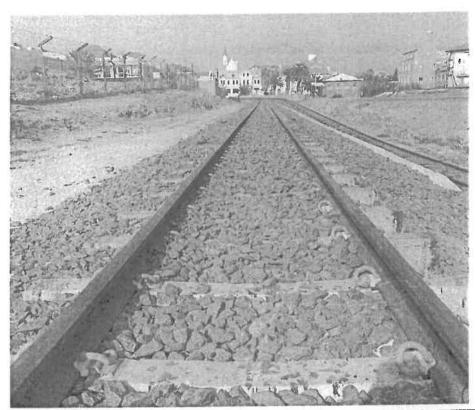
7TH NATIONAL ASSEMBLY



PARLIAMENTARY STANDING COMMITTEE ON ECONOMICS AND PUBLIC ADMINISTRATION



REPORT ON THE OVERSIGHT VISIT TO THE MANAGEMENT OF RAILWAY INFRASTRUCTURE IN //KHARAS, HARDAP, KHOMAS AND ERONGO REGION

28 AUGUST TO 01 SEPTEMBER 2023

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ACRONYMS

CBD Central Business District

ISO International Organisation for Standards

MWT Ministry of Works and Transport

NAMPORT Namibia Ports Authority

NRA Namibia Railway Authority

NRSR Namibia Railway Safety Regulator

RFA Road Fund Administration

RIPES Research, Information, Publication and Editorial Services

SADC Southern African Development Community

SOE State-Owned Enterprises

TNHL TransNamib Holdings Limited

1. INTRODUCTION AND BACKGROUND

Railway transport plays a vital role in the transportation sector of Namibia, contributing significantly to the country's economy. It offers an economical, efficient, environmentally friendly, and safe solution for long-distance transportation of heavy goods. Furthermore, Namibia has great potential for mining and industrial activities, which makes railways ideal for transporting heavy goods for long distances because of their ability to accommodate heavy loads compared to road transport. Due to the population growth, railway transport will be of interest to the country in future for both freight and passengers. It is, therefore, paramount to ensure its development and sustainability.

In light of this, TransNamib Holdings Limited (TNHL), a State-Owned Enterprise (SOE) established by the National Transport Services Holding Company Act, No. 28 of 1998) is the national rail services operator in Namibia which provides all railway transport services within and across the border of the country. It specialises in the transportation of bulk, break bulk, containerised freight and passengers utilising rail transport as well as offers warehousing, storage, and property rentals to complement its core business.

It is against this background and as part of its parliamentary oversight function that, the Parliamentary Standing Committee on Economics and Public Administration decided to conduct physical oversight visits to railway stations, railway facilities, associated infrastructure and property (movable and immovable assets) in //Kharas, Hardap, Khomas and Erongo regions from 28 August to 01 September 2023.

The Committee as mentioned earlier has the constitutional mandate to exercise parliamentary oversight on the Namibian economy and the activities and programmes of Offices, Ministries, Agencies and State-Owned Enterprises, including the Ministry of Works and Transport (MWT) as well as TNHL. The Committee is also mandated to operate with a vision to promote infrastructure development and economic planning. In May 2021, the Standing Committee held a Stakeholders Consultative workshop which was attended by senior officials of the MWT as well as TNHL. The workshop report which included the findings and recommendations was subsequently approved in the National Assembly and transmitted to the MWT for implementation.

2. COMMITTEE MEMBERSHIP

The Standing Committee on Economics and Public Administration has twenty-three (23) members of Parliament derived from different political parties represented in the National Assembly. However, due to budgetary constraints, only four Members undertook the visit namely, Hon. Natangue Ithete (Chairperson and Leader of the Delegation), Hon. Hilaria Mukapuli, Hon. Maria Elago and Hon. Kennedy Shekupakela. Members were accompanied by Ms Agnes N. Mukono (Chief Parliamentary Clerk: Committee Services), Ms Noreen Sitali (Information Officer: Research, Information, Publication and Editorial Services (RIPES)) as well as representatives from the Ministry of Works and Transport (Mr Robert Kalomho and Ms Ilona Shoikuti, the project engineer representatives responsible railway upgrading in the south Mr Jonas Hamalwa, and Mr Mike Rumsey from K&A Consulting Engineers) and representatives from TransNamib (Ms Abigail Raubenheimer, Mr Bertus Eksteen, and Mr Gideon Eiseb).



Figure 1: Committee Members and Accompanying Officers

3. METHODOLOGY

The oversight visit was meticulously executed using a comprehensive methodology. This approach included initial briefing meetings with officials from key entities such as the Ministry of Works

and Transport, TransNamib, and NAMPORT. Subsequently, the delegation conducted on-site visits to various railway infrastructure and their associated facilities. These visits provided a firsthand assessment of the state of the railway network.

4. OBJECTIVES OF THE VISIT

The primary objective of this visit was to apprise the esteemed Committee members about the prevailing status of TransNamib's railway services, infrastructure, and facilities. The visit aimed to garner a holistic understanding of the strengths, accomplishments, challenges, deficiencies, inadequacies, and potential threats within the railway sector, particularly within the designated core regions.

5. PURPOSE OF THE REPORT

This report's paramount purpose is to present the findings and outcomes of the oversight visit to the distinguished National Assembly. Furthermore, the report serves as a platform for deliberation, consideration, and subsequent adoption by the National Assembly. It facilitates informed decision-making and strategic actions to address the issues and opportunities identified during the visit.

6. RAILWAY INFRASTRUCTURES VISITED BY THE COMMITTEE

The Committee visited the following railway infrastructures in the southern, central, and western links.

- Site visit to Keetmanshoop train station and associated facilities.
- Upgrading of the Sandverhaar Buchholzbrunn Railway Line (42km Project under construction between Keetmanshoop and Aus).
- Aus train station and associated facilities.
- Lüderitz train station and associated facilities.
- Meeting with NAMPORT officials and visit to the Port of Lüderitz.
- Rehoboth train station and associated facilities.
- Main locomotive maintenance workshop and train station in Windhoek.
- Walvis Bay train station and associated facilities.
- Swakopmund train station and associated facilities.
- Arandis train station and associated facilities.

- Usakos train station and associated facilities.
- Kranzberg train station and associated facilities.
- Karibib train station and associated facilities.

7. MEETINGS / OVERSIGHT VISITS

7.1. PART 1: //KHARAS REGION

7.1.1. Courtesy Call on the Honourable Governor

The Committee conducted a courtesy visit to the esteemed Honourable Governor of the //Kharas Region, Honourable Aletta Fredericks. During this meeting, officials from TransNamib delivered a comprehensive presentation shedding light on the operational scope of TransNamib. It was emphasized that TransNamib is an operational entity spanning across ten (10) regions of Namibia, with the notable exception of Zambezi, Kavango East/West, and Kunene.

In terms of staffing, TransNamib maintains an extensive workforce, boasting a robust complement of one thousand and two hundred (1,200) dedicated personnel. The company's expansive portfolio encompasses three (3) key subsidiaries: Swakopmund Station Hotel, GPT TransNamib, and Namibia Rail Construction, each contributing to the diversified facets of its operations.

TransNamib's railway fleet comprises seventy-eight (78) locomotives and an array of approximately one thousand five hundred (1,500) wagons. These railway workhorses collectively facilitate the annual transportation of approximately 1.5 million tonnes of cargo. However, the company aspires to amplify this capacity significantly, aiming to reach the impressive milestone of 4 million tonnes per annum within the next five (5) years. Currently, TransNamib keeps 23 to 26 locomotives operational on a daily basis. To ensure optimal profitability and operational efficiency, the ideal requirement is a daily fleet of 34 locomotives. Unfortunately, the company currently operates with only 24 locomotives due to constraints stemming from a lack of essential equipment and spare parts. The low number of available locomotives is attributed to their age (most are 50 to 60 years old). This is leading to frequent breakdowns and the existence of a maintenance backlog that needs to be addressed. This backlog has persisted over the past 10 years, primarily due to a scarcity of parts for the maintenance of the locomotives.

