

# Regional Transport Integration Roundtable

SADC Regional Infrastructure Development Master Plan  
Transport Sector Plan



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**aurecon**

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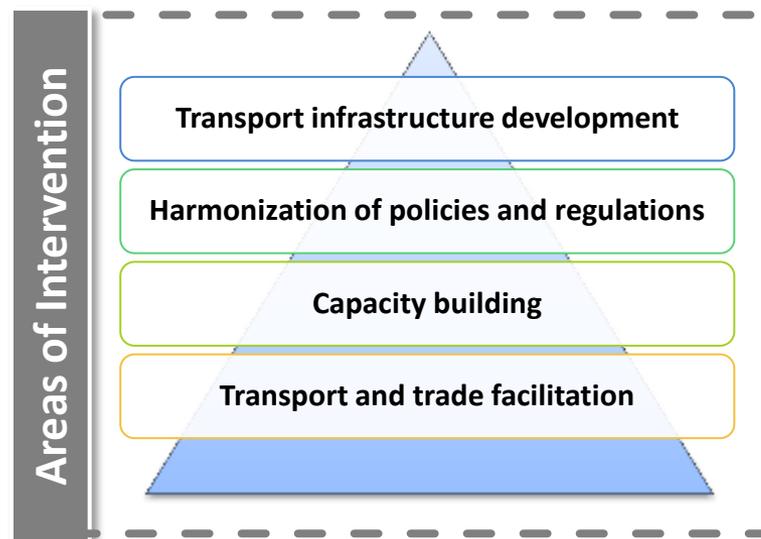
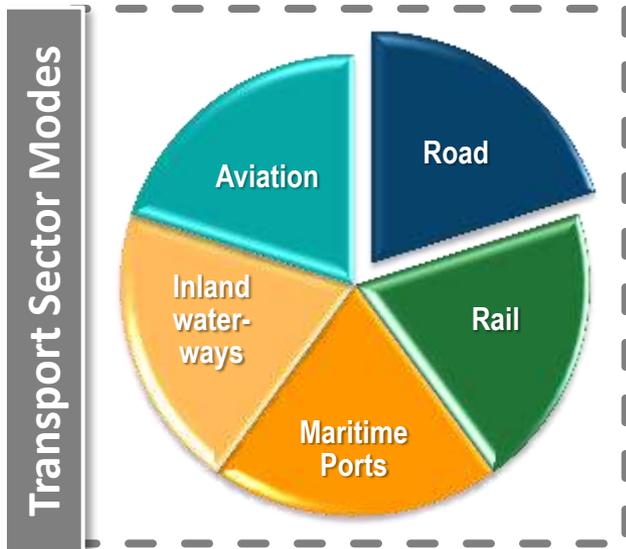


**6. Proposed Implementation Action Plan and Projects**

# 1. Scope, Objectives and Vision of the Transport Sector Plan



# Introduction to the Transport Sector Plan



## Transport Sector Plan Progression

*Surface Transport Project List*



*Surface Transport Policy, Regulatory and Legal Framework*



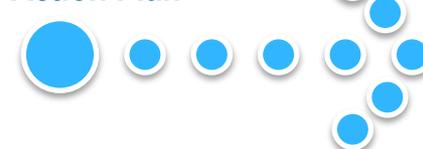
*Diagnostic Surface Transport Infrastructure Requirement Projection for 2027*



*Strategic Framework*



*Proposed Implementation Action Plan*



# Objectives

## Cursory / Strategic Assessment

- Situational Analysis (base year)
- First order / desktop Future Demand Projection (2027)
- Project identification (primary and secondary sources) and fiche development
- Assess effectiveness and adequacy of enabling environment to support infrastructure development
- Propose deployment / action plan



# Approach to Project Identification

Infrastructure status quo summary:

- Capacity
- Condition
- Discontinuity

Forecasts of the demand for regional trade, transit trade and transport economic growth

Identification of priority regional transport corridors based on analysis of trade flows

A “best guess” scenario of what new transport infrastructure will be required by 2027 based on projected new economic activities and population centres.

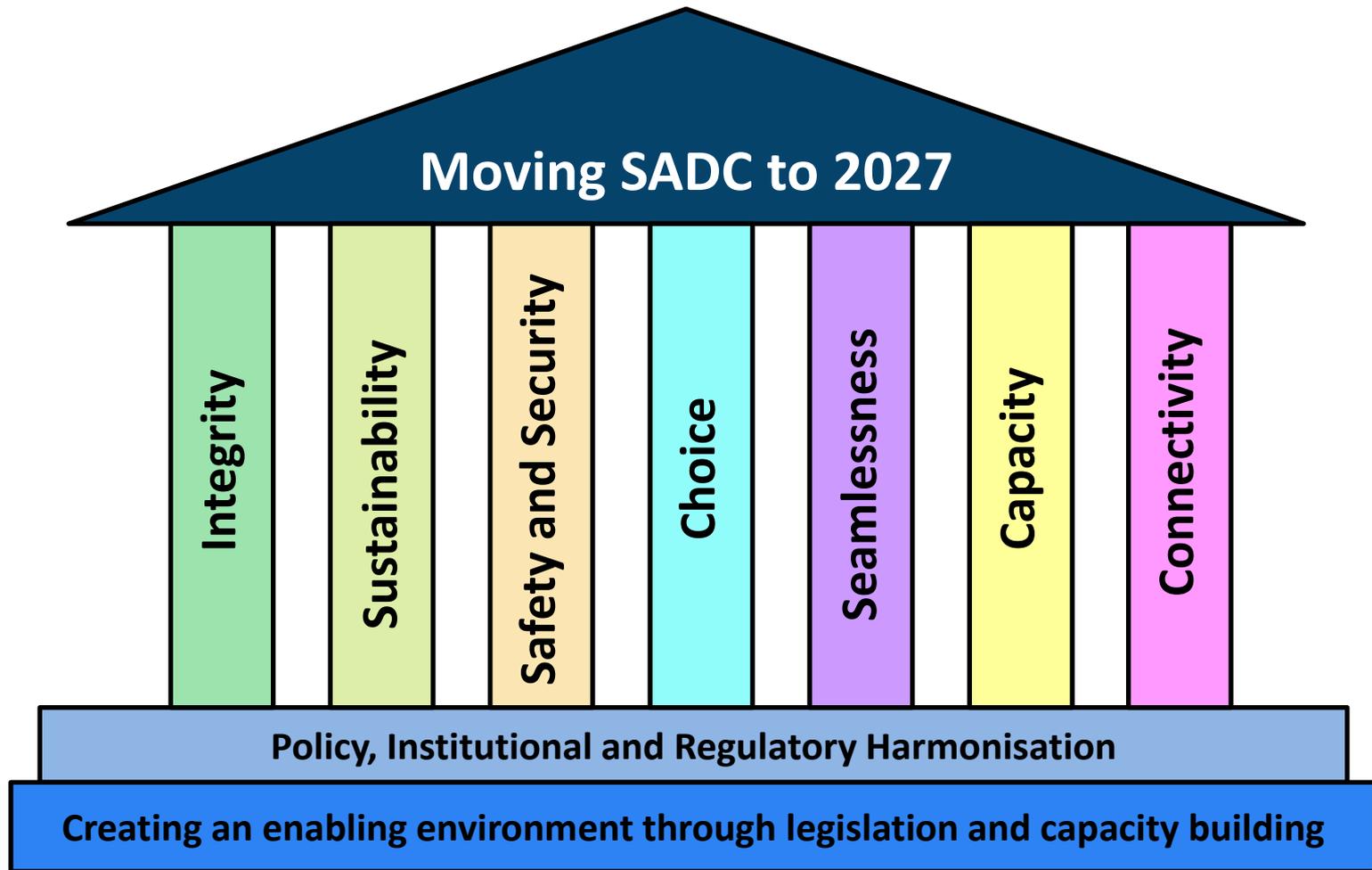


## Sources:

Program for Infrastructure Development for Africa Draft Reports (PIDA)

Definition and Investment Strategy for a Core Strategic Transport Network for Eastern and Southern Africa

# Vision of the Transport Sector Plan



***NOTE:*** The pillars identified to moving the SADC transport system into the future were grouped according to salient themes as apposed to the various sub-sectors of transport, as the RIDMP promotes modal / sub-sector integration.

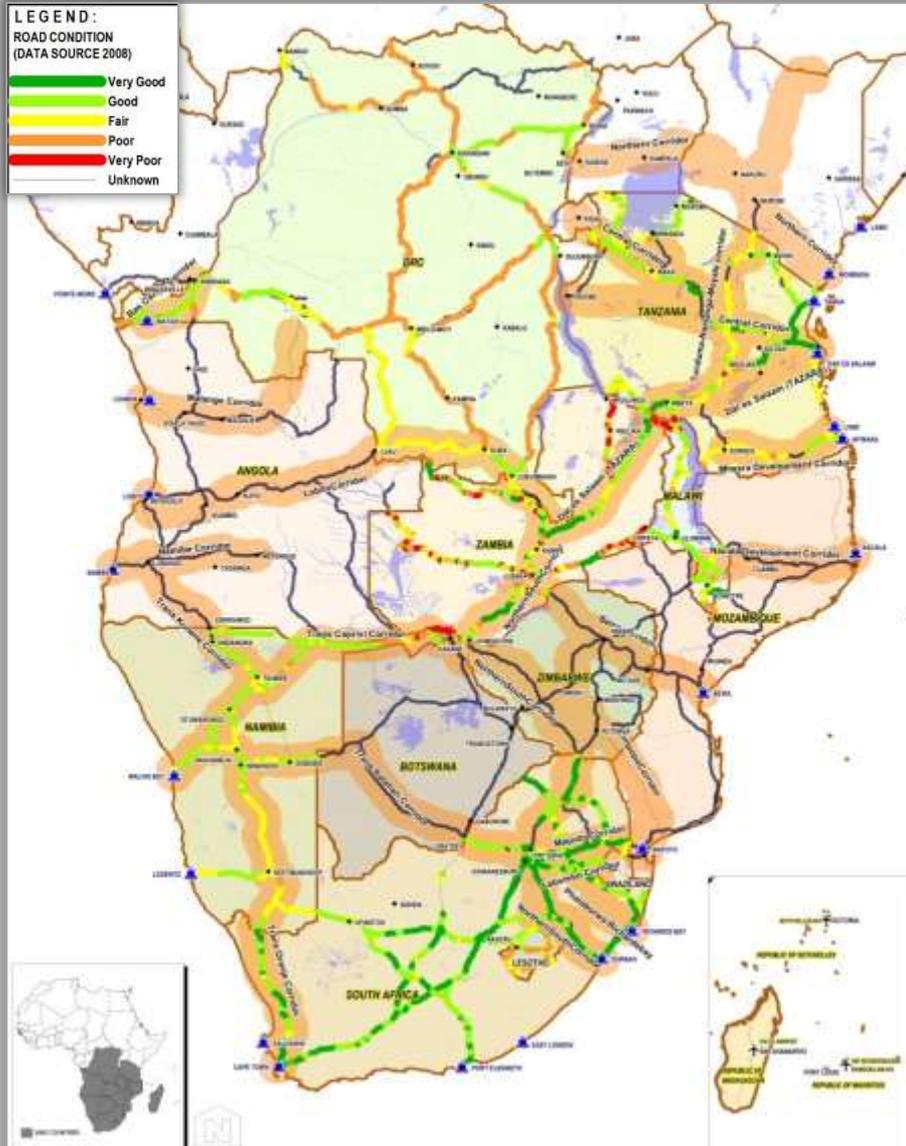
## 2. Current Status of Transport Infrastructure



