

# Local Procurement of Railway Locomotives Transnet: A Case Study

TIPS DEVELOPMENT DIALOGUE SEMINAR

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# Introduction

- SA public procurement: DTI estimates 15% - 25% of GDP
- Local content: Important industrial policy instrument. Can support local development, technological upgrading, SME development and strategic sector development
- SA's public procurement policy pursues multiple secondary policy objectives: industrialisation, localisation, transformation, skills development, job creation and enterprise and supplier development

# Study Objectives

- Assess impact of localization policy on Transnet's order for 1064 locomotives (R50 bn) regarding the following:
  - a) localisation of manufacturing operations, firm competitiveness & upgrading, product design, R&D, innovation and aftermarket services & employment;
  - b) strategies to access international technologies;
  - c) contractual and operational relationships with Transnet;
  - d) the OEMs' role in integrating and supporting South African suppliers, possible integration into their global value chains (export orientation).
- Review design, implementation and monitoring of Preferential Procurement Policy Framework Act, 2000 (Act No. 5 of 2000), Regulations and Instruction Notes (designation criteria) & coherence among multiple industrial policies.

# Overview

Bids awarded 17 March 2014 to 4 OEMs:

Supplier	Number	Type
Bombardier (Canadian)	240	Electric
China South Rail (SOE)	359	Electric
General Electric (USA)	233	Diesel
China North Rail (SOE)	232	Diesel
<b>Total</b>	<b>1 064</b>	

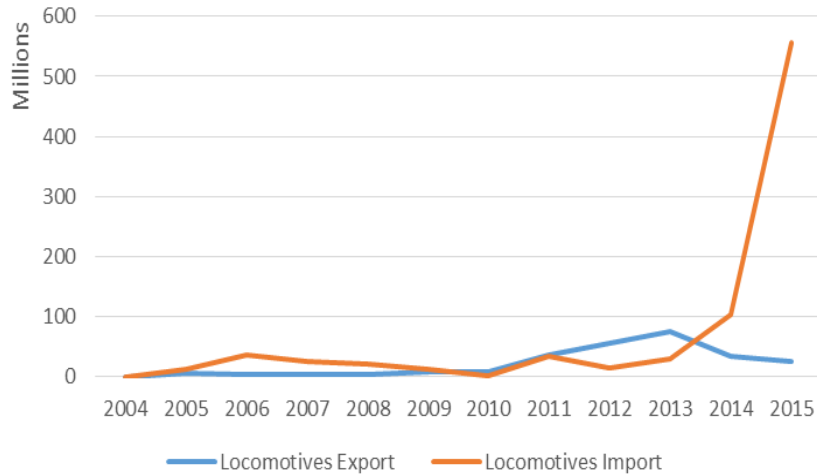
- CSR and CNR, won 56% of the tender (591 units) since merged into China Railway Rolling Stock Corporation.
- At October 2016, only GE and Bombardier had made progress on localisation plans: setting up manufacturing plants and developing skills.
- Chinese firms had only manufactured locos in China - 60 permitted. GE 6 permitted.

# Approach to the study

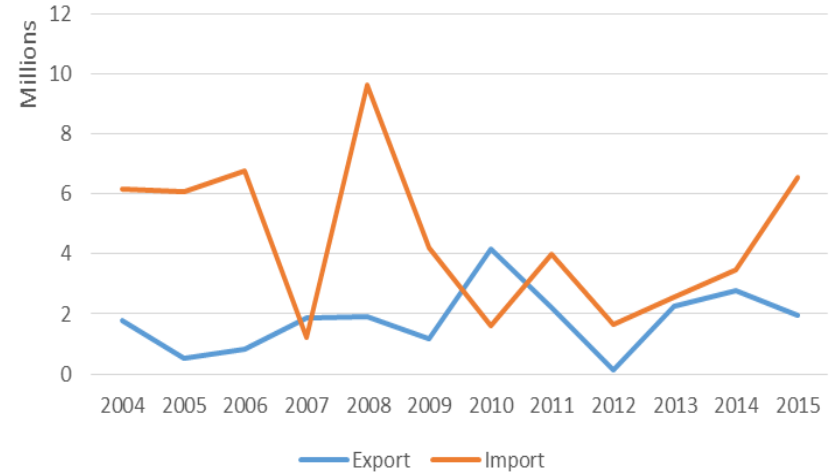
- Desk-top review of key policies, industry reports and academic research;
- Quantitative data from national and international databases; and
- In-depth interviews:
  - 4 interviews with key institutions (DTI, SABS, Transnet & SACEEC).
  - 9 interviews with suppliers: manufacturers of wagons, bogies, signal equipment, fridges, brakes, window panels, bearings and so on.
  - 1 industry expert
  - Only one OEM interviewed. Others required Transnet approval (non disclosure contracts) – not forthcoming.