This visit allowed for a deeper understanding of TransNamib's operational landscape and underscored the company's dedication to bolstering its role in the region's transportation and logistics sectors. It further highlighted the essential role of adequate equipment and resources in achieving the company's ambitious cargo transportation targets, aligning with Namibia's broader economic development objectives.



Figure 2: Meeting with the Honourable Governor of the //Kharas Region

TransNamib's Critical Cargo Routes

TransNamib maintains a network of vital cargo routes crucial for the efficient transportation of essential goods and commodities, contributing significantly to the nation's infrastructure and trade. Key routes include:

- (i) Walvis Bay to Tsumeb, Ondangwa, and Grootfontein (Minerals, Fuel, Cement, and Ballast): This essential route serves as a pivotal artery for the transportation of a diverse range of cargoes, including Dundee products (copper blister/concentrate and acid), fuel, cement, and ballast. It facilitates the movement of goods across a considerable stretch of Namibia.
- (ii) Walvis Bay to Windhoek (Fuel): This route is dedicated to the transportation of fuel, playing a critical role in ensuring a consistent supply of this essential resource to the nation's capital, Windhoek.

- (iii) Windhoek to Hosea Kutako International Airport (Fuel): The connection between Windhoek and Hosea Kutako International Airport is instrumental in providing a seamless and efficient channel for the transportation of fuel to the airport, essential for aviation operations i.e., jet fuel.
- (iv) Ariamsvlei to Lüderitz (Manganese): This specialized route serves as the primary conduit for the transportation of manganese, a valuable mineral resource, from Ariamsvlei to the strategic port of Lüderitz.

These routes are the lifeblood of TransNamib's cargo transportation operations, ensuring the continued movement of essential commodities throughout Namibia and beyond. The efficiency and reliability of these routes are pivotal in supporting the nation's economic activities and development.

7.1.2. Infrastructure, Operational and Maintenance Challenges at TransNamib

The current challenges faced by TransNamib, including infrastructure, rolling stock (locomotives and wagons), operations, and maintenance, are as follows:

- (a) Aging Locomotives: The locomotives in service are significantly beyond their expected lifespan, with most of them ranging from 50 to 60 years old. Their age has made them increasingly unreliable. Procuring spare parts is a persistent challenge, exacerbated by extended delivery times, which can be as long as 6 to 12 months. These delays impact the efficiency and timeliness of service delivery.
- (b) Locomotive Procurement Issues: Despite the procurement of seventeen (17) SSD locomotives in 2017, only one is currently operational. This is mainly due to control system problems, a lack of spare parts, and insufficient knowledge transfer. Empowering and capacitating local expertise is deemed necessary to reduce dependency on foreign sources. Re-manufacturing one locomotive has been undertaken, and the same process is needed for ten more.
- (c) Maintenance Funding Backlog: On locomotives only, TransNamib faces a yearly funding backlog of N\$ 135 million for spare parts and maintenance, with an immediate annual cost of N\$ 40 million.

- (d) Loss-Making Routes: Some routes are currently unprofitable, primarily due to their length and the absence of cargo for the return journey. Numerous speed and tonnage restrictions due to the railway line condition greatly contributes to the loss of income. Additionally, challenges related to sand outside of Lüderitz further impact the routes' profitability due to the sand ingress on the railway line that needs to be removed on a daily basis.
- (e) Poor Infrastructure Condition: The rail infrastructure is in disrepair, with numerous line breaks occurring almost daily (specifically between Kranzberg and Tsumeb). Resources for adequate maintenance are lacking for both TransNamib and the Ministry of Works and Transport.
- (f) Operational Shortfall: To ensure optimal performance, a minimum of 34 locomotives are required, but there are currently only 24 in operation.
- (g) Infrastructure Compliance: Only 24% of the railway network complies to the SADC standard of 18.5 tonnes per axle load. This is a result of budgetary constraints and insufficient funding for railway infrastructure improvements. It's essential to note that the railway lines are government-owned, with TransNamib being solely responsible for management and for maintenance.
- (h) Safety Concerns Kransberg-Tsumeb Line: The Kransberg-Tsumeb railway line remains a significant safety concern, with the most recent derailment happened in July 2023. Ongoing maintenance is being carried out to ensure safety and new railway line is planned to be constructed soon. Rail breaks of the 30kg/m rails that are more than 50 years old are problematic on this section.
- (i) Keetmanshoop to Aus Line: The Keetmanshoop to Aus line exhibits varying conditions, with a particularly poor 40km section between Sandverhaar and Buchholzbrunn, which has a speed limit of 15km/h. This segment is currently undergoing an upgrade, involving the construction of a new line parallel to the existing one. Phase 1 of this project, focuses on earthworks embankment construction, commenced in September 2022, and is expected to conclude in September 2024, with an estimated contract value of N\$110 million. Subsequent phases, including the construction of bridges and the permanent way will follow. To date, the total estimated value of the entire project is N\$694 million (when all components are considered, i.e, goods (construction material), services (consultancies) and works).

Major Causes of Accidents

- (i) Railway Infrastructure: Structural failures resulting from track geometry defects or rail defects are major contributors to railway derailments. The defects are caused by issues such as misaligned tracks, damaged rails/rail breaks, or problems with the overall geometry of the railway network. Structural failures can significantly impact the safety and operational efficiency of the railway system. Infrastructure obstacles such as the sand covering the railway line. Accidents can occur due to insufficient maintenance or obstacles on rails leading to derailments and other safety issues. It was determined that one of the primary factors contributing to the recent fatal derailment that occurred between Aus and Lüderitz in April 2023 was the accumulation of sand on the railway track. This sand accumulation significantly affected the track's condition, leading to reduced traction and stability for the train. Consequently, the train was unable to maintain its course, resulting in the tragic derailment. This incident highlights the critical importance of regular maintenance and monitoring of railway infrastructure, particularly in areas prone to sand accumulation, to prevent such accidents in the future.
- (ii) Human Errors: Accidents can also result from human errors, such as improper signalling, miscommunications, fatigue, or errors in following safety procedures.
 These can occur among railway staff or train operators.
- (iii) Mechanical Problems: Mechanical issues with trains or railway equipment can lead to accidents. Problems with brakes, engines, or other components can result in derailments or collisions.
- (iv) Negligence: Accidents may be caused by negligence, including failure to adhere to safety protocols, lack of proper maintenance, or inadequate safety training for personnel.
- (v) Rolling Stock: The condition of rolling stock, including locomotives and wagons, can also be a contributing factor to accidents. This may involve issues with the equipment's age, maintenance, or technical failures.

Key Projects underway and Planned on Infrastructure

NORTH

Construction of the Oshakati railway station buildings and platform in progress.

- Procurement of Rails, turnouts, ballast stone and fasteners will follow subject budget availability.
- Construction of the Ondangwa Oshakati Railway Line Construction of the permanent way will be the last component.

CENTRAL

- Upgrading of the Kranzberg-Tsumeb Railway Line (i.e Walvis Bay to Kranzberg is fully upgraded, to be followed by the upgrading of Kranzberg-Otjiwarongo and thereafter the upgrading of Otjiwarongo-Tsumeb and Otavi-Grooftein), this in support of Trans-Zambezi and Cunene Railway Corridors). The construction phase of this section is expected to start in 2024.
- Minor repair works are being carried out on the Kransberg-Windhoek section to enhance the railway standard.
- Minor repairs are underway on the Windhoek-Airport line to improve its condition.