# Status Quo: Roads



## Salient Issues and Concerns

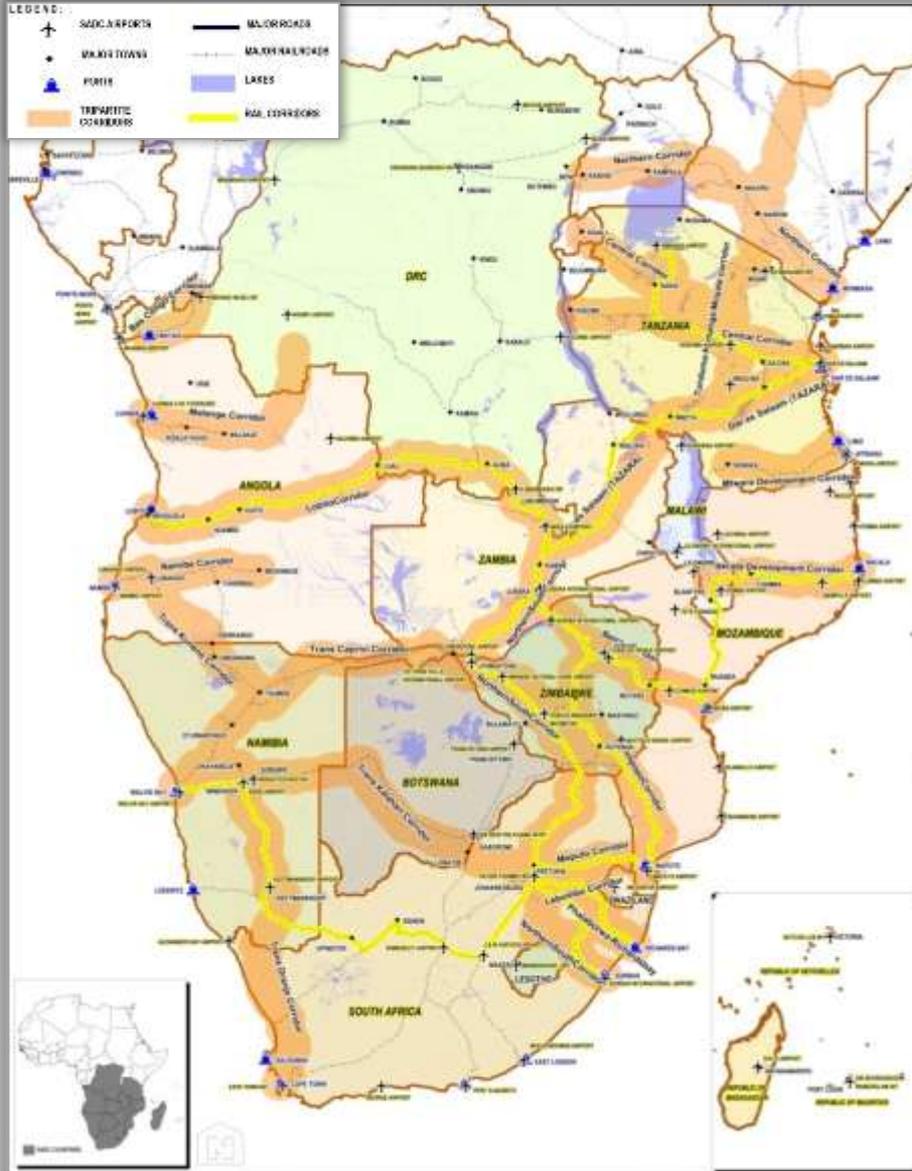


- High transport costs
- Lack of – and high cost of maintenance
- Poor road conditions
- Missing links between key origins and destinations
- Occasional congestion between major nodes
- Delays at cities where by-passes have not yet been built
- Capacity and safety constraints due to lack of climbing lanes
- Delays at border posts
- High accident rates (road safety)

# Status Quo: Rail



## Salient Issues and Concerns



- Poor reliability, high accident and failure rates
- Theft of operating equipment
- Poor locomotive and wagon availability
- High operating costs and low freight volumes, thus not financially sustainable
- Road transport competition
- Gauge and method of locomotive propulsion not standardized
- Lack of continuity and inter-regional connectivity
- Lack of maintenance and investment
- Damage as result of conflict
- Operate below 'design capacities' due to poor track condition

# Status Quo: Sea Ports and Aviation



## Salient Issues and Concerns

- Poor maintenance and lack of funding
- Most currently operate close to capacity
- Poor modal interface management
- Poor materials handling capabilities, equipment and related infrastructure
- Trade and transport facilitation delays
- Poor location and layout hampers expansion opportunities;
- Poor access
- Insufficient berths
- Depth constraint
- Congestion
- Poor condition



## Salient Issues and Concerns

- Inadequate runways and terminals
- Deficient navigation and traffic control equipment
- Skills and capacity constraints
- Lack of maintenance
- Need for modernization

# 3. Current Status of the Enabling Environment



# Current Status of the Enabling Environment

## ROAD DIAGNOSTIC

### Infrastructure Challenges

- Lack of regional road infrastructure policies implementation
- Inadequate funding for development of RTRN
- Road user charges not harmonised
- Axle load limits not harmonised and regulated
- Non-compliance with regional roads standards
- Lack of efficient and effective commercialised road agencies

### Transport Challenges

- Protection of national road transport industry
- Issuance of transport operators card by competent (national) authority
- Practical application and management of the bilateral agreements
- Application and enforcement of permit system
- Lack of law enforcement capacity

## RAIL DIAGNOSTIC

### Infrastructure Challenges

- Lack of holistic regional rail policy
- Re-investment in run-down systems, including public funding

### Transport Challenges

- Low system reliability
- Open access onto regional network.



# Current Status of the Enabling Environment

## MARITIME DIAGNOSTIC

- Compliance with international conventions

### Ports

- Investment required to grow capacity and improve operations
- Lack of private sector participation

### AtoN

- Navigation aids' sustainability, funding and modernisation required

### Shipping

- Development of regional industry and economies of scale required

### Maritime

- Lack of holistic regional maritime policy
- Maintaining port-state control skills and establishing sustainable funding model

## AVIATION DIAGNOSTIC

### Airports

- Designation of regional hubs

### Air Navigation Services

- Perceived national security issues
- Commercialisation and de-politisation required
- Sustainable funding model
- Treatment of *lower airspace* if *upper airspace* is commercialised

### Air Transport

- Implementing air services liberalisation
- Protection of national (especially state-owned, loss-making) airlines

### Aviation

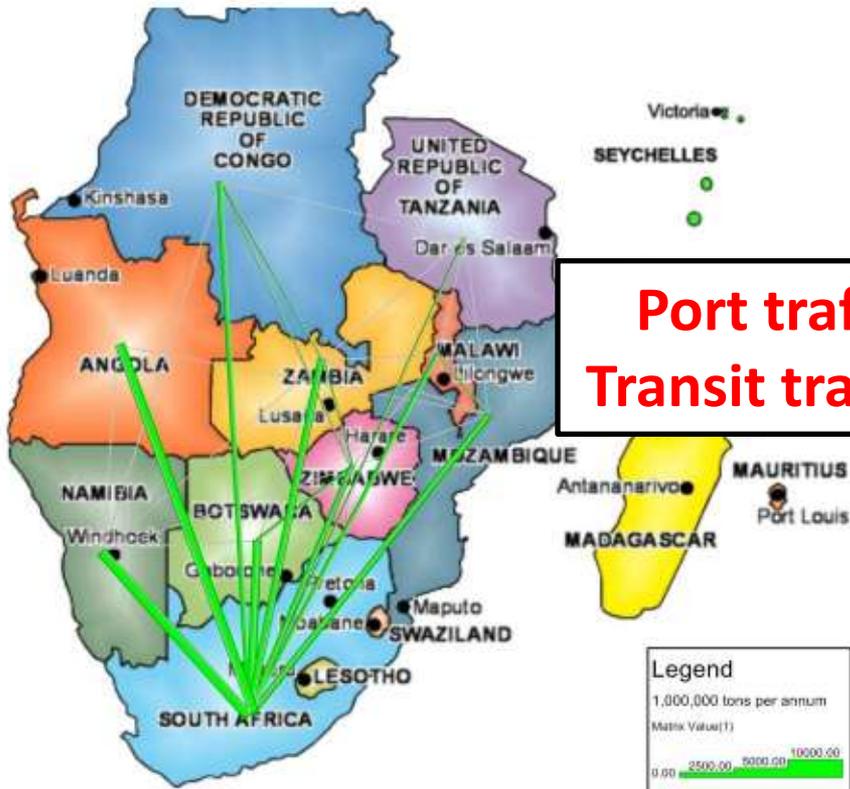
- Lack of holistic regional aviation policy
- Non-compliance with international conventions
- Lack of implementation of standards and recommended practices
- Lack of coordination of training efforts by Member States
- Maintaining safety oversight skills and establishing sustainable funding model

# 4. Projections and Trends for 2027 with Infrastructure Requirements

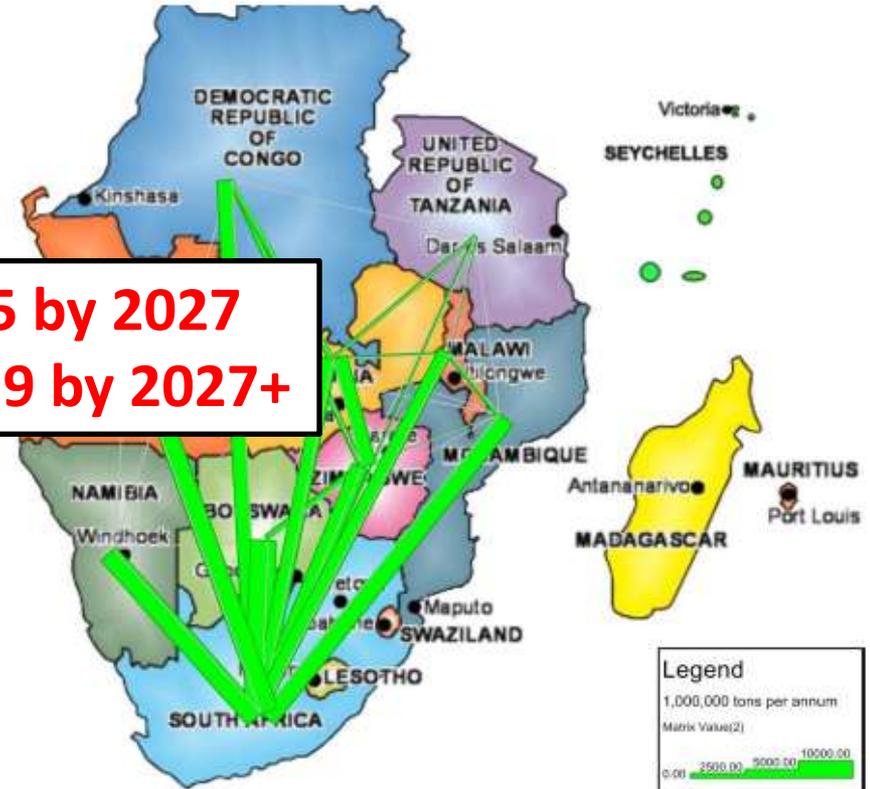


# Estimated Trade Flows between SADC Countries

2009



2027



**Port traffic x 5 by 2027**  
**Transit traffic x 9 by 2027+**

## Imports:

South Africa (45 million tons), Angola (10 million tons), and Zimbabwe (7 million tons).

