



Northern Corridor Quarterly Performance Dashboard Report

July-September 2016



Northern Corridor
Transit and Transport
Co-ordination Authority

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1. SUMMARY

The Northern Transport Corridor links the land locked countries of Uganda, Rwanda, Democratic Republic of Congo, Southern Sudan and Burundi with Kenya's maritime port of Mombasa. Against this background, various trade facilitation initiatives aimed at minimizing transportation cost and transit time are being undertaken to improve the performance of the Corridor.

Among the initiatives being implemented include: Expansion of the Port of Mombasa, improvement of infrastructure along the corridor (road and rail) and the establishment one-stop border post facilities. This has resulted to the steady increase in the volume of cargo at the Port of Mombasa. Similarly, traffic along the Northern Corridor has been growing steadily, with more growth seen in imports as the region continues to import more goods than it exports. The road network is the main mode of transport for both imports and exports accounting about 97 percent.

Another initiative is simplification of port clearance procedures and establishment of the Single Customs Territory that has seen reductions in time taken to process and clear goods at the Port of Mombasa and transit borders. For instance, as presented in the report the average dwell time for cargo inside the port has been substantially reduced from 100.72 hours in July 2015 to 88.68 hours in September 2016 while transit time from Mombasa to Malaba stands at 4.8 days, compared to 12 days in 2008 for most transit traffic.

Furthermore, maritime indicators (waiting time before berth and the average monthly ship turnaround time) have attained the set target as per the Mombasa port Community charter which provides various measured geared towards enhancing efficiency at the Port and the Corridor. In September 2016 vessel turnaround was recorded at 2 days against 3 days' target while waiting time before berth registered 6.5 hours against the set target of 24 hours.

2. INTRODUCTION



The Mombasa Port Community Charter¹ provides the framework to enhance an efficient, effective, competitive Port and supply chain system that would drive the regional economies towards becoming an attractive investment destination.

Indeed, the charter being cognisant of this identified a set of critical indicators that are being monitored to gauge progress in efficiency of the port and the Corridor.

The charter also identifies key initiatives for implementation and stakeholders who are relevant to the success of the planned initiatives. Guided by this, Northern Corridor Transit and Transport Coordination Authority (NCTTCA) engages the port community stakeholders as part of the measures to galvanize efforts aimed at enhancing efficiency of the corridor and measuring the performance through the Northern Corridor Dashboard.

To accelerate the realization of the potential of the

1 *The Mombasa Port Community Charter was signed in June 2013 by both Public and Private institutions who committed towards measures aimed at improving efficiency at the Port and the Corridor. The charter may be accessed via http://ttcanc.org/documents/Port_Comm_Charter_Final.pdf*

Mombasa Corridor and spur the region's economic growth, the Mombasa Port Community Charter which was signed in June, 2013 provided various commitments among them were:

- Achieve 70% pre-entry of cargo handled by the Mombasa Port.
- Paperless cargo clearance by integrating community systems into the KNESWS by December 2014
- Increase liquid bulk holding capacity to 11,000,000 MT by December 2015.
- Achieve an average of 120,000 km per truck per annum by December 2016.
- Grow cargo off take by rail to above 35% of throughput by December 2018.

Implementation of these aforementioned targets will ensure efficiency is attained along the Corridor.

The Charter also provided nine indicators covering Maritime, Port and Corridor. These indicators among others are tracked through the Northern Corridor Dashboard on weekly, monthly and quarterly basis.

This report mainly covers the period of three months from July 2016 to September 2016. Information on key performance indicators was extracted from the stakeholder's electronic business systems as well data from the Road Transport and GPS surveys.

The report gives the status of progress achieved on various indicators towards facilitating smooth flow of cargo and movement of traffic along the transport corridor. Measuring the corridor Performance through these indicators contribute to the identification of areas requiring improvement and evaluation of the effectiveness of programs designed to improve competitiveness of the Corridor.



3. QUARTERLY PERFORMANCE ANALYSIS

This section gives the performance status for the first quarter (July to September 2016). Where possible a comparison is made with the same quarter in 2015. The scope is limited to the indicators specified by the Mombasa Port Community charter and is part of the 31 performance indicators being measured by the Northern Corridor Transport Observatory¹.

