



Northern Corridor Quarterly Performance Dashboard

January-March 2017



Northern Corridor
Transit and Transport
Co-ordination Authority

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1. SUMMARY

The ability of ports to ensure smooth cargo movements is one central dimension of their overall function as transport nodes. This report gives the status of progress achieved on Mombasa port charter indicators that are used to gauge the smooth flow of cargo and movement of traffic along the northern transport corridor. This in turn will enable policy makers to identify key areas that require improvement and evaluation of the effectiveness of programs designed to improve competitiveness of the corridor.

This report summarizes third quarter performance covering January to March 2017 by presenting the status of key indicators which have an angle on efficiency. Furthermore, a summary of other key indicators notably container uptake by CFS and delivery of cargo by road and rail is provided.

The analyses show that currently the road network is the main mode of transport for both imports and exports accounting about 97 percent. However ongoing projects such as construction of Standard Gauge Rail (SGR) shall balance transport modal shift between rail and road as stipulated in the Mombasa port community charter.

Some of the targets have been met. They include; for example indicators on waiting time before berth, containerized cargo dwell time and after customs release time. These indicators have some bearing on efficiency of the port. The achievement is attributable to various initiatives initiated by the Port of Mombasa such as the implementation of the fixed berthing window, 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. Although not all Member States have implemented the SCT initiative.

The table below summarizes performance of key quarterly indicators from January to March 2017.

Table 1: Quarter status summary, January to March 2017

Category	Indicator	Target	January to March 2017 Status/Progress		
Maritime Indicators	Vessel turnaround time (Hrs)	72	Jan	76.4	
			Feb	96.2	
			March	78.4	
	Ship waiting time (Hours)	24	Jan	21.5	
			Feb	25.0	
			March	22.6	
	Ship actual waiting time (Hours)		Jan	19.1	
			Feb	22.3	
			March	19.8	
Port Indicators	Containerised Cargo Dwell time (Hours)	72	Jan	Feb	March
			99	73	70
	One Stop Centre Time (Hours)	24	Jan	Feb	March
			56	42	39
	After customs release (Hours)	36	Jan	Feb	March
			47.9	34.9	33.6
	Document Processing Centre Time (Hours)	1	Jan	Feb	March
			2.4	2.3	1.9

Corridor Indicators	Transit time in Kenya in Hours (from Mombasa to: Malaba & Busia)	72		Malaba		Busia	
			Jan	106		205	
			Feb	98		162	
			Mar	107		133	
	Weighbridge traffic (N° of trucks weighed)	All	Weighbridge	Jan	Feb	March	
			Mariakani	4,043	-	2,162	
			AthiRiver	9,619	9687	10,861	
			Gilgil	4,641	4297	2,999	
			Webuye	1,671	1502	1,670	
			Busia	446	448	516	
	Weight compliance at weighbridge (%)	100	Weighbridge	Jan	Feb	March	
			Mariakani	97	-	99	
			AthiRiver	98	98	99	
			Gilgil	94	94	91	
			Webuye	96	96	95	
			Busia	73	75	78	

2. INTRODUCTION

The Mombasa Port Community¹ Charter commits both private and public stakeholders to undertake measures that will increase efficiency of the Mombasa Port and supply chain system that would drive the regional economies towards becoming an attractive investment destination.

Towards this end, this report shows the progress achieved in the third quarter covering January to March 2017 in implementation of the Charter particularly for the 9 key indicators which are tracked by the Northern Corridor dashboard. These indicators cover the period from the time the ship enters the port area and leaves, to the length of time associated to cargo movement until it exits the borders either at Malaba or Busia in Kenya. It is equally important to highlight the uncertainties in delays which may increase the cost of transportation.

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.
- Transform Mombasa Port into a high performing landlord port by 2016.
- Grow cargo off take by rail to above 35% of throughput by December 2018.

The analysis presented in this report complements what is provided weekly on the online portal of the Northern Corridor Transport Observatory. The content of this report is also available online at <http://top.ttcanc.org>.

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*

3. PROGRESS OF QUARTERLY PERFORMANCE ANALYSIS

This section gives the performance status for the third quarter of 2016/17 (January to March 2017). Where possible a comparison is made with the same quarter of the previous years. The scope covers the indicators specified by the Mombasa Port Community charter and reported on a monthly basis.

3.1 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 January to March 2017.

3.1.1 Ship Turnaround Time

This indicator is measured from the time the vessel arrives at the Port area (Fairway Buoy) to the time it leaves the port area demarcated by the fairway buoy.