## Exports:

South Africa (81 million tons), Angola (51 million tons), Botswana (7 million tons), and Zambia (4 million tons)

The following were used in forecasting future demand for regional and transit trade:

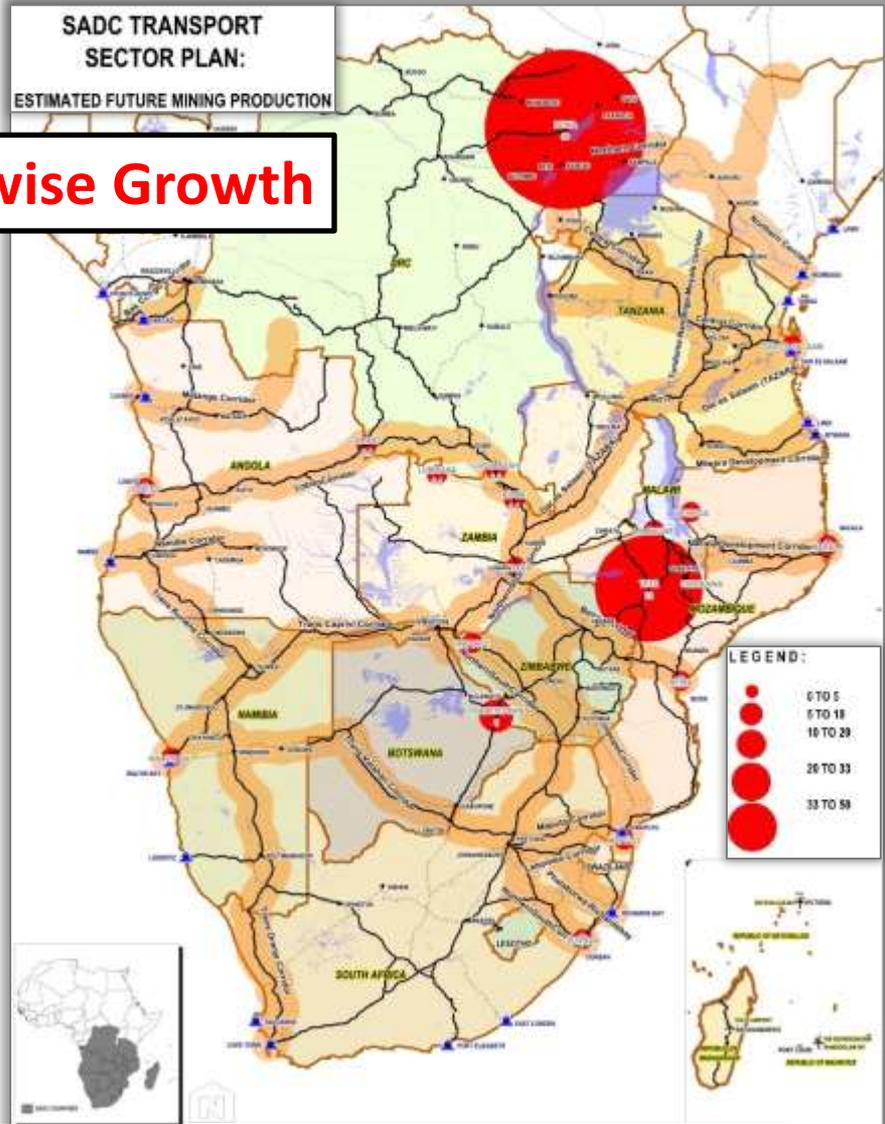
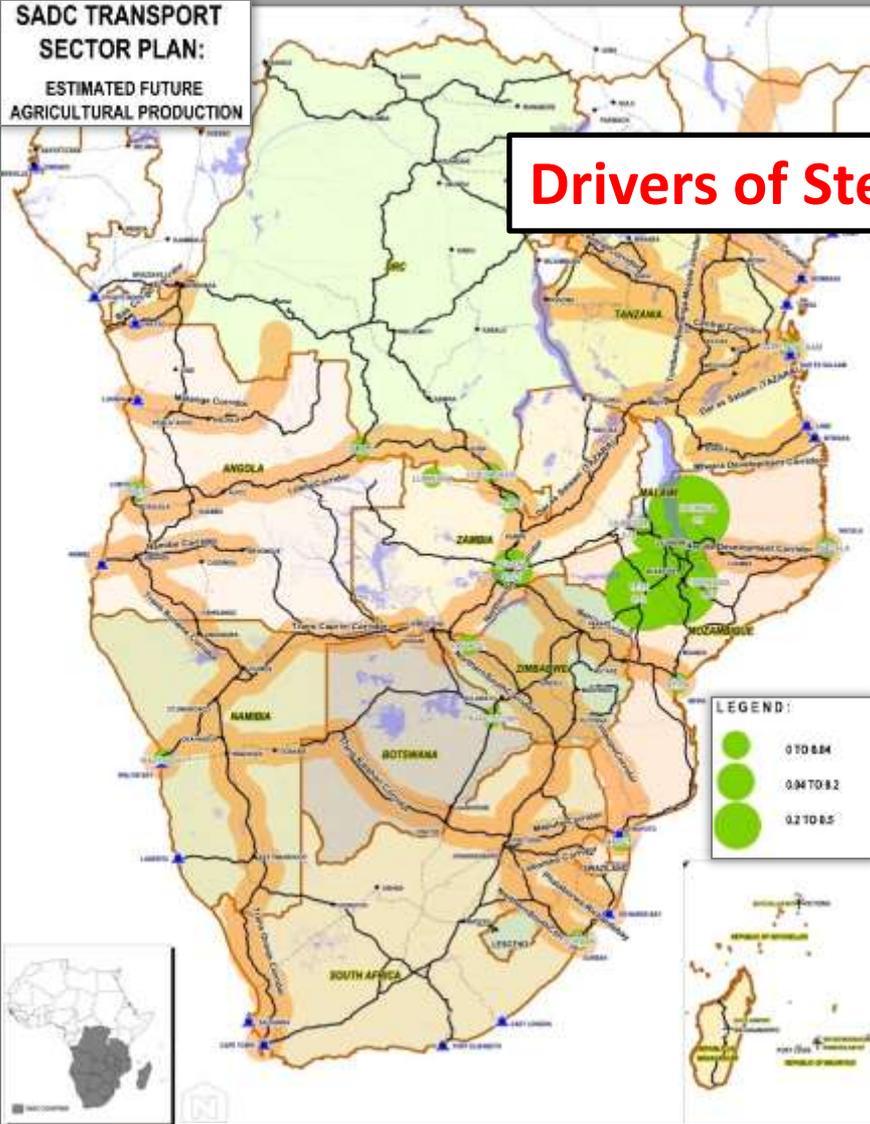
- Historical trade data series
- GDP forecasts by country
- Population forecasts by country

# Estimated Regional Agricultural and Mining Production

SADC TRANSPORT  
SECTOR PLAN:  
ESTIMATED FUTURE  
AGRICULTURAL PRODUCTION

**Drivers of Step-wise Growth**

SADC TRANSPORT  
SECTOR PLAN:  
ESTIMATED FUTURE MINING PRODUCTION



**Source:**

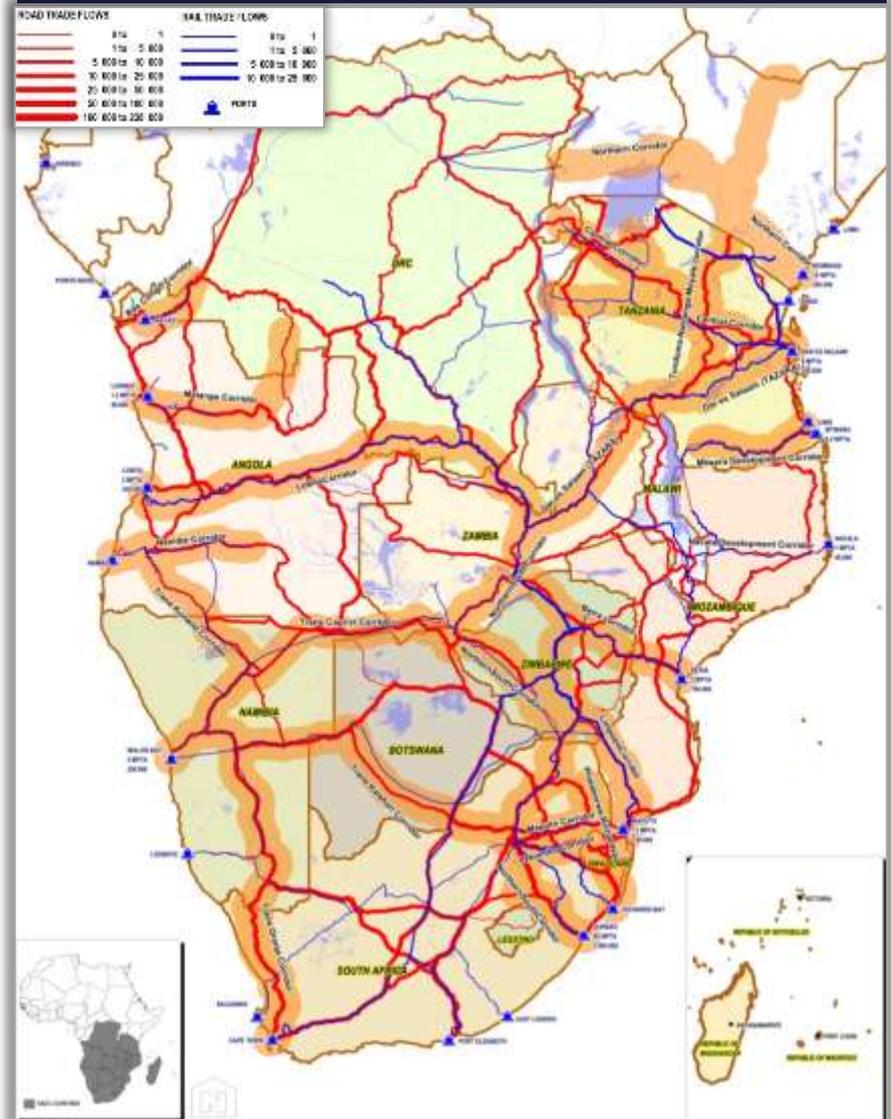
Data obtained from: *Definition and Investment Strategy for a Core Strategic Transport Network for Eastern and Southern Africa*

# Assigned Projected Trade Flows

## 2009 Projected Trade Flows



## 2027 Projected Trade Flows





# 5. Strategic Framework

Over-arching themes in the Transport Sector that should be highlighted:

**1. Systemise Implementation of the Protocol**

**2. National Regulations to Conform to International and Regional Guidance**

**3. Continue to Commercialise Delivery**



ROAD

## PRIORITIES FOR COOPERATION

### Infrastructure

- “Think regionally and act nationally” in implementation of Road Infrastructure Policy
- Agreement on funding strategy
- Harmonisation of road user charging
- Harmonised load limits
- Roads standards harmonisation
- Performance monitoring of RTRN
- Institutionalised, commercialised road management practices.

### Transport Services

- Move from bi/multilateral arrangements to regional liberalization
- Elevate Joint Route Management Committees to corridor level
- Establish transport associations to provide certification and monitoring services to transporters.

# 5. Strategic Framework

## PRIORITIES FOR COOPERATION



### RAIL

- Common network design and operating standards
- Formulation and negotiation of a new multilateral regional business agreement between railways including operations on a corridor basis



### AVIATION

- Regional integration of airspace
- Implementation of Yamoussoukro Decision
- Standardised regional SARPs
- Incorporation of SARPs into national legislation
- Region-wide training



### MARITIME

- Information and experience exchange
- Development of national/regional maritime traffic lanes to know where vessels passing the region would be sailing, to enhance maritime safety and pollution prevention (as per WIO-MHP model)
- Review requirements of and compliance with African Maritime Transport Charter;
- Standardised regional standards and practices
- Incorporation of standards into national legislation
- Region-wide training.



# 5. Strategic Framework

## Overarching Transport Institutional Reform

1. Reinstate regional body that is mandated to perform the policy and planning functions on behalf of the SADC region.

2. Establish Regional Regulatory Oversight Bodies (economic and technical)



ROAD

- Establish general or roads-specific regional transport competition authority; and
- Regional law enforcement approach (and institution/s).



RAIL

- Strengthening rail planning capacity
- Strengthening of SARA in respect of human resources
- Establishment of a regional railway safety regulator



MARITIME

- Continue commercialization
- Investigate implications of unbundling integrated port-rail operations
- Investigate regional delivery of international standard navigation aids
- Establishment of regional safety oversight agency



AVIATION

- Continue commercialisation of regional airports
- Continue commercialisation of national ATNS
- Establishment of regional Upper Airspace Control Centre
- Partial withdrawal of government participation in and liberalisation of national airlines
- Continue establishment of a regional air services authority
- Establishment of regional safety oversight agency.