# Trade

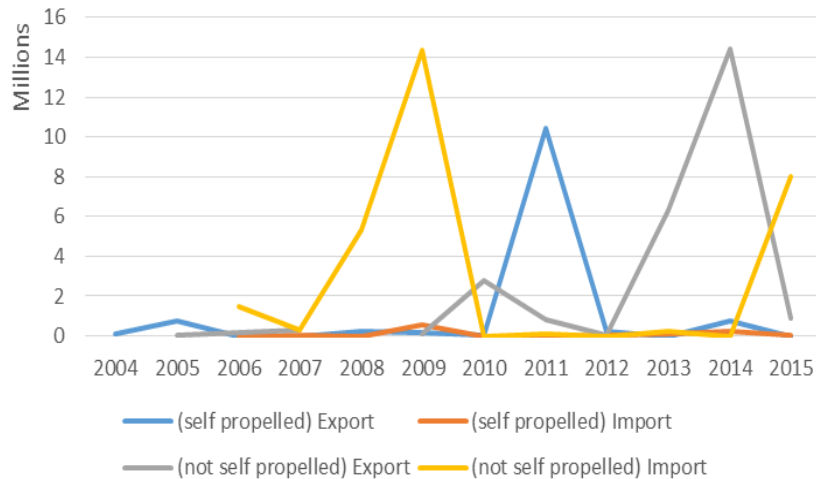
## Locomotives



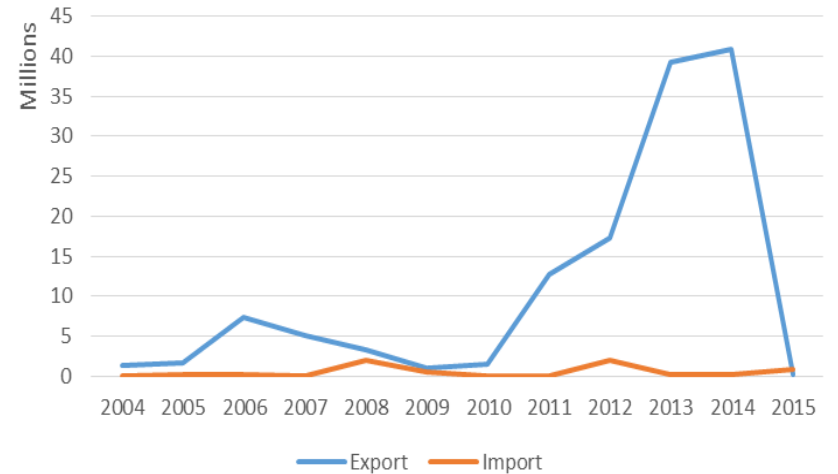
## Service vehicles



## Coaches



## Wagons



# Local content

- **Decision:** PPPFA Instruction Notes. DTI & NT decide rolling stock local content requirements (no SEIAS)

Classes of rail rolling stock	Local content requirement
Diesel locomotives	55%
Electric locomotives	60%
Electric Multiple Units (EMUs)	65%
Wagons	80%

- **Bid Verification:** Transnet Supply Chain or Transnet Engineering verify the bid depending on nature of the bid.
- **Exemptions:** DTI approves
- **Delivered product verification agent:** SABS appointed late – not started - lacks funding
- **Enforcement:**
  - **Tnet Freight Rail:** enforcement of commercial penalties
  - **Criminal penalties:** none

# **Findings**



# Findings

- Constrained by early stage in life of project
- Localisation got off to an uneven if not rocky start
  - According to one supplier, between January and October 2016 only five locomotives were produced
  - Entire programme is approximately one year behind schedule.
- Despite the challenges, some suppliers interviewed have upgraded their manufacturing processes, chiefly through investment in machinery, skills, quality controls and new products.
- OEM estimates only 5% to 7% of prospective suppliers will succeed to become exporters – some complacency
- Some suppliers are diversifying into export markets (mainly Africa).
  - Want incentives to assist with certification (IRIS) and export subsidies.

# Findings cont.

- Transnet's contracts did not match the DTI's local content expectations
- Transnet OEM ambitions:
  - No policy mandate
  - Transnet multiple roles within one SOE; an infrastructure provider, a rolling stock operator and an OEM
  - Crowds out private sector
  - Reduces incentive of international OEMs to invest in local firms
  - Struggling to manufacture (customer of & supplier to OEMs )
- Transnet Procurement:
  - 'Feast and famine' procurement over time,
  - Short notice periods and short delivery deadlines
  - all militate against the development of a local rolling stock manufacturing industry.