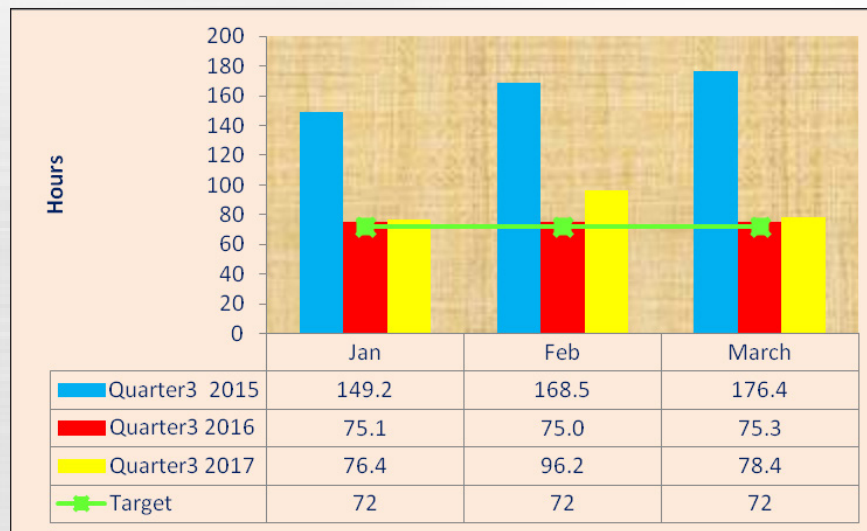
Figure one shows ship turnaround time for the quarter covering the months of January to March in 2015, 2016 and 2017. It is evident that ship turnaround time decreased significantly from 176.4 hours in March 2015 to 78.4 in the same month of 2017. It can also be noted that the trend was erratic in 2015 with an average ship waiting time of 165 hours.



However, this trend has been reversed and ship turnaround time reduced significantly to an average of 84 hours the same quarter 2017. The positive performance can be related to the implementation of the Second Container Terminal in September 2016 that has increased the port capacity by 550,000 Twenty Feet Equivalent Units (TEUs).

However, the performance is still beyond the set target of 3 days. In 2017, February 2017 data is the highest with 96.2 hours. This was attributed to larger vessels calling at the port which require more time to offload and load. The report also banks on ongoing initiatives such as expansion of terminals, construction of an offshore Single Buoy Mooring and establishment of up to date dry bulk facilities (which are yet to be implemented) that are expected to improve performance to attain the 72 hour target.

Figure 1: Ship Turnaround Time (Hours)

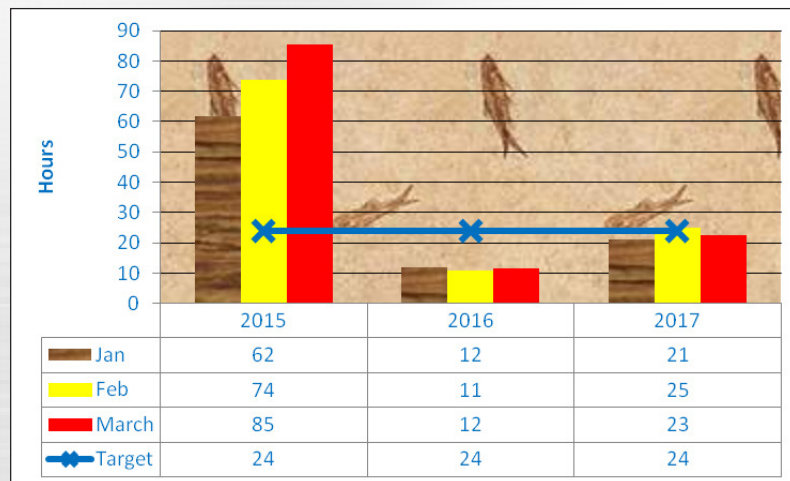


Source: KPA, Jan-March 2015/2016/2017

3.1.2 Ship Waiting Time (hours)

This time is measured from the time the vessel arrives at the fairway buoy to the time at its first berth, including waiting at their own convenience. Figure 2 presents performance and comparison in vessel waiting time before berth from January to March 2015, 2016 and 2017.

Figure 2: Ship waiting time (hours)



Source: KPA, Jan-March 2015/2016/2017

Ship waiting time was recorded as 23 hours in March 2017 which is within the set target of 24 hours. It is attributed to the implementation of fixed Berthing Window to allow shipping lines plan their time.

When compared to 2016, performance doubled; there was a significant increase by an average of 11.5 hours while 2015 registered an average of 73.6 between the three month periods. 2016 performance exceeds the set target of 24 hours and outperforms performance for similar period in 2015 and 2017.

Analysis show that vessel waiting time before berth target has been met since January 2016 as committed in the port charter. Some of the factors for this positive performance include; introduction of Fixed Window Berthing, improved crane productivity and adequate terminal capacity. There is need to review this target further to improve efficiency.

