moves per Hour)**

The other marine indicator for port efficiency is the vessel productivity in this case Gross moves per hour which focuses on a crane's ability to move containers over the quay wall each hour. Gross moves per hour, defines the total container movement (on loading, offloading and repositioning) divided by the number of hours for which the vessel is at berth. From table 6, the average Gross Moves at the Port of Mombasa for container vessels handled was steady at 33 for the quarter under review.

Over the period,140 ships were recorded and the monthly call varied from a low of 44 ships in September to a high of 49 ships in August 2019 delivering a total of 333,993 TEUs in the quarter. Productivity in Gross Moves Per hour has improved two-fold compared to the port charter baseline of 16.7 Gross Moves per hour in 2013. The improved productivity has been occasioned by the improved investment and utilization of ship yard equipment by the KPA. This includes increase in number of Ship to Gantry cranes, Rubber Tyred Gantry (RTG) cranes, Terminal Tractors among others. The Gross moves per hour is targeted at 38 moves per hour by December 2020 and 40 moves per hour by December 2022.

Month	No of ships	Total Moves	Gross Moves per hours	TEUs	Aver- age TEUs Per ship
Jul-19	47	78,782	33.16	111,681	2,376
Aug-19	49	81,657	33.62	115,771	2,363
Sep-19	44	75,503	33.66	106,541	2,421

*Table 6: Vessel Productivity at the port of Mombasa from April to September 2018* 



A vessel is assisted to Berth by tug boats

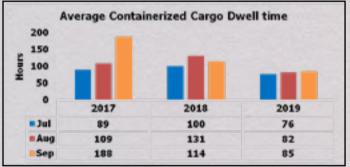
# **4. PORT INDICATORS**

This section focuses on performance of time and delays specifically container dwell time, One Stop Centre Clearance Time, Time Taken at the Document Processing Centre (DPC) and Delay after customs release at the port of Mombasa for the quarter ending June.

# 4.1 Containerized Cargo Dwell Time at the Port of Mombasa

Cargo Port Dwell Time is the measure of time that elapses from the time cargo is offloaded at the Port to the time it leaves the Port premises.

Average cargo dwell time at the port is targeted at 78 hours as at December 2020 as per the Mombasa port and Northern corridor community charter;60 hours by December 2022 and 48 hours by December 2024. During the quarter under review, cargo dwell time shows tremendous improvement when compared to the same quarter in previous years as illustrated in figure 4 below-a pointer to increased efficiency. Analysis show decrease in cargo dwell time from an average of 7.8 days in September 2017 to an average of 4.8 days in 2018 and further decrease to 3.5 days in 2019 the same month. Implementation of standard gauge rail and road infrastructure along the port area is bearing the desired outcomes to improve this indicator. However, between the 2019 quarter, there was a marginal increase in cargo dwell time from 3.2 days in July 2019 to 3.5 days in September 2019. Since the ship turnaround time had shown a slight increase too over the same time period, the higher dwell time indicates delays cumulated by ship turnaround time.



*Figure 4: Average containerized cargo dwell time in hours April to June* 

# 4.2 Time for customs clearance at the Document Processing Centre (DPC)

This refers to the time taken by Customs to pass an entry lodged by a clearing agent. This time bears a proportion to the total port dwell time.

Figure 5 shows a steady trend of 2 hours for the time taken for customs clearance at the DPC for the quarter

under review in both 2016to 2019. The performance is still an hour shy from the set target. Delays in customs clearance at DPC during this period is partly attributed to the SIMBA system instability; document volumes awaiting processing in between the shifts; the quality of declaration by the relevant agents and other stakeholders' systems. It is evident that more efforts, including the automation of the DPC processes should be fast-tracked for speeding-up clearance of cargo processes to realize this target of one hour.

