

Annexure

A. Deep dive into case studies

Monetising non-core assets through sell and scrap removes assets from the balance sheet while generating cash for reinvestment

India

IREPS and Mission Zero scrap: condemnation as classification

By the mid-1980s, Japan National Railways carried cumulative debt of USD 257 billion, one of the largest ever accumulated by a state-owned enterprise. The government established the JNR Settlement Corporation to classify and dispose of 8,808 hectares identified as non-core. Over eleven years, it sold 7,972 hectares for USD 49.7 billion. However, the programme did not achieve the debt reduction it was designed to deliver: political interference blocked sales at the peak of land prices in the late 1980s, and the market collapse in 1991 forced sales into a downturn. The institutional framework was solid; the timing was not.

Key learnings from India

1. A dedicated disposal vehicle with genuine operational independence is a necessary condition because political interference destroys timing discipline
2. Classification unlocks the mechanism; it does not guarantee the outcome if sales are driven by political convenience rather than market discipline
3. Every year Transnet delays disposing of urban-adjacent rail land is value permanently lost.

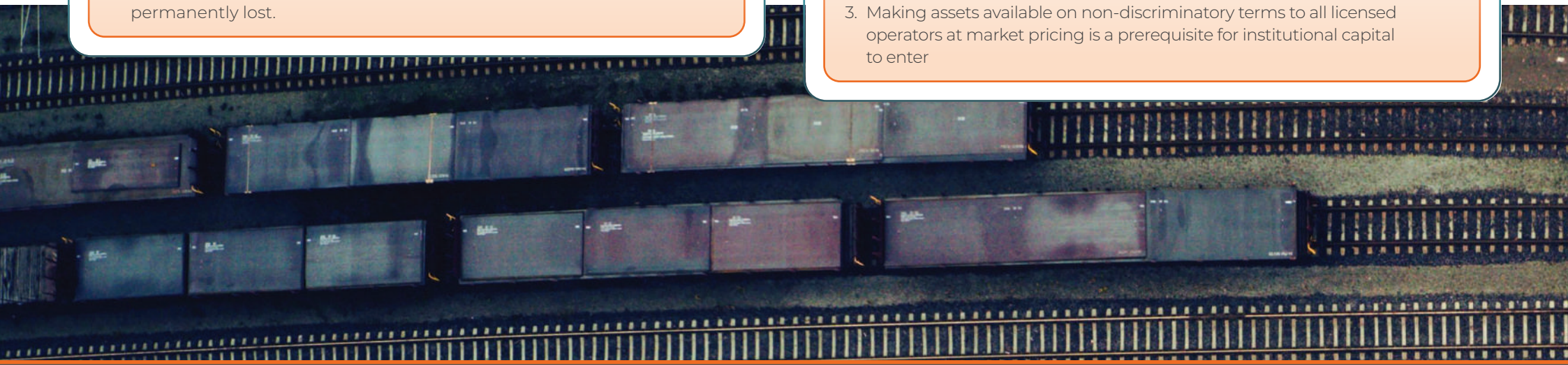
Japan National Railways

Selling surplus land to relieve balance sheet

Japan's national railway had spent 40 years expanding into places it had no business serving – lines with no passengers. By 1987 the debt was USD 256 trillion; no operational turnaround could fix that. Japan made a structural decision: break the operating railway into seven clean new companies (the JR Group) and create a separate JNR Settlement Corporation to deal with the damage, including the debt, the surplus land and the stranded employees. The Settlement Corporation sold 7,972 hectares of urban rail land over 11 years, generating USD 53 billion. The Shiodome site in central Tokyo alone raised USD 3.4 billion. Even then, USD 128 trillion in residual debt remained and was absorbed by Japanese taxpayers.

Key learnings from Japan

1. Structural separation is the precondition for reform: the JR companies could only succeed because they started without the legacy debt on their books
2. Urban land is the hidden asset in most old railways: decades of right-of-way acquisition leaves prime city-centre plots sitting idle
3. Making assets available on non-discriminatory terms to all licensed operators at market pricing is a prerequisite for institutional capital to enter



Concession programmes that worked matched mechanism to classification

Brazil

RFFSA dissolution, 1997: classification before concession

By the mid-1990s, Brazil's state-owned Rede Ferroviária Federal, Sociedade Anônima (RFFSA) had accumulated decades of underinvestment, high debt, and deteriorating infrastructure. Regional branch lines could not cover operating costs. The government offered 30-year concessions through competitive tender, requiring operators to meet binding production targets, reduce accident rates against a fixed baseline, and pay concession fees of 3–10% of net revenue. Freight volumes grew from approximately 60 billion tonne-kilometres in 1997 to over 300 billion by 2012. The model worked because classification determined which assets were available for concession; competition and regulation determined whether operators delivered.

Key learnings from Brazil

1. Classification came first when the state identified what to retain before anything went to market
2. Binding production targets and concession fees converted operating rights into revenue-generating instruments
3. Competition in the concession award, not just the concession structure, is what produced performance

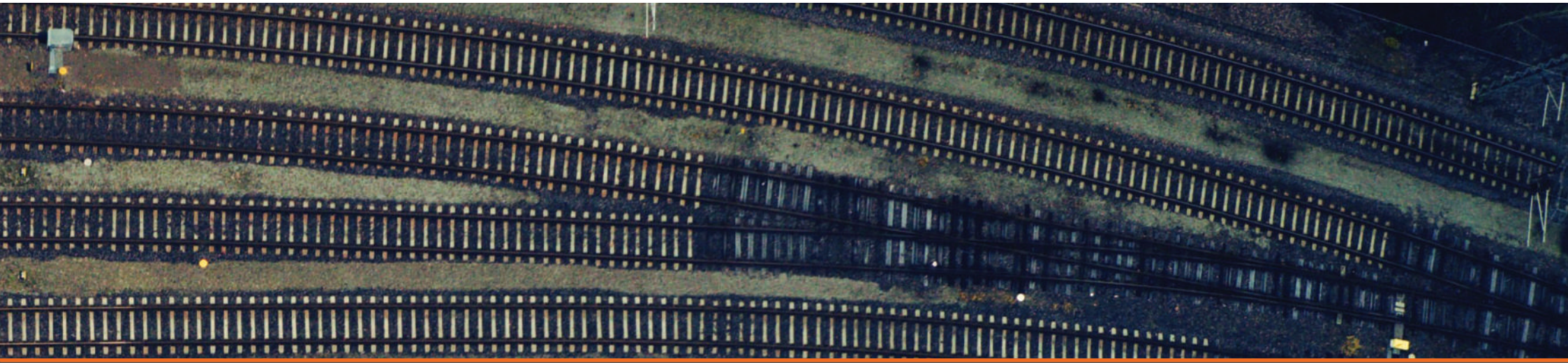
Mozambique

Nacala vs Beira: the structure is the difference

Mozambique offers two cases with opposite outcomes. The Nacala model bundled 912 kilometres of rail with yards, terminals, and deep-water port access into a single agreement, anchored by Vale's coal exports. Secondary spurs that could not sustain a concession independently found a commercial role inside the larger logistics chain, and the bundle attracted $2.7 billion in investment. The Beira corridor, structured without that integration, failed within seven years and was returned to state management in 2011. The difference was not operator quality; it was the structure.

Key learnings from Mozambique

1. Assets that cannot attract a concessionaire alone may be viable inside a bundled corridor where anchor shippers provide the volume floor
2. Port integration is not a bonus but is often the commercial anchor that makes corridor concessions viable
3. Structure determines outcome more reliably than operator quality



Leasing non-core rail assets is feasible now, but scale requires clear asset classification and a published pipeline to attract private operators

Australia

VicTrack: classification-first leasing of surplus rail land

When lines closed and operations consolidated, VicTrack faced the same tension Transnet faces on finding ways to monetise surplus rail land without permanently relinquishing the state's right to reclaim it. Its response was a classification gate. This meant every lease application was assessed fortnightly to determine whether the land was required for transport then or in the future. Only land that passed the assessment proceeded to the Department of Transport for clearance, then to execution. The result is a portfolio of over a thousand tenancies across retail, pastoral grazing, telecommunications, and heritage rail.

