Summary of commercial / technical interviews

20 April 2011

1 Executive summary

The Rolling Stock fleet renewal project team interviewed selected Rolling Stock Manufacturers ("RSM") between 5 – 7 April 2011 at the Gallagher Estate in Midrand. The objective of the interviews was to assist the project team in assessing the broad market appetite for the project as well as testing certain project assumptions. The key messages from this engagement were:

- **There is broad consensus that a 65% local content target is quite challenging, but achievable in the medium term, say between 5 and 10 years.**
- **The main factor to allow investment and local content is sustainable guaranteed workload of sufficient volume. There was some variation on perceived minimum quantities. Average would be ~250 cars per year for 10 years, but optimum would be more like 300-400 cars per annum.**
- **The preference of suppliers is to build initial vehicles overseas, with local SA people on site to develop skills. This is perceived to reduce risk and improves knowledge transfer.**
- **Most suppliers see the opportunity to involve local B-BBEE enterprises in supply of sub-components, particularly less specialized/technical equipment (interiors, motors, windows, wiring, car bodies etc.) as well as non-core activities (logistics, training, maintenance etc.)**
- **Degree of small and medium/B-BBEE involvement may depend on final specification / materials.**
- **Suppliers see some benefit in a long term maintenance relationship of some kind, with a higher performance risk in the warranty only approach.**
- **There was a tendency for a preference towards the manufacturer taking significant maintenance responsibility (certainly to start with), or a Joint Venture approach with the operator.**
- **Suppliers provided a mixed response with regards to the long-term establishment of an export-oriented Rolling Stock manufacturing industry. Some suppliers felt that in the longer term, an export Rolling Stock industry might be a viable option, particularly to other African countries. Whilst others thought it would be difficult to be competitive, particularly comparing to some of the Asian suppliers.**

2 Introduction

The Rolling Stock fleet renewal project team interviewed selected Rolling Stock Manufacturers ("RSM") between 5 – 7 April 2011 at the Gallagher Estate in Midrand. The objective of the interviews was to assist the project team in assessing the broad market appetite for the project as well as testing certain project assumptions.

RSMs were selected for interview on the basis that we received timely confirmation of their interest in attending the interview sessions, and provided that the RSM broadly met three of the following four criteria:

- Vehicle production capacity equal to at least 300 passenger vehicles a year;
- Maintenance or significant whole of life support for manufactured vehicles;
- International production lines with a presence in at least three countries;
- Prior South African train building and maintenance provision experience OR willingness to transfer technology to South Africa / local production facility.

The purpose of this document is to set out the consolidated recording of the key points raised during the interviews with the RSMs. This is a document for internal purposes only to be shared among PRASA, DoT, the dti and the Transaction Advisors.

A separate document will be available for sharing on the PRASA website containing a final summarized version including comments on a no names basis. These documents will also be available on the GIBB document management system.

Interview Panel

JD deVilliers (chair)	Department of Transport
Nicholas Pule	The DTI
Ingwa Sichula	PRASA
Will Baustita	National Treasury
Johann Rauch	GIBB
James Ferreira	GIBB
Pippa Reyburn	ENS
Walter Meyer	KPMG
Mahomed Bashir	KPMG
Christian Peckham	Interfleet
Mike Gallie-James (minute taker)	Interfleet

Questions posed for Technical Meetings:

1	Please provide us with some examples of where you have worked in train manufacture and maintenance.

	What category of rolling stock are you interested in: multiple units / coaches / locomotives?
2	We would like to see 65% local content to the new rolling stock achieved in the medium term - do you believe that this is achievable, and what would need to be in place to achieve it? In your opinion what is the necessary annual vehicle volumes and contract duration required to justify investment in a local production plant?
3	Are there any examples of where you have worked globally to transfer/develop technology and skills and are there any lessons for RSA?
4	How would you involve South African (small and medium/B-BBEE) enterprises in the manufacture and maintenance of the new rolling stock?
5	What is your preferred level of involvement in maintenance support?
6	What is your initial view on South African cost structure relative to the industry globally and the prospect of South Africa being able to export rolling stock?
7	Do you have any examples of good practice in Government support mechanisms for inward investment in infrastructure from other parts of the world?
8	Is there anything in the documentation and information you have received so far (including the technical specification) that would discourage you from setting up a local rolling stock manufacturing plant and maintenance facilities?

RSMs interviewed:

Alstom
Ansaldo Breda
ARL & Heavy Industry / Talgo / Ansaldo STS / CNR
Bombardier
Construcciones y Auxiliar de Ferrocarriles (CAF)
GE Transport
Hitachi
Mitsui / Toshiba
Naledi Rail
Siemens
Stimela / CSR Nanging
Transnet Rail Engineering
Union Carriage Works
Vidistep / CNR / China Railway Construction Corporation
Wictra Holdings / CSR QingdaoSifang

3 Consolidated responses

We would like to see 65% local content to the new rolling stock achieved in the medium term - do you believe that this is achievable, and what would need to be in place to achieve it?