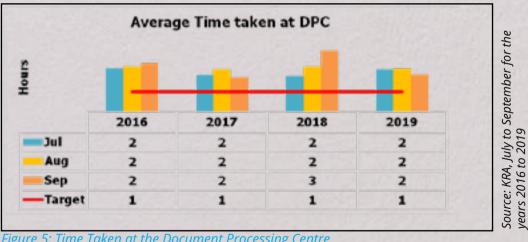


Figure 5: Time Taken at the Document Processing Centre (DPC)

### 4.3 One Stop Centre Clearance Time

One Stop Centre Clearance Time measures the average time between passing of a registered customs entry and issuance of release order. As illustrated in figure 6, average time spent at One Stop Centre for the period (July to September)shows a significant improvement in the 2019 quarter when compared to 2018. Although the performance is still far against the set target of 24 hours pointing to prevailing inefficiencies. The underperformance is partly attributed to late submission and amendment of customs entries by clearance agents



and shortcomings in coordination of joint verification of cargo. Furthermore, it requires a couple of days before results can be obtained for some of the tests carried out on imported goods by standards agencies. Therefore, mechanisms for speeding-up clearance of cargo processes by all the stakeholders involved to realize the required result of one day is important.

Figure 4: Average containerized cargo dwell time in hours April to June

### 4.4 Delay after customs release

Delay after customs release refers to the period it takes to evacuate the cargo from the port after it is officially released by Customs.

The time after customs release has a significant bearing on the port dwell time. Statistics from figure 7 shows time taken after customs release improved in 2019 quarter when compared to the previous year same quarter. Some of the commitments aimed at improving performance for this target include: automating gate clearance procedures and ensuring 24-hour operations which have been fully

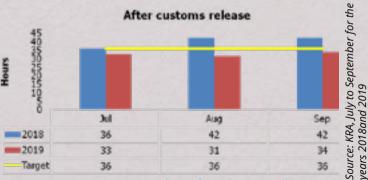


Figure 7: Average time taken after customs release

implemented. In addition, there has been great improvements of roads infrastructure around the seaport and the corridor together with the implementation of standard gauge rail which are bearing the desired outcomes to improve this indicator.

# 4.5 Rwanda Revenue Authority customs average under SCT at the Port of Mombasa

To improve ease of doing business, Northern Corridor Member States set out to create a Single Customs Territory (SCT). The implementation of SCT clearance procedures began at the end of 2013. Since then, all goods are cleared into a Single Customs Territory under a duty paid and warehousing regime. The SCT is a step towards a full customs union, achievable by the removal of restrictive regulations and reducing internal border controls on goods moving between partner states. The ultimate goal is the free circulation of goods.

A Single Customs Territory reduces the cost of doing business by eliminating duplication of processes. It also reduces administrative costs, regulatory requirements and the risks associated with non-compliance on the transit of goods. A Single Customs Territory enhances trade in locally produced goods, particularly agricultural goods and boosts the relationship between the private and public sectors. It also acts as a springboard for the free movement of other factors of production and attracts foreign, domestic and cross-border investment.

Using the SCT clearance process, the clearing agent lodges an entry into ASYCUDA which is interfaced with other agencies under a single window system (Rwanda Electronic Single Window) that allows all the border agencies to interface with ASYCUDA when a consignment is dealt with at Mombasa. Seals are applied at Mombasa and the other agencies conduct their procedures when the truck/goods arrive at the traders premise in Rwanda.

Figure 8 presents time taken for Single Custom Territory procedures for the quarter ending September 2019. The indicators under analysis include:

• **Document Passing-** this is the average time between customs entry declaration/registration and Payment is made by Agent.

• **Customs Release Time-** this refers to the average time between passing/Acceptance of customs entry registration and issuance of customs release order.

• After release time- is the average time between custom release order to the exit i.e. evacuate the cargo from the port after it is officially released by Customs

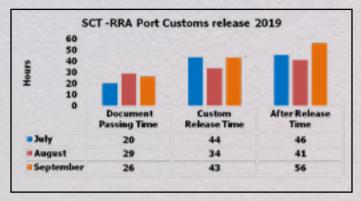


Figure 8: RRA SCT release at the Port of Mombasa

Generally, average time taken for SCT processes at the port of Mombasa has not been steady for the quarter under review. However, there is still a challenge of automated exchange of data among the Member States participating in the SCT framework of clearing goods, the said interface/ platform for exchange of data on goods being cleared is not efficient. There is need to adopt a single transit system for the Northern Corridor for clearance of internationally traded goods in order to address this problem.