Key learnings from Australia

1. Classification is the precondition; without it, not a single lease can be executed
2. The gate only works if it is embedded in a standing institutional process with legal effect
3. A functioning leasing pipeline requires both the classification framework and the institutional process that makes it operational

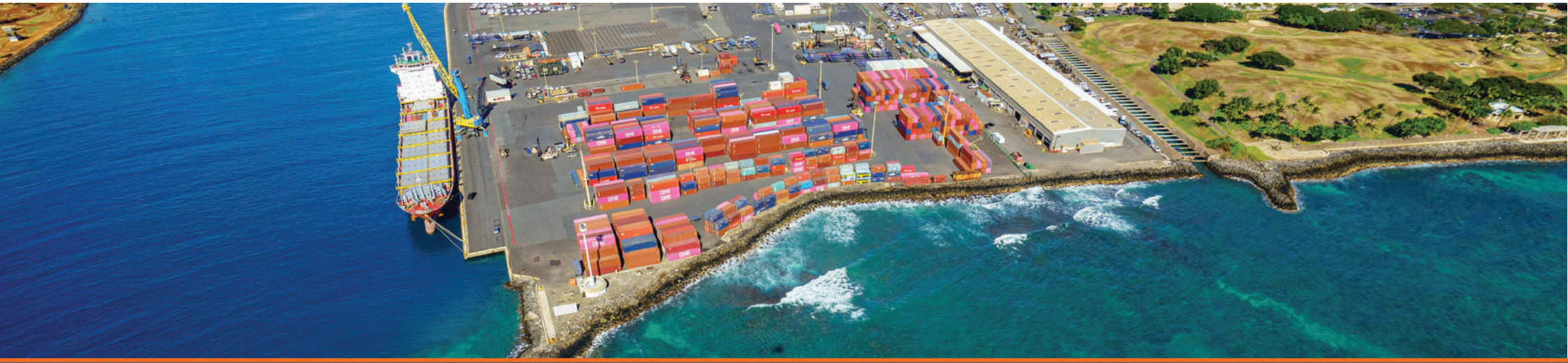
South Africa's early evidence

TRIM siding lease programme

TRIM has been leasing sidings, marshalling yards, and depot buildings as part of its non-core property disposal programme. Assets are placed to market through formal RFPs under existing procurement provisions, with private operators invited to lease and operate facilities under commercial obligations. Crucially, the programme has proceeded without any new legislative framework, demonstrating that the institutional machinery for infrastructure leasing already exists within TRIM's current mandate. The March 2026 siding RFPs are the first material evidence of asset-level transactions reaching the market.

Key learnings from South Africa

1. The programme demonstrates institutional momentum for leasing non-core assets that can be scaled
2. Infrastructure leasing is legally and institutionally feasible under existing frameworks
3. A systematic, published pipeline timeline would accelerate private sector participation



Leasing is already happening in South Africa; however, concentrating all assets through a single vehicle inhibits competition

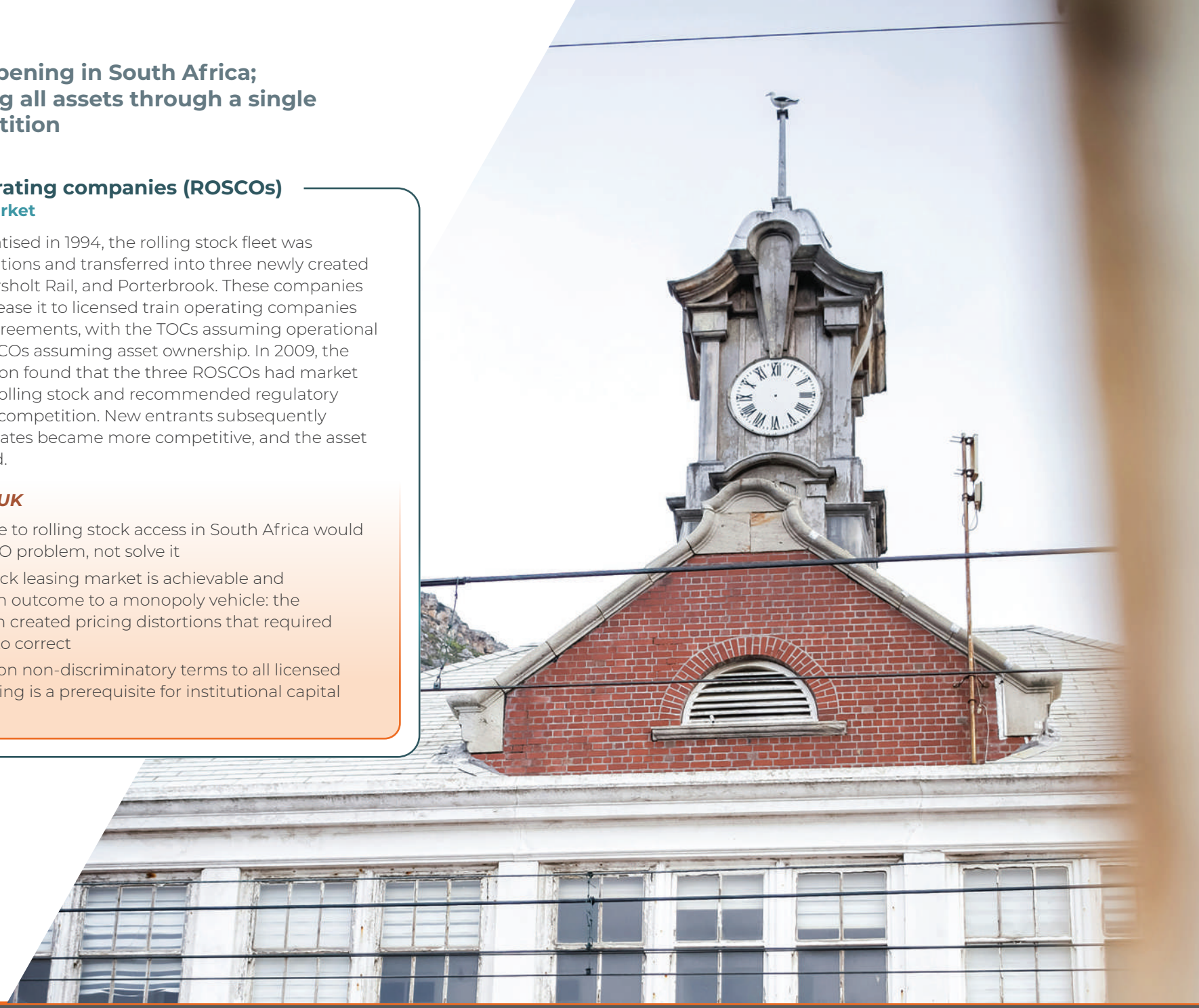
UK rolling stock operating companies (ROSCOs)

A competitive leasing market

When British Rail was privatised in 1994, the rolling stock fleet was separated from train operations and transferred into three newly created ROSCOs: Angel Trains, Eversholt Rail, and Porterbrook. These companies own the rolling stock and lease it to licensed train operating companies (TOCs) under long-term agreements, with the TOCs assuming operational responsibility and the ROSCOs assuming asset ownership. In 2009, the UK Competition Commission found that the three ROSCOs had market power on certain types of rolling stock and recommended regulatory interventions to introduce competition. New entrants subsequently entered the market, lease rates became more competitive, and the asset ownership base broadened.

Key learnings from the UK

1. LeaseCo as the sole route to rolling stock access in South Africa would replicate the early ROSCO problem, not solve it
2. A competitive rolling stock leasing market is achievable and demonstrably superior in outcome to a monopoly vehicle: the early single-lessor design created pricing distortions that required regulatory intervention to correct
3. Making assets available on non-discriminatory terms to all licensed operators at market pricing is a prerequisite for institutional capital to enter



B. Policy

The instruments that mandate, shape, and constrain the classification and disposal of Transnet's assets.

