Annexure 17 _ TRIM_ 5 Year Maintenance Investment Plan Required to reach 250MT

Document Date: 19 December 2024 **Author**: Transnet Rail Infrastructure Manager_Strategy, Business Planning & Innovation **Contributions**: Finance, Asset Life Cycle and Capital Expansion Plans and Network Planning output conversions **Purpose**: Network Statement Publication_December 2024

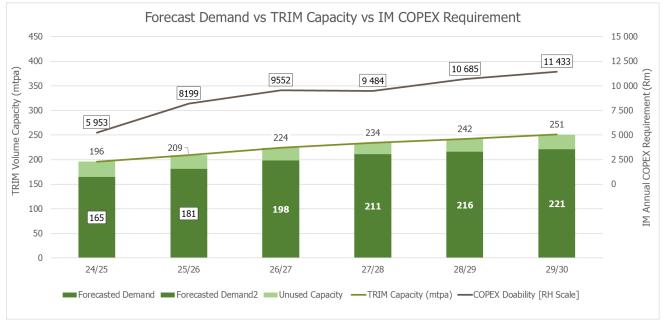
A - Required Capacity Creation Trajectory_2025/25 - 2029/30

Context: To enable TRIM to achieve its target of creating capacity for 250MT, Maintenance works must be carried out ahead of actual demand to move traffic. Contracts and material orders must be placed at least 6 months before they will be required across the country to allow for logistics and delivery thereof. If required funding is only received in the year the volume must be delivered, then the actual maintenance work will be delayed and if carried out will be for the following period's benefit. Timing of funding interventions therefore a key driver.

Additional Investments in planning tools, Condition monitoring tools, on-track tracking and data collection equipment will be critical to improve condition monitoring, maintenance planning, traffic planning, forecasting, maintenance execution, and data collection for improved planning.

Sections A – D represent the required investment to achieve 250mt and resultant capacity if TRIMs multi-funding strategy is achieved over the 5-year period.

Assumptions: The required funding will be sourced and be availed at least 12 months before the maintenance works must be executed to ensure that capacity is created in the year that the volume must be transported.



B - Maintenance Investments (Rbn) required to meet 250MT target in the Preriod_2025/26 - 2029/30

Below is a breakdown of Required Capital Investments per Corridor for the financial years 2025/26 to 2029/30:

Corridor COPEX	FY25/26	FY26/27	FY27/28	FY28/29	FY29/30
NORTHCOR	1 897	2 551	2 312	2 462	3 057
CAPECOR	1 632	2 095	2 069	2 206	2 187
CONTAINERCOR	1 303	1 436	1 483	2 751	2 415
NORTHEASTCOR	930	1 218	1 424	1 268	1 248
CENTRALCOR	861	1 038	1 015	1 040	1 751
ORECOR	1 576	1 214	1 181	958	775
Grand Total	8 199	9 552	9 484	10 685	11 433
Corridor CAPEX					
NORTHCOR	948	1 060	888	588	374
CAPECOR	420	446	435	476	428
CONTAINERCOR	471	479	367	389	313
NORTHEASTCOR	455	527	418	429	300
CENTRALCOR	378	373	281	309	258
ORECOR	747	847	745	600	343
Grand Total	3 418	3 732	3 134	2 792	2 017
Total Investment Requirements	11 617	13 284	12 618	13 477	13 450

C – Breakdown of Works required to meet 250MT target in the Preriod_2025/26 – 2029/30 if funding, equipment and materials are availed at the right time.

2025/26 Detailed National Plan of required works assuming all funding availed on time :

