Regional Transport Integration Roundtable

SADC Regional Infrastructure Development Master Plan
Transport Sector Plan

Presenter: James Scheepers
30 October 2012
1. Scope, Objectives and Vision of the Transport Sector Plan

2. Current Status of Transport Infrastructure

3. Current Status of the Enabling Environment

4. Projections and Trends for 2027

5. Strategic Framework

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

Transport Sector Modes
- Aviation
- Road
- Inland water-ways
- Rail
- Maritime Ports

Areas of Intervention
- Transport infrastructure development
- Harmonization of policies and regulations
- Capacity building
- Transport and trade facilitation

Transport Sector Plan Progression

- Surface Transport Project List
- Surface Transport Policy, Regulatory and Legal Framework
- Diagnostic Surface Transport Infrastructure Requirement Projection for 2027
- Diagnostic Report
- Strategic Framework
- Proposed Implementation Action Plan
- Transport Sector 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
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
NOTE: The pillars identified to moving the SADC transport system into the future were grouped according to salient themes as opposed to the various sub-sectors of transport, as the RIDMP promotes modal / sub-sector integration.
2. Current Status of Transport Infrastructure
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
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**

**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

**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
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
Drivers of Step-wise Growth

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
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

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

**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.

**AVIATION**
- Regional integration of airspace
- Implementation of Yamoussoukro Decision
- Standardised regional SARPs
- Incorporation of SARPs 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)

- Establish general or road-specific regional transport competition authority; and
- Regional law enforcement approach (and institution/s).
- Strengthening rail planning capacity
- Strengthening of SARA in respect of human resources
- Establishment of a regional railway safety regulator

ROAD

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

- 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
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 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:*
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

#### LEGEND
- **Ports**
- **Dry Ports**
- **Airports**
- **Rail**
- **One Stop Border Post**
- **Road Upgrade**

#### High Trade Flow Corridor Projects

<table>
<thead>
<tr>
<th>No.</th>
<th>Project Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>BGSP 14 - South African Ports - Durban Port</td>
</tr>
<tr>
<td>2</td>
<td>BGSP Nr 13 - Walvis bay</td>
</tr>
<tr>
<td>3</td>
<td>BGSP Nr 27 - Dry port at Lebombo/ Ressano Garcia border crossing</td>
</tr>
<tr>
<td>4</td>
<td>BGSP Nr 28 - Dry Port at Lusaka</td>
</tr>
<tr>
<td>5</td>
<td>BGSP Nr 29 - Dry Port at Kitwe</td>
</tr>
<tr>
<td>6</td>
<td>CSTN - Vol 4 - Nr 17 - Maputo and Matola Port</td>
</tr>
<tr>
<td>7</td>
<td>CSTN - Vol 4 - Nr 18 - Walvis Bay</td>
</tr>
<tr>
<td>8</td>
<td>CSTN - Vol 4 - Nr 19 - Walvis bay VTS/ Port Control</td>
</tr>
<tr>
<td>9</td>
<td>CSTN - Vol 4 - Nr 30 - Botswana Dry Port at Walvis Bay</td>
</tr>
<tr>
<td>10</td>
<td>MSP Nr 61 - The New Walvis Bay container terminal on reclaimed land</td>
</tr>
<tr>
<td>11</td>
<td>MSP Nr 62 - The New tanker berth</td>
</tr>
<tr>
<td>12</td>
<td>MSP Nr 63 - The Ship and Rig Repair Quay</td>
</tr>
<tr>
<td>13</td>
<td>MSP Nr 64 - The Walvis Bay Marina development</td>
</tr>
</tbody>
</table>
Long Term Regional Strategic Projects