# 6. Proposed Implementation Action Plan



# Project Identification

Classifications: MSP, BGS, CSTN, Institutional, LTSP

208 projects in total at over **\*35 billion USD**

99 Strategic modal development plan projects mapped

- 18 Border Post Projects (12 mapped)
- 61 Road Projects (21 mapped)
- 26 Rail Projects (14 mapped)
- 17 Aviation projects (9 mapped)
- 60 Ports and Water Transport Projects (43 mapped)
- 26 Policy/Regulatory/Institutional projects (0 mapped)

**\* Note:**

*This cost estimate takes only into account projects for which cost information was available .*

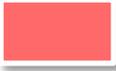


# Trade Flow Assignment

- Trade flows give an indication of transport network demand which in turn is linked to economic activity.
- Origin-destination \*matrices were further developed to be mode and port specific – assigned as trade flows.
- Projects placed on the GIS maps together with the 2009 and 2027 trade flows on the regional road and rail networks.
- The figures indicate the corridors in three colours linked to trade flow volumes:

 ***Highest Trade Flows***

 ***Intermediate Trade Flows***

 ***Lowest Trade Flows***

**\* Matrices Source:**

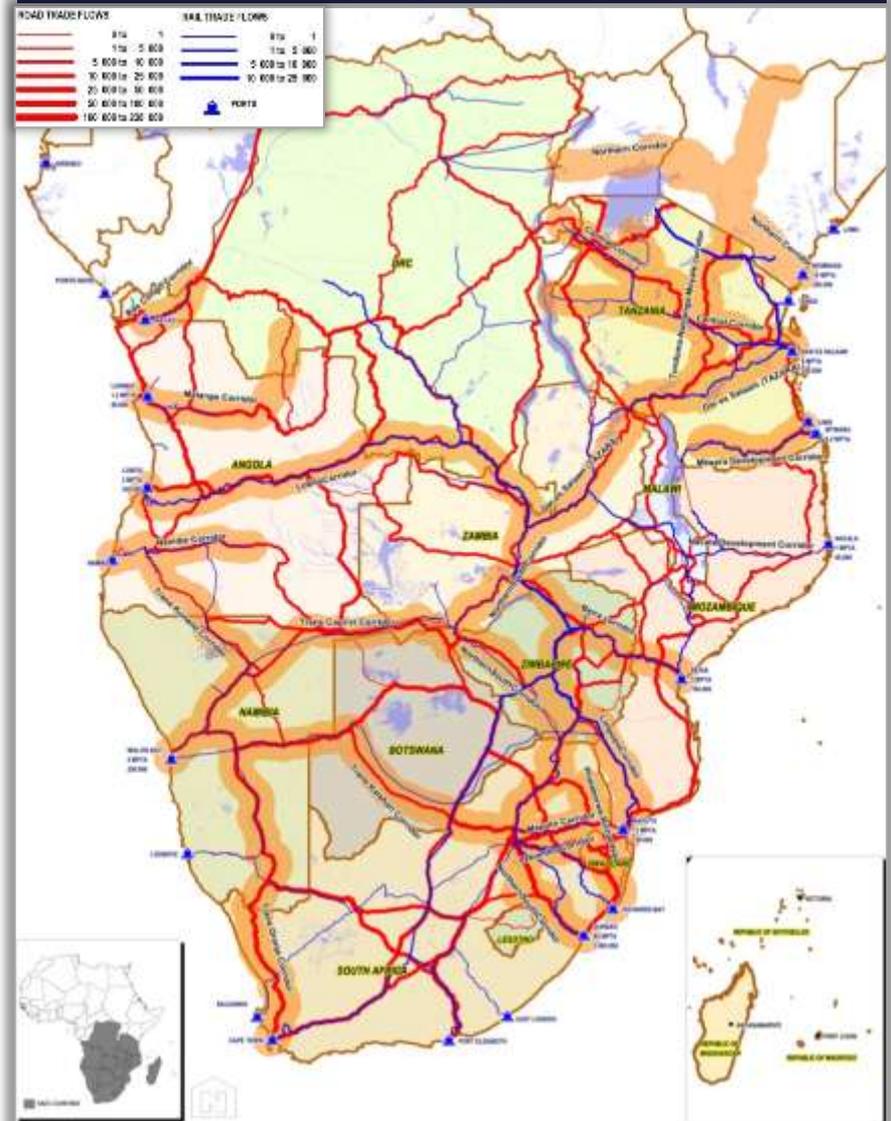
*Definition and Investment Strategy for a Core Strategic Transport Network for Eastern and Southern Africa (2011).*

# Projected Trade Flows

## 2009 Projected Trade Flows



## 2027 Projected Trade Flows



# Corridor Trade Flow Ranking

## 2009 Trade Flows with the Infrastructure Projects



## 2027 Trade Flows with the Infrastructure Projects



# Action Plan

1. Infrastructure projects in the vicinity of corridors with higher trade flows should be given higher implementation consideration as they can assist in the further development of trade and economy along these corridors.

***Projects in the vicinity of corridors with Highest Trade Flows = Short Term Implementation***

***Projects in the vicinity of corridors with Intermediate Trade Flows = Medium Term Implementation***

***Projects in the vicinity of corridors with Lowest Trade Flows = Long Term Implementation***

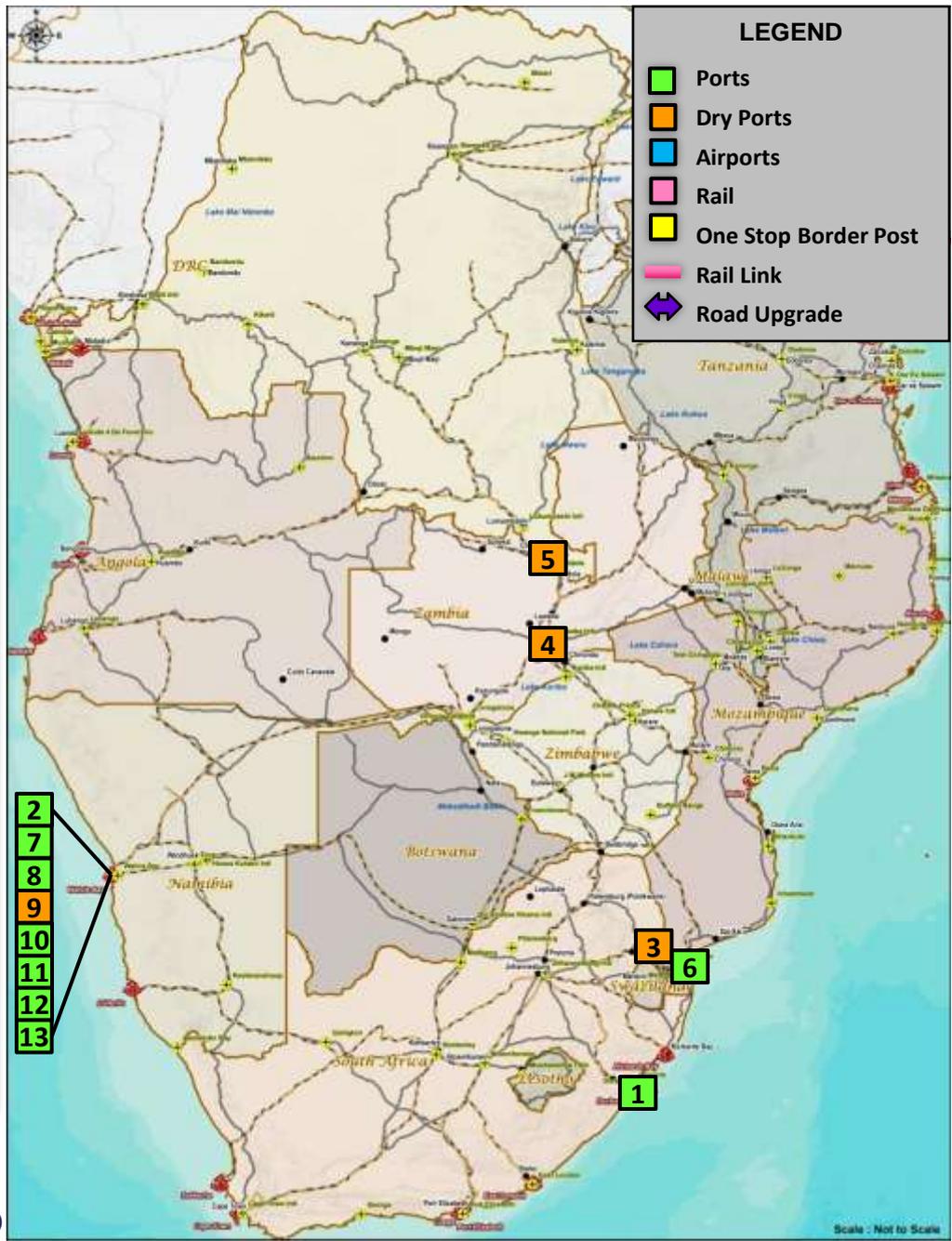
2. Then Enabling environment projects and initiatives must receive immediate attention parallel to the infrastructure projects.



# Project Locations by High, Medium and Low Corridor Trade Flow Classifications



# Longer Term Regional Strategic Projects



## High Trade Flow Corridor Projects

1	BGSP 14- South African Ports - Durban Port	Durban port- Port expansion (R23.37 b)	North South Corridor
2	BGSP Nr 13- Walvis bay	Port expansion	Trans Kalahari Corridor
3	BGSP Nr 27- Dry port at Lebombo/ Ressano Garcia border crossing	Construct Dry Port	Maputo Corridor
4	BGSP Nr 28- Dry Port at Lusaka	Construct Dry port	North South Corridor
5	BGSP Nr 29- Dry Port at Kitwe	Construct a Dry port	North South Corridor
6	CSTN- Vol 4- Nr 17- Maputo and Matola Port	Maputo Port- The rehabilitation project includes dredging.	Limpopo Corridor
7	CSTN- Vol 4- Nr 18- Walvis Bay	Relocation of some operations is recommended	Trans Kalahari Corridor
8	CSTN- Vol 4- Nr 19- Walvis bay VTS/ Port Control	The Port will relocate the port control system to an area adjacent to the present Radar Tower.	Trans Kalahari Corridor
9	CSTN- Vol 4- Nr 30- Botswana Dry Port at Walvis Bay	Construct Dry Port	Trans Kalahari Corridor
10	MSP Nr 61- The New Walvis Bay container terminal on reclaimed land	Namport- Construction of a 30 hectare large new modern container terminal to expand the port of Walvis Bay container handling as well as bulk handling capacity.	Trans Kalahari Corridor
11	MSP Nr 62- The New tanker berth	Namport- Construction of a new tanker berth (a modern marine petroleum offloading facility) in Walvis bay.	Trans Kalahari Corridor
12	MSP Nr 63- The Ship and Rig Repair Quay	Namport- The new Ship and Rig Repair Quay will see the construction of a new jetty suitable for two large semi- submersible oil rigs as well as drill ships.	Trans Kalahari Corridor
13	MSP Nr 64- The Walvis Bay Marina development	Namport-Allow a private investor to build, operate and own a modern facility through long term concession.	Trans Kalahari Corridor