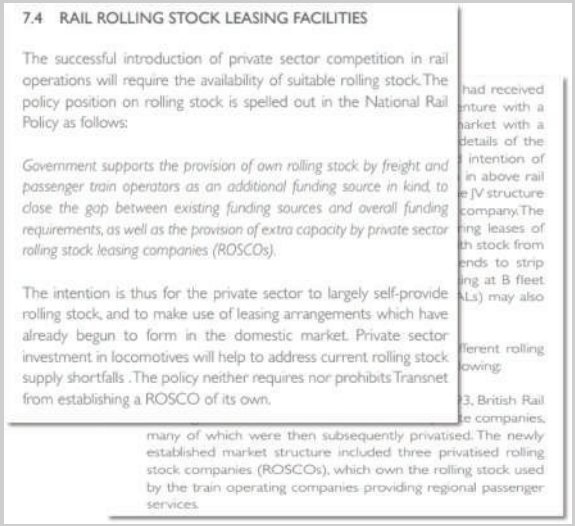
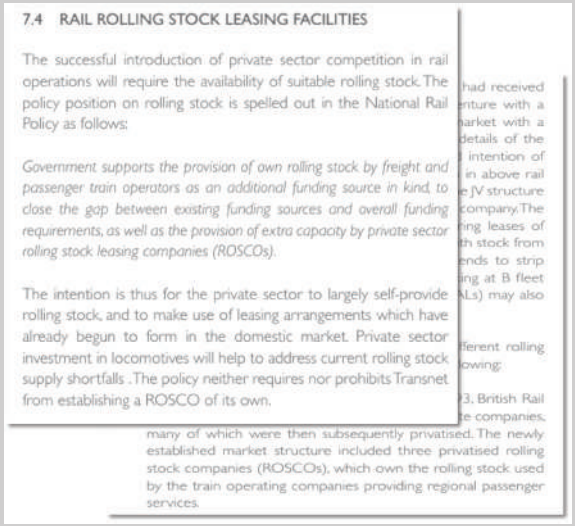
1. Purpose of this annexure

The classification and disposal framework applied in this report does not emerge from Anura Partners' analysis alone. It is grounded in a chain of policy, fiscal, and structural reform instruments that, taken together, constitute both the legal mandate and the practical architecture for non-core asset disposal at Transnet. This annexure sets out each instrument in sequence, states its category, and explains its specific relevance to the classification and disposal question this report addresses.

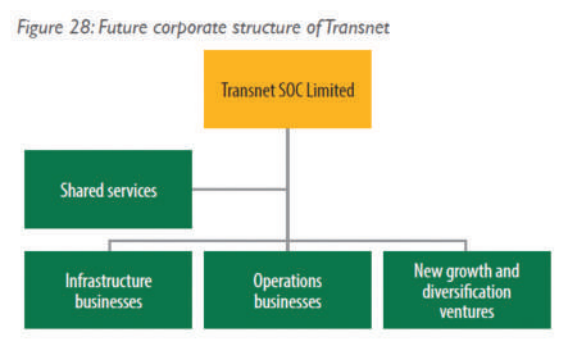
Logistics function property is core; residential, commercial and undeveloped land are candidates for disposal

Asset class	*Decision logic policy grounding*	
	Does it have a logistics function?	*Is it core to the network?*
1 *Property*	**Freight Logistics Roadmap (FLR) Section 5.3 and Appendix 9** Property portfolio described as the "quick win" non-core disposal vehicle. Distinction required between: a. property with logistics function (core – access roads, maintenance yards, operational sidings); b. residential housing (non-core – human settlements mandate); c. commercial buildings (non-core – not logistically functional); d. undeveloped land parcels (assess case by case).	*Table 8: Network category route length and freight potential* Bulk mineral corridors (BMC): Route length 2 241, % assigned route length 12%, Assessed potential, billion tonne-km 127,5, % assessed freight potential 61% Coal: 846, 4%, 53,9, 26% Iron ore: 939, 5%, 64,3, 31% Magnetite: 574, 3%, 9,3, 4% Core rail network (CRN): 4 818, 25%, 70,9, 34% Feeder lines: 5 316, 28%, 8,2, 4% Short lines: 6 532, 35%, 1,3, 1% Total assigned routes: 18 907, 100%, 207,9 Unassigned lines (PRASA/private/sold/uplifted): 1 876, n/a **FLR Section 8, Table 8** Bulk mineral corridors (12% of route length, 61% of freight potential) and core rail network connecting major economic nodes (25% of route length, 34% of freight potential). Both categories are commercially viable at potential volumes and must remain under TRIM ownership. **FLR Section 8, Table 8** Short lines (35% of route length, 1% of freight potential) are non-core – candidates for closure or private sector takeover with right-of-way preserved. Feeder network (28% of route length, 4% of freight potential) is borderline – not independently viable but contributes to core density; concession candidates rather than disposal candidates.

Refurbishable rolling stock stays in TFR; B-fleet wagons and obsolete diesel locomotives route to ROSCO JVs or disposal

Asset class	*Decision logic policy grounding*	
	Is this an operations business unit?	***Can it be redeployed in TRF?***
2 ***Rolling stock***		
	FLR Section 7.4	**FLR Section 7.4**
	Existing fleet assessed for sale to private sector where Transnet cannot refurbish or deploy. “It may be desirable to evaluate whether components of the existing fleet at Transnet are suitable for sale to the private sector.” B-fleet wagons and diesel locomotives explicitly identified as ROSCO JV candidates. Section 5.3: “Transnet Engineering intends to strip and refurbish 20 diesel locomotives, and is also looking at B-fleet wagons.”	B-fleet wagons and diesel locomotives explicitly identified as ROSCO JV candidates. Section 5.3: “Transnet Engineering intends to strip and refurbish 20 diesel locomotives, and is also looking at B-fleet wagons. Guarantee requires disposal of B-fleet and obsolete rolling stock.”

Only infrastructure-owning operations are core; train operations and engineering are contestable and route to commercialisation

Asset class	*Decision logic policy grounding*	
	Is this an operations business unit?	***Does it own infrastructure?***
3 ***Business units***	 **FLR Section 11 and Figure 28 (future corporate structure)** Operations business units are positioned within "operations businesses" in the future corporate structure – potentially a competitive market participant rather than a core state-retained asset.	**FLR Section 6, Principle 1** "The rail network and national ports are national assets that must be managed in order to maximise social benefits." Public ownership of infrastructure is a non-negotiable principle. **FLR Section 7.2** TRIM owns and manages rail infrastructure on behalf of the state. TFR operates trains. This separation provides the structural basis: TRIM assets are sovereign and cannot be sold; TFR-associated assets (rolling stock, operational depots) are commercial and potentially disposable or concessionable. ***Further analysis*** **FLR Section 11 and Figure 28 (future corporate structure)** Operations business units are positioned within "operations businesses" in the future corporate structure – potentially a competitive market participant rather than a core state-retained asset. The question of whether certain functions are core or contestable is identified as requiring **further analysis**.

Infrastructure is retained under TRIM; investment is prioritised where anchor freight and rehabilitation needs are greatest

Asset class

4

Infrastructure

Decision logic policy grounding

Is this a core sovereign asset?

FLR Section 6, Principle 1

"The rail network and national ports are national assets that must be managed in order to maximise social benefits." Public ownership of infrastructure is a non-negotiable principle. Section 7.2: "The Infrastructure Manager will assume ownership of rail infrastructure on behalf of the state." Infrastructure can be concessioned for management, not sold.

FLR Section 7.2

TRIM owns and manages rail infrastructure on behalf of the state. TFR operates trains. This separation provides the structural basis: TRIM assets are sovereign and cannot be sold; TFR-associated assets (rolling stock, operational depots) are commercial and potentially disposable or concessioned.

FLR Section 7.5

The National Ports Act, Section 3(2) requires the establishment of the NPA (Pty) Ltd as a state-owned company wholly owned by Transnet. "The National Ports Authority will be the landlord of the South African ports and will own all the land and the port infrastructures within the port estates." Greater private sector involvement is sought through leases and concessions, not asset sales.

Is there anchor freight flowing on this asset?

FLR Section 8, Table 8

Bulk mineral corridors (12% of route length, 61% of freight potential) and core rail network connecting major economic nodes (25% of route length, 34% of freight potential). Both categories are commercially viable at potential volumes and must remain under TRIM ownership.