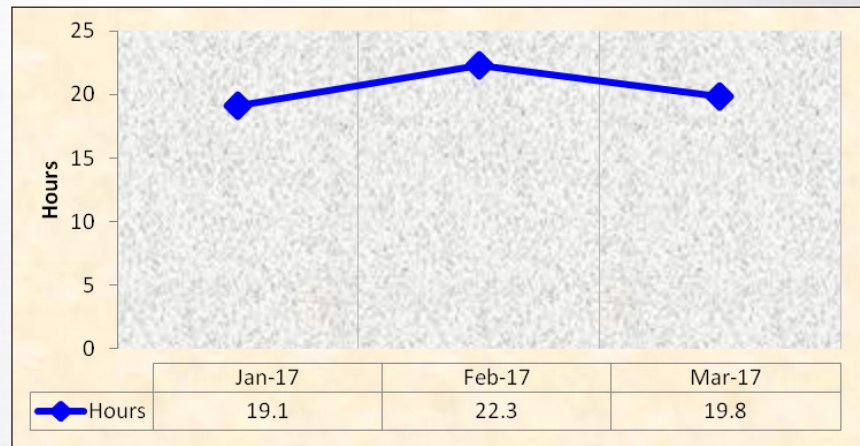


3.1.3 Ship Actual Waiting Time (hours)

This refers to the time ship arrives at the fairway buoy to the time pilot boards the ship for clearance

From the figure below, actual ship waiting time was recorded as 19.1 hours in January 2017 to 19.8 hours in March 2017.

Figure 3: Ship Actual waiting time (hours)



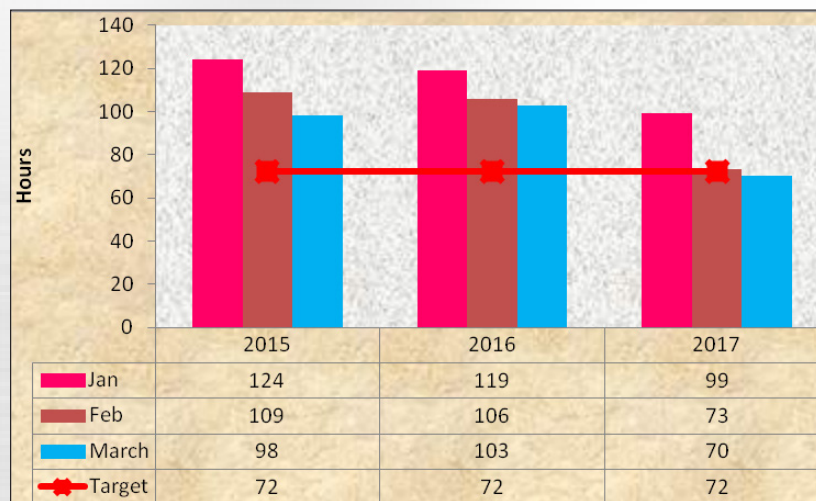
Source: KPA, Jan-March 2017

3.2 MARITIME INDICATORS

3.2.1 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 4: Containerised Cargo dwell time (Hours)



Source: KPA, Jan-March 2015/2016/2017

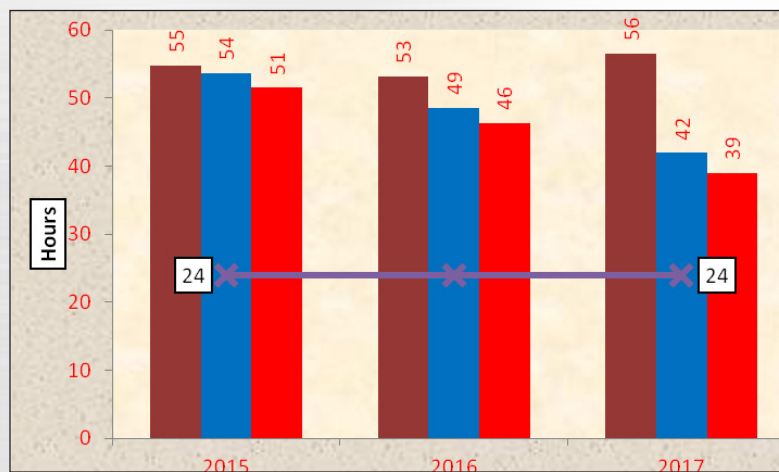
It is clearly observed that the average containerized dwell time for the reporting period is 110.4 hours for 2015, 109.3 hours for 2016 and 80.8 hours for 2017. This implies that containerised cargo dwell time has been decreasing steadily over the years as shown in figure 3 above. Moreover, the performance of March 2017 (70 hours) shows tremendous improvement which outperforms performance of 72 hours set target. Kenya Ports Authority reported that the improvement was attributed to manual interventions to resolve lack of full integration of single custom territory, 24/7 clearance and evacuation of cargo from the port, armouring of electronic cargo tracking system, automation of systems and expansion of exit lanes at the gates. Gate 18/20 was expanded with two additional lanes having been introduced to improve truck turn around.