						Central		со		
Row Labels	Northcor	CapeCor	OreCor	ConCor	NortheastCor	Corridor	Reclass	Telecoms	Fuel Depot	Grand Total
Rail Replacement Work	R142m	R293m	R622m	R67m	R178m	R113m				R1 415m
Train Authorisation Systems	R392m	R232m	R50m	R232m	R97m	R156m				R1 159m
Sleeper Replacement Work	R190m	R167m	R126m	R107m	R86m	R56m				R732m
Civil/Mechanical Works							R492m		R87m	R580m
Embankment/Slope rehab Work	R82m	R56m		R385m	R38m	R3m				R564m
Turnout and Turnout Components	R182m	R99m	R113m	R39m	R38m	R32m				R502m
Substation Works	R85m	R126m	R120m	R97m	R20m	R48m				R498m
Ballast and Screener Work	R123m	R92m	R25m	R72m	R42m	R126m				R480m
Other Works	R150m	R134m	R90m	R39m	R24m	R13m				R451m
Critical OHTE Works	R114m	R147m	1	R37m	R56m	R14m	1			R368m
Formation Rehab works	R142m	R7m	R48m	R55m	R90m	R10m				R352m
Radio Works								R257m	1	R257m
Condition Assessment Systems	R47m	R23m	R99m	R1m	R27m					R197m
Drainage/ Culverts work	R13m	R20m	R60m	R24m	R49m	R16m				R183m
Bridge Rehab Works	R17m	R26m	R20m		R17m	R86m				R166m
Service Road Work	R25m	R27m	R60m	R2m		R37m				R150m
Transmission line	R38m	R29m			R23m	R8m				R98m
Telecoms Works								R40m		R40m
Transmission works	R12m	R10m		R3m	R2m	R2m				R29m
Grand Total	R1 755m	R1 489m	R1 433m	R1 161m	R788m	R718m	R492m	R297m	R87m	R8 199m

Note: The plan is informed by do-ability and will be amended based on affordability envelop.

250MT	Detailed Central Re	aion Plan of red	nuired works. as	ssumina all funding	availed on time:
	Detanea eentra nee	<i></i>	, an ca monto, ac		

					-
Work Group (Capecor)	FY26/27	FY27/28	FY28/29	FY29/30	Grand Total
Ballast Screener	R483m	R525m	R483m	R567m	R2 057m
Rail Replacement	R488m	R488m	R491m	R385m	R1851m
Sleeper Replacement	R429m	R427m	R427m	R427m	R1711m
Turnout & Components					
Replacement	R183m	R185m	R194m	R194m	R756m
Formation Rehabilitation	R166m	R166m	R166m	R166m	R664m
Signalling & Telecoms	R117m	R62m	R227m	R227m	R633m
OHTE, Transmission &					
Substations	R133m	R135m	R133m	R133m	R533m
Other Works	R48m	R36m	R39m	R42m	R165m
Culvert & Drainage & Cuttings	R43m	R40m	R40m	R40m	R163m
Service Road Rehabilitation	R5m	R5m	R6m	R6m	R23m
Grand Total	R2 095m	R2 069m	R2 206m	R2 187m	R8 557m

Work Group (Orecor)	FY26/27	FY27/28	FY28/29	FY29/30	Grand Total
Rail Replacement Work	R577m	R577m	R456m	R274m	R1884m
Turnout Replacement Work	R177m	R151m	R151m	R151m	R631m
Ballast and Screener Work	R151m	R151m	R50m	R50m	R403m
Other Works	R70m	R70m	R70m	R70m	R280m
Train Authorisation Systems	R50m	R50m	R50m	R50m	R200m
Formation Rehab Works	R40m	R40m	R40m	R40m	R160m
Service Road Work	R40m	R40m	R40m	R40m	R160m
Bridges Rehab Works	R30m	R40m	R40m	R40m	R150m
Turnout Components Work	R30m	R30m	R30m	R30m	R120m
Sleeper Replacement Work	R30m	R30m	R30m	R30m	R120m
Condition Assessment System	R18m	R1m	R1m	Rm	R20m
Substation Works	Rm	Rm	Rm	Rm	Rm
Grand Total	R1 214m	R1 181m	R958m	R775m	R4 128m

250MT_Detailed Central Region Plan of required works, assuming all funding availed on time:

Work Group (Centralcor)	FY26/27	FY27/28	FY28/29	FY29/30	Grand Total
Ballast Screener	R271m	R271m	R271m	R264m	R1 078m
Rail Replacement	R223m	R256m	R261m	R283m	R1 024m
Signalling & Telecoms	R225m	R416m	R9m	R146m	R796m
Sleeper Replacement	R186m	R186m	R187m	R177m	R737m
Turnout & Components Replacement	R111m	R111m	R111m	R119m	R452m
Formation Rehabilitation	R80m	R80m	R80m	R80m	R320m
Other Works	R39m	R46m	R176m	R45m	R306m
OHTE, Transmission & Substations	R60m	R81m	R59m	R75m	R276m
Culvert & Drainage & Cuttings	R19m	R44m	R22m	R49m	R135m
Service Road Rehabilitation	R2m	R22m	Rm	R9m	R33m
Grand Total	R1 218m	R1 515m	R1 177m	R1 248m	R5 158m