- **There is broad consensus that 65% is quite challenging, but an achievable target in the medium term, say between 5 and 10 years.**
- **Local producers[1] appeared more at ease with a 65% target, due to familiarity with supply chain.**
- **The main factor to allow investment and local content is sustainable guaranteed workload of sufficient volume.**
- **There is also a need to develop the local supply chain, which takes time.**
- **Local content requirements in other countries are typically set at comparable levels.**
- **What is achievable with the Metrorail fleet (large order) may not be so easily achieved with some of the more specialised orders (locos, DMUs etc).**
- **Global OEMs recognise the potential part SA suppliers can play in forming partnerships etc.**

In your opinion what is the necessary annual vehicle volumes and contract duration required to justify investment in a local production plant?

- **There was some variation on perceived minimum quantities. Average would be ~250 cars per year for 10 years, but optimum would be more like 300-400 cars per annum. Absolute minimum might be in the region of 150 cars per annum, but not all suppliers would be willing to invest at this level.**

[1] UCW, Naledi Rail, TRE and Wictra Holdings

Are there any examples of where you have worked globally to transfer/develop technology and skills and are there any lessons for RSA?

- **Some suppliers have good experience of developing skills and knowledge transfer however there are some concerns related to loss of intellectual property that would need to be controlled.**
- **The preference of suppliers is to do design and build and test initial vehicles overseas, with local SA people on site to develop skills. This is perceived to reduce risk and improves knowledge transfer.**

How would you involve South African (small and medium/B-BBEE) enterprises in the manufacture and maintenance of the new rolling stock?

- **Most suppliers see the opportunity to involve local B-BBEE enterprises in supply of sub-components, particularly less specialized/technical equipment (interiors, motors, windows, wiring, car bodies etc.)**
- **Some suppliers also see opportunity in non-core activities (logistics, training, maintenance etc.)**
- **Degree of small and medium/B-BBEE involvement may depend on final specification / materials.**
- **Local producers were generally more at ease with this due to familiarity with local supply chains already in place.**

What is your preferred level of involvement in maintenance support?

- **Most suppliers indicated they would be prepared to work with any maintenance model. However, it was clear some of the suppliers have more experience with performance based maintenance contracts than others.**
- **All suppliers see some benefit in a long term maintenance relationship of some kind, with a higher performance risk in the warranty only approach.**
- **There was a tendency for a preference towards the manufacturer taking significant maintenance responsibility (certainly to start with), or a Joint Venture approach with the operator.**

What is your initial view on South African cost structure relative to the industry globally and the prospect of South Africa being able to export rolling stock?

- **There was a mixed response to export potential. Some suppliers felt that in the longer term export might be a viable option, particularly to other African countries. Whilst others thought it would be difficult to be competitive, particularly comparing to some of the Asian suppliers.**
- **Given potential higher European cost structures, exporting locally manufactured components could present an export opportunity.**
- **Export was seen as a good way to sustain long term viability of the plant, but there is unlikely to be sufficient confidence in this to influence any decision to invest or not.**
- **Productivity, unions and labour costs were cited as concerns.**

Do you have any examples of good practice in Government support mechanisms for inward investment in infrastructure from other parts of the world?

- **Tax incentives, including tax holidays**
- **Long term order book guarantees**
- **Provision of land for building the factory**
- **Exemption on import duties / free trade zones**
- **Green taxes**
- **Assistance with visas for expat staff**
- **Social support around the manufacturing site to attract skills base – schools, hospitals, shopping, etc.**

Is there anything in the documentation and information you have received so far (including the technical specification) that would discourage you from setting up a local rolling stock manufacturing plant and maintenance facilities?

- **Generally nothing seen to discourage suppliers, although some suppliers did mention they required further clarity on size of the order, whether the order would be split, local content requirements and what incentives there would be before they could confirm their interest.**

Other comments?

- **Further clarity is required by all potential suppliers on how the 65% local content will be calculated.**
- **Comment raised that the Metrorail product was clearly defined and understood. There were some minor issues raised relating to the user requirement specification and technical specification (acceleration performance and reliability targets). It was more difficult for potential suppliers to comment on the requirements for long distance trains.**
- **There was significant interest from potential suppliers on both the contracting strategy (e.g. size and duration of the initial order), and whether multiple suppliers would be engaged.**
- **Some concern was raised by local South African suppliers at their position, especially in relation to exclusivity and their vulnerability to outside OEMs going it alone.**