3.2.2 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.

As depicted on the figure 4 below, time spent at One Stop Centre decreased from 56 hours in January to 39 hours in March 2017. There has been a significant improvement in performance when compared to 2015 and 2016 the same period. The performance is still elusive from the 24 hours target which could be due to late submission and revision of documents by clearance agents and uncoordinated joint verification of cargo that results in delays. Therefore there is need to speed-up clearance of cargo processes to achieve the desired results.

Figure 5: One Stop Centre Clearance Time



Source: KRA data Jan-March 2015/2016/2017

3.2.3 Time Taken at the Document Processing Centre (DPC)

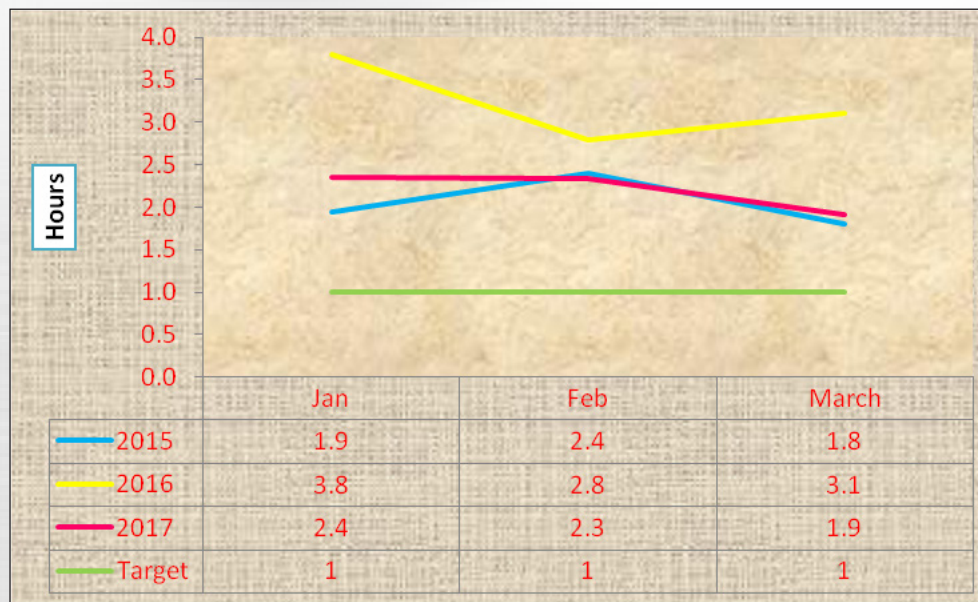
This is the time it takes to have an entry lodged by a clearing agent passed by Customs. The time at DPC has an effect on port dwell time though minimal.

Average time taken at DPC was 2 hours in 2015 and 2.2 hours in 2017 between January and March as illustrated in figure 5 above. The performance in DPC time moved further away from the target of 1 hour over the last 3 years. Delays in customs clearance at DPC during this period is partly 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. Addressing these challenges will go a long way in improving DPC time.

In addition, the rollout of the new customs management system to replace the SIMBA system in June, 2017 will enhance efficiency and risk management component of the system as it will take up most of the roles currently under DPC.

Figure 6: Time Taken at the Document Processing Centre (DPC)



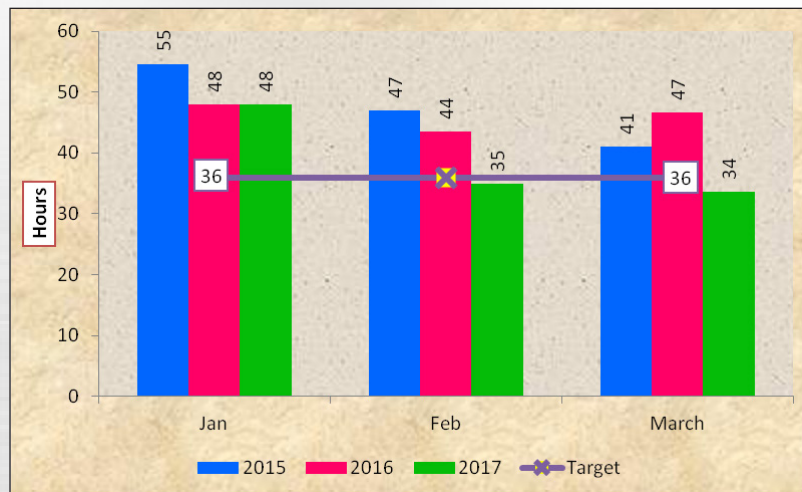
Source: KRA data Jan-March 2015/2016/2017

3.2.4 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 6 shows time taken after custom release from January to March for the years 2015, 2016 and 2017.