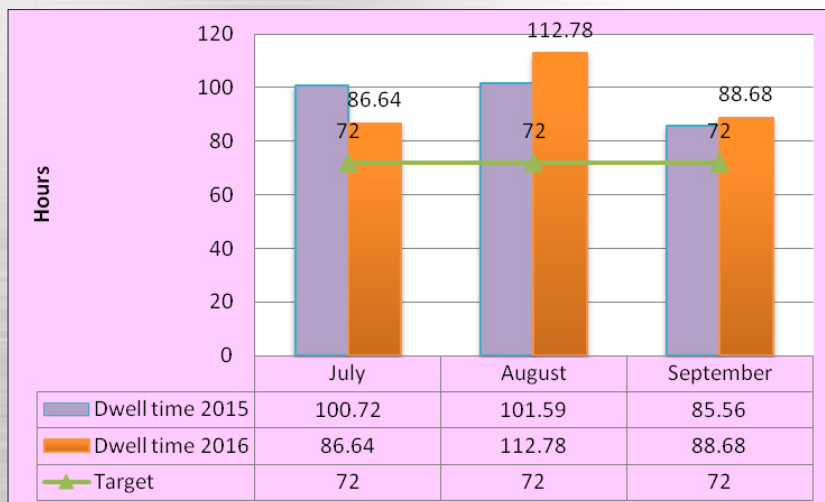
¹ The Northern Corridor Transport Observatory is a corridor performance monitoring tool with an online platform that tracks over 31 performance indicators. The indicators relate to Volume/Capacity, Transport Rates/Costs, Transit time/delays and Efficiency/Productivity. The online port is accessed via <http://top.itcanc.org>

3.1 PORT INDICATORS

3.1.1 Containerised Cargo Dwell time

Refers to the total time spent by Cargo at the Port from when the Cargo is discharged from the vessel until it exits the Port (average number of days the container stays in the yard).

Figure 1: Containerised Cargo dwell time (Hours)



Source: KPA, Jul-Sep 2015/2016

The Port containerised port dwell time is affected by many factors given that there are various cargo interveners at the port where delays might occur. In addition, the free period given is 4 days for local cargo and 9 days for transit cargo whereas the target is 3 days. However, the target can still be attained by improving traffic flow to and from the Port, Pre-arrival cargo clearance to be facilitated

Figure 1 gives comparison of containerised cargo dwell time for three months of the first quarter for 2015 and 2016. It indicates an average containerised dwell time of 4 days from July to September 2016, a marginal improvement by 8.97 hours from the baseline of 105 hours.

In September 2016, average dwell time was recorded as 3.7 days (88.68 hours). The performance could partly be explained by the KWATOs system technicalities during the period. Similar trend of performance was experienced in 2015 between July and September.

This performance is still way below the port charter target of three days' dwell time and 2 days international benchmarking standards.

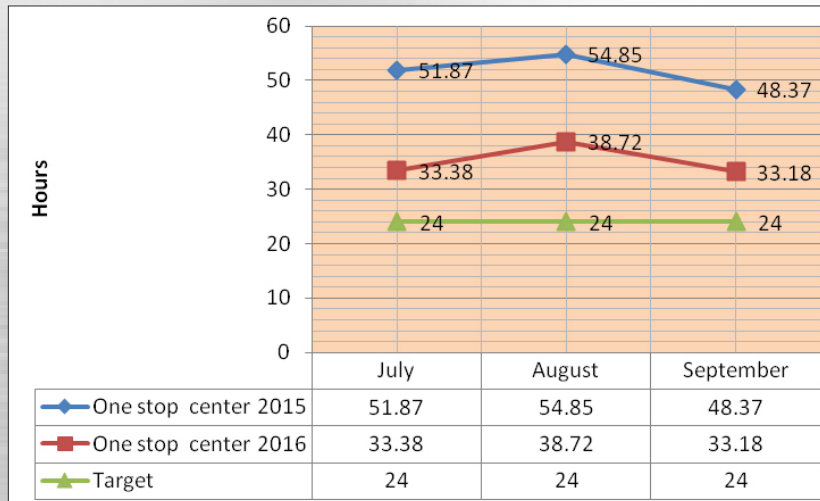
by partial manifest submission. Clearing and Forwarding Agents should also ensure correct and timely submission of documents to facilitate faster clearance of cargo.