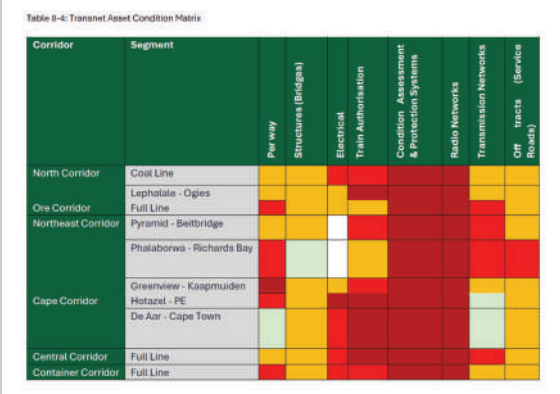
Table 8: Network category route length and freight potential

	Route length	% assigned route length	Assessed potential, billion tonne-km	% assessed freight potential
Bulk mineral corridors (BMC)	2 241	12%	127,5	61%
Coal	846	4%	53,9	26%
Iron ore	939	5%	64,3	31%
Magnetite	574	3%	9,3	4%
Core rail network (CRN)	4 818	25%	70,9	34%
Feeder lines	5 316	28%	8,2	4%
Short lines	6 532	35%	1,3	1%
Total assigned routes	18 907	100%	207,9	
Unassigned lines (PRASA/private/ sold/uplifted)	1 876		n/a	

Market strategy must be based on real world demand.
Draft National Rail Master Plan (NRMP) Section 12.5

High-demand / high-engineering projects represent the NRMP's most immediate and economically significant intervention set, because they address corridors where market demand is strongest, engineering constraints are most acute, and early investment can unlock the greatest gains in capacity.
NRMP Section 17.4.1, Table 14-1 to 4

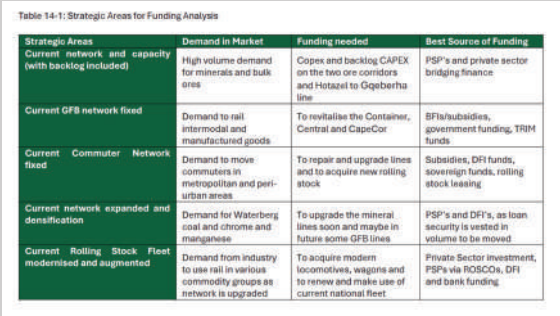
Does the asset require rehab or replacement?


Table 8-4: Transnet Asset Condition Matrix

Corridor	Segment	Per way	Structures (Bridges)	Electrical Train Authorisation	Condition Assessment & Protection Systems	Radio Networks	Transmission Networks	Off tracts (Service Roads)
North Corridor	Coal Line							
Ore Corridor	Lephalale - Ogies							
	Full Line							
Northeast Corridor	Pyramid - Beitbridge							
	Phalaborwa - Richards Bay							
Cape Corridor	Greenview - Kaapmuiden							
	Hotazel - PE							
	De Aar - Cape Town							
Central Corridor	Full Line							
Container Corridor	Full Line							

Overall state of infrastructure, equipment, and systems, which can impact performance, maintenance needs, and safety standards. Regular assessments and monitoring are essential for identifying potential risks and prioritising repairs or upgrades.
NRMP Section 12.5

Is there market demand?


Table 14-1: Strategic Areas for Funding Analysis

Strategic Areas	Demand in Market	Funding needed	Best Source of Funding
Current network and capacity (with backlog included)	High volume demand for minerals and bulk ores	Capex and backlog CAPEX on the two ore corridors and Hotazel to Gqeberha line	PSP's and private sector bridging finance
Current GFB network fixed	Demand to rail intermodal and manufactured goods	To revitalise the Container, Central and CapeCor	BFIs/subsidies, government funding, TRIM funds
Current Commuter Network fixed	Demand to move commuters in metropolitan and peri-urban areas	To repair and upgrade lines and to acquire new rolling stock	Subsidies, DFI funds, sovereign funds, rolling stock leasing
Current network expanded and densification	Demand for Waterberg coal and chrome and manganese	To upgrade the mineral lines soon and maybe in future some GFB lines	PSP's and DFI's, as loan security is vested in volume to be moved
Current Rolling Stock Fleet modernised and augmented	Demand from industry to use rail in various commodity groups as network is upgraded	To acquire modern locomotives, wagons and to renew and make use of current national fleet	Private Sector investment, PSPs via ROSCOs, DFI and bank funding

2. Each instrument in sequence

2.1 Operation Vulindlela · 2020 · Oversight & accountability

Established jointly by the Presidency and National Treasury in 2020, Operation Vulindlela is South Africa's structural reform delivery unit, responsible for tracking, unblocking, and escalating implementation failures across government.

Its direct relevance to this report: the non-core asset disposal obligation is one of the markers tracked in Vulindlela's quarterly presidential reporting cycle. Deputy Minister of Finance Ashor Sarupen confirmed in primary research that 60% of freight rail logistics reform targets, including disposal, are currently lagging.[62]

2.2 White Paper on National Rail Policy · 2022 · Policy

Adopted by Cabinet in March 2022, the National Rail Policy is the founding document of the current reform programme. It mandates vertical separation of infrastructure from operations, open access for third-party operators, active private sector participation, and strengthened economic regulation.

Its direct relevance: it establishes the strategic rationale for right-sizing Transnet's asset base, namely, that an organisation operating under open access cannot carry the cost of assets that serve no contracted purpose.

2.3 Freight Logistics Roadmap · 2023 · Policy instrument

Approved by Cabinet in December 2023 following a direct presidential directive in the February State of the Nation Address, the roadmap is the implementation plan for the National Rail Policy. It sequences structural reforms, establishes the NLCC as the coordination body, mandates the Network Statement, requires the establishment of the Transport Economic Regulator, and assigns the Department of Transport responsibility for the National Rail Master Plan.

Its direct relevance: the roadmap is the document National Treasury looks to for the specifics of what is expected on core and non-core assets, as confirmed by Deputy Finance Minister Ashor Sarupen in primary research.[62]

[62] *Ashor Sarupen, Deputy Minister of Finance, interviewed by Anura Partners, May 2026*

2.4 National Logistics Crisis Committee · 2023 · Oversight & coordination

Established by the Presidency in early 2023 and codified in the Freight Logistics Roadmap, the NLCC is the cross-government coordination body chaired by the Presidency and including Transnet, the DoT (which absorbed the former DPE's Transnet oversight role following the DPE's dissolution in 2024), National Treasury, and the SAPS. It operates through eight work streams, with Work Stream 4 covering structural reform and Work Stream 6 covering financing and PSP.

Its direct relevance: the NLCC is the institutional forum within which a shared core / non-core definition, once established, would need to be adopted to become operational across government.

2.5 R47bn National Treasury guarantee · 2023 · Fiscal instrument

Issued to enable Transnet to service its R150 billion debt load, the guarantee carried a binding condition: that Transnet identify and dispose of its non-core assets. The Auditor-General subsequently flagged slow execution and, more fundamentally, the absence of a shared definition of core versus non-core as the primary obstacle to compliance.

Its direct relevance: this condition is the legal origin of the disposal mandate this report addresses. The asset list required under the condition has never been published.

2.6 Vertical separation of TRIM and TFR · 2024 · Structural reform

In October 2024, Transnet Freight Rail was formally separated into TRIM (Transnet Rail Infrastructure Manager) and TFR (Transnet Freight Rail Operating Company), completing the structural reform mandated by the National Rail Policy.

Its direct relevance: TRIM is now the entity that holds and manages Transnet's rail infrastructure assets. It is therefore the primary institutional counterpart for any classification, disposal, or concessioning decision on rail assets.

2.7 Network Statement · 2024 · Market rules instrument

Published in final form by TRIM in December 2024, the Network Statement sets out the conditions, charges, and procedures under which private operators may access the national rail network. It enables framework agreements of more than twelve months – a prerequisite for private investment in rolling stock.

Its direct relevance: without the Network Statement, no private operator can commercially commit to acquiring or rehabilitating rolling stock. This makes it a precondition for most PSP structures evaluated in this report.

2.8 R150bn Treasury guarantee (restructured) · 2025 · Fiscal instrument

The original R47 billion guarantee facility was expanded through two further Treasury approvals in 2025 – R51 billion in May and additional guarantees in July – bringing the total to R150 billion across three approvals. The non-core asset disposal condition was reworded, not removed, as confirmed by National Treasury, but no asset list was published and no disposal KPIs appear in the shareholder compact.

Its direct relevance: the reworded condition represents an unresolved obligation that this report's framework is designed to enable Transnet to discharge.[63]

2.9 Draft National Rail Master Plan · 2026 · Policy instrument

Published by the Department of Transport for public comment in 2026, the NRMP provides the most comprehensive classification of South Africa's rail network to date, identifying approximately 7,059 core freight kilometres and 11,848 kilometres of feeder and short lines. It mandates right-of-way protection on closed lines and proposes market-testing for branch line concessions from 2027; TRIM's May 2026 branch-line RFPs (Section 9.2) have already moved ahead of that timeline.

Its direct relevance: the NRMP classifies the network at line level but does not resolve the classification question at the organisational asset level – the gap this report addresses.[64]

[63] *Auditor-General of South Africa, Transnet SOC Ltd audit findings (2022–2024); Senior organised business representative, NLCC, interviewed by Anura Partners, April 2026; Modisaemang Ijane, National Treasury, interviewed by Anura Partners, May 2026*

[64] *Department of Transport, Draft National Rail Master Plan, Republic of South Africa, 2026*

3. What the framework requires but does not resolve

Taken together, the nine instruments above constitute the most comprehensive policy mandate for rail reform in South Africa's history. They establish the strategic rationale for disposal, create the fiscal obligation to act, build the structural architecture to enable private participation, and map the network that must be right-sized. What they do not provide – and what Auditor-General's findings, as reported to Parliament's Portfolio Committee on Public Enterprises, have identified as missing – is a shared, independently defensible definition of what constitutes a core versus a non-core asset at the level of Transnet's organisational balance sheet. Without that definition, there is no credible asset list, no disposal pipeline, and no accountability mechanism. Tracks to Prosperity, Volume 2 provides that definition.