Figure 7: Delay after Custom Release



Source: KRA data Jan-March 2015/2016/2017

The custom release time recorded 34 hours in March 2017 having decreased from 48 hours in January 2017. A Similar pattern was observed in 2015 having reduced from 55 hours to 42 hours the same period.

Analysis show that after release time target has been met as committed in the port charter suggesting that activities aimed at improving this indicator are yielding desired results.

Some of the activities aimed at improving performance of this indicator include: Automating gate clearance procedures, dedicating special gates to CFSs and ensuring 24 hour operations.

3.3 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.

Data for these indicators are obtained on a monthly basis from Kenya National Highway Authority through the weighbridge administrators while transit time is obtained from the Kenya Revenue Authority data.

3.3.1 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.

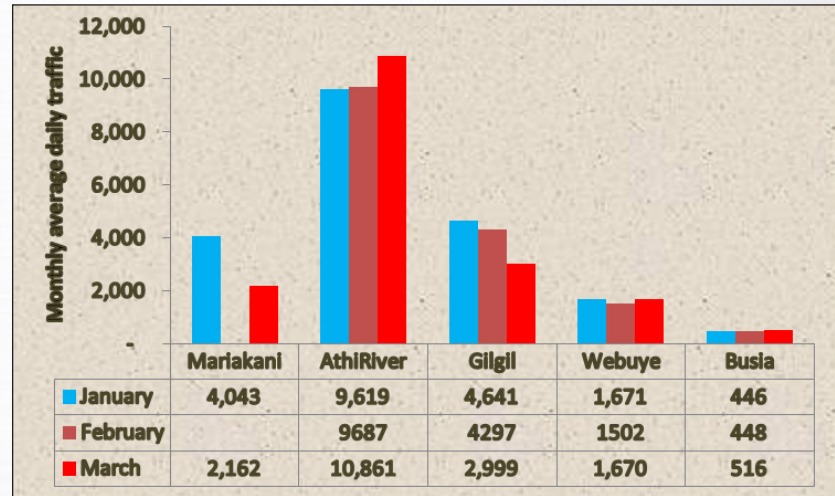
Figure 8, shows monthly average daily traffic from January to March 2017 at all the weighbridges along the northern corridor in Kenya. Busia weighbridge recorded the least traffic whereas Athi River weighbridge recorded the highest traffic in the quarter and it's attributable to cargo that are originating from Namanga route, Nairobi City and its environs. This traffic further reduces almost by half as registered at Gilgil weighbridge partly due to cargo being offloaded in the Nairobi City which is one of the main destination centres.

Marikani and Athi river weighbridges have installed new High Speed Weigh-In-Motion for Mombasa bound trucks. This means the traffic averages should be higher.





Figure 8: Monthly average daily traffic 2017



Source: KeNHA, January – March 2017

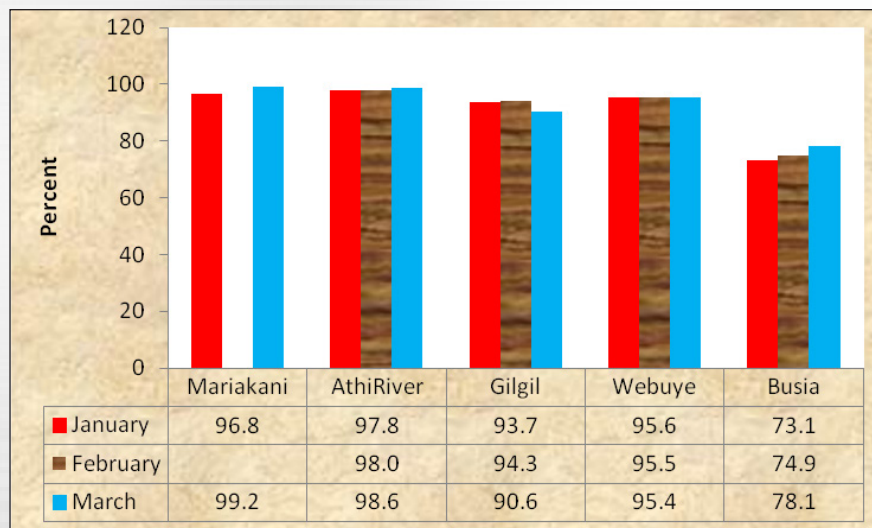
Note: February data missing for Mariakani weighbridge

3.3.2 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.