The following indicators gives a breakdown of other processes which affect the port dwell time.

3.1.2 One Stop Centre Clearance Time

One Stop Centre Clearance Time measures the average time between passing of customs entry after its registration and issuance of a release order.

Figure 2: One Stop Centre Clearance Time



Source: KRA, Jul-Sep 2015/2016

From figure 2, time at One Stop Centre for transit cargo significantly improved in 2016 compared to the same period in 2015.

September 2016 registered the best performance of 33.18 hours though still shy away from the set target of 24 hours as per the Port charter.

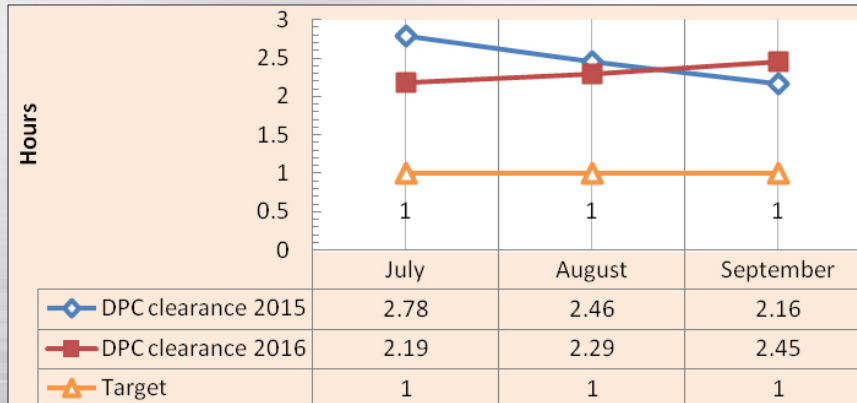
Delays at one stop centre can be partly explained by uncoordinated physical verification and joint inspection of cargo

Therefore, all respective agencies involved are expected to take the lead role in their respective clearance stages to achieve a target of 24 hours in the port by fully adhering to the 24/7 port working system.

3.1.3 Time Taken at the Document Processing Centre (DPC)

This is the time it takes to have an entry lodged by a clearing agent passed by Customs. The time at DPC has an effect on Port dwell time though minimal.

Figure 3: Time Taken at the Document Processing Centre (DPC)



Source: KRA, Jul-Sep 2015/2016

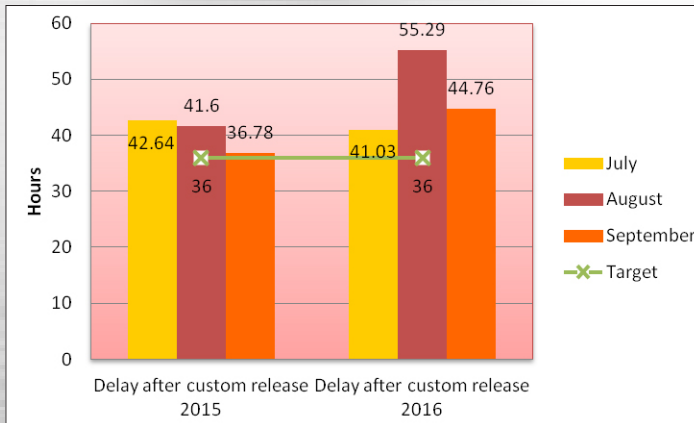
DPC time marginally increased from 2.19 hours in July 2016 to 2.45 hours in September 2016 which was slightly higher than the DPC time of 2.16 hours recorded in September 2015. This performance is still higher than the set target of one hour. This can be attributed to clearing agents' delays in submitting their files in good time and last minute changes to the documents system outages have also delayed document processing during the period. However there have been systems upgrades to ensure better performances.