### High Trade Flow Corridor Projects

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<th></th>
<th>Description</th>
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<tbody>
<tr>
<td>14</td>
<td>BGSP Nr 19- Huambo Airport</td>
<td>Lobito Corridor</td>
</tr>
<tr>
<td>15</td>
<td>BGSP Nr 22- Gaborone airport</td>
<td>Trans Kalahari Corridor</td>
</tr>
<tr>
<td>16</td>
<td>BGSP Nr 24- Cargo Terminal at Chipata</td>
<td>North South Corridor</td>
</tr>
<tr>
<td>17</td>
<td>CSTN- Vol 4- Nr 16- Maputo Airport Upgrade</td>
<td>Limpopo Corridor</td>
</tr>
<tr>
<td>18</td>
<td>BGSP Nr 2 - Kazungula Bridge</td>
<td>North South Corridor</td>
</tr>
<tr>
<td>19</td>
<td>BGSP Nr 4- Beitbridge - Chirundu road upgrading</td>
<td>Limpopo Corridor</td>
</tr>
<tr>
<td>20</td>
<td>CSTN- Vol 4- Nr 20- Road improvements on the Namibian section of the Trans Kalahari</td>
<td>Trans Kalahari Corridor</td>
</tr>
<tr>
<td>21</td>
<td>CSTN- Vol 4- Nr 21- Road rehabilitation between Livingstone and Zimbabwe</td>
<td>North South Corridor</td>
</tr>
<tr>
<td>22</td>
<td>MSP Nr 25- Lobito Corridor Roads</td>
<td>Lobito Corridor</td>
</tr>
<tr>
<td>23</td>
<td>MSP Nr 47- Upgrading of Sinanga to Katima Mulilo</td>
<td>North South Corridor</td>
</tr>
</tbody>
</table>
### High Trade Flow Corridor Projects

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

<table>
<thead>
<tr>
<th>Project Code</th>
<th>Description</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>34</td>
<td>BGSP 14- South African Ports- Richards Bay</td>
<td>Richards Bay Port expansion (R23.37 b)</td>
</tr>
<tr>
<td>35</td>
<td>BGSP Nr 15- Beira Port</td>
<td>Beira Corridor</td>
</tr>
<tr>
<td>36</td>
<td>BGSP Nr 27- Dry port at Lebombo/ Ressano Garcia border crossing</td>
<td>Richardsbay-Phalaborwa Corridor</td>
</tr>
<tr>
<td>37</td>
<td>BGSP Nr 28- Dry Port at Lusaka</td>
<td>Beira Corridor</td>
</tr>
<tr>
<td>38</td>
<td>CSTN- Vol 4- Nr 15- Beira Port Dredging</td>
<td>Dredging of the 40km entrance channel to the port of Beira.</td>
</tr>
<tr>
<td>39</td>
<td>CSTN- Vol 4- Nr 17- Maputo and Matola Port Rehabilitation Program- Maputo Port</td>
<td>Richardsbay-Phalaborwa Corridor</td>
</tr>
<tr>
<td>40</td>
<td>MSP Nr 39- Techobanine Deep sea port</td>
<td>Richardsbay-Phalaborwa Corridor</td>
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<tr>
<td>41</td>
<td>CSTN- Vol 4- Nr 16- Maputo Airport Upgrade</td>
<td>Improvements are scheduled for the airport terminals</td>
</tr>
<tr>
<td>42</td>
<td>BGSP Nr 4- Beitbridge - Chirundu road upgrading</td>
<td>Beira Corridor</td>
</tr>
<tr>
<td>43</td>
<td>CSTN- Vol 4- Nr 11- Road rehabilitation between Escarpment &amp; Chirundu</td>
<td>The road segment closest to Chirundu is badly potholed and in need of reconstruction in many places</td>
</tr>
<tr>
<td>44</td>
<td>MSP Nr 35- Beira- Mutare Road upgrading and Tolling</td>
<td>Beira Corridor</td>
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<tr>
<td>45</td>
<td>MSP Nr 36 Beira- Mutare-Harare Railway upgrading</td>
<td>Beira Corridor</td>
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<tr>
<td>46</td>
<td>MSP Nr 38- Techobanine Heavy Haul Railway</td>
<td>Richardsbay-Phalaborwa Corridor</td>
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<tr>
<td>47</td>
<td>MSP Nr 13- Forbes/Machipanda OSBP</td>
<td>Beira Corridor</td>
</tr>
<tr>
<td>48</td>
<td>MSP Nr 20- Ressano Garcia/Lebombo OSBP</td>
<td>Richardsbay-Phalaborwa Corridor</td>
</tr>
</tbody>
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### Longer Term Regional Strategic Projects