C. Transnet Asset Inventory

Register of publicly available asset information, compiled for TTP Volume 2 research

Anura Partners, 2026

IMPORTANT: This inventory is compiled from publicly available information, including Transnet annual reports, parliamentary submissions, the Network Statement, the National Rail Master Plan (draft 2026), and public press reporting. It does not constitute an official Transnet asset register, and it does not classify assets as core or non-core. Transnet has not released a public classification of its assets. Descriptions are high-level and indicative. The "Condition" column is populated only where a credible public or sourced basis exists; where none exists, the entry reads "Not publicly disclosed". All entries should be verified against Transnet's internal records before use in formal proceedings.

Asset	*Type*	*Description*	*Condition*
1. Rail infrastructure assets			
1.1 Primary freight corridors			
Sishen–Saldanha (Iron Ore Line)	Heavy-haul bulk corridor	Dedicated ~861 km heavy-haul line carrying iron ore from the Northern Cape to the Port of Saldanha; one of the world's longest heavy-haul export lines.	Operational; the best-performing corridor, though iron ore railings hit a ten-year low in 2023. Independent repair assessment completed; rehabilitation agreements under negotiation with exporters (2025).
Coal Line (Ermelo–Richards Bay)	Heavy-haul bulk corridor	~570 km line carrying thermal coal from Mpumalanga to Richards Bay Coal Terminal; the primary coal export artery.	Recovering but constrained. Volumes fell to a 30-year low of ~48 Mt in 2023; recovered to ~52 Mt (2024) and targeting 60–65 Mt (2026). 28 km of speed restrictions lifted and two train slots added in 2024. Ongoing maintenance backlog addressed incrementally; resignalling project pending.
Manganese Line (Hotazel–Coega/PE)	Heavy-haul bulk corridor	~860 km line carrying manganese ore from the Northern Cape to Eastern Cape ports.	Operational. Not publicly disclosed.
Container Corridor (City Deep–Durban)	General freight / intermodal	~700 km corridor linking the Gauteng industrial heartland to the Port of Durban; carries containerised freight.	Running well below capacity; a small fraction of viable train frequency is currently operated. Not publicly disclosed.
Chrome / Ferrochrome Corridor (Limpopo–Maputo)	General freight	~400 km cross-border corridor carrying chrome and ferrochrome toward Maputo.	Degraded. Not publicly disclosed.
Waterberg / North Corridor (Lephalale–Ermelo)	Coal / general freight	~650 km corridor serving the Waterberg coalfields; identified for future coal export growth.	Requires upgrade to unlock capacity. Not publicly disclosed.

Asset	Type	Description	Condition
1. Rail infrastructure assets continued			
1.1 Primary freight corridors continued			
Cape Mainline (Johannesburg–Cape Town)	General freight / intermodal	~1,500 km trunk line linking Gauteng to the Western Cape; diverse commodities.	Degraded. Not publicly disclosed.
Natal Mainline (Johannesburg–Durban via Pietermaritzburg)	General freight	~740 km trunk line linking Gauteng to Durban; the primary general freight artery to the country's busiest port.	Degraded. Not publicly disclosed.
Ressano Garcia Line (Johannesburg–Maputo)	General freight / intermodal	~500 km cross-border corridor to Maputo, Mozambique; diverse and automotive freight.	Operational cross-border corridor. Not publicly disclosed.
Cape Winelands Fruitline (Hex River / Huguenot)	Agricultural / general	~200 km corridor serving Western Cape fruit and wine regions.	Low utilisation; reefer capacity underused. Not publicly disclosed.
East London Corridor	General freight / automotive	~300 km corridor serving the East London automotive and container hub.	Degraded, low utilisation. Not publicly disclosed.
Port Elizabeth Corridor	General freight	~280 km corridor serving Gqeberha (Port Elizabeth) container and general cargo.	Degraded. Not publicly disclosed.
North-East Corridor (Johannesburg–Beitbridge)	General / cross-border	~520 km corridor to the Zimbabwe border at Beitbridge.	Degraded. Not publicly disclosed.
1.2 Branch lines, feeder lines and short lines			
Free State Kroonstad cluster	Feeder / branch network	~800 km network in the Free State serving grain silos and the Harmony Gold Welkom mining hub; grain moved by rail via hopper wagons.	Track condition poor in places but navigable; silos built for rail but currently served by road. Included in the 2016–17 branch line tender package, not awarded.
Port Shepstone line	Branch line	~100 km KwaZulu-Natal coastal line serving a quarry and the Natal Portland Cement kiln; tourism and heritage upside.	Self-contained line with anchor freight. Included in the 2016–17 branch line tender package, not awarded.
Donnybrook line	Branch line	~120 km KwaZulu-Natal line serving timber and agricultural freight.	Low utilisation. Not publicly disclosed.
Umzimkhulu line	Branch line	~80 km KwaZulu-Natal line serving timber.	Low utilisation. Not publicly disclosed.
Gilead–Phalaborwa spur	Feeder line	~80 km Limpopo spur serving phosphate and mineral traffic.	Not publicly disclosed.
Harmony Gold Welkom spur	Mining spur	~50 km Free State spur serving gold mine inputs and outputs.	Not publicly disclosed.

Asset	Type	Description	Condition
1. Rail infrastructure assets continued			
1.2 Branch lines, feeder lines and short lines continued			
Limpopo mineral spurs (various)	Mining spurs	Various short spurs serving chrome, platinum and other mineral operations in Limpopo.	Not publicly disclosed.
Eastern Cape agricultural lines (various)	Branch / feeder lines	Various lines serving agricultural districts in the Eastern Cape.	Low utilisation. Not publicly disclosed.
KwaZulu-Natal rural branch lines (various)	Branch lines	Various rural lines serving timber, agricultural and sugar freight.	Low utilisation. Not publicly disclosed.
North West Province branch lines	Branch lines	Various lines serving maize and platinum districts.	Low utilisation. Not publicly disclosed.
Upington–Sishen feeder sections	Feeder line	~120 km feeder sections contributing iron ore volumes to the Sishen–Saldanha corridor.	Tied operationally to the core iron ore corridor. Not publicly disclosed.
Low-density network balance (~9,000 km)	Low-density lines	The balance of the network carrying negligible or nil freight; ~9,000 km identified as very low density.	Largely dormant; many sections non-operational for years. Not publicly disclosed.
1.3 Track and civil infrastructure			
Track (total network)	Permanent way	~20,400 km freight route network (FLR); ~1,067 mm Cape gauge. Some sources cite up to ~23,500 km including all footprint. Both figures differ from the NRMP's 18,907 km classified network (7,059 km core plus 11,848 km feeder and short lines; see Section 7.1) because the FLR figure is drawn from a different source and includes sidings, yards and other trackage outside the NRMP's network-length classification.	Significant deferred maintenance backlog nationwide; cumulative maintenance backlog estimated at ~R26.5bn (Auditor-General).
Electrified track (25kV AC / 3kV DC)	Electrified permanent way	~3,600 km of electrified corridors including sections of the Coal Line, Container Corridor and Sishen–Saldanha.	At least 1,000 km reported unusable due to defective substations and cable theft (FLR); 73% of overhead traction equipment exceeds its 25-year lifecycle.
Diesel-only track	Non-electrified permanent way	~19,900 km including all branch and feeder lines.	Not publicly disclosed.
Bridges and culverts	Civil structures	Thousands of structures across the network (exact count not public).	Significant maintenance backlog; security vulnerability. Not publicly disclosed.
Tunnels (incl. Hex River tunnel complex)	Civil structures	Multiple tunnels including the Hex River complex, one of the longest in the Southern Hemisphere.	Condition variable. Not publicly disclosed.
Signalling systems	Signalling / control	Network-wide signalling infrastructure.	Largely obsolete; ~70% of signalling reported obsolete and up to ~250,000 manual train authorisations per month due to system failures (FLR / NRMP).