Work Group (Containercor)	FY26/27	FY27/28	FY28/29	FY29/30	Grand Total
Train Authorisation Systems	R966m	R377m	R1 165m	R265m	R2 772m
Sleeper Replacement Work	R333m	R356m	R408m	R434m	R1531m
Rail Replacement Work	R343m	R399m	R355m	R332m	R1 429m
Turnout Replacement Work	R204m	R219m	R198m	R197m	R818m
Ballast and Screener Work	R181m	R212m	R210m	R199m	R802m
Formation Rehab Works	R189m	R206m	R157m	R171m	R722m
OHTE Works	R193m	R188m	R186m	R142m	R709m
Turnout Components Work	R90m	R97m	R103m	R112m	R402m
Other Works	R70m	R88m	R112m	R127m	R397m
Substation Works	R82m	R78m	R68m	R64m	R292m
Service Road Work	R65m	R69m	R38m	R42m	R215m
Tunnels Work	R42m	R46m	R51m	R56m	R195m
Condition Assessment System	R34m	R14m	R95m	R34m	R177m
Bridges Rehab Works	R27m	R20m	R32m	R41m	R121m
Embankment/Slope rehab Work	R26m	R6m	R10m	R16m	R59m
Substation Works	R5m	R5m	R13m	R19m	R43m
Grand Total	R2 852m	R2 382m	R3 201m	R2 250m	R10 684m

Work Group (Northcor)	FY26/27	FY27/28	FY28/29	FY29/30	Grand Total
OHTE, Transmission & Substations	R530m	R608m	R671m	R695m	R2 504m
Train Authorisation Systems	R955m	R751m	R223m	R132m	R2 060m
Other Works	R18m	R20m	R18m	R1 236m	R1 293m
Formation Rehabilitation	R164m	R189m	R182m	R188m	R723m
Culvert & Drainage & Cuttings	R150m	R172m	R195m	R206m	R723m
Sleeper Replacement	R148m	R163m	R179m	R197m	R688m
Ballast Screener	R149m	R154m	R169m	R189m	R662m
Rail Replacement	R95m	R105m	R115m	R127m	R442m
Turnout & Components Replacement	R51m	R56m	R62m	R68m	R237m
Bridges Rehab Works	R44m	R49m	R69m	R68m	R230m
Service Road Rehabilitation	R43m	R42m	R52m	R54m	R191m
Signalling & Telecoms	R24m	R63m	R7m	R7m	R101m
Grand Total	R2 372m	R2 372m	R1944m	R3 167m	R9 855m

250Mt_ Detailed Eastern Region Plan of required works assuming all funding availed on time:

Work Group (Northeastcor)	FY26/27	FY27/28	FY28/29	FY29/30	Grand Total
Ballast Screener	R229m	R217m	R177m	R516m	R1 139m
Sleeper Replacement	R220m	R217m	R212m	R209m	R859m
Rail Replacement	R209m	R209m	R209m	R209m	R835m
OHTE, Transmission &					
Substations	R126m	R169m	R202m	R189m	R686m
Turnout & Components					
Replacement	R89m	R89m	R125m	R122m	R426m
Signalling & Telecoms	R76m	R9m	R20m	R299m	R404m
Formation Rehabilitation	R72m	R72m	R72m	R72m	R288m
Service Road Rehabilitation				R105m	R105m
Culvert & Drainage & Cuttings	R14m	R31m	R16m	R18m	R78m
Other Works	R3m	R2m	R6m	R13m	R24m
Grand Total	R1 038m	R1015m	R1 040m	R1751m	R4 844m

D – Key Performance Indicators to be Achieved, based on the required 250mt plan

Context: Train Slots are calculated based on, inter alia, projected travel times considering envisaged network conditions, travel speeds and prescribed speed limits across the network.