Therefore, in order to expedite activities at the DPC, there is need to fully implement pre-arrival clearance as is enshrined in the Charter. In addition, initiatives such as on the spot approval of manifest or allowing partial manifest will help in avoiding unnecessary delays.

3.1.4 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.

Figure 4: Delay after Custom Release



Source: KRA, Jul-Sep 2015/2016

Fig 4 indicates the Time taken after Customs Release from July to September for 2015 and 2016. The time after Customs release forms a bigger proportion of the Port dwell time.

It can be noted that delays after customs release has increased when compared with the same period in 2015. For instance, in the month of September the time increased from 36.78 hours in 2015 to 44.76 hours in 2016.

A lot of activities are undertaken upon customs release before the cargo is evacuated from the Port. This includes clearance from KPA, Gate procedures and loading of the Trucks. Poor Infrastructure around the port also leads to congestion hindering access and evacuation of cargo from the port in time.

In this regard the Clearing Agents should closely collaborate with the cargo owners' transporters and the Port Authority to speed up cargo removal from the Port as one of the ways of attaining the set target.

3.2 CORRIDOR INDICATORS

Corridor Indicators cover the period from the time goods are released up to exit at the border. The indicators of interest are compliance levels at weighbridges, volume of traffic and transit time from the Port to the borders.

3.2.1 Weighbridge Traffic

This refers to the number of trucks crossing the weighbridges. The indicator measures the average number of trucks weighed per day at the various weighbridges in Kenya.

Figure 5: Monthly average daily traffic volume



Source: KeNHA, Jul-Sep 2015/2016

Figure 5 gives trend of monthly average traffic volumes for three month period (July to September) in 2016 at respective weighbridges in Kenya along the Northern corridor.

The Athi river weighbridge recorded the highest number of traffic weighed followed by Mariakani and Gilgil weighbridges. The higher traffic weighed at Athi River as compared to Mariakani is due to cargo that are originating from Namanga route to Nairobi and also from Nairobi and its environs. This traffic further reduces almost by half as registered at Gilgil weighbridge partly due to the fact that most cargo is destined to Nairobi the city.

All the Weighbridges along the Northern Corridor in Kenya are implementing the High Speed

Weigh-in-Motion (HSWIM) with an exception Busia weighbridge. Trucks which are compliant with HSWIM are not required to stop at the weighbridge stations to be weighed on the fixed scale. Only HSWIM non-compliant trucks are stopped for confirmation from the fixed Scale.

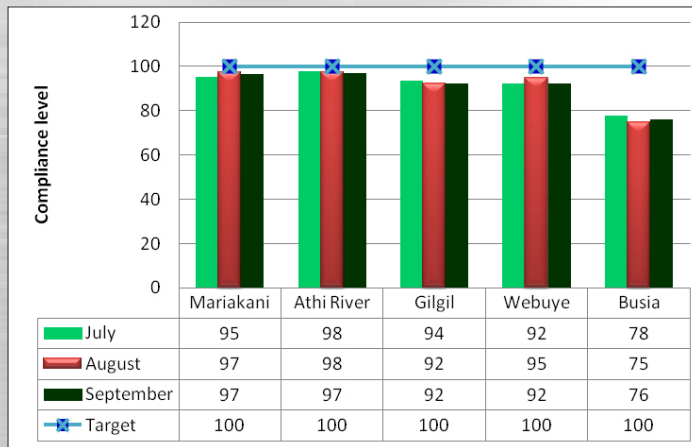
3.2.2 Weight Compliance at the Weighbridge

Weight compliance measures the percentage of trucks that comply with the vehicle load limits before and after re-distribution of the weights.

Overloading of trucks needs to be prevented to protect the road pavement.

It is most common practice to fine drivers for failure to comply with weight standards and to impose user charges proportional to the damage caused to the infrastructure. However, this practice does not solve the problem instead it may fuel corruption.