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

#### Low Trade Flow Corridor Projects

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<tbody>
<tr>
<td>49 BGSP 14</td>
<td>South African Ports- Cape Town</td>
</tr>
<tr>
<td>50 BGSP Nr 13</td>
<td>Walvis bay</td>
</tr>
<tr>
<td>51 BGSP Nr 29</td>
<td>Dry Port at Kitwe</td>
</tr>
<tr>
<td>52 CSTN Vol 4</td>
<td>Nr 4- Dar es salaam RoRo Quay</td>
</tr>
<tr>
<td>53 CSTN Vol 4</td>
<td>Nr 1- New Dar es Salaam Container Terminal</td>
</tr>
<tr>
<td>54 CSTN Vol 4</td>
<td>Nr 18- Walvis Bay Bulk and Breakbulk Handling</td>
</tr>
<tr>
<td>55 CSTN Vol 4</td>
<td>Nr 19- Walvis bay VTS/ Port Control</td>
</tr>
<tr>
<td>56 CSTN Vol 4</td>
<td>Nr 2- Maintenance and Capital Dredging Dar es Salam</td>
</tr>
<tr>
<td>57 CSTN Vol 4</td>
<td>Nr 27- Port of Kigoma</td>
</tr>
<tr>
<td>58 CSTN Vol 4</td>
<td>Nr 29- Isaka Dry Port</td>
</tr>
<tr>
<td>59 CSTN Vol 4</td>
<td>Nr 3- Bulk Terminal Expansion- Port</td>
</tr>
<tr>
<td>60 CSTN Vol 4</td>
<td>Nr 30- Botswana Dry Port at Walvis Bay</td>
</tr>
<tr>
<td>61 CSTN Vol 4</td>
<td>Nr 5- Community based system in Port of Dar es Salaam.</td>
</tr>
</tbody>
</table>
### Longer Term Regional Strategic Projects

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<th>Code</th>
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<th>Details</th>
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</thead>
<tbody>
<tr>
<td>62</td>
<td>CSTN- Vol 4- Nr 7- New SPM Oil Terminal</td>
<td>Used for crude oil imports to Zambia, not for Tanzania.</td>
<td>Central Corridor</td>
</tr>
<tr>
<td>63</td>
<td>MSP Nr 34- Berths at Kigamboni to expand Dar Port</td>
<td>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.</td>
<td>Central Corridor</td>
</tr>
<tr>
<td>64</td>
<td>MSP Nr 51- Development of New berths at Kigamboni</td>
<td>Provision of new berths (a container quay) expected to handle dry bulk, container and liquid bulk</td>
<td>Central Corridor</td>
</tr>
<tr>
<td>65</td>
<td>MSP Nr 55- Development of Deep water port at Mwambani Tanga</td>
<td></td>
<td>Tunduma-Namanga-Moyale corridor</td>
</tr>
<tr>
<td>66</td>
<td>MSP Nr 56- Development of New Port at Mbegani, Bagamoyo</td>
<td></td>
<td>Central Corridor</td>
</tr>
<tr>
<td>67</td>
<td>MSP Nr 57- Mtwara Port at EDZ Development</td>
<td></td>
<td>Central Corridor</td>
</tr>
<tr>
<td>68</td>
<td>MSP Nr 61- The New Walvis Bay container terminal on reclaimed land</td>
<td>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.</td>
<td>Mtwara Development Corridor</td>
</tr>
<tr>
<td>69</td>
<td>MSP Nr 62- The New tanker berth</td>
<td>Namport- Construction of a new tanker berth (a modern marine petroleum offloading facility) in Walvis bay.</td>
<td>Trans Orange Corridor</td>
</tr>
<tr>
<td>70</td>
<td>MSP Nr 63- The Ship and Rig Repair Quay</td>
<td>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.</td>
<td>Trans Orange Corridor</td>
</tr>
<tr>
<td>71</td>
<td>MSP Nr 64- The Walvis Bay Marina development</td>
<td>Namport-Allow a private investor to build, operate and own a modern facility through long term concession.</td>
<td>Trans Orange Corridor</td>
</tr>
</tbody>
</table>
**Low Trade Flow Corridor Projects**