SOUTH

- Upgrading of the Sandverhaar-Buchholzbrunn Railway Line between km 42.828 and km 82.898. The construction of this section is awarded to the state entities i.e., TNHL and Roads Construction Company (RCC).
- Upgrading of the Aus-Lüderitz Railway Line: Construction of Sand Shelter Tunnel Between Km 294,100 and Km 298.500 Including Railway Siding at Haalenberg is planned but requires funding.
- Upgrading of the Aus-Lüderitz Railway Line: Construction of Railway Link to deep-water port of Lüderitz at Angra Point. (Funding is immediately need for Feasibility and detail Design Phase).

Other Key Studies under consideration

- Trans-Zambezi Corridor Railway Extension (Feasibility study for the new line between Grootfontein – Katima Mulilo has been completed).
- Expression of Interest for the development of the Trans-Kalari Railway project in cooperation with Botswana. This will include the Upgrade of the Windhoek Gobabis railway line.

A Study commissioned by the Ministry of works and Transport on the Rail Sub-Sector Institutional Setup Review has also been completed. This study recommends for review of the legal framework leading to streamlining of functionalities and regulation railway sector.

7.1.3. Site Visit to Keetmanshoop Train Station, Infrastructure and Facilities

During the site visit to Keetmanshoop Train Station, the Station Supervisor provided the delegation with crucial information regarding the station's operations and recent developments:

- Operational Halt: The Station Supervisor informed the delegation that station activities had
 come to a standstill following the accident between Aus and Lüderitz in April 2023.
 Consequently, vacuum trains were suspended, and the associated equipment was relocated
 to Windhoek. This action was taken in response to a braking system issue identified in the
 investigation report.
- Vacuum Brakes vs. Air Brakes: Members of the delegation were also briefed on the distinctions between vacuum brakes and air brakes. It was highlighted that air brakes represent a newer technology capable of extended use without limitations, marking a potential advancement in train braking systems. Air brake trains are more suitable for heavy freight, especially at steep inclines and are therefore recommended for the Aus to Lüderitz section, which will form part of the new procurement package.
- Communication Challenges: In terms of communication, it was revealed that there were previously two radio telephone lines for train communication, with train personnel connecting telephones to these lines. However, these lines are now inactive. The delegation was made aware that TransNamib used to have the old telephone line system for communication. This old system is discontinued and a two-way radio communication method is currently used. Due to limitations of this system, the organization is in need of a modern communication system.
- Transition to Digital: Currently, the station relies on a manual system of recording/data capturing for various train operations. The Supervisor expressed the need to transition to a digital system to enhance efficiency and streamline processes.
- Passenger Train Fare Challenges: The station faces challenges related to transportation. It
 was noted that the station does not own a bus, and in case of breakdowns or emergencies,

they must hire buses at a cost of N\$300 per passenger, significantly increasing the ticket cost from the standard N\$200. This tells that the organization is in need of vehicles to execute duties.

Keetmanshoop Mechanical Workshop:

- Locomotives Maintenance: The Keetmanshoop Mechanical Workshop currently undertakes daily maintenance tasks for locomotives, while major servicing is conducted in Windhoek. This division of labour can lead to extended servicing times, and it has been suggested that some major repairs could also be accommodated in Keetmanshop to improve efficiency and reduce downtime.
- Spare Parts Challenges: The workshop faces a significant challenge due to the aging rolling stock of TNHL, which ranges from 30 to 60 years old. Acquiring spare parts for these older locomotives models is a complex process. These parts often need to be sourced from outside the country, primarily in South Africa. This external procurement poses an obstacle, with waiting periods for the acquisition of such parts typically ranging from 6 to 12 months, impacting the maintenance and repair timelines.
- Skills and Knowledge Transfer: During discussions with officials at the Train Station, the committee was made aware of an issue involving the workforce. It was observed that many older individuals are given employment opportunities, while younger workers face challenges in terms of job security, understudy opportunities, and the transfer of skills and knowledge. This concern was brought to the attention of the committee members, highlighting the need for a more balanced approach to workforce development and knowledge sharing.

7.1.4. Site Visit to the Construction Project: Upgrading of the Sandverhaar - Buchholzbrunn Railway Line

The section of the railway line between Sandverhaar Station and Buchholzbrunn Station demands significant upgrading due to its current poor condition. This segment covers a total mainline length of 40.070 km, extending from km 42.828 to km 82.898.

It is important to note that this project is one of the Harambee Prosperity Plan projects which will facilitate efficient and dependable goods transportation, stimulate economic growth, attract investments, and create employment opportunities.

- Historical Background: Notably, this part of the Southern Railway Line dates back to its construction between 1905 and 1908. It was initially equipped with 30 kg/m rails and 30 kg light-duty steel sleepers. However, the passage of time, wear and tear, and corrosion have taken a toll on the existing sleepers, rails, turnouts, fastenings, and ballast stone. This aging infrastructure is now in deplorable condition.
- Challenges: The existing earthworks embankment and formation layerworks are facing issues, with signs of collapse and overall inferior condition. Additionally, approximately 95% of the rail track is laid directly on the formation without the provision of ballast stone. At river crossings and streams, the existing stormwater drainage structures have proven inadequate to manage recurring floodwaters, leading to wash-aways of the embankment. These challenges are expected to persist in the future.
- Current Restrictions: For safety reasons, there are current speed and axle load restrictions in place, limiting the speed to 15 km/h and axle loads to 11.5 tons over this section of the railway line. The aim of the upgrade project is to enhance the railway line to accommodate a speed of 60 km/h and increased axle-loads of 18.5 tons.
- Parallel Line Construction: To ensure that train operations continue during the construction phase, it is proposed that a new railway line be constructed parallel to the old line. This innovative approach minimizes disruptions and ensures ongoing rail service.
- Project Components: The upgrading project encompasses various components, including the construction of earthworks embankment, the rehabilitation of existing steel bridges, the construction of rail-over-river bridges, procurement of permanent way material (new 48 kg/m rails, P2 concrete sleepers, fastenings, turnouts, and ballast stone), and the execution of permanent way construction.

- Phase 1: Construction of Earthworks Embankment between km 42.828 and km 82.898. This project was awarded to TransNamib Holdings Limited (TNHL) and Roads Construction Company (RCC) as a subcontractor on September 29, 2022. The project is planned to finish on 27 September 2024. The procurement of this 24 months contract was done through the Execution by Public Entities (EPE) procurement method in accordance with the provisions of the Public Procurement Act of 2015 (Act No. 15 of 2015), under the Ministry of Works & Transport (Directorate of Railway Infrastructure Management).
- Subsequent Phases: The completion of the first phase represents the initial step in a multiphase project. Following the successful execution of the first phase, the project will seamlessly transition to subsequent phases, each with its unique set of objectives and tasks. These subsequent phases are strategically designed to build upon the accomplishments of the initial phase, thereby contributing significantly to the overall success of the project and the fulfillment of its ultimate goals.

The project's progression involves a systematic and comprehensive approach, with detailed plans and scope of work for each subsequent phase being meticulously developed and implemented as the project advances. These phases are (i) rehabilitation of existing steel bridges (ii) the construction of rail-over-river bridges, (iii) the procurement of permanent way material (comprising new 48 kg/m rails, P2 concrete sleepers, fastenings, turnouts, and ballast stone), and (iv) the construction of the permanent way. This structured and phased approach ensures that the project not only addresses the challenges of the current railway line but also lays the groundwork for a significantly enhanced and more efficient railway infrastructure in the future, while allowing for easier budget allocation.