Volume forecasts are estimates based on currently known traffic mix. The IM does not yet know what the future volume mix will be as this is the first market opening. This will be dependent on a combination of market interest and the National Rail Master Plan forecasted traffic mix and agreed funding plans.

Assumptions: Number of slots indicated do not consider unpredicted security incidents, therefore actual slots available may fluctuate dependent on the status of network security.

Note: Information on projected travel times associated with this plan will be made available at a later stage. These may be affected by changes in network condition which will be reviewed from time to time

Orecor: Restorative Capital Investment Anticipated Benefit for all Ore Corridor Commodities.

KPI / Benefit Measure	UoM	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
Capacity	Slots per week	49	56	56	56	56
Volumes (Mt)	(Mt)	66,95	67,05	68,53	68,53	68,53

Capecor: Restorative Capital Investment Anticipated Benefit for key PE manganese flows.

KPI / Benefit Measure	UoM	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
Capacity (Mn)	Slots per week	40	41	41	41	41
Volumes (Mt)	(Mt)	12,55	12,55	12,55	12,55	12,55

Central: Restorative Capital Investment Anticipated Benefit for all Central Corridor Commodities.

KPI / Benefit Measure	UoM	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
Capacity	Slots per day	16	23	47	47	47
Volumes (Mt)	(Mt)	2,9	4,3	4,7	5,0	5,3

Containercor: Restorative Capital Investment Anticipated Benefit for all Container Corridor Commodities.

KPI / Benefit Measure	UoM	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
Capacity	Slots per day	18	29	33	35	47
Volumes (Mt)	(Mt)	8,2	9,9	10,9	11,4	11,8

NorthCor: Restorative Capital Investment Anticipated Benefit for key export RBCT coal flows.

KPI / Benefit Measure	UoM	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
Capacity	Slots per day	13,5	13,8	14	14,2	14,7
Volumes (Mt)	(Mt)	66,8	69,2	71,9	74,3	78,8

Northeast Cor: Restorative Capital Investment Anticipated Benefit for the Maputo and Richards Bay Magnetite flows.

KPI/ Benefit Measure	UoM	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
Capacity	Slots per day	9	10	10	10	10
Volumes (Mt)	(Mt)	13,1	14,0	15,1	16,2	16,7

E – Affordable Maintenance Investment Budget based on current Volume Projections and envisaged Funding mechanisms for the Preriod_2025/26 – 2029/30

Context: The table below is based on the most practical latest budget estimate of TRIM's Corporate plan in the current business environment. While revenue is projected to increase, it remains insufficient to cover the escalating capital and operational expenditure requirements.

To address the funding shortfall, TRIM must adopt a multi-source funding strategy, leveraging various mechanisms to secure the necessary capital over the next three years (Access Fees, Leasing Income, Scrap Sales, Budget Facility Infrastructure (BFI) funding, Private Sector funding, Debt relief, Project financing, Debt and Concessions). However, TRIM requires a substantial cash injection during the two years preceding the implementation of the Catalytic PSP transactions outlined in the Freight Logistics Roadmap. This interim funding is critical to ensuring timely capital investments that will enable the restoration of essential network capacity and reliability while laying the foundation for comprehensive rail reform during this transitional period.

Although Capital requirements for 2025/26 was R11.36bn, this has now been reduced to R9.36bn to ensure executability given the non-confirmation of funding and consideration to supplier lead times.

Delayed and or lower fund injections than required <u>will</u> cause a downward adjustment of volume capacity projections and a slower improvement in network performance and reliability and should be avoided.

Assumptions: e.g., Cash from operations (access fees), Budget Facility for infrastructure allocations and other private sector collaborations are required to fund the capital investment requirements.