# **Policy Issues**

# Higher Level Policy Considerations

- **Perpetuation of uncompetitive rail?** R50bn (40 yr useful life)
  - Narrow gauge + old track alignments = inherently uncompetitive (Transport policy Green Paper)
  - Conducive to shift from road to rail?
- **Crowding out private sector:** No policy informing Transnet's decision to become OEM.
  - Unique skill sets and capacity lost
  - What's next? Eskom manufacturing turbines? Transnet Pipelines manufacturing pipes?
  - Policy required
- **Cost benefit analysis of localization:** none so far

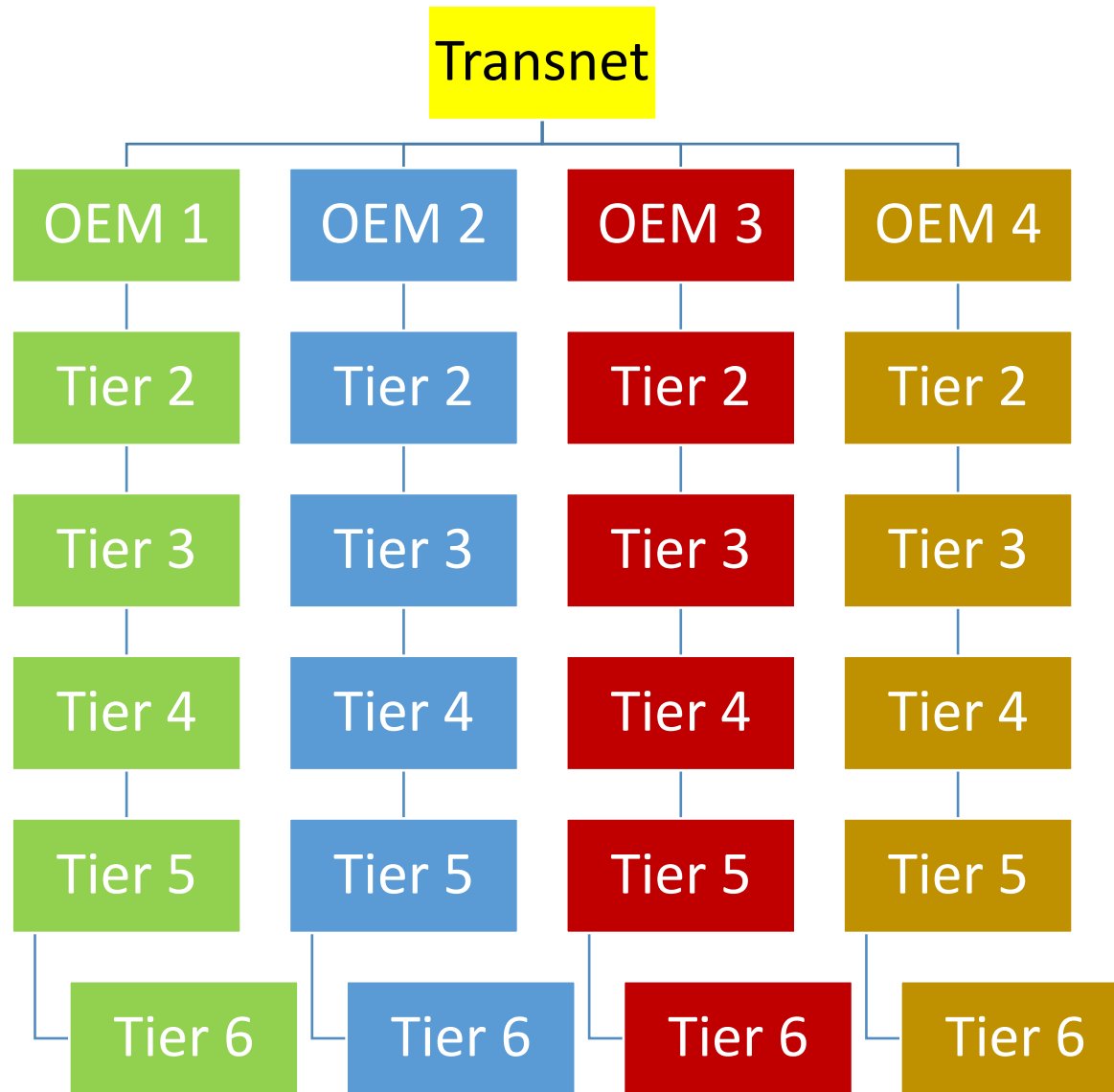
# Localisation Policy Considerations

- 1) Lack of verification agency-** serious threat to entire programme: Fix urgently (funding)
- 2) Transnet's OEM aspirations:**
  - It is conflicted in bid evaluations (player & referee).
  - Shift to independent organisation.
- 3) Transnet's feast and famine procurement:**  
Incentivise Transnet to improve.
- 4) Localisation demand side focus:**  
Compliment with supply side measures: skills development, lean manufacturing, meeting international standards and technology advancement (ramp-up).

# Policy considerations

- **Unstated Government policy objectives:** Public consultation, publish & give reasons in writing
- **Multiple instruments:** disentangle the various incentive measures and streamline administration
- **Instrument design:** Locomotive local content require more detail & nuance
- **Economies of Scale** different for different components: More consideration in setting local content thresholds

# Monitoring Challenge: How do you measure contribution of Tier 6 at OEM level?



# Administration

- **Monitoring:** SOCs, OEMs and suppliers should be required to provide information to DTI. Enable monitoring of policy efficacy.
- **Exemptions:**
  - more structured approval procedure required
  - For product not just applicant
- **SABS expertise:** hire experts



**THANK YOU**

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