7.1.5. Site Visit to Aus Train Station

During the site visit to the Aus Train Station, it was evident that the station had undergone an upgrade in 2013, and as a result, it remains in good condition. The refurbishment has contributed to its sustained quality and functionality, providing an insight into the benefits and longevity of well-executed station improvements.

- During the site visit to Aus Train Station, the delegation observed several noteworthy aspects of the station's operations and infrastructure:
- Well-Maintained Infrastructure: One of the prominent observations was the excellent condition of the railway infrastructure at this station. The railway tracks and associated facilities were reported to be in a relatively new and well-maintained condition, ensuring safe and efficient train operations.
- Management of Downward Slopes: Aus Train Station holds a unique position as it is situated at the highest point leading to the downward slopes of the railway line towards Lüderitz. To prevent any potential run-away trains, the station's railway fleets are meticulously managed and monitored, ensuring the safe descent of trains along these slopes.
- Property Rental to Prevent Vandalism: A proactive approach to preserving station buildings was noted during the visit. To prevent vandalism and degradation of the station's properties, the station buildings are rented out. This not only generates additional revenue for TNHL but also helps safeguard the station's assets, contributing to its long-term sustainability and functionality.

7.1.6. Site Visit on the Aus-Luderitz Railway Line

Rehabilitation of the Railway Line: The line's rehabilitation commenced in 2000 and reached completion by the end of 2017. The total length of the revitalized railway spans 139.5 kilometres, exclusively traversing the Namib Desert. The line underwent an upgrade, increasing the axle load capacity from 11.5 tonnes to 18.5 tonnes. This enhancement involved the utilization of both the conventional track and the Tubular Track (TT) system. For the initial segment of this desert railway, a conventional track system was employed. It featured 48 kg/m rails placed on P2 concrete sleepers, with a nominal spacing of 700 mm. The ballast used consisted of 1200 m3 per kilometre, with particles averaging 53 mm in size. E3131 cast iron chairs and fastenings were utilized in this section. In contrast, the remaining portion of the line that passed through the sandy desert, prone to windblown sands, was constructed using the Tubular Track (TT) system, incorporating 48 kg/m rails.

Sand Problems on the Tracks: Dealing with the constant movement of sand dunes has been an ongoing and persisting issue for the Namibian railway authorities. The notorious dune belt located within the Namib Desert, characterized by its ever-shifting sands, has presented significant challenges for the railway infrastructure. This not only results in operational difficulties but also places a considerable financial burden on the continuous task of keeping the railway line free from sand accumulations. The Aus-Lüderitz railway line is particularly vulnerable to the relentless onslaught of windblown sand, which significantly impacts the efficiency and functionality of the line. The abrasive nature of the windblown sand, with its propensity to clog the tracks, can necessitate the suspension of train operations for safety reasons. This relentless invasion of sand onto the tracks has remained an ongoing, unresolved problem in Namibia, burdening the railway authorities with challenges that hinder safe and reliable operations, reduce the line's availability, and increase the frequency of maintenance efforts.

The consequences of sand interference on the tracks are multifaceted and encompass increased expenses for maintenance and rehabilitation, reduced train speeds, operational delays, and safety concerns such as derailment. Among the specific challenges encountered are track blockages, the infiltration and contamination of ballast, disruptions to electrical systems, and the malfunctioning of switches and gearboxes along the railway line. The primary issue arising from sand deposits on the tracks is ballast fouling, which hampers the structural integrity and performance of the track. Moreover, when the tracks become buried under layers of sand, it renders the railway line temporarily unavailable for operations. An illustration of this scenario is presented in Figure 2, which depicts the TT system in the study area buried beneath dune sand.

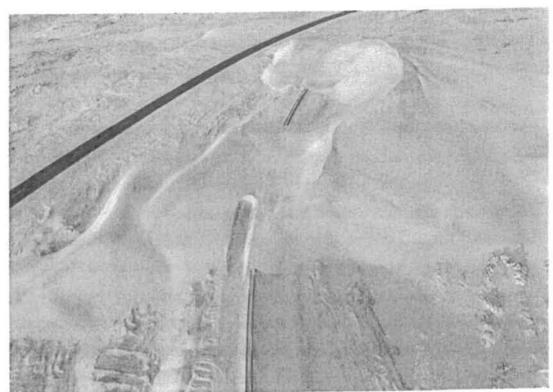


Figure 3: Aus-Lüderitz Railway Line covered by windblown sand crossing the line.

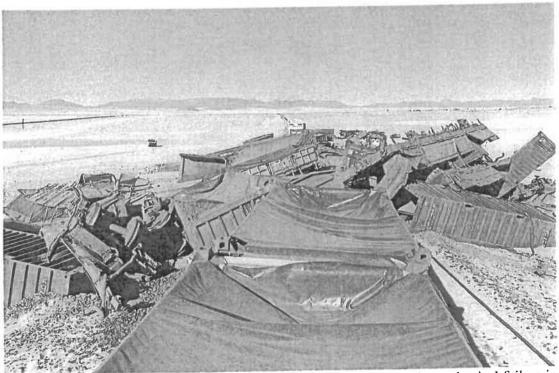


Figure 4: Fatal train derailment due to windblown desert sand and train mechanical failure in April 2023 at Garub Station on the Aus-Lüderitz Railway Line.

Sand Shelter Tunnel Proposal: The Ministry of Works and Transported proposed a construction of a sand-shelter tunnel as permanent solution to the shifting sand problem. It is an above the ground tunnel (Sand Shelter). This section spans approximately 4.4 kilometers, stretching from kilometer point 294,100 to kilometer point 298,500, directly intersecting the sand belt. A design for the proposed tunnel has already been completed. The tunnel design features circular segment roofs supported by vertical walls with top slabs, effectively mitigating earth pressure concerns. The design incorporates bottom slabs connected to horizontal beams, distributing, and transferring loads into the ground efficiently. Safety measures and adherence to regulations, as specified by TNHL and relevant statutory bodies, are integral components of the design. These safety measures include the provision of a freeboard on either side of the train, escape refuges spaced at 50meter intervals, and provisions for mechanical ventilation within the tunnel. The costs associated with both the initial investment and ongoing operation of the ventilation system have been factored into the overall cost estimates for implementing this tunnel solution. The proposed cross-section of the tunnel is outlined in Figure 4, providing a visual representation of the design's basic configuration.

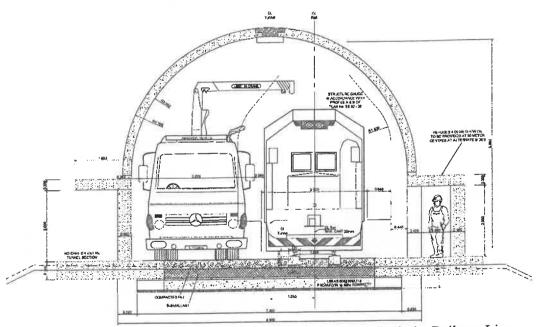


Figure 5: Tunnel cross section proposed on the Aus-Lüderitz Railway Line.

The design of this tunnel was finalized in 2016 by K&A Consulting Engineers. Subsequently, in the same year, the project was put out to tender for tunnel construction. However, the tender was

canceled due to insufficient funds to support the project. Similarly, the Central Procurement Board of Namibia (CPBN) advertised the same bid for tunnel construction in November 2021, only to cancel it once more due to budgetary constraints. This project will cost approximately N\$ 600 million and is yet to be funded.