R Billion	2025/26	2026/27	2027/28	2028/29	2029/30	Total
Capitalised operating expenditure	6,6	9,7	8,1	8,1	9,2	41,7
Sustaining capital expenditure	2,4	2,7	1,9	1,8	1,5	10,3
Expansion capital expenditure	0,4	0,9	0,8	0,4	-	2,5
Total	9,4	13,3	10,8	10,3	10,7	54,5

This can be further Broken down as follows:

Capital Expenditure (R Millions)	2025/26	2026/27	2027/28	2028/29	2029/30
Infra Copex	6500	9552	8001	7934	9018
Infra Rail Wagon Copex	112	130	98	150	151
Сорех	6 612	9 682	8 099	8 084	9 168
Wagon Fleet Renewal Programs-Infra	281	392	388	136	168
Ore line transformers	133	0	0	0	0
Rail Infra Project@ 3rd Tippler-Port of SLD	45	0	0	0	0
Sustaining Infrastructure Programs	279	588	535	619	389
Real Estate	25	243	132	8	17
IATS	-	2	1	-	-
Technologies	9	45	11	11	11
Finance Leased Assets	964	837	738	781	826
Other IT Projects	195	35	13	3	-
Telecoms	357	448	47	203	42
Security	48	135	70	72	95
Hazmat	-	5	10	15	15
Sustaining Capex	2 337	2 730	1 944	1 849	1 563
Waterberg Stage 2-3	119	127	127	0	0
Coal 81	254	268	215	175	0
Other Coal Projects	15	119	84	0	0
Manganese	25	348	329	237	0
Expansionary Capex	413	862	755	412	0
Total Capital Expenditure	9 361	13 273	10 797	10 345	10 731

2025/26 Detailed National Plan for Infra Copex based on corporate plan affordability is further broken down into work breakdown packages as follows:

WorkBreakdown Package	Northcor	OreCor	CapeCor	NortheastCor	Central Corridor	ConCor	Reclass	Telecoms	Fuel Depot	Grand Total
Rail Replacement Work	R110m	R562m	R188m	R193m	R97m	R67m				R1 218m
Train Authorisation Systems	R388m	R50m	R196m	R105m	R156m	R84m				R980m
Reclass/Provision for Incidents							R528m			R528m
Sleeper Replacement Work	R145m	R126m	R116m	R83m	R10m					R480m
Turnout and Turnout Components	R166m	R113m	R60m	R52m	R6m	R17m				R415m
Substation Works	R62m	R120m	R98m	R13m	R48m	R64m				R406m
Embankment/Slope rehab Work	R82m		R55m	R51m		R176m				R364m
Other Works	R148m	R30m	R115m	R15m	R1m	R7m				R317m
Ballast and Screener Work	R100m	R25m	R43m	R30m	R78m	R36m				R312m
Formation Rehab works	R142m		R7m	R77m	R10m	R46m				R282m
Critical OHTE Works	R95m		R103m	R32m	R14m	R3m				R246m
Radio Works								R234m		R234m
Condition Assessment Systems	R47m	R99m	R22m	R5m		R1m				R173m
Bridge Rehab Works	R17m	R20m	R26m	R17m	R92m					R172m
Drainage/ Culverts work	R10m	R60m	R17m	R28m	R11m	R5m				R132m
Service Road Work	R9m	R60m	R19m		R4m					R91m
Transmission line	R24m		R20m	R19m	R8m					R71m
Civil/Mechanical Works									R60m	R60m
Transmission works	R11m		R7m	R2m	R2m					R21m
Grand Total	R1 556m	R1 265m	R1 092m	R723m	R536m	R507m	R528m	R234m	R60m	R6 500m

F – Expansion Capital Plan

Context: Expansion Project listed below reflect current TRIM Expansion Programme pipeline based on the current allocated funding plan. Projects will be executed over the next 5 years. A review of these plans in line with the National Rail Master Planning Process, the first draft of which is due in February 2025 will be undertaken with the Department of Transport.

Assumptions: The Corporate plan budget in section E represents Transnet allocated budget. Programme funds will also be supplemented by Private sector at a business case level.