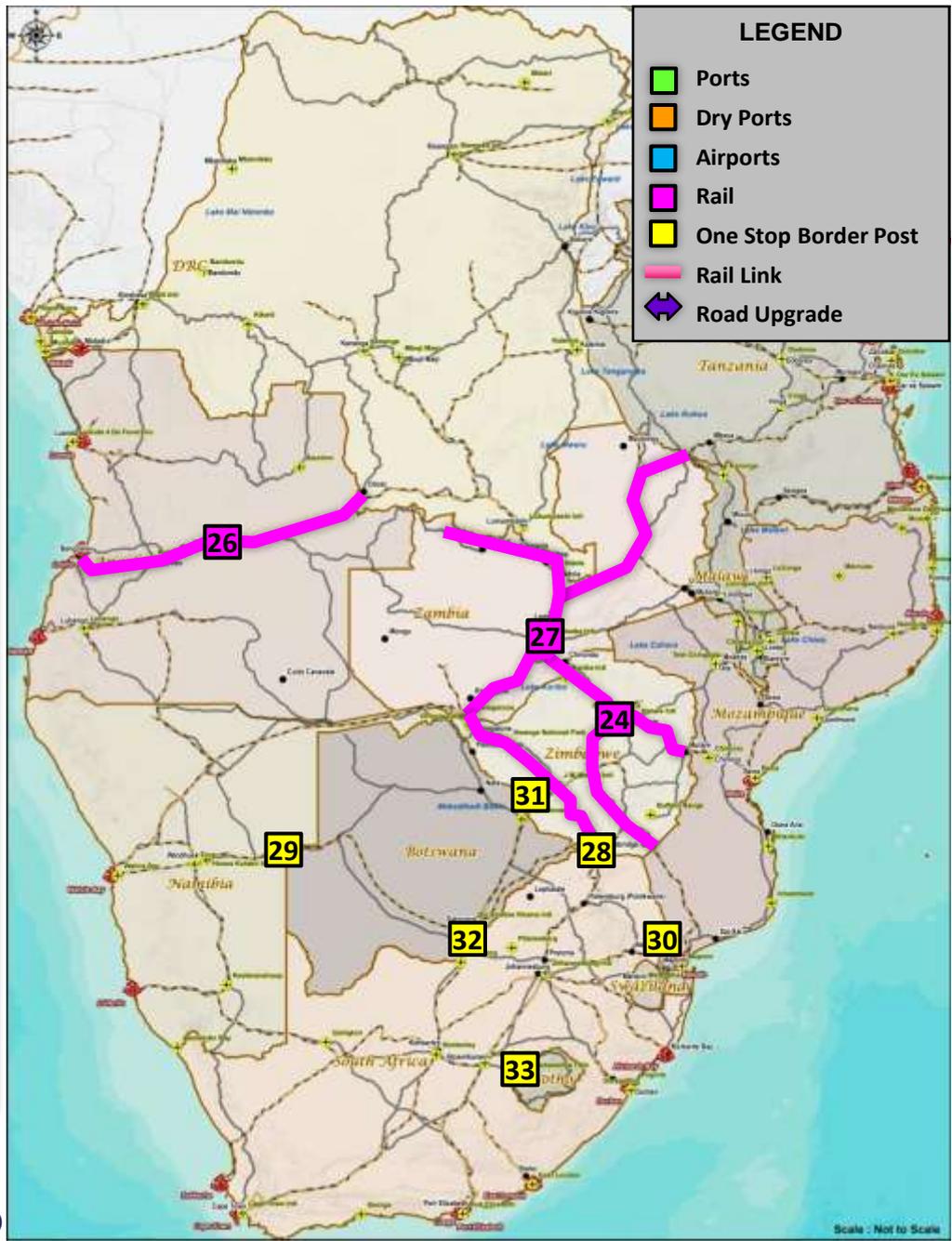
Longer Term Regional Strategic Projects



## High Trade Flow Corridor Projects

14	BGSP Nr 19- Huambo Airport	Improve airport	Lobito Corridor
15	BGSP Nr 22- Gaborone airport	Additional terminal capacity	Trans Kalahari Corridor
16	BGSP Nr 24- Cargo Terminal at Chipata	Under construction- cargo terminal at Chipata	North South Corridor
17	CSTN- Vol 4- Nr 16- Maputo Airport Upgrade	Improvements are scheduled for the airport terminals	Limpopo Corridor
18	BGSP Nr 2 - Kazungula Bridge	Construction of a road bridge that is built to handle trains as well at a future date.	North South Corridor
19	BGSP Nr 4- Beitbridge - Chirundu road upgrading	Upgrade two road sections	Limpopo Corridor
20	CSTN- Vol 4- Nr 20- Road improvements on the Namibian section of the Trans Kalahari	716 km of the original highway is being rehabilitated and widened in several phases.	Trans Kalahari Corridor
21	CSTN- Vol 4- Nr 21- Road rehabilitation between Livingstone and Zimbabwe	This approximately 70 kms section was badly potholed and needed full rehabilitation	North South Corridor
22	MSP Nr 25- Lobito Corridor Roads	Rehabilitate the main feeder roads within the corridor. This will involve restoration of the bridges, drainage systems and reconstruction of pavements.	Lobito Corridor
23	MSP Nr 47- Upgrading of Sinanga to Katima Mulilo	Upgrade of road	North South Corridor

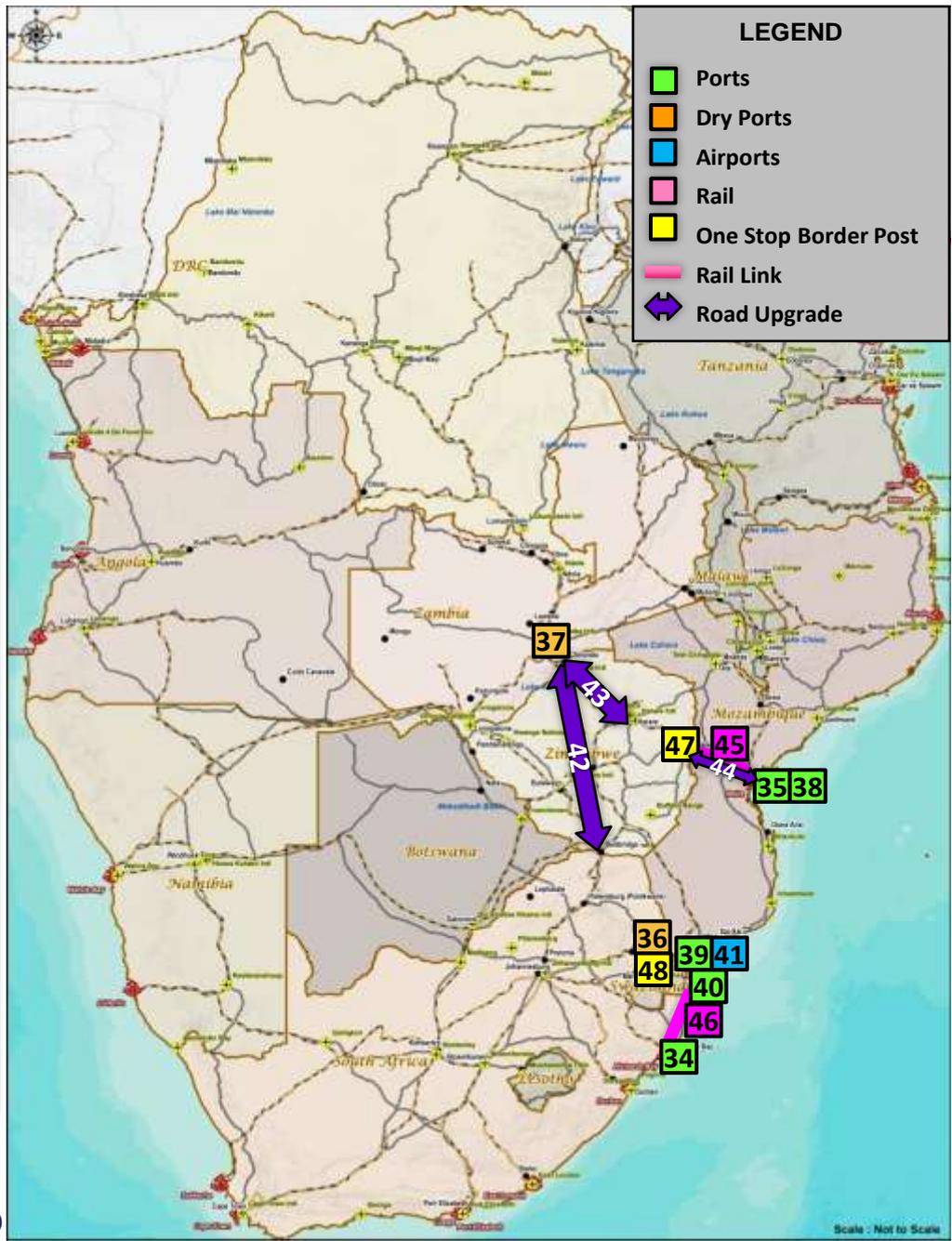




## High Trade Flow Corridor Projects

24	MSP Nr 2- National railways of Zimbabwe revival	Required: Investment in infrastructure, and rolling stock repair and acquisition	Limpopo Corridor
25	MSP Nr 32- Lions Den Kafue Rail Link (Zimbabwe- Zambia)	Construct new Line to Link Zimbabwe with Zambia	Limpopo Corridor
26	MSP Nr 43- Lobito Corridor Railway	Railway line rehabilitation, link to Lobito port, possible future link to Zambia	Lobito Corridor
27	MSP Nr1- Railway system Zambia structuring	Restructure the existing concession- possibly by vertical separation of the rail concession	North South Corridor
28	MSP Nr 11- Beitbridge border OSBP	Zimbabwe is upgrading and expanding the infrastructure using PPP options. The plans incorporate the development of a OSBP in the long run.	North South Corridor
29	MSP Nr 18- TransKalahari / Mamuno OSBP	Establishing Mamuno/Trans Kalahari Border post OSBP	Trans Kalahari Corridor
30	MSP Nr 20- Ressano Garcia/ Lebombo OSBP	infrastructure upgrades and processes redesign.	Maputo Corridor
31	MSP Nr 21- PLumtree/ Ramokgwebane OSBP	Establishing PLumtree/Ramokgwebane OSBP. design and construction of separate freight and passenger terminals.	North South Corridor
32	MSP Nr 22- Pioneer gate/ Skilpadhek OSBP	On- going infrastructure facilities upgrades at Skilpadshhek (SA/Botswana) to increase office space and improve access roads.	Trans Kalahari Corridor
33	MSP Nr 40- Ngwenya/ Oshoek OSBP	Establishing Ngwenya/Oshoek OSBP	Lebombo Corridor





## Med Trade Flow Corridor Projects

34	BGSP 14- South African Ports- Richards Bay	Richards Bay Port expansion (R23.37 b)	Richardsbay-Phalaborwa Corridor
35	BGSP Nr 15- Beira Port	Port expansion	Beira Corridor
36	BGSP Nr 27- Dry port at Lebombo/ Ressano Garcia border crossing	Construct Dry Port	Richardsbay-Phalaborwa Corridor
37	BGSP Nr 28- Dry Port at Lusaka	Construct dry port	Beira Corridor
38	CSTN- Vol 4- Nr 15- Beira Port Dredging	Dredging of the 40km entrance channel to the port of Beira.	Beira Corridor
39	CSTN- Vol 4- Nr 17- Maputo and Matola Port Rehabilitation Program- Maputo Port	Maputo Port- The rehabilitation project includes dredging.	Richardsbay-Phalaborwa Corridor
40	MSP Nr 39- Techobanine Deep sea port		Richardsbay-Phalaborwa Corridor
41	CSTN- Vol 4- Nr 16- Maputo Airport Upgrade	Improvements are scheduled for the airport terminals	Richardsbay-Phalaborwa Corridor
42	BGSP Nr 4- Beitbridge - Chirundu road upgrading	Upgrade two road sections	Beira Corridor
43	CSTN- Vol 4- Nr 11- Road rehabilitation between Escarpment & Chirundu	The road segment closest to Chirundu is badly potholed and in need of reconstruction in many places	Beira Corridor
44	MSP Nr 35- Beira- Mutare Road upgrading and Tolling		Beira Corridor
45	MSP Nr 36 Beira- Mutare- Harare Railway upgrading	Perform deferred maintenance and realignment of sections of tracks	Beira Corridor
46	MSP Nr 38- Techobanine Heavy Haul Railway		Richardsbay-Phalaborwa Corridor
47	MSP Nr 13- Forbes/Machipanda OSBP	Establishing Forbes/Machipanda OSBP	Beira Corridor
48	MSP Nr 20- Ressano Garcia/Lebombo OSBP	infrastructure upgrades and processes redesign.	Richardsbay-Phalaborwa Corridor



**LEGEND**

- Ports
- Dry Ports
- Airports
- Rail
- One Stop Border Post
- Rail Link
- Road Upgrade