Figure 6: Weighbridge Compliance



Source: KeNHA, Jul-Sep 2015/2016

Figure 6 above shows compliance levels at respective weighbridges after redistribution from July to September 2016. From the data, it is observed that none of the weighbridges complied 100%, however most of them registered over 90% (between 92% and 97%) compliance levels with the exception of Busia weighbridge. The lower compliance in Busia weighbridge can be explained by the fact that most of the trucks through Busia transport exports from Kenya and the Busia weighbridge is the first weighbridge they encounter.

The biggest challenge at the weighbridges is axle load compliance which may be attributed to lack of blocking and bracing which leads to shifting of cargo. It is important to note that the responsibility of ensuring that cargo is properly

blocked and braced lies with the shipper. Trucks most prone to shifting of cargo during transportation are those carrying clinker. Transporters of clinker should develop a mechanism to partition their trucks as is the case for tankers to minimize shifting of cargo during transportation.

Key among the remedies to these challenges is to sensitize the shippers to support compliance by transporters and support self-regulatory initiatives to enhance voluntary compliance and entrench accountability.

Compliance will eliminate multiple weighing of trucks since all trucks will pass the HSWIM and no truck will be stopped or diverted to the fixed scale.

It is important to note that there are cases where a truck complies at one weighbridge but fails at another weighbridge. The report recommends to fast-track the harmonization of axle load requirements by all Member States and embrace the HSWM for their weighbridges along the Northern Corridor.

3.2.3 Transit Time

Transit time is assessed by route, from origin to destination, and by modal combination being a critical parameter for transport costs. In Kenya, Transit time is defined as to the average time for transit trucks to move from Mombasa port to Malaba or Busia exit points. In the interest of this report, transit time is on road mode of transport.

Using Data from the Revenue Authority, Transit time is estimated from the time the release order is generated at the port of Mombasa to the time the export certificate is issued upon crossing the specified borders. Transit time is also estimated from the Electronic Cargo Tracking System (ECTS) data from the time the Truck is armed with the ECTS at the start of the journey in Mombasa to the time it's disarmed at the border. Table 1 gives summary of transit time from July to September 2016 from Mombasa Port to Malaba and Busia borders.

Table 1: Average Transit Time in Kenya

| Destination | July | August | September | Target |
|-------------------|--------|--------|-----------|--------|
| Mombasa to Malaba | 118.62 | 119.88 | 115.79 | 72 |
| Mombasa to Busia | 213.17 | 234.43 | 205.40 | 72 |

Source: KRA, Jul-Sep 2015/2016

From the analysis, average transit time from Mombasa to Malaba which is 933 km has been relatively constant at around 4.9 days for the whole population of trucks during the period (July to September, 2016) with a slight decrease from 118.6 hours to 115.8 hours in the months of July and September respectively. For all the routes, it is observed that transit time was high in the month of August 2016 which may be partly attributed to delays in cargo off-take from the port.

Transit time from Mombasa to Busia (947 Km) decreased from of 213 hours (8.9 days) in July to 205 hours (8.5 days) in September 2016.

Despite the slight differences in the distances, transit time to Busia was higher than Malaba.

There is need to install HSWIM at Busia weighbridge to reduce delays along the route. Transit time is still beyond the expected 72 hours and some of the reason why the target was not achieved includes; congestion around the Port that limited smooth entry and exit at the port, delays by transporters to pick cargo after port release (i.e. the time reported includes the time after customs documentary release of cargo and physical exit of cargo from the port reflected in Figure 4 above), delays within transporters facilities, high frequency of stoppages for personal reasons along the Northern Corridor by drivers, road construction work going on at Port Reitz and repair works at Bachuma Gate-Taru area section.