# **5. CORRIDOR INDICATORS**

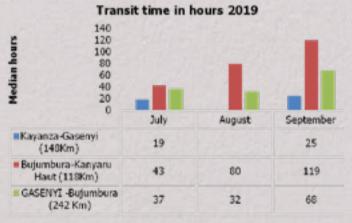
Corridor Indicators cover the period from the time goods are released up to exit at the border and final destinations. On this category, the indicators of interest are compliance levels at weighbridges, volume of traffic and transit time along the Northern Corridor.

## 5.1 Transit Time in Burundi

The main northern corridor route runs from Kanyaru –Haut to Bujumbura through Kayanza and connects with DRC through Gatumba border station. In addition, the route through Gasenyi connects with the main route at Kayanza. Transit time in Burundi was measured from Kanyaru Haut and Gasenyi to the major nodes and customs border points of Bujumbura Port and Kayanza.

Figure 9 shows that from July to September 2019, transit time from Kayanza-Gasenyi (148Km); Bujumbura-Kanyaru Haut (118Km); and Gasenyi-Bujumbura (242 Km) increased marginally on all routes over the quarter under review pointing to prevailing inefficiencies. It is evident that there are transit delays on these routes occasioned by traffic congestion and road conditions resulting from damage by rain and overloaded vehicles.

The average transit time from Bujumbura to Kanyaru-Haut route was significantly high increasing from 43 hours in July 2019 to 119 hours in September 2019 despite the fact it is a shorter distance compared to Kayanza- Gasenyi route and Gasenyi Bujumbura port route an indication of prevailing inefficiencies. The long transit delays on the routes were attributable to the steep terrain and road conditions.



*Figure 9: Transit Time in Burundi along the Northern Corridor* 

# 5.2 Transit time in Kenya -using RECTS

Figure 10 gives trends of transit time from Mombasa port to Malaba and Busia borders from July to September in 2019 for the trucks that were armed with RECTs. The distance between Mombasa port to Malaba is 933 km and from Mombasa port to Busia is 947 km. The average transit time target for trucks plying these routes is 3 days. Over the review period, average transit time from Mombasa to Malaba for the quarter under review improved tremendously from 67 hours in July to 56 hours in September 2019. Similarly, average transit time from Mombasa to Busia improved steadily from 68 hours to 65 hours during the same review period. The good performance is within the 3 days of set target. This performance suggests an enhanced efficiency along the route over time. The remarkable performance could be attributed to the infrastructure improvement along the route including construction of Port Reitz- Moi International airport access road, Miritini –Mwache Kipevu links road, Nairobi Southern by-pass and Nairobi Eastern by-pass, construction of 3 interchanges at Nakuru, Njoro and Mau Summit which have succeeded in diverting traffic from congestion in the major urban areas along the Corridor.



Figure 10: Transit time from Mombasa to Malaba and Busia borders in Hours in 2019

Figure 11 provides transit time from the port of Mombasa to Kampala/Uganda, Elegu-Nimule border/South Sudan and Mpondwe/DRC for the period for quarter ending September 2019. All the destinations from Mombasa have seen an improvement in average transit times except for trucks plying the Mombasa to Kampala route which saw an increase from 107 hours in July to 129 hours in September 2019 occasioned by congestion in capital cities



## 5.3 Transit time in Rwanda

Transit time in Rwanda is the time duration from the time a truck is allowed (electronically in Rwanda Revenue Authority's system) to commence the transit journey to the time the bond is cancelled on the exit border. Rwanda is bordered by Uganda, Tanzania, Burundi and the DRC.

Hours

Rwanda borders DRC through various borders among them is Rubavu, Cyanika, Bukavu and Bugarama. DRC is Rwanda's largest trading partner and provides largest market share.

Figure 12 below shows the transit times in Kagitumba to Akanvaru Haut/Burundi, Kagitumba to Rubavu/ DRC, Kagitumba to Rusizi/Bukavu and Kagitumba to Rutete for the quarter ending September 2019 using the Regional electronic cargo tracking system. All the routes witnessed improvement in transit time except the Kagitumba- Bukavu route which saw an increase in transit time from 34 hours

in July 2019 to 37 hours in September 2019. The improved performance is partly attributed to; the road condition which is mostly good or fair except for a few sections which are either under development or rehabilitation; implementation one-stop border points and implementation of the Single Customs Territory (SCT).

