

NAMIBIA STATE OF LOGISTICS 2018 REPORT

Namibia First Annual State of Logistics Report 2018



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NAMIBIAN - GERMAN CENTRE FOR LOGISTICS

NAMIBIA STATE OF LOGISTICS 2018 REPORT

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FOREWORD

Logistics is an elevated priority for many countries regardless of their level of economic development. This is because facilitating trade and transport is at the core of stimulating economic development. Well-functioning domestic and international logistics is a precondition of national competitiveness.

In order to advance a country's logistics performance, fact-based metrics and general knowledge about the sector and logistics activities are essential to establish reliable benchmarks, assess policy impacts, and to compare development over time and vis-à-vis peers.

The cross-cutting nature of logistics as a policy area is widely recognized: logistics is not just about connecting infrastructure but encompasses regulation of services, sustainability, and resilience, or trade facilitation. These aspects are all discussed in this report.

With the first edition of its State of Logistics (NSoL) report 2018, Namibia has joined a relatively exclusive group of countries that have established a national assessment of its logistics. The work was commissioned by the Walvis Bay Corridor Group (WBCG) with the support of Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, and the report was skillfully prepared by Prof. Kenneth K. Odero and staff of the Namibian-German Centre for Logistics (NGCL), Namibia University of Science and Technology (NUST).

Similar studies using a mix of methodological approaches have typically been launched in many developed countries, such as the U.S., Germany, South Korea, Japan and Finland. Recently, this type of reports have been done also in, for example, Turkey, Chile, Mexico, Ukraine, Vietnam, Thailand and Oman. Several of these countries have also developed comprehensive national logistics strategies. Some of these have been facilitated by organizations such as The World Bank or International Transport Forum at OECD.

In Finland, a country with particularly close ties with Namibia, the first national logistics study was published already in year 1990. Since year 2006, the undersigned has supervised the completion of seven survey-based Finland State of Logistics reports. The latest one is issued in early 2019 in Finnish, but the six previous ones can be accessed also in English at: https://blogit.utu.fi/logistiikkaselvitys/en/225-2/

The logistics sector is changing rapidly, e.g. in terms of the nature of demand (for example, e-commerce), players, use of technology, new risks (cybersecurity), and policy concerns. Professionals and countries are increasingly concerned with the environmental footprint and resilience of supply chains. This first NSoL report forms a sound reference point and base to follow up these and other future developments.

In short, this report is an essential part in the efforts to better understand logistics performance in the context of increasingly complex supply chains. I am sure that this report will be used extensively by government stakeholders, international and national organizations, private firms, and academia in efforts to improve logistics in Namibia — the backbone of the economy of any country.

I am sure that readers will find this report very useful. I am also confident that it will establish itself as a study, which will be conducted at regular intervals also in the future!

Dr. Lauri Ojala Professor of Logistics Co-author and initiator of The World Bank's Logistics Performance Index Turku School of Economics at the University of Turku Finland

ACKNOWLEDGEMENTS

The development of this first Annual State of Logistics Report for Namibia has benefitted from the support of several institutions led by the Walvis Bay Corridor Development Group, the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, Japan International Cooperation Agency, and the Namibia University of Science and Technology. Several ministries of the Government of the Republic of Namibia also gave support most notably the Ministry of Works and Transport, Ministry of Finance, and Ministry of Industrialisation, Trade and SME Development. Additionally, the following generously shared data which was helpful in preparing the report - the Namibia Statistics Agency, Namibian Ports Authority, Directorate of Customs and Excise, Roads Authority, TransNamib Holdings Private Limited, and Namibia Airports Company. Many more individuals than can be mentioned by name, both professional colleagues and students alike, participated in discussions and gracefully provided most valuable comments on earlier drafts. To all contributors, anonymous and those singled out, this report benefited immensely from your invaluable contributions.

ABBREVIATIONS

AOs	Authorised Operators
ARs	Advance Rulings
ВСР	Border Crossing Point
BR	Botswana Railway
CEO	Chief Executive Officer
СРІ	Consumer Price Index
DB	Doing Business
DRC	The Democratic Republic of Congo
DDT	Digital Terrestrial Television
GDP	Gross Domestic Product
EODB	Ease of Doing Business
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH
ICAO	International Civil Aviation Organisation
ICT	Information Communication Technology
ITC	International Trade Centre
JICA	Japan International Cooperation Agency
ICD	Inland Container Depot
ISIC	International Standard Industrial Classification of All Economic Activities
ISO	International Organisation of Standardisation
IT	Information Technology
LHC	Logistics Hub Centre
LPI	Logistics Performance Index
MTC	Mobile Telecommunications
NAC	Namibia Airports Company
Namport	Namibian Ports Authority
N\$	Namibian Dollar

NGCL	Namibian-German Centre for Logistics
NPC	National Planning Commission
NSoL	Namibia State of Logistics Report
NSW	National Single Window
NSA	Namibia Statistics Agency
NUST	Namibia University of Science and Technology
OECD	Organisation for Economic Cooperation and Development
PCAs	Post-clearance Audits
PwC	PricewaterhouseCoopers
SACU	Southern Africa Customs Union
SADC	Southern Africa Development Community
SME	Small and Medium Enterprise Development
STS	Ship-to-Shore
TEU	Twenty Foot Equivalent Unit
TFI	Trade Facilitation Indicators
ТКМ	Tonne Kilometre
TNHL	TransNamib Holdings Limited
UNCTAD	United Nations Centre for Trade and Development
UNSD	United Nations Statistics Division
WACS	West Africa Cable System
WBCG	Walvis Bay Corridor Group
WEF	World Economic Forum

EXECUTIVE SUMMARY

Namibia's logistics costs declined 11.4 percent to stand at 15.6 percent in relation to gross domestic product (GDP) in 2017 having peaked at 17.6 percent in 2016. The growth trajectory of the main components of the GDP followed more or less a similar path. The recent surge in fuel prices, as well as changes in the wholesale and retail trade sectors are some of the factors likely to have an effect on (domestic) logistics costs in 2018.

In terms of international logistics, Namibia logistics performance index (LPI) score of 2.73 (aggregated 2012-2018) makes it part of the top 50 percent internationally. All six dimensions of trade analysed in the International LPI point to a resilient performance. However, sustainable growth is required to ensure regional competitiveness given developments in other emerging African countries with ports such as Tanzania and Mozambique.

Namibia's performance in areas such as trade community involvement, documents, automation, and information availability improved over the 2015-2017 period, though there was a decline in appeals procedures as well as in governance and impartiality based on the trade facilitation indicators.

The Port of Walvis Bay, the leading commercial port in Namibia handled 93.1 percent of total cargo (gross tonnage) transiting to and from the neighbouring countries in 2017. Of the eight or so countries that use the Port of Walvis Bay for imports and exports, Zambia, Angola, Democratic Republic of Congo, Botswana and Zimbabwe are the main markets for transit cargo by volume.

Zambia is the dominant market for transit cargo among these countries, which accounted for 51.8 percent of all inbound transit cargo via the Port of Walvis Bay in 2017, up from 47.9 percent in 2016. This represents a 50.9 percent increase in the volume of imports to Zambia. Similarly, Zambian exports comprising mostly copper and wooden products accounted for 85.7 percent of total outbound transit cargo by volume (metric tons), up from 72.5 percent in 2016.

Namibia's track railway network transports approximately 1.2 billion tonne-kilometer of cargo annually. The railway system moved 1.58 million metric tons of various commodities (both bulk and containerised freight) in 2017. This sharply contrasts with road freight which accounts for more than 80 percent of total tonne kilometers of goods transported in Namibia include transit cargo. Of the three corridors connecting Walvis Bay with countries in the Southern Africa Development Community (SADC) region, Walvis Bay-Ndola-Lubumbashi-Development Corridor is the busiest, followed by Trans-Cunene and Trans-Kalahari Corridor in that order with respect to transit cargo.

Generally, inbound transit cargo based on total volumes disaggregated into container and dry-bulk cargo seems to be much more diverse in terms of destination countries, compared to outbound cargo, which is dominated by Zambia. There is relatively less diversity in terms of the distribution of containerised and break-bulk exports by country of origin.

Recent (2018) throughput at the Port of Walvis Bay shows improvement with volumes for September 2018 having surpassed the 2017 ones by 6,159 metric tons (or 9.2 percent, from 66,769 tons in September 2016 to 72,928 tons by September 2018). The year 2018 is likely to become a very good year for the Port of Walvis Bay since the cargo volumes for the period January-September already exceeds numbers for 2017.

The capacity of Port of Walvis Bay is expected to increase as a result of ongoing investments projects. Thus, greater attention is required in managing international logistics sustainably to ensure that Namibia could become a "logistics nation" for the SADC region by 2025.

Other likely areas of growth in 2019 and beyond include progress in deepening the Botswana-Namibia rail link framework, the anticipated start of South African manganese exports through the Port of Lüderitz, growth in throughput to and from Zambia comprising copper (export) and frozen foods (import), as well as the much anticipated increase in transit volumes destined to Zimbabwe.

NAMIBIA STATE OF LOGISTICS 2018 REPORT

1. BACKGROUND

INTRODUCTION

This is the first annual state of logistics report for Namibia - Namibia State of Logistics Report 2018 or NSoL in short. The report provides a comprehensive review of the current state of logistics in Namibia, with a focus on the macroeconomic environment as well as domestic and international logistics performance. The necessity to examine logistics performance derives from the notion that a competitive and efficient logistics sector is vital for Namibia's economy and is a vital component of trade and development. Thus, the NSoL report 2018 documents the size and contribution of logistics, its linkages to business cycles and the consequences of regulation, policies and decisions which affect its performance.

Turning Namibia into a "Logistics Nation" is a central policy objective designed to herald major social and economic changes. Towards this goal, a Logistics Hub Master Plan (NPC/JICA, March 2015)¹ has been implemented since 2015. It was against this background that it became necessary to measure, analyse and report on logistics performance in order to improve the efficiency and competitiveness of both domestic and international logistics. Accordingly, a project to prepare the State of Logistics Report for Namibia was commissioned by the Walvis Bay Corridor Group (WBCG) with the support of the German Cooperation for International Development (GIZ) GmbH to prepare the Namibia State of Logistics report. This report was prepared by Prof. Kenneth K. Odero and staff of the Namibian-German Centre for Logistics (NGCL), Namibia University of Science and Technology (NUST).

SIZE AND CONTRIBUTION OF THE LOGISTICS SECTOR

The logistics sector in Namibia grew on average at 14.5 percent during 2007-2017 (Figure 1). According to the National Accounts (Namibia Statistics Agency, 2017), the following logistics sectors – wholesale trade, retail trade and road freight - made relatively higher contribution to the GDP compared to other logistics related sectors² (Figure 2). Wholesale trade and retail trade accounted for 82 percent (or N\$ 13.7 bn) followed by road freight, which accounted for 12 percent (or N\$ 1.96 bn).

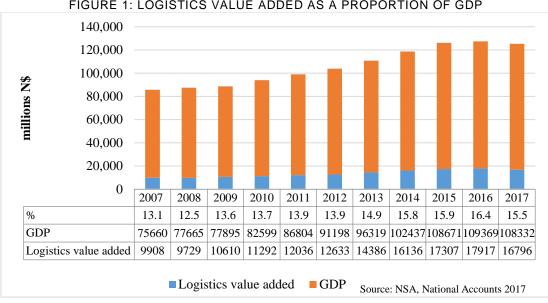
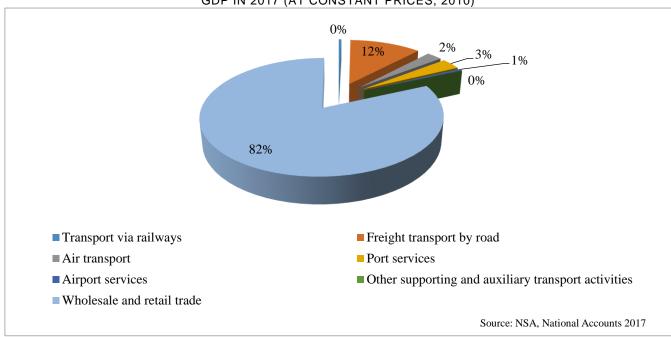


FIGURE 1: LOGISTICS VALUE ADDED AS A PROPORTION OF GDP

The "Master Plan for the Development of an International Logistics Hub for SADC Countries in Namibia (March 2015)" was formulated under the study project through the technical cooperation scheme of Japan International Cooperation Agency (JICA) and adopted by National Planning Commission (NPC).

The contribution of the logistics sector to the GDP, as well as national logistics costs is estimated using sectorally disaggregated National Accounts data from the Namibia Statistics Agency (NSA), the national statistics agency. Sectors relevant to logistics were identified using the International Standard Industrial Classification of All Economic Activities (ISIC) Revision used by NSA. The Agency is in the process of rebasing the National Accounts and expects to upgrade to ISIC, Rev.4 in 2019.

FIGURE 2: PROPORTIONAL CONTRIBUTION OF LOGISTICS RELATED SECTORS TO GDP IN 2017 (AT CONSTANT PRICES, 2010)



The value added of air transport was the fourth largest (N\$ 0.4 bn or 2.5 percent). Airport services and other supporting and auxiliary transport activities contributed less than one percent each.

LOGISTICS COSTS

Logistics costs in relation to GDP in 2017 stood at 15.6 percent compared to 17.6 percent in 2016, representing a -10.4 percent decline (Figure 3). Fuel price is one of the main drivers of logistics costs. The Consumer Price Index (CPI) for October 2018 released by NSA showed annual inflation rate rose from 4.8 percent in September 2018 to 5.1 percent in October 2018. The increase in fuel costs pushed transport costs upwards resulting in transport inflation remaining the leading driver of higher inflation month-on-month. This performance coincided with the contraction of the economy in real value added of 0.9 percent compared to a growth of 0.6 percent recorded in 2016. The Namibia's economy improved marginally during the second quarter of 2018 and positive growth of 0.9 percent is expected in 2019 (Figure 4).



FIGURE 3: NAMIBIA LOGISTICS COSTS IN RELATION TO GDP, 2007-2017 (%)

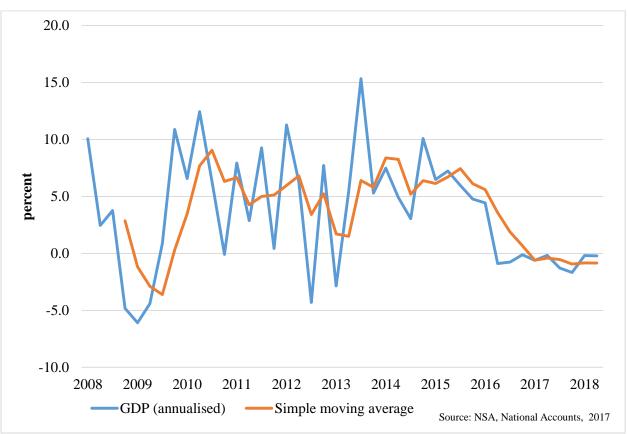


FIGURE 4: GDP ANNUAL GROWTH RATE, 2008-18

In 2017, final consumption expenditure of GDP was N\$164.3 billion; up from N\$ 161.4 bn the previous year at current prices (Figure 5). Out of this, private consumption accounted for 73.7 percent (N\$ 121.10 bn) in 2017; down from 75.0 percent (N\$ 121.11 bn) in 2016. GFCF expenditure was N\$ 28.3 bn in 2017 (or 16 percent of GDP at market prices); down from N\$ 37.2 bn in 2016 (or 22.4 percent of GDP at market prices).

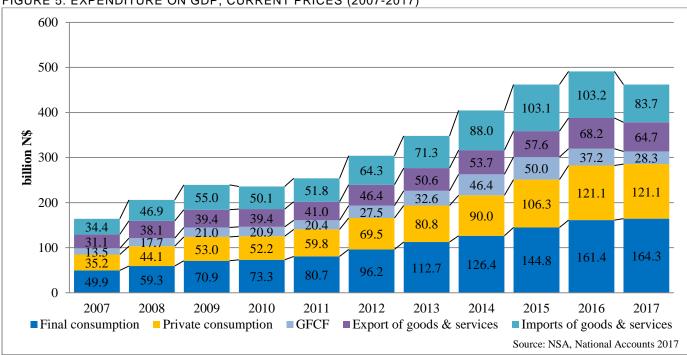


FIGURE 5: EXPENDITURE ON GDP, CURRENT PRICES (2007-2017)

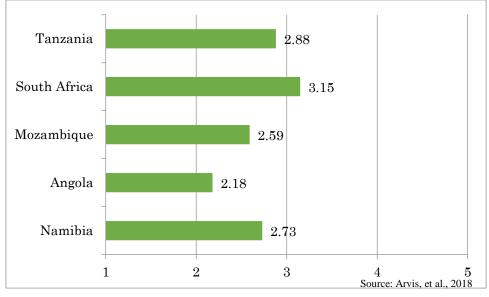
In terms of international trade, exports of goods and services stood at N\$64.7 billion in 2017, down from N\$68.2 billion in 2016 (i.e. 41.1 percent to 36.7 percent of GDP at market prices in 2017 and 2016 respectively). On the other hand, imports declined from N\$103.2 billion (62.2 percent) in 2016 to N\$ 83.7 billion (or 47.5 percent of GDP at market prices) in 2017. This means that Namibia's import bill declined by N\$10.6 billion resulting in a reduced trade deficit of N\$18.5 billion. Delivering the mid-year review speech in the National Assembly on 24 October 2018, the Minister for Finance Hon. Calle Schlettwein said "Namibia's economy which has been in recession since mid-2016 was expected to contract by 0.2 percent in 2018 after a contraction of 0.9 percent in 2017. Positive growth of 0.9 percent is expected in 2019, though, and growth is projected to average 2.3 percent over the next three years".

2. OVERVIEW OF NAMIBIA'S LOGISTICS PERFORMANCE

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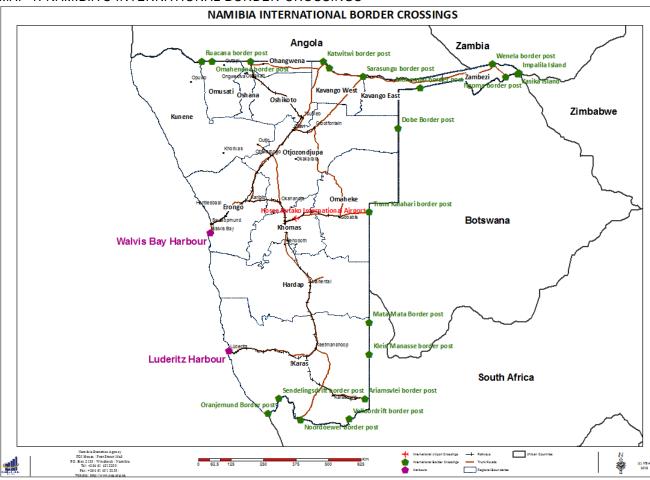
Namibia's Logistics Performance Index score, making it part of the top 50 percent internationally. Namibia's logistics performance index overall score of 2.73 (aggregated 2012-2018) makes it part of the top 50 percent internationally (Arvis, et al., 2018). The six dimensions of trade logistics analysed in the International LPI include efficiency of customs and border management clearance; the quality of trade and transport infrastructure; ease of arranging competitively priced shipments; competence and quality of logistics services; ability to track and trace consignments; and the frequency with which shipments reach consignees within scheduled or expected delivery times. These dimensions of Namibia's logistics performance are further elaborated below.

FIGURE 6: LPI AGGREGATED, 2012-2018 SCORE (1=LOW, 5=HIGH)



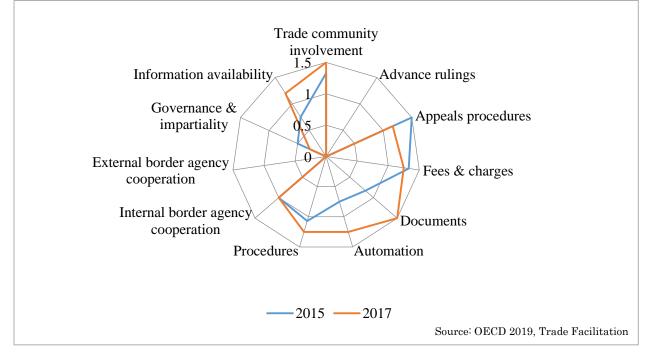
TIME TO IMPORT/EXPORT, BORDER COMPLIANCE

Trade facilitation performance in Namibia improved between 2015 and 2017 in the areas of information availability, documents, and automation (OECD, 2019). Overall, performance in most trade facilitation indicators (TFI) is stable, with the exception of appeal procedures, where some ground was lost (Figure 7). Reducing the time and cost associated with border compliance when obtaining, preparing and submitting documents during port or border handling, customs clearance and inspection procedures for shipment to cross ports of entry/exit or international borders (Map 1) is vital to increase Namibia's competitiveness in world logistic markets.



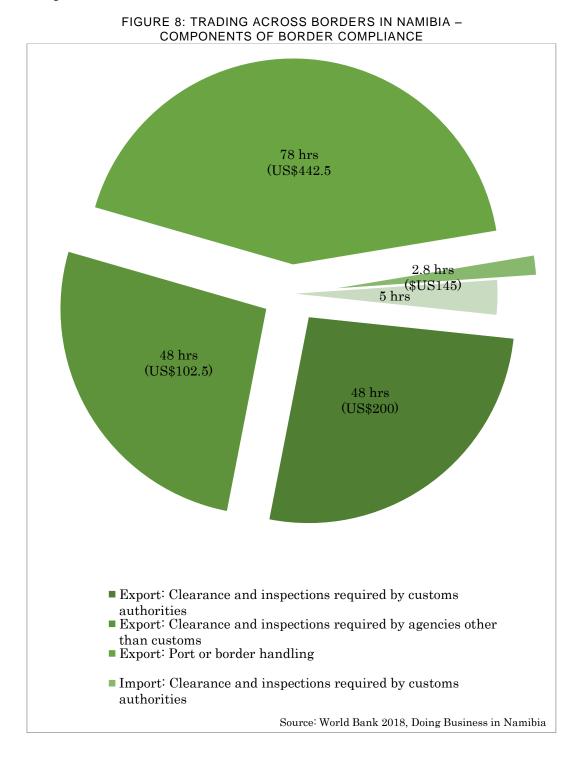
MAP 1: NAMIBIA'S INTERNATIONAL BORDER-CROSSINGS

FIGURE 7: TRADE FACILITATION PERFORMANCE IN NAMIBIA, 2015-2017 (2 = BEST PERFORMANCE THAT CAN BE ACHIEVED)



TIME TO IMPORT, BORDER COMPLIANCE

On average, it takes 48 hours and US\$ 200 to complete clearance and inspection required by customs authorities and other agencies for exports and 78 hours (US\$ 442.5) for port or border handling charges (Figure 8). Comparatively, it takes 2.8 hours at a cost of US\$ 145 to process imports. For imports, no clearance and inspection is required by agencies other than customs and it takes 5 hours to complete port or border handling.



CORRIDOR/BORDER PERFORMANCE

The comparative time it takes (in median hours) to complete border handling, customs clearance and inspection procedures for shipment (both import and transit) to cross border points is shown in Figure 9. On average, it takes 4.9 hours to cross the Namibia-Zambia (Katima/Mulilo) border crossing point (BCP) compared to 1.9 hours at Buitepos/Mamuno on the .Namibia-Botswana BCP, and 1.6 hours at Noordoewer/ Vioolsdrif BCP on the Namibia-South African border.

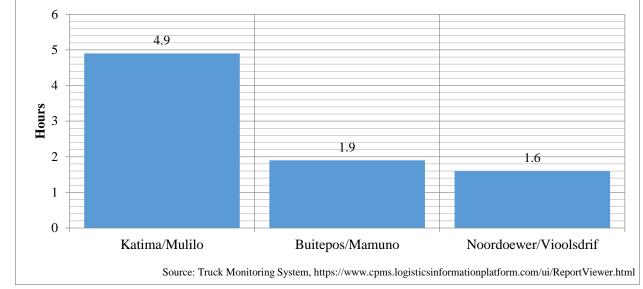
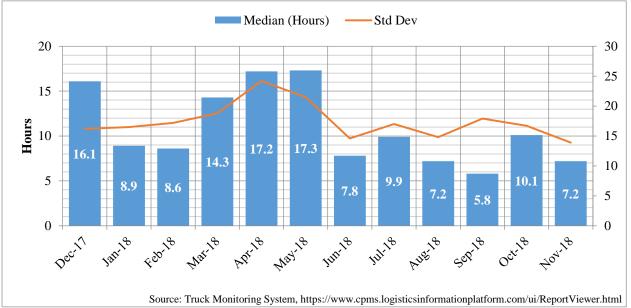


FIGURE 9: COMPARATIVE BORDER CROSSING TIMES (MEDIAN HOURS), BOTH IMPORT & TRANSIT

Further levels of efficiencies associated with border management is shown (Figure 10) in terms of median (hours) crossing time (and Standard Deviation) at BCP along corridors (Walvis Bay-Ndola-Lubumbashi, Trans-Kalahari and Trans-Oranje) covering the last 12 months (Dec 2017-Nov 2018). During the last 12 months, on average, December 2017 and April/May 2018 had relatively longer border crossing times of above 15 hours compared to the other months of the year.

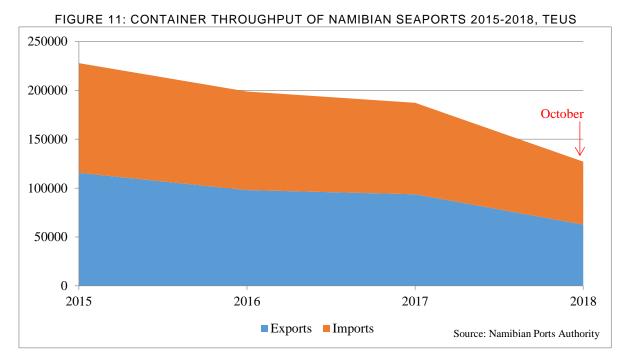
FIGURE 10: BORDER CROSSING TIME (MEDIAN HOURS), BOTH IMPORT & TRANSIT (DEC 2017-NOV 2018)



QUALITY OF TRADE AND TRANSPORT INFRASTRUCTURE

NAMIBIAN SEAPORTS

The Port of Walvis Bay and to its south the Port of Lüderitz recorded throughput volumes for imports, exports and transshipments in 2017 of 187,263 TEUs down -5.8 percent from 198,810 TEUs in 2016 (Figure 11). On average, Walvis Bay handled 98.6 percent while Lüderitz handled 1.4 percent of the total throughput.



Mainline carriers such as COSCO, Maersk, PIL, CMA-CGM, MSC, MACS, GAL and OACL make weekly calls at the Port of Walvis Bay contributing to Namibia's ranking and score in Liner Shipping Connectivity Index (LSCI) (Figure 12).

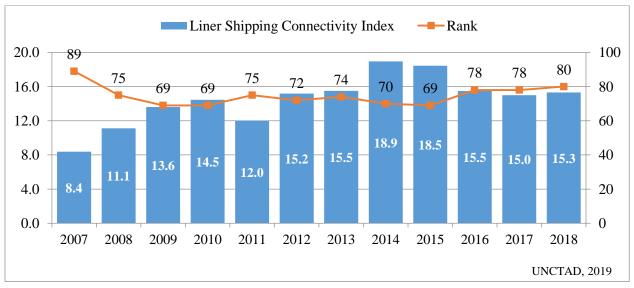


FIGURE 12: Liner Shipping Connectivity Index, Namibia

These mainline services are part of a string of interlinked services combining a number of ports (Map 2 & Map 3). The liner shipping bilateral connectivity index (LSBCI) shows Namibia's integration level into global liner shipping networks (Figure 13), a vital part of the global supply chain for copper, wooden products and tobacco - key exports of neighbouring SADC countries that transit through Namibia's seaports (Map 4). Similarly, imports including frozen products (mostly fish, beef and poultry), vehicles on wheels, machinery, mining chemicals (Sulphur and Sulfuric acid), steel, and ceramic tiles etc., use this vital seaboard.



MAP 2: USA - Europe Service

Source: Maritime Carrier Shipping GmbH & Co., https://www.macship.com/SERVICES/Map.aspx

MAP 3: Mediterranean-West Africa Service



Source: MSC Mediterranean Shipping Co., https://www.msc.com/che/our-services/trade-services/msc-in-africa

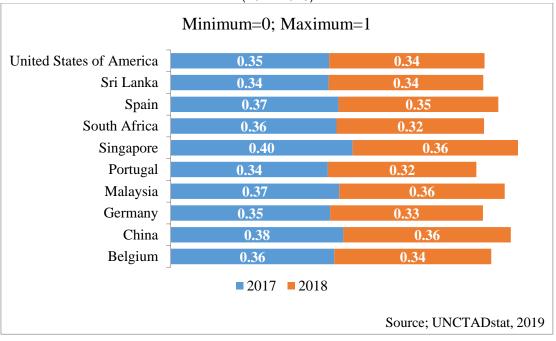
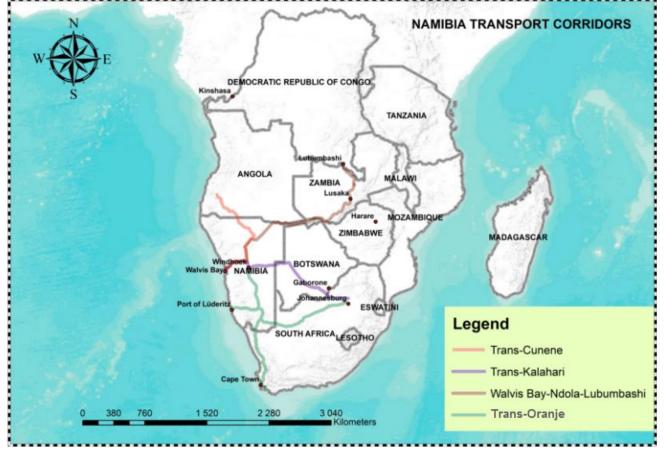
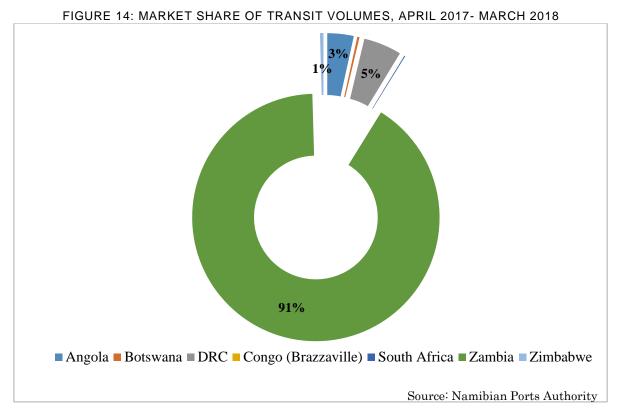


FIGURE 13: NAMIBIA LINER SHIPPING BILATERAL CONNECTIVITY INDEX, (2017-2018)

MAP 4: CORRIDORS LINKING NAMIBIAN PORTS TO NEIGHBOURING SADC COUNTRIES



Zambia, Angola, Democratic Republic of Congo (DRC), Botswana and Zimbabwe are the main markets for transit cargo by volume (Figure 14).



Dues and charges applicable to the Port of Walvis Bay and the Port of Lüderitz are published annually in *Port and Syncrolift Tariffs*. This notwithstanding, Namport has procured expertise to review its port pricing structure and policies in order to address the perception that Namibia's port charges are relatively high compared to other ports (Marketing Strategy Study for Development of Namibia into a Logistics Hub for Southern Africa [Component 1], 2018). FIGURE 15: AN AERIAL VIEW OF WALVIS BAY

Ongoing projects - a new container terminal at the South Port and a liquid bulk terminal at the North Port (Figure 15) - will bring the capacity of the port to 750 000 TEUs a year – more than double the current 350 000 TEUs. The four newly installed Post-Panamax gantry cranes will improve efficiency and enable faster ship turnaround time. The container and other cargo terminal have on-dock rail services, allowing for direct transfer to rail wagons of bulk cargo such as wheat but not containers.

Also, a new Logistics Hub Centre (LHC) is in the planned in order to promote additional transit cargo business. The LHC will complement existing private companies that provide, in close proximity to the port, bonded storage for cargo that is re-exported or locally distributed.

There are private off-dock container yards used for storage of loaded import and export containers within the port (e.g. the Zambia Dry Port, a bonded warehouse operated by Africa Union Cargo, offering a range of services such



as cargo handling and storage, trans-loading, stuffing and cross-packing, bonded warehousing, clearing and forwarding, etc.

Besides the Port of Walvis Bay having full truck scanners for checking containers being loaded onto a vessel, tracking devises such as radio frequency identification (RFID) tags for tracing and tracking are a standard requirement for trucking businesses.

A computerised information system that will allow the port and its users to exchange information on the status of cargo moving through the port and on regulatory procedures is soon to be installed under the Single Window initiative. A suitable company is currently being procured to implement the project.

In addition, Namport accepts payment for port charges through automatic debiting on local accounts as well as by cash and bank deposits. As part of port improvement, a number of initiatives are being implemented to address challenges of globalisation, rising customer expectations, pressure for environmental awareness in port operations, pressure for operational consistency, increased productivity and efficiencies, as well as improved business operations. An example is the Tariff Review Study already mentioned. Other examples include Port Automation and the National Single Window (NSW) Initiative. A tender process to identify a suitable company to implement the NSW is being rolled out.

Recent (2018) throughput at the Port of Walvis Bay shows improvement (Figure 16) with volumes for September 2018 having surpassed the 2017 ones by 6,159 metric tons (or 9.2 percent, from 66,769 tons in September 2016 to 72,928 tons by September 2018). The year 2018 is likely to become a very good year for the Port of Walvis Bay since the cargo volumes for the period Jan-Sep already exceeds numbers for 2017. Adding volumes for the remaining quarter will probably at the end set a new record.

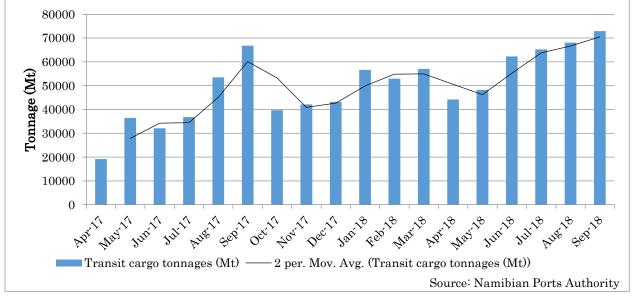


FIGURE 16: PORT OF WALVIS BAY THROUGHPUT, MONTH-ON-MONTH (2017-18)

Zambia is the dominant market for transit cargo for both imports and exports going through the Port of Walvis Bay (Figure 17). In 2017 Zambia imports accounted for 51.8 percent of all inbound transit cargo via the Port of Walvis Bay, up from 47.9 percent in 2016 representing a 50.9 percent increase in the volume of imports to Zambia. Similarly, Zambian exports comprising mostly copper and wooden products accounted for 85.7 percent of total outbound transit cargo by volume (metric tons), up from 72.5 percent in 2016.

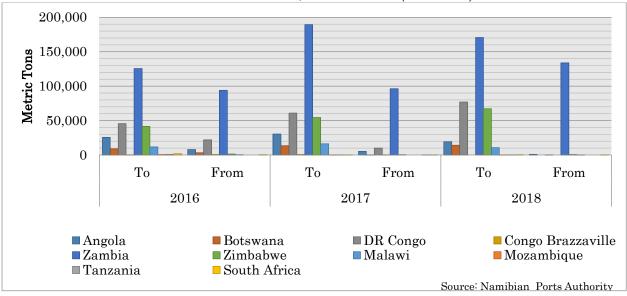
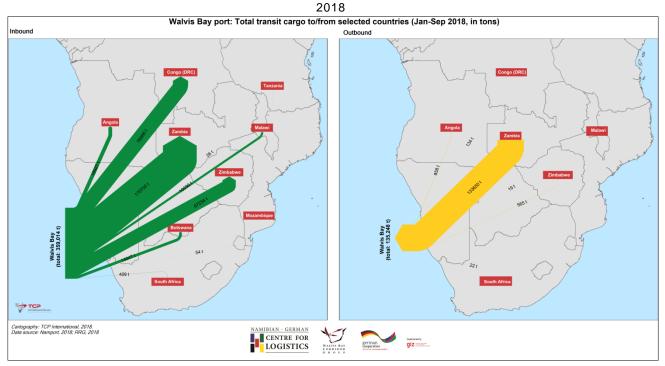
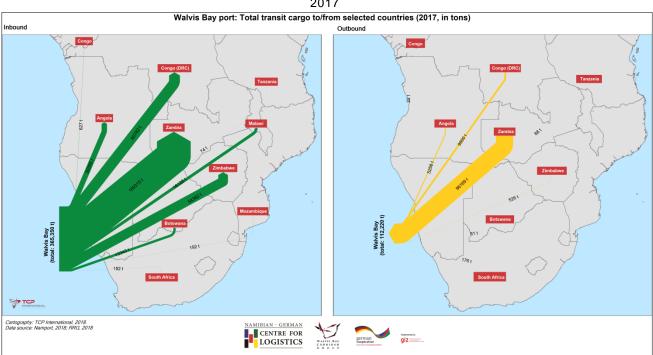


FIGURE 17: TOTAL THROUGHPUT WALVIS BAY, METRIC TONS (2016-2018)

However, there is slower growth and in most cases negative growth in the contribution of other countries' volume of imports and exports transiting through the Port of Walvis Bay. This is true for all types of cargo. Comparing Map 5 showing 2018 total volume of cargo transiting through the Port of Walvis Bay in either direction (imports and exports), and Map 6 (2017) as well as Map 7 (2016), it is apparent that inbound flows. (i.e. imports) are much larger than outbound flows (roughly by a factor of 2.5). It is also apparent that by far, the strongest interaction is between Walvis Bay and Zambia (all years, both inbound and outbound flows), followed by DRC and Zimbabwe. Zambia and Zimbabwe are countries without seaports, i.e., both have to seek for the most advantageous gateway(s) for most of their imports and exports.

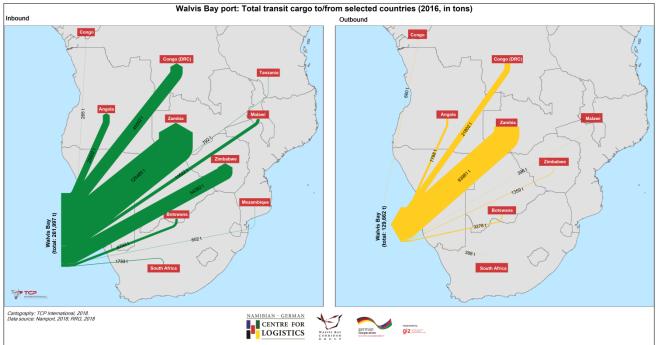


MAP 5: TOTAL TRANSIT CARGO IN METRIC TONNES TO/FROM NEIGHBOURING SADC COUNTRIES,



MAP 6: TOTAL TRANSIT CARGO IN METRIC TONNES TO/FROM NEIGHBOURING SADC COUNTRIES, 2017

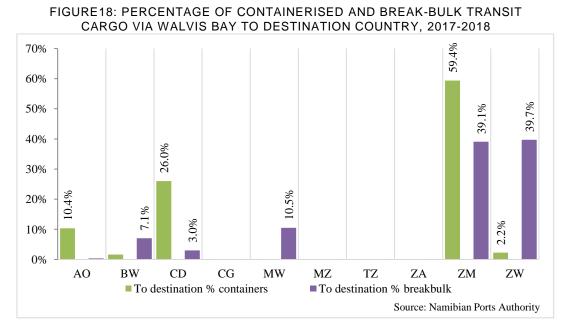
MAP 7: TOTAL TRANSIT CARGO IN METRIC TONNES TO/FROM NEIGHBOURING SADC COUNTRIES, 2016



Surprisingly, flows in either direction to and from Botswana are quite low. However, the situation could improve significantly following reports that Botswana Railways (BR) officially opened its dry port facility at the Walvis Bay Dry Port – a 36,200 square meter portion of land to establish dry ports to facilitate and fast track import/export activities within the SADC region.

Transit volumes to/from South Africa are also quite low. However, given South Africa has a number of seaports, this is not very surprising. The same rationale applies for Angola. Cargo flows to/from other countries, notably Congo (Brazzaville), Malawi, Tanzania, and Mozambique are also generally quite low, and can thus be considered as "random flows". The trade link to Zambia seems to be stable and in terms of volumes currently the most important one for Walvis Bay. Measures should be taken to secure and improve this level.

Generally, inbound transit cargo based on total volumes disaggregated into container and dry-bulk cargo seems to be much more diverse in terms of destination countries, compared to outbound cargo, which is dominated by Zambia (ZM). During the period April 2017-March 2018, imports to Zambia accounted for nearly sixty percent of total volume of containerised transit cargo imported via the Port of Walvis Bay, followed by Democratic Republic of Congo (DRC) 26.0 percent and Angola (AO) 10.4 percent. On the other hand, Zimbabwe (ZW) had 39.7 percent of imported dry-bulk cargo transiting via the Port of Walvis Bay, closely followed by Zambia at 39.1 percent. Malawi (MW) 10.5 percent, Botswana (BW) 7.1 percent and DRC (3.0 percent) came third, fourth and fifth respectively (Figure 18).



There is relatively less diversity in terms of the distribution of containerised and break-bulk exports by country of origin. As expected, Zambia had the lions' share (91.2 percent) of containerised exports, and only second to DR Congo in terms of exports of break-bulk cargo transiting via the Port of Walvis Bay (Figure 19). DRC exports accounted for 52.9 percent of total break-bulk cargo transiting via Walvis Bay while Zambian exports represented 30.8 percent. Angolan exports came third at 8.7 percent and Botswana fourth with 3.2 percent.

While transit cargo volumes seemed to have picked up during the second and third quarters of 2018 (April to September), the underlying composition of imports and exports remain more or less similar to what is expected. Zambian cargo dominate in terms of total number of boxes exported via the Port of Walvis Bay, accounting for 98.7 percent in the past two quarters, and just over half (53.5 percent) of the total number of imported boxes (Figure 20). DRC comes second with its imports accounting for almost one third (31.1 percent) of transit boxes imported via Walvis Bay port. Comparatively, Zimbabwean imports and exports are mostly in the form of break-bulk cargo Zimbabwe with the country's imports accounting for 66.1 percent of break-bulk exports transiting through Walvis Bay and half (50.1 percent) of imports (Figure 21).

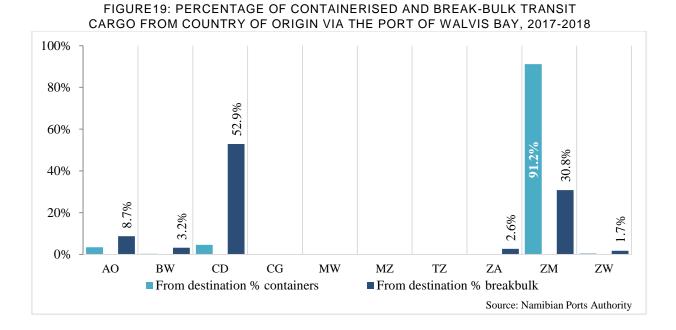
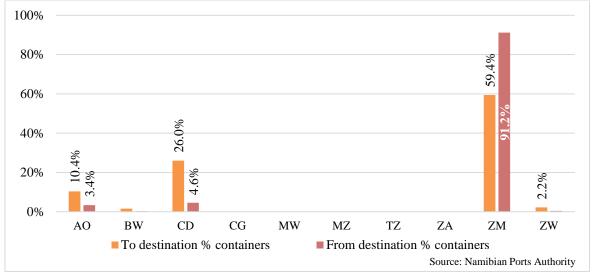


FIGURE 18: SHARE OF TRANSIT CONTAINER MARKET BY COUNTRIES EXPORTING AND IMPORTING VIA THE PORT OF WALVIS BAY, 2017-18



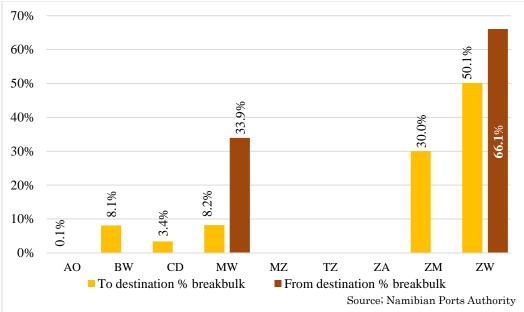


FIGURE 19: SHARE OF TRANSIT BREAK-BULK MARKET BY COUNTRIES IMPORTING AND EXPORTING THOUGH THE PORT OF WALVIS BAY, 2017-2018

ROAD TRANSPORT

Road freight accounts for more than 80 percent of total tonne kilometers of goods transported in Namibia include transit cargo. Of the three corridors connecting Walvis Bay with countries in the SADC region WBNLDC is the busiest, followed by Trans-Cunene and Trans-Kalahari Corridor (TKC) in that order with respect to transit cargo.

Total road freight by year tonne-kilometres (TKM) transported along each corridor for the last three years is shown in Table 1. In 2017, 1,150 million TKM of freight was transported along WBNLDC, up 39.2 percent from 2016 when 826.1 million TKM was transported. The comparative volumes for Trans-Cunene was 54.1 million TKM in 2017, up from 50.5 million TKM in 2016 (or 7.1 percent annual increase), while TCK experienced a decrease of -7.3 percent from 20.5 million TKM in 2016 to 19.0 million TKM in 2017.

	2016	2017	2018
Corridor			
Walvis Bay-Ndola Lubumbashi Development Corridor	826.1	1,150	1,094.4
Trans-Cunene Corridor	50.5	54.1	30.0
Trans-Kalahari Corridor	20.5	19.0	20.0
Trans-Oranje Corridor	Missing data	Missing data	Missing data

TABLE 1: TOTAL FREIGHT (IN MILLION TONNE-KILOMETRES) BY YEAR, NAMIBIAN CORRIDORS

Source: Namibian Ports Authority

Trucking Regulations

There is applicable axle load, vehicle length and height limits for different types of trucks (Table 2 and Table 3). These regulations which are harmonised on both sides of international borders are Namibia enforced at weigh stations along the four transport corridors. There are two weigh stations along WBNLDC, TKC and Trans-Cunene Corridor, while Trans-Oranje Corridor has four weigh bridges. Of these weigh bridges nine are operational while the 10th is under construction. Four operate 24 hours seven days a week while five operate 16 hours a day.

The maximum age of imported vehicles from non-SACU countries is eight years. The maximum allowable age of vehicles that can be operated on Namibian roads is 40 years - mostly for exhibition with the average age of commercial trucks significantly lower.

	Applicable Axle Load Limits (kg)
Steering Axle	
Single	7,700
Double	15,400
Tri-axle or more	23,100
Other Axles	
Single with single wheels	8,000
Single with double wheels	9,000/10,200 (bus)
Double with single wheels	16,000
Double with double wheels	18,000/20,400 (bus)
Tri-axle or more	24,000
Courses Decide Authensites	

TABLE 2: APPLICABLE AXLE LOAD LIMITS ON DIFFERENT TYPE OF TRUCKS, (KGS)

Source: Roads Authority

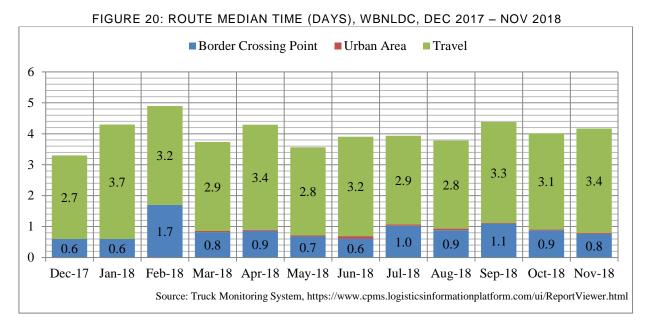
TABLE 3: APPLICABLE VEHICLE WEIGHT AND HEIGHT RESTRICTIONS, (METERS)

	Applicable Length Limit (m)
Vehicle configuration	
Articulated vehicle, i.e. drawing vehicle with semi-trailer	18.5
Bus train	20
Rigid vehicle	12.5
Any other combination but excluding breakdown	22
	Applicable Width Limit (m)
Bus and goods vehicle GVM more than	2.6
Any other vehicle	2.5
	Applicable Height Limit (m)
Double decker bus	4.65
Any other vehicle	4.3

Source: Roads Authority

Cross-border Transportation

Namibia is a signatory to the Convention on International Transport of Goods and the Kyoto Convention for Harmonisation. Accordingly, transit of goods is facilitated through among other things regional vehicle insurance which provides coverage in more than one country. A regional driver's license/certification also allows truckers to transport goods across borders. Equally, multi-entry visas are granted to drivers who regularly operate across borders. The associated route median times on the WBNLDC is shown on Figure 22.



So are the transit times at and between borders. A more detailed measure of transport efficiency on the Walvis-Bay-Ndola-Lubumbashi Development Corridor is shown on Figure 23 in terms of the ratio of idle to moving time per travel segment. Relatively, a lot more idle time (91.3 percent) is spent at the Katima Mulilo BCP compared to other segments with the Livingstone-Lusaka segment having a more balanced distribution.

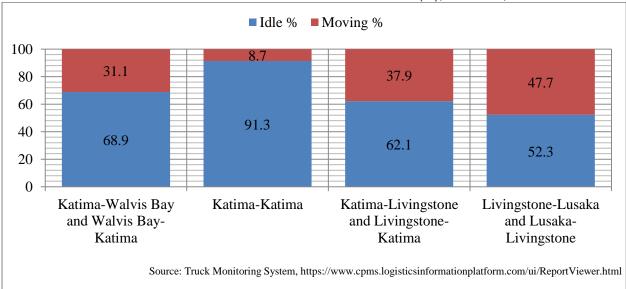


FIGURE 21: RATION OF IDLE TO MOVING PER TRAVEL SEGMENT (%), WBNLDC, NOV 2018

Comparative route ration of idle to moving time for the two main corridors – Trans-Kalahari and Walvis-Bay-Ndola-Lubumbashi Development Corridors shown on Figure 24 suggest almost similar distribution albeit with nearly two-thirds of the total journey time spent idling and ¹/₃ on actual travel.

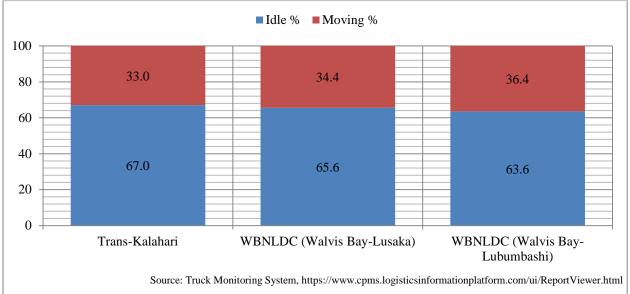
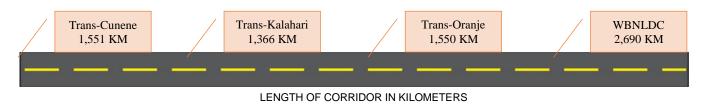


FIGURE 22: ROUTE RATION OF IDLE TO MOVING TIME (%), TKC & WBNLDC, NOV 2018

Save for relatively short sections with climbing lanes, all the four international transport corridors are single lanes in each direction. There are no toll roads for the entire length of each corridor on the Namibia side.



RAIL TRANSPORT

Namibia's track railway network (Map 8) transports approximately 1.2 billion TKM of cargo annually. Operated by TransNamib Holdings Limited (TNHL), a State-owned Enterprise, the railway system moved 1.58 million metric tons of various commodities (both bulk and containerised freight) in 2017, including cargo categorised as agriculture, building materials, bulk fuel, bulk liquid, general cargo and mining.

As shown in Figure 25 below, 0.4 million tonnes of building materials (or 25.6 percent) and 0.4 million tonnes of bulk liquid (25.6 percent) were transported via rail, together making up more than half the total rail freight tonnage in 2017. These were followed by bulk fuel (0.3 million tonne, or 19.0 percent), mining (0.23 million tonnes, or 14.6 percent), containers (0.12 million tonnes, or 7.4 percent), agriculture-related products (0.1 million tonnes, or 6.4 percent) and general cargo (0.02 million tonnes, representing 1.3 percent).

Owing to limited capacity (refer to Annex 1 for details), the existing railway system can only manage to haul 15-20 percent of the total freight market. However, with improvements volumes could almost double within the next five years from the current 1.6 million metric tons to 3 million metric tons, representing one third of the national freight traffic volumes.

Firstly, this means significantly increasing railway percentage share for various cargos for which rail has a distinct advantage, such as liquid bulk, dry bulk, containers, and construction material and project cargo. With improvements, rail freight volumes could almost double within the next five years from the current 1.6m to six million metric tonnes, representing almost ¹/₃ of the total freight traffic volume in Namibia.

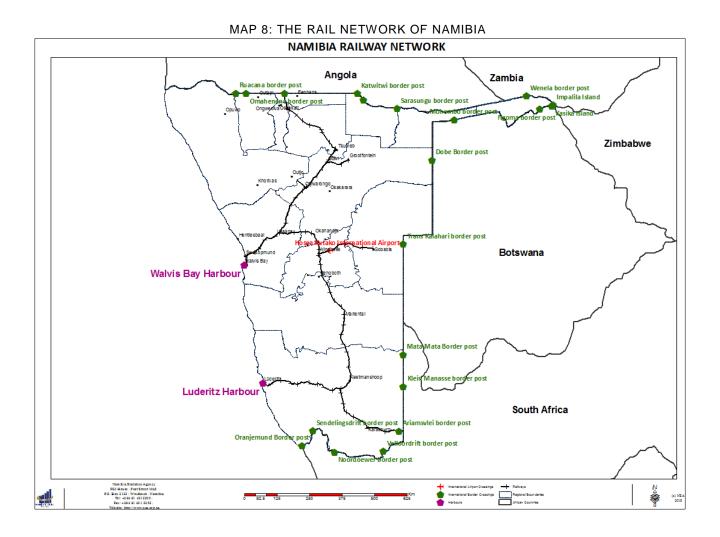
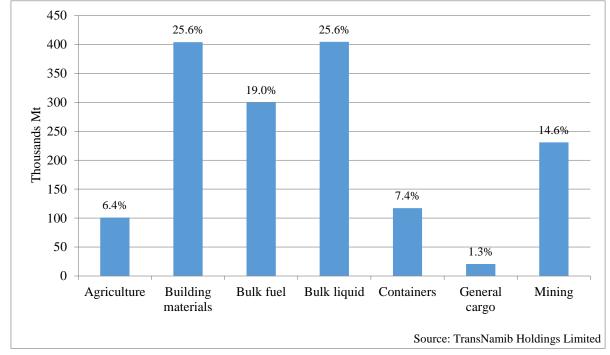


FIGURE 23: VOLUME OF RAIL FREIGHT ('000 MT) BY COMMODITY GROUPING, 2017



Presently, rail freight's share of liquid bulk stands at 45 percent, 25 percent for dry bulk, 6 percent for containers, and 15 percent of the construction and project cargo market. TransNamib enjoys this market share due to reliable shippers, including

- Froducers of raw material and energy products (e.g. coal to NamPower)
- **4** Manufactures and producers (e.g. copper concentrates to Dundee)
- 4 Agricultural processors (e.g. wheat, maize Namib Mills)
- International Shipping lines and Forwarders
- Namibia Breweries (containers, malt and hops)
- **4** Construction companies and Traders (cement, super sand)
- Sulfuric acid (Rössing Mine)

Secondly, increasing capacity to absorb more traffic generated from seaports, cross-border traffic, mines, agricultural and manufacturing centres on the five TransNamib Corridors, namely Walvis Bay-Kranzberg, Kranzberg-Windhoek, Kranzberg-Oshikango, Tsumeb-Ondangwa/ Ongwediva, and Nakop/ Ariamsvlei-Windhoek (Map 9). Currently, 60 percent of rail freight traffic is generated from the port of Walvis Bay. Given the ongoing port expansion, there will be increased demand for freight services. Approximately seven percent of the rail freight is currently generated from cross-border traffic. Presently, there is only one rail connection to the network of South Africa with which Namibia share the same gauge (i.e., Cape gauge – 1,067 m). Exchange of locomotives takes place at Nakop in the border between the two countries.



MAP 9: TRANSNAMIB RAIL CORRIDORS

Thirdly, there is no transloading near the border. Only crew interchange takes place at the border-crossing and the process takes maximum one hour. There is potential to link with other networks e.g. Botswana, Zambia, Angola, DR Congo and Zimbabwe.

AIR TRANSPORT

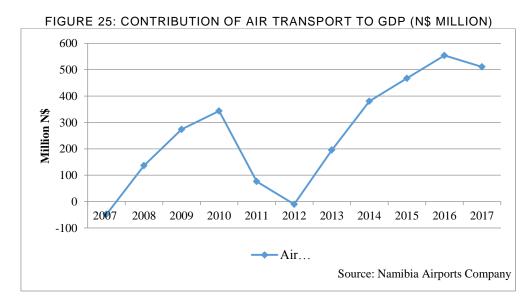
Namibia has a network of eight airports, the main hub being Hosea Kutako International Airport (HKIA). In 2007, Namibia had an Air Connectivity Index (ACI) of 1.7 percent. In comparison, the top three countries by rank were United States (22.8 percent), Canada (13.4 percent) and Germany (12.1 percent). South Africa with ACI of 3.6 percent was ranked 100 out of a total of 200 countries (Arvis and Shepherd, 2011). Recent entry of several new international carriers such as Ethiopian, Qatar, Royal Dutch Airlines (KLM) and Condor into HKIA (Figure 24) means that the country's connectivity has likely changed, and so too has the relative competitive position of airline networks, the airport and the level of air accessibility.



FIGURE 24: NAMIBIA'S AIRPORTS, AIRLINES AND DESTINATIONS

Source: Namibia Airports Company

Following the world financial crisis of 2008/9, the contribution of air transport dipped and only recovered after 2012 (Figure 25). In 2016, the value added of air transport reached an all-time high of N\$554.1 million before it declined to N\$510.7 million inn 2017, a decrease of 7.83 percent.



Improving air safety oversight and complying with international conventions (e.g. the International Air Safety Transport Operational Safety Audit and the International Aviation Safety Assessment) is a sine qua non for Namibia to seize the opportunity to enhance access to markets such as Europe and the Unites States where safety standards are stringent. Improving infrastructure investments and modernization of facilities (e.g. air traffic control, air traffic navigation systems, and providing sufficient space and systems for cargo processing and handling) at HKIA is likely to increase international air cargo capacity leading to higher cargo volumes. Refer to additional impacts of proposed improvements below.

Current situation

• The current total apron surface can only accommodate 2 large aircraft (Airbus 330) and 3 medium sized (Boeing 737 or Airbus 319).

Proposed developments

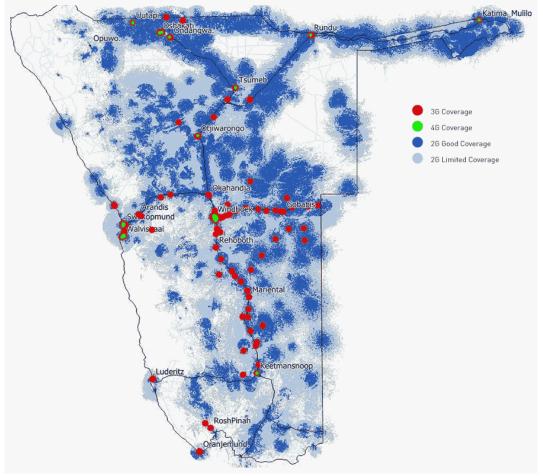
- New Runway Category 4F that can accommodate multiple wide-bodied Code F aircraft
- New two level terminal building for International passengers, New VIP Lounge
- New Fire Fighting Station
- New Air Traffic Control Tower

Expected benefits

- Attract new airlines and bigger aircrafts with provision of aerobridges
- Increase safety and compliance with international standards and regulations
- Increase aircraft parking on apron
- Increase aeronautical revenue
- Increase in retail space increase in non-aeronautical revenue
- Increase baggage handling capacity
- Enable complementary services such as hotel development, conference facilities and airline lounges
- Job creation/ employment opportunities

IT NETWORK

Two of Namibia's leading information technology (IT) service providers, namely Telecom Namibia and Mobile Telecommunications (MTC) provide 95 percent mobile phone network population coverage (Map 10 and Map 11). Mobile phone subscriptions are recorded at 119.16 per 100 inhabitants.



MAP 10: IT NETWORK COVERAGE

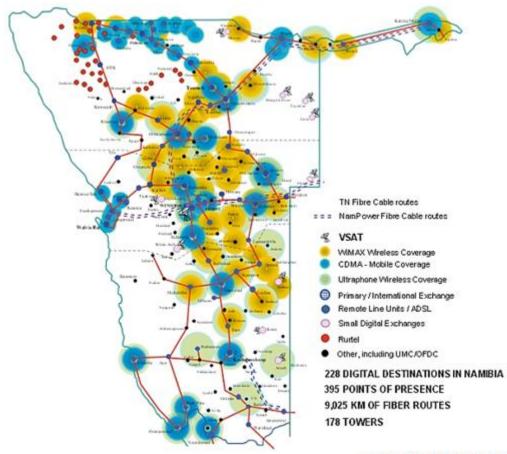
Source: MTC Annual Report 2016

On the television and broadcasting front, Namibia has successfully implemented the Digital Terrestrial Television (DTT) migration from analogue to digital television as required by the Telecommunications Union and DTT coverage has increased to 74.4 percent. The latest generation DTT standards enable the delivery of audio, video and data services to fixed, portable and mobile devices.

In addition, Namibia has been connected to the West Africa Cable System (WACS) since May 2012. This connection is expected to result in increased broadband capacity and accelerate the uptake of internet-based services and internet access in the country. Current international link capacities through the WACS have been recorded at 5 Gigabytes per second. The government network backbone infrastructure has been redesigned and is being upgraded to be able to carry the increased bandwidth capacity of 600 Megabits per second from WACS.

Namibia was ranked 81th in the Global Information Technology Report (GITR) of 2016, this is the best result since 2012. In year 2015 Namibia had a score of 2.95 (out of 7 achievable points). In the following year Namibia was able to improve by a whole score point and rose by 20 ranks in the world ranking (Figure 26).

MAP 11: FIBRE CABLE ROUTES



Source: Telcom Namibia Annual Report 2011/12

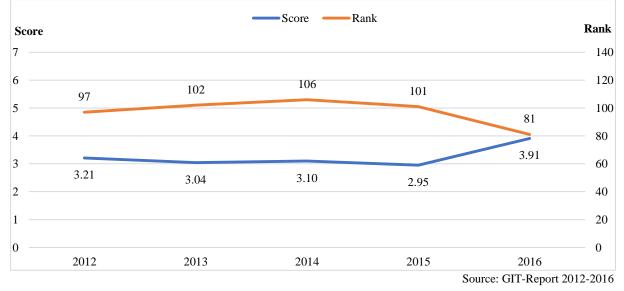


FIGURE 26: NAMIBIA'S SCORE AND RANK IN GIT-REPORT 2012-2016

3. FUTURE TRENDS AND OUTLOOK

A BRIEF LOOK AT THE PAST

COMPETENCE AND QUALITY OF LOGISTICS SERVICES

Namibia recorded a year-on-year average growth rate of 9.73 percent from 2007 to 2016 in terms of competence and quality of logistics services i.e., trucking, forwarding, and customs brokerage (World Bank, *World Economic Indicators*, 2018). In southern Africa, only Mozambique had a higher year-on-year average growth rate at 16.19 percent to reach a score of 2.63 (1=low to 5=high), which compares favourably to the sub-Sahara Africa (SSA) region average of 2.42.

EASE OF ARRANGING SHIPMENTS

In terms of ease of arranging international shipments, Namibia improved gradually from 2.14 in 2007 to 2.69 in 2016 (1=low; 5=high). While Namibia's performance has improved over the years, so too have its southern Africa neighbours, particularly Mozambique and Tanzania both whose score for 'ease of arranging competitively priced international shipments' leapt from 2.077 and 2.317 respectively in 2014 to 3.055 and 2.982 in 2016 (World Bank, 2018).

ABILITY TO TRACK AND TRACE CONSIGNMENTS

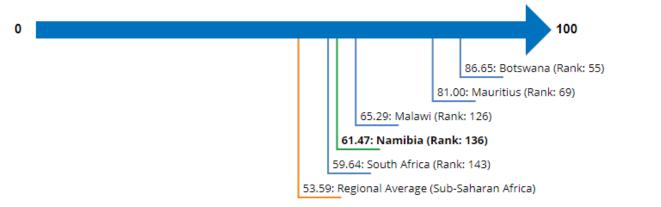
Namibia's score for 'ability to track and trace consignments' improved from 1.83 in 2007 to 2.85 in 2012 before dropping to 2.52 in 2016 (1=very low, 5=very high). Within the SADC region, South Africa, Tanzania and Mozambique scored highest with the latter two showing substantial improvement since 2014 (World Bank, 2018).

FREQUENCY WITH WHICH SHIPMENTS REACH CONSIGNEES WITHIN SCHEDULED OR EXPECTED DELIVERY TIMES

In terms of frequency with which shipments reach consignees within 'scheduled' or 'expected' delivery time is an indicator of timeliness of clearance and delivery, and therefore the supply chain reliability and predictability – in 2016, Namibia's score of 3.19 was higher than the regional (SSA) of 2.84 and that of upper middle income countries of 3.12 (1=hardly ever; 5=nearly always).

EASE OF DOING BUSINESS: TRADING ACROSS BORDERS

FIGURE 27: TRADING ACROSS BORDERS SCORE



Source: World Bank Doing Business 2019

Namibia's ease of doing business overall score of 60.53 (2019) is almost a ¹/₄ percentage point increase (+0.24) on the 2018 score, signifying an improvement in the overall business environment as measured by Ease of Doing Business (EODB). Table 4 below shows the performance across 10 Doing Business (DB)

indicator sets while the trading across borders score (Figure 27 above) associated with three sets of procedures—documentary compliance, border compliance and domestic transport— measures the time and cost (excluding tariffs).

Indicator	DB 2019 Score	DB 2018 Score	Change in Score (% points)	
Overall	60.53	60.29	+0.24	
Starting a Business	69.06	68.90	+ 0.16	
Dealing with Construction	69.79	69.43	+ 0.36	
Getting Electricity	78.25	78.12	+ 0.13	
Registering Property	40.19	40.14	+0.05	
Getting Credit	60.00	60.00	-	
Protecting Minority Investors	51.67	51.67	-	
Paying Taxes	74.52	74.52	-	
Trading across Borders	61.47	61.47	-	
Enforcing Contracts	63.44	61.58	+ 1.86	
Resolving Insolvency	36.97	37.04	- 0.07	

TABLE 4: DOING BUSINESS 2019 SCORE

Source: World Bank, Doing Business 2019

During the last one year, six out of 10 indicators associated with doing business have changed. Performance on trading across borders remained unchanged however. Namibia performs better on border compliance in terms of 'time to export (hours) but not so well in terms of cost (US\$ 745 vs US\$ 606) in comparison to SSA. The same applies to documentary compliance with Namibia having a time to export advantage. Namibia's performance is relatively strong in trading across borders (i.e., importation) both in terms of border compliance and documentary compliance. For example, it takes on average 6 hours to complete border compliance on imports compared to 8.5 in OECD (high income) and 126.3 in SSA (Table 3).

TABLE 5: TRADING ACROSS BORDERS, TIME AND COST (2019)

Indicator		Namibia	SSA	OECD high income
Border compliance	Time to export (hours)	120	97.3	12.5
	Cost to export (USD)	745	605.8	139.1
Documentary compliance	Time to export (hours)	90	72.8	2.4
	Cost to export (USD)	348	168.8	35.2
Border compliance	Time to import (hours)	6	126.3	8.5
	Cost to import (USD)	145	684.3	100.2
Documentary compliance	Time to import (hours)	3	97.7	3.4
Cost to import (USD)		63	283.5	24.9

Source: World Bank, Doing Business 2019

THE FUTURE

Namibia is set to become a logistics hub for the SADC region by 2025. Looking ahead, the following developments, among others, are likely to determine the state of logistics in Namibia going forward:

- (a) Completion and commissioning of the South Port Development Project at Walvis Bay
- (b) Completion and commissioning of the North Port of Walvis Bay, SADC Gateway Development
- (c) Capacity enhancement leading to significantly increasing railway percentage share for various cargos for which rail has a distinct advantage
- (d) Completion of port/rail infrastructure around the Port of Lüderitz and commencement of manganese exports through the port
- (e) Implementation of the Namibia-Botswana cross-border railway cooperation

- (f) Sustainable improvement in Namibia's logistics performance.
- (g) Cross-border enhancement by implementing measures such as one-stop border posts(h) Digitalisation of corridors e.g. single window
- (i) Strategic marketing strategy with a special focus on the Zambian market

APPENDICES

ANNEX 1: NAMIBIA RAIL NETWORK AND SERVICES		
THE RAIL NETWORK AND SERVICES		
Advanced train control systems monitor train movements usi	ng train identification and automatic	
route setting		
Most freight wagons have double-axle bogies		
Heavy load wagons carry 70 tonnes or more		
Trains have more than 50 wagons		
The system has 24-hour freight terminal operations		
Privately owned rail wagons account for a significant part of	the rolling stock for freight, other than	
tanker and hopper wagons		
Rail wagons are allowed to cross the border subject to bilater	al quotas limitations	
Maintenance of the track in the corridor is performed by the		
Portion of the locomotives are less than 15 years old		
Harmonisation of rail operations on both sides of the border		
Maximum train	length: 35 Empty; 25 Fully loaded	
Maximum wagon ca		
Length of track on co	1 5	
Maximum train		
THE RAIL OPERATOR(S)		
Annual traffic (2017):		
Freight tonnes:	1.58 million	
Freight tonnes: kilometres:	1.2 billion	
Major shippers include	1.2 011101	
Producers of raw materials and energy products		
 Manufacturers and producers 		
*		
Agricultural processors		
• International shipping lines or forwarders		
Construction firms and traders		
The railroad does not operate unit freight trains except in tran		
Priority is given to passenger or freight traffic but with sensit	ivity to passenger traffic, which enjoys	
schedules service & operations		
Railroad's share of freight traffic in the corridor	15-20%	
Most freight trains operate in a fixed schedule?		
Private sector involvement in rail operations:		
NHL is the sole rail operator in Namibia by legislation. Howe		
liberalisation of the rail market to introduce private sector par	ticipation. TNHL only owns the rolling	
stock & equipment.		
The rail road has the following multimodal terminals:	- Freight yards with warehousing	
	- Inland container deports	
Fleet of rail wagons:	1,900	
Currently only diesel locos are operated:	Average speed 50km/hr with speed	
	restrictions	
Maximum value for:		
Axle load:	16.5-18.5 (variable)	
Wagon load:	44 tonnes	
Train length:	25-35 depending if loaded or unloaded	
Annual level of utilisation of the rail wagons:	Varies by corridor (i.e., Walvis	
(i) Tonne kilometres	Bay-Kranzberg, Kranzberg-Tsumeb,	
(ii) Loaded kilometres	Kranzberg-Windhoek,	
(iii) Average trip length	Windhoek-Keetmanshoop, and	
	Tsumeb-Otjiwarongo)	

	2 on most lines
Average number of train movements per day on the main	2 on most lines, Otavi Tavasah Kasashara (2) in the
corridor in each direction:	Otavi-Tsumeb-Kranzberg (3), in the
Percentage of trains that are freight:	south part of Namibia (1) 97%
Average number of wagons per train:	22-25
Average number of wagons per train.	1st March 2019 – date Desert Express
Currently freight-only services available:	is expected to be back in operation
Special visiting (tourist) trains from South Africa	2 (Rooibos and Shongololo)
TRANSIT TIME AND VARIATIONS	
Maximum allowable free time for loading/offloading at the p	ort, ICD, and freight terminal is 24hrs.
Demurrage charges apply after the expiry of free time. Target	t not always achieved due to delays and
other operational constraints	
Factors affecting train turnaround time include rail yard prod	uctivity, availability of cargo, availability
of locomotive rolling stock, and railyard operating hours	
Use of ICT in managing the railway	Yes/ No
Functions performed by computerised systems	
Accounting and cost control:	Yes/ NO
Booking transport and billing for services:	Yes/NO (partially, especially billing)
Calculating rates:	Yes /NO
Fleet management:	Yes /NO
Tracking shipments:	Yes /NO
Planning/coordination with shipper:	Yes /NO
Integrating sequential services and transactions:	Yes /NO
Use of electronic data interchange	
Order confirmation:	Yes /No
Exchange of shipping documents:	Yes/ No
Payment using Internet banking	
Suppliers:	Yes/ No
Transport services:	Yes/ No
CROSS-BORDER MOVEMENTS	
Rail connections to networks in neighbouring countries - Cur	rently only to South Africa. Additional
connections to Botswana and Zambia still at proposal phase	
Do the trucks have the same gauge	Yes/ No
How is cross-border movements handled?	
Exchange of locomotives at the border:	Yes/ No
Trans-loading near the border:	Yes /No
Average time to cross border:	1 hour (only crew change)
REGULATIONS	Thour (only crew change)
Axle load limit:	16.5-18.5
Wagon load limit:	44 tonnes
	44 tonnes
Documents used for the carriage of goods on railway	XZ (NI
Standard railway bill:	Yes/ No
Ocean bill of lading for dry port:	Yes/ No (for customs clearance)
Freight forwarders multimodal bill of lading:	Yes /No
How are rail rates determined?	
Regulated:	Yes/ No (bulk-fuel)
Negotiated:	Yes/ No
Based on tonne-kilometre:	Yes/ No
Based on type of cargo:	Yes/ No
Which of the follow reduces the quality of service?	
Condition of track and equipment	Yes/ No
	Yes/ No
Maintenance standards and budgets Track capacity	Yes/ No

Source: TransNamib Holdings

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