All the weighbridges on Kenya (except Busia) along the Northern Corridor are implementing high speed Weigh-In-Motion (HSWIM). The results show that in quarter three performance improved steadily in terms of compliance levels of over 90 percent performance for all weighbridges except Busia whose level of compliance was 78% compliance in March 2017.

Figure 9: Weighbridge Compliance



Source: KeNHA, January -March 2017

Note: February data missing for Mariakani weighbridge

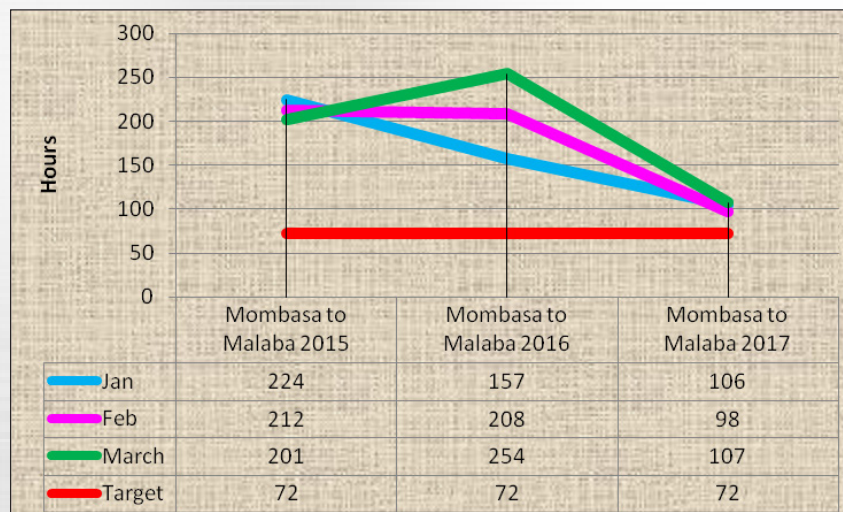
3.3.3 TRANSIT TIME

Transit time in Kenya is an estimate of the period from the time cargo is removed from the port of Mombasa to the time the export certificate is issued after crossing the border at Malaba or Busia.

The scope of the transit time in this report is on road mode of transport. The northern corridor is served by a combination of surface transport modes; road, railway, oil pipeline and inland waterways. Accessing the port, accounts for a very large share of corridors costs. Therefore private and public stakeholders should partner to remove barriers along the corridor.

Figure 10 below gives trends of transit time from January to March 2015, 2016 and 2017 from Mombasa port to Malaba border.

Figure 10: Average Transit Time from Mombasa to Malaba



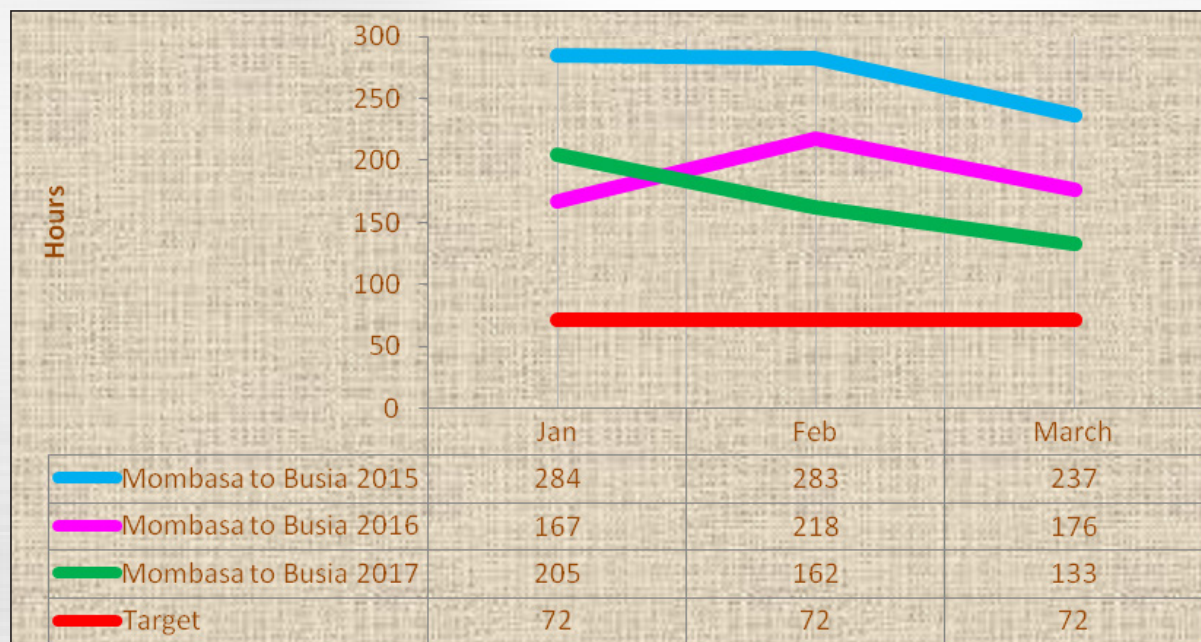
Source: KRA, Jan-March 2015/2016/2017

From the analysis, average transit time from Mombasa to Malaba which is 933 km reduced steadily across the three year period under review. In March 2017, transit time recorded 107 hours a high of 35 hours above the set target of 72 hours. This trend was a replica of 2015 which shows that transit time decreased from 224 hours to 201 hours in January and March respectively.