The distance from Kigali to Rubavu/DRC is approximately Transit time in Rwanda from Kagitumba

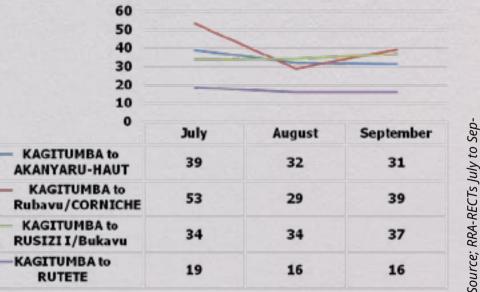


Figure 12: Mean Transit time in from Kagitumba to other destinations bordering Rwanda 2019

2019

tember

160 kilometers while Mombasa to Kigali is around 1,680 kilometers. From the analysis, average transit time from Kigali to Rubavu Corniche increased from 41 hours to 49 hours during the quarter of July to September 2019 as shown in figure 13 below. Similarly, average transit time from Mombasa/Kemba to Kigali under single custom ter-

ritory increased slightly from 67 hours in July 2019 to 74 hours in September 2019. The high transit time was occasioned by traffic in capital cities (Nairobi and Kampala), driver stoppages along the route due to personal reasons and longer time taken for the RECTS gadgets to be disarmed when a truck has already arrived.

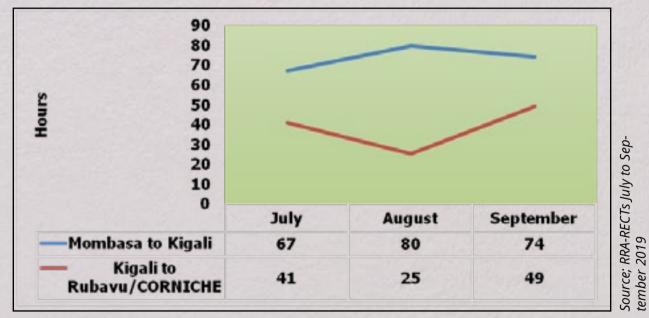


Figure 13: Mean Transit time in from Mombasa to Kigali and from Kigali to Rubavu/ Corniche 2019

## 5.4 Transit time in Uganda

Transits time in Uganda tracks the time taken to move cargo between Kampala and various borders between Uganda and Northern Corridor Member States of Rwanda, South Sudan, Kenya and DRC as illustrated in figure 14 below. Uganda borders South Sudan through Elegu/Nimule border and Oraba/Kaya. Uganda borders DRC through Ntoroko, Goli and Mpondwe. From the analysis time taken varies depending on the distance. However, Kampala to Ntoroko is the slowest route compared to Kampala-Oraba and Kampala-Elegu routes as shown in the figure below over the review period. It was noted that there was a lot of traffic on the Ntoroko route; which could have attributed to long transit time by congestion.

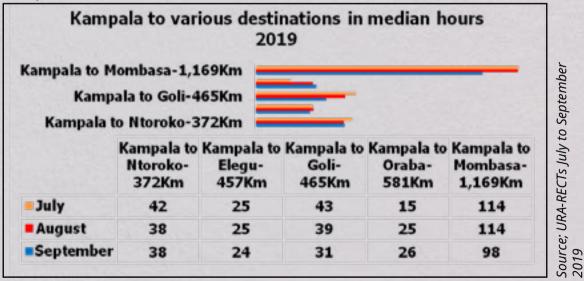


Figure 14: Transit time from Kampala CBD in hours to various borders





**Growing Prosperity Through Trade** 



The Permanent Secretariat 1196 Links Road, Nyali P.O. Box 34068-80118 Mombasa, Kenya



Telephone +254 729 923574 +254 733 532485



E-mail: ttca@ttcanc.org Website: www.ttcanc.org

🥑 @NorthernCoridor

NorthernCorridor