Asset	Type	Description	Condition
1. Rail infrastructure assets continued			
1.3 Track and civil infrastructure continued			
Train control systems / SCADA	Control systems	Network-wide train authorisation and control systems.	Outdated; vulnerable to vandalism; inadequately maintained. Not publicly disclosed.
Overhead traction equipment (OHE)	Electrification	Catenary and traction equipment on electrified corridors.	Significant theft and vandalism damage; 73% exceeds 25-year lifecycle; 347 of 440 traction substations ageing or obsolete (FLR).
Level crossings	Civil / safety	Thousands of road-rail crossings nationwide.	Many in poor condition; safety and vandalism risk. Not publicly disclosed.
Loops, sidings and passing places	Permanent way	Network-wide passing loops and sidings.	Variable; some non-operational for years. Not publicly disclosed.
1.4 Marshalling yards, sidings and intermodal terminals			
Germiston yard	Marshalling yard	Primary marshalling hub for Gauteng freight.	Operational. Not publicly disclosed.
Sentrarand yard	Marshalling / intermodal yard	Container and intermodal marshalling yard at Bapsfontein, Gauteng.	Operational. Not publicly disclosed.
Bellville yard	Marshalling yard	Cape region marshalling yard, Western Cape.	Operational. Not publicly disclosed.
Empangeni yard	Marshalling yard	Northern marshalling yard on the Coal Line, KwaZulu-Natal.	Operational. Not publicly disclosed.
Allanridge yard	Marshalling yard	Coal and general marshalling yard, Free State.	Operational. Not publicly disclosed.
Krugersdorp marshalling yard	Marshalling yard	General marshalling yard, Gauteng.	Subject of a TRIM leasing RFP process. Not publicly disclosed.
Bloemfontein yards	Staging yard	General freight staging yards, Free State.	Reported to hold idle grain hopper wagons. Not publicly disclosed.
Rosslyn automotive yard	Automotive yard	Automotive loading and unloading yard serving the Rosslyn plant, Gauteng.	Associated double-deck automotive wagons reported obsolete after a model change. Not publicly disclosed.
East London yard	Automotive / general yard	Automotive and general yard, Eastern Cape.	Low utilisation. Not publicly disclosed.
Smaller sidings (nationwide)	Sidings	Numerous local freight staging sidings across the network.	Variable; TRIM systematising access via RFPs. Not publicly disclosed.

Asset	Type	Description	Condition
2. Rolling stock			
2.1 Locomotives Total fleet: ~2,960 units across all classes and categories (NRMP 2026). Active fleet significantly smaller. Class-level counts not released by Transnet.			
Electric locomotives (Sishen–Saldanha classes)	Electric locomotive	Heavy-haul electric locomotives dedicated to the iron ore export corridor.	In service on the corridor; a portion reported idle or cannibalised for parts. Not publicly disclosed.
Electric locomotives (Coal Line classes)	Electric locomotive	Heavy-haul electric locomotives for coal export haulage.	Availability a binding constraint; ~45 of a planned 90 e-locos deployed on the coal line (2025). Some units repaired in-house due to OEM spares impasse.
Electric locomotives (general network)	Electric locomotive	General network electric locomotives for container and general freight.	Ageing fleet with maintenance backlog. Not publicly disclosed.
Diesel locomotives (general / branch)	Diesel locomotive	Diesel locomotives for general freight and non-electrified branch lines.	A significant proportion of the diesel fleet is over 40 years old, affecting reliability (FLR). Portion idle.
CRRC / CNR fleet (Chinese-manufactured)	Electric / diesel locomotive	Dual-voltage and other locomotives procured from CRRC/CNR (the "1064" procurement).	161 of the dual-voltage units (27%) out of service as at March 2023, of which ~61% awaiting spares amid an OEM dispute (FLR, App 7). Some repaired in-house.
Diesel shunting locomotives	Shunting locomotive	Yard shunting locomotives across multiple classes.	Many potentially redundant with reduced yard activity. Not publicly disclosed.
B-fleet locomotives (non-operational 3+ years)	Non-operational locomotive	Locomotives out of service for three or more years.	Non-operational; market value contested. Not publicly disclosed.
Leased locomotives (LeaseCo / ISCO)	Leased locomotive	Locomotives held or accessed through leasing structures.	LeaseCo structure reported under review; access contested by private operators. Not publicly disclosed.
2.2 Wagons Total fleet: ~80,000 units across all categories (NRMP 2026), including active, non-operational (3+ years) and condemned/scrap wagons.			
Iron ore bottom-discharge wagons	Bulk wagon	~10,000 dedicated iron-ore export wagons for the Sishen–Saldanha corridor.	In service on a dedicated corridor. Not publicly disclosed.
Coal hopper wagons	Bulk wagon	~20,000+ coal hopper wagons for the Coal Line; trains of ~200 wagons at 83 t each.	High utilisation; central to coal export recovery. Not publicly disclosed.
Manganese ore wagons	Bulk wagon	~4,000+ wagons for manganese export.	In service. Not publicly disclosed.
Container flat wagons	Intermodal wagon	Flat wagons for containerised freight on the container corridor.	Underutilised relative to market potential. Not publicly disclosed.
General-purpose gondola wagons	General wagon	Gondola wagons for diverse general freight.	Mix of active and idle units. Not publicly disclosed.

Asset	Type	Description	Condition
2. Rolling stock continued			
2.2 Wagons continued			
Grain hopper wagons	Agricultural wagon	~2,000–3,000 (estimate) hopper wagons for grain transport.	Reported standing idle in Bloemfontein. Not publicly disclosed.
Timber platform wagons	Forestry wagon	Platform wagons for timber and forestry freight.	Reported commercially obsolete (designed for 1970s conditions). Not publicly disclosed.
Automotive double-deck wagons (BMW spec)	Automotive wagon	Double-deck wagons built to a specific automotive specification for the Rosslyn plant.	Reported obsolete following a model change; no current use. Not publicly disclosed.
Chrome / ferrochrome bogie wagons	Bulk wagon	Bogie wagons for chrome and ferrochrome export via Limpopo/Maputo.	Some idle due to corridor degradation. Not publicly disclosed.
Refrigerated wagons (reefers)	Refrigerated wagon	Small fleet for perishables and fruit.	Low utilisation; Fruitline capacity underused. Not publicly disclosed.
Tanker wagons	Liquid bulk wagon	Tanker wagons for petroleum and chemical liquid bulk.	Mix of active and idle. Not publicly disclosed.
Intermodal spine wagons	Intermodal wagon	Spine wagons for container and intermodal traffic.	Dependent on container corridor throughput. Not publicly disclosed.
B-fleet wagons (non-operational 3+ years)	Non-operational wagon	Wagons out of service for three or more years.	Non-operational; scrap or refurbishment value. Not publicly disclosed.
2.3 Rolling stock maintenance and engineering facilities			
Koedoespoort Works	Heavy overhaul facility	Major heavy locomotive and wagon overhaul facility, Pretoria (Transnet Engineering).	Major national facility. Not publicly disclosed.
Salt River Works	Maintenance / overhaul facility	Locomotive and wagon maintenance and overhaul, Cape Town.	Key Cape region facility. Not publicly disclosed.
Durban Engineering Depot	Maintenance depot	Coal line wagon and container-locomotive maintenance, Durban.	Not publicly disclosed.
Bloemfontein Depot	Maintenance depot	Central region maintenance depot; also holds idle rolling stock.	Not publicly disclosed.
Germiston Depot	Maintenance depot	Gauteng region maintenance depot.	Not publicly disclosed.
Sentrarand Maintenance Facility	Maintenance depot	Intermodal and container rolling stock maintenance, Gauteng.	Not publicly disclosed.

Asset	Type	Description	Condition
2. Rolling stock continued			
2.3 Rolling stock maintenance and engineering facilities continued			
Saldanha Maintenance Base	Maintenance depot	Sishen–Saldanha corridor locomotive maintenance base.	Not publicly disclosed.
Richards Bay Maintenance Base	Maintenance depot	Coal Line rolling stock maintenance base.	Not publicly disclosed.
Smaller regional depots (nationwide)	Maintenance depots	Various local and regional maintenance depots.	Variable. Not publicly disclosed.
3. Port infrastructure (TNPA and TPT) TNPA owns and manages seven commercial ports; TPT operates terminals within them. TNPA is the only debt-free entity in the group and is being corporatised as a precursor to separation.			
3.1 Port terminals			
Durban Container Terminal (Pier 1 & 2)	Container terminal	Container terminal at the Port of Durban; ~2.5–3m TEU p.a.	Operational (TNPA/TPT). Not publicly disclosed.
DCT Pier 2 / Gateway Terminal (ICTSI)	Container terminal (concession)	Pier 2 container operation; handles a large share of national container volume.	Operational under a 25-year DP World / ICTSI joint venture concession; investment programme underway.
Durban Break Bulk Terminal (DBT)	Break-bulk terminal	Multi-cargo break-bulk terminal at Durban.	Severely degraded; concession process underway.
Durban Bulk Terminal	Dry-bulk terminal	Multi-commodity dry-bulk terminal at Durban.	Operational. Not publicly disclosed.
Durban Car Terminal (Ro-Ro)	Automotive terminal	Roll-on / roll-off automotive terminal; ~400,000+ vehicles p.a.	Operational. Not publicly disclosed.
Point Passenger Terminal (former)	Mixed-use precinct	Former passenger and mixed-use precinct at Durban.	Development candidate. Not publicly disclosed.
Maydon Wharf (Bulk Liquid Quay)	Liquid-bulk terminal	Petroleum and chemical liquid-bulk quay at Durban.	Operational. Not publicly disclosed.
Richards Bay Coal Terminal (RBCT)	Coal export terminal	Coal export terminal; ~91 mtpa design capacity; ~52 Mt exported 2024.	Operational; infrastructure largely unchanged (10 yard machines, 4 ship-loaders, all operational). Shareholder-consortium-owned, not Transnet; Transnet holds rail access.
Richards Bay Dry Bulk Terminal	Dry-bulk terminal	Manganese, chrome and other dry-bulk minerals.	Operational (TNPA). Not publicly disclosed.

Asset	Type	Description	Condition
3. Port infrastructure (TNPA and TPT) continued			
3.1 Port terminals continued			
Richards Bay Multi-Purpose Terminal	Multi-cargo terminal	General bulk and break-bulk terminal.	Operational (TNPA). Not publicly disclosed.
Cape Town Container Terminal	Container terminal	Container terminal; ~800,000 TEU p.a.	Operational; concession under consideration. Not publicly disclosed.
Cape Town Multi-Purpose Terminal	Multi-cargo / cruise terminal	General cargo and cruise terminal.	Operational. Not publicly disclosed.
Ben Schoeman Dock (Cape Town)	Dry-bulk / general terminal	General and dry-bulk quay at Cape Town.	Operational. Not publicly disclosed.
Ngqura Container Terminal (NCT)	Deep-water container terminal	Deep-water container terminal at Coega; ~1.2m TEU capacity.	Operational; a key growth terminal. Not publicly disclosed.
Port Elizabeth Bulk Terminal	Dry-bulk terminal	Manganese and chrome dry-bulk terminal, Gqeberha.	Operational. Not publicly disclosed.
East London Terminal	Multi-purpose / automotive terminal	General cargo and vehicle terminal at East London.	Operational. Not publicly disclosed.
Saldanha Iron Ore Terminal	Iron ore export terminal	Iron-ore export terminal; ~60 mtpa capacity; Sishen–Saldanha endpoint.	Operational. Not publicly disclosed.
Saldanha Multi-Purpose Terminal	Liquid-bulk / general terminal	Petroleum and general cargo terminal.	Operational. Not publicly disclosed.
Mossel Bay Port / terminal	Small multi-purpose terminal	Regional fishing and general cargo terminal.	Limited freight role. Not publicly disclosed.

Asset	Type	Description	Condition
3. Port infrastructure (TNPA and TPT) continued			
3.2 Port-adjacent property holdings			
Durban Bay Island landholding	Waterfront land	Significant waterfront property at Durban Bay with development potential.	Not publicly disclosed.
Point Waterfront precinct (portions)	Mixed-use precinct	Former passenger-rail precinct at Durban with mixed-use potential.	Not publicly disclosed.
V&A Waterfront (former, sold 2006)	Waterfront development	Precedent asset: developed by Transnet/Portnet, sold in 2006 for ~R7bn, now valued at ~R30bn+.	Sold; retained as a disposal precedent, not a current holding.
Cape Town port buffer land	Buffer land	Buffer properties adjacent to the operational port at Cape Town.	Not publicly disclosed.
Richards Bay port buffer land	Buffer / industrial land	Buffer and industrial land adjacent to the Richards Bay terminals.	Not publicly disclosed.
Ngqura / Coega buffer landholdings	Buffer land	Land held adjacent to the deep-water terminal at Coega.	Not publicly disclosed.
4. Property portfolio Transnet held ~44,000 title deeds at formation in 1990 (primary research). The current portfolio is smaller but remains one of the largest non-financial property holdings in South Africa. Transnet has identified 3,788 non-core properties and begun a residential auction programme targeting ~R1bn (Transnet, 2025).			
4.1 Strategic and high-value properties			
Esselen Park training complex	Training campus	Sandstone training campus (1940s Italian prisoner of war construction), Kalkvlakte, Gauteng.	Estimated R1–2bn+ as-is (primary research, indicative). Not publicly disclosed.
Johannesburg Park Station precinct	Urban station precinct	Major urban station precinct with commercial and retail potential.	High development value; core footprint contested. Not publicly disclosed.
Cape Town station precinct (portions)	Urban station precinct	Urban precinct with tourism, retail and mixed-use potential.	Some non-core portions. Not publicly disclosed.
Durban station precinct	Urban station precinct	Mixed-use urban station precinct.	Development potential. Not publicly disclosed.
Pretoria station precinct	Urban station precinct	Urban station precinct.	Development potential. Not publicly disclosed.

Asset	Type	Description	Condition
4. Property portfolio continued			
4.1 Strategic and high-value properties continued			
City Deep Inland Container Depot	Inland port / intermodal hub	Major inland port and intermodal hub, Johannesburg.	Core operational. Not publicly disclosed.
Cato Ridge inland sites	Rail-side industrial land	Former rail-side industrial land adjacent to a major dry port, KwaZulu-Natal.	Already transforming; development precedent exists. Not publicly disclosed.
Golden Centre (former HQ)	Commercial office building	Former Transnet headquarters office building, Johannesburg.	Not publicly disclosed.
Transnet House / Head Office	Corporate office	Corporate headquarters building, Johannesburg.	Not publicly disclosed.
Non-core identified properties (~3,788)	Mixed portfolio	Residential, commercial, industrial and vacant properties identified as non-core by Transnet.	Residential auction programme underway (~R1bn target); only residential to date.
Title deed portfolio (~44,000, 1990 baseline)	Full portfolio	Full property portfolio at formation in 1990; substantially reduced since.	Baseline estimate (primary research); current number not publicly quantified.
Former station buildings (rural / small towns)	Heritage buildings	Historic station buildings, many disused, across small towns.	Variable; heritage and community value. Not publicly disclosed.
Former staff housing (large estates)	Residential estates	Residential estates built for railway workers.	Disposal underway (~R1bn target); significant stock remaining.
Industrial warehousing (rail-adjacent)	Warehousing / industrial	Warehousing, yards and light industrial land adjacent to freight lines.	Development opportunity where rail-disconnected. Not publicly disclosed.
Former locomotive sheds (disused)	Industrial heritage buildings	Disused locomotive sheds with heritage and tourism potential.	Not publicly disclosed.
Right-of-way land (closed lines)	Linear corridor land	Linear corridor land along former or closed rail routes.	To be retained in the public domain per NRMP 2026; not for sale.

Asset	Type	Description	Condition
5. Pipelines (Transnet Pipelines) Transnet Pipelines operates South Africa's national petroleum and gas pipeline network, with ~200 employees, and is operationally self-sustaining. Separation from the group has been discussed under the reform programme.			
New Multi-Product Pipeline (NMPP)	Petroleum products pipeline	~555 km Durban-to-Johannesburg (Kendal) pipeline carrying petrol, diesel and jet fuel.	Major national fuel artery. Not publicly disclosed.
Durban–Johannesburg Pipeline (DJP, former)	Petroleum products pipeline	~580 km legacy pipeline being progressively replaced by the NMPP.	Being phased out in favour of the NMPP. Not publicly disclosed.
Cape Town Pipeline	Petroleum products pipeline	~80 km pipeline supplying fuel to the inland Western Cape.	Core Western Cape fuel supply. Not publicly disclosed.
Natref Pipeline connections	Refinery pipeline	Refined-petroleum connections to the inland refinery.	Not publicly disclosed.
Gas pipelines (inherited / minor)	Gas pipeline	Minor natural and industrial gas pipelines.	Not publicly disclosed.
6. Transnet Engineering — manufacturing and overhaul facilities Transnet Engineering is the group's manufacturing and heavy maintenance division, South Africa's only rolling stock manufacturer and one of few on the continent.			
Koedoespoort Works	Manufacturing / overhaul facility	Locomotive manufacture, heavy overhaul and refurbishment, Pretoria.	Major national manufacturing capability; large employer. Not publicly disclosed.
Salt River Works	Manufacturing / overhaul facility	Rolling-stock manufacturing, overhaul and maintenance, Cape Town.	Historic facility; major employer. Not publicly disclosed.
Durban Works	Maintenance facility	Wagon and locomotive maintenance, Durban.	Not publicly disclosed.
Port Elizabeth / Uitenhage Works	Manufacturing / overhaul facility	Wagon manufacturing and overhaul serving automotive and general freight, Eastern Cape.	Not publicly disclosed.
Bloemfontein Works	Maintenance / overhaul facility	Central region maintenance and overhaul, Free State.	Not publicly disclosed.
Mobile field maintenance units	Field maintenance	Distributed mobile units for field track and rolling stock repair.	Distributed nationwide. Not publicly disclosed.

Asset	Type	Description	Condition
7. Cultural, heritage and intangible assets			
A category that has received little attention in public disposal discussions despite material value. The Pierneef collection alone is estimated at ~R2bn (primary research) and does not appear on Transnet's published asset register..			
Pierneef art collection (32 panels)	Fine art collection	Panels commissioned in the 1930s for the former Johannesburg Park Station; on loan to a museum.	Estimated ~R2bn (primary research, indicative); not on Transnet's published asset register.
Additional artworks and heritage items	Art / heritage	Artworks and heritage items accumulated across Transnet facilities over decades.	Extent not publicly catalogued. Not publicly disclosed.
Historic locomotive collection (steam era)	Heritage rolling stock	Steam-era locomotives held at various sites; some managed by heritage bodies.	Heritage and tourism value; some ownership contested. Not publicly disclosed.
Heritage station buildings (listed)	Heritage buildings	Listed historic station buildings subject to the National Heritage Resources Act (No. 25 of 1999).	Cannot be demolished without approval; condition variable. Not publicly disclosed.
Transnet archives and records	Institutional records	Legal, land title and historical operational records held in Johannesburg.	Institutional and historical value. Not publicly disclosed.
8. Technology, systems and other assets			
Train management / control systems (TMS)	Control systems	Network-wide operations control infrastructure.	Outdated; significant manual override requirement. Not publicly disclosed.
SCADA systems (pipeline)	Control systems	Pipeline monitoring and control systems.	Safety-critical. Not publicly disclosed.
Port operating systems (NAVIS / TOS)	Terminal operating systems	Container terminal operating systems.	Linked to the Gateway Terminal concession. Not publicly disclosed.
IT infrastructure (data centres, networks)	IT infrastructure	Network-wide data centres and IT networks.	Mix of core and potential outsourcing candidates. Not publicly disclosed.
Fibre optic network (rail corridors)	Telecommunications	~23,500 km fibre footprint along rail corridors.	Significant latent value; telecoms operators have expressed interest. Not publicly disclosed.
Weighbridges and load measurement	Operational equipment	Load measurement equipment at key freight nodes.	Core operational. Not publicly disclosed.
Security systems (CCTV, perimeter)	Security systems	Network-wide surveillance and perimeter security.	Security losses remain a primary network challenge. Not publicly disclosed.
Environmental monitoring equipment	Compliance equipment	Environmental monitoring at ports and along corridors.	Compliance obligation. Not publicly disclosed.
Intellectual property (designs, patents)	Intangible asset	Rolling stock design IP held by Transnet Engineering.	Some commercial value. Not publicly disclosed.

Sources: Transnet Annual Reports (2019–2024); Network Statement (TRIM, December 2024); Draft National Rail Master Plan (DoT, 2026); Roadmap for the Freight Logistics System (December 2023); Transnet parliamentary and SCOPA submissions; public press reporting (S&P Global, Argus, Freight News, World Cargo News, 2024–2026). This inventory does not constitute an official Transnet asset register and does not assign core / non-core classifications.

D. Performance Ratio Method

Overview

The Performance Ratio is a standard metric used in international rail benchmarking to measure productive output of rolling stock relative to available capacity. It is employed by the Union Internationale des Chemins de Fer (UIC), the Australian Rail Track Corporation (ARTC), and port operators including Tanger Med.

This report uses the Performance Ratio to identify Transnet's binding constraint in the freight chain and to determine the sequencing order for asset recovery initiatives.

Formula

Performance Ratio = (Actual train-km operated) / (Available train-km capacity)

Where:

- Actual train-km = Total revenue-generating train movements (freight + passenger) in a financial year, measured in train-kilometres
- Available train-km capacity = Maximum train movements the network and rolling stock can support under standard operational parameters (based on network configuration, rolling stock fleet, and operational hours per standard operating procedures)

Application to Transnet (FY2024/25 data)

Rail networks

- **Performance Ratio:** 65%
- **Benchmark threshold:** 75% (international standard)
- **Gap:** 10 percentage points

Interpretation: The network operates 10 percentage points below the threshold that makes corridors bankable under international standards. This gap reflects underutilisation relative to engineered capacity, not inadequate network design. Recovery to 75% is achievable through demand restoration (volume growth) and operational improvements (speed, frequency).

Train operations (rolling stock)

- **Performance Ratio:** 50%
- **Benchmark threshold:** 85% (international standard)
- **Gap:** 35 percentage points

Interpretation: Train operations, not the network, is Transnet's binding constraint. The 35 percentage point gap reflects underdeployed rolling stock (engines and wagons idle or underutilised). This is the widest gap in the freight chain. Closing requires (1) deployment of idle rolling stock into service, (2) procurement of additional wagons and locomotives, and (3) alignment of operating schedules with freight demand.

Seaports

- **Performance Ratio:** 60%
- **Benchmark threshold:** 70% (international standard)
- **Gap:** 10 percentage points

Interpretation: Ports operate below standard but closer to recovery than train operations. Port utilisation is constrained by rail supply (fewer trains = fewer containers delivered), which reflects the upstream constraint.

The freight chain logic

The three types of assets function in sequence: rail feeds trains, trains feed ports. No asset can outperform the weakest link upstream of it.

Decision rule: The binding constraint determines the order of repair. Train operations at 50% represents the widest gap and tightest upstream limit. Every improvement downstream is capped until train operations reaches 65%. Therefore:

- **Priority 1:** Close the train operations gap (50% → 65% minimum)
- **Priority 2:** Upgrade rail networks (65% → 75%)
- **Priority 3:** Expand port capacity (capped at 65% until trains improve)

International benchmarks

ARTC (Australia), freight segments

Tanger Med (Morocco), container train service

Indian Railways, key freight corridors

Transnet Freight Rail: 65% (network); 50% (rolling stock)

South Africa's network ratio (65%) is positioned relative to international peers, with opportunity to close the gap to the 75% level that international investors consider bankable.

The rolling stock ratio (50%) is significantly below international norms and represents the binding constraint on recovery.

Peer review and validation

The methodology is based on: UIC 406 Performance Indicators (Union Internationale des Chemins de Fer), ARTC Australian Rail Infrastructure Standards, World Bank Railway Reform toolkits, and UNCTAD Port Performance Measurement guidelines.

Data sources for Transnet: Transnet SOC Ltd Annual Reports (2020–2025), Transnet Freight Rail operational data (monthly train-km reports), Engineering News mining and logistics reporting, and Transnet National Ports Authority statutory reports.

Limitations and qualifications

1. **Available capacity estimates:** Conservative assumptions based on engineering standards. Actual achievable capacity may differ pending detailed operational audit.
2. **Idle rolling stock assumption:** The gap between actual and available train-km assumes idle or underutilised stock can be brought to service. Requires: rehabilitation of idle assets, crew availability and training, operational demand (freight bookings).
3. **Network configuration:** The 75% threshold assumes current network topology. Major network rehabilitation (resignalling, speed restrictions lifted) could improve the ratio independently of volume.
4. **Seasonal variation:** Performance ratios are calculated on annual averages. Seasonal peaks may show higher utilisation; winter months may show lower ratios.

Recommendations for use

1. **Annual review:** Recalculate the Performance Ratio annually using updated Transnet operational data to track progress.
2. **Asset-level application:** The ratio can be applied at the corridor level (e.g., Coal Line, Sishen–Saldanha) to identify constraining freight routes.
3. **Refinement:** Once a formal Transnet asset classification framework is adopted, disaggregate the freight chain ratio by asset class and geography.