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<tr>
<th>Project</th>
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<th>Corridor</th>
</tr>
</thead>
<tbody>
<tr>
<td>72</td>
<td>BGS Nr 17 - New airport, 35 kms outside Luanda</td>
<td>Malange Development Corridor</td>
</tr>
<tr>
<td>73</td>
<td>BGSP Nr 18 - Lubango airport</td>
<td>Trans Cunene Corridor</td>
</tr>
<tr>
<td>74</td>
<td>BGSP Nr 23 - Luanda airport</td>
<td>Additional terminal capacity</td>
</tr>
<tr>
<td>75</td>
<td>BGSP Nr 24 - Cargo Terminal at Chipata</td>
<td>Under construction - cargo terminal at Chipata</td>
</tr>
<tr>
<td>76</td>
<td>BGSP Nr 1 - Dar es Salaam-Chalinze Toll road</td>
<td>Upgrade and Toll existing road</td>
</tr>
<tr>
<td>77</td>
<td>BGSP Nr 2 - Kazungula Bridge</td>
<td>Construction of a road bridge that is built to handle trains as well as a future date.</td>
</tr>
<tr>
<td>78</td>
<td>CSTN-Vol 4- Nr 20 - Road improvements on the Namibian section of the Trans Kalahari</td>
<td>Trans Orange Corridor</td>
</tr>
<tr>
<td>79</td>
<td>CSTN-Vol 4- Nr 21 - Road rehabilitation between Livingstone and Zimba</td>
<td>Trans Caprivi Corridor</td>
</tr>
<tr>
<td>80</td>
<td>CSTN-Vol 4- Nr 23 - An ICD at Tsumeb</td>
<td>Trans Cunene Corridor</td>
</tr>
<tr>
<td>81</td>
<td>CSTN-Vol 4- Nr 24 - Upgrade Rundu-Oshikango Road</td>
<td>Trans Cunene Corridor</td>
</tr>
<tr>
<td>82</td>
<td>CSTN-Vol 4- Nr 25 - Road Link from Tsumeb to Katwitwi</td>
<td>Trans Cunene Corridor</td>
</tr>
<tr>
<td>83</td>
<td>CSTN-Vol 4- Nr 26 - Extension of TransNamib from Ondangwa to Oshikango</td>
<td>Trans Cunene Corridor</td>
</tr>
<tr>
<td>84</td>
<td>CSTN-Vol 4- Nr 6 - Road to the Port of Kigoma</td>
<td>The route from Manyoni to Kigoma is currently not paved. This is essentially a rail route.</td>
</tr>
</tbody>
</table>
Longer Term Regional Strategic Projects

Low Trade Flow Corridor Projects

85 CSTN_Vol 4- Nr 8- Access roads to Dar es Salaam Ports

86 MSP Nr 44- Luanda-Windhoek Corridor Roads

87 MSP Nr 47- Upgrading of Sinanga to Katima Mulilo

88 BGSP Nr 6- Chingola to Solwezi- Luwana

89 CSTN- Vol 4- Nr 10- Improving the TAZARA rail system

90 CSTN- Vol 4- Nr 12- Improved Regional Rail Operating Agreements

91 CSTN- Vol 4- Nr 22- Rehabilitation of the railway between Kranzberg and Tsumeb

92 MSP Nr 3- Tanzania railways Limited revival

93 MSP Nr 33- Cargo Freight Stations Dar es Salaam

94 MSP Nr 41- Namibe Railway upgrading including link to Santa Clara border post

95 MSP Nr 50- Establish Cargo freight station- Kisarawe

LEGEND

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

Central Corridor
Namibe Corridor
Trans Caprivi Corridor
Trans Cunene Corridor
Tunduma-Namanga-Moyale corridor
### Low Trade Flow Corridor Projects

<table>
<thead>
<tr>
<th>Project Code</th>
<th>Project Details</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>96</td>
<td>MSP Nr 10- Oshikango/Santa Clara OSBP</td>
<td>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.</td>
</tr>
<tr>
<td>97</td>
<td>MSP Nr 19- Nakonde/Tunduma OSBP</td>
<td>Construction of Nakonde/Tunduma OSBP</td>
</tr>
<tr>
<td>98</td>
<td>MSP Nr 23- Kasumbalesa OSBP</td>
<td>Establishing Kasumbalesa OSBP</td>
</tr>
<tr>
<td>99</td>
<td>MSP Nr 9- Katima Mulilo/Wenela OSBP</td>
<td>Establishing Katima Mulilo/Wenela OSBP</td>
</tr>
</tbody>
</table>
Project Locations by Mode
Port Projects

LEGEND

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

Longer Term Regional Strategic Projects
Longer Term Regional Strategic Projects

Roads Projects

LEGEND

- High Trade Flow Corridor Projects
- Medium Trade Flow Corridor Projects
- Low Trade Flow Corridor Projects
Longer Term Regional Strategic Projects

Rail Projects

LEGEND
- High Trade Flow Corridor Projects
- Medium Trade Flow Corridor Projects
- Low Trade Flow Corridor Projects
Longer Term Regional Strategic Projects

OSBP Projects

LEGEND

- High Trade Flow Corridor Projects
- Medium Trade Flow Corridor Projects
- Low Trade Flow Corridor Projects
- Thank You -

- Obrigado -

- Merci -
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