7.1.7. Site Visit to Lüderitz Train Station

The railway track infrastructure at Lüderitz Train Station is currently in a commendable state, presenting it as relatively new and well-maintained. However, the station building itself contrasts this, as it exists in a dilapidated condition. Restoration efforts are essential to preserve its historical significance and ensure its structural integrity moving forward. The refurbishment of this station building not only serves as a testament to its historical value but also contributes to its functional sustainability for future use.



Figure 6: Dilapidated Lüderitz Station Building

The building is dilapidated and is more than 100 years old. The renovation of such a building will require it to remain the same or as it is. This must be done with due regard, considering that it has been demarcated as a national monument and can, therefore, not be changed architecturally but only structurally.

7.1.8. Meeting at the Namport - Port of Luderitz

During the visit to the railway line linking to Namport (Port of Lüderitz), it became evident that a holistic perspective of the entire transport network, encompassing both rail and port facilities, is crucial for a comprehensive understanding of the region's logistical infrastructure and how these two components of the system work in synergy to support trade and transportation activities. The presentation by Namport focused on the following:

(a) Background to NAMPORT

- Operational History: NAMPORT has served as the National Port Authority in Namibia since 1994, overseeing the management of both the Port of Walvis Bay and the Port of Lüderitz.
- Port of Walvis Bay Significance: The Port of Walvis Bay plays a pivotal role by offering a more efficient and rapid transit route connecting Southern Africa, Europe, Asia, and the Americas. This strategic location enhances trade and shipping opportunities.
- Port of Lüderitz: The Port of Lüderitz caters to Southern Namibia and provides access to markets in the Northern Cape of South Africa, further contributing to regional trade.
- Syncrolift Facility: NAMPORT operates a Syncrolift (dry dock facility) capable of lifting vessels up to 2000 tons for repair and maintenance, enhancing maritime services.
- Cargo Handling: NAMPORT efficiently handles a substantial seven (7) million tons of cargo annually, facilitating trade and economic activities.
- Container Handling Capacity: With the capacity to handle 750,000 TEUs (Twenty-Foot Equivalent Units) per annum, NAMPORT plays a significant role in containerized cargo trade, providing essential infrastructure and services for global and regional logistics.

(b) Role of NAMPORT

- Managing Current Trade Needs: NAMPORT plays a crucial role in managing port facilities to meet the current trade needs of the region. This involves ensuring that the ports are efficiently handling the volume and types of cargo required for ongoing trade operations.
- Developing for Future Demands: Beyond the present, NAMPORT is dedicated to developing the ports to meet the future demands of trade and commerce. This forward-

- thinking approach involves infrastructure expansion and improvement to accommodate growing trade volumes and evolving industry requirements.
- Enhancing Regional Trade Competitiveness: NAMPORT contributes significantly to enhancing the competitiveness of the Southern African Development Community (SADC) region's trade. By providing efficient, reliable, and cost-effective port services, it fosters trade growth and facilitates international and regional commerce.
- Facilitating Economic Growth in Namibia: NAMPORT's operations enable economic growth in Namibia, promoting regional development and cross-border trade. The ports serve as vital hubs for trade activities that stimulate economic progress and job creation.
- Promoting Preferred Trade Routes: NAMPORT actively promotes the Ports of Walvis Bay and Lüderitz as preferred routes for maritime trade between SADC, Europe, and the Americas. This positioning strengthens the region's global trade connections.
- Supporting Cross-Border Trade Development: As the founding architects of the Walvis Bay Corridor Group, NAMPORT plays a pivotal role in developing and enhancing crossborder trade corridors. This involves facilitating trade flow across borders and reducing trade barriers.
- Environmental Responsibility: NAMPORT is committed to minimizing the environmental impact of port operations. It adheres to International Organisastion for Standardisation (ISO) standards to ensure responsible and sustainable practices that protect the natural environment.
- Community Support: NAMPORT is actively involved in uplifting and supporting the communities in which it operates. This includes community development initiatives and engagement to improve the well-being of local residents.

(c) <u>Cross Border Volumes</u>

- Significant Growth: NAMPORT has witnessed a substantial increase in cross-border cargo
 volumes, reflecting its vital role in facilitating international trade. The strategic location of
 Namibia's ports, coupled with efficient services, has contributed to this remarkable growth.
- Key Markets: The main markets served by NAMPORT in cross-border trade include South Africa, Zambia, the Democratic Republic of Congo (DRC), and Botswana. These countries

represent crucial trade partners, and NAMPORT's operations play a pivotal role in connecting Namibia to these neighbouring nations.

(d) Main Imports and Exports Products

Port of Walvis Bay

Main Export Commodities:

- Dry Bulk: Notable export items include salt, coal, and copper concentrate.
- Breakbulk: Key commodities consist of marble and granite.
- Containerized: Exported items in containers include charcoal, fish, fish products, copper blisters, and cathodes.

Main Import Commodities:

- Dry Bulk: Imports mainly comprise grains, wheat, and sulphur.
- Breakbulk: Building materials, vehicles, and equipment are significant imports.
- Liquid Bulk: The port handles imports of petroleum products.
- Fish and Fish Products: Imports in this category include various fish and fish products.

Port of Lüderitz

Main Export Commodities:

- Manganese Ore: A primary export commodity from the Port of Lüderitz.
- Zinc: Another significant export item.
- Ice: This export involves frozen goods.

Main Import Commodities:

- Petroleum: The port handles imports of petroleum products.
- Wet Fish: Wet fish imports are a part of the port's activities, contributing to local and regional seafood distribution.

7.2. PART 2: HARDAP REGION

7.2.1. Visit to Rehoboth Train Station

The Rehoboth Train Station, situated just outside the town, features essential infrastructure elements, including a waiting room, an old hotel that is privately owned and presently non-operational, a ticket office, and a post office. Notably, the railway track infrastructure in the

vicinity of this station is in a commendable state, reflecting good maintenance practices. However, it is important to highlight that the station is currently not in use. The potential for its revival hinges on the re-establishment of passenger train services connecting Windhoek and Rehoboth. Yet, it's worth noting that TNHL has confirmed that, at the moment, the operation of passenger trains between Rehoboth and Windhoek is not economically viable. This insight underscores the careful consideration and economic feasibility assessments necessary to make informed decisions about the station's future use.

7.3. PART 3: KHOMAS REGION

7.3.1. Visit to TNHL Locomotive Workshop

The Windhoek repair workshop is strategically situated in Windhoek, occupying the northernmost segment of TNHL's land within the heart of the city. This workshop has been in operation since its establishment in 1960 and has served as the primary facility for locomotive repairs and maintenance within TransNamib. The workshop's infrastructure comprises a robust main steel structure, solid concrete foundations, plinths, and overhead crane gantry girders. During the visit to the repair workshop, the team gained valuable insights into its various repair areas. The locomotive workshop is systematically organized into specialized sections, encompassing wheel repairs, cleaning, engine repairs, electrical repairs, and running repairs and inspections.

Challenges at TNHL Locomotive Workshop:

- Lack of Updated Machinery and Technology: Conversations with supervisors revealed that
 one of the overarching limitations of the Windhoek repair workshop is the absence of
 modern machinery and technology, which can significantly enhance repair efficiency and
 quality.
- 2. Lack of Semi-Skilled Manpower: There is a shortage of semi-skilled personnel, contributing to the workshop's challenges in addressing locomotive repairs and maintenance effectively.
- 3. Insufficient Parts: The workshop faces a shortage of critical spare parts required to complete repairs in a timely manner. The unavailability of essential components hinders repair operations.