**Low Trade Flow Corridor Projects**

49	BGSP 14- South African Ports- Cape Town	Cape Town- Expand and Upgrade (R5.135b)	Trans Orange Corridor
50	BGSP Nr 13- Walvis bay	Port expansion	Trans Orange Corridor
51	BGSP Nr 29- Dry Port at Kitwe	Construct a dry port	Dar es Salaam (TAZARA)
52	CSTN- Vol 4 - Nr 4- Dar es salaam RoRo Quay	Plan to develop a RoRo terminal and Multi-story car park to save space occupied by 5000 vehicles. A second park to be added in 2016	Central Corridor
53	CSTN- Vol 4- Nr 1- New Dar es Salaam Container Terminal	Two new container berths	Central Corridor
54	CSTN- Vol 4- Nr 18- Walvis Bay Bulk and Breakbulk Handling	Relocation of some operations is recommended	Trans Orange Corridor
55	CSTN- Vol 4- Nr 19- Walvis bay VTS/ Port Control	The Port will relocate the port control system to an area adjacent to the present Radar Tower.	Trans Orange Corridor
56	CSTN- Vol 4- Nr 2- Maintenance and Capital Dredging of Entrance Channel and Berths Dar es Salam	Maintenance and Capital Dredging of Entrance Channel and Berths	Central Corridor
57	CSTN- Vol 4- Nr 27- Port of Kigoma	Port improvements	Central Corridor
58	CSTN- Vol 4- Nr 29- Isaka Dry Port		Central Corridor
59	CSTN- Vol 4- Nr 3- Bulk Terminal Expansion- Port	Conversion of General Cargo Berths 5,6	Central Corridor
60	CSTN- Vol 4- Nr 30- Botswana Dry Port at Walvis Bay		Trans Orange Corridor
61	CSTN- Vol 4- Nr 5- Community based system in Port of Dar es Salaam.	This software system is for the electronic submission of documents and payment of Duties and fees.	Central Corridor

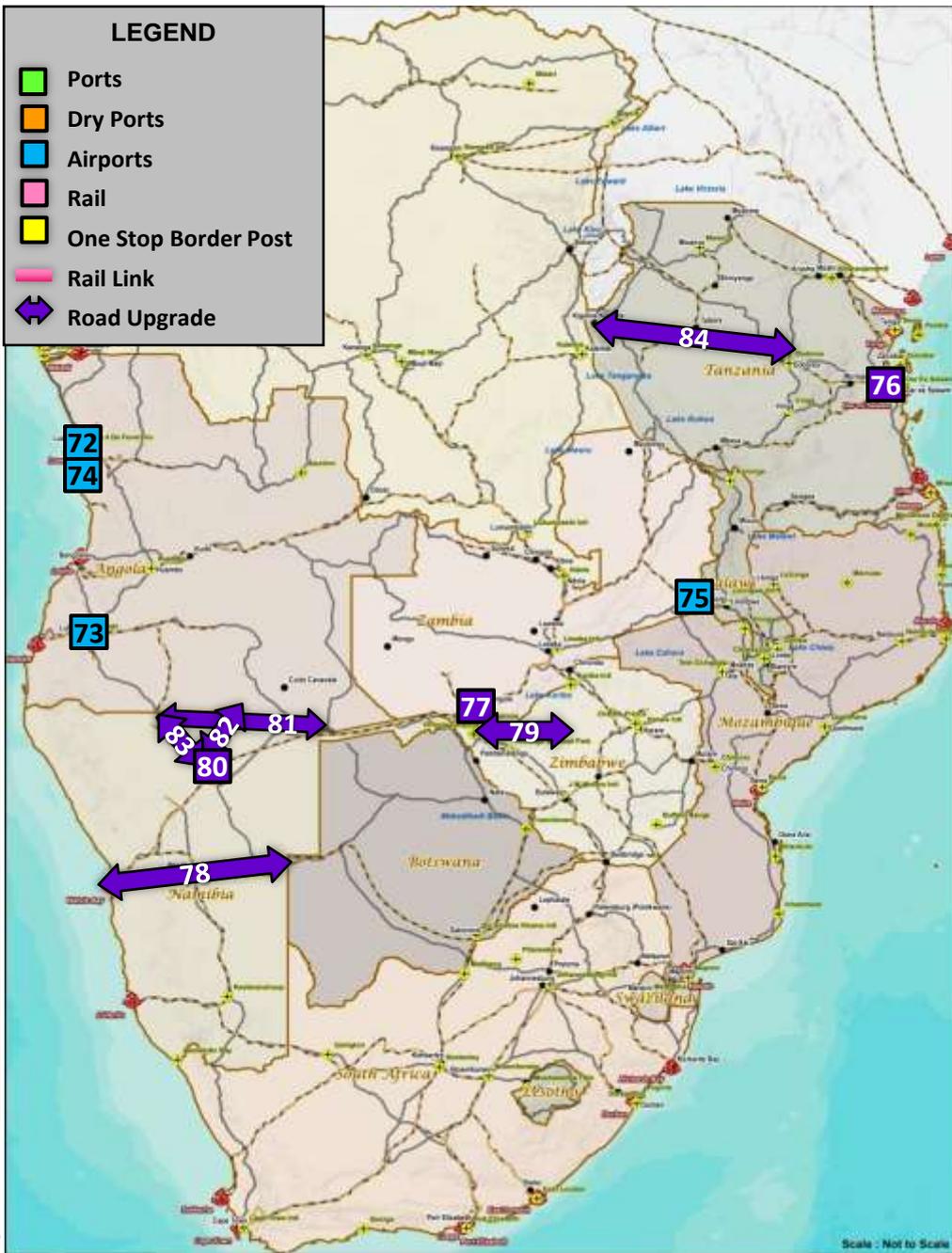
**LEGEND**

- Ports
- Dry Ports
- Airports
- Rail
- One Stop Border Post
- Rail Link
- Road Upgrade



**Low Trade Flow Corridor Projects**

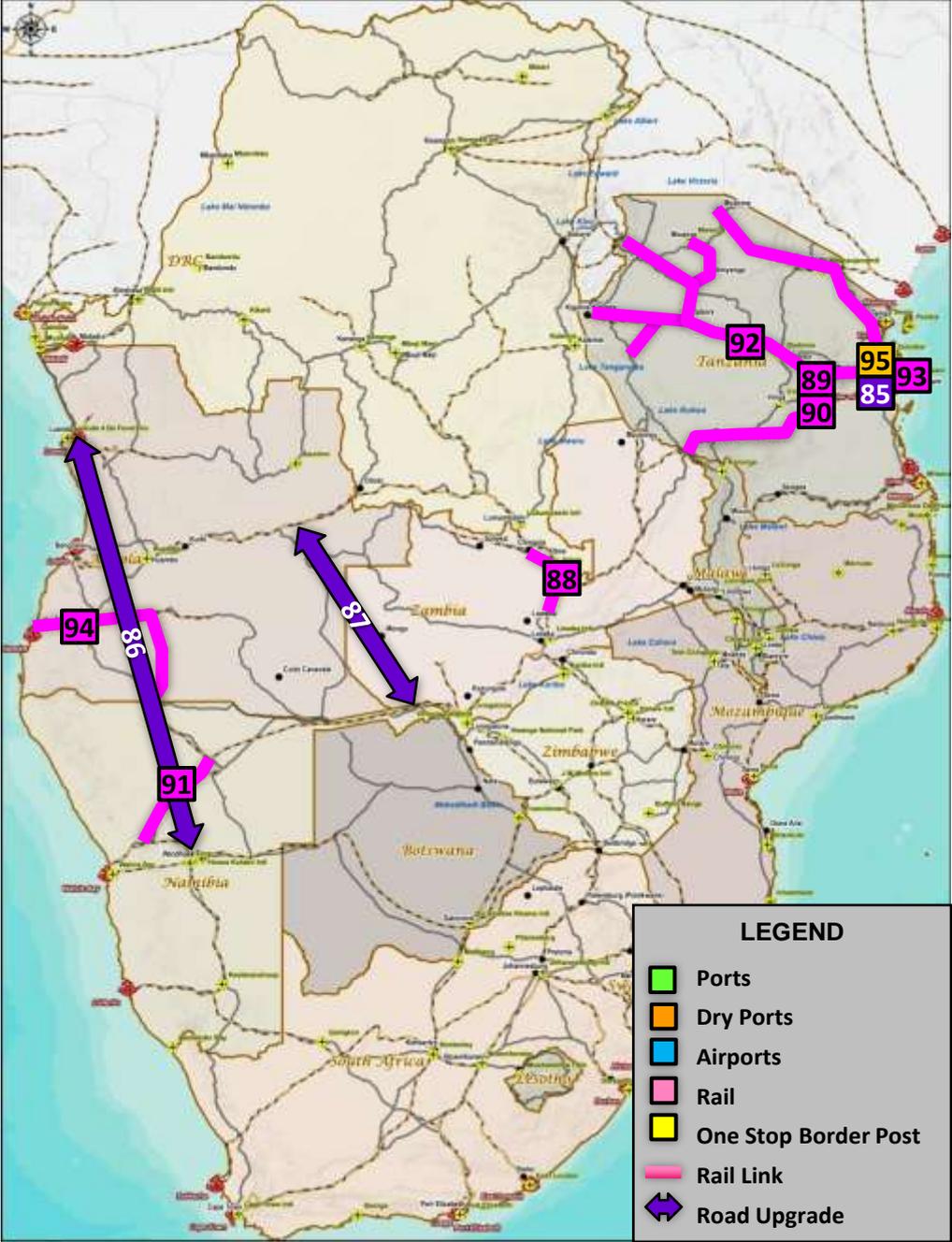
62	CSTN- Vol 4- Nr 7- New SPM Oil Terminal	used for crude oil imports to Zambia, not for Tanzania.	Central Corridor
63	MSP Nr 34- Berths at Kigamboni to expand Dar Port	Quay length of 1700m and 60ha on Kigamboni area 1, 1300m and 35 ha on Kigamboni area 2, and quay length of 1700m and 65 ha on Kigamboni area 3.	Central Corridor
64	MSP Nr 51- Development of New berths at Kigamboni	Provision of new berths (a container quay) expected to handle dry bulk, container and liquid bulk	
65	MSP Nr 55- Development of Deep water port at Mwambani Tanga		Central Corridor
66	MSP Nr 56- Development of New Port at Mbegani, Bagamoyo		Tunduma-Namanga-Moyale corridor
67	MSP Nr 57- Mtwara Port at EDZ Development		Central Corridor
68	MSP Nr 61- The New Walvis Bay container terminal on reclaimed land	Namport- Construction of a 30 hectare large new modern container terminal to expand the port of Walvis Bay container handling as well as bulk handling capacity.	Mtwara Development Corridor
69	MSP Nr 62- The New tanker berth	Namport- Construction of a new tanker berth (a modern marine petroleum offloading facility) in Walvis bay.	Trans Orange Corridor
70	MSP Nr 63- The Ship and Rig Repair Quay	Namport- The new Ship and Rig Repair Quay will see the construction of a new jetty suitable for two large semi- submersible oil rigs as well as drill ships.	Trans Orange Corridor
71	MSP Nr 64- The Walvis Bay Marina development	Namport-Allow a private investor to build, operate and own a modern facility through long term concession.	Trans Orange Corridor