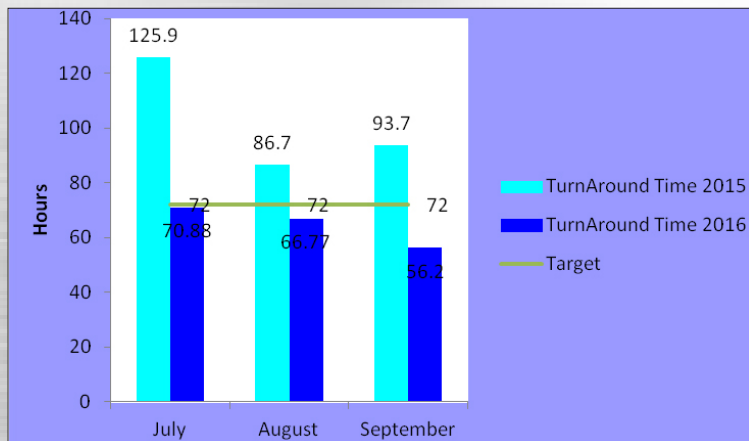
3.3 MARITIME INDICATORS

The section focuses on performance of container vessel movements (waiting time before berth and the average monthly turnaround time) at the port of Mombasa from July to September 2016.

3.1.1 Vessel Turnaround Time

This is the time from ship entry in port to exit from the port area. It is measured from the time the vessel arrives at the fairway buoy to the time it leaves the Port area.

Figure 7: Containerised Ship Turnaround Time (Hrs)



Source: KPA, Jul-Sep 2015/2016

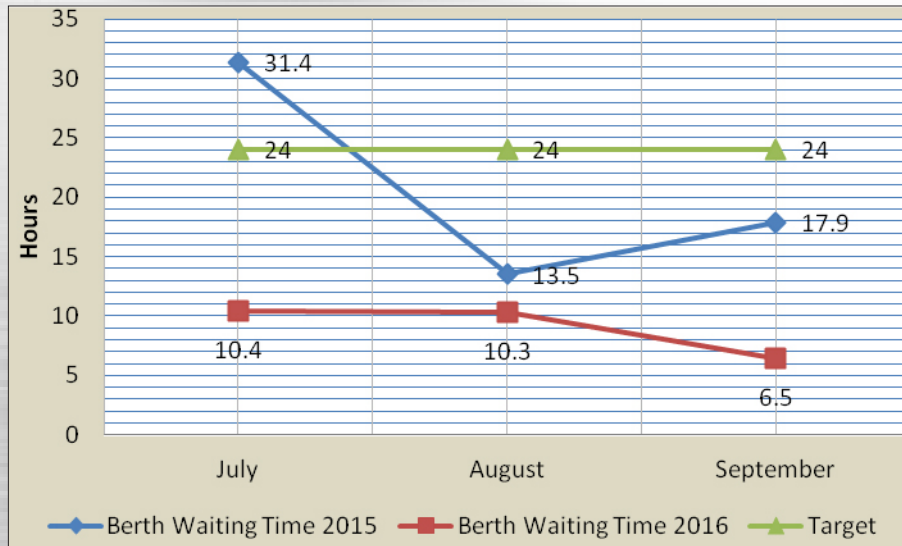
Figure 7 shows tremendous improvement in containerised vessel turnaround from the month of July to September in 2016 compared to 2015. In September 2016 turnaround time reduced to 2 days from 3 days recorded in July. Similarly, vessel turnaround time significantly reduced from around 5 days in July to 3.9 days in September 2015. Various initiatives that have been implemented since the inception of the charter have contributed greatly towards attainment of this indicator.

Among them the port expansion projects such as opening a new berth and container terminal and implementation of the fixed berthing window in the clearance of goods at the Port. However more concerted efforts from respective agencies should be put in place to reduce this time further to 24 hours which is the benchmark.

3.1.2 Vessel Waiting Time before Berth (hours)

This time is measured from the time the vessel arrives at the fairway buoy to the time at its first berth. This is normally a small proportion of the turnaround time.

Figure 8: Containerised Vessel waiting before Berth (hours)



Source: KPA, Jul-Sep 2015/2016

It is observed that Waiting Time before berth significantly improved from 10.4 hours in July to 10.3 hours in August and further to 6.3 hours in September. Comparing with the same quarter previous year, results show that performance for 2016 is better than the target time of 24 hours as per the charter. This commendable performance has saved the Shippers the imposition of Vessel Delay Surcharge, and port congestions which raises the costs of doing business.