- 4. Need for Knowledge Transfer: There is a clear need for knowledge transfer and capacity building for both engineers and artisans working at the workshop. Currently, the workshop employs four senior Zimbabwean artisans who are tasked with training Namibian understudy trainees.
- 5. Financial Constraints: Financial constraints are evident in the inability to purchase spare parts. Acquiring spare parts has become problematic, and timely access to the right spares is a persistent challenge.
- 6. Need for New Locomotives: The existing locomotive fleet is aging, with some units surpassing 50 years in service. To reduce heavy locomotive and wagon maintenance costs and provide efficient service there is a pressing need to invest in the procurement of new locomotives/wagons to ensure reliable and efficient rail operations. Omungulumbashe locomotive/carriage is the sole diesel multi-unit (DMU) and the only passenger locomotive/carriage. If it is to operate, it necessitates backup to allow for service and maintenance times.
- 7. Hydraulic Jacks Acquisition: The workshop requires the purchase of lifting hydraulic jacks to eliminate the need for hiring such equipment from South Africa, thus enhancing self-sufficiency.
- 8. Enhancement of Crane Capacity: The overhead cranes in use presently have a maximum carrying capacity of 30 tons. Expanding this capacity is necessary to accommodate more extensive repair and maintenance tasks for heavier rolling stock.
- Copper and Fuel Theft Concerns: The issue of fuel and copper theft is on the rise, posing security challenges and potential disruptions to railway operations. Addressing this concern is vital to protect critical infrastructure and assets.

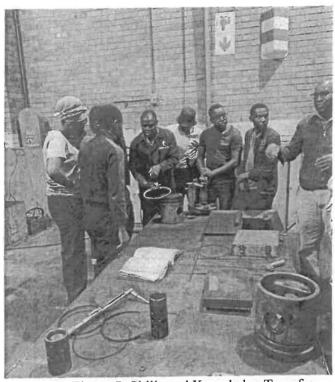


Figure 7: Skills and Knowledge Transfer

7.3.2. Visit to the Windhoek Train Station

The team conducted a visit to the Windhoek train station, which is situated on Bahnhof Street. During the visit, no significant railway infrastructure or operational issues were identified at this station. This positive assessment suggests that the station is currently operating smoothly without notable concerns affecting its rail-related functions. Nonetheless, there exists a pressing need for modernizing operations not only at this station but also at the associated radio control facilities. This imperative stems from the recognition that such modernization efforts can significantly enhance efficiency, safety, and overall system performance in alignment with contemporary industry standards.

7.4. PART 4: ERONGO REGION

7.4.1. Visit to the Walvis Bay Train Station

The Walvis Bay train station, with its focus on bulky and containerized cargo, plays a pivotal role in the region's logistics landscape. The station boasts twelve active sidings and five harbour connections. While there were previously four shunting operations per day, this has now reduced to two. It's evident that the Walvis Bay railway holds a central position as the lifeblood of the

region, intricately linked to the operations of the adjacent harbor. During the visit, several challenges were observed and brought to the attention of the delegation. These challenges span various facets of the station's operations:

- 1. Staff Complement: The station is meant to have a staff complement of sixteen (16) personnel, but currently, it operates with only eight (8), underscoring the need for additional human resources. It became evident that the non-competitive salary structure of TNHL hinders the recruitment of skilled personnel.
- 2. Unreliable Rolling Stock: The issue of unreliable rolling stock, which includes locomotives, emerged as a critical concern. The station faces challenges related to the outflow of skilled personnel, with the building and equipment showing signs of wear and tear.
- 3. Maintenance and Overwork: Locomotives operating at the station are overworked and lack proper maintenance. Notably, there is no standby locomotive available, and locomotive repairs necessitate outsourcing to the private companies. The station has resorted to leasing three locomotives to meet operational demands.
- 4. Communication: Communication challenges persist, with two-way radio communication limited to the route from Walvis Bay to Arandis. This restricted coverage can hamper operational efficiency.
- 5. Training Facilities: Inadequate training facilities were evident during the visit. An ongoing truck driver training program conducted in the ticket office highlighted the need for more suitable training spaces.
- 6. Infrastructure Upgrading: This crucial project, which commences from Walvis Bay and extends toward Kranzberg, holds the promise of enhancing the region's transport and logistics capabilities. This notable development is the ongoing infrastructure upgrading initiative, with an expected completion date set for November 2023. The modernization of infrastructure along this route represents a substantial step towards bolstering the region's connectivity and trade competitiveness, aligning with Namibia's broader development goals. Looking ahead, the successful completion of this upgrading project is poised to play a pivotal role in facilitating efficient and reliable transportation throughout the region, ultimately fostering economic growth and prosperity.

The delegation also visited the Walvis Bay workshop, where they were informed about wagon repairs. Interestingly, the workshop has seen a significant decline in wagon wheel repairs, with the number decreasing from twenty to seventy wheels per year in the past to none in the last five years. In terms of infrastructure, it was observed that the rail connection to the workshop had been removed during the construction of fuel tanks and was never reinstated. Additionally, the uplifter (crane) at the workshop has ceased to operate due to age-related issues and the impracticality of replacement. These challenges underscore the pressing need for infrastructure and equipment modernization to enhance the station's operational efficiency and capacity.

7.4.2. Visit to Erf 8677 (TransNamib Property in Swakopmund)

The meeting with the Chief Executive Officer, the Councillor, and the Engineer from Swakopmund Municipality shed light on the strategic significance of Erf 8677. This particular piece of land is seen as a pivotal contributor to the town's future growth and development, aligning with the Municipality's broader Strategic Vision. While the location holds considerable potential for fostering the town's expansion, it also presents certain limitations due to the existing rail infrastructure. In line with the Municipality's vision and to facilitate the town's growth, there's a proposal to either sell a portion of Erf 8677 or arrange for an exchange that would serve the interests of Swakopmund Municipality. Situated at the heart of the town, this land is well-suited for value addition and has been earmarked for the construction of a mall. However, the land's ownership has been subject to dispute, notably stemming from its sale under the leadership of Nanda via a 99-year Lease Agreement.

The meeting also brought to the fore key challenges concerning the railway network and facilities, leading to several proposed solutions:

- 1. Integration into Urban Planning: The opportunity to develop land closer to the Central Business District (CBD) was discussed, with a suggestion for potential railway realignment to facilitate urban expansion.
- 2. National Road System: The establishment of an efficient national road system was raised as a priority, linking to railway infrastructure enhancements.

- 3. Utilizing Fuel Levies: Exploring the possibility of allocating fuel levies to bolster railway infrastructure was among the proposals, potentially contributing to the growth and efficiency of the rail network.
- 4. Multi-Purpose Railway Usage: The suggestion to retain the existing rail line for smaller freight, thus allowing for a diversified usage approach, was discussed.
- 5. Trans-Zambezi Corridor Railway Improvement: Recognizing the need to enhance the railway infrastructure from Grootfontein as a strategy for TransNamib's profitability was also addressed.

The discussion provided valuable perspectives for addressing the complex relationship between land development, rail infrastructure, and the town's strategic goals, paving the way for informed decisions and actions.

7.4.3. Site visit to Arandis Train Station

The property at Arandis Train Station is under TransNamib's ownership, yet it currently remains non-operational. During the station's history, there was a railway police station that served the community, and the visit highlighted the potential benefits of its reinstatement. Additionally, there was a past provision of passenger services at this station, which raises the possibility of reintroducing these services to cater to the needs of the local population. This information underscores the historical significance of Arandis Train Station in terms of both rail and community services. By reevaluating the feasibility of reintroducing these services, the station could play a more active role in the region's transportation and public welfare, enhancing its value to the local community and the railway network.