## Low Trade Flow Corridor Projects

72	BGS Nr 17- New airport, 35 kms outside Luanda	Construct new airport	Malange Development Corridor
73	BGSP Nr 18- Lubango airport	Improve airport	Trans Cunene Corridor
74	BGSP Nr 23- Luanda airport	Additional terminal capacity	
75	BGSP Nr 24- Cargo Terminal at Chipata	Under construction- cargo terminal at Chipata	
76	BGSP Nr 1- Dar es Salaam- Chalinze Toll road	Upgrade and Toll existing road	Central Corridor
77	BGSP Nr 2 - Kazungula Bridge	Construction of a road bridge that is built to handle trains as well at a future date.	Trans Caprivi Corridor
78	CSTN- Vol 4- Nr 20- Road improvements on the Namibian section of the Trans Kalahari	716 km of the original highway is being rehabilitated and widened in several phases.	Trans Orange Corridor
79	CSTN- Vol 4- Nr 21- Road rehabilitation between Livingstone and Zimba	This approximately 70 kms section was badly potholed and needed full rehabilitation	Trans Caprivi Corridor
80	CSTN- Vol 4- Nr 23- An ICD at Tsumeb	To handle the increased volumes estimated for the route.	Trans Cunene Corridor
81	CSTN- Vol 4- Nr 24- Upgrade Rundu- Oshikango Road	involves paving 501km route from Gravel to Bitumen across Namibia.	Trans Cunene Corridor
82	CSTN- Vol 4- Nr 25- Road Link from Tsumeb to Katwitwi	This 258km segment paves a gravel road on increasingly active trade route between Namibia and Southern Angola. Bonded warehouses are also being constructed on the Namibian side.	Trans Cunene Corridor
83	CSTN- Vol 4- Nr 26- Extension of TransNamib from Ondangwa to Oshikango	Extension of TransNamib from Ondangwa to Oshikango	Trans Cunene Corridor
84	CSTN- Vol 4- Nr 6- Road to the Port of Kigoma	The route from Manyoni to Kigoma is currently not paved. This is essentially a rail route.	Central Corridor

Longer Term Regional Strategic Projects



Low Trade Flow Corridor Projects

85	CSTN_ Vol 4- Nr 8- Access roads to Dar es Salaam Ports	CSTN_ Vol 4- Nr 8- Access roads to dar es salaam Ports	Central Corridor
86	MSP Nr 44- Luanda-Windhoek Corridor Roads		Namibe Corridor
87	MSP Nr 47- Upgrading of Sinanga to Katima Mulilo	Upgrade of road	Trans Caprivi Corridor
88	BGSP Nr 6- Chingola to Solwezi- Luwana	Construct new railway line. (536 km)	Dar es Salaam (TAZARA)
89	CSTN- Vol 4- Nr 10- Improving the TAZARA rail system	The track has good specifications but needs repairs in sections-financing needed for equipment repair and working capita, with new management and realistic business plan	Tunduma-Namanga-Moyale corridor
90	CSTN- Vol 4- Nr 12- Improved Regional Rail Operating Agreements	Possible open access for multiple rail operators	Tunduma-Namanga-Moyale corridor
91	CSTN- Vol 4- Nr 22- Rehabilitation of the railway between Kranzberg and Tsumeb	This 322km section of the track was seriously degraded and needed rehabilitation. The northern extension of Angola depends on the strengthening of this middle section of the route.	Trans Cunene Corridor
92	MSP Nr 3- Tanzania railways Limited revival	Investment in infrastructure, and rolling stock repair and acquisition	Tunduma-Namanga-Moyale corridor
93	MSP Nr 33- Cargo Freight Stations Dar es Salam	Rail shuttle transport linkage, Realignment of existing container yards, new dry port terminal, new truck road access, new mainline, new spur lines, freight stations, customs and clearing and forwarding buildings, truck parking spaces and other associate	Central Corridor
94	MSP Nr 41- Namibe Railway upgrading including link to Santa Clara border post	Mocamedes railways is to be rehabilitated and rail link constructed towards Oshikango/Santa Clara border post	Namibe Corridor
95	MSP Nr 50- Establish Cargo freight station-Kisarawe	Provide a Dry Port on the Outskirts of Dar es Salam (For container and vehicle traffic)	Central Corridor



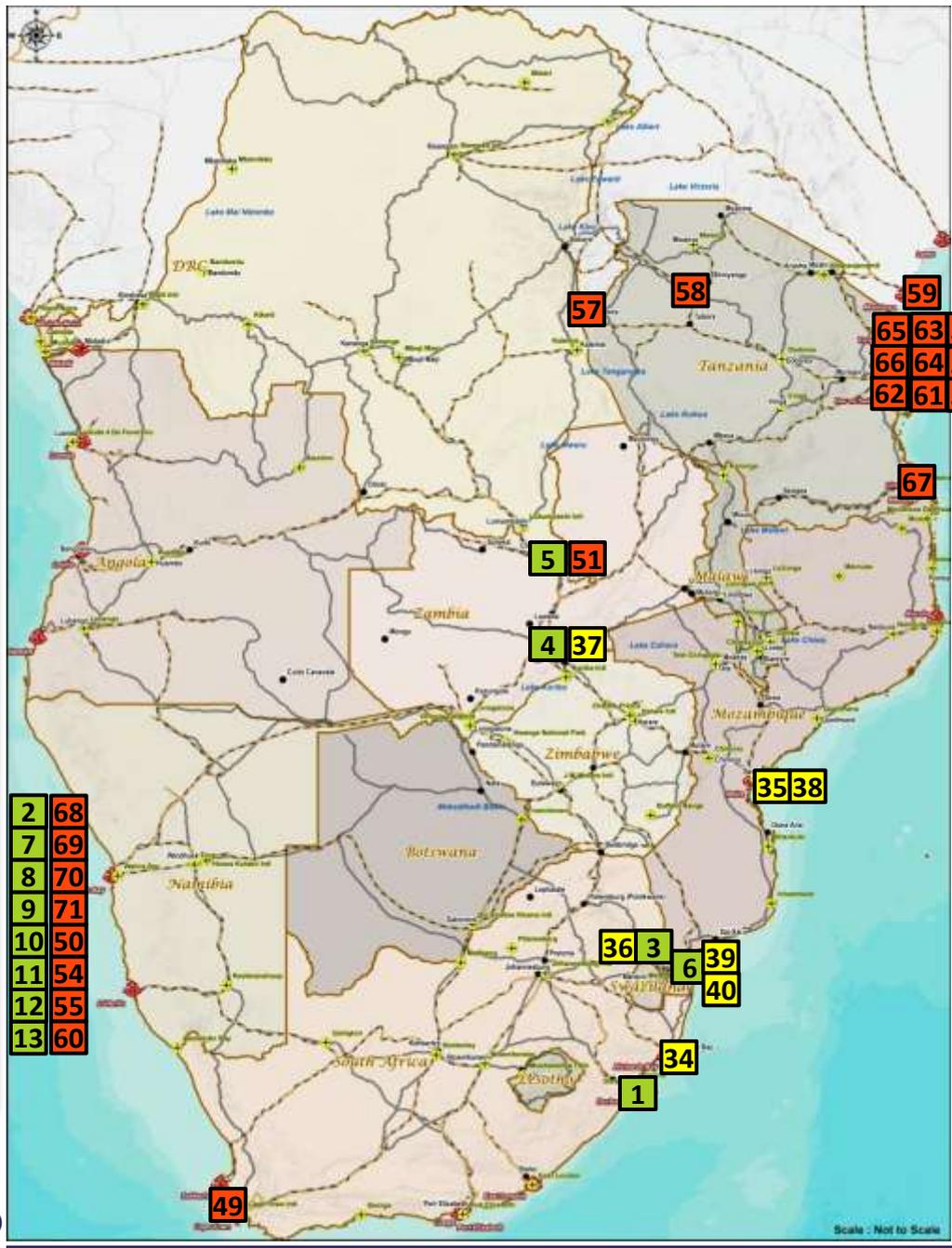
## Low Trade Flow Corridor Projects

<b>96</b>	MSP Nr 10- Oshikango/Santa Clara OSBP	If a OSBP is contemplated then the new facility could be dedicated to road and rail freight and the current border crossing used for pedestrian and non- commercial vehicular traffic.
<b>97</b>	MSP Nr 19- Nakonde/Tunduma OSBP	Construction of Nakonde/Tunduma OSBP
<b>98</b>	MSP Nr 23- Kasumbalesa OSBP	Establishing Kasumbalesa OSBP
<b>99</b>	MSP Nr 9- Katima Mulilo/ Wenela OSBP	Establishing Katima Mulilo/Wenela OSBP



# Project Locations by Mode



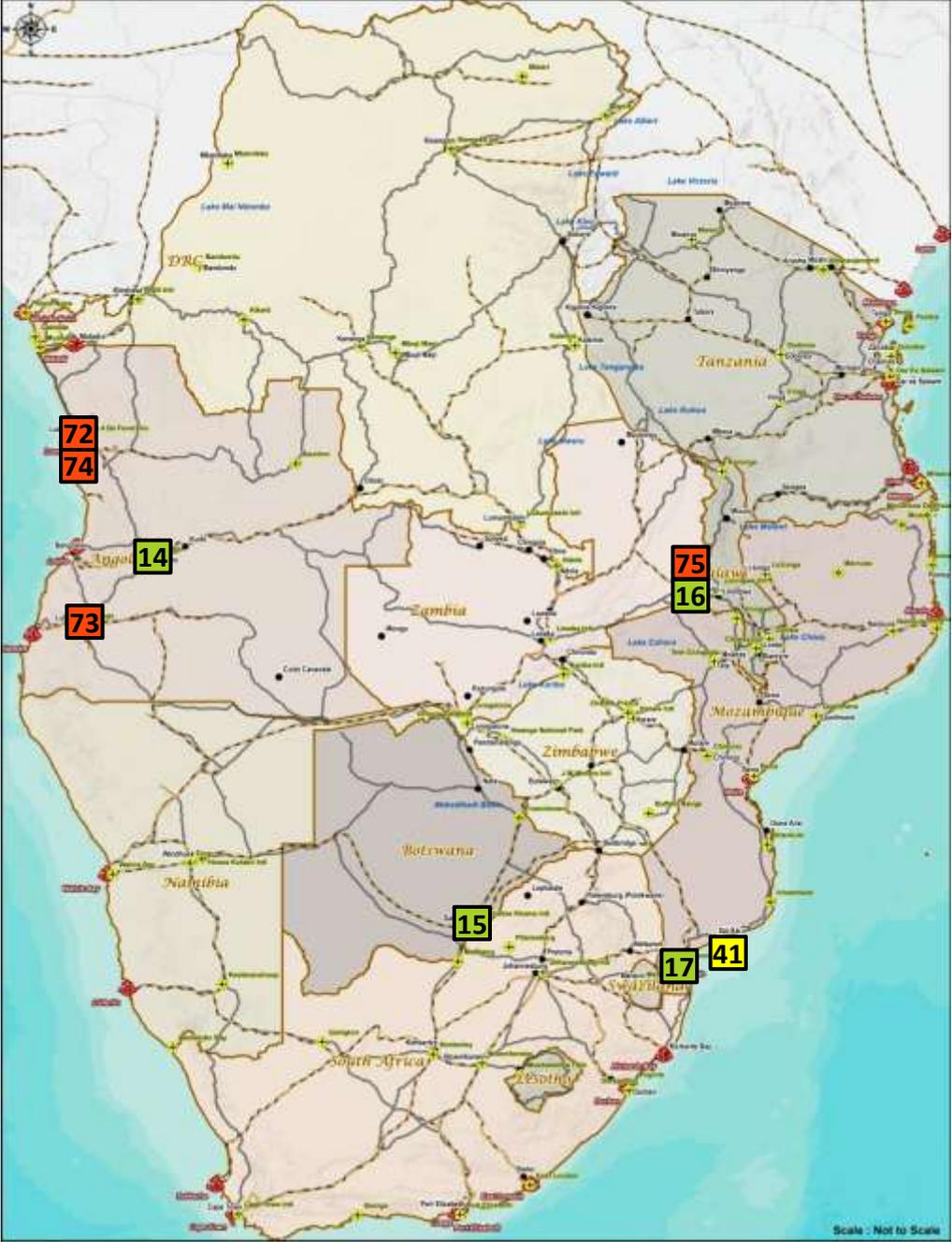


### LEGEND

<span style="display: inline-block; width: 20px; height: 20px; background-color: #90EE90; border: 1px solid black;"></span>	High Trade Flow
<span style="display: inline-block; width: 20px; height: 20px; background-color: #FFFF00; border: 1px solid black;"></span>	Medium Trade Flow
<span style="display: inline-block; width: 20px; height: 20px; background-color: #FF8C00; border: 1px solid black;"></span>	Low Trade Flow