and support the increase of volumes from 71 MTPA to 81 MTPA.
al Doubling Link: RCB Port-Nsezi Instruction of locomotive preparation facility in Bayvue Yard of the Port of Richards Bay to improve the turnaround time
locomotives in the Port of Richards Bay.
erberg - Revised Stage 2-3- FEL4-13.8MTPA
nstruction of the Marakele and Diepsruit loops and related works to increase the line capacity for coal from Lephalale t abazimbi from 2.6 MPTA to 9.5 MPTA
anha Salkor B Yard
tend lines 1, 2 & 3 in Salkor B yard, with about 700m to the South, provide OHTE and High mast lighting for B yard t sure that arriving Manganese trains can be shunted directly into B yard and processed further and thus increase th unting capacity of Salkor yard.
ersdam Infiltration Pond & Track Work
pansion of the retention pond to eliminate flooding of the track lines, as well as upliftment of the submerged line i imfersdam between Fieldsview and Kimberley sections on the Cape Corridor to reduce the turnaround time of th anganese trains in the Northern Link Line.
Sishen Rail Link Line and Sishen Erts Yard Expansion Project
nstruct the Sishen rail link line to create a direct link from Hotazel line to the Sishen yard to eliminate the current bottlened Haakbosleegte loop, caused by the turnaround of the newly introduced manganese trains in Sishen Erts Yard.
instruct three additional lines in the Sishen yard to accommodate Manganese trains headed for Saldanha to improv Ficiency and the increase of the Manganese export volumes.
anese 16Mtpa Phase 2:
instruct loops and yards with supporting infrastructure from Hotazel to the Port of Ngqura in support of the future volum owth to 16mtpa demand for manganese.

Tippler 3

• Construct railway lines to link Tippler 3 with the Salkor Yard and Port Siding to support the operation of Tippler 3, increasing the Ore handling capacity of the Port of Saldanha.

Power Upgrade Ore Line

• Install 60mva transformers, distribution lines and substations to increase the ore line electrical infrastructure capacity to run an all-electric fleet decreasing operating costs.

Mobile Substations Countrywide

Acquire the services of an Original Equipment Manufacturer (OEM) that will design, manufacture, commissioning, and supply 2 x 3kV DC and 3 x 25kV AC total (five) mobile substations countrywide and provide sustainable training

Ukuvuselela Project

Extend 17 loops and 3 yards (Kaalfontein, Watloo and Port of PE) along the South Corridor to provide additional capacity for the Automative trains from Gauteng to the Port of PE. This will be funded by the Budget Facility for Infrastructure (BFI) as announced by the Minister of Finance.

Botswana Rail Link and Eswatini Rail Link

Develop a new corridor that will link the mines in Botswana to the SA ports via the Eswatini link for transportation of bulk commodities and strengthen regional integration.

G – **DEFINITIONS**

COPEX means Short for "Capitalised Maintenance Expenditure," refers to expenditure for replacing or maintaining components of existing assets to preserve their functionality or extend their life. This typically involves planned or unplanned maintenance activities that are capitalized because they meet the criteria of enduring benefits under accounting standards.

CAPEX means short for "Capital Expenditure", refers to the funds used to acquire, upgrade, or construct long-term assets that are expected to provide economic benefits over many years. Examples include purchasing new equipment, building facilities, or adding entirely new infrastructure. Capex is typically associated with creating new assets or significantly upgrading existing ones.

Sustaining capital expenditure means Investments made to maintain the current operating level of assets. This includes replacing old equipment or infrastructure to ensure the business continues to operate efficiently without necessarily expanding capacity. Purpose: Maintain the current scale of operations without major capacity enhancements.

Expansion capital expenditure means: Expenditure aimed at expanding the capacity or scope of operations, creating new assets, or significantly upgrading existing ones to increase capabilities. **Purpose**: Grow the business by increasing production capacity, capabilities, or market reach.

Capitalised Maintenance expenditure refers to expenditure for replacing or maintaining components of existing assets to preserve their functionality or extend their life. This typically involves planned or unplanned maintenance activities that are capitalized because they meet the criteria of enduring benefits under accounting standards. Purpose: Sustain the operational capability of existing assets.

Key Differences:

Aspect	COPEX	Sustaining Capex	Expansionary Capex
Purpose	Maintain and extend life of current assets	Maintain operations at current levels	Increase capacity, capability, or scope
Scope	Component replacement/maintenance	Systemic upgrades/replacements	New projects or major upgrades
Accounting Treatment	Capitalized as part of existing assets	Capitalized as replacements or upgrades	Capitalized as new assets
Examples	Rail replacement (≥100m), ballast rehab	Replacing aging infrastructure	Building new lines, adding capacity
Focus	Operational sustainability	Business sustainability	Business growth