7.4.4. Visit to Usakos Train Station

The Usakos Train Station presents a significant historical and infrastructural asset. The station building, although currently in a dilapidated and non-operational state, remains under the ownership of TransNamib. In the past, the station played a role in accommodating road trucks, but with the changing times, road transportation services is no longer in use by TNHL. During discussions on-site, it became evident that the reliability of locomotives has been a challenge, leading to service delays. In light of this, a potential solution was proposed—to repurpose the

Usakos Train Station as a crossing station for trains. Given its strategic location where trains from Walvis Bay and Windhoek intersect and exchange, this transformation could significantly enhance operational efficiency. The Usakos Train Station, despite its current condition, carries the potential to contribute to the optimization of rail services in the region. By reimagining and repurposing this station as a crossing point for trains, it is possible to address the challenges posed by locomotive reliability and improve the overall functionality of the railway network in the area.

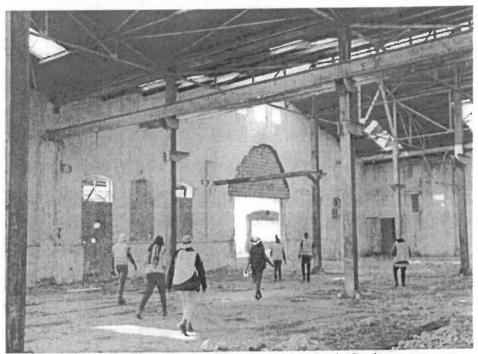


Figure 8: Dilapidated Usakos Train Station

7.4.5. Site visit to Kranzberg Railway Station

Kranzberg Railway Station, strategically positioned between the towns of Karibib and Usakos, serves as a pivotal point where the railway line from Windhoek diverges into two distinct routes. One line extends westward, connecting to Swakopmund and Walvis Bay, while the other proceeds in a north-eastern direction toward Omaruru and Tsumeb. This configuration leads to a unique situation where trains traveling between Walvis Bay and Windhoek cross and exchange drivers, regrettably resulting in unavoidable overtime payments.

During the visit to Kranzberg Railway Station, the committee members were made aware of a pressing issue: the high incidence of theft of railway components in the vicinity. This problem

necessitated the implementation of anti-theft springs to safeguard railway tracks and equipment. Vandalism of railway tracks not only leads to financial losses but, more critically, poses significant safety risks. Instances of theft, wherein railway materials disappear from the scene while trains are scheduled to travel, have exacerbated the challenge. In response to this issue, the committee proposed the introduction of a Cabinet Directive to address theft. The directive would empower authorities to arrest anyone found in possession of stolen railway materials, thereby acting as a deterrent, and promoting the safety and security of the railway network in the area. The anti-theft measures and proposed directives underscore the importance of safeguarding railway infrastructure and ensuring the efficient operation of the railway system in the region.

7. CONCLUSION

The oversight visits to TransNamib's railway infrastructure management across the //Kharas, Hardap, Khomas, and Erongo regions have yielded invaluable insights into the state of the railway services and related facilities. These visits, designed to evaluate strengths, accomplishments, challenges, weaknesses, limitations, and threats, have illuminated critical considerations. The Government of the Republic of Namibia remains steadfast in its commitment to improving the nation's transportation infrastructure. This unwavering commitment is intrinsically linked to the overarching goals of reducing poverty and fostering economic growth, positioning transportation as a pivotal catalyst for progress. Furthermore, the development of transport infrastructure, especially in linking the Walvis Bay seaport to the hinterland and neighbouring nations, stands as a cornerstone in achieving Namibia's Vision 2030. These infrastructure advancements are integral in enhancing Namibia's trade competitiveness within the Southern African Development Community (SADC) sub-region. By rectifying the bottlenecks within the railway transport infrastructure, Namibia is primed to maximize its role in the broader logistics value chain, enabling seamless trade and reinforcing its economic standing.

The oversight visit has unveiled the multifaceted importance of railway infrastructure in stimulating economic growth, improving connectivity, and facilitating trade. These factors are fundamental components of Namibia's journey towards a more prosperous and interconnected future. The findings from this visit serve as the bedrock for well-informed decision-making and strategic planning, aimed at elevating the country's railway and transport sector. The collaborative

efforts of all stakeholders are essential to realizing the full potential of Namibia's railway sector and advancing the nation's developmental ambitions. The visit by the members of parliament has provided invaluable insights into the management and condition of the region's railway infrastructure. Notably, several ongoing and proposed projects align with Namibia's ambitious long-term Vision 2030, aimed at enhancing the nation's logistics value chain by addressing critical railway infrastructure bottlenecks. Furthermore, the initiatives discussed during the visit possess the potential to significantly enhance Namibia's trade competitiveness, extending their impact to benefit the entire Southern African subregion. Focusing on the development and improvement of railway infrastructure, these projects contribute not only to Namibia's economic growth but also to regional integration and cooperation within the Southern African Development Community (SADC).

This visit has underscored the pivotal role that railway infrastructure plays within the broader context of national and regional development. It is imperative that these efforts continue to receive the necessary support and resources to ensure the successful realization of their objectives, ultimately propelling Namibia closer to the aspirations outlined in Vision 2030.

8. RECOMMENDATIONS

The oversight visit to the railway infrastructure has unearthed several critical areas that merit strategic attention and intervention. These recommendations aim to drive progress and enhance the role of railway infrastructure in the economic development of Namibia and the broader Southern African region. Effective implementation of these measures requires collaboration among various stakeholders and commitment to the vision of a robust, efficient, and integrated railway network. These recommendations are aimed at optimizing the utilization and performance of Namibia's railway network.

 Synergistic Collaboration: Encourage state-owned enterprises like NAMPORT and TransNamib to establish collaborative synergies in the realm of business development. This partnership will harness the strengths of each entity and foster mutually beneficial outcomes.

- 2. Private Operator Engagement: TransNamib should explore the possibility of allowing private operators to utilize the rail network through concession agreements. This approach can invigorate the rail sector, enhance efficiency, and stimulate competition, ultimately resulting in improved services. It should be noted that this could compromise the terms of the loan TNHL intends to take from the DBSA, as TNHL will be required to generate sufficient cash flow to repay the loan.
- 3. Railway Infrastructure Enhancement: The government should prioritize the comprehensive upgrade of the railway infrastructure to attract more businesses to TransNamib. The upgrade aims to ensure that all lines adhere to the SADC standard of a minimum of 18.5 tons per axle and includes the introduction of longer loop lines to accommodate extended (air brake) trains on the national network. This includes the following critical initiatives:
 - a) Ariamsvlei Seeheim Railway Section: Undertake maintenance and upgrading of the Ariamsvlei Seeheim railway section to enhance connectivity (South Africa Northern Cape Mines) and operational efficiency.
 - b) Sandverhaar Buchholzbrunn Railway Line: Upgrade the Sandverhaar Buchholzbrunn Railway Line between km 42.828 and km 82.898. This vital corridor requires immediate attention to rectify existing infrastructure issues.
 - c) Aus Lüderitz Railway Line: Construct a Sand Shelter Tunnel between Km 294,100 and Km 298.500, to mitigate the accumulation of windblown sand on the railway line. Additionally, consider the construction of a railway link to the deepwater port of Lüderitz at Angra Point.
 - d) Oshakati Ondangwa Railway Line: Focus on the development of the Oshakati
 - Ondangwa Railway Line to bolster regional connectivity and trade between economic centers in the country.
 - e) Trans-Zambezi Railway Corridor (Walvis Bay-Tsumeb and Otavi-Grootfontein Rail Links): Prioritize the upgrading, rehabilitation, and extension of the Trans-Zambezi Railway network to connect to the Zambian railway network to facilitate cross-border trade and regional integration.

f) Trans-Kalahari Corridor (Windhoek-Gobabis railway link): Expedite the upgrading and further development of the Trans-Kalahari Corridor Railway, a critical component for regional trade and connectivity.

Both for the greenfield and brownfield projects it is recommendable to explore the adoption of ballastless track systems (such as Tubular Track System), particularly in desert regions and areas with significant wildlife and livestock presence. This eco-friendly and cost-effective approach can reduce maintenance and construction expenses while improving operational safety and efficiency.

- 4. Logistics Hub Positioning: Empower Namibia to strengthen its positioning as a logistics hub, aligning infrastructure development with its strategic role in regional trade and commerce.
- 5. Infrastructure Maintenance Subsidies: Consider subsidizing the maintenance of critical infrastructure, including railway stations and associated facilities. This will ensure their sustained functionality and operational readiness.
- 6. Establishment of the Namibia Railway Safety Regulator (NRSR): The establishment of the Namibia Railway Safety Regulator is of paramount importance in enhancing the safety and efficiency of the railway network. The NRSR will play a pivotal oversight role in ensuring the safety of the railway system, proactively improving its standards, and preventing safety incidents. The key mandates of this body may include:
 - a) Progressive Monitoring: The NRSR will be responsible for implementing progressive monitoring practices. This involves continuous surveillance to identify and address potential safety hazards before they happen or escalate into major incidents. Regular inspections of the railway network, coupled with comprehensive safety audits of rail operators' systems, will be integral to this effort.
 - b) Railway Safety Incidents Investigation: The NRSR will serve as the primary authority responsible for investigating railway safety incidents. In the event of accidents or safety breaches, the NRSR will conduct thorough investigations to identify root causes.

The findings of these investigations will be instrumental in establishing comprehensive protocols aimed at preventing the recurrence of such incidents in the future.

- c) Regulations Enforcement: Ensuring strict adherence to safety regulations and protocols is a critical function of the NRSR. The body will be entrusted with the authority to enforce safety interventions, which may include the issuance of relevant enforcement notices and directives. By enforcing compliance with safety measures, the NRSR will contribute to a safer and more secure railway network.
- d) Safety Promotion: The NRSR should actively engage in safety promotion and awareness campaigns to educate both railway staff and the public on safety best practices and protocols. Enhancing safety culture and knowledge will be pivotal to minimizing railway safety risks.
- e) Collaboration: The NRSR should work closely with TransNamib, other relevant authorities, and industry stakeholders to collectively address safety challenges and improve the overall safety standards of the railway network.
- f) Research and Development: The NRSR should invest in research and development initiatives to identify innovative solutions and technologies that can enhance railway safety. Regularly reviewing and updating safety standards and protocols will be crucial to keeping pace with advancements in the industry.
- 7. Establishment of Namibia Railway Authority (NRA): The establishment of the Namibia Railway Authority (NRA) is a critical step in the effective management and development of Namibia's railway infrastructure. The NRA's primary focus will be on regulating and overseeing the country's railway operations, ensuring that they align with national objectives and adhere to the highest standards of safety, efficiency, and sustainability. The establishment of the NRA will significantly contribute to the efficient, safe, and sustainable management of Namibia's railway sector. By actively engaging in policy formulation, regulation, infrastructure development, safety measures, and investment promotion, the NRA will foster a more vibrant railway industry that aligns with the nation's development aspirations.

The key functions and responsibilities of the NRA may encompass:

- a) Policy Formulation: The NRA will actively participate in the development and formulation of policies related to the railway sector. These policies should promote railway services that are efficient, reliable, maintainable, and safe, thereby supporting the nation's broader economic and developmental goals.
- b) Regulatory Oversight: The NRA will serve as the regulatory authority for all railway development, maintenance, and operations in Namibia. This includes monitoring railway service providers to ensure they adhere to safety standards, service quality, and environmental regulations.
- c) Infrastructure Development: The NRA will actively engage in the planning and development of railway infrastructure projects, by working closely with the Ministry of Works & Transport and Ministry of Finance and Public Enterprises. This includes overseeing the expansion, upgrading, and maintenance of railway lines and related facilities to meet the evolving needs of the nation.
- d) Investment and Financing: The NRA will explore avenues for attracting both domestic and foreign investments into the railway sector. This will involve the identification of financing sources and mechanisms to support railway projects that contribute to the nation's economic growth.
- e) Safety and Security: Ensuring the safety and security of railway operations will be a top priority for the NRA. It will collaborate with relevant authorities including NRSR to address safety concerns and enhance security measures across the railway network.
- f) Sustainability: The NRA will work towards making railway operations more sustainable. This includes exploring initiatives that reduce the environmental impact of railway services, improve energy efficiency, and promote responsible resource management.
- g) Market Competition: The NRA will encourage fair competition in the railway sector, promoting market efficiency and offering opportunities for private sector participation.

- h) Research and Development: Investing in research and development initiatives will be essential for staying abreast of industry advancements and innovations. The NRA will collaborate with relevant stakeholders to explore technologies and practices that can enhance railway services.
- 8. How can TransNamib (TNHL) be profitable again? While the path to profitability for TransNamib is challenging, it is feasible with the right strategies and support. Recognizing the importance of the workforce, leveraging the available business opportunities, and addressing rolling stock challenges are key steps toward achieving profitability. The assistance and commitment of various stakeholders are crucial in this endeavor. The following aspects are recommended to assist TNHL be profitable again.
 - Prioritizing the Workforce: The most vital aspect of TNHL's success is its people. It's essential to recognize that TNHL is more than just infrastructure and assets; it's a company driven by its employees. Empowering and capacitating the workforce, as well as ensuring fair remuneration, are crucial steps toward profitability.
 - Building a National Asset: TNHL plays a significant role in building a national asset for Namibia's future. A thriving railway company not only supports the economy but also contributes to the long-term development of the nation.
 - Leveraging the Business Case: TNHL has a strong business case, given the availability of freight. Leveraging this potential is essential for profitability. Amendments to legislation should be considered to facilitate the movement of dangerous goods and heavy freight by rail. This is intended to protect national roads and enhance freight movement, particularly when TransNamib has the capacity to handle additional volumes.
 - Competing with Road Transport: To regain profitability, TNHL needs to address challenges related to competing with road transport. This involves overcoming issues related to old and unreliable rolling stock and railway infrastructure. Due to emerging oil, gas, and green hydrogen markets, it is essential for the government to ensure sufficient investment in the railway sector is made at this time. This is necessary to ensure that transportation corridors are operational at full capacity.
 - Development Bank of Southern Africa (DBSA) Loan: The DBSA loan is a critical component in addressing the rolling stock shortfall. This loan will support the acquisition of 20-25

locomotives, remanufacturing 10 locomotives, acquiring 300 wagons/tankers, upgrading workshops and equipment, and providing necessary training.

While the delivery period is estimated at 24-36 months, there is an immediate need for assistance between now and the delivery of these resources. TNHL will submit a detailed situational analysis and financial breakdown to the Ministry of Finance and Public Enterprise to propose the assistance required. This is intended to maintain operations until new rolling stock can be procured.

Comprehensive 5-Year Plan: TNHL's road to success involves implementing a comprehensive 5-year plan. This plan aims to increase the tonnage transported from 1.5 million to 4 million tonnes per annum, significantly boosting revenue and profitability.

7. SIGNATURES

| Hon. | Ithete | Natangy | é |
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