Furthermore, average transit time over the same period in 2015 was registered as 213 hours, 2016 hours in 2016 and 104 hours in 2017. However, transit time is still beyond the expected 72 hours. Therefore, activities geared towards attaining this key performance indicator should be implemented to the latter.

There was a significant decrease in transit time from Mombasa to Busia from 205 hours to 133 hours in January and March 2016 respectively. Average transit time over the same period in 2015 was registered as 213 hours, 2016 hours in 2016 and 104 hours in 2017. There is still need for implementing initiatives that were agreed upon in the port charter in order to attain the 72 hour target. Transit time Mombasa to Busia (947 Km) is as shown in figure 11.

Figure 11: Average Transit Time in Kenya (Mombasa to Busia)



Source:KRA, Jan-March 2015/2016/2017

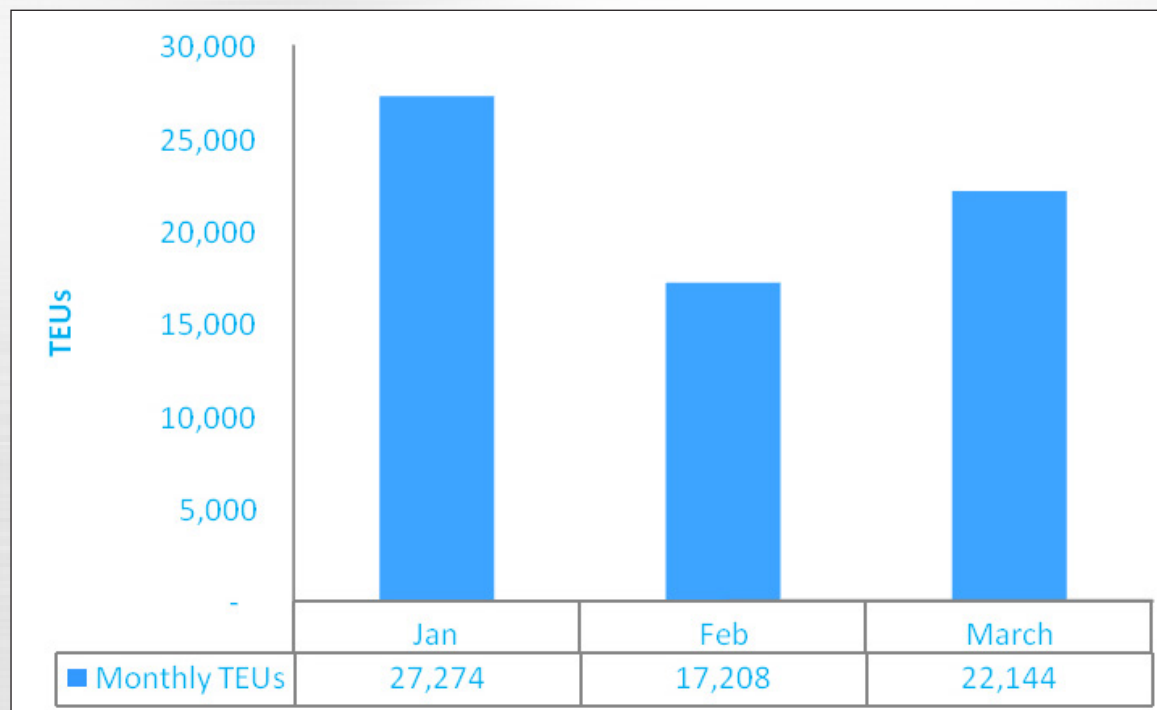
3.4 CONTAINERS UPTAKE FROM THE PORT TO THE CFS



Decongestion of the port of Mombasa enormously depends on the efficient cargo pick up from the Port by Container Freight Stations (CFSs) and efficient cargo clearance process at the CFS's. Cargo to the CFSs is either client nominated or KPA nominated. Port Charter policy, stipulates that 70% of goods should be pre-cleared prior to arrival of vessels and goods should not overstay at CFSs.

Figure 12 shows that there was a decrease in the CFS uptake from 27,274 TEUs in January 2017 to 22,144 TEUs in March 2017.

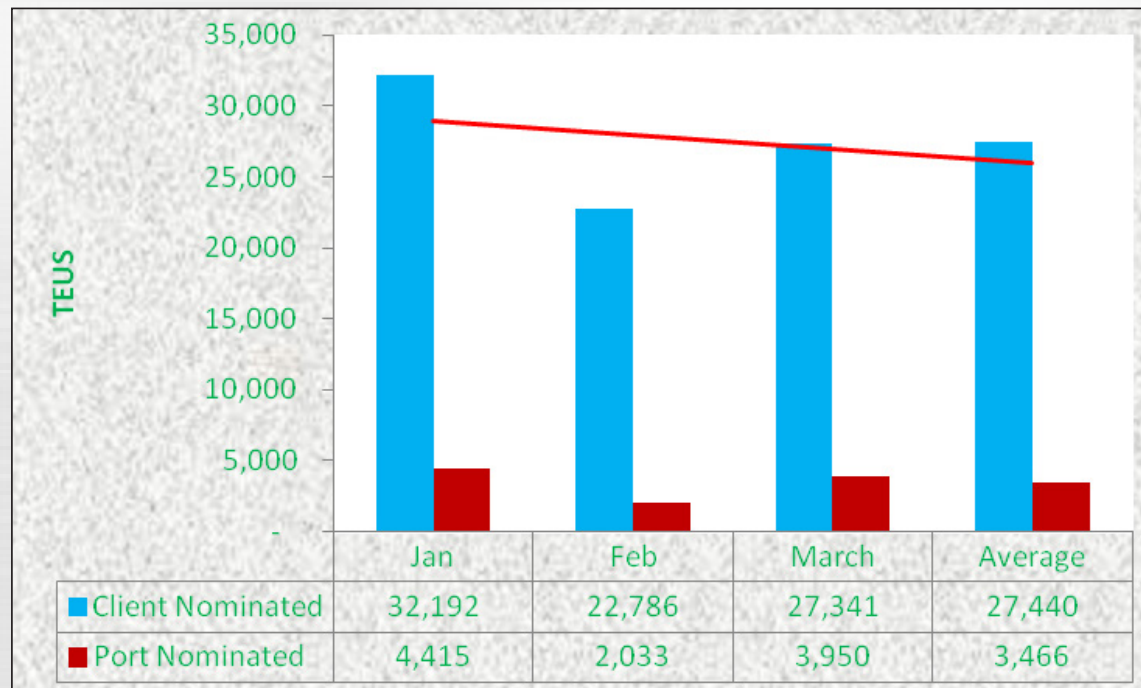
Figure 12: Monthly Container Deliveries to CFS (2017)



Source: KPA data, 2017

As illustrated in Figure 13 below, 89% of the cargo to CFSs was nominated by clients compared to 11% that was nominated by KPA for the reporting quarter. The average containers were 27,440 client nominated and 3,466 for KPA-nominated for the three month reporting period. In general, total monthly container deliveries decreased between January and March 2017.

Figure 13: CFS nomination 2017



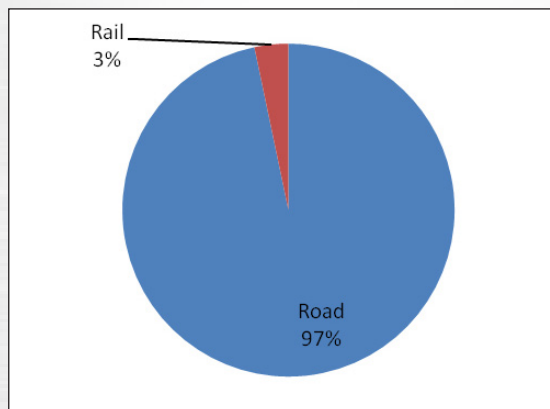
Source: KPA data, 2017

3.5 CARGO OFF TAKE (ROAD, RAIL)

The main objective of the Northern Corridor is to expedite timely movement of goods. Cargo leaves the port through the following transport modal channels: road, rail and pipeline. Stakeholders need to expand the capacity of these channels to remove the bottlenecks that may cause any delays. These delays directly influence costs which in turn causes inefficiencies.

From figure 14, road transport is the main mode of cargo off accounting for 97 percent compared to 3 percent for rail transport during the quarter. The performance for rail transport is way below the set target of 40 percent as per the Charter. There are initiatives of towards attainment this target. Currently construction of standard gauge railway (SGR) has been completed from Mombasa to Nairobi terminus. The standard gauge railway (SGR), is expected to deliver 6,000,000 tons by railway mode of transport. This will have an impact on the transport and logistics industry and calls for the industry to re-adjust their business models to align themselves to industry trends.

Figure 14: Cargo off take by rail and road from January to March 2017 (average)





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