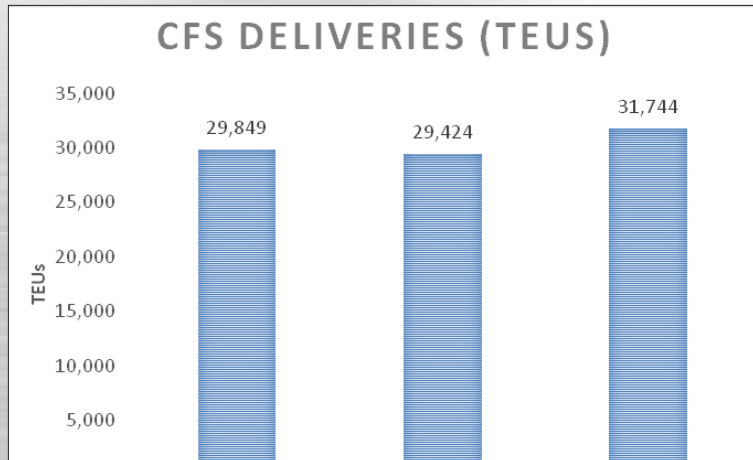
With a fixed berthing window arrangement, the target can further be reduced to a maximum of 4hrs waiting period for ships since vessels arriving out of their agreed arrival are either late comers or waiting at their own convenience.

3.4 CONTAINERS UPTAKE FROM THE PORT TO THE CFS

Container Freight Stations (CFSs) are an extension of the port and are privately managed. Decongestion of the port of Mombasa enormously depends on the efficient cargo pick up from the Port by CFS's and efficient cargo clearance process at the CFS's. Cargo to the CFSs is either client nominated or KPA nominated.

According to the Port Charter policy, where 70% pre-clearance of goods prior to arrival of vessels is targeted, goods should not overstay at CFSs unless CFS's are also specialized to be used as Warehouses for Shippers. The time taken for import pickup and customs release at CFS's should be comparable with that of the Port.

Figure 9: Monthly Container Deliveries to CFS



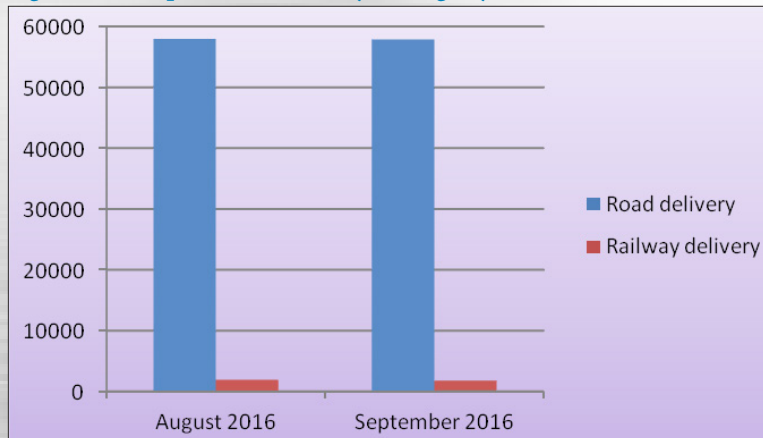
Source: KPA, Jul-Sep 2015/2016

Figure 9 above shows the total deliveries to 12 out of 22 CFSs registered under the CFSAs and KPA policy for both client and Port nominated cargo.

3.5 CARGO OFF TAKE (ROAD, RAIL)

Investment in intermodal transport solutions incorporating road and rail will offer substantial opportunities to reduce logistics costs improve efficiencies and enhance regional trade.

Figure 10: Comparison on delivery of Cargo by rail and road (TEUs)



Source: KPA, Jul-Sep 2015/2016

From the Figure above, road transport is the main mode of transport for cargo off take which accounts for 97 percent compared to 3 percent rail transport. The port charter set target for cargo off take by road at 60 percent and that for railway at 40 percent. Clearly the performance for rail transport is way below the set target. However, initiatives towards realization of this target are in place. Among the ongoing initiatives include; the construction of a Standard Gauge Railway from Mombasa to Malaba, along with the strategic position of the KPA ICD's.

Presently, road haulage accounting for around 97% in transport modal shift makes it an integral component of trade and trade facilitation. An efficient and reliable road freight transport is therefore imperative.



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