OVERVIEW OF ENERGY MEASUREMENT AND MANAGEMENT SYSTEM PER TENDERER

Transnet based server

Several tenderers are providing location for locomotive data storage to be located at the OEM server with special permission given to Transnet to access the data. Some tenderers have their own energy management systems which they are currently using in various parts of the world, and they are opting to provide the same system to Transnet.

Tenderer 3 and tenderer 5 are offering energy management system as an option, during financial evaluation these options must be included in the base price

Green – Base offer; Blue – Option; Brown - Document not sufficient (DNS); Red – Document not provided (DNP)

ITEM	TENDERER 1	TENDERER 2	TENDERER 3	TENDERER 4	TENDERER 5	TENDERER 6	TENDERER 7
EN 50463				DNP		DNP	
On-board Energy Display				DNP		DNP	
Communication to land based system				DNP		DNP	
Load based analysis				DNP		DNP	
Server location				DNP	Not Clear	DNP	
Driver advisory system				DNP		DNP	

APPENDIX NN: OPTIONS - 465 DIESEL LOCOS – A6-02 – CONTROL SYSTEMS – ELVIS TSHIVHILINGE

TECHNICAL OPTIONS OVERVIEW

This section highlights technical options which are related to 599 Electric Locomotives. There are three categories of options, namely.

4 Category 1: these are options which are offered by various tenderers and must be included in the base price offer as offered by tenderers.
5 Category 2: these are options which Transnet requested the tenderers to offer as options, and must not be included in the base price offer of the tenderers. These options must be evaluated separately.

CATEGORY 1 – OPTIONS WHICH MUST BE INCLUDED IN THE BASE PRICE OFFER

1	**Test bench and simulation equipment**	1. The Tenderer must be requested to provide the option to supply test benches to be used for in-house testing by TFR. The cost for this option must be included in the base price	Tenderer 3	A6-02	2.16
2	**ADU for the driver assistant**	1. The Option to provide ADU must be included in the base price offer	Tenderer 3 Tenderer 4	A6-02	2.21
3	**Remote data download**	1. The EMD Intellitrain and EMD Locomotive monitoring centre have the capability to remotely download data and this option must be included in the base price offer	Tenderer 3	A6-02	6.1.9 7.8 8.8 9.11 24.1

					24.2 24.3 54.7 54.8 54.9
4	Real time signal analysis	1. The tenderer must clarify whether the feature to view logged signals offline is included in the tenderer's base price offer	Tenderer 3	A6-02	10.9 10.5
6	Execution of the drivers reset from the lead locomotive to the trailing locomotives	1 The Tenderer response indicates that functionality to implement driver's reset of the trailing locomotives is available if eMU option is purchased. This option must be included in the base price offer	Tenderer 4	A6-02	14.2
7	Access of any information on locomotive should be accessible via any other locomotive in the consist	1 The tenderer's response indicates that functionality to display information of the trailing locomotives may be included at additional cost 2 The tenderer must be requested to provide cost for this feature	Tenderer 4	A6-02	17.2 17.5 17.7
10	Display of total tractive/braking effort of entire	1 The tenderer states that in order to calculate TE and BE from trailing locomotives which do not have DB modem, additional costs will be incurred for development. The Tenderer must be requested to provide costing for the development of look up table for older types of	Tenderer 4	A6-03	32.1

	consist	locomotives.			
12	Installation of ECP/WDP and RDP cabling	1. The tenderer offers the installation of cabling for ECP WDP and RDP as an optional extra. This option must be included in the base price of the locomotive during financial evaluations.	Tenderer 4	A6-02	43.5
13	Supply of dummy train line power supplies and ECP function boxes	1. The tenderer offers the installation of ECP junction boxes as an optional extra. This option must be included in the base price of the locomotive during financial evaluation	Tenderer 4	A6-02	43.6

TECHNICAL OPTIONS AS REQUESTED BY TFR

OPTIONS	TENDERER 1	TENDERER 2	TENDERER 3	TENDERER 4
ECP with Wire Distributed Power (WDP)	√		√	√
Radio Distributed Power (RDP)	√		√	√

APPENDIX OO: OPTIONS - 599 ELECTRIC LOCOS – A6-05 - TRANSFORMER – VINCENT MALALE

CLAUSE	ITEM	TENDERER 1	TENDERER 2	TENDERER 3	TENDERER 4	TENDERER 5	TENDERER 6	TENDERER 7
7.2	Positioning mounting of transformer in the locomotive -Desirable			*This protection cape is not supplied in our base offer Please be aware that can be subscribed as an option Please refer to PARAGRAPH 17.2 OF CHAPTER 3 SECTION 2 B0-Bo LOCOMOTIVE TECHNICAL DESCRIPTION				

CLAUSE	ITEM	TENDERER 1	TENDERER 2	TENDERER 3	TENDERER 4	TENDERER 5	TENDERER 6	TENDERER 7
17.1.4	Tests (short circuit) -Desirable				SC test to be ordered separately	We have not included for this test since our type tests are comprehensive enough. But we are willing to discuss this test in the design review and if TFR decides they still require this test after discussion then we will offer this separately		

APPENDIX PP: OPTIONS - 599 ELECTRIC LOCOS – A6-14 - MAINTENANCE – VILVALINGUM NAIR

Issue #	Issue Title	Finance to do list	Option proposed by which Tenderers?	Section Number	Clause Number
5.1 (example)		1 Contact Tenderer X and ask for a price for a Energy Management system that complies with our specifications This price must be added to the base price before the financial adjudication 2 Add the price for energy management system (already quoted as an option) to the Tenderer X base price before the financial evaluation 3) No adjustment needed for Tenderer Z as this is included in the base price	Tenderer X , Tenderer Y	A6-03 A6-12 A6-12	5.4 2.8.6 6.11

APPENDIX QQ: OPTIONS - 599 ELECTRIC LOCOS – MECHANICAL SYSTEMS – ROBERT FRÖHLING

Please refer to the mechanical systems risk report (it includes the options descriptions)

- Bolster less Self Steering Bogies
- Transformer cage
- Yaw dampers
- etc

APPENDIX RR: OPTIONS - 599 ELECTRIC LOCOS – QUALITY SYSTEMS – VILIVA

Issue #	Finance to do list	Option proposed by which Tenderers?	Section Number	Clause Number
Accommodation and assistance. Clause 9.0	The costs for accommodation and assistance are not stated. Establish if the costs are included in quotation	Diesel Locomotives Tenderers 1, 2, 3 and 4 do not specify who will carry the costs	As-Is	9.0
		Electrical Locomotives Tenderers 1, 2, 3, 4, 5, 6 and 7 do not specify who will carry the costs	As-Is	9.0

APPENDIX 8S: OPTIONS - 599 ELECTRIC LOCOS – ELECTRICAL SYSTEMS – SGUDA SIBANDE

Issue #	Issue Title	Finance to do list	Option proposed by which Tenderers?	Section Number	Clause Number
1	Roof Equipment Design	1 Add the price for installing HV equipment in a cubicle located inside the locomotive (already quoted as an option) to the Tenderer 3 base price before the financial evaluation.	Tenderer 3	A5.12	2.10 2.10.1
2	Pantographs and pantograph OHTE interaction	1 All Tenderers must quote for air bellow controlled type pantographs and not the spring controlled	N A	A5.20	3.4
3	Pantographs and pantograph OHTE interaction	1 Add the price for providing the cross coupled ADD system so that activation of one ADD automatically lowers all other pantographs in a consist safely such that the VCB HSCB opens first before pantographs are lowered this is applicable to the Tenderers 2, 3, 4, 5, 6 and 7 base prices before the financial evaluation 2 Only tenderer 1 quoted for cross coupled ADD system.	Only tenderer 1 quoted for cross coupled ADD system	A5.20	3.5.1

APPENDIX TT: OPTIONS - 599 ELECTRIC LOCOS – WHEELS – JOSEPH BONGA

T3- section A6-17 clause 2.2-Tenderer has offered tyred wheels as base offer and solid wheels as an option.

TFR prefers solid wheels. This must be taken into account when the LCC of the loco is determined.

During the financial evaluation the committee must take into account the cost of solid wheels when evaluating T3 base price.

APPENDIX UU: REASONS FOR DISQUALIFICATION OF TENDERER 4 ON Bo-Bo PROPOSALS

Section	Clause No.		Locomotive General Information and Requirements	TFR Score	TFR Clarification	Weighted Score	Tenderer's Self Assessment Compliance Level	Tenderer's Comments, Information and Cross References
A6-01	1.5.2	[redacted]	It is anticipated that certain of these locomotives will be used to haul loads requiring locomotive distributed power. Certain lines will require the use of ECP with WDP whereas other lines will require the use of RDP. It is a mandatory requirement that provision for the fitment of ECPB braking / wire DP and RDP (radio distributed power) be made - see section A6-02 for further details.	0	No supporting evidence found. Tenderer did not comply with PROPOSAL RESPONSE REQUIREMENTS instruction 5.2 (ref. "INTRO" page) of how to complete the clause-by-clause response and to provide substantiating evidence and or cross references to evidence.	DSQ	Full compliance	
	1.6.3	[redacted]	It is mandatory that tenderers locomotives with dual voltage mode (AC/DC) capability are offered on a standardised platform and automatic change-over between modes shall be possible, i.e. possible to achieve "on-the-fly" change-over from AC to DC and vice versa automatically. See also A6-02 for locomotive parameters and specification BBF0889 for the parameters of the 3kV DC/25kV AC change over section.	0	No supporting evidence found. Information at hand indicate that the locomotive is not an AC/DC as required by TFR. The locomotive required should be able to go through AC/DC without driver intervention.	DSQ	Full compliance	
	3.1	[redacted]	It is a mandatory requirement that the radio communication system is provided in accordance with specifications as listed in section	0	No supporting evidence to imply that the design proposed has made provision for space of TFR communications equipment	DSQ	Full compliance	

Section	Clause No.		Locomotive General Information and Requirements	TFR Score	TFR Clarification	Weighted Score	Tenderer's Self Assessment Compliance Level	Tenderer's Comments, Information and Cross References
			A6-19		onboard.			
	3.2.1		It is a mandatory requirement that the Cab Signalling/Authorisation System is provided in accordance with specifications as listed in section in A6-19	0	No supporting evidence to imply that the design proposed has made provision for space of TFR communications equipment onboard.	DSQ	Full compliance	
A6-02	2.7		It is a mandatory requirement that all hardware required to control a diesel locomotive via the AAR 27 pin standard shall be provided Care must be taken to ensure that the existing diesel MU jumpers can be used between this locomotive and a trailing diesel locomotive	0	No evidence found, however tenderer states full compliance.	DSQ	Full Compliance	
	2.19		It is a mandatory requirement that the High Voltage compartment doors be interlocked with locomotive high voltage operation. It should not be possible to override the interlocking under any circumstances (also see other requirements for interlocking system in section A6-12)	0	No supporting evidence found however tenderer states full compliance. The high voltage interlocking is a critical safety requirement.	DSQ	Full Compliance	
	7.1		It is a mandatory requirement for the control system to be supplied with data recorder (black box) functionality	0	No evidence found, however tenderer states full compliance	DSQ	Full Compliance	

Section	Clause No.		Locomotive General Information and Requirements	TFR Score	TFR Clarification	Weighted Score	Tenderer's Self Assessment Compliance Level	Tenderer's Comments, Information and Cross References
	12.1		It is a mandatory requirement that the locomotive has the ability to, in the event of a fault, automatically cut out the affected system.	0	No evidence found, however tenderer states full compliance	DSQ	Full Compliance	
	12.2		It is a mandatory requirement that the protection scheme is designed to optimise operability of the locomotive. I.e when a fault occurs, other devices which are not affected should operate normally. This should be done automatically without any action from the driver.	0	No evidence found, however tenderer states full compliance	DSQ	Full Compliance	
	18.1		It is a mandatory requirement that the control system will use speed probe feedback, motor voltages / currents etc to accurately determine when a locked axle condition occurs.	0	No evidence found, however tenderer states full compliance	DSQ	Full Compliance	
	22.1		It is a mandatory requirement for the locomotive to have a modern electronic braking system which can be adapted for ECP/WDP or RDP operation.	0	No evidence found, however tenderer states full compliance	DSQ	Full Compliance	
	28.2		It is a mandatory requirement that electric braking shall remain available after an over-speed trip occurs.	0	No evidence found, however tenderer states full compliance No information provided of the locomotive control system	DSQ	Full Compliance	
	32.2		It is a mandatory requirement for all DDU's and other instrumentation to be	0	No evidence found, however tenderer states full compliance	DSQ	Full Compliance	

Section	Clause No.		Locomotive General Information and Requirements	TFR Score	TFR Clarification	Weighted Score	Tenderer's Self Assessment Compliance Level	Tenderer's Comments, Information and Cross References
			ergonomically positioned towards the driver.					
	32.3		It is a mandatory requirement for the DDU to be operable in all temperatures which can be experienced during operation anywhere in South Africa.	0	No evidence found of acceptable operating temperatures of DDUs, however tenderer states full compliance.	DSQ	Full Compliance	
	42.1		It is a mandatory requirement that the locomotive shall have all necessary hardware and software to control a standard diesel locomotive coupled behind it.	0	No evidence found and tenderer does not state a compliance level.	DSQ		
	43.1		It is a mandatory requirement that the locomotive must cater for future fitment of be equipped with ECP/WDP and RDP equipment	0	No evidence found, however tenderer states full compliance.	DSQ	Full Compliance	
	52.1		The pantograph automatic drop system shall be integrated with the locomotive control system. See also A8-20 clause 3.5	0	No evidence found, and tenderer does not state level of compliance.	DSQ		
	52.2		There shall be an input to the control system which is energised when the automatic drop system is activated.	0	No evidence found, and tenderer does not state level of compliance	DSQ		
	52.3		When any locomotive in the consist detects that the automatic drop system has been activated, all locomotives in the consist will immediately open their main primary circuit breakers and lower	0	No evidence found, and tenderer does not state level of compliance	DSQ		

Section	Clause No.		Locomotive General Information and Requirements	TFR Score	TFR Clarification	Weighted Score	Tenderer's Self Assessment Compliance Level	Tenderer's Comments, Information and Cross References
			their pantographs.					
A6-05	11.3		Should the transformer not be located inside the locomotive, then it is a mandatory requirement that details must be provided to demonstrate that the 25 kV down lead cable and all high voltage connections are suitably protected against access. Technical details of prevention of access must be provided at the time of tender.	0	No supporting evidence found in tender documentation. The comment by the tenderer is irrelevant to the clause requirement.	DSQ	Full Compliance	Elastimold HV bushing is insulated
A6-07	2.1		It is mandatory that an electrically driven compressor of sufficient capacity to deliver at least 0,05 m³/s of free air when operating against a delivery pressure of 1 000 kPa will be provided on each locomotive.	0	No information supplied. TFR has no experience with this model compressor, it is also belt driven. (Some evidence of the belt driven compressor found in the parts list.)	DSQ	Full Compliance	
A6-11	2.4		It is mandatory that the interior of the driver's compartment be lined with an approved fire retardant material of adequate impact resistance to withstand knocks from tool boxes etc. In areas where abnormal wear can be expected suitable Stainless Steel protection plates shall be provided.	0	No supporting info could be found	DSQ	Full compliance	

Section	Clause No.		Locomotive General Information and Requirements	TFR Score	TFR Clarification	Weighted Score	Tenderer's Self Assessment Compliance Level	Tenderer's Comments, Information and Cross References
	4.1		It is mandatory that the driver's compartment floor be covered with a hard-wearing long lasting, non-slip and pliable material which can be easily cleaned.	0	No supporting info could be found	DSQ	Full compliance	
	5.1		It is mandatory that the driver's compartment be well insulated against the transmission of noise and vibration	0	No supporting info could be found	DSQ	Full compliance	
	11.3		It is mandatory that 3 antenna inspection covers be provided within the ceiling at access the antenna positions.	0	No supporting evidence	DSQ	Full compliance	
	13.1		It is essential that two rear view mirrors be installed on either side of the driver's cab one for use by the driver and the other for the assistant.	0	No supporting info could be found	DSQ	Full compliance	
AS-12	6.4.1		It is a mandatory requirement that with a "dead" lead locomotive application, the installed battery capacity must be such that the locomotive can be operated for at least 4 hours, with the pantograph lowered, whilst controlling a live trailing locomotive (with critical equipment still on).	0	Risk no reference to batteries	DSQ	Full compliance	
	6.9.1		It is a mandatory requirement that tenderers provide full details of the type(s) of interlocks offered	0	RISK No technical information provided. More detailed information will be required	DSQ	Full compliance	

Section	Clause No.		Locomotive General Information and Requirements	TFR Score	TFR Clarification	Weighted Score	Tenderer's Self Assessment Compliance Level	Tenderer's Comments, Information and Cross References
AE-14	7.5		It is a mandatory requirement that the contractor furnish Transnet with component serial number lists showing the serial numbers of the components actually fitted to each locomotive. The component serial number lists shall be in electronic format. To be formalised at Design review stage.	0	No evidence found	DSQ	Full Compliance	
	9.1		It is an essential requirement that provision must be made to recover a locomotive using jacking pads and/or lifting eyes on the nose and or side of the locomotive	0	No evidence found	DSQ	Full Compliance	
	11.1		It is mandatory that tenderers must quote on the provision of spare parts and recommend quantities.	0	Volume 4 Index 5 Brake System	DSQ	Full Compliance	will be provided after winning the tender
AE-18	13.4.1.2		It is a mandatory requirement that Contractors must therefore provide locomotives with on board equipment for automatic de-powering/re-powering at neutral sections and voltage system separation sections	0	OPTION No technical information provided. Please provide detailed information on how the locomotive senses and switches at AC/DC changeover as well as neutral section. The information given is more on how the AC/DC is constructed	DSQ	Full compliance	
AE-19	2.3		The mandatory electrical safety and installation requirements of roof mounted antennas are given in Specification BBC 1790	0	No supporting evidence	DSQ	Full compliance	

Section	Clause No.		Locomotive General Information and Requirements	TFR Score	TFR Clarification	Weighted Score	Tenderer's Self Assessment Compliance Level	Tenderer's Comments, Information and Cross References
	2.4		It is mandatory that detailed brake interface requirements/information in order to interface the Signalling/Authorisation System to the locomotive for the purpose of the initiation of a braking application by the on-board Signalling/Authorisation System be provided.	0	No supporting evidence	DSQ	Full compliance	
	3.2.1		50 Hz track circuit	0	No supporting evidence	DSQ	Full compliance	
	3.2.2		Jeumont track circuit	0	No supporting evidence	DSQ	Full compliance	
	3.2.3		Aster track circuit	0	No supporting evidence	DSQ	Full compliance	
	3.2.4		ML track circuit	0	No supporting evidence	DSQ	Full compliance	
	3.2.5		Reed track circuit	0	No supporting evidence	DSQ	Full compliance	
	3.2.6		50 Hz impedance of the locomotive between the pantograph and the return rails	0	No supporting evidence	DSQ	Full compliance	
	3.3		The psophometric disturbing current generated by the locomotive, as defined in ITU-T directives and as measured outside the substation, shall be as low as possible. Tenderers shall furnish details of methods employed to reduce the psophometric disturbing currents.	0	No supporting evidence	DSQ	Full compliance	

Section	Clause No.		Locomotive General Information and Requirements	TFR Score	TFR Clarification	Weighted Score	Tenderer's Self Assessment Compliance Level	Tenderer's Comments, Information and Cross References
			supported by calculations					
A6-20	3.1		It is mandatory that each locomotive must be provided with two pantographs for redundancy, of which only one will be in use at any time. The pantographs must comply with the requirements of TFR specification RSE/TE/SPC/0029 as well as clarification document RSE/TE/TMO/0005 (see A5-20 Attachment 3 for both).	0	RISK Four pantographs are provided which contradicts the requirements of this clause and specifications referenced, the use of two pantographs ensures that safety clearances on the roof are maintained. The pantograph must be controlled by means of air bellows instead of the traditional springs. More information must be provided on pantograph dimensions and collector head profile which must conform to UIC profile which shall be approved by Transnet.	DSQ	Full compliance	
	3.2		It is mandatory that the pantograph must be mounted at each end of the locomotive such that the collector heads are positioned vertically above the bogie pivot point.	0	The pantographs must be mounted such that the Knuckle ends face each other. Please indicate bogie pivot centre for the locomotive. It will not be possible to position pantograph collector head vertically above the bogie pivot centre with 4 pantographs	DSQ	Full compliance	

APPENDIX VV: REASONS FOR DISQUALIFICATION OF TENDERER 4 ON Co-Co PROPOSALS

Section	Clause No		Locomotive General Information and Requirements	TFR Score	TFR Clarification	Weighted Score	Tenderer's Self Assessment Compliance Level	Tenderer's Comments, Information and Cross References
A8-01	1.5.2	[redacted]	It is anticipated that certain of these locomotives will be used to haul loads requiring locomotive distributed power. Certain lines will require the use of ECP with WDP whereas other lines will require the use of RDP. It is a mandatory requirement that provision for the fitment of ECPB braking / wire DP and RDP (radio distributed power) be made - see section A8-02 for further details.	0	No supporting evidence found Tenderer did not comply with PROPOSAL RESPONSE REQUIREMENTS Instruction 5.2 (ref. "INTRO" page) of how to complete the clause-by-clause response and to provide substantiating evidence and/or cross references to evidence	DSQ	Full compliance	
	1.6.3	[redacted]	It is mandatory that tenderers locomotives with dual voltage mode (AC/DC) capability are offered on a standardised platform and automatic change-over between modes shall be possible i.e. possible to achieve "on-the-fly" change-over from AC to DC and vice versa automatically. See also A8-02 for locomotive parameters and specification B8F0889 for the parameters of the 3kV DC/25kV AC change over section.	0	TFR require Clarification Information at hand indicate that the locomotive is not an AC/DC as required by TFR. The locomotive required should be able to go through AC/DC without driver intervention	DSQ	Full compliance	

	3.1	[illegible]	It is a mandatory requirement that the radio communication system is provided in accordance with specifications as listed in section A6-19	[illegible]	No supporting evidence	DSQ	Full compliance	
	3.2.1	[illegible]	It is a mandatory requirement that the Cab Signalling/Authorisation System is provided in accordance with specifications as listed in section in A6-19	[illegible]	No supporting evidence	DSQ	Full compliance	
A6-02	2.7	[illegible]	It is a mandatory requirement that all hardware required to control a diesel locomotive via the AAR 27 pin standard shall be provided. Care must be taken to ensure that the existing diesel MU jumpers can be used between this locomotive and a trailing diesel locomotive.	[illegible]	No evidence found, however tenderer states full compliance	DSQ	Full Compliance	

	2.19		It is a mandatory requirement that the High Voltage compartment doors be interlocked with locomotive high voltage operation. It should not be possible to override the interlocking under any circumstances (also see other requirements for interlocking system in section A6-12)	0	No evidence found, however tenderer states full compliance.	DSQ	Full Compliance
	7.1		It is a mandatory requirement for the control system to be supplied with data recorder (black box) functionality.	0	No evidence found, however tenderer states full compliance.	DSQ	Full Compliance
	12.1		It is a mandatory requirement that the locomotive has the ability to, in the event of a fault, automatically cut out the affected system.	0	No evidence found, however tenderer states full compliance.	DSQ	Full Compliance
	12.2		It is a mandatory requirement that the protection scheme is designed to optimise operability of the locomotive. I.e. when a fault occurs, other devices which are not affected should operate normally. This should be done automatically without any action from the driver.	0	No evidence found, however tenderer states full compliance.	DSQ	Full Compliance
	18.1		It is a mandatory requirement that the control system will use speed probe feedback, motor voltages / currents etc to accurately determine when a locked axle condition occurs	0	No evidence found, however tenderer states full compliance.	DSQ	Full Compliance

	22.1		It is a mandatory requirement for the locomotive to have a modern electronic braking system which can be adapted for ECP/WDP or RDP operation.		No evidence found, however tenderer states full compliance	DSQ	Full Compliance	
	28.2		It is a mandatory requirement that electric braking shall remain available after an over-speed trip occurs		No evidence found, however tenderer states full compliance	DSQ	Full Compliance	
	32.2		It is a mandatory requirement for all DDU's and other instrumentation to be ergonomically positioned towards the driver		No evidence found, however tenderer states full compliance	DSQ	Full Compliance	
	32.3		It is a mandatory requirement for the DDU to be operable in all temperatures which can be experienced during operation anywhere in South Africa.		No evidence found, however tenderer states full compliance	DSQ	Full Compliance	
	42.1		It is a mandatory requirement that the locomotive shall have all necessary hardware and software to control a standard diesel locomotive coupled behind it.		No evidence found and tenderer does not state a compliance level	DSQ		
	43.1		It is a mandatory requirement that the locomotive must cater for future fitment of be equipped with ECP/WDP and RDP equipment		No evidence found, however tenderer states full compliance.	DSQ	Full Compliance	
	52.1		The pantograph automatic drop system shall be integrated with the locomotive control system See also A5-20 clause 3.5		No evidence found, and tenderer does not state level of compliance.	DSQ		

	52.2		There shall be an input to the control system which is energised when the automatic drop system is activated	0	No evidence found, and tenderer does not state level of compliance.	DSQ		
	52.3		When any locomotive in the consist detects that the automatic drop system has been activated, all locomotives in the consist will immediately open their main primary circuit breakers and lower their pantographs.	0	No evidence found, and tenderer does not state level of compliance.	DSQ		
A5-05	11.3		Should the transformer not be located inside the locomotive, then it is a mandatory requirement that details must be provided to demonstrate that the 25 kV down lead cable and all high voltage connections are suitably protected against access. Technical details of prevention of access must be provided at the time of tender.	0	No supporting evidence found in tender documentation. No Co-Co transformer information available. The comment by the tenderer is irrelevant to the clause requirement.	DSQ	Full Compliance	Elastimold HV bushing is insulated
	13.1.1		It is mandatory that the Transformer be fitted with an Explosion Vent of spring loaded diaphragm type, of which the exhaust shall be directed such that the oil and gases are expelled into an area where it shall result in minimum damage and disruption (i.e. downwards below the floor).	0	No supporting evidence found in tender documentation. No Co-Co transformer information available	DSQ	Full Compliance	

	13.1.2		It is mandatory that the Explosion Vent is fitted with electrical contacts which on operating shall operate protection circuitry	0	No supporting evidence found in tender documentation. No Co-Co transformer information available	DSQ	Full Compliance	
	13.2		Conservator Tank					
	13.2.1		It is mandatory that the transformer be fitted with an conservator tank to allow for the expansion and contraction of the transformer oil.	0	No supporting evidence found in tender documentation. No Co-Co transformer information available	DSQ	Full Compliance	
	13.4		Oil Level Indicator.					
	13.4.1		It is mandatory that the transformer is fitted with an Oil Level Indicator	0	No supporting evidence found in tender documentation. No Co-Co transformer information available	DSQ	Full Compliance	
	13.4.2		It is mandatory that together with giving a visual indication of the oil level the unit is also fitted with contacts for operating of Protection and Alarm circuits	0	No supporting evidence found in tender documentation. No Co-Co transformer information available	DSQ	Full Compliance	
	13.5.2		It is mandatory that the oil valves have a means of positively locking them in the open or closed position.	0	No supporting evidence found in tender documentation. No Co-Co transformer information available.	DSQ	Full Compliance	
	13.6		Oil Sampling, Drainage and Filtering cocks / valves.					
	13.6.1		It is mandatory that the transformer be fitted with Oil Sampling, Drainage and Filtering cocks	0	No supporting evidence found in tender documentation. No Co-Co transformer information available	DSQ	Full Compliance	

	13.6.2		It is mandatory that the cocks are lockable in both the open and closed positions	0	No supporting evidence found in tender documentation. No Co-Co transformer information available	DSQ	Full Compliance
	17.1.1		It is mandatory that the transformers are subjected to "Type" and "Routine" Tests specified in Table 4 of I.E.C. Publication No. 60310	0	No supporting evidence found in tender documentation. No Co-Co transformer information available	DSQ	Full Compliance
	17.1.2		It is mandatory that all Transformers are subjected to "Routine" Tests	0	No supporting evidence found in tender documentation. No Co-Co transformer information available.	DSQ	Full Compliance
	17.1.3		It is mandatory that one of the first transformers built is subjected to "Type" Tests specified in table 4 of I.E.C. Publication No. 60310	0	No supporting evidence found in tender documentation. No Co-Co transformer information available	DSQ	Full Compliance
A6-07	2.1		It is mandatory that an electrically driven compressor of sufficient capacity to deliver, at least 0,85 m³/s of free air when operating against a delivery pressure of 1 000 kPa, will be provided on each locomotive.	0	No information supplied. TFR has no experience with this model compressor, it is also belt driven. (Some evidence of the belt driven compressor found in the parts list.)	DSQ	Full Compliance
A6-11	2.4		It is mandatory that the interior of the driver's compartment be lined with an approved fire retardant material of adequate impact resistance to withstand knocks from tool boxes etc. In areas where abnormal wear can be expected suitable Stainless Steel protection plates shall be provided	0	No supporting info could be found	DSQ	Full compliance

	4.1		It is mandatory that the driver's compartment floor be covered with a hard-wearing long lasting non-slip and pliable material which can be easily cleaned.		No supporting info could be found	DSQ	Full compliance	
	5.1		It is mandatory that the driver's compartment be well insulated against the transmission of noise and vibration		No supporting info could be found	DSQ	Full compliance	
	11.3		It is mandatory that 3 antenna inspection covers be provided within the ceiling at access the antenna positions.		No supporting evidence	DSQ	Full compliance	
	13.1		It is essential that two rear view mirrors be installed on either side of the driver's cab one for use by the driver and the other for the assistant.		No supporting info could be found	DSQ	Full compliance	
AS-12	6.4.1		It is a mandatory requirement that with a "dead" lead locomotive application, the installed battery capacity must be such that the locomotive can be operated for at least 4 hours, with the pantograph lowered, whilst controlling a live trailing locomotive (with critical equipment still on).		Risk no reference to batteries	DSQ	Full compliance	
	6.9.1		It is a mandatory requirement that tenderers provide full details of the type(s) of interlocks offered.		RISK: No technical information provided. More detailed information will be required	DSQ	Full compliance	

A8-14	7.6		It is a mandatory requirement that the contractor furnish Transnet with component serial number lists showing the serial numbers of the components actually fitted to each locomotive. The component serial number lists shall be in electronic format. To be formalised at Design review stage.		No evidence found	DSQ	Full Compliance	
	9.1		It is an essential requirement that provision must be made to recover a locomotive using jacking pads and/or lifting eyes on the nose and/or side of the locomotive.		No evidence found	DSQ	Full Compliance	
	11.1		It is mandatory that tenderers must quote on the provision of spare parts and recommend quantities.		Volume 4 Index 5 Brake System	DSQ	Full Compliance	will be provided after winning the tender
A8-18	1.3.4.1.2		It is a mandatory requirement that Contractors must therefore provide locomotives with on board equipment for automatic de-powering/re-powering at neutral sections and voltage system separation sections.		OPTION No technical information provided. Please provide detailed information on how the locomotive senses and switches at AC/DC changeover as well as neutral section. The information given is more on how the AC/DC is constructed.	DSQ	Full compliance	
A8-19	2.3		The mandatory electrical safety and installation requirements of roof mounted antennas are given in Specification BBC 1790		No supporting evidence	DSQ	Full compliance	

	2.4		It is mandatory that detailed brake interface requirements/information in order to interface the Signalling/Authorisation System to the locomotive for the purpose of the initiation of a braking application by the on-board Signalling/Authorisation System be provided		No supporting evidence	DSQ	Full compliance	
	3.2.1		50 Hz track circuit		No supporting evidence	DSQ	Full compliance	
	3.2.2		Jeumont track circuit		No supporting evidence	DSQ	Full compliance	
	3.2.3		Aster track circuit		No supporting evidence	DSQ	Full compliance	
	3.2.4		ML track circuit		No supporting evidence	DSQ	Full compliance	
	3.2.5		Reed track circuit		No supporting evidence	DSQ	Full compliance	
	3.2.6		50 Hz impedance of the locomotive between the pantograph and the return rails		No supporting evidence	DSQ	Full compliance	
	3.3		The psophometric disturbing current generated by the locomotive, as defined in ITU T directives and as measured outside the substation, shall be as low as possible. Tenderers shall furnish details of methods employed to reduce the psophometric disturbing currents, supported by calculations.		No supporting evidence	DSQ	Full compliance	