Corridor Projects





**Airport Projects**

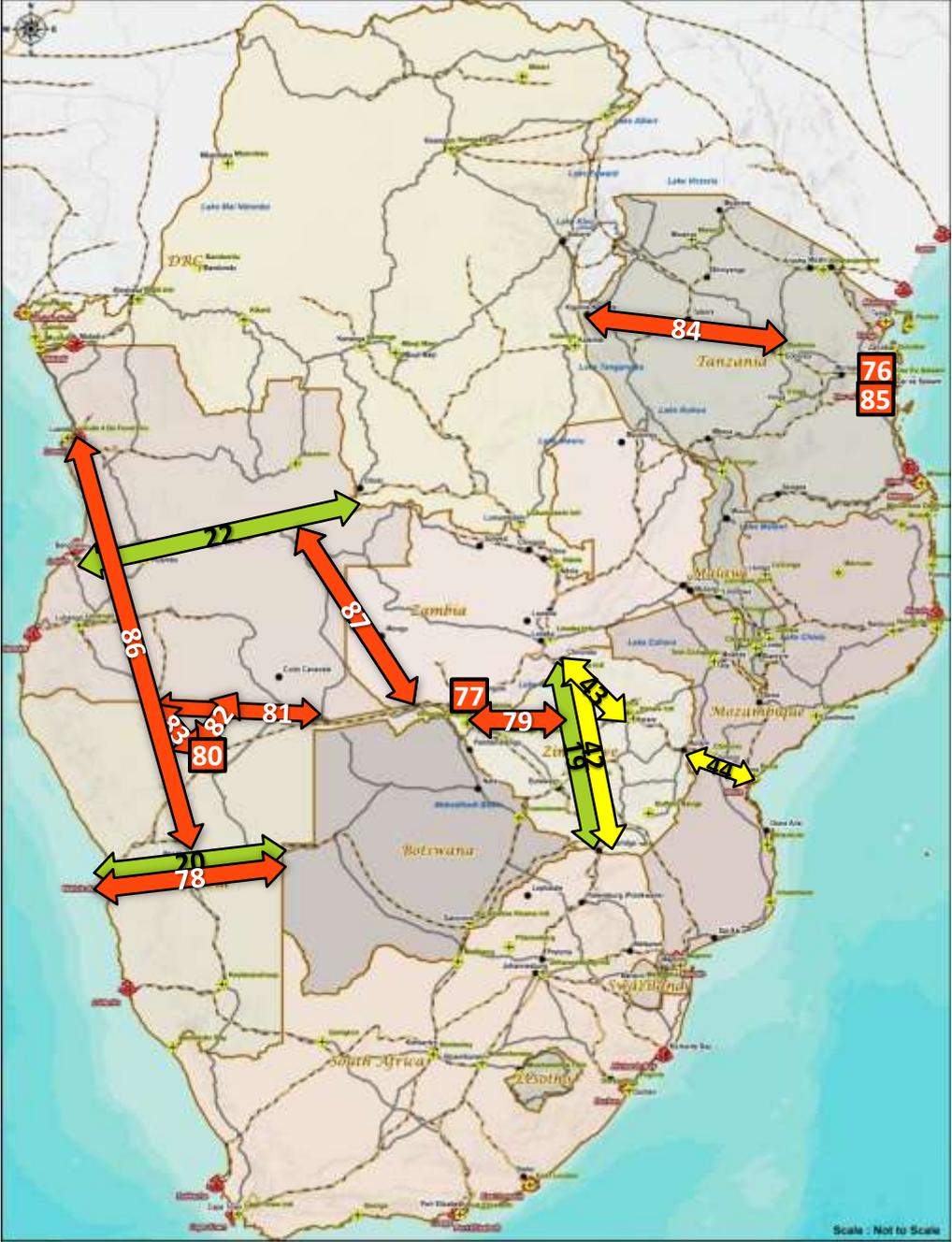


**LEGEND**

	High Trade Flow
	Medium Trade Flow
	Low Trade Flow

Corridor Projects





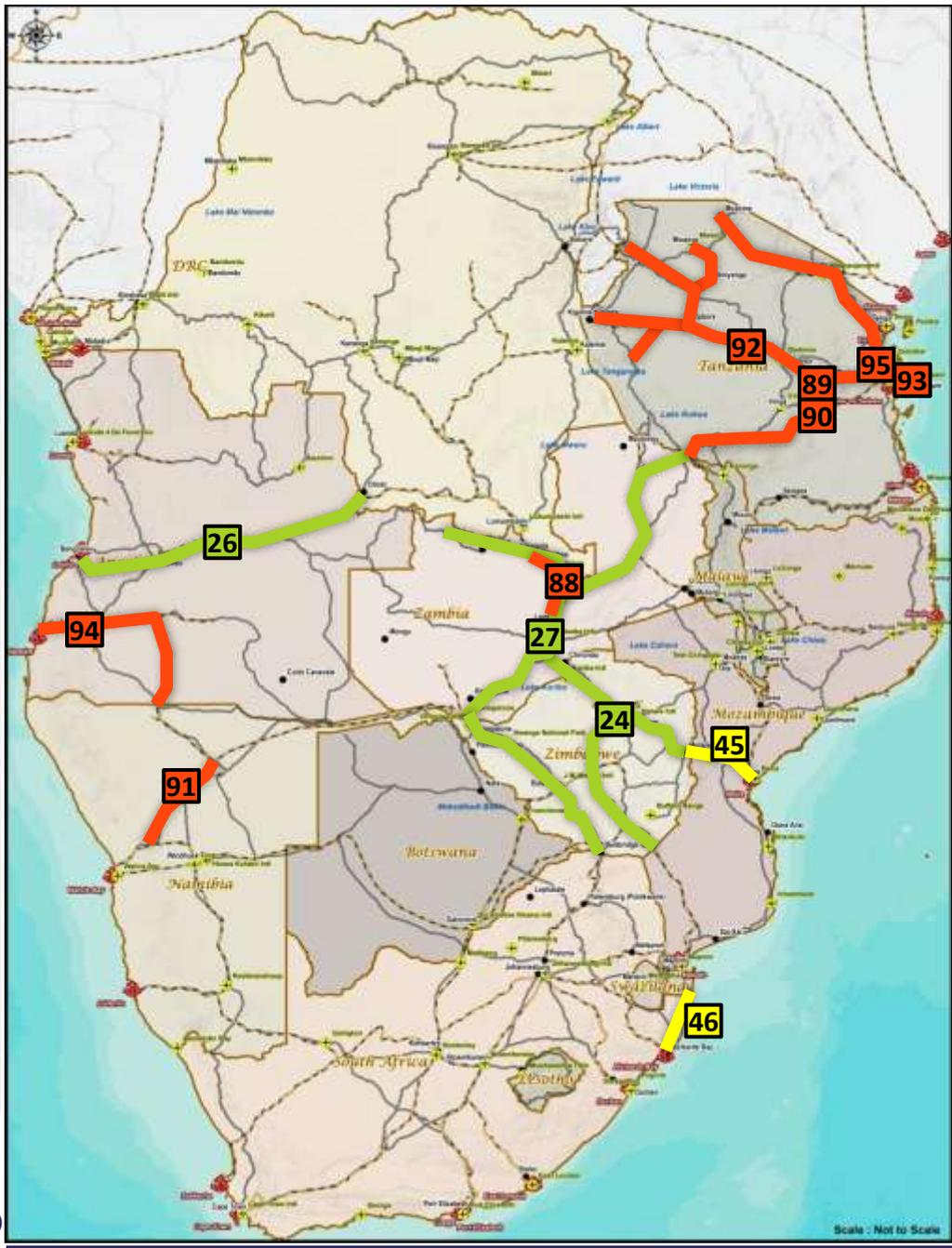
**Roads Projects**



**LEGEND**

	High Trade Flow	Corridor Projects
	Medium Trade Flow	Corridor Projects
	Low Trade Flow	Corridor Projects





# Rail Projects

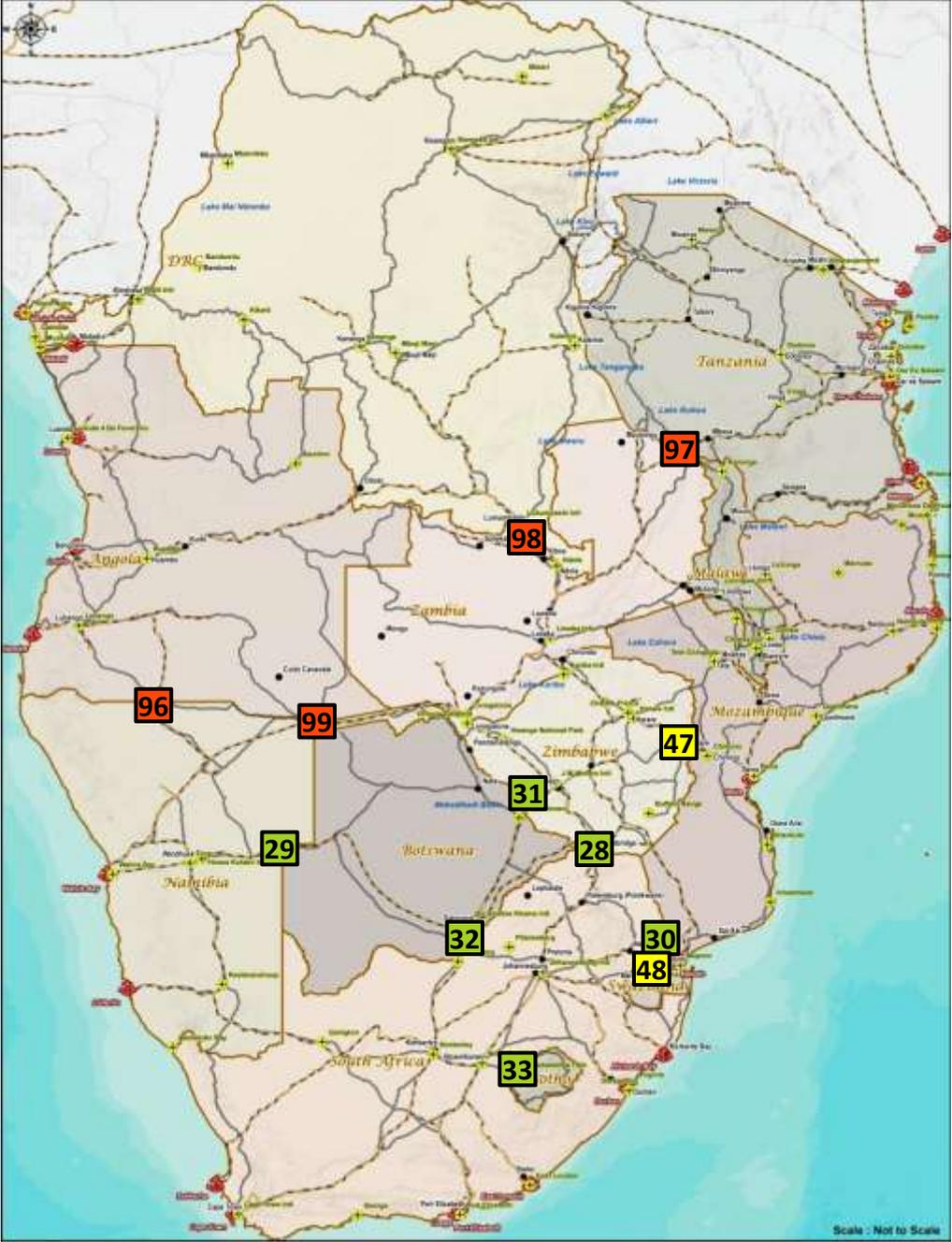


## LEGEND

	High Trade Flow
	Medium Trade Flow
	Low Trade Flow

Corridor Projects





**OSBP Projects**



### LEGEND

	High Trade Flow
	Corridor Projects
	Medium Trade Flow
	Corridor Projects
	Low Trade Flow
	Corridor Projects





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