A6-20	3.1	[redacted]	It is mandatory that each locomotive must be provided with two pantographs for redundancy of which only one will be in use at any time. The pantographs must comply with the requirements of TFR specification RSE/TE/SPC/0029 as well as clarification document RSE/TE/TMO/0005 (see A6-20 Attachment 3 for both).	D	RISK Four pantographs are provided which contradicts the requirements of this clause and specifications referenced, the use of two pantographs ensures that safety clearances on the roof are maintained. The pantograph must be controlled by means of air bellows instead of the traditional springs. More information must be provided on pantograph dimensions and collector head profile which must conform to UIC profile which shall be approved by Transnet.	DSQ	Full compliance	
	3.2	[redacted]	It is mandatory that the pantograph must be mounted at each end of the locomotive such that the collector heads are positioned vertically, above the bogie pivot point.	D	The pantographs must be mounted such that the Knuckle ends face each other, Please indicate bogie pivot centre for the locomotive. It will not be possible to position pantograph collector head vetically above the bogie pivot centre with 4 pantographs.	DSQ	Full compliance	

APPENDIX WW: EVALUATION TEAMS - 509 ELECTRIC LOCOMOTIVES

SECTION NO.	SECTION DESCRIPTION	CLAUSES	TEAM REPRESENTATIVES	ACCOUNTABLE PERSON
A6 - 01	Locomotive General Information and Requirements	Clause 4.1-4.4, 4.4.2, 7.1-7.6	Dr Robert Fröhling, Mesham Sivnaraim, Sheraton Singh and Georg Hettasch	Dr Robert Fröhling
		Clause 1.1, 1.1.1, 1.5.2, 1.6, 1.6.1, 1.6.3, 2.2.1- 2.2.2, 4.1-4.4, 4.4.1-4.4.2, 4.5-4.6, 4.6.1-4.6.2, 4.7.2-4.7.5, 4.7, 4.7.8-4.7.9, 5.1.2-5.1.5, 6, 9.1	Marthin Mulder & Justice Ngwenyama	Marthin Mulder
		1.6.2.1,4.7.6, 4.7.6.1-4.7.6.2, 4.7.7, 6.1,	Elvis Tshivhilinge	Elvis Tshivhilinge
		Clause 1.5.2, 3.1, 3.3.1 - 3.3.2	Andre du Toit & Nkululeko Gobhozi	Andre du Toit & Nkululeko Gobhozi
		Clause 2.2.7-2.2.10, 2.2.1-2.2.2, 4.4.1	Trevor Downward & Joel Mathonsi	Trevor Downward & Joel Mathonsi
		Duplicated Clause 3.2.1 (See clause in A6-19)	Eugene Rossouw	Dr Bennie Steyn
		Clause 8.1	Eugene Rossouw	Vilvalingam Nair
		Clause 1.6.2.1 (Tenderers 3, 4 & 5)	Eugene Rossouw	Winfried Mörs
		Clause 4.6, 4.6.1, 4.6.2 (Tendere 6)	Eugene Rossouw	Dr Robert Fröhling
A6 - 07	Locomotive Control System	Clause 2.12 - 2.14, 6.1.9, 7.8, 8.8, 9.11, 23.1 - 23.3, 24.1, 34.1 - 34.2,	Andre du Toit & Nkululeko Gobhozi	Andre du Toit & Nkululeko Gobhozi

		33.1- 33.2, 24.2 - 24.7 (Excl 24.5)		
		All clauses excluding the above (ADT's) and below	Winfried Mors, Elvis Tshivhilinge, Seloke Fabiao, Itumeleng Fanampe, James Clay	Elvis Tshivhilinge
		Clause 53.1 - 53.3	John Kannemeyer	John Kannemeyer
		Clause 53.1 (duplicated in A6-11 clause 23)	Completed by Eugene Rossouw	John Kannemeyer
A6 - 03	Simulation	All clauses	Marthin Mulder, Justice Ngwenyama & Nick Breytenbach	Marthin Mulder
A6 - 04	Rotating Machines	All clauses	Trevor Downward, Joel Mathonsi & Zandile Khumalo	Trevor Downward
A6 - 05	Locomotive Transformer	Clause 7.2-7.3a	Dr Robert Fröhling, Mesham Sivnaraim, Sheraton Singh and Georg Hetlasch	Dr Robert Fröhling
		All clauses excluding the above	Winfried Mors & Vincent Malale - All clauses excluding the above Dr Fröhling	Winfried Mors
A6 - 06	Locomotive Brakes	All Clauses	Konrad van der Merwe, Dave Hansen	Konrad van der Merwe
A6 - 07	Compressed Air and Vacuum Supply Systems	All clauses	Konrad van der Merwe, Dave Hansen, Joseph Nethathe, Michael Bouwer	Konrad van der Merwe
A6 - 08	Locomotive Air Supply and Auxiliaries	All clauses	Konrad van der Merwe, Dave Hansen, Joseph Nethathe, Michael Bouwer	Konrad van der Merwe
A6 - 09	Air and Vacuum Brakes General	All clauses	Konrad van der Merwe, Dave Hansen, Joseph Nethathe, Michael Bouwer	Konrad van der Merwe
A6 - 10	Coupling System	All clauses	Ross Hartley	Ross Hartley
A6 - 11	Locomotive General and	Clause 2 - 10.5.2, 12 - 22.8.3	Edith Mufamadi &, Johan Oberholzer	Edith Mufamadi & Johan

	Driver's Compartment			Oberholzer
		Clause 11.1-11.6 (excl 11.5)	Andre du Toit & Nkululeko Gobhozi	Andre du Toit & Nkululeko Gobhozi
		Clause 1.1, 1.3, 2.3.1, 5.3,6.6, 6.6.1, 12.1.1, 13.1, 23.1, 2.4	Eugene Rossouw	Eugene Rossouw
		Clause 23	John Kannemeyer	John Kannemeyer
A6 - 12	Main Power Systems	All clauses excluding ones below done by Sguda	Trevor Downward, Joel Mathonsi & Zandile Khumalo	Winfried Mors
		Clause 1.4.1, 1.5.1.1-1.5.1.2, 1.5.2.1, 1.5.3.1, 2.0.1, 2.0.2.1-2.0.2.2, 2.6.1-2.6.2, 2.10.1-2.10.3, 3.10.1-3.10.5, 4.6, 4.6.1, 6.1.5, 6.3, 6.9.1, 6.9.1.2,-6.11.3	Sguda Sibande & Asheen Singh	Sguda Sibande
		Clause 6.11.2		
A6 - 13	Locomotive Ablution Requirements	Clause 1.1 - 5.4	Edith Mufamadi & Johan Oberholzer	Edith Mufamadi &, Johan Oberholzer
A6 - 14	Locomotive Maintenance	All clauses	Viva Nair, Peet Zeelie, Tamara Govender, Cliffy Ramages & Peter Martin	Viva Nair
A6 - 15	Configuration Management	All clauses	Shaun Taylor, Jan van Tonder, Sanele Mazibuko, Paul Sako, Simphiwe Mathebula & Thato Morake	Shaun Taylor
A6 - 15a	Configuration Management	All clauses	Shaun Taylor, Sanele Mazibuko, Paul Sako, Simphiwe Mathebula & Thato Morake	Shaun Taylor

A6 - 15b	Drawings	All clauses	Shaun Taylor, Sanele Mazibuko, Paul Sako, Simphiwe Mathebula & Thato Morake	Shaun Taylor
A6 - 16	Quality Assurance	All clauses	Vilva Nair, Dave Mundel, Wally Breedt, Callie van der Walt & Peter Martin	Vilva Nair
A6 - 17	Locomotive Wheelsets, Bearings, Gearwheels and Pinions, Gearcases, Suspension Bearings	All clauses	Joseph Bonga, Kingsley Sivhabu & Zamahlubi Mabalabala	Joseph Bonga
A6 - 18	Electrical Infrastructure and Civil Infrastructure	Clause 2.1, 2.2-2.3	Dr Robert Fröhling, Mesham Sivnaraim, Sheraton Singh & Georg Hettasch	Dr Robert Fröhling
		Clause 1.3.4.1.2, 1.4.1.1-1.4.1.2, 1.4.2-1.4.6, 1.5.1, 1.5.3	Sguda Sibande & Asheen Singh	Sguda Sibande
A6 - 19	Communication and Train Authorisation Operational Systems	Clause 1.1.1 - 1.1.2, 1.2.1, 2.1 , 2.2 - 2.4	Andre du Toit, Nkululeko Gobhozi & Nick Breytenbach	Andre du Toit & Nkululeko Gobhozi
		Clause 3.1-3.6	Dr Bennie Steyn	Dr Bennie Steyn
A6 - 20	Electrical Safety, Locomotive Power and Pantographs	All clauses	Sguda Sibande & Asheen Singh	Sguda Sibande
A6 - 21	Structural Integrity	All clauses	Dr Robert Fröhling, Mesham Sivnaraim, Sheraton Singh and Georg Hettasch	Dr Robert Fröhling
A6 - 22	Acceptance Testing and Commissioning Test	All clauses	Eugene Rossouw	Winfried Mörs
Notes: Audit performed by Eugene Rossouw on Tasks which were not supposed to be scored i.e. information, blank space and Task not scored.				

APPENDIX XX: EVALUATION TEAMS - 465 DIESEL LOCOMOTIVES

SECTION NO.	SECTION DESCRIPTION	CLAUSES	TEAM REPRESENTATIVES	ACCOUNTABLE PERSON
A6 - 01	Locomotive General Information and Requirements	Clause 1.1-1.7, 2.1-2.3, 4.2.2.1-4.2.2.4, 4.2.3.1-4.2.3.3	Dr Robert Fröhling, Mesham Sivnaraim, Sheraton Singh and Georg Hettasch	Dr Robert Fröhling
		Clause 1.1, 1.1.1, 1.5.2, 1.6, 1.6.1, 1.6.2.1, 1.6.3, 2.2.1- 2.2.2, 4.1-4.4, 4.4.1-4.4.2, 4.5-4.6, 4.6.1-4.6.2, 4.7.2-4.7.5, 4.7.6, 4.7.6.1-4.7.6.2, 4.7.7-4.7.9, 5.1.2-5.1.5, 6, 6.1, 9.1	Marthin Mulder & Justice Ngwenyama	Marthin Mulder
		Clause 4.2.5.1 - 4.2.5.3, 4.2.6.1 - 4.2.6.4, 4.2.7.1-4.2.7.2, 4.2.8.1-4.2.8.3, 4.2.9.1-4.2.9.3, 4.2.10.1, 4.2.10.3-4.2.10.5, 4.2.11.1	Joseph Bonga, Kingsley Sevhabu and Zamahlubi Mabalabala	Joseph Bonga
		Clause 1.8 T3	Eugene Rossouw	Konrad van der Merwe, Dave Hansen
		Clause 4.15.3 (All tenderers)	Eugene Rossouw	Konrad van der Merwe, Dave Hansen
A6 - 02	Locomotive Control System	Clause 2.12 - 2.14, 6.1.9, 7.8, 8.8, 9.11, 15.4, 23.1-23.3, 24.1-24.7 (excl 24.5), 33.1-33.2, 34.1-34.2	Andre du Toit & Nkululeko Gobhozi	Andre du Toit & Nkululeko Gobozi
		Clause 53 and sub clauses all tenderers	John Kannemeyer	John Kannemeyer
		clause 46.1 Tenderer 3	Eugene Rossouw	
		All clauses excluding the above	Winfred Mors, Elvis Tshivhilinge, Seloke Fabian, Itumeleng Fanampe, James Clay	Elvis Tshivhilinge

A6_03	Simulation	All clauses	Marthin Mulder, Justice Ngwenyama & Nick Braytenbach	Marthin Mulder
A6 - 04	Rotating Machines	All clauses	Trevor Downward, Joel Mathonsi & Phumudzo Rannenyeni	Trevor Downward
A6 - 05	Diesel Engines	All clauses	Phumudzo Rannenyeni & Dumile Ntame	Frikkie Harris
A6 - 06	Locomotive Brakes	All Clauses	Konrad van der Merwe, Dave Hansen	Konrad van der Merwe
A6 - 07	Compressed Air and Vacuum Supply Systems	All Clauses	Konrad van der Merwe, Dave Hansen, Joseph Nethathe, Michael Bouwer	Konrad van der Merwe
A6 - 08	Locomotive Air Supply and Auxiliaries	All Clauses	Konrad van der Merwe, Dave Hansen, Joseph Nethathe, Michael Bouwer	Konrad van der Merwe
A6 - 09	Air and Vacuum Brakes General	All Clauses	Konrad van der Merwe, Dave Hansen, Joseph Nethathe, Michael Bouwer	Konrad van der Merwe
A6 - 10	Couplers and drawgears	All clauses	Ross Hartley	Ross Hartley
A6 - 11	Bogie, Body and Under-Frame	Clause 2.1.1-2.1.2, 2.2.1, 2.3.1-2.3.2, 2.3.5-2.3.6, 2.4.1-2.4.4, 2.5.1	Dr Robert Frühling, Mesham Sivnaraim, Sheraton Singh & Georg Hettasch	Dr Robert Frühling
		Clause 1.1 -1.18.3, 1.20 - 1.20.9.1 & 2.6.2	Edith Mufamadi &, Johan Oberholzer	Edith Mufamadi & Johan Oberholzer
		Clause 1.20-1.20.9.1 Tenderer 1	Eugene Rossouw	Konrad van der Merwe
		Clause 1.19.1-1.19.5 all tenderers	Eugene Rossouw	Konrad van der Merwe

		Clause 1.20.10 all tenderers	Eugene Rossouw	Konrad van der Merwe
		Clause 1.21 - 1.22.2 all tenderers	Eugene Rossouw	Konrad van der Merwe
		Clause 2.61 all tenderers	Eugene Rossouw	Konrad van der Merwe
A6 - 12	Main Power Systems	All clauses	Trevor Downward, Joel Mathonsi & Phumudzo Rannenyeni	Trevor Downward
A6 - 13	Locomotive Ablution Requirements	Clause 1 - 5.4	Edith Mufamadi & Johan Oberholzer	Edith Mufamadi & Johan Oberholzer
		Clause 2.6	Eugene Rossouw	Eugene Rossouw
A6 - 14	Locomotive Maintenance	All clauses	Viiva Nair, Peet Zeelie, Tamara Govender, Cliffy Ramages & Peter Martin- All clauses	Viiva Nair
A6_15	Configuration Management	All clauses	Shaun Taylor, Jan van Tonder, Sanele Mazibuko, Paul Sato, Simphiwe Mathebula & Thato Morake	Shaun Taylor
A6_15A	Interactive Electronic Manuals	All clauses	Shaun Taylor, Jan van Tonder, Sanele Mazibuko, Paul Sato, Simphiwe Mathebula & Thato Morake	Shaun Taylor
A6_15B	Drawings	All clauses	Shaun Taylor, Jan van Tonder, Sanele Mazibuko, Paul Sato, Simphiwe Mathebula & Thato Morake	Shaun Taylor
A6 - 16	Quality Assurance	All clauses	Viiva Nair, Dave Mundel, Wally Breedt, Callie van der Walt & Peter Martin	Viiva Nair
A6 - 17	Locomotive Safety Requirements	Clause 1.0 - 2.11, 4.1 - 4.3	Edith Mufamadi & Johan Oberholzer	Edith Mufmadi & Johan Oberholzer

		Clause 3.1 - 3.1.2, 1.1-1.2 T2, 1.5 T2, 1.9 T2 & T3, 1.3-1.4 T3	Eugene Rossouw	Sguda Sibande
A5 - 18	Acceptance Tests	All clauses	Trevor Downward & Eugene Rossouw	Winfried Mörs
A6 - 19	Communication and Train Authorisation Operational Systems	Clause 1.1.1-1.1.2, 1.2.1, 2.1-2.4	Andre du Toit & Nkululeko Gobhozi	Andre du Toit & Nkululeko Gobhozi
		Clause 3.1-3.6	Dr Bennie Steyn	Dr Bennie Steyn
Notes: Audit performed by Eugene Rossouw on Task which were not supposed to be scored i.e. Information, blank space and Task not scored.				

- THE END -

EXHIBIT 3

High Level Review of TE's Transition Readiness for 1064 Locomotive Assembly

Draft for Discussion

Strictly Private and Confidential

21st February 2014

pwc

Background
February 2014
3
PwC

Scope of work

The scope of the review was to assess the readiness of Transnet Engineering (TE) to start production of the 1064 Electric and Diesel Electric Locomotive order.

In assessing the operational readiness for the manufacture of the locomotives, PwC reviewed the following areas as well as identified the major risks associated with each review objective:

1. Review and approval of the locomotive designs
2. How fast can production be ramped up to full production rates?
3. What is the maximum production rate?
4. Where should the assemble lines be located?

Method applied during the operational readiness assessment

The overall objective of the review was to assess the operational readiness of TE by looking at the following key areas:

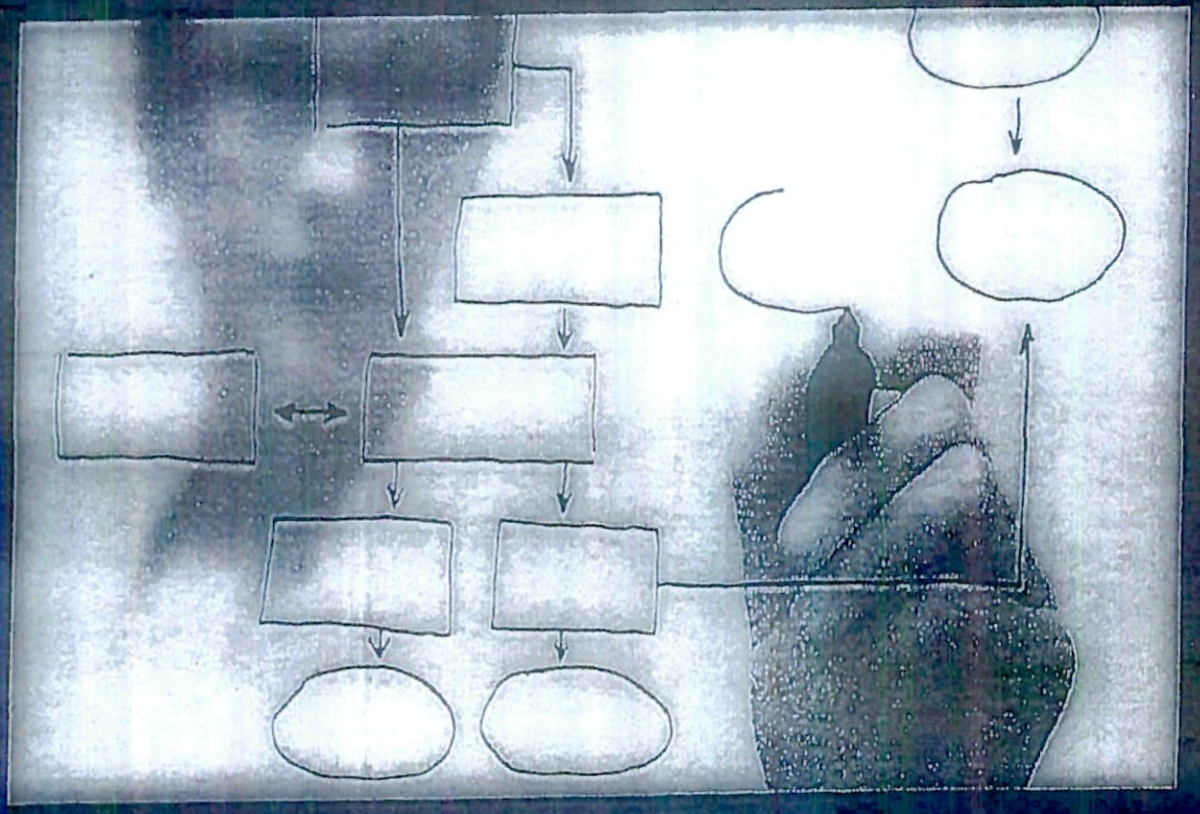
- The future anticipated assembly requirements of locomotives at Koedoespoort and Durban,
- Interviews with key personnel responsible for current and proposed locomotive manufacture,
- Observations from walk-throughs of the main assembly lines at Koedoespoort and the proposed assembly lines at Durban,
- TE's historical performance on recent CSR and GE contracts, and
- Observations based on PwC's experience.

The assessment was conducted primarily by reviewing operational information provided by the Transnet Engineering (TE) Management team, conducting interviews with key operations personnel, engagements with Transnet Freight Rail (TFR) and observations from conducting site inspections.

Reliance was placed on the written and verbal information provided, most of which could not be verified due to time constraints given the need to report in time for the Original Equipment Manufacturer (OEM) negotiations process.

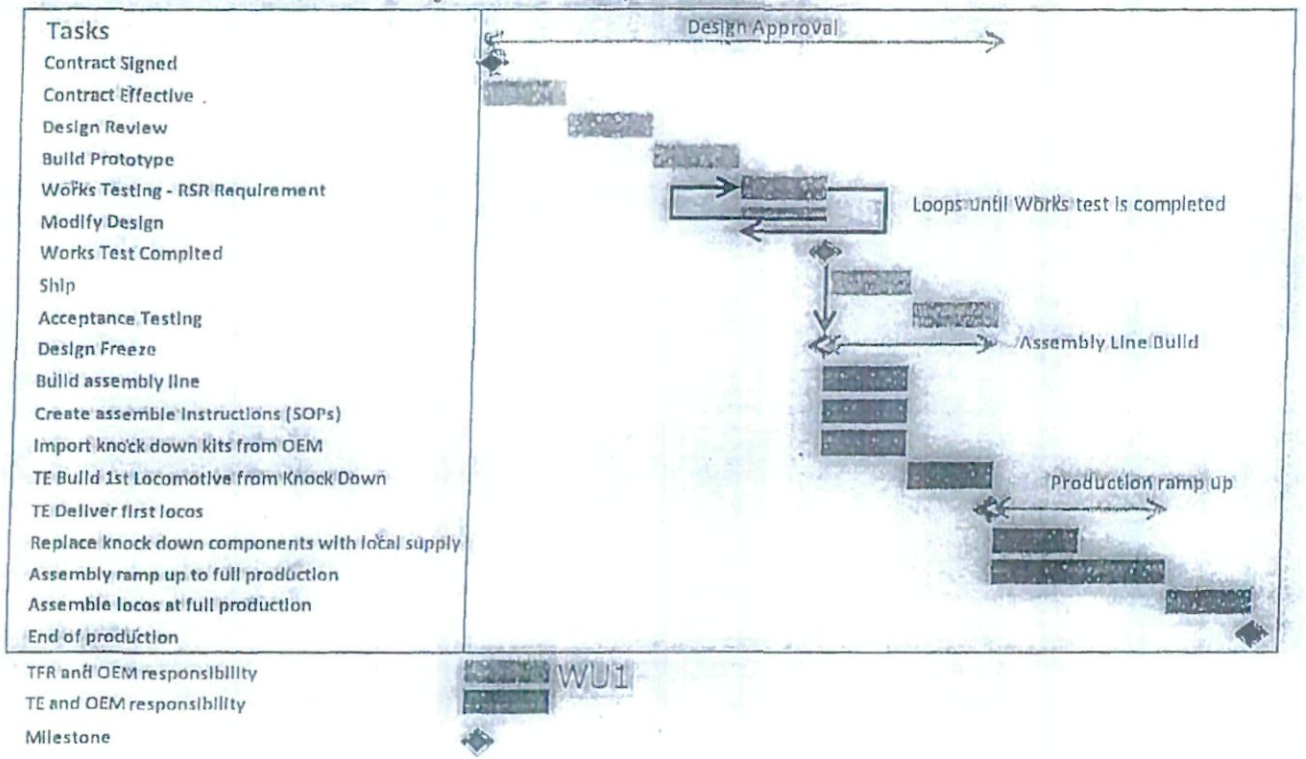
Review and approval of locomotive designs

2



High level process from Contract signing to complete delivery

A key dependant for TE to start with the manufacture/assembly of locomotives is the freeze of locomotive designs. The timeline below depicts key activities and milestones that must be managed to achieve the desired delivery of the 1064 locomotives:



What does the activity duration mean? Assumed, nominal, etc.???

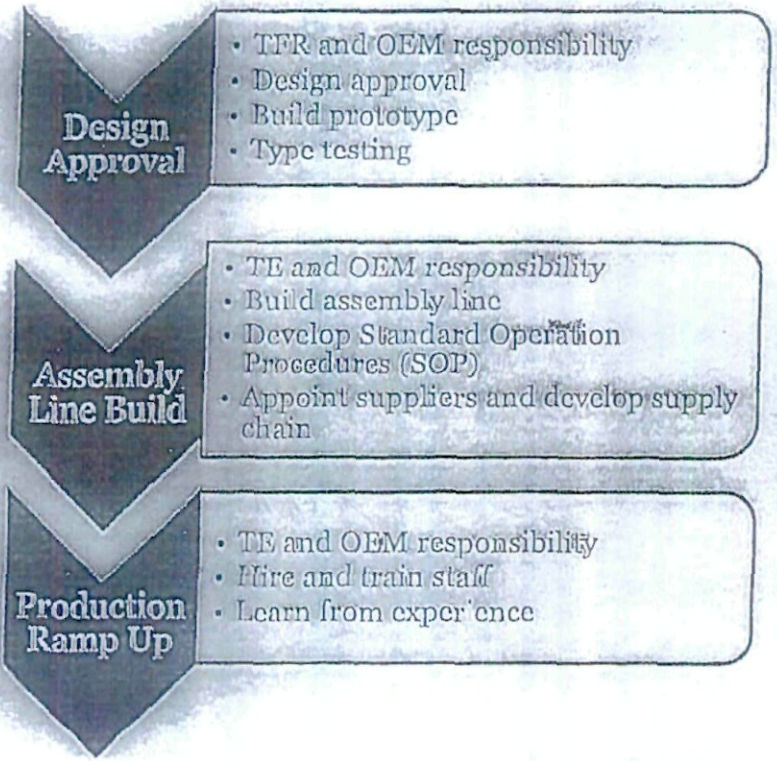
Three separate phases in production ramp up

There are primarily two milestones which must be met prior to TE ramping up production of the locomotives.

The locomotive designs must be finalised and a design freeze be declared by TFR and the OEM. Once the designs are approved then TE is in a position to assess what the requirements for setting up an assembly line are.

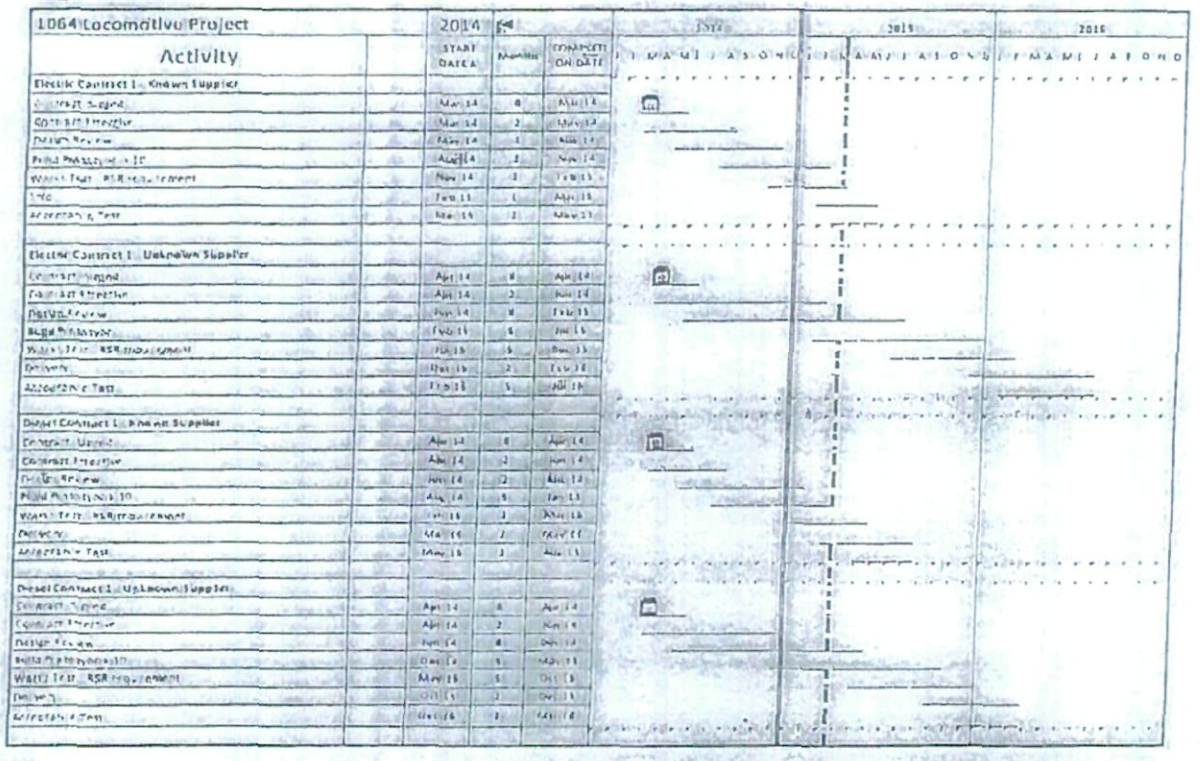
TE and the OEMs are jointly responsible for setting up the assembly line for the locomotives. Once set-up, standard operation procedures (SOP) are finalised in preparation for production by either TE and the OEM together with the accredited third party suppliers.

Once the production line is defined and set-up, TE is deemed ready to initiate the production ramp up process.



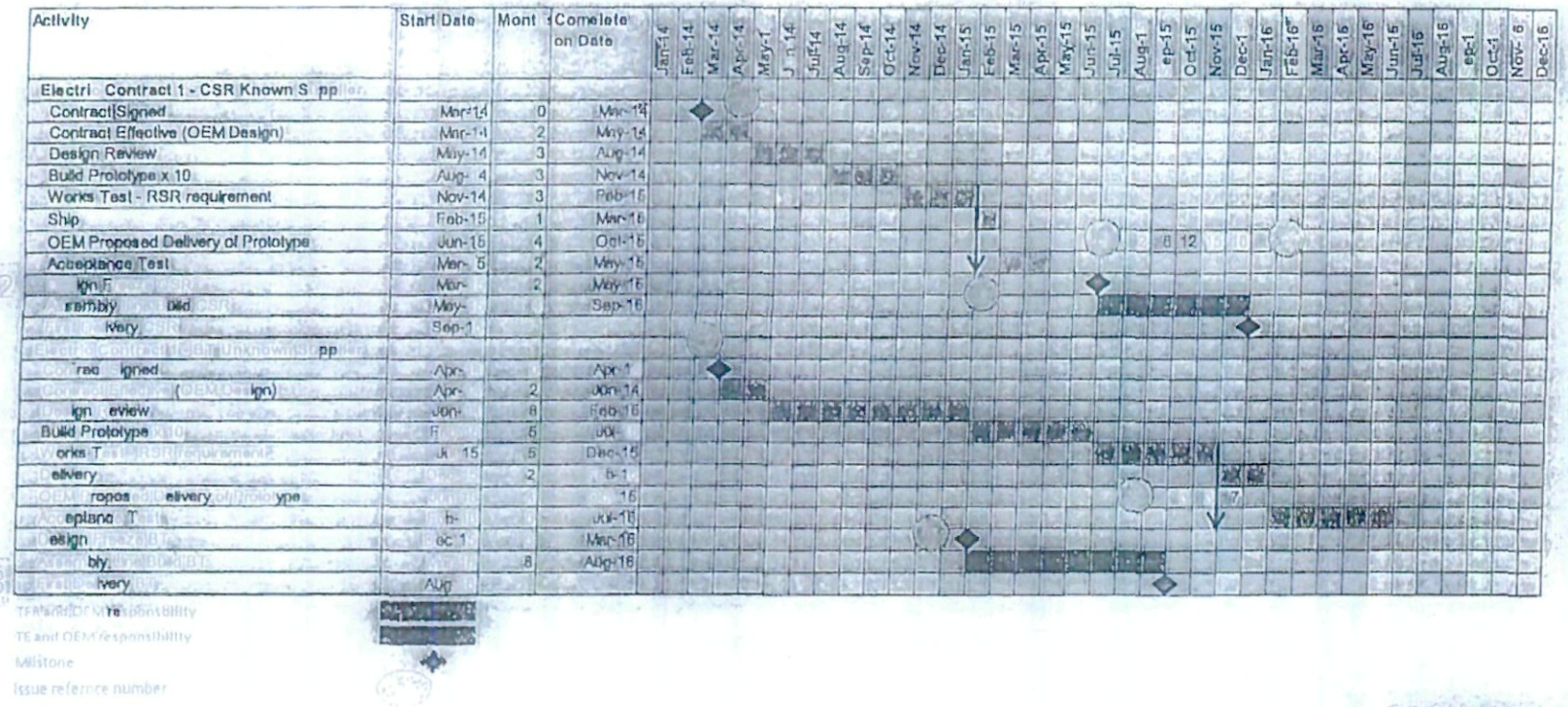
TFR's Proposed Design Phase Timeline

The following chart depicts the planned design timeline for the four OEMs that have been shortlisted. It is observed that the timeline is shorter for the OEMs which TFR and TE have an existing working relationship with. The timeline for the two new OEMs have been estimated based on historical experience.



There is misalignment between OEM design & delivery schedule and TFR design capability

The following is the outcome of our assessment of the design readiness for the electric locomotives. It was observed during the review that there are areas of concern which TE needs to manage in order to meet delivery schedules. These issues are depicted on the time below and the details articulated in the following slides.



The date stated in the columns vs. time line do not match for the design freeze rows.

Does set up include assembly of loco? (Delivery milestone at end of set up time, first delivery by OEM)

Misalignment between Electric OEM design & delivery schedule and TFR design schedule

The following are issues that were identified during the review of the realisation of the electric locomotive design requirements in preparation for the finalisation and approval of the locomotive designs, which are plotted on the timeline in the timeline on the previous slide:

1. **Different assumed contract signing dates** - CSR schedule is based on a February 2014 contract signing date. TFR schedule is based on a 1 March 2014 contract signing date.
2. **Different prototype delivery dates** -CSR Prototype delivery is 5 Months after TFR's planned prototype delivery date. TFR believe the design phase will be much quicker as they a ready have experience with this supp ier.
3. **Reduced Local Content** – CSR has proposed to deliver the first 45 locos as factory prototypes fully assembled in China. This large number of locos will reduce total contract local content percentages.
4. **TFR can reduce design approval time** – TFR believe they can approve design and works testing approximate y 5 months earlier based on prior experience with CSR. This is provided that there are no issues found during works testing which require design modifications.

Misalignment between Electric OEM design & delivery schedule and TFR design schedule (Cont.)

5. **Different assumed contract signing dates** - BT schedule is based on a February 2014 contract signing date. TFR schedule is based on a 1 April 2014 contrac signing date.

6. **BT can deliver prototypes ahead of the TFR schedule** – BT's delivery schedule has the delivery of the prototypes 4 months ahead of TFR schedule. This is provided that there are no issues found during works testing which require design modifications.

7. **Design freeze must occur 8 weeks prior to prototype delivery** – BT prototypes will be built locally in South Africa. To allow for TE's 8 week assembly line set up period the design freeze needs to occur by Feb 20 5

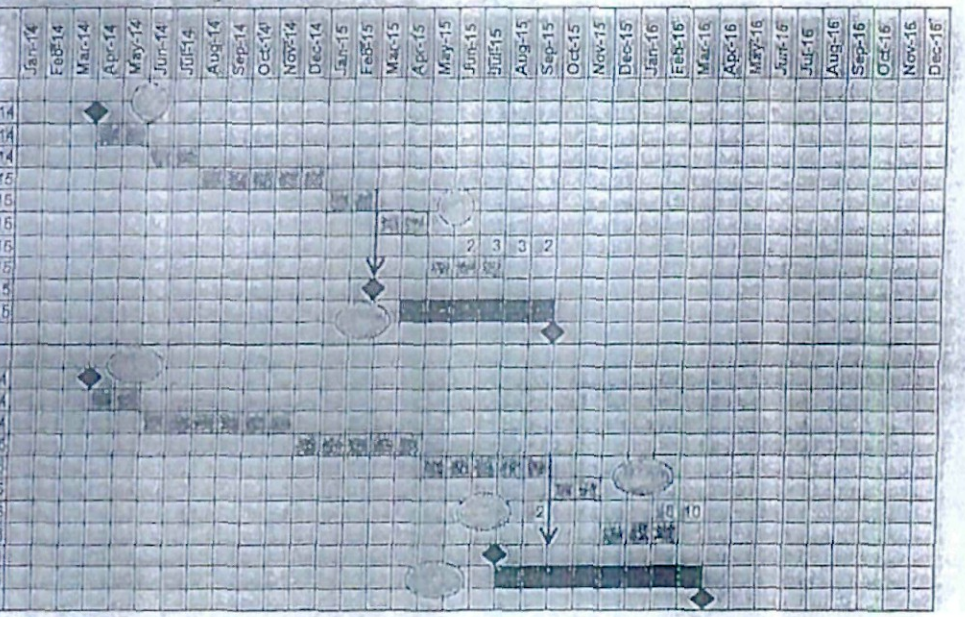
   TE is making the initia prototypes. It is not lear how TE will develop SOPs (Standard Operating Procedures) if they have no assembly line to copy.

   BT's prototype delivery schedule shows first delivery of 3 locos. This will require TE to assemble 3 locos in the first month of setting up the assembly line.

There is misalignment between OEM design & delivery schedule and TFR design capability

The following is the outcome of our assessment of the design readiness for the diesel electric locomotives. It was observed during the review that there are areas of concern which TE needs to manage in order to meet delivery schedules. These issues are depicted on the timeline below and the details articulated in the following slides. Note that some of the issues are similar to the ones identified for the electric locomotive. These have not been re-captured.

Activity	Start Date	Months	Complete on Date
Diesel Contract 1 - GE Known Supplier			
Contract Signed	Apr-14	0	Apr-14
Contract Effective (OEM Design)	Apr-14	2	Jun-14
Design Review	Jun-14	2	Aug-14
Build Prototype x 10	Aug-14	5	Jan-15
Works Test - RSR requirement	Jan-15	2	Mar-15
Delivery	Mar-15	2	May-15
OEM Proposed Delivery of Prototype	Jun-15	4	Oct-15
Acceptance Test	May-15	3	Aug-15
Design freeze GE	Apr-15	2	Jun-15
Assembly Line Build GE	Jun-15	4	Oct-15
First Delivery GE	Oct-15		
Diesel Contract 1 - CNR Unknown Supplier			
Contract Signed	Apr-14	0	Apr-14
Contract Effective (OEM Design)	Apr-14	2	Jun-14
Design Review	Jun-14	6	Dec-14
Build Prototype x 10	Dec-14	5	May-15
Works Test - RSR requirement	May-15	5	Oct-15
Delivery	Oct-15	2	Dec-15
OEM Proposed Delivery of Prototype	Sep-15	7	Apr-16
Acceptance Test	Dec-15	3	Mar-16
Design freeze CNR	Oct-15	3	Jan-16
Assembly Line Build CNR	Jan-16	3	Jun-16
First Delivery CNR	Jun-16		



TFR and OEM responsibility

TE and OEM responsibility

Milstone

Issue refernce number

Misalignment between Electric OEM design & delivery schedule and TFR design schedule

The following are additional issues (in addition to those shown on slides 11&12) that were identified during the review of the realisation of the diesel electric locomotive design requirements in preparation for the finalisation and approval of the locomotive designs, which are plotted on the timeline in the previous slide:

8. **Different assumed contract signing dates** - GE schedule is based on a February 2014 contract signing date. TFR's schedule is based on a 1 April 2014 contract signing date.

9. **Different prototype delivery dates** - GE Prototype delivery is 1 month after TFR's planned prototype delivery date. TFR believe the design phase will be quicker as they already have experience dealing with this supplier.

10. **Reduced design cycle** – TFR are proposing a 1 month reduction in the design phase when compared to GE's proposed design time. This is provided that there are no issues found during works testing which required design modifications.

11. **Different assumed contract signing dates** - CNR schedule is based on a February 2014 contract signing date. TFR's schedule is based on a 1 April 2014 contract signing date.

12. **Different prototype delivery dates** – CNR's Prototype delivery is 3 month ahead of TFR's planed prototype delivery date. TFR have reduced the time as they do not have the resources to cope with additional work load.

13. **Delay in Prototype delivery** - CNR has proposed to initially delivery 2 prototypes in September 2016. Then there is a delay of 5 months before the next 18 prototypes are delivered. We are unclear why such a delivery schedule is being proposed.

14. **TE needs an earlier design freeze** - TE will need design freeze to occur two months ahead of TFR delivery schedule if they are to met CNR's delivery schedule and ramp up production after the last prototype has been delivered.

TFR's design phase is not aligned to OEM's design phase timeline

TFR has proposed a more stringent timeline for GE and CSR which might be at risk due to limited availability of capable technical professionals that can test and approve the prototype from OEMs.

- TFR has proposed a reduced time frame for delivery of 1st prototype for GE and CSR. TFR believes this can be achieved because of their recent experience working with these OEMs.
- TFR has limited technical people capable o approving and testing OEM products. To smooth the workload TFR is proposing to pull in the approval processes for the two known OEMs - GE and CSR and push out the approval process for the two unknown OEM's BT and CNR.

Time from contract start to delivery of 1st prototype

OEM	OEM Timing	TFR Timing	Difference
CSR	17 Months	12 Months	-4 Months
BT	18 Months	22 Months	4 Months
GE	15 Months	13 Months	- 2 Months
CNR	18 Month	20 Months	2 Months

TFR ramp up time can be reduced slightly with significant increased risk

The currently proposed TFR ramp up period for GE and CSR is ambitious given the insufficient availability of technically skilled professionals who can complete the design work for all four OEMs.

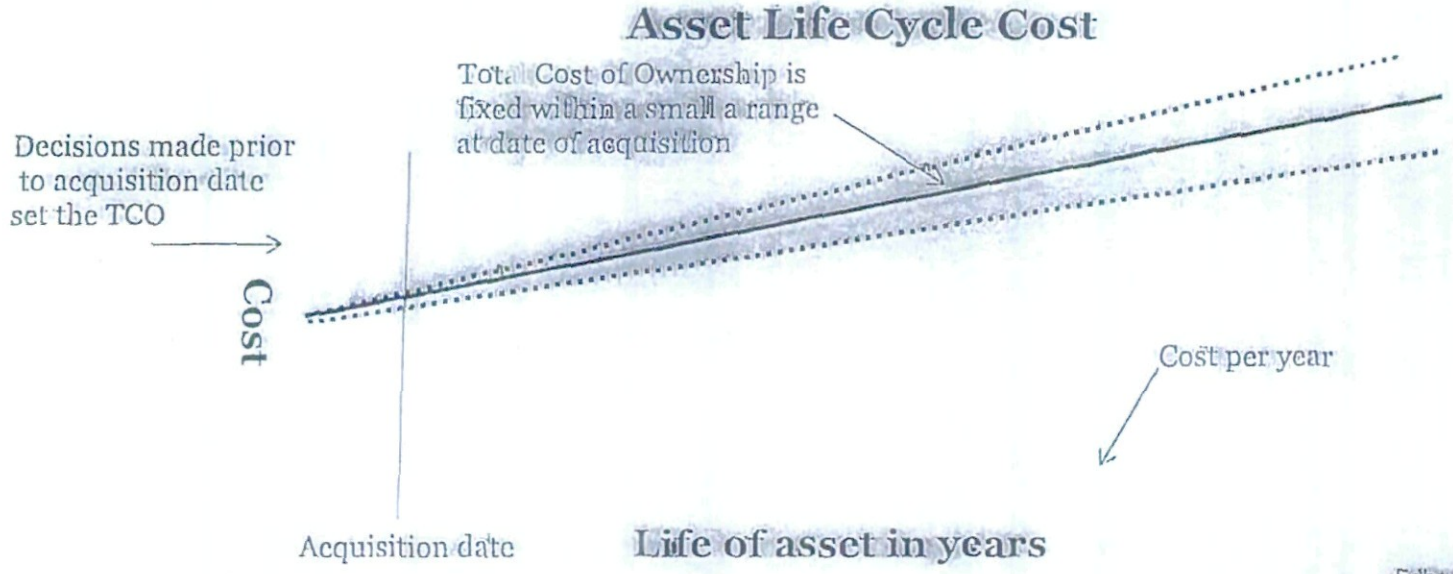
- The current proposed schedule from TFR is already considered quite aggressive for the known OEMs (CSR and GE). The TFR proposed design schedules for both these OEM's have been reduced.
- It is considered high risk to take the shortest design period from either TFR or the OEM's. TFR do not have sufficient skills to complete all four design phases simultaneously and if forced to do so will significantly increase risk. Errors made in the design phase will have long lasting impacts to the loco performance and life time costs.

OEM	OEM Timing	Low Risk	Medium Risk (TFR proposed)	High Risk
CSR	17 Months	17 Months	12 Months	12 Month
BT	18 Months	22 Months	22 Months	18 Months
GE	15 Months	15 Months	13 Months	13 Months
CNR	18 Months	20 Months	20 Months	18 Months

WU4

Key considerations given the aggressive design timelines

- Care should be taken not to reduce the design timelines beyond critical duration. Errors or omissions in design phase can have a significantly effects on the total cost of ownership (TCO) of an asset.
- The following guideline needs to be borne in mind - That although only about 20% of the TCO of an asset is spent at the time of the acquisition of the asset, 80% of an asset's TCO is ***locked*** in at this time.



What is the purpose of this slide?

TE's design phase is aligned to OEM's design phase timeline

The forecast time to the delivery of the first locomotive assembled by TE is in line with the OEMs target:

- Most OEMs have not specifically provided details of the duration from design freeze to the delivery of the first locomotive assembled by TE .
- We have assumed design freeze occurs at the completion of Type testing.

Time from design freeze until first TE delivery

OEM	OEM Timing	TE Timing	Difference
CSR	~6 Months	6 Months	o Months
BT	~8 Months	8 Months	o Months
GE	6 Mon hs	6 Months	o Months
CNR	~8 Months	8 Months	o Months

TE ramp up time can be reduced slightly with increased risk

TE targets a ramp-up period between six and eight months in preparation for the assembly of the first locomotive:

- TE's proposed duration from design freeze to first TE delivery is already considered aggressive based on previous experience

Time from design freeze until first TE delivery

OEM	OEM Timing	Low Risk	Medium Risk	High Risk
CSR	~6 Months	7 Months	6 Months	5 Month
BT	8 Months	10 Months	8 Months	7 Months
GE	6 Months	7 Months	6 Months	5 Months
CNR	~8 Months	10 Months	8 Months	7 Months

Locomotive Design - Risk Summary

The following risk assessment was performed for the building of the assembly line. Mitigation actions are proposed which should be considered for the medium to high risk areas. Low risks should be monitored so that they do not escalate.

#	Risk	Impact*	Likelihood of Occurrence*	Risk Score
1	TFR required to make approval short cuts which impact on the long term benefits of new locomotives	2	2	4
2	Errors made in the design phase will have long term effects on locomotive performance and total cost of the locomotive	2	2	4
3	TFR has limited staff qualified to conduct design reviews and performance testing	3	3	9
4	Schedule dates for CSR are ambitious/aggressive with an estimated 3 months assumed for design review and 4 months for assembly line set-up time compared to 6 months of actual set-up time.	3	2	6
5	Misalignment on OEM and TFR design signing dates.	2	2	4
6	TFR has an ambitious/stringent timeline for the delivery of the prototype (CSR and GE).	2	2	4

* 1 = Low, 2 = Medium, 3 = High

Locomotive Design - Risk Assessment and Mitigation Strategies

The following potential risks were identified on the accelerated completion of the design phase for TFR. Mitigation strategies are proposed to reduce the likelihood of their occurrence:

#	Risk	Impact	Likelihood of Occurrence	Mitigation Strategy
1	TFR required to make approval short cuts which impact on the long term benefits of new locomotives	Medium	Medium	• Identify and complete tasks which can be completed in advance to design freeze. • Include a random and /or spot check quality control step • Seek regular feedback on progress of design freeze status and adjust assembly line build programs as required
2	Errors made in the design phase may have long term effects on locomotive performance and total cost of the locomotive	High	Medium	• Be very considerate when reducing design phase timeline. • Seek other areas to bring locomotive delivery in earlier in preference to pressurising design phase
3	TFR has limited staff qualified to conduct design reviews and performance testing	High	High	• Hirer industry experts to assist in the design review and performance testing • Spread design reviews and performance testing over time so that they do not occur simultaneously • Investigate opportunity to second TE engineers to assist in the design phase of the project

Locomotive Design - Risk Assessment and Mitigation Strategies

#	Risk	Impact	Likelihood of Occurrence	Mitigation Strategy
4	Schedule dates for CSR are ambitious/aggressive with an estimated 3 months assumed for design review and 4 months for assembly line set-up time compared to 6 months of actual set-up time.	High	Medium	• Discuss the re-adjustment of the CSR target dates to realistic timelines with the OEM. • Identify the activities that could be brought forward to improve the likelihood of achieving the timeline. • Identify non value adding activities that could be dropped to reduce the time required to complete the planned activities.
5	Misalignment on OEM and TFR design signing dates.	Medium	Medium	• Identify the activities on the TFR side that could be brought forward to improve the likelihood of achieving the OEM timelines. • Review the TFR design signing process to identify which activities could be shortened to enable meeting the target OEM sign date.
6	TFR has an ambitious/stringent timeline for the delivery of the prototype (CSR and GE).	Medium	Medium	• Identify areas of improvement from the previous work done with CSR and GE to enable the achievement of the target delivery dates. • Identify which activities could be brought forward to improve the likelihood of achieving the tight delivery schedule.

Recommendations – Design review and approval

The following mitigation recommendations are made to address the medium and high risk areas:

Insufficient design approvals due to lack of resources	◦ Contract rail industry specialists to assist with the design approval and prototype testing ◦ TFR engineers to brainstorm ways of reducing design approval and prototype testing phases
Design flaws due to time constraints adversely affect locomotive performance and total cost of the locomotives	◦ Contract rail engineers to assist with the design activities ◦ Review the design process to identify activities that could be reduced in scope or sub-contracted to improve design turnaround time ◦ Prioritise designs to reduce batches that must receive 100% design review and approval
Insufficient availability of qualified staff to conduct design reviews and performance testing	◦ Contract rail engineers to assist with the design activities ◦ Second TE Engineers to assist in this phase of the project

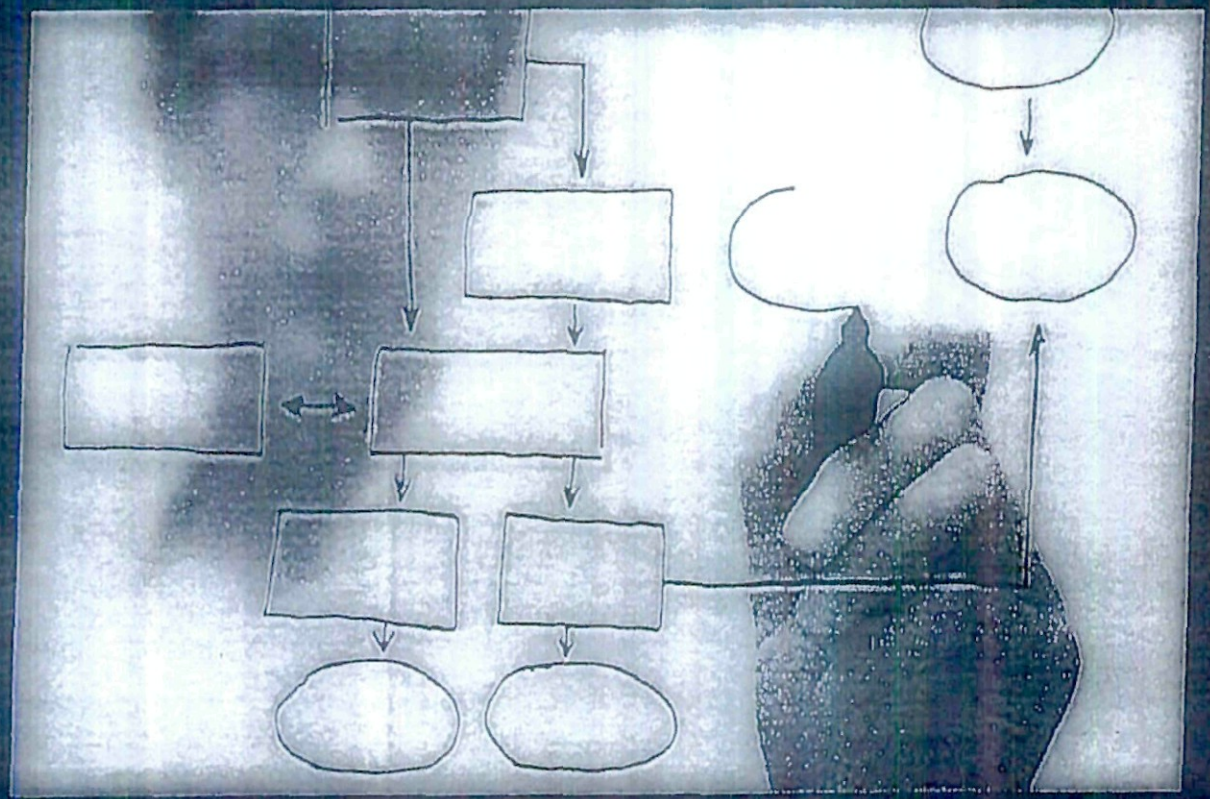
Recommendations – Design review and approval

The following mitigation recommendations are made to address the medium and high risk areas:

CSR's schedule is aggressive / ambitious	◦ Discuss the possibility of increasing the timelines for CSR in line with the other OEMs (BT & CNR) ◦ Review and prioritise design activities for CSR to focus on critical areas.
Misalignment on OEM and TFR design signing dates	◦ Review the design signing dates and impact to identify opportunities to align signing dates. ◦ Review to identify design activities that could be brought forward to achieve the design signing dates.
TFR has an ambitious / stringent timeline for the delivery of the prototype (CSR and GE)	◦ Review the possibility to align the CSR and GE timelines for the delivery of the prototypes with those for CNR and BT. ◦ Prioritise and rationalise the OEMs to balance high and low intensity OEMs in order to reduce work load.

How fast can full production be ramped up?

2



Assessment Areas for Assembly Line Ramp-up

The overall objective in evaluating this assembly line build up was to assess how far TE is in addressing the minimum requirements for preparing to assemble the locomotives. The following were noted during our review:

Assembly line

Currently TE operates an assembly line for Diesel and Electric locomotives which are similar to the locomotives planned for the 1064 transaction. The understanding from the operation of these two production lines will go a long way in helping to set-up assembly lines for General Electric (Diesel loco) and China South Railway (Electric loco). Although TE does not currently have experience with Bombardier Transportation (Electric loco) and China North Railway (Diesel Loco), the approach used to set-up the assembly lines for GE and CSR will be adopted for BT and CNR

Development of standard operating procedures (SOP)

Standard operating procedures have been developed for the Diesel Loco (Class 43) which is similar to the planned Class 44 as well as for the 20E Electric Loco which is similar to the planned 21E.

However, these will not be fully adaptable and thus will have to be reviewed after design freeze and with learning from the manufacturing of the propotype locomotives.

Supplier development

Supplier development for the OEMs and TE are at different stages with some work still to be finalised. TE has suppliers which they have been working with on the Class 43 and 20E locomotives. These are going to be complemented with the suppliers that have been identified and/or used, to some extent, by the OEMs.

TE has demonstrated an on-time delivery performance

The following table of results provides a summary of the time it took TE to deliver the first locomotives after design freeze. Projected target dates were extrapolated for the 1064 locomotives consignment.

		Previous TE projects			Projection			
Milestone	Responsible	EMD	GE	CSR	GE	CSR	CNR	BT
Contract sign		01-Mar-07	01-Dec-09	01-Dec-12	01-Apr-14	01-Apr-14	01-Apr-14	01-Apr-14
Design freeze	OEM TFR	01-Jun-09	01-Jun-11	01-Nov-13	01-Apr-15	01-Mar-15	01-Oct-15	01-Dec-15
Proto delivery	OEM	01-Mar-09	01-Feb-11	01-Dec-13	01-Jun-15	01-May-15	01-Jun-16	01-Mar-16
First TE Delivery	TE OEM	01-Aug-09	01-Aug-11	01-May-14	01-Oct-15	01-Sep-15	01-Jun-16	01-Aug-16
Times from Contract sign (Months)								
Design freeze		22	13	11	12	11	18	20
Proto delivery		24	14	12	14	13	21	23
First TE Delivery		29	20	17	18	17	26	28
Design freeze to TE delivery		7	7	6	6	6	8	8

- With the EMD, GE 43 Class and CSR locomotives, TE has ramped up for the delivery of their first locally assembled locomotives to 7 months from Design Freeze
- TE propose that they can ramp up for delivery of the first locally assembled locomotives for CSR and GE within 6 months from design freeze. This is because they already have experience dealing with these OEMs.
- TE propose that they are able to ramp up for delivery of the first locally assembled locomotives for BT and CNR within 8 months of design freeze.

TE can reduce assembly line ramp up duration through several means

TE ramp ups are already considered aggressive and of medium risk

Further reductions in ramp up could be achieved through:

- Importing knock down kits earlier and over a longer time period to give time for the identification and contracting of local suppliers,
- Identify and complete tasks that can be completed ahead of design freeze,
- Detailed planning and project management of assembly line preparation well in advance and prior to design freeze,
- Ensuring supply chain and planned recruitment are initiated early in the process and well before design freeze, and
- Seeking OEM input in the assembly line preparation and set up well before design freeze.

TE Assembly Line Set-up - Risk Summary

The following risk assessment was performed for setting up of the assembly line. Mitigation actions are proposed which should be considered for the medium to high risk areas. Low risks should be monitored so that they do not escalate.

#	Risk	Impact*	Likelihood of Occurrence*	Risk Score
1	Long lead times in supplier contracting process delays commencement of locomotives assembly	2	2	4
2	Setting up of 4 OEM assembly lines simultaneously will spread critical resources and delay delivery schedule			
3	Transnet Engineering attempts to manufacture as much scope as possible within TE as opposed to looking for opportunities to outsource products to third parties local suppliers	2	2	4
4	Limited number of experienced locomotive assemble managers			
5	TE do not have the necessary project management skills and experience to manage complex projects			
6	Quality of assembly of product may result in potential bottleneck at testing stations due to quality of assembly	2		
7	Allow adequate time for the translation of drawings (especially Chinese)	2	2	4
8	TE cannot develop their Standard Operating Procedures (SOP) for BT through observation as usually the case. (BT plan to assemble prototypes at TE)	2	2	4

* 1 = Low, 2 = Medium, 3 = High

TE Assembly Line Set-up - Risk Assessment & Mitigation

#	Risk	Impact	Likelihood of Occurrence	Mitigation Strategy
1	Long lead times in supplier contracting process delays commencement of locomotives assembly	High	Medium	• Included a designated supply chain and procurement personnel in each production line team to ensure open communication and accountability • Share future demand requirements with supply base to allow supplier preparation. • Working with suppliers (e.g. Aberdare Cables) to upgrade product specifications to fit with new design specifications • Stagger the phase out of knock down kits from the OEM to provide increased timeline • Commence contracting process prior to final design freeze on components. • Obtain "shipping list" upon shipping date and feed to MRP system to identify potential gaps to be addressed
2	Setting up of 4 OEM assembly lines simultaneously will spread critical resources and delay delivery schedule	High	High	• Set up 4 separate project teams responsible for readying each production line • Appoint a strong steering committee with critical skills to review project progress and advise further actions on regular basis • Utilise critical resources in an overseeing and directive role as opposed to hands on role. • Review opportunity to stagger the commencement of each production line to focus of critical resources (with lines in Pretoria commencing first, followed by the Durban lines) • Agree an increased number of OEM direct supply locos to allow a longer time to set up each production line

TE Assembly Line Set-up - Risk Assessment & Mitigation

#	Risk	Impact	Likelihood of Occurrence	Mitigation Strategy
3	Transnet Engineering attempts to manufacture as much scope as possible within TE as opposed to looking for opportunities to outsource products to third parties local suppliers	Medium	Medium	• Review the performance measures of TE business units to encourage sharing of assets for the benefit of TE as a whole • Critically review each component manufactured internally for opportunities to outsource the work to third party local suppliers • Seek opportunities to centralise the manufacture of components ac oss all four production lines to reduce duplicating complex sub-component processes.
4	Limited number of experienced locomotive assemble managers	High	High	• Advertise in the market well in advance to identify potential candidates • Approach OEMs to seconder senior staff for duration of contract • Identify internal candidates now. Develop an training program which commences now and builds up until project commencement.
5	Poor workmanship when assembling components may result in bottlenecks at testing stations	Medium	High	• Manage the workmanship by continuous training as well as a full time QA representative per line • Ensure correct number and quality of product available in advance through MRP system to reduce number of snags as a result of "missing components"

TE Assembly Line Set-up - Risk Assessment & Mitigation

#	Risk	Impact	Likelihood of Occurrence	Mitigation Strategy
6	Inadequate time reserved for the translation of design drawings (especially Chinese)	Medium	Medium	• Ensure drawings received is understood by key personnel, to transfer knowledge to team members and suppliers • Understanding of drawings and unusual spec's to be created during training at OEM's and early conversion to TE system • Working with OEM's on understanding the full scope of changes to be incorporated after initial design, before commencement of first built • With supply of knock down kits, actual samples of parts to be delivered locally will be available for improved training and adherence to standards
7	TE do not have sufficient project management skills and experience to manage complex projects	High	High	• Utilise experienced and skilled project managers to manage the process • Identify an employ an experienced project manager if they can't be found internally • Implement a regular balanced project reporting model • Appoint a steering committee comprising of all key stakeholder groups
8	TE cannot develop their Standard Operating Procedures (SOP) for BT through observation as usually the case. (BT plan to assemble prototypes at TE)	Medium	Medium	• Understand how BT have handles this knowledge transfer in the past. • Ensure the issue is understood by the BT/TE project team and a mitigation strategy is developed

Recommendations – Assembly Line Ramp-Up

The following mitigation recommendations are made to address the medium and high risk areas:

Long lead times in supplier accreditation and contracting process	◦ Review the supplier accreditation and contracting process to identify opportunities to shorten/fast-track the process. ◦ Prioritise the suppliers into tiers based on the order of critical components for the accreditation process.
Cr tical resou stretched duc t tting up f 4 EM sser bly lin s mu t n usly	◦ Identify the type of critical resources that must be brought in to complete the ramp up process. ◦ Identify critical areas that must be resourced with contract specialists and initiate the recruitment process as soon as TFR/OEMs contracts are signed.
L tp s. mg th - trat gic s p l al pplers	◦ Evaluate which of the non-strategic scope of supply can be outsourced. ◦ Evaluate the available scope of supply to identify which areas could be outsourced or co-sourced. ◦ TE to develop a roll-out programme based on criticality of components and reliability of suppliers.

Recommendations – Assembly Line Ramp-Up

The following recommendations are made to address the mitigation actions proposed to address the medium and high risk areas:

Limited number of experienced locomotive assembly managers	• Contract rail engineers to assist with the design activities. • Evaluate and stagger the activities for ramp-up process to balance the available personnel. • Match experienced engineers with novice engineers to reduce the workload while maintaining quality
Poor workmanship during assembly of components may result in rework, delays and additional costs	• Increase the number of qualified artisans and match experienced artisans with the novice to increase the pool of effective and productive workforce. • Introduce quality circles to identify and share performance improvement techniques. • Introduce quality spot checks to drive quality improvement and knowledge transfer.
Inadequate time provided for translation of design drawings (Chin	• Procure the skills of Chinese Engineers from CNR/CSR and team with local engineers to assist with translation. • Explore the use of language translation tools for technical environments to complete custom work.

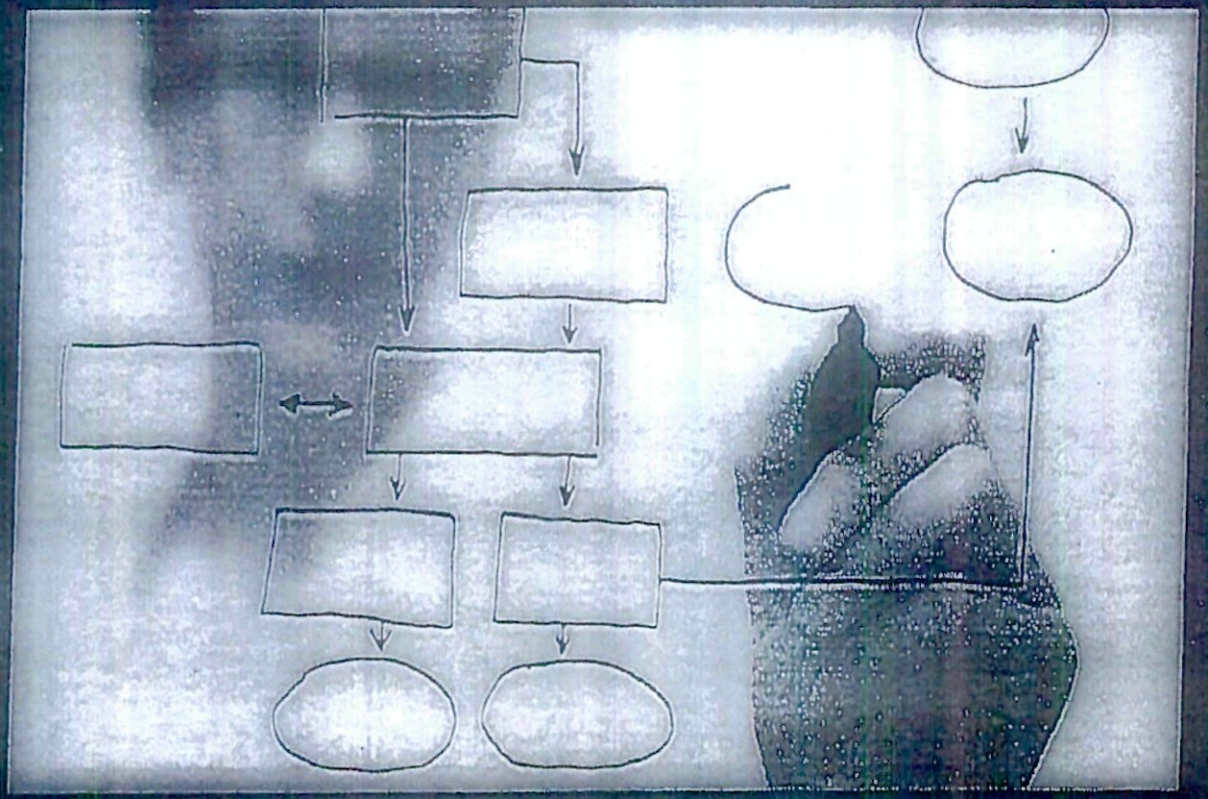
Recommendations – Assembly Line Ramp-Up

The following recommendations are made to address the mitigation actions proposed o address the medium and high risk areas:

TE do not have sufficient project management skills and experience to manage complex projects	• TE to appoint a program manager with experience of similar sized and complexity projects. • Contract rail engineers to assist with the production set-up and ramp-up activities. • Empower experienced technicians to carry out routine project risk and monitoring activities.
TE needs to adopt a different approach to develop SOPs for BT	• Second experienced engineers to work with BT for the development of SOPs. • TE to procure the SOPs from BT including time for the customisation to suite the TE operations. • TE to negotiate their requirements to develop SOPs with BT which includes exposure to BT's operations.

What is the maximum production rate?

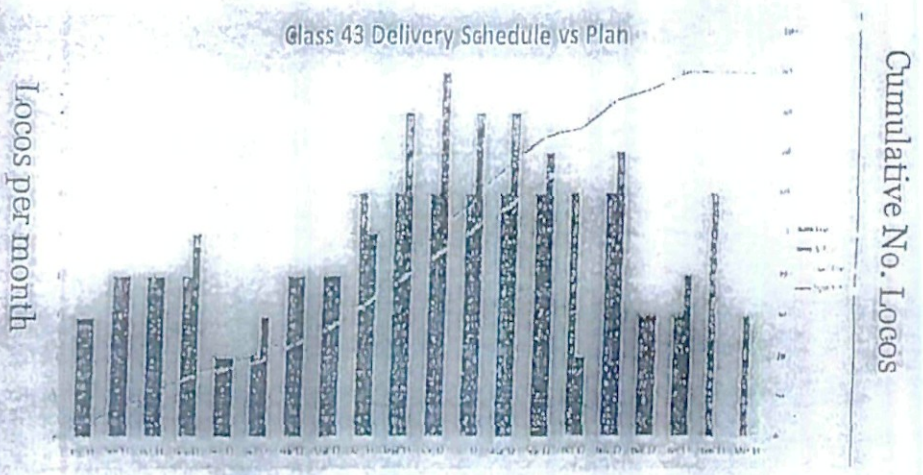
3



TE has a proven consistent production rate of 8 locomotives per month

The following observations were made during the assessment of TE's operational readiness for the 1064. It was noted that:

- TE consistently assembled 8 Diesel locomotive per month for GE which is similar to the class of locomotive that is planned for the diesel portion of the 1064 transaction.
- The production run was on a single shift.
- The consignment was delivered ahead of schedule.



TE can produce 10 locomotive per month per assembly line

- In February this year TE agreed to produce the CSR designed E20 locomotives at a rate of 10 locomotives per month.
- TE has previously produced a up to a maximum of 12 GE43 Class locomotive per month.
- Given time and effort TE may be able to increase production up to 15 locos per month but this may well come at increased cost per loco, and as yet is an untested production rate.

	Low Risk		Medium Risk		High Risk	
Locos per month per line	10	15	12	18	18	24
Locos per month all lines	40	60	50	72	72	92
Work hours per week	40 (1 shift)	80 (2 shift)	60 (1.5 shifts)	80+ (2.5 shifts)	80+ (2.5 shifts)	168 (3 shifts)

Assumptions used in developing delivery schedules

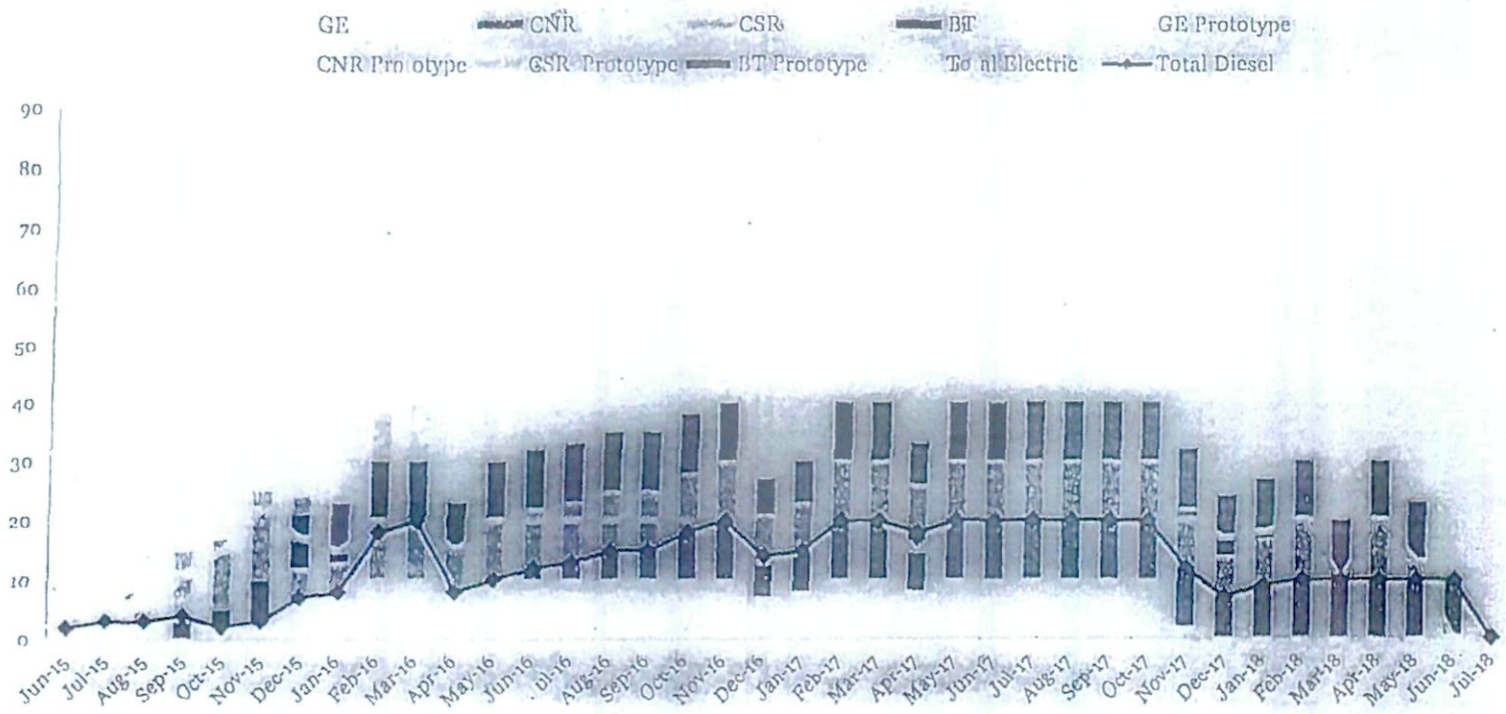
An evaluation of TE's throughput for low, medium and high risk was done using the delivery schedules of the four OEMs given the following assumptions:

- Delivery schedules are based on OEM's proposed delivery schedules and production ramp ups,
- TFR design constraint have not been considered,
- TE will commence delivery of locally assembled locomotives in the month following the delivery of the final prototype for that OEM, and
- December and January production is at 50% capacity due to seasonal shut down.

Low Risk: 40 Locos per month (10 per OEM)

Assumptions

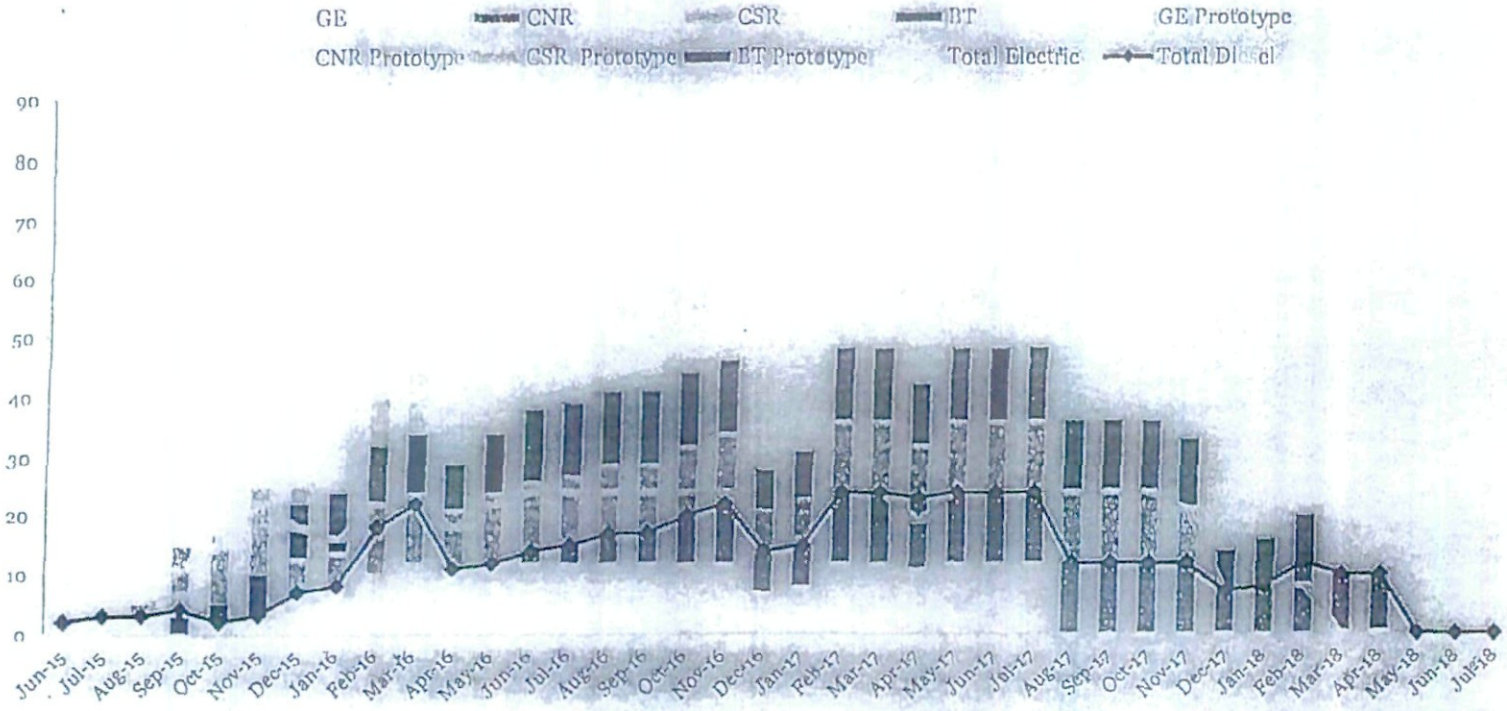
- Ramp up 1, 2, 4 , 8, 10
- Halve production over December and January



Low - Medium Risk : 48 Locos per month (12 per OEM)

Assumptions

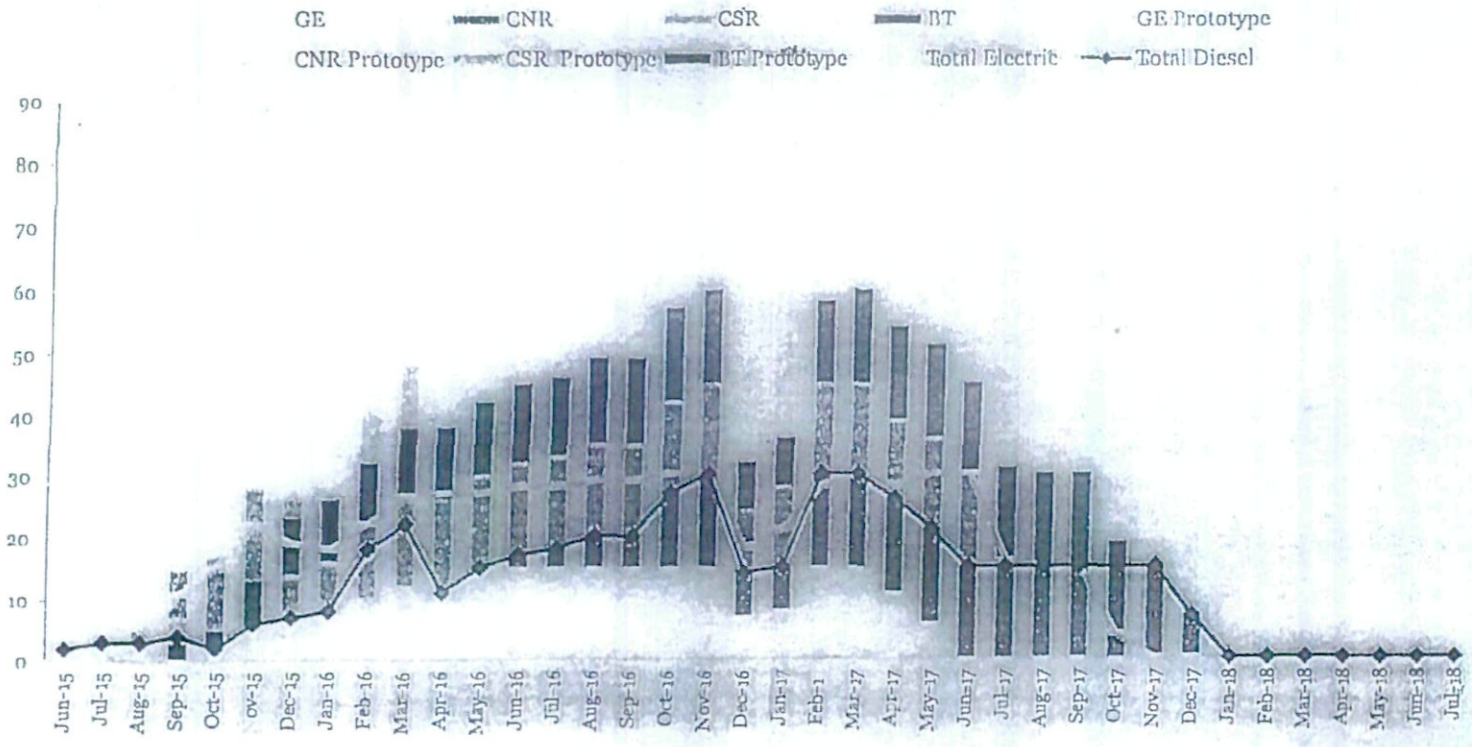
- Ramp up 1, 2, 4, 8, 12
- Halve production over December and January



Medium Risk: 60 Locos per month (15 per OEM)

Assumptions

- Ramp up 1, 4, 10, 15
- Halve production ove December and January



High Risk: 83 Locos per month (24 per OEM)

Assumptions

- Ramp up 1, 4, 8, 12, 16, 20, 24
- Halve production over December and January

TE Production - Risk Summary

The following risk assessment was performed for the production line. Mitigation actions are proposed which should be considered for the medium to high risk areas. Low risks should be monitored so that they do not escalate.

#	Risk	Impact*	Likelihood of Occurrence*	Risk Score
1	TE may not be able to produce locomotives at a rate higher than previously constantly demonstrated (8 per month)	3	1	3
2	Contracted labour on assembly lines will slow down production rates in an effort to extend contract duration	3	3	9
3	Assembly lines are held up to lack of material/parts	3	3	9
4	Production losses incurred because of the lack of information exchange between afternoon shift and day shift the following day	1	2	2
5	Increased cost incurred due to requirement to work overtime to catch up production	1	2	2
6	TE fail to constantly deliver locomotives as per required TFR schedule	3	2	6
7	Delays caused by inconsistent/inaccurate packing lists from OEMs	2	3	6

* 1 = Low, 2 = Medium, 3 = High

TE Production - Risk Assessment & Mitigation

The following mitigation strategies were developed, for which the medium to high risk should be considered for implementation:

#	Risk	Impact	Likelihood of Occurrence	Mitigation Strategy
1	TE may be unable to produce locomotives at a rate higher than 8 per month	High	Low	• TE to work additional hours per week to make up production. (Either more shifts or over time or both) • Incorporate lean manufacturing techniques in all TE assembly processes • Utilise SAP to support and monitor production activities • Seek productivity advise from OEMs • Utilise knock down kits to increase productivity on assembly line
2	Contracted labour on assembly lines may slow down production rates in an effort to extend contract duration	High	High	• Provide productivity incentivised pay as opposed to hours incentivised pay where possible. Utilise visual production status measures Strong supervision as appropriate
3	Assembly lines are held up due to lack of material/parts	High	High	Appoint individuals responsible for the on time delivery of goods Utilise SAP to monitor and track potential delivery issu Supplier contracted to find alternative delivery method for goods which will not make the delivery date.

TE Production - Risk Assessment & Mitigation

#	Risk	Impact	Likelihood of Occurrence	Mitigation Strategy
4	Production losses incurred because of the lack of information exchange between afternoon shift and day shift the following day	Low	Medium	• Try to complete all work on a single shift • Assign different work to each shift • Develop handover procedures which include exchange of necessary information • Break work up into small tasks which can be completed in 30 minute blocks to eliminate need for exchange of information at handover.
5	Increased cost incurred due to requirement to work overtime to catch up production	Low	Medium	• Provide productivity incentivised pay as opposed to hours incentivised pay where possible. • Utilise visual production status measures • Strong supervision as appropriate • Utilise lean manufacturing techniques
6	TE fail to constantly deliver locomotives as per required TFR schedule	High	Medium	• Contract assembly of some locomotives to other players in the market • Maintain an option to import further batches of fully completed locomotives from OEM
7	Delays caused by inconsistent/inaccurate packing lists from OEMs	Medium	High	• Contract with OEM's to provide material as required complete with accurate packing lists • Request OEM to maintain stock level locally in their own warehouse facilities

Recommendations – Production Rate Improvement

The following mitigation recommendations are made to address the medium and high risk areas:

TE may be unable to produce locomotives at a rate higher than 10 per month	• Consider the option of TE taking GE, CSR and one other OEM and providing a production line to an outside South African assembler in order to reduce the risk associated with rapid ramp up risk • Increasing productivity through applying Lean Sigma methodologies to the assembly line processes
Delays due to contractor workers working slowly to prolong the contract time	• Contract labour to be employed under production incentives as opposed to time incentives. • Introduce a productivity tracking and monitoring programme • Use the productivity monitoring programme to improve a productivity focused culture
Assembly hall up due to the lack of material supply	• Institute a delivery forecast and monitoring system and proactively follow up on expected deliveries. • Review the minimum order quantity levels given the loco delivery schedule to provide sufficient buffer while maintaining JIT (just in time).

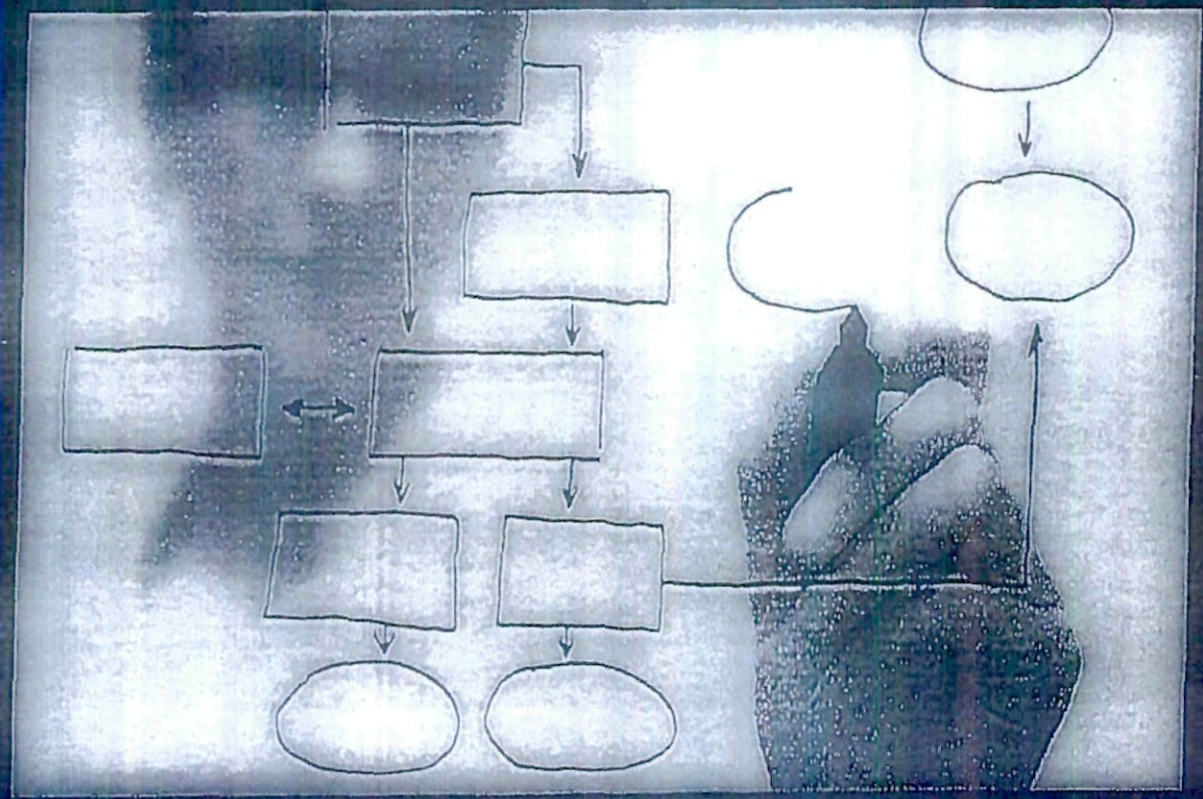
Recommendations – Production Rate Improvement

The following mitigation recommendations are made to address the medium and high risk areas:

Increased cost incurred due to requirement to work overtime to catch up production	• Institute a delivery forecast and monitoring system and proactively schedule required overtime to minimise financial impact. • Develop a low cost operating model that could be adopted when overtime is required.
TE fail to constantly deliver locomotives as per required TIR schedule	• Review and improve the current production tracking and monitoring system to manage risk areas that could impact the delivery rate. • Extend the monitoring period for the forecasted delivery against work in progress.
Delay caused by inconsistent quality packaging lists from OEMs	• Track and monitor stock-outs or missing items and implement stock levels to prevent running out. • Review minimum stock levels to identify optimum quantities given the type and expected production throughput.

Where should the facilities be located?

4



TE's assessment of the physical facilities

TE conducted an assessment of different sites to identify which ones could be used for the assembly of the 1064 locomotive order. The assessment indicates that either Saltriver, Uitenhage and Durban works could be used for the assembly of locomotives in addition to the current facility at Koedoespoort.

A further high-level assessment of Koesdoespoort and Durban works were conducted by the PwC team through site visits and interviews of key production personnel.

Koedoespoort has been used to assemble the Class 43 Diesel locomotives for GE and the 20E for CSR. Durban is primarily used for repairs, but has available facilities suited to the product on line requirements of either of the four OEMs.

Row Labels	SRX Score	Dep Score	Cam Shed	Uth Score	DBN Score
Bogie Assy	0.21	0.14	0.07	0.21	0.21
Bogie Fabrication	0.10	0.05	0.08	0.18	0.13
Cubicle Assy	0.09	0.03	0.03	0.02	0.002
General	0.15	0.10	0.08	0.15	0.15
Hoods & Component Fabrication	0.20	0.15	0.25	0.30	0.25
Mainline Assembly	0.48	0.30	0.18	0.42	0.41
Offline Assembly	0.40	0.20	0.20	0.30	0.38
Paint	0.39	0.17	0.22	0.33	0.4
Platform (Carbody) Fabrication	0.30	0.10	0.15	0.35	0.32
Test	0.11	0.28	0.11	0.22	0.3
Traction Motor Assy	0.05	0.03	0.03	0.04	0.05
Transformer Assy	0.02	0.02	0.02	0.02	0.02
Warehouse	0.22	0.14	0.35	0.31	0.018
Wheel Assy	0.08	0.02	0.02	0.06	0.08
Grand Total	2.728	1.7195	1.783	2.85G	2.72

Overview of TE's Koedoespoort Operations

The outcome of the assessment of Koedoespoort indicates that the si e mee s the majority of the requirements to establish the required lines, with some actions required to prepare for the assembly of the 1064 locomotives.

Diesel & Electric Locomotive

TE Scope		AREAS OF GAPS CONSIDERED					
		Capability/ Complexity	Availability of Floor Space	Equipment Availability	Number of Skilled Staff	Staff Skill Level Required	Down Stream Supplier Readiness
Total Loco	IZ DF AP						
	EAS TO CLOSE						
Bogie Assembly	SIZ O C						
	TO CLOSI						
Loco Assembly	SI E						
	CLOSE						
Locomotive Control System Assembly	Z PGA						
	FAST TO CLOSE						
Traction Motor Assembly	SIZE OF GAP						
	EASE TO CLOSE						
Power Conversion System	ZE GAP						
	EAS CL E						
Propulsion & Electronic Braking	ZE						
	E OSE						

Key	Size of gap	Ease to close
	Critical g p	Extreme y difficult
	Significant gap	Difficult
	Gap	Moderate
	Slight gap	S fit
	No gap	No gap to fill

Overview of TE's Durban Operations

The outcome of the assessment of the Durban works indicates that the site requires additional actions to meet the requirements for the assembly of the 1064 locomotives.

Diesel & Electric Locomotive

TE Scope		AREAS OF GAP CONSIDERED					
		Capability/ Complexity	Availability of Floor Space	Equipment Availability	Number of Skilled Staff	Staff Skill Level Required	Down Stream Supplier Readi ess
Total Loco	SIZE OF GAP						
	EASE TO CLOSE						
Bogie Assembly	SIZE OF GAP						
	EASE TO CLOSE						
Loco Assembly	SIZE OF GAP						
	EASE TO CLOSE						
Locomotive Control System Assembly	SIZE OF GAP						
	EASE TO CLOSE						
Traction Motor Assembly	SIZE O GAP						
	EASE TO CLOSE						
Power Conversion System	SIZE O GAP						
	EASE TO CLOSE						
Propulsion &Electronic Braking	SIZE OF GAP						
	EASE TO CLOSE						

Key	Size of gap	Ease to close
	Critical gap	Extremely difficult
	Significant gap	Difficult to close
	Gap	Moderate
	Slight gap	Easily closed
	No gap	No gap to fill

TE Assembly - Risk Assessment & Mitigation

The following mitigation strategies were developed, for which the medium to high risk should be considered for implementation:

#	Risk	Impact	Likelihood of Occurrence	Mitigation Strategy
1	Locating more than two assembly lines in KDS may cause delay s assembly start-up for additional lines	Medium	High	• Only locate two assembly lines in KDS and the other two lines at other locations • TE to provide a detailed plan s for assembly line fit out and start-up of all lines which should be scrutinised for risk by an independent party
2	Industrial action within TE halts locomotive delivery from all TE lines	Medium	Medium	• Locate assembly at more than one location
3	OEM's require an increase price to compensate for relocation of assembly in Durban	Medium	High	• Request OEM's to justify additional costs structure of Durban relocation • Seek alternative assembly locations where additional costs are not incurred.
4	Transnet Engineering's Durban facility has not previously assembled locomotives	Low	High	• Agree a less aggressive delivery schedule with TFR (and compliment it with a steeper ramp up in Pretoria if required) • Use OEM knock down kits for an increased number locomotives during start up • Relocate critical resources to Durban facility for duration of the contract • Utilise "refurbishment" knowledge and skills currently situated in Durban

TE Assembly Line Set-up - Risk Assessment & Mitigation

#	Risk	Impact	Likelihood of Occurrence	Mitigation Strategy
5	The input of inaccurate and incomplete data in SAP will result in the failure of SAP to be utilised to support the production process	High	High	• Develop a clear picture of what support functionality willbe required from SAP during the production process. • Include a designated person to be assigned to each production line project team from the beginning who is responsible for SAP's ability to support the production process. • Design a data entry process which ensures only accurate data in entered into SAP • Design a data cleansing process to continually clean any inaccurate data

Recommendations – Assembly Location

The following mitigation recommendations are made to address the medium and high risk areas:

Delays due to more than two assembly lines located in Koedoespoort	• Spread delivery risk through assembling locomotives across several locations and/or other suppliers who have an assembly facility. • Limit assembly lines at KDS to two lines unless TE can provide a detailed plan of where and by when a third or fourth line would be set-up at Koedoespoort
Production interruption due to industrial action	• TE to draft employment contracts that encourage an open communication and provide a platform for dialog for resolution of potential conflict/unrest. • TE to consider an agreement and /or incentive measures to deter industrial action.
Incentive price increase due to OEM required to participate from TE Durban site	• TE to locate the OEM with the least established local operations to minimise the impact of this cost. • TE to develop a negotiation strategy comprising of the cost comparison between Gauteng and KwaZulu Natal to use as leverage to minimise costs.

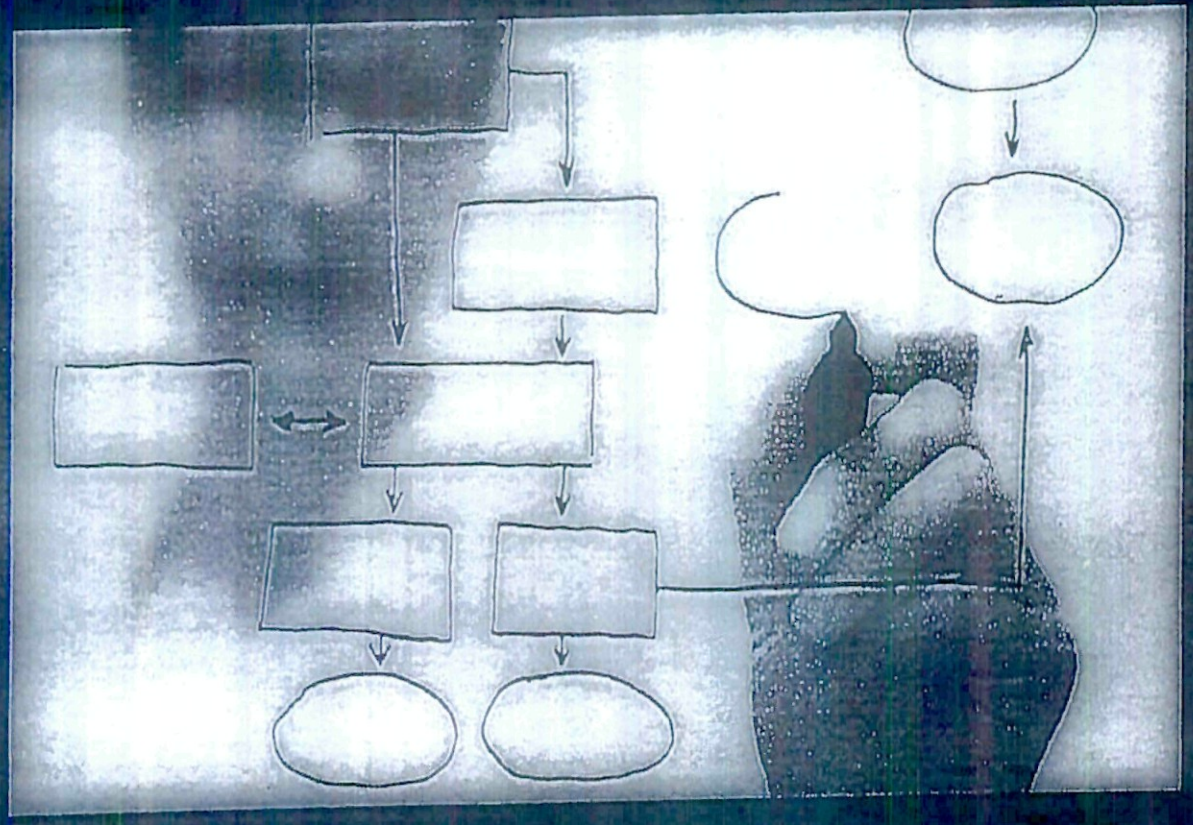
Recommendations – Assembly Location

The following recommendations are made to address the mitigation actions proposed to address the medium and high risk areas:

Durban site has not been used to build locomotives	• Develop a transition plan to convert part of the Durban facility to assemble locomotives, including the enabling infrastructure i.e. logistics • Develop a capacity and capability plan for required skills and competencies.
Inaccurate and incomplete data in SAP impacts the ability to make production decision	• Assess and cleans the SAP master data to improve quality to enable reliance during decision making. • Develop and roll-out a programme to create awareness on the critical aspects of data quality and how it can be maintained. • Institute an improvement programme to identify inefficiencies and misuse to educate on data maintenance and management.

Staffing Projections

5



PwC

Slide on staffing ramp up required

The following information was obtain from the TE management team on the staffing requirements for the assembly of the 1064 locomotives:

	Required			Existing			New Hires			Additional Shift		
	Electric	Diesel	Total	Electric	Diesel	Total	Electric	Diesel	Total	Electric	Diesel	Total
New Build - Final Assembly, Tes and Commision	349	267	616	140	60	200	209	207	416	336	254	590
RSE Carbody and Bogie Fabrication	170	140	310	125	40	165	45	100	145	168	133	296
Bogie Assembly	26	20	46	12	12	24	14	8	22	25	19	44
Wheel Set Assembly	8	8	16	6	6	12	2	2	4	8	8	16
Traction Motor Assembly	6	6	12	4	4	8	2	2	4	6	6	12
Supply Chain	13	13	26	4	3	7	9	10	19	3	3	6
Total			1026			416			610			964

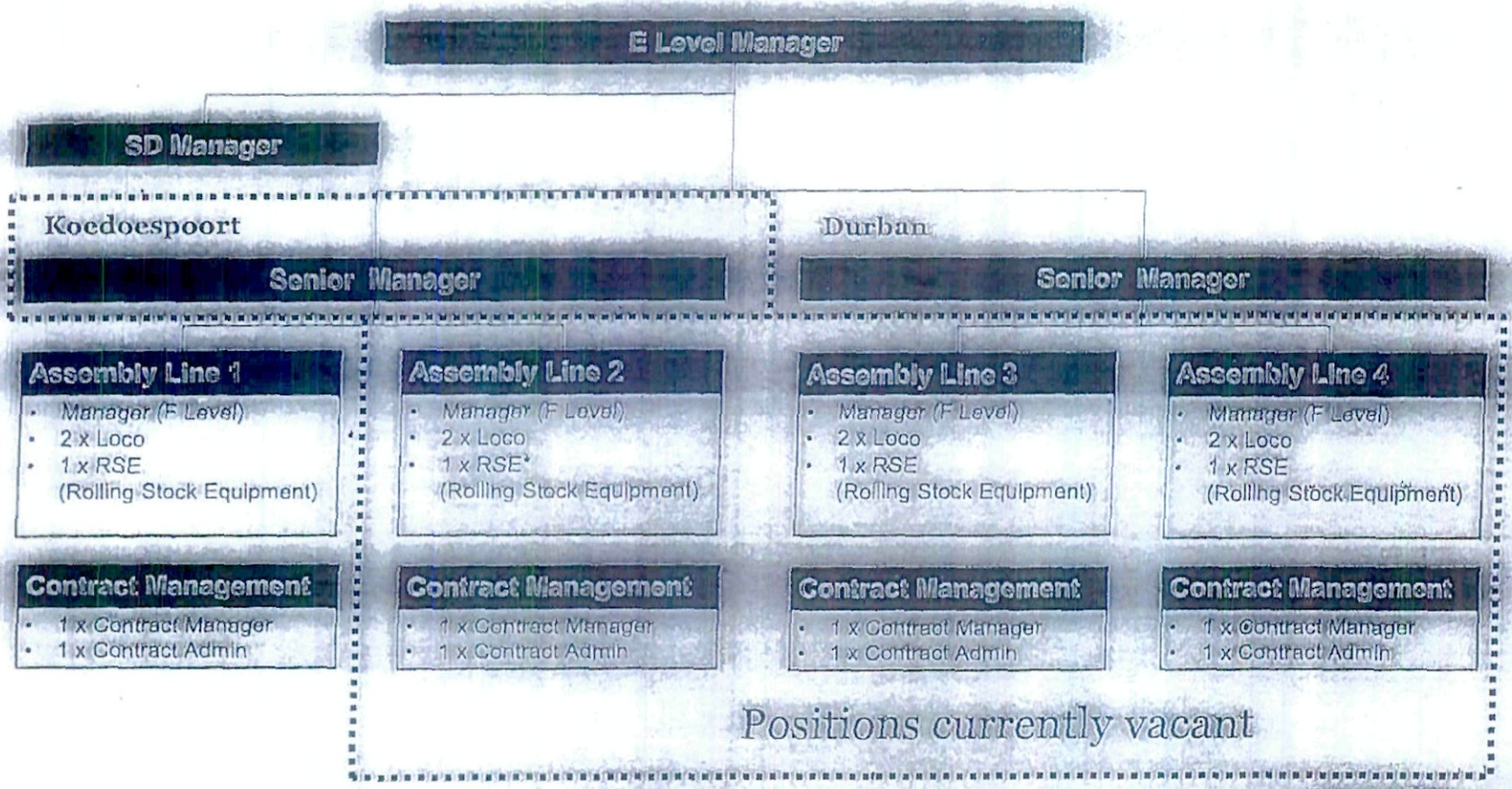
- TE must hire an additional 610 staff, on either contract or full time basis, to fill the requirements of four assembly lines
- Staff ramp up is planned to occur from Aug 2015 to April 2016.
- TE will need to hire an additional estimated 964 staff to increase production to a full second shift across all assembly lines.

There are some gaps in required skills which will need addressing

Required Skill	Gap	Comments
Project Management		• Historically TE has done what is required to meet delivery schedules • TE do not have proven project management experience relating to projects of this size and complexity • Do not currently follow all the practices we would expect to see of a specialist project management organisation
Diesel Locomotive Assembly		• TE have good experience with a few individuals regarding Diesel locomotive assembly • They will need additional skills to manage four separate lines
Electrical Locomotive Assembly		• Currently TE's Electrical locomotive experience is limited to upgrades and modifications. • TE has commenced the assembly of 95 CSR Electrical locomotives with the first delivery due on 6 May 2014 • This will provide TE with significant experience in assembly electric locomotives.
Procurement		• Gap does not exist in skills but there is a gap in number of skilled staff. (See following page for vacancy details)
Expediting		• In the past expediting has been an issue for TE. Over time they have been improving but it is still presenting problems
SAP utilisation		• Has in the past been an issue for TE. Over time they have been improving but it is still presenting problems

Proposed Supply Chain Management Structure

Supply Chain Management proposed organisation structure to accommodate the additional procurement requirements for the Koedoespoort and Durban plants.



TE Staffing- Risk Summary

The following risk assessment was performed for the building of staffing requirements. Mitigation actions are proposed which should be considered for the medium to high risk areas. Low risks should be monitored so that they do not escalate.

#	Risk	Impact*	Likelihood of Occurrence*	Risk Score
1	TE will have a short hiring lead time as they will not identify the actual number and skills of staff required until a few months prior to production commencement when Standard Operating Procedures are completed.	1	3	3
2	TE will not know if they need to work additional shifts to meet production requirements until they begin production. If an additional shift is required there will be a very short window of time to hire a large number of additional staff.	3	1	3
3	Contractual union assembly lines will slow down production rates in an effort to extend contracted rates.	3	3	9
4	Recruitment department at TE cannot handle the processing of new staff in the timeframe required.	2	3	6
5	Inability to recruit and train required timeframe may delay production of locomotives.	3	3	9

* 1 = Low, 2 = Medium, 3 = High

TE Assembly location - Risk Assessment & Mitigation

The following mitigation strategies were developed, for which the medium to high risk should be considered for implementation:

#	Risk	Impact	Likelihood of Occurrence	Mitigation Strategy
1	Short hiring lead time due to the need to identify the actual number and skills of staff required.	Low	High	• Identify conservator estimates of numbers early and bring potential staff through hiring process. Make final decisions on hiring numbers once SOP are developed.
2	Lack of foresight on the number of people required to meet production demands.	High	Low	• Develop staffing contingency plan for a partial second shift • Identify a pool of potential staff who have completed most of the screening process. • Identify recruitment consultants who could be utilised to speed up hiring process. • Utilise overtime to achieve increased production levels until additional staff can be hired.
3	Recruitment department at TR unable to handle the processing of 610 new staff in the timeframe required.	Medium	High	• Develop plans to understand workload and timing. Start process early to spread workload out over next 18 month. • Outsource recruitment screening process if required

TE Assembly Line Set-up - Risk Assessment & Mitigation

#	Risk	Impact	Likelihood of Occurrence	Mitigation Strategy
	HR's ability to on-board additional staff in required timeframe may delay production of locomotives	High	Medium	• Draw from pool of previously employed Transnet staff • Reduce required employee skill level through detail SOP's, as well as OEM onsite training and assisting in development of SOP's • Review opportunity to contract out initial employee screening process • Review opportunities to divert resources from other programs of work such as refurbishments, coaches and wagons. • Seek opportunities to outsource the manufacture of components to reduce need to increase staff. (See risk 4 below) as well as pre-assembly of certain components by suppliers • Build capacity during the current GV / GSR contracts (employ more than needed for training purposes, carry over to 1064 contract) • HR to form part of the Project Management team envisaged for Phase 1 of project(s)

Recommendations – Staffing Requirements

The following recommendations are made to address the mitigation actions proposed to address the medium and high risk areas:

Short hiring lead time due to the need to identify the actual number and skills of staff required	• Develop a skills matrix to inform the development of the recruitment drive based on priority. • TE to request divisions within Transnet to second Human Capital (HC) Practitioners to assist with recruitment. • Develop a recruitment plan that will focus and inform the recruitment and on-boarding process.
Lack of foresight on the number of people required to meet production demands	• Conduct a skills assessment to identify the nature, level and number of different skills that are required. • Develop a skills map, based on priority, for the building of the 1064 locomotives.
Recruitment department at TE unable to handle the processing of 6 new staff in the timeframe required	• Secondment of HC Practitioners to assist with the recruitment and on-boarding process. • Develop a customised induction and orientation programme for quick integration of new recruits. • Establish a buddy system to assist with the speedy integration of new joiners.

Recommendations – Staffing Requirements

The following recommendations are made to address the mitigation actions proposed to address the medium and high risk areas:

Delay in production of locos due to HR's inability to on-board additional staff in required timeframe	• Develop a customised induction and orientation programme for quick integration of new recruits. • Establish a buddy system to assist with the speedy integration of new joiners. • Secondment of HC Practitioners to assist with the recruitment and on-boarding process.

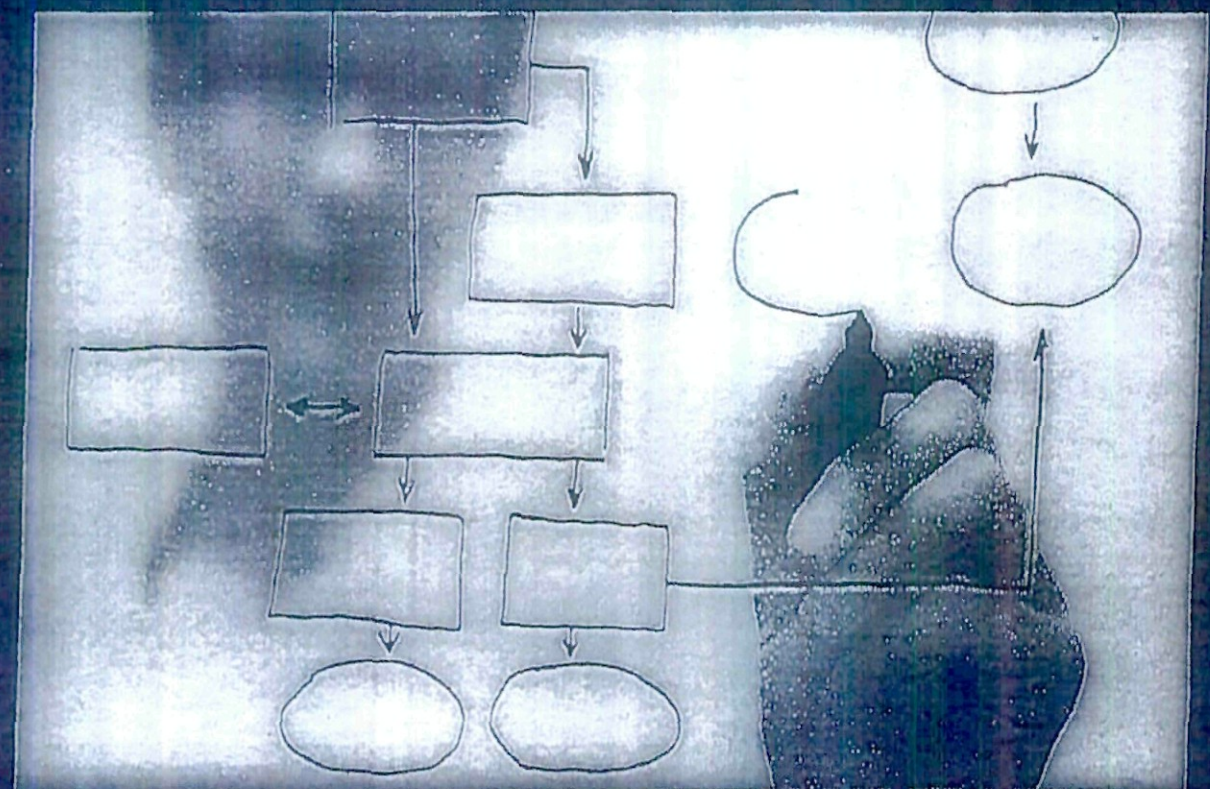
Recommendations for staffing requirements

The following recommendations are made on recruitment and on-boarding of staff depending on the delivery schedule that is adopted for the 1064 locomotives:

- Once TE assembly workload is finalised, TE needs to develop a more detailed staffing plan by assembly line and location. The staffing plan should include details on skills, number and timing. TE needs to make a contingency plans should a partial second shift be required.
- TE Recruitment team should develop a plan on how they can on-board the additional staff in the timeframes required. The plan should include a contingency plans should a partial second shift be required.

TFR Identified Risks

6



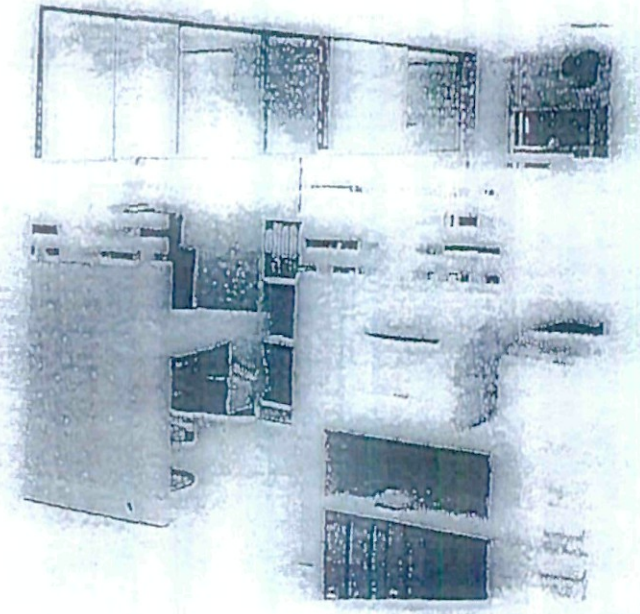
Outcome from Interaction with TFR

Ad hoc and a formal sessions were held with TFR to understand their status given their input into the design and commissioning of the locomotives.

The key areas which were discussed with TFR were:

- Readiness for review and approval of locomotive designs
- Locomotive delivery schedules
- High level operational readiness of TFR for the 1064 locomotives

A number of risks and concerns were raised by TFR and these are documented in this section of the report.



TFR Issues and concerns regarding TE completing locomotive assembly

The following risk assessment was compiled based on the outcome of the discussions held with TFR. Mitigation actions are proposed which should be considered for the medium to high risk areas. Low risks should be monitored so that they do not escalate.

#	Risk	Impact*	Likelihood of Occurrence*	Risk Score
1	Maintenance and MOPS will suffer as a consequence of TE changing focus	3	1	3
2	TE do not have a good track record of project management and do not have the project management skills or experience to manage the ramp up of 4 OEM assemble lines			
3	Testing facilities at Durban are not sufficient. They will need to be upgraded or increased testing time allowed for in delivery schedule.	1		3
4	TFR are required to conduct design approvals on two Electrical locomotives simultaneously and/or two Diesel locomotives simultaneously	3		
5	TFR's infrastructure cannot handle the delivery of greater than 300 locomotives per year (25 per month)			

* 1 = Low, 2 = Medium, 3 = High

Risk Assessment and Mitigation Strategies

The following mitigation strategies were developed, for which the medium to high risk should be considered for implementation. Low risks should be monitored so that they do not escalate.

#	Risk	Impact	Likelihood of Occurrence	Mitigation Strategy
1	Negative impact on maintenance and MOPS as a consequence of TE changing focus	High	Medium	• Draw from pool of previously employed Transnet staff • Reduce required employee skill level through detail SOPs, as well as OEM onsite training and assisting in development of SOP's • Review opportunity to contract out initial employee screening process
2	TE does not have the required project management skills or experience to manage the ramp up of 4 OEM assemble lines	High	High	• Ensure TE appoint a project manager with demonstrated experience in managing project of this size and complexity • Utilise a detailed project timeline to manage the assembly line start-up and ramp up. • Utilise a proven project management methodology e.g. PMBOK • Ensure OEM maintains responsible for TE assembly line start up and delivery schedule • Implement a project management status reporting process to ensure all stakeholder are kept informed of progress
3	Testing facilities at Durban are not adequate. They will need to be upgraded or increased testing time allowed for in delivery schedule.	Low	High	• Only assemble Diesel locomotives in Durban as the requirement for test facilities is less demanding. • If Electric locomotives are to be tested in Durban then they must allow for the additional testing time in the delivery schedule.

Risk Assessment and Mitigation Strategies

#	Risk	Impact	Likelihood of Occurrence	Mitigation Strategy
4	TFR required to conduct design approvals on two Electrical locomotives simultaneously and/or two Diesel locomotives simultaneously	High	High	• Stagger design reviews so that only one electrical and one diesel locomotive's design review is conducted at any one time. • Complete the design reviews of the two known OEMs (GE and CSR) first as these will take less time. • Compete the design review of the two unknown OEMs second (BT and CNR) • Investigate contracting in additional skills • Investigate opportunity to seconder TE engineers to assist in design review process.
5	TFR's infrastructure unable to handle the delivery of greater than 300 locomotives per year (25 per month)	High	High	• TFR to understand what items/actions are on the critical path preventing receiving of more locomotives. (If they don't already) • Make informed decisions on TFR's real ability to receive more locomotives onto the rail network and which type of locomotive can be received. (Do not want to pay a penalty to increase loco production when they cannot be utilised by TFR)

Recommendations – TFR Identified Risks

The following mitigation recommendations are made o address the medium and high risk areas:

Negative impact on maintenance and MOPS as a consequence of TE changing focus	◦ TE to consider sub-contracting the maintenance function to improve its dedication to focus areas ◦ TE to evaluate the current maintenance regime in line with its envisaged role and develop a relevant approach.
Insufficient project management skills and experience to manage the ramp up of four OEMs	◦ TE to appoint a program manager with experience of similar sized and complexity projects. ◦ Contract rail engineers to assist with the production set-up and ramp-up activities. ◦ Empower experienced technicians to carry out routine project risk and monitoring activities.
Inadequacy of testing facilities at the Durban site	◦ Develop a transition plan for upgrading the Durban site operations to the required testing facility. ◦ Compile a capex plan for the procurement of the required test and weighing equipment.

Recommendations – TFR Identified Risks

The following mitigation recommendations are made to address the medium and high risk areas:

Inadequate resources to approve the designs for the 2 Diesel and 2 Electric locomotives	• Contract rail engineers to assist with the design activities • Second TE Engineers to assist in this phase of the project
TFR's infrastructure unable to handle the delivery of greater than 300 locomotives per year	• TFR to evaluate its infrastructure plan to develop a strategy to enable accommodation of the new locos. • TFR to consider engineering options to develop infrastructure conducive for the locos. • TFR to consider a dedicated network for the locos.

EXHIBIT 4

Locomotive tender for the supply of 1064 new locomotives for the Transnet Freight Rail General Freight Business

Report of the Finance Negotiation Team
to
Siyabonga Gama (TFR CE)
Anoj Singh (Transnet GCFO)

Key outcomes from the negotiations for the acquisition of 1064 new Locomotives concluded in March 2014

TRANSNET

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Purpose

The purpose of this report is to detail the key financial outcomes from the negotiation for the acquisition of 1064 locomotives concluded in March 2014.

Background

Transnet issued two tenders for the acquisition of 1064 locomotives (465 diesel and 599 electric locomotives) as was outlined in the locomotive deployment plan to ensure that Transnet Freight Rail (TFR) would be in a position to provide the required traction capacity in support of the MDS.

The tender evaluation process was concluded in January 2014 and the results thereof were approved by the Transnet Board. The Transnet Board also approved that negotiations with the 2 preferred bidders for the 465 diesel locomotive tender i.e. General Electric South Africa Technologies (GE) and the CNR Consortium (CNR), and the 2 preferred bidders for the 599 electric locomotive tender i.e. Bombardier Transportation South Africa (Pty) Ltd (BT) and CSR E-Loco Supply (Pty) Ltd (CSR), commence

The Transnet Board Acquisition and Disposal Council (BADC) approved an allocation of locomotives between the preferred bidders for the diesel locomotives on a 50/50 split basis i.e. 233 locomotives to GE and 232 locomotives to CNR and a 60/40 split basis for the electric locomotives i.e. 359 for CSR and 240 for BT.

Negotiations commenced in February 2014. Negotiations were completed in March 2014 and the contracts were signed on 17 March 2014.

The key outcomes from the negotiations are detailed in this report.

TRANSNET

Executive Summary

465 Diesel Locomotives

The final negotiated price per locomotive, excluding the cost of hedging and future inflationary escalations for GE is **R 30 265 400** and for CNR is **R 34 000 000**. The mandate relating to pricing as set out in the negotiation strategy was met.

The final negotiated price per locomotive, including the cost of hedging and fixed for future inflationary escalations for GESAT is **R 36 174 650** and for CNR is **R 42 875 020**. The mandate relating to pricing including hedging and escalations as set out in the negotiation strategy was met.

The GE price per locomotive was negotiated downwards from the best and final offer price at the start of negotiations adjusted for the impact of the smaller batch size, additional Transnet Engineering (TE) scope and changes to economic conditions including escalation and hedging costs of, R 39.6 million to a final hedged base price including escalations of R 36.2 million per locomotive. This resulted in a net saving of R 3.4 million per locomotive or a saving of R 790 million for all 233 locomotives.

The CNR price per locomotive was negotiated downwards from the best and final offer price at the start of negotiations adjusted for the impact of the smaller batch size, additional TE scope and changes to economic conditions including escalation and hedging costs, of R 49.8 million to a final hedged base price including escalations of R 42.9 million per locomotive. This resulted in a net saving of R 6.9 million per locomotive or a saving of R 1.6 billion for all 232 locomotives.

599 Electric Locomotives

The final negotiated price per locomotive, excluding the cost of hedging and future inflationary escalations for BT is **R 43 690 574** and for CSR is **R 40 854 785**. The mandate relating to pricing as set out in the negotiation strategy was met.

The final negotiated price per locomotive, including the cost of hedging and fixed for future inflationary escalations for BT is **R 54 371 693** and for CSR is **R 50 480 000**. The mandate relating to pricing including hedging and escalations as set out in the negotiation strategy was met.

The BT price per locomotive was negotiated downwards from the best and final offer price at the start of negotiations adjusted for the impact of the smaller batch size, additional Transnet Engineering (TE) scope and changes to economic conditions including escalation and hedging costs of, R 61.5 million to a final hedged base price including escalations of R 54.4 million per locomotive. This resulted in a net saving of R 7.1 million per locomotive or a saving of R 1.7 billion for all 240 locomotives.

The CSR price per locomotive was negotiated downwards from the best and final offer price at the start of negotiations adjusted for the impact of the smaller batch size, additional TE scope and changes to economic conditions including escalation and hedging costs, of R 60.6 million to a final hedged base price including escalations of R 50.5 million per locomotive. This resulted in a net saving of R 10.2 million per locomotive or a saving of R 3.6 billion for all 359 locomotives.

Estimated Total Cost (ETC)

The Transnet Board approved Estimated Total Cost (ETC) for 1064 locomotives of R 38.6 million, which excluded the costs of future inflationary escalations and foreign exchange hedging costs, was not met (refer figure 1 below), and it is recommended that approval for this is obtained from the relevant authority.

TRANSNET

Figure 1:

Summary of EIC calculation

	[illegible]	[illegible]	[illegible]
	244 (44%)	311 (56%)	[illegible]
Final Locomotive cost	54 371 693	50 480 800	
Estimated Total Cost excluding Hedging, Escalation	10 465 737 760	14 666 853 455	25 152 591 215
Estimated Total Cost including Hedging & Escalation	13 049 206 920	18 122 820 000	31 171 525 320
	[illegible]	[illegible]	[illegible]
	221 (50%)	233 (50%)	453
Final Locomotive cost	42 875 020	38 174 850	
Estimated Total Cost excluding Hedging and Escalation	7 886 000 000	7 051 338 200	14 975 838 200
Estimated Total Cost including Hedging and Escalation	9 547 004 540	8 428 593 450	18 325 696 090
	[illegible]		
	41 044		

Estimated Total Cost excluding Hedging and Escalation	40 093 419 415
Estimated Total Cost Including Hedging and Escalation	49 347 214 410
Transnet Board Mandate (EIC) for 1064 locomotives excluding hedging and excluding escalations	38 500 000 000

Note that the EIC above excludes the cost of any options, variations capital spares, initial spares, tools and test equipment, as these will be agreed to at the Design Review stage of the contract. A further 10 % should at least be added to cover this cost.

Proposed Estimated Total Cost including Hedging, Escalation, options, spares, tools and test equipment	54 500 000 000

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Economic conditions and factors that impacted the price since close of the tender

Spot Foreign Exchange Rates

The RFP was issued in July 2012 and finally closed on the 30th of April 2013. Bidder's submissions were based on economic conditions during this period. As negotiations were only finalised on the 17th of March 2014, a period of nearly 11 months had elapsed since the close of the tender, during which economic conditions had shifted considerably.

The Rand had deteriorated from 8.98 Rand to the US Dollar in April 2013 to 10.72 Rand to the US Dollar as at March 2014. This equates to a 19.4 % decline in the Rand against the US Dollar during this period. The Rand also deteriorated from 11.86 Rand to the Euro in April 2013 to 14.87 Rand to the Euro as at March 2014, which equates to a 25.5 % deterioration against the Euro during this period.

Note that the spot rate of exchange used in the business case to calculate the base price of the locomotive was 9.13 Rand to the US Dollar, as compared to the spot exchange rate as at contract signature date of 10.72 Rand to the US Dollar. This has impacted the expected price of the locomotive as per the business case and ultimately the Estimated Total Cost (ETC) as approved by the board by approximately 17 %.

Cognisance must be taken that during the negotiations a potential risk relating to the impact on the Rand due to the potential imminent war in the Ukraine emanated, contributing towards the view to fix the Rand at current levels and finalise the negotiation and contracting process speedily.

Please refer to an article from the Business Day re-emphasising the volatility of the Rand that can be expected going forward attached hereto as Annexure A.

Inflation

The cost of labour and materials required to build the locomotives have increased locally within South Africa and globally over this period. On average local CPI has increased by 6.1 % over the period December 2012 to January 2014, during which bidders would have been obtaining pricing from their suppliers. Foreign equivalent indices have increased on average by about 1.5 % to 2.5 % over the same period. Local content related to this build is on average about 60 % therefore the higher increase on the local indices carry more weight. Economic forecasts also indicate that this upward trend will continue over the next few years.

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The ETC as listed in the business case was calculated at a point in time i.e. April 2013 and excluded the cost of escalation linked to inflation. This has impacted the expected price of the locomotive as per the business case and ultimately the Estimated Total Cost (ETC) as approved by the Transnet Board.

Bidders have also built a risk premium into their pricing for forward looking inflation, to cater for the unpredictable nature of the labour environment within South Africa and the risk associated with Transnet Engineering carrying out this additional *new* scope of work provided.

Batch Size

As approved by the Transnet Board the four preferred bidders were advised that the batch size has been split on a 50/50 basis for the 465 diesel locomotive tender and on a 60/40 basis for the 599 electric locomotive tender, amongst them. As a result, the fixed costs related to setting up the production line would have to be recouped over a smaller batch. This resulted in an increase in the cost per locomotive. Note that although the cost per locomotive would have increased, an overall saving is realised due to splitting the batch, because of the saving made on future escalations and hedging costs as a result of a shorter delivery period (refer section below explaining this in more detail).

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Overall impact of economic conditions and other factors on the price

The price of the locomotive was thus impacted as follows as a result of the change in economic conditions and other factors as explained above:

Figure 2:

	[illegible]	[illegible]
	[illegible]	[illegible]
	232 (50%)	[illegible] 233 (50%)
Best and Final Offer per Board submission	27 360 000	24 312 000
Adjusted for changes to:	7 059 026	5 509 100
Escalation up to signature date (from close of tender to Mar 14)		
Forex adjustment to spot rate at 17 March 2014		
Batch pricing adjustment for reduction of batch size to 50 %		
Best and Final Offer updated for economic and other factors	34 419 026	29 820 800

	[illegible] Electric	[illegible]
	Tenderer 5	CSR
	240 (40%)	359 (60%)
Best and Final Offer per Board submission	29 049 486	28 890 000
Adjusted for changes to:		
Escalation up to signature date (from close of tender to Mar 14)		
Forex adjustment to spot rate at 17 March 2014		
Batch pricing adjustment for reduction of batch size to 40 % / 60 %		
Best and Final Offer updated for economic and other factors	42 291 574	39 741 013

Initial bidder pricing submissions relating to these economic and other factors, were higher than as presented in figure 2 above. Through the negotiation process these initial submissions were reduced by R 2.5 million for CNR, R 252 700 for GE, R 1.5 million for BT and R 10 million for CSR to the levels reflected above.

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Impact of splitting the batch between the bidders

The Transnet Board Acquisition and Disposal Council (BADC) approved an allocation of locomotives between the preferred bidders for the diesel locomotives on a 50/50 split basis i.e. 233 locomotives to GE and 232 locomotives to CNR and a 60/40 split basis for the electric locomotives i.e 359 locomotives for CSR and 240 locomotives for BT.

As a result the delivery schedule was accelerated thereby ensuring that the locomotives arrived earlier resulting in savings in future inflation related escalation costs and savings in foreign exchange hedging costs.

This also resulted in an increase in the cost per locomotive due to bidders having to allocate more of the sunk capital costs to a smaller batch.

The net saving as a result of this decision as calculated by Regiments Capital (approved transaction advisors) is reflected below in figure 3:

Additional benefits not quantified below would include the ability to deliver additional volumes earlier thereby earning additional revenue earlier.

Figure 3:

Summary of Impact of reducing Batch Size	GE Per Loco	CNR Per Loco
Escalation if a batch of 465 was ordered based on original delivery schedule	7 415 835	3 140 056
Hedging cost if a batch of 465 was ordered based on original delivery schedule	8 451 590	5 731 752
Escalation if a batch of 233/232 is ordered based on revised delivery schedule	5 140 590	2 770 543
Hedging cost if a batch of 233/232 was ordered based on revised delivery schedule	2 893 702	5 009 928
Saving on escalation	2 275 655	369 512
Saving on hedging	1 057 968	718 847
Total Saving	3 333 643	1 088 294
Additional cost as submitted by Bidder to reduce batch size	3 133 715	259 575
Net saving	199 928	819 719

Notes:
The forecasts were based on using historic trends of appropriate indices as calculated by Regiments Capital.
The calculations above are based on information available at a point in time to Regiments.
The above calculations were prepared to demonstrate the impact of reducing the batch size and will not be up to the final negotiated position.

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Summary of Impact of reducing Batch Size	Per Loco	Per Loco
Escalation if a batch of 599 was ordered based on original delivery schedule	13 658 795	13 578 427
Hedging cost if a batch of 599 was ordered based on original delivery schedule	7 509 366	7 012 365
Escalation if a batch of 240/359 ordered based on revised delivery schedule	6 497 660	6 263 407
Hedging cost if a batch of 240/359 was ordered based on revised delivery schedule	3 424 108	3 607 263
Saving on escalation	7 161 035	5 905 640
Saving on hedging	4 085 258	3 805 142
Total Saving	11 246 293	9 715 082
Additional cost as submitted by Bidder to reduce batch size	5 859 171	1 618 500
Net saving	5 387 152	7 115 582

Notes:
The forecasts were based on using historic trends of appropriate indices as calculated by Regional Capex.
The calculations above are based on information available at a point in time to Regional.
The above calculations were prepared to demonstrate the impact of reducing the batch size and will not be in the final negotiated position.

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Negotiation Mandate

A draft mandate from the delegated authority to negotiate appropriate or better terms for the following items was issued to the negotiation team:

1. Pricing
2. Payment terms
3. Delivery risk mitigation
4. Escalation risk mitigation
5. Foreign exchange risk mitigation
6. Advance payment risk mitigation
7. Total cost of ownership (Fuel/Energy) risk mitigation
8. Warranties
9. Deferral of the delivery schedule
10. Break Pricing
11. Impact of Transnet Engineering (TE) additional scope
12. Alignment of pricing between bidders

Outcomes from the Negotiations

The following items were negotiated at length in scheduled face-to-face meetings between Transnet representatives and those of GE, CNR, BT and CSR. There were a number of proposals and counter-proposals which lead to the formation of a common understanding and agreement between the two parties.

1. Pricing

465 Diesel Locomotives

The GE price per locomotive was negotiated downwards from the best and final offer price at the start of negotiations adjusted for the impact of the smaller batch size, additional Transnet Engineering (TE) scope and economic conditions including escalation and hedging costs of, R 39.6 million to a final hedged base price including escalations of R 36.2 million per locomotive. This resulted in a net saving of R 3.4 million per locomotive or a saving of R 790 million for all 231 locomotives.

The CNR price per locomotive was negotiated downwards from the best and final offer price at the start of negotiations adjusted for the impact of the smaller batch size, additional TE scope and economic conditions including escalation and hedging costs, of R 49.8 million to a final hedged base price including escalations of R 42.9 million per locomotive. This resulted in a net saving of R 6.9 million per locomotive or a saving of R 1.6 billion for all 232 locomotives.

599 Electric Locomotives

The BT price per locomotive was negotiated downwards from the best and final offer price at the start of negotiations adjusted for the impact of the smaller batch size, additional Transnet Engineering (TE) scope and changes to economic conditions including escalation and hedging costs of, R 61.5 million to a final hedged base price including escalations of R 54.4 million per locomotive. This resulted in a net saving of R 7.1 million per locomotive or a saving of R 1.7 billion for all 240 locomotives.

The CSR price per locomotive was negotiated downwards from the best and final offer price at the start of negotiations adjusted for the impact of the smaller batch size, additional TE scope and changes to economic conditions including escalation and hedging costs, of R 60.6 million to a final hedged base price including escalations of R 50.5 million per locomotive. This resulted in a net saving of R 10.2 million per locomotive or a saving of R 3.6 billion for all 359 locomotives.

Estimated Total Cost (ETC)

The Transnet Board approved Estimated Total Cost (ETC) for 1064 locomotives of R 38.6 million, which excluded the costs of future inflationary escalations and foreign exchange hedging costs, was not met (refer figure 1 above), and it is recommended that approval for this is obtained from the relevant authority.

2. Payment Terms

The following payment terms were agreed to:

Figure 4:

Payment terms	GAR	
Advance Payment	10%	10%
Design review	5%	
Acceptance	75%	67%
Retention	10%	3%

Payment terms	Bombardier	
Advance Payment	5%	18%
6 Months / Design review	5%	23%
After 17 months	5%	
Acceptance	80%	65%
Retention	5%	5%

There were a number of proposals and counter-proposal's and the payment terms above were agreed to as part of a package deal obtained with the price reduction refe red to above.

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3. Delivery Schedule and Delivery Risk Mitigation

The locomotives will be delivered at a rate of 12 locomotives per month per bidder at peak production as per the summarised delivery schedule below (refer figure 5). In order to mitigate against late delivery risk, a penalty regime capped at 10 % of the contract price has been agreed to with all bidders.

Figure 5:

Delivery Schedule - Diesel Locomotives	CNR	GE
	232 (50%)	233 (50%)
	CNR 1st 20 from China	GE 1st 6 from USA
by March 2015	0	0
by March 2016	20	84
by March 2017	87	126
by Oct 2017	84	73
by February 2018	42	
Locomotives will be manufactured at a peak tempo of 12 per month.		

Delivery Schedule - Electric Locomotives	Bombardier	CSR
	240 (40%)	359 (60%)
	BT produce all locos locally	CSR 1st 40 from China
by March 2016	6	66
by March 2017	139	142
by December 2017	97	
by January 2018		125
Locomotives will be manufactured at a peak tempo of 12 per month.		

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4. Escalation Risk Mitigation:

In order to mitigate against the risk that the cost of forward looking inflation will materially impact the price of the locomotive over the delivery period, it has been agreed with bidders that the cost of escalation linked to forward looking inflation is included in the price of the locomotive as detailed in figure 1 above. I.e. escalation risk for TFR is removed as the cost of escalation is now included in the price and the price is not subject to a change in inflation related escalation indices.

The premium paid per locomotive to fix this escalation cost into the price is reflected below:

Figure 6:

Escalations	CNR	GE
Cost to fix forward looking inflationary escalations	4 886 526	3 946 188

Escalations	Bombardier	GE
Cost to fix forward looking inflationary escalations	7 646 113	7 936 8

Bidders built a risk premium into their pricing for forward looking inflation, to cater for the unpredictable nature of the labour environment within South Africa, however although not negotiated away entirely this was negotiated down to more reasonable market related levels.

There were a number of proposals and counter-proposals and the cost of escalation above was negotiated downwards for CNR from R 8.7 million to R 4.8 million per locomotive and for GE from R 5.1 million to R 3.9 million per locomotive resulting in a net saving per locomotive of R 3.9 million for CNR and R 1.1 million for GE.

The cost of escalation above was negotiated downwards for BT from R 9.1 million to R 7.6 million per locomotive and for CSR from R 17.6 million to R 7.9 million per locomotive resulting in a net saving per locomotive of R 1.5 million for BT and R 9.7 million for CSR.

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5. Foreign Exchange Risk Mitigation

In order to mitigate against the risk that changes to spot foreign exchange rate will materially impact the price of the locomotive over delivery period, it has been agreed with bidders that this risk would remain on their balance sheet. It was also agreed that bidders would be responsible for hedging the foreign exchange exposure. The cost of foreign exchange hedging is included in the price of the locomotive as detailed in figure 1 above. I.e. foreign exchange risk and hedging risk for TFR is removed as the cost of hedging is now included in the price and the price is not subject to a change in foreign exchange rates. Bidders are also now responsible for the costs related to the maintenance and rolling of hedges should delays in delivery be experienced.

The premium paid per locomotive to fix this foreign exchange hedging cost into the price is reflected below:

Figure 7:

Foreign Exchange Hedging Costs	CNR	GE
Cost to fix the price and mitigate against forex movements	4 038 454	1 963 112

Foreign Exchange Hedging Costs	Bombardier	CSR
Cost to fix the price and mitigate against forex movements	8 035 000	1 638 888

Due to the agreed payment terms for Milestone 1 and Milestone 2 for CNR and Milestone 1 for GE, the cost of hedging was significantly reduced as bidders were requested to allocate these payments to the foreign amounts first, however that saving was slightly offset by a concomitant increase in the APG cost as more funds would have to be paid earlier.

It needs to be noted that CNR's hedging cost is more expensive than GE's hedging cost due to CNR having a dual currency contract, a longer delivery period and more foreign content due to initial set up and design costs incurred overseas.

Also CSR's hedging cost is cheaper than that of BT, as the cost of hedging was negotiated down to this level with CSR. It is our view that the cost of hedging for CSR will in fact be a lot higher than the final negotiated number agreed to as reflected in figure 7 above. It is also our view that CSR will be keeping this position open and will not enter into an FEC

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contract to hedge for foreign exchange movements even though the agreement is that GSR carries all risk relating to foreign exchange movements and hedging.

The decision to enter into a Rand based contract and ensure that suppliers hedge via FEC contracts for the full contract amount is justified as historically the Rand has shown a continuous depreciating trend. The full hedging of forex risk exposures is also a requirement of the board approved financial risk management framework. Alternative collar structures whereby entering into an arrangement to participate in any improvement in the exchange rate was not considered mainly because the participation route was proving not to be cost effective. Other factors influencing this decision included the view that the depreciated currency supports exports and as such the government would not support a significant strengthening of the Rand. Hedging on the Transnet balance sheet would also have required significant credit lines from banks which can hamper credit line availability for other MDS projects. Furthermore hedging on the Transnet balance sheet requires onerous hedge accounting processes to be instituted, as prescribed by IAS 39, which can result in income statement volatility which is not optimal.

6. Advance Payment Risk Mitigation

All advance payments are secured by an advance payment guarantee issued by a bank with a minimum long term credit rating of an A- Fitch rating or equivalent.

7. Total Cost of Ownership Risk (Fuel/Energy) Mitigation

In order to mitigate against the risk that the locomotives once placed into operation will consume more fuel (diesel locomotives) or energy (electric locomotives) than indicated in bidders responses to the RFP, a penalty clause with a related fuel/energy warranty regime has been included in the supply agreement with bidders.

8. Warranties

GE have agreed to provide a 30 month warranty on the locomotive as well as a 6 year warranty on the traction motor and a 12 month warranty on spares.

CNR, BT and CSR have agreed to provide a 24 month warranty on the locomotive as wel as a 6 year warranty on the traction motor and a 12 month warranty on spares.

9. Deferral of the delivery schedule

In order to mitigate against the risk of having to accept and pay for locomotives during an economic downturn when volumes from customers may not be forthcoming thereby impacting negatively upon Transnet's loan covenants, bidders agreed to accept a clause in the supply agreement whereby acceptance of locomotives could be deferred for a period of time.

Transnet agreed that in return bidders would be reimbursed for reasonable and auditable costs. These costs could include warehousing costs, time value of money costs, costs related to the rolling of hedges etc.

Due to complications relating to hedge accounting within the accounting records of GE, it was agreed with GE that the mechanics of this arrangement would be agreed to post the contract signature date.

10. Break Pricing

A liability cap of 15 % of the contract price is included in the supply agreement thereby limiting Transnet's exposure in the unlikely event of breach of contract by Transnet.

11. Impact of Transnet Engineering (TE) Additional Scope

A strategic decision was taken at a Transnet level that TE should be enabled to eventually be able to become an Original Equipment Manufacturer (OEM) of locomotives. This 1064 tender process would be used as a catalyst to facilitate this strategy. As such bidders were advised to provide pricing based on providing TE with additional scope for the manufacture of the locomotives. Strategically it was decided that for specific items within the build process where TE were within 10 % of the market price then it would be acceptable to allow TE to retain this scope. The pricing as reflected above in Figure 1 is inclusive of this additional scope for TE based on this principle.

12. Alignment of Pricing between Bidders

It should be noted that GE and CSR already have established production lines within South Africa as they have previously already entered into contracts with Transnet to build locomotives. GE and CSR have also had a head start in establishing supply chains for sub components in South Africa. As such there pricing is lower than that of their counterparts CNR and Bombardier.

Through the negotiation process, the team endeavoured to align prices between the bidders; however the expectation was never to align prices completely due to the reason as explained above.

Also it was always understood that one of the reasons the Transnet Board approved a split award of the tender was to ensure that adequate competition exists in the market, for which a slight premium would have to be paid in the beginning.

As such, based on this understanding we believe that the negotiation mandate relating to alignment of pricing between bidders has been met.

Conclusion

It is recommended that a submission is made to the requisite authorities requesting an increase in ETC for 1064 locomotives of R 54.5 billion based on the outcomes of the negotiation process.

Based on the outcomes of the negotiation process the draft negotiation mandate as supplied has been met.

Sign-off

Yousuf Laher
Executive manager
TFR Finance

Danie Smit
Deputy Treasurer Middle Office
Transnet Group

CC:
Thamsanqa Jiyane

TRANSNET

Annexure A

Economy

Rocky ride forecast for 'still too expensive' rand

by Evan Pickworth, 18 March 2014, 05:53

A GAUGE by Swiss bank UBS that assesses 22 exchange rates according to their trade balances on Monday found that the rand was 10% too expensive, signalling fears the currency is in for a rough ride for the rest of the year.

After losing about a third of their value in three years, the rand and Turkey's lira still need to fall further to reach levels that make their economies competitive, according to the report. Analysts point to structural problems that monetary policy alone cannot fix as key risks in the future, with further weakness to well more than R11 to the dollar on the immediate horizon before a period of stability can kick in.

The rand weakened to its worst levels in five years in January as investment opinion turned swiftly away from emerging markets. Together with the Turkish lira and Argentinian peso, the rand was the weakest global currency in January, but a shrinkage in the current account deficit and an easing in fears over the crisis in the Ukraine, have seen volatility subside.

UBS said the Turkish lira was 12% overvalued and with the rand made up the worst levels among the currencies being monitored.

But French bank Société Générale pointed out that both currencies have risen over the past six weeks as a result of interest rate increases rather than improvements in their economies.

"The rand and lira are still expensive," Shweta Singh, an emerging-market economist at Lombard Street Research, said in an interview last week. "The currencies are not appealing relative to the risks."

Emerging markets economist at Nomura International Peter Attard Montalto said on Monday he had found the rand to be at fair value in January, but that it was notoriously difficult to predict the future of the currency. He expected volatility to persist and said the rand might weaken to as low as R11.25 this year.

The currency was at R10.73 to the dollar late on Monday from R10.68 at the end of last week.

Mr Montalto said another interest rate increase could not be ruled out but consensus among market watchers was edging to an unchanged stance.

The Reserve Bank monetary policy committee's three-day meeting begins next week on Tuesday, with an announcement on rates to follow on Thursday.

Mr Montalto expected two rate hikes this year and two more next year, before a more neutral stance could be expected.

Investment Solutions chief economist Chris Hart said while he could see the rand becoming "quite a bit weaker", he felt the recent strikes were not providing a "true picture" of South Africa's trade balance as fewer goods were supplied while workers stayed away.

He expected the rand to weaken further as the US tapering programme began to "bite", but then to stabilise later.

The US Federal Reserve is expected to reduce its quantitative easing programme by $10bn on Wednesday, according to research by Barclays.

In addition to this week's inflation data on Wednesday, the release of the Nkandla report on upgrades to President Jacob Zuma's home and further industrial action, the rand could also be "materially influenced by the Crimean secession referendum" and the Fed's meeting, Barclays said.

Global market participants are waiting for the Fed's policy statement on Wednesday, with the bank expected to continue to pare back on its monetary stimulus programme.

The rand weakened to more than to R11 to the dollar, its weakest level since 2008, in January, raising speculation at the time that it might stay weak for as long as five years.

Turkey hiked rates in January to 12% from 7.75% in response to a sell-off in the lira.

The action by the Turkish central bank coincided with a surprise decision by South Africa's Reserve Bank to increase rates 50 basis points to 5.5%.

The lira slid to fresh all-time lows against the dollar in January on concerns over its current account deficit and has hit five-week lows to the dollar.

French bank Credit Agricole estimated the rand would remain little changed at R10.60/$ by year end, and is the third-most bearish firm in Bloomberg's survey. The lira might depreciate a further 8% by the end of the year, it said.

"Turkey and South Africa lack competitiveness," Sebastien Barbe, the head of emerging-market research at France's third-biggest bank, said in a March 7 phone interview from Paris. "It's difficult to argue that these currencies have cheapened enough."

With Bloomberg

EXHIBIT 5

CNR CONSORTIUM

11 March 2014

Abantwana Lodwa Mdletshe
Transnet Freight Rail
Acquisition Council

465 Main Diesel Locomotives for General Freight – Impact of Locating in Durban

Dear Lindiwe and Gary

Further to our previous email in this regard. Following the request from TFR for CNR Consortium to consider the Durban facilities for manufacture of locomotives, the following calculations were made:

IMPACT OF MANUFACTURING IN DURBAN VS JOHANNESBURG

TRANSPORT COSTS

	Saving	Extra Cost	Comment
Engine		R 8 000.00	Engine imported for testing done in JHB
Propulsion System		R 16 000.00	ABB is located in JHB. 4 x to Engine test portion, assembly in JHB
Brakes		R 8 000.00	Knorr Bremse located in JHB.
Chinese components supplier	R 8 000.00		Imported components from Dalian
Locomotive Gears		R 4 000.00	Based in JHB
Air Conditioner		R 4 000.00	Based in JHB
Wheels + Axles	R 8 000.00		Imported components
Refrigerator		R 500.00	Based in JHB
U-tubes and gear case	R 4 000.00		Rotacon based in Durban
Communications equipment		R 200.00	Located in JHB
Total	R 20 000.00	R 40 700.00	
Difference per locomotive		R 20 700.00	
Extra Cost on Locomotives		R 4 077 500.00	

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EXHIBIT 6

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TIMU DRAFT

Since Spet.15th of 2014, CNR RS SA has provided the technical supports to TE in positive according to the requirements. The following items have been made big progress.

1. Manufacture Process Chart

In 2014, the draft version of "Information of Process Chart, Working Procedure and Machinery, Jigs & Fixtures for each Station" was provided to TE.

Latterly, when TE visit in Dalian, CNR production line of diesel locomotive was shown and introduced in details to TE, including Carbody fabrication line and assembly line, bogie frame fabrication line and assembly line, Combo fabrication and assembly line, wheelset assembly line, engine test bench, locomotive final assembly line, loadtes. bench and running test bench and etc.

As per the request made by TE during their visit in Dalian, CNR Dalian updated the draft data sheet by adding the procurement information of Machinery and Jigs & Fixtures, and labor hours at each station etc. In this document, it indicated the product and procedure for the items like material preparation, carbody, underframe, cab, sidewall, partition wall, side door wall, cover, bogie frame, fuel tank, coolant structure, water tank cowcatcher, driver console, wheelset assembly, bogie assembly, locomotive assembly and test etc. Meanwhile, process flow chart, procedure, machinery, jigs &fixtures, labor time, as well as procurement

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information of those jigs and fixtures like dimension, funation, purchasing cycle etc. were indicated.

2.Technical support for Durban

In May of 2014, due to the new facilitate in Durban, we provided some suggestion on jigs and fixtures need to be equipped with in Durban to TE.

3.3P Technical Support

Currently, we are preparing the documents needed during 3P as per the request by TE. The experts from CNR will come once all the document are ready.

4.Potential Cost Increased

Therefore, start from less experience to mature manufacture it needs a complicated procedure Due to the tight schedule, the faeility and staff in Durban could be challenge on the project execution

It is estimated that it will get the cost increased, this letter list some of the fields, it is draft but can be finalized during the execution in future.

January 26 2015

EXHIBIT 7

2230

CNR Rolling Stock South Africa

Durban Locomotive Factory Relocation Proposal V2

CNR Rolling Stock South Africa

2015-12-1

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DRAFT V2

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In May of 2014, due to the new facilitate in Durban, we provided some suggestion on jigs and fixtures need to be equipped with in Durban to TE.

3.3P Technical Support

Currently, we are preparing the documents needed during 3P as per the request by TE. The experts from CNR will come once all the document are ready.

4.Potential Cost Increased

Therefore, start from less experience to mature manufacture, it needs a complicated procedure. Due to the tight schedule, the facility and staff in Durban could be challenge on the project execution

It is estimated that it will get the cost increased, the cost will be more than R100,000,000, such as the following field:

- Transportation cost increased
- Human staff cost increased
- Technical support cost increased

this letter list some of the fields and estimated the additional cost, due to the manufacturing is not started and the Durban situation and information of the site is not enough, the cost is draft but can be finalized during the execution in

CNR Rolling Stock South Africa

CNR Rolling Stock South Africa
China Construction Bank Building
85 Grayston Drive
Sandton
Johannesburg
2196
cnrrssapm@163.com

future.

CNR RS SA
Febraiy, 2015

南非项目德班搬迁地
Proposal Estimated Cost Increa

序号 No.	名称 Description	增加金额（总计） Increased amount(total)
1	增加运输费用 Increased logistics cost	66,480,000
2	增加德班建立办事处和施行费用 Increased cost for setupfaeilities in Durban & travelling	29,40 000
3	全新、新设厂区的工艺布局技术指导技术支持费用（比指导已有厂区需要等多的技术支持和指导）Increased Cost on techni support & guide on brandnew pr c s layout(compared with the KDS)	48, 0,
4	培训全新生产厂员工的难度和费用增加（新生培训的深度和广度与既有熟练员工不同） Difficulty and cost increased on traning the new emplyees	31,800,000
5	供应商的机车生产现场服务成本增加 Increased cost for site service on site by supplier	47,470,000
6	我方延迟收到货款，货款的时间价值 Increased Financial cost for postpone the delivery due to the relocation	96,000,000

增加费用预算

sed on Durban Relocation

备注 Remark
table1
办事处房租：60万每年*7=420万；住宿房租（30人）：30万每月*12个月*7年=2520万兰特 Office rental:600,000 Rand/year*7=4,200,000Rand;rental(30 persons): 300,000/month*12*7=25.2million Rand
800R（小时费率）*7.5小时*30人*270个工作日 800R(hour rate)*7.5hours*30persons*270 working day
每台多10万兰特；212台合计=2100万兰特；（可以从培训TE人员数上验证一下）；培训总人数： 100,000Rand per loco increased,21million rand total in 212 locomotives; (to be verified on TE traning)
现场服务按照采购总额（除TE)的10%计算，搬迁导致增长10%计算。 On site service will be calculated according to 10%of procument amount(excludes TE), and the relocation will increase 10%.

7	保险	2,726,851
	总计	318,700,000

EXHIBIT 8

Private and Confidential
Draft

TRANSNET

INVESTIGATION

OPERATION DIVISION: Transnet SOC Ltd

TIA CASE REF NO: To be confirmed

TIP-OFFS NO: N/A

FORENSIC FIRM LEADER	Lionel van Tonder
DATE OF REPORT	14 June 2015
BUDGET HOURS	160 hours per team member (6 team members)
ACTUAL HOURS	960
VARIANCE	960
MATTER INVESTIGATED: Assisting Transnet SOC Ltd ("Transnet") with a forensic investigation into allegations in the media pertaining to a possible conflict of interest involving Mr Iqbal Sharma ("Mr Sharma").	

1. BACKGROUND

1. PricewaterhouseCoopers Inc. ("PwC") was appointed to assist with a forensic investigation relating to allegations in the media. These allegations relate to a possible conflict of interest involving Mr Sharma, Chairperson of Transnet's Board Acquisitions and Disposals Committee ("BADC"), which evaluated tenders in respect of the acquisition of new locomotives for an amount of approximately R50 billion ("the locomotive contract").

2. During our meeting on 31 July 2014, we were briefed and provided with a copy of a newspaper article (Mail & Guardian, dated 4 July 2014) containing the allegations involving Mr Sharma.

3. As per the said article, Mr Sharma was at all relevant times a non-executive Director of Transnet and the Chairperson of the BADC, which evaluated tenders in respect of the acquisition of new locomotives for an amount of approximately R50 billion.

4. The successful bidders, (all foreign entities), were required (in terms of their contracts with Transnet) to procure 60% of their components from the South African market.

5. As per the media report, it was alleged that Mr Sharma acquired a share in an entity styled *"VR Laser Services"* (name that appeared in the newspaper article, which refers to "VR Laser Services (Pty) Ltd", ("VR Laser Services")), an engineering company that manufactures *"all types of vehicl hulls for any original equipment manufacturer"*. It was also alleged that the said share was acquired shortly prior to the announcement of the winning bidders on the locomotive contract.

6. As per the newspaper article, it was also alleged that the winning bidders, prior to the awarding of the locomotive contract, performed a site visit at the premises of VR Laser Services to assess the possibility of subcontracting to VR Laser Services.

7. The newspaper article also alleged that, shortly after Mr Sharma's share acquisition in VR Laser Services, an entity in which Messrs Rajesh Gupta ("Mr Gupta") and Duduzane Zuma ("Mr Zuma") have a share, also acquired a share in VR Laser Services.

8. During our meeting on 31 July 2014, we were also requested to include the possible unauthorised disclosure of confidential information relating to the matter in our mandate.

2.	LIMITATIONS
	1. We draw your attention to the following limitations: a) The contents of this report is strictly confidential; b) We conducted the investigation in terms of our mandate, on behalf of

	Transnet; c) The scope of our work was limited to an analysis of documentation and information made available to us and specific enquiries undertaken to pursue our mandate; d) We have not verified the authenticity or validity of the documentation made available to us. In some instances we were only allowed to review the documentation, without being authorized to make copies of the said documents; e) Probity search results returned and used during the course of this assignment are limited to publicly available information made available by the Companies and Intellectual Property Commission ("CIPC"). In this regard we also had sight of relevant entities' share registers. We cannot guarantee the authenticity, validity and completeness of such information; f) We have included information that we obtained verbally in this report. We cannot verify that this information is credible or truthful; g) If additional or new documentation or information is brought to our attention subsequent to the date of this report, which would affect the findings detailed below, we reserve the right to amend and qualify our findings accordingly; h) Any recommendations made in this report should only be acted upon after consultation with your legal advisors; i) This report was prepared solely for the purposes of reporting our findings to Transnet. It should therefore not be utilised for any other purpose. No part may be quoted, referred to or disclosed to any third party, without our prior written consent; and j) The procedures performed do not constitute an audit or a review in accordance with International Standards on Auditing or International Standards on Review Engagements (or relevant national standards or practices). Consequently, we do not provide any audit assurance.

3.	PROCEDURES PERFORMED
	The following procedures were performed:

1. We obtained and reviewed copies of the following documentation / datasets:

   a) The Transnet Group Company Secretariat Code of Ethics, effective date 1 June 2013, policy reference number "TG/GCS 2/4/1P" ("Code of Ethics", attached hereto as *Appendix 1.1*);

   b) The Transnet Declaration of Interest and Related Party Disclosures Policy for Directors, effective date 15 September 2013, policy reference number "TG/GCS 2/4P" ("Declaration of Interest Policy", attached hereto as *Appendix 1.2*);

   c) The Transnet Supply Chain Policy, effective date 1 May 2012, policy reference number "SCM 01/2011" ("May 2012 SCM Policy", attached hereto as *Appendix 1.3*);

   d) The Transnet Supply Chain Policy, effective date 1 October 2013, policy reference number "TG/SCM 15/1P" ("October 2013 SCM Policy", attached hereto as *Appendix 1.4*);

   e) The Transnet Memorandum of Incorporation for a State Owned Company, dated 25 June 2013 ("Transnet Memo of Incorporation", attached hereto as *Appendix 2*);

   f) The following media report:

      i. The Mail & Guardian media report styled "*Transnet tender boss's R50-billion double game*", dated 4 July 2014 (attached hereto as *Appendix 3.1*);

   g) Mr Sharma's email response to Mr Mafika Mkwanazi (Chairman of the Board, Transnet, "Mr Mkwanazi") styled "*Re: Mail & Guardian article July 4, 2014*" dated 10 July 2014 (attached hereto as *Appendix 4.1*)

   h) Mr Sharma's email complaint to Mr Johan Retief, Press Ombudsman ("Ombudsman", attached hereto as *Appendix 4.2*), in respect of the media report styled "*Transnet tender boss's R50-billion double game*", dated 4 July 2014;

   i) The Mail & Guardian's email response, including attached appendices, to Mr Johan Retief, Press Ombudsman (including related share registers, attached

hereto as *Appendix 4.3*);

j) Ms Ayanda Ceba's ("Ms Ceba"), Transnet Group Company Secretary, letter to Mr Sharma styled *"Annual General Declaration of Interest in Contracts and Related Party Disclosure for the 2013/14FY"*, dated 25 February 2013 (attached hereto as *Appendix 5.1*);

k) Mr Sharma's declarations of interests to Transnet, dated 28 February 2013 ("February 2013 declaration", attached hereto as *Appendix 5.2*);

l) Mr Sharma's declarations of interests to Transnet, dated 24 April 2014 ("April 2014 declaration", attached hereto as *Appendix 5.3*);

m) A Microsoft Excel spreadsheet styled *"Transnet Active Vendors for all OD – 12 Aug 2014"*, containing a list and relevant details pertaining to active Transnet vendors as at 12 August 2014;

n) A Microsoft Excel spreadsheet styled *"TN SAP Vend Deleted Vendors 2 – 14 Aug 2014"*, containing a list and relevant details pertaining to deleted Transnet vendors as at 14 August 2014;

o) A Microsoft Excel spreadsheet styled *"X1 Archived Vendors – 14 August 2014"*, containing a list and relevant details pertaining to archived Transnet vendors as at 14 August 2014;

p) A list of the four winning bidders and their contact details (attached hereto as *Appendix 6.1*);

q) A list of the Board of Directors ("BOD") of Transnet and their contact details (attached hereto as *Appendix 6.2*);

r) Transnet Payment Advice to Ithemba Governance & Statutory Solutions (Pty) Ltd ("Ithemba") dated 30 June 2014 for a total amount of R 42,750.00 (attached hereto as *Appendix 6.3*);

s) BBBEE Verification Certificate of VR Laser Services dated 19 October 2007 (attached hereto as *Appendix 7.1*);

t) Transnet Vendor Process Record ("VPR") for CSR E-Loco Supply (Pty) Ltd ("CSR E-Loco") (attached hereto as *Appendix 7.2*);

u) Supplier Declaration Form of CSR E-Loco dated 10 December 2012 (attached hereto as *Appendix 7.3*);

v) Locomotive Supply Agreement between CSR E-Loco and Transnet dated 22

October 2012 signature page (attached hereto as *Appendix 7.4*);

w) A Microsoft Excel spreadsheet showing all payments made to Ithemba (attached hereto as *Appendix 7.5*);

x) Supplier Declaration Form of Ithemba dated 23 January 2014 (attached hereto as *Appendix 7.6*);

y) A Microsoft Excel spreadsheet showing all payments made to VR Laser Services;

z) A Microsoft Excel spreadsheet showing all payments made to CSR E-Loco;

aa) Excerpt of selected minutes of meetings of the BADC from 23 March 2011 to 26 February 2014 (attached hereto as *Appendix 8.1*); and

bb) Excerpt of selected minutes of meetings of the Board of Transnet from 20 April 2011 to 30 July 2014 (attached hereto as *Appendix 8.2*);

2. We reviewed the following documentation in the presence of Mr Thamsaqa Jiyane from Transnet (Not related to Mr Benny Jiyane from VR Laser Services) on 10 September 2014:

a) Various advertisements of the 1064 tender, the first of which was dated 13 July 2012 in the Sunday Times newspaper;

b) The Tender Opening Form for tender numbers TFRAC-HO-8608 Electrical and TFRAC-HO-8609 Diesel dated 30 April 2013;

c) The Terms of Reference (TOR) in so far as it related to us determining the closing date of the tenders;

d) The first register of evaluators for the TFRAC-HO-8608 Electrical and TFRAC-HO-8609 Diesel tenders dated 8 May 2013;

e) Memorandum submitted by Mr Molefe ("Management") to the BADC dated 17 January 2014 with the subject: "*Request for approval to negotiate and award of business to the short listed tenderers for the supply of 599 (COCO) new dual voltage locomotives for the general freight business (GFB)*".

f) Memorandum submitted by Mr Mo'efe ("Management") to the BADC dated 17 January 2014 with the subject: "*Request for Approval to Negotiate and Award of Business to the Short Listed Tenderers for the Supply of 465 New Diesel Locomotives for the General Freight Business (GFB)*"; and

	g) Letters of intent dated 28 January 2014 sent to the four winning bidders.
	3. Interviews and/or consultations and/or telephone conversations were held with the following individua's: a) Ms Ceba, Group Company Secretary, Transnet; b) Mr Thamsanqa Jiyane, TFR CPO, Transnet; c) Mr Stefaans Brummer ("Mr Brummer"), Reporter, Mail and Guardian; d) Mr Fanie Botha ("Mr Botha"), VR Laser Services; e) Mr John van Reenen ("Mr van Reenen"), previous shareholder, VR Laser Services; f) Mr Lionel Faull ("Mr Faull"), Reporter, Mail and Guardian; g) Mr Gary Bloxam ("Mr Bloxam"), previous shareholder, VR Laser Services; h) Mr Madoda John Beany" Jiyane ("Mr Jiyane"), Director, VR Laser Services; i) Mr Ian McNeil ("Mr McNeil"), previous director, VR Laser Services; j) Dobri Makhubela ("Mr Makhubela"), Projects Contracts Manager, Bombardier Transportation South Africa (Pty) Ltd ("Bombardier Transportation"). We received a written reply from Bombardier Transportation; k) We received a written reply from General Electric; l) Mr Pan Wang ("Mr Wang") from CSR E Loco Supply (Pty) Ltd. We received a written reply from Mr Wang and we interviewed Mr Wang; and m) Mr Iqbal Sharma ("Mr Sharma"), non-executive Director of Transnet. 4. Probity searches (including directorship/membership searches, company searches, property searches, general "Google" searches, etc) were performed and analysed in respect of individuals and entities identified during the course of this investigation.

4.	REGULATORY FRAMEWORK
	1. Constitution of the Republic of South Africa Act No. 108 of 1996 ("The Constitution");

	2. Companies Act No. 71 of 2008 ("Companies Act"); 3. Public Finance Management Act No. 1 of 1999 ("PFMA"); and 4. Prevention and Combatting of Corrupt Activities Act No. 12 of 2004 ("POCA").

5.1	FINDINGS: TRANSNET POLICIES AND PROCEDURES, INCLUDING RELATED LEGISLATION

1. October 2013 SCM Policy, the policy was approved in September 2013 and sets out in paragraph 35.1 on page 17 the roles and responsibilities of the BADC from the perspective of Supply Chain Management. The policy states: "*The Transnet Board comprises of Board members appointed from time to time by the Minister of Public Enterprises. For the acquisition and disposal of Transnet assets, the Board has delegated powers to the BADC. The committee must have and maintain:*

An appropriate Supply Chain Management system, which is fair, equitable, transparent, competitive and cost effective; and

Effective, efficient and transparent systems of financial and risk management and internal control."

2. October 2013 SCM Policy, the policy states in paragraph 35.1 on page 17: "*The BADC members must:*

Act with fidelity, honesty, integrity and in the best interest of the Transnet in managing its financial affairs, including the avoidance of conflict of interest and provide safeguards against favouritism, improper practices and opportunities for fraud, theft and corruption;

Prevent any prejudice to the financial interests of Transnet or the State;

Take effective and appropriate steps to prevent irregular expenditure, fruitless and wasteful expenditure, losses resulting from criminal conduct and expenditure not

complying with the operational policies of Transnet;

Ensure that expenditure of Transnet is procured in accordance with the approved budget; and

Approve certain bids not delegated to any other Acquisitions Council.

The BADC may delegate powers and duties or instruct specific officials in Transnet to perform any of the duties assigned to it."

3. October 2013 SCM Policy, the policy states in paragraph 38 on page 20 that: *"All Transnet employees should uphold the following key values (amongst others) Desist from allowing personal interests to influence business decisions or tasks and disclose any actual or potential conflict of interest."*

4. Declaration of Interest Policy, the purpose of the policy is set out in section three, page three, and states:

"3.2 The duties of Directors to avoid a conflict of interest and the disclosure of directorships held in other companies

3.3 provide guidelines to all Directors as to how to disclose and manage conflicts of interests."

5. Declaration of Interest Policy, the policy states in section 4. Application, on page three that: *"This policy applies to every Director of Transnet, every alternate Director of Transnet, any person occupying the position of a Director or alternate Director by whatever name designated."*

6. Declaration of Interest Policy, the policy states in section 5. Definitions, on page three that: *"In this policy the following terms shall have the meanings assigned to them below and cognate expressions shall have corresponding meanings namely:*

5.1. *'Director': means a member of the board of Transnet or an alternate Director of Transnet and includes any person occupying the position of a Director or alternate Director.* In this regard it should be noted that Mr Sharma is a non – executive Director, but according to Ms Ceba all policies applicable to Directors are also applicable to Non – Executive Directors.

5.2 *'Conflict of interest': is described in paragraph 6 and includes, inter alia, a situation in which:*

5.2.2. *a Director has private interests or personal consideration or has an Affiliation or a Relationship which affects, or may affect, or may be perceived to affect a Director's judgement in acting in the best interest of Transnet, or could corrupt the Director's motivations for acting in a particular manner, or which could result in, or be perceived as Favouritism or Nepotism;*

5.2.3. *a Director uses his/her position, or privileges, or information obtained while working in the capacity as a Director for:*

5.2.3.1. *private gain, or advancement, or any other advantage; or*

5.2.3.2. *the expectation of private gain or advancement, or any other advantage;*

5.2.3.3 *accruing to the Director or any member of his family, or friends or business associates;*

5.3. *'Affiliation': means involvement with a vendor, service provider, or competitor of Transnet on the part of the Director, a person related or inter-related to the Director or the Director's friends or business associates; including serving as a shareholder, board member, employee, consultant or advisor to the aforementioned entities.*

5.5. *'Favouritism': means an inclination in attitude or behaviour to show preferential treatment towards a certain person, group or entity.*

5.7. *'Personal Financial Interest': means a direct Material interest of a person, of a financial, monetary or economic nature, or to which a monetary value may be attributed."*

5.8. *'Material': when used as an adjective means significant in the circumstances of a particular matter, to a degree that:*

5.8.1. is of consequence in determining the matter, or

5.8.2. might reasonably affect a person's judgment or decision-making in the matter, or

5.8.3. could influence the economic decisions taken in a matter.

5.10. 'Related': when used in respect of two persons, means persons who are connected to one another in any manner contemplated below:

5.10.2. an individual is related to a juristic person if the individual directly or indirectly controls the juristic person, as determined in accordance paragraph 5.12 below, and

5.10.3. a juristic person is related to another juristic person if:

5.10.3.3. a person directly or indirectly Controls each of them, or the business of each of them, as determined in accordance to paragraph 5.12 below.

5.11. 'Inter-Related': when used in respect of three or more persons, means persons who are related to one another in a linked series of relationships, such that two of the persons are related in a manner contemplated in paragraph 5.10 above, and one of them is related to the third in any such manner, and so forth in an unbroken series.

5.12. 'Control': for the purpose of paragraph 5.10.2 and 5.10.3 above, a person controls a juristic person, or its business, if:

5.12.1. in the case of a company:

5.12.1.1. that company is a subsidiary of the first person, as determined in accordance with the Companies Act; or

5.12.1.2. the first person together with any related or inter-related person, is:

5.12.1.2.1. directly or indirectly able to exercise or control the exercise of a majority of the voting rights associated with securities of that company, whether pursuant to a shareholder agreement or otherwise (e.g. Director and a person related to him, together hold more than 50% of the voting shares in company Y); or

5.12.1.2.2. has the right to appoint or elect, or control the appointment or election

of, Directors of that company who control a majority of the votes at a meeting of the board (e.g. Director is able to appoint Directors to the board of company Y and those Directors appointed by him can exercise more than 50% of the votes at a board meeting);

5.12.4. that first person has the ability to materially influence the policy of the juristic person in a manner comparable to a person who, in ordinary commercial practice, would be able to exercise an element of control referred to in paragraphs 5.12.1, 5.12.2 or 5.12.3.

5.13 'Relationship': includes the connection subsiding between any two or more persons who are related or inter-related.

5.15 'Significant influence': is the power to participate in the financial and operating policy decisions of an entity, but does not necessarily amount to Control.

7. Declaration of Interest Policy, the policy states in section 3 duty to avoid and disclose a conflict of interest on page five that:

"6.1. Directors have a duty to avoid actual conflicts of interest in terms of the common law, the Public Finance Management Act No 1 of 1999 ("PFMA"), the Companies Act and the King Report on Governance for South Africa, and the King Code of Governance Principles, 2009 ("King III"). A summary of key principles relating to a Director's responsibility to avoid and disclose a conflict of interest that have been set out below, in a non-exhaustive manner, are guided to Directors.

6.2 One of the most important fiduciary duties of Directors under the common law is the duty to avoid a conflict of interest. Directors have a duty to observe the utmost good faith towards Transnet, and in discharging that duty they are required to exercise independent judgment and to take decisions according to the best interests of Transnet. Any Director who is appointed to the Board of Transnet as a representative of a party with a substantial interest in Transnet should recognise the potential for conflict. That Director must understand that the duty to act in the best interests of Transnet That Director must recognise that the duty to act in the best interests of Transnet remains paramount. Certain conflicts of interests are fundamental and should be avoided

6.3. In this regard, Directors have a duty inter alia to:

6.3.1 to act with fidelity, honesty, integrity, independence of mind and in the best interests of Transnet, and to exercise the powers and perform functions in good faith;

6.3.2. account for secret profits;

6.3.3. not misappropriate corporate opportunities;

6.3.4. not improperly compete with Transnet;

6.3.5. not to use their position as Director, privileges, or any information obtained while acting in the capacity of a Director:

6.3.5.1 to gain an advantage for themselves or for any other person other than Transnet or a wholly-owned subsidiary of Transnet (it is not required that the Director gains a material or a financial advantage any advantage will bring the Director will bring the Director within the realm of this provision);

6.3.5.2 to knowingly cause harm to Transnet or a subsidiary of Transnet and communicate with the Board at the earliest practical opportunity any information that comes to the Director's attention;

6.3.6 disclose:

6.3.6.1. conflicts of interest (whether real or potential) in good time together with full details to the Board of Transnet and such conflicts shall be appropriately managed;

6.3.6.2. any interest in a contract with Transnet;

6.3.6.3 any direct or indirect personal or private business interest that they, or any spouse, partner or close family member may have in any matter before the Board of Transnet and, subject always to paragraph 6.5, must withdraw from the proceedings when that matter is being considered unless the Board of Transnet decides that the direct or indirect interest is trivial or irrelevant and the Director is not required to withdraw in accordance with paragraph 6.5; and

6.3.6.4. any Personal Financial Interest in respect of matters to be considered at a meeting of the Board of Transnet, and/or any matter in respect of which a Director knows that a related person has a Personal Financial Interest, in the manner set out in paragraph 6.5.

6.4. In terms of Section 75 of the Companies Act, a Director may disclose any Personal Financial Interest in advance, by submitting a Declaration of Interests Form to the Board of Transnet, setting out the nature and extent of the interest, to be used generally until changed or withdrawn by further written notice from that Director.

6.5. If a Director of Transnet, has a Personal Financial Interest in respect of a matter to be considered at a meeting of the Board of Transnet, or knows that a Related person has a Personal Financial Interest in the matter, the Director,

6.5.1. must disclose the interest and its general nature in writing before the matter is considered at the meeting;

6.5.2. must disclose to the meeting any material information relating to the matter, and known to the Director;

6.5.3. may disclose any observations or pertinent insights relating to the matter if requested to do so by the other directors;

6.5.4. if present at the meeting, must recuse himself/herself from the meeting when the matter is being decided upon, after making any disclosure contemplated in paragraphs 6.5.2 or 6.5.3;

6.5.5. must not take part in the consideration of the matter, except to the extent contemplated in paragraphs 6.5.2 or 6.5.3;

6.5.6. while absent from the meeting in terms of this paragraph;

6.5.7. is to be regarded as being present at the meeting for the purpose of determining whether sufficient Directors are present to constitute a quorum of the meeting; and

6.5.9. must not execute any document on behalf of Transnet in relation to the matter unless specifically requested or directed to do so by the Board of Transnet.

6.6. In terms of section 76(4)(a)(ii) of the Companies Act, a Director will have satisfied his/her obligations to act in the best interests of the Company(among other things) if (i) the Director had no Personal Financial Interest in the subject matter of the decision, and had no reasonable basis to know that any Related person had a Personal Financial Interest in the matter, or (ii) the Director complied with the requirements of Section 75 of the Companies Act with respect to any

interest.

6.7. The onus is on the individual Directors to determine whether they are free from apparent or actual conflicts."

6.8. Transnet Policy. In addition to the above, a Director must:

6.8.1 declare an interest in any business entity (whether as a shareholder, member, Director, adviser, or in any other capacity) that:

6.8.1.1. have significant contracts with Transnet. In this regard, 'significant contracts' means contracts which account for at least 10% (ten percent) of such business entity's consolidated gross revenue in any one financial year; or

6.8.1.2 is a competitor of Transnet; or

6.8.1.3 is party to an acquisition of Transnet and/or its subsidiaries, its assets or businesses, or any part thereof;

6.8.1.4 is party to a joint venture or other business venture with Transnet or any of its subsidiaries;

6.8.1.5 tenders for advisory or other professional services related to the transactions referred to in paragraphs 6.8.1.3 and 6.8.1.4 above;

6.8.1.6 is party to any transaction that needs to be approved at Board level or by any of the committees of the Board of Transnet

6.8.2 disclose:

6.8.2.1 any direct or indirect interest in contracts or proposed contracts, which have been, or will be entered into by Transnet and must set out full particulars of that interest;

6.8.2.2 all Conflicts of Interest in accordance with this policy

6.8.3 The Board will be entitled, at any time, to determine that a particular interest of any Director or by a person related or inter-related to him constitutes a Conflict of Interest, and to recommend an appropriate way to manage such conflict, even if such a transaction falls outside the transactions set out above.

6.8.4. If a Director of the Company acquires, or Knows that a Related Person has acquired, a Personal Financial Interest in an agreement or other matter in which the Company has a Material Interest, after the agreement or other matter has been approved by the Company, the Director shall promptly disclose to the Board, the nature and extent of that interest, and the Material circumstances relating to the Director or Related Person's acquisition of that interest, as the case may be.

6.8.5. If, in the reasonable view of the other non-conflicted Directors, a Director or the Related Person in respect of such Director acts in competition with the Company relating to the matter to be considered at the meeting of the Board, the Director shall only be entitled to such information concerning the matter to be considered at the meeting of the Board as shall be necessary to enable the Director to identify that such Personal Financial Interest exists or continues to exist.

6.8.6. A decision by the Board, or a transaction or agreement approved by the Board, is valid despite any Personal Financial Interest of a Director or Related Person of a Director if:

6.8.6.1. was approved following the disclosure of the Personal Financial Interest in the manner contemplated in Section 75 and clause 6.8; or

6.8.6.2. Despite having been approved without disclosure of that Personal Financial Interest, it has been ratified by an Ordinary Resolution following disclosure of that Personal Financial Interest as so declared by you."

6.8.7. A court, on application by any interested person, may declare valid a transaction or agreement that had been approved by the Board, or shareholders as the case may be, despite the failure of the Director to satisfy the requirements of this clause."

8. Declaration of Interest Policy, the policy states in section 7. Declaration of a Conflict of Interest, on page nine:

"7.1. Declaration of Interest in Contracts

7.1.1. Applicable to: All Directors who have an interest, either directly or indirectly, or know that a related person has an interest in:

7.1.1.1. any new or existing contract with an entity external to Transnet which may

conduct business with Transnet;

7.1.1.2. acquiring Transnet and/or its subsidiaries, its assets or businesses, or any part thereof;

7.1.1.3 any joint venture or other business venture with Transnet or any of its subsidiaries;

7.1.1.4. tendering for the supply of goods or services to Transnet or tendering for advisory or other professional services related to the transactions referred to above, Collectively, a "Contractual Interest".

7.1.2. To be completed: Annually by Directors and as when a Contractual Interest is identified.

7.1.3. To be submitted: to the Group Company Secretary.

7.2 Annual declarations/Related party disclosures

7.2.1. Applicable to: All Directors.

7.2.2. To be completed: Annually and as and when a Conflict of Interest arises, and/or when directorship or financial interests of Directors change within the financial year, and/or when directorship or financial interests of persons Related to Directors change within the financial year.

7.2.3. To be submitted: to the Group Company Secretary.
Even if there are no conflicts of interest the prescribed Annexure must be completed as a Nil Declaration."

7.3. Declaration of interest at meetings

7.3.1. Applicable to: All members of/attendees at Key meetings and all Directors who have a Personal Financial Interest in respect of a matter to be considered at a meeting of the Board of Transnet.

7.3.2. If a Director has a Conflict of Interest in respect of a matter to be considered at a meeting, or knows that a Related person has a Personal Financial Interest in the matter, the Director must comply with the procedures more fully set out in

paragraph 6.5 above. Such a Director must not execute any document on behalf of Transnet in relation to the matter unless specifically requested or directed to do so by the Board.

7.3.3. To be completed: At each meeting.

7.3.4. To be submitted: to the applicable Committee Secretary.

9. Companies Act, section 1, Definitions, states:

"director" means a member of the board of a company, as contemplated in section 66, or an alternate director of a company and includes any person occupying the position of a director or alternate director, by whatever name designated,

'related party', when used in respect of two persons, means persons who are connected to one another in any manner contemplated in section 2(1) a) to (f)

'relationship' includes the connections subsisting between any two or more persons who are related or inter-related, as determined in accordance with section 2; and

'inter-related', when used in respect of three or more persons, means persons who are related to one another in a linked series of relationships, such that two of the persons are related in a manner contemplated in section 2(1), and one of the is related to the third, in any such manner, and so forth in an unbroken series.

10. Companies Act, section 75 Director's personal financial interests, states:

"(1) In this section-

(a) 'director' includes-

(i) an alternate director;

(ii) a prescribed officer; and

(iii) a person who is a member of a committee of the board of a company,

irrespective of whether the person is also a member of the company's board; and

(b) 'related person', when used in reference to a director, has the meaning set out in section 1, but also includes a second company of which the director or a related person is also a director, or a close corporation of which the director or a related person is a member.

(2) This section does not apply-

(a) to a director of a company-
(i) in respect of a decision that may generally affect
(aa) all of the directors of the company in their capacity as directors; or
(bb) a class of persons, despite the fact that the director is one member of that class of persons, unless the only members of the class are the director or persons related or inter-related to the director, or
(ii) in respect of a proposal to remove that director from office as contemplated in section 71; or

(b) to a company or its director if one person-
(i) holds all of the beneficial interests of all of the issued securities of the company; and
(ii) is the only director of the company.

(3) If a person is the only director of a company, but does not hold all of the beneficial interests of all of the issued securities of the company, that person may not-

(a) approve or enter into any agreement in which the person or a related person has a personal financial interest, or

(b) as a director, determine any other matter in which the person or a related person has a personal financial interest, unless the agreement or determination is approved by an ordinary resolution of the shareholders after the director has

disclosed the nature and extent of that interest to the shareholders.

(4) At any time, a director may disclose any personal financial interest in advance by delivering to the board, or shareholders in the case of a company contemplated in subsection (3), a notice in writing setting out the nature and extent of that interest, to be used generally for the purposes of this section until changed or withdrawn by further written notice from that director.

(5) If a director of a company, other than a company contemplated in subsection (2) (b) or (3), has a personal financial interest in respect of a matter to be considered at a meeting of the board, or knows that a related person has a personal financial interest in the matter, the director-

"(a) must disclose the interest and its general nature before the matter is considered at the meeting;

"(b) must disclose to the meeting any material information relating to the matter and known to the director;

(c) may disclose any observations or pertinent insights relating to the matter if requested to do so by the other directors;

(d) if present at the meeting, must leave the meeting immediately after making any disclosure contemplated in paragraph (b) or (c);

(e) must not take part in the consideration of the matter, except to the extent contemplated in paragraphs (b) and (c);

(f) while absent from the meeting in terms of this subsection-

(i) is to be regarded as being present at the meeting for the purpose of determining whether sufficient directors are present to constitute the meeting; and

(ii) is not to be regarded as being present at the meeting for the purpose of

determining whether a resolution has sufficient support to be adopted; and

(g) must not execute any document on behalf of the company in relation to the matter unless specifically requested or directed to do so by the board.

(6) If a director of a company acquires a personal financial interest in an agreement or other matter in which the company has a material interest, or knows that a related person has acquired a personal financial interest in the matter, after the agreement or other matter has been approved by the company, the director must promptly disclose to the board, or to the shareholders in the case of a company contemplated in subsection (3), the nature and extent of that interest and the material circumstances relating to the director or related person's acquisition of that interest.

(7) A decision by the board, or a transaction or agreement approved by the board or by a company as contemplated in subsection (3), in which a director or prescribed person has a financial interest of a director or person related to the director is only if-

(a) it was approved following disclosure of that interest in the manner contemplated in this section; or

(b) despite having been approved without disclosure of that interest, it-

(i) has subsequently been ratified by an ordinary resolution of the shareholders following disclosure of that interest; or

(ii) has been declared to be valid by a court in terms of subsection (8)."

"(8) A court, on application by any interested person, may declare valid a transaction or agreement that had been approved by the board, or shareholders, as the case may be, despite the failure of the director to satisfy the disclosure requirements of this section."

11. The Companies Act, section 76. Standards of directors conduct, states:

"(1) In this section, 'director' includes an alternate director, and-

(a) a prescribed officer, or

(b) a person who is a member of a committee of a board of a company, or of the audit committee of a company,

irrespective of whether or not the person is also a member of the company's board.

(2) A director of a company must-

(a) not use the position of director, or any information obtained while acting in the capacity of a director-

(i) to gain an advantage for the director, or for another person other than the company or a wholly-owned subsidiary of the company; or

(ii) to knowingly cause harm to the company or a subsidiary of the company; and

(b) communicate to the board at the earliest practicable opportunity any information that comes to the director's attention, unless the director-

(i) reasonably believes that the information is-

(aa) immaterial to the company; or

(bb) generally available to the public, or known to the other directors; or

(ii) is bound not to disclose that information by a legal or ethical obligation of confidentiality.

(3) Subject to subsections (4) and (5), a director of a company, when acting in that capacity, must exercise the powers and perform the functions of director-

(a) in good faith and for a proper purpose;

(b) in the best interests of the company; and

(c) with the degree of care, skill and diligence that may reasonably be expected of a person-

(i) carrying out the same functions in relation to the company as those carried out by that director; and

(ii) having the general knowledge, skill and experience of that director.

(4) In respect of any particular matter arising in the exercise of the powers or the performance of the functions of director a particular director of a company-

(a) will have satisfied the obligations of subsection (3)(a) and ( )

(i) the director has taken reasonably diligent steps to become informed about the matter;

(ii) either-

(aa) the director had no material personal financial interest in the subject matter of the decision and had no reasonable basis to know that any related person had a personal financial interest in the matter; or

(bb) the director complied with the requirements of section 75 with respect to any interest contemplated in subparagraph (aa); and

(iii) the director made a decision or supported the decision of a committee or the board, with regard to that matter and the director had a rational basis for believing and did believe, that the decision was in the best interests of the company; and

(b) is entitled to rely on-

(i) the performance by any of the persons-

(aa) referred to in subsection (5); or

(bb) to whom the board may reasonably have delegated, formally or informally by course of conduct, the authority or duty to perform one or more of the board's functions that are delegable under applicable law; and

(ii) any information, opinions, recommendations, reports or statements, including financial statements and other financial data, prepared or presented by any of the

persons specified in subsection (5).

(5) To the extent contemplated in subsection (4) (b), a director is entitled to rely on-

(a) one or more employees of the company whom the director reasonably believes to be reliable and competent in the functions performed or the information, opinions, reports or statements provided;

(b) legal counsel, accountants, or other professional persons retained by the company, the board or a committee as to matters involving skills or expertise that the director reasonably believes are matters-
(i) within the particular person's professional or expert competence; or
(ii) as to which the particular person merits confidence; or
(c) a committee of the board of which the director is not a member, unless the director has reason to believe that the actions of the committee do not merit confidence."

12. King III Report on Corporate Governance, 2009 ("the King Code"), chapter 2 - Board and Directors, on page 61 it states.

"24. Any director who is appointed to the board as the representative of a party with a substantial interest in the company, such as a major shareholder or a substantial creditor, should recognize the potential for conflict. However, that director must understand that the duty to act in the best interests of the company remains paramount.

25. Certain conflicts of interest are fundamental and should be avoided. Other conflicts (whether real or perceived) should be disclosed in good time and in full detail to the board and then appropriately managed."

13. Code of Ethics, section: Scope on page 2, states:

"2. The Code of Ethics will apply to all Transnet employees, including permanent and non-permanent employees, non-executive directors as well as service providers, suppliers and trade partners of Transnet;"

14. Code of Ethics, section: Ethical Behaviour on page 6, states:

"6.2. Trusting each other and being professional in conduct both within and outside the work environment such that the conduct will not reflect negatively upon Transnet's image and reputation;

6.3. Refraining from using a position of authority and/or facilities provided by Transnet to further your own interests or that of friends and relatives;

6.4. Desisting from allowing personal interests to influence business decisions or tasks and disclosing any actual or potential conflicts of interests;

6.5. Honouring the content and spirit of all business transactions and not abusing or harming Transnet's reputation, assets or interests;

6.6. Being honest and transparent in all actions and portraying a corporate image of integrity, honesty and stringent business ethics;

6.10. Respecting and maintaining the confidentiality of sensitive information gained through association with Transnet."

15. Code of Ethics, section: Confidential Information and Trade Secrets on page 8, states:

"9. Employees and Non-Executive Directors

9.1. Must not disclose or use any information of Transnet (or a third party) obtained through carrying out of the employee's duties for any purpose other than to fulfill his/her Transnet duties,

10. Will have access to information related to Transnet's business strategies and contractual relationships with third parties. This information must be regarded as trade secrets, which include the following:

10.1. Intellectual property, know-how, processes and techniques, technical detail, methods of operating cost and source of material, pricing and purchasing policies, systems design and development information;

10.2. Names of customers and financial agreements between Transnet and suppliers of goods and services, information, hardware and software products;

10.3. The contractual and financial arrangements between Transnet and its customers and business associates;

10.4. The design and function of systems, software and/or hardware used or supplied by Transnet;

10.5. Details of Transnet financial structure and operating results;

10.6. Details of Transnet's business operation trategic planning and positioning, and policy considerations; and

10.7. Other matters which relate to Transnet's business in respect of which information is not readily available in the ordinary course of business to a competitor or external party."

16. Code of Ethics, section: Relationship with Trade Partners on page 10, states:

"16. If such a relationship may influence or create the perception of influencing their decisions in the performance of their duties on behalf of Transnet, employees should not invest in, or acquire a financial interest directly or indirectly, in such an

entity. All interests in businesses or entities must be declared in line with the Transnet Declaration of Interest and Related Party Disclosures Policy."

17. Code of Ethics, section: Non-Executive Directorship on page 11, states:

"20. Non-Executive Directors who have been invited to hold outside directorship or membership should ensure that such invites is brought to the attention of the Company Secretariat for Declaration of Interest purposes."

5.2 FINDINGS:

MR SHARMA'S EMAIL RESPONSE TO MR MKWANAZI STYLED *"RE: MAIL & GUARDIAN ARTICLE JULY 4, 2014"* DATED 10 JULY 2014 AND MR SHARMA'S EMAIL COMPLAINT TO THE OMBUDSMAN IN RESPECT OF THE SAID MEDIA REPORT

1. From our review of Mr Sharma's email response to Mr Mkwanazi styled *"Re: Mail & Guardian article July 4, 2014"* dated 10 July 2014, the following was noted as mentioned by Mr Sharma:

   a) It is the responsibility of the Chairman of the Board ("the designation") to recommend the appointment of "Committee Chairs to the Board".

   b) He identified an opportunity with VR Laser Services and set out to acquire it. He "initiated discussions and proceeded to "negotiate" with the "owners". His first meeting with VR Laser Services was in March 2013, after which formal discussions followed in May 2013 and the "deal" was subsequently finalised in December 2013 (Mr Sharma did not provide details relevant to individuals he dealt or negotiated with in this regard)

   c) He approached "Mr Essa" (Mr Salim Aziz Essa, "Mr Essa") as an additional investor as a result of the final negotiated price and "not wanting to over leverage the transaction". As Mr Sharma was not in a position to contribute due to the required "capital calls", 75% of VR Laser Services was subsequently bought by Mr Essa and the balance (25%) remained with an

existing shareholder.

d) VR Laser Services has for the past 2 years, and currently still is, "running at a loss", which required considerable contributions from the shareholders. As such, the mentioned minority shareholder "allegedly" sold his stake to "Craysure Investments" (entity was identified as "Craysure Investments (Pty) Ltd, "Craysure Investments").

e) Due to his "limited budget", he "remains" with "a property company" and does not participate in the "operating business".

f) VR Laser Services' last invoice to Transnet was in 2011 and does not currently do any business with Transnet. Prior to 2011, VR Laser Services was in business with Transnet for 6 years to a value of R2,00,000.00 per year.

g) He has been, and currently still is, "friends" with the "Guptas" ("the Gupta family"). Whether he does business with the "Guptas" or not is a "personal matter".

h) There is no conflict between his "private business affairs" and his roles and responsibility to Transnet.

2. From our review of Mr Sharma's e-mail complaint to Ombudsman, in respect of the said media report, the following was noted as mentioned by Mr Sharma in addition to the above:

a) The former Transnet BADC Chairman, Mr Don Mkhwanazi, is a relative of Mr Mkhwanazi.

b) Subsequent to the departure of Mr Don Mkhwanazi, Mr Mkhwanazi recommended the appointment of Mr Sharma as the Transnet BADC Chairman.

c) The BADC provides "oversight on the process followed by executives and does not decide on the assignment of tender awards".

d) The BADC, under his Chairmanship, took a decision that information relating to the tender should only be disclosed to Officials engaged in adjudicating the tender and, no information of any substance was shared with the Committee.

e) He "has it on good authority" that a "board member(s)" had an influence on the

	publication of the "defamatory article". f) He was not aware of the minority shareholder's "alleged" sale to "Craysure Investments"; (Note: that this is in direct contradiction of what was mentioned in his reply to the Chairman of the BOD. g) In addition to the "Guptas", he also has an "association" with "Duduzane Zuma". h) There is no conflict between his dealings with VR Laser Services, VR Laser Property and Transnet as neither company does business with Transnet.
5.3	FINDINGS: THE MAIL & GUARDIAN'S EMAIL RESPONSE IN RESPECT OF MR SHARMA'S COMPLAINT, INCLUDING ATTACHED APPENDICES, TO THE OMBUDSMAN
	1. From our review of the Mail & Guardian's email response in respect of Mr Sharma's complaint, including attached appendices, to the Ombudsman, the following was noted: a) Mr Sharma's allegation that a board member(s) had an influence on the publication of the 'defamatory article' is denied. The story is based "entirely on documentary evidence and on the record corroboration by sources". b) The Mail & Guardian verified when and how Mr Sharma purchased "VR Laser", which included speaking to the former majority owner, "Mr van Reenen", who sold his share of the company to Mr Sharma; and to the minority empowerment shareholder "Mr Jiyane", who initially kept his stake, but then agreed to sell it to Craysure Investments, the company associated with Mr Gupta and Mr Zuma. c) He (Mr Sharma), "Mr van Reenen" and "Mr Jiyane" stated that the purchase agreement for the purchase of "VR Laser" was concluded in December 2013. In addition, various elements of the purchase-agreement took several months post-December to tie up. "VRLS Properties'" share register shows that "Issar Capital" acquired its 100% shareholding in the company on 6 March 2014 (attached hereto as *Appendix 4.3*).

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d) Transnet finalised the locomotive tender award on 17 March 2014.

e) All the major bidders for the Transnet locomotive tender actively considered the company (VR Laser) as a potential subcontractor even as Mr Sharma acquired part of it and before the tender process he supervised wa complete. Neither Mr Sharma in his complaint, nor any other relevant party, has denied these "highly significant visits by a l the eventua' winn'ng bidde s" that took place as "Sharma was concluding negotiations for the acquisition of 'VR Laser".

f) "Mr Jiyane" also revea ed tha all four foreign companies that would later w a slice of Transnet's new locomotive tend r had visited VR Laser's factory between December 2013 and January, to evaluate them as potentia local suppliers". See 14 [illegible] VR pg 11 – 1

g) Mr Sharma approached "VR Laser" first and later included Mr Essa. Notwithstanding the reasons he (Mr Sharma) arrived at f r in lu ing Mr Essa, "it is clear that Mr Sharma's intent to buy 'VR Laser" was unamb gu us at the outset".

h) Mr Essa has previously been profiled as one of the leaders' of Sharma's investment company, "Issar Capital", which owns "VRLS Properties"

i) "Sharma and Essa are co-directors in another business, solar panel manufacturing company "Daqo South Africa", since November 2012. They are also co-directors in a third company, "National Agricultural Development Project" since December 2012. The company's share reg'st r shows that Sharma and Essa each acquired a shareholding in Nationa Agricul'u a Development Project from the Gupta family owned companies on t e same day in November last year".

j) Both Mr Sharma and Mr Essa informed the "M&G" that Mr Sharma's property company "VRLS Property" received rent from Mr Essa's "VR Laser" – "thus, Mr Sharma derives direct material benefit from "VR Laser's" business".

k) The BADC chaired by Mr Sharma had overall supervision of all Transnet group tenders above a certain threshold amount, which included the 1064 locomotive contract.

l) The article demonstrates the business relationship since late 2013 betwee

	the Gupta s and Mr Sharma in two instances namely, Craysure Investments' acquisition of a 24,9% stake in "VR Laser" after Messrs Sharma and Essa had concluded purchase negotiations with its previous owners, and the transfer of shares from the Gupta family-linked companies to Sharma-and Essa-owned companies in "Nationa' Agricult al Development Project". m) Mr Sharma tated that neither "VR Laser" nor "VRLS Properties" "has done or is doing or contemplating doing business with Transnet". n) Transnet confirmed that "VR Laser" "has performed services" for Transnet Engineering since 2006.

5.4	FINDINGS: INTERVIEWS AND CONSULTATIONS WITH TRANSNET STAFF REGARDING MR SHARMA'S POSITION IN TRANSNET
	1. Ms C ba confirmed that Mr Sharma is a Non-Executive Director on the BOD of Transnet as well as the Chairman of the BADC of Transnet.

5.5	FINDINGS: INTERVIEWS AND CONSULTATIONS WITH RELEVANT BOARD MEMBERS AND BADC MEMBERS REGARDING THE BREACH IN CONFIDENTIALITY AND HOW THE POSSIBLE LEAK OCCURRED
	1. We cannot i vest gate or conc de on this tter as Mr Sharma did not want to provide us with specific informati that w u d make further investigation poss b'e.

5.6	FINDINGS: MR SHARMA'S ALLEGED ACQUISITION OF A SHARE IN VR LASER SERVICES
	1. From Mr Sharma's e-mail correspondence with Mr Mkwanazi and the Ombudsman, Mr Sharma confirmed his relationships with Mr Essa (with whom he also co-owns a property, refer *Appendix 9.1*), the Gupta family and Mr Zuma. General Google searches and Mr Sharma's February 2013 and April 2014

declarations (refer *Appendix 5.2* and *5.3*) also co firmed his spouse as Ms Tarina Patel.

2. Our probity search results revealed that Mr Sharma has interests in the form of directorships (including shareholding in certain instances) in the following entities, which were not declared, as part of his annual February 2013 declaration, his April 2014 declaration or during any BADC meetings (refer tables 1 and 2 below for a breakdown relevant to Messrs Sharma and Essa's active directorships). It should be noted that Mr Sharma did however declare his interests in other entities (refer *Appendix 5.2* and *5.3* for the entities declared).

   a) 79 NDC Swellendam (Pty) Ltd, appointed on 12/08/2013;
   b) Appledore Investments (Pty) Ltd, appointed on 18/05/2006. It should be noted that Mr Sharma also neglected to declare his spouse's interest in this entity as she is listed as an active director;
   c) Meer Sharma and Associates CC, date of appointment is unknown (it should be noted that the status of this entity is listed as "deregistration final");
   d) Mirase Investments (Pty) Ltd, appointed on 10/05/2006 (it should be noted that the status of this entity is listed as "deregistration final");
   e) National Agricultural Development Project (Pty) Ltd ("NADP"), appointed on 07/11/2013. Mr Sharma also did not declare Mr Essa's active directorship in this entity; and
   f) VRLS Properties (Pty) Ltd ("VRLS Properties"), appointed on 09/12/2013.

3. Although Mr Sharma is not listed as a director of the entity styled "Elgasolve (Pty) Ltd" ("Elgasolve"), he declared a 50% shareholding in his February 2013 declaration. However, Mr Sharma did not declare any further interests in this entity during his April 2014 declaration or any BADC meetings. Mr Sharma also did not declare Mr Essa's interest in this entity.

4. It is unknown to us when Mr Sharma became a shareholder in Elgasolve as we did not have sight of this entity's share register.

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Table 1: Summary of probity search results relevant to Mr Sharma

#	Mr Sharma's active directorship(s) & dates of appointment	Findings / comments
1	79 NDC Swellendam (Pty) Ltd, appointed on 12/08/2013	• Mr Sharma did not declare his interest in this entity. • 79 NDC Swellendam (Pty) Ltd and Mr Essa share the same address details.
2	Appledore Investments (Pty) Ltd, appointed on 18/05/2006	• Mr Sharma did not declare his interest in this entity. • One of Mr Sharma's co-active directors is his spouse, Ms Tanita Patel, who was appointed on the same date as Mr Sharma. Mr Sharma did not declare his spouse's interest in this entity. • Appledore Investments (Pty) Ltd and Mutree Investments (Pty) Ltd share the same auditors and address details.
3	Daqo South Africa (Pty) Ltd, appointed on 07/11/2012	• Mr Sharma declared his interest in this entity (initially limited to a directorship after which a 20% shareholding was declared) on both 28/02/2013 and 24/04/2014 respectively. • Three of Mr Sharma's co-active directors in this entity are styled "Dafeng Shi", "Feiyi Yao Dafeng" and "Xiang Xu Tai", for whom were appointed on the same date as Mr Sharma. • Mr Essa is also listed as a co-active director of this entity and was appointed on the same date as Mr Sharma. Mr Sharma did not declare Mr Essa's interest in this entity. • Daqo South Africa (Pty) Ltd and GMT Concepts (Pty) Ltd share the same address details.
4	GMT Concepts (Pty) Ltd, appointed on 12/11/2000	• Mr Sharma declared his interest in this entity (20% shareholding) on both 28/02/2013 and 24/04/2014 respectively. • Mr Sharma's two co-active directors are "Yoke Fong Tan" and "Peck Hla Tan", both of which were appointed on the same date as Mr Sharma. • The previous listed address details of GMT Concepts (Pty) Ltd are similar to the registered details of Issar Investment Holding (Pty) Ltd and Issar Capital (Pty) Ltd ("Issar Capital"). • Mutree Investments (Pty) Ltd and Daqo South Africa (Pty) Ltd share the same address details.

#	Mr Sharma's active directorship(s) & dates of appointment	Findings / comments
5	Issar Capital (Pty) Ltd, appointed on 17/12/2010	• Mr Sharma declared his interest in this entity (100% shareholding) on both 28/02/2013 and 24/04/2014 respectively. • Issar Capital and Issar Investment Holdings (Pty) Ltd share the same address details and current auditors. • Address details of Issar Capital is similar to previously listed address details of GMT Concepts (Pty) Ltd.
6	Issar Investment Holdings (Pty) Ltd, appointed on 14/01/2011	• Mr Sharma declared his interest in this entity (100% shareholding) on both 28/02/2013 and 24/04/2014 respectively. • Issar Investment Holdings (Pty) Ltd and Issar Capital share the same address details and current auditors. • Address details of Issar Investment Holdings (Pty) Ltd is similar to previously listed address details of GMT Concepts (Pty) Ltd.
7	Meer Sharma and Associates CC, date of appointment was not reflected in our probity search results	• Mr Sharma did not declare an interest in this entity.
8	M fase Investments (Pty) Ltd, appointed on 10/05/2006	• Mr Sharma did not declare his interest in this entity • Mufase Investments (Pty) Ltd and Appledore Investments (Pty) Ltd share the same auditors and address details.
9	National Agricultural Development Project (Pty) Ltd, appointed on 07/11/2013	• Mr Sharma did not declare his interest in this entity. • Mr Sharma's co-active director is Mr Essa. Mr Sharma did not declare Mr Essa's interest in this entity. • NADP and Ithemba (which is also an active director of VR Laser Services) share the same address details. • According to the share register of NADP, Elgnsolve owns 80% of the shares in this entity and Issar Capital owns the remaining 20% of the shares in this entity.

#	Mr Sharma's active directorship(s) & dates of appointment	Findings / comments
10	Nulane Investments 204 (Pty) Ltd, appointed on 17/09/2008	• Mr Sharma declared his interest in this entity (100% shareholding) on both 28/02/2013 and 24/04/2014 respectively. • Nulane Investments 204 (Pty) Ltd, its current auditors and Mr Essa share the same address details.
11	Transnet SOC Ltd, appointed on 13/12/2010	N/A
12	VRLS Properties (Pty) Ltd, appointed on 09/12/2013	• Mr Sharma did not declare his interest in this entity • Mr Sharma's co-active director in VRLS Properties is Ithemba (appointed on 1 March 2014, which provide secretarial work for various companies), which is also an active director of VR Laser Services. • Two of the previous directors of this entity (Jacobus Meyer Greeff and Mr Bloxham) were also previous directors of VR Laser Services and VRLS Investments (Pty) Ltd. Mr Van Loenen, a former director of this entity is also listed as a previous director of VR Laser Services and an active director of VRLS Investments (Pty) Ltd. • Mr Ilyane, a former director of this entity, also holds an active directorship in VR Laser Services. • VRLS Properties and VR Laser Services share the same address details.

Table 2: Summary of probity search results relevant to Mr Essa's directorships held in entities relevant to this investigation

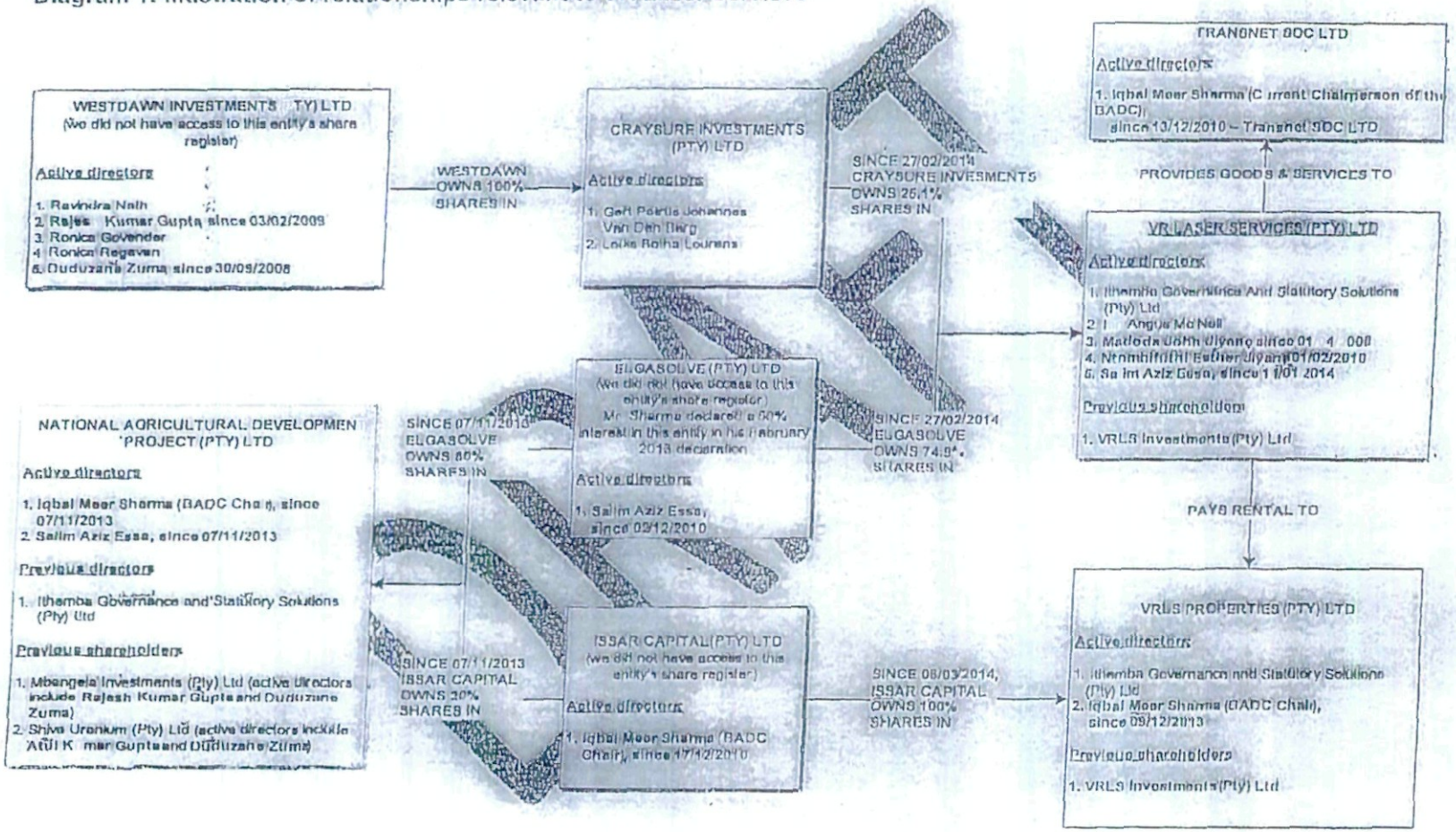
#	*Mr Essa's active* directorship(s) & dates of appointment	Findings / comments
1	Daqo South Africa (Pty) Ltd, appointed on 07/11/2012	• Mr Sharma declared his interest in this entity (initially limited to a directorship after which a 28% shareholding was declared for both 28/02/2013 and 24/04/2014 respectively. • Three of Mr Sharma's co-active directors in this entity are styled "Dafeng Shi", "Feiyu Yao Dafeng" and "Xiang Xu", all of whom were appointed on the same date as Mr Sharma. • Mr Essa is also listed as an active director of this entity and was appointed on the same date as Mr Sharma. Mr Sharma did not declare Mr Essa's interest in this entity. • DaqoSouth Africa (Pty) Ltd and GM Concepts (Pty) Ltd share the same address details.
2	Elgasolve (Pty) Ltd, appointed on 02/12/2013	• Although Mr Sharma is not listed as a director of Elgasolve, he declared a 60% shareholding in this entity on 28 February 2013. No further declarations in relation to this entity, including during BADC meetings, were made by Mr Sharma. • Mr Sharma also did not declare Mr Essa's interest in this entity.
3	National Agricultural Development Projects (Pty) Ltd, appointed on 07/11/2013	• Mr Essa's co-active directors Mr Sharma (Mr Sharma did not declare Mr Essa's interest in this entity) • A Patel (who is an active director of Vuser Services) shares the same address details.

#	Mr Essa's active directorship(s) & dates of appointment	Findings / comments
4	VR Laser Services (Pty) Ltd, appointed on 14/01/2014	• Mr Sharma did not declare an interest in this entity, including his own or Mr Essa's (refer Diagram 1 on page 39 for details pertaining to such interest). • According to the share register relating to VR Laser Services, Elgasolve owns 74.9% of the shares in this entity and Craysure Investments (Pty) Ltd owns the remaining 25.1% shares in this entity. • From our analyses of the Microsoft Excel spreadsheet showing all payments made to VR Laser Services, Transnet's most recent procurement from VR Laser Services occurred during the period February 2014 to April 2014 (total amount of R3,552.25 including VAT).

5. In addition to the lack of appropriate declarations of interest by Mr Sharma as listed above, the following should be noted in respect of Messrs Sharma, Essa, Zuma and the Gupta family's interests in VR Laser Services (refer diagram 1 below for a breakdown relevant to these relationships):

   a) Messrs Sharma and Essa are active directors of NADP, an entity in which Elgasolve and Issar Capital hold an 80% and 20% shareholding respectively.
   b) Mr Essa is the sole director of Elgasolve and Mr Sharma declared a shareholding of 50% in this entity on 21 February 2013.
   c) Elgasolve in turn holds a 74.9% shareholding in VR Laser Services.
   d) Issar Capital in turn holds a 100% share in VRLS Properties, the entity from which VR Laser Services rents land.
   e) As such, Mr Sharma has interests in VR Laser Services through his involvement in NADP, Elgasolve and Issar Capital respectively.
   f) Mr Zuma and members of the Gupta family are listed as active directors of Mbangela Investments (Pty) Ltd and Shiva Uranium (P) Ltd respectively, entities which previously held shares in NADP.
   g) Mr Zuma and members of the Gupta family are further listed as active directors of Westdawn Investments (Pty) Ltd, an entity with 100% shareholding in Crayston Investments. Crayston Investments in turn has a 25.1% shareholding in VR Laser Services.
   h) Despite numerous requests to date (27 November 2014) we have not r the share registers of Issar Capital from Fin5 Incorporat and Westdawn Investments (Pty) Ltd from Itemba Governance and Statutory Solutions.

Diagram 1: Illustration of relationships relevant to VR Laser Services



	6. The following should also be noted with respect to Mr Sharma's email correspondence to Mr Mkwanazi, dated 10 July 2014, and the Press Ombudsman, dated 4 July 2014 in relation to the interests illustrated above: a) Mr Sharma stated that VR Laser Services' last invoice to Transnet was in 2011 for a "paltry" amount. This is however not correct as Transnet's most recent procurement from VR Laser Services occurred in the period February 2014 to April 2014. b) Although Mr Sharma stated that VR Laser Services "was and currently still is running at a loss", for which "considerable contributions from the shareholders" were required, and that he decided not to "participate in the company" due to the "capital calls", Mr Sharma does in fact have an interest in VR Laser Services. This interest, as discussed above, is evident through his involvement in NAMP, Elgasolve and Nissar Capital respectively.

5.7	FINDINGS: MESSRS GUPTA AND ZUMA'S ALLEGED ACQUISITION OF AN INTEREST IN "VR LASER SERVICES"
	1. Refer to findings above in respect of "Mr Sharma's alleged acquisition of a share in VR Laser Services" and "Messrs Gupta and Zuma's alleged acquisition of an interest in VR Laser Services". 2. Mr Jiyane confirmed that Craysure Investments is in the process of purchasing his shares in VR Laser Services. He further confirmed that Craysure Investments is a wholly-owned subsidiary of Westdawn Investments (Pty) Ltd. 3. Westdawn Investments (Pty) Ltd is owned by Mr Zuma and the Gupta family.

5.8	FINDINGS: THE ROLE PLAYED BY OTHER INDIVIDUALS / ENTITIES, INCLUDING RELATED PROBITY SEARCH RESULTS AND SHAREHOLDING
	1. Refer findings above in respect of "Mr Sharma's alleged acquisition of a share in VR Laser Services" and "Messrs Gupta and Zuma's alleged acquisition of an interest in VR Laser Services".

5.9	FINDINGS: INTERVIEWS AND CONSULTATIONS WITH SHAREHOLDERS IN "VR LASER SERVICES"
	1. During a telephone interview, Mr Van Reenen stated the following: a) VRLS Investments (Pty) Ltd previously owned 74.9% of VR Lasers Services and this company was owned by Mr Broxham and Mr Van Reenen. The remaining 25.1% was owned by Mr Tiyane. b) Mr Tiyane was the one who initially had contact with Mr Sharma around June / July 2013. c) He subsequently met Mr Sharma around three to four times during the course of 2013. d) They managed to reach an agreement of sale and the deal was done on 9 December 2013. e) Mr Essa only became involved in the deal when they were about to sign the purchase agreement. f) From the offset Mr Sharma disclosed to him that he is on the Board of Transnet. g) He stated that Mr Essa purchased VR Laser Services and Mr Sharma purchased VRLS Properties. h) He stated that, at the time when negotiations began, the business was not running at a profit and lost around R8 million in the 6 months leading up to December. i) He confirmed that he was aware that the winning bidders "came around", but

that he has no further knowledge of the visits as Mr Jiyane hosted them.

j) He stated tha. he is aware of Mr Jiyane being in negotiations to sell his shares.

2. During a telephone interview, Mr Jiyane stated the following:

a) The decision was taken to sell VR Laser Services around 2012.

b) He was involved with the initial sale process which started around June / July 2013.

c) He was first introduced to Mr Essa and Mr Essa in turn introd ced him to Mr Sharma. This all occurred in 2013.

d) Mr Essa is currently the majority shareholder in VR Laser Services. Mr Essa purchased these shares through Elgasolve.

e) VR Laser Services "hosts" a number of Original Equipment Manufacturers ("OEM's") on various projects to demonstrate manufacturing capabilities. VR Laser Services manufactures various components as well as fabricated assemblies for various OEM's.

f) The two Chinese companies approached VR Laser Services around November or December 2013. They wanted to have a look at VR Laser Services' capacities and capabilities. He was approached by their BEE partner (he cannot recall the name) and was thereafter introduced to the Chinese partners.

g) The two Chinese companies who visited in 2013 were "CSR" and "CNR". They approached VR Laser Services because they were manufacturing the "95 locomotives" in terms of the previous Transnet contract.

h) The third company was "General Electric". He met them earlier last year or towards the end of 2012. VR Laser Services just discussed generally what the company does etc. cutting steel.

i) "Esther Jiyane" is his wife and all his shares in VR Laser Services are held in her name.

j) The share register is correct in saying that there are new shareholders. However, the shares are not sold as yet as there are certain milesto es that need to be met before the sale can be completed

	k) His shares are being sold to Craysure Investments. He only dealt with an individual by the name of "J.P Arora" from Craysure Investments. l) He is aware that Craysure Investments is wholly owned by Westdawn Investments (Pty) Ltd. m) He stated that Ithemba is the new company secretary for VR Laser Services n) When we tried to pose follow up questions to Mr Jiyane, we received a reply via his lawyer that he is no longer prepared to be interviewed. 3. During a telephone interview, Mr Bloxham mentioned the following: a) He only negotiated with Mr Sharma for the sale of VR Laser Services. b) During June/ July 2013, negotiations were at a halt due to disagreement on the sale price. However, in September 2013, Mr Sharma approached him and Mr Van Reenen again and came with a better offer.

5.10	FINDINGS: INTERVIEWS AND CONSULTATIONS WITH EMPLOYEES OF "VR LASER SERVICES" REGARDING SITE VISITS PERFORMED BY BIDDERS
	1. During a telephone interview, Mr McNeil mentioned the following: a) He had no knowledge of who hold shares in VR Laser Services. b) He had no knowledge of the visits that were conducted by the winning bidders. 2. During a telephone interview, Mr Botha mentioned the following: a) He knows that there are new owners of VR Laser Services, but does not have any further information about them. b) He is not aware of any site visits made by the winning bidders.

5.11	FINDINGS: INTERVIEWS AND CONSULTATIONS WITH BIDDERS REGARDING SITE VISITS PERFORMED AT "VR LASER SERVICES"
	Bombardier Transportation

1. In an email dated 15 September 2014 (attached hereto as *Appendix 10.1*), Mr Makhubela of Bombardier Transportation stated the following. *"They never visited the premises of VR Laser Services."*

CSR E-Loco Supply (Pty) Ltd

1. In an email dated 16 October 2014 (attached hereto as *Appendix 10.2*), Mr Wang of CSR E-Loco Supply stated the following:
   a) They visited VR Laser Services in October 2013;
   b) The purpose of the visit was to identify opportunities to improve the localisation of locomotives being manufactured for Transnet;
   c) They do not know the details of the owners of VR Laser Services;
   d) They had no contact with Mr Sharma and are not aware of his business associates;
   e) CSR E-Loco Supply concluded that they would not do business with VR Laser Services as they did not meet their manufacturing specifications;
   f) They performed numerous site visits on a number of local suppliers, these site visits commenced when CSR E-Loco Supply was awarded the tender to manufacture the 95 locomotives; and
   g) VR Laser Services visited CSR E-Loco Supply in China during April 2014. However to date (27 November 2014) CSR E-Loco Supply has not appointed VR Laser Services' as one of their sub-contractors.

General Electric

1. In an email dated 15 October 2013 (attached hereto as *Appendix 10.3*), Mr Zeenith Ebrahim of General Electric stated the following
   a) They never visited the premises of VR Laser Services;
   b) The Transnet Board of Directors visited General Electric in the United States of America during October 2014. Mr Sharma was part of the delegation from Transnet who visited them. There was no mention of VR Laser Services during this visit; and
   c) There had been no communications between General Electric and VR Laser Services.

	CNR Import & Export Corporation Ltd 1. We have requested, but not yet received any feedback from CNR Import & Export Corporate regarding the alleged site visits by them to VR Laser Services.

5.12	FINDINGS: THE PROCESS FOLLOWED BY THE BADC IN AWARDING THE LOCOMOTIVE CONTRACT TO THE FOUR WINNING BIDDERS
	1. According to Mr Thamsanqa Jiyane, the BADC's involvement with regards to the two tenders (the Diesel and Electrical locomotives tenders) collectively referred to as the 1064 tender was as follows: a) Management obtained approval from the BOD and BADC, in accordance with the delegations of authority of Transnet, to go out on tender to acquire 1064 locomotives; b) The BADC then reviewed and approved a summary of the evaluation criteria for the 1064 tender; c) The BADC was required to approve the recommendations made by Management as to which tenderers should be awarded the contract; and d) The BADC "did not even know the names of the tenderers as they were referred to as 1, 2, 3, 4 etc. in the management presentations made to the BADC" relating to the results of the evaluations by management of the 1064 tender. 2. The BADC approved the TFR Locomotive Procurement Strategy on 6 August 2012. Mr Sharma was present at this meeting in his capacity as member of the BADC. 3. The two tenders collectively referred to as the 1064 tender was first advertised on 13 July 2012 according to Ms Lindiwe Mdletshe, Commodities Manager at Transnet and the Sunday Times' advertisement dated the same date. 4. The submission close date for the 1064 tender was 30 April 2013 according to the

Tender Opening Forms for tender numbers TFRAC-HO-8608 Electrical and TFRAC-HO-8609 Diesel.

5. According to the Tender Opening Form for tender number TFRAC-HO-8608 Electrical dated 30 April 2013, the following tenderers submitted tenders for the Electrical tender:
   a) Bombadier Transportations, "T1" according to the evaluation documentation;
   b) CSR E-Loco Supply Proprietary Limited, "T2" according to the evaluation documentation;
   c) Alstom (consortium consisting of Woman Rail Consulting and Engineering (Pty) Ltd and New Africa Rail), "T3" according to the evaluation documentation;
   d) Bongiveli, "T4" according to the evaluation documentation;
   e) Siemens, "T5" according to the evaluation documentation;
   f) CNR Import & Export Corporation Ltd (consortium consisting of CNR Import and Export, Global Railway Africa and Cadiz Corporate Solutions & Endinamax (Pty) Ltd), "T6" according to the evaluation documentation; and
   g) Mitsui/Toshiba (Mars), "T7" according to the evaluation documentation.

6. According to the Tender Opening Form for tender number TFRAC-HO-8609 Diesel dated 30 April 2013, the following tenderers submitted tenders for the Diesel tender:
   a) CNR Import & Corporation LTD (consortium consisting of Global Railway Africa/Cadiz Corporate Solutions & Endinamix (Pty) Ltd), "T1" according to the evaluation documentation;
   b) CSR Dolwe Consortium (consortium consisting of CSR Qishuyan Co. Ltd and Pin Ezy Investments), "T2" according to the evaluation documentation;
   c) EMD Africa, "T3" according to the evaluation documentation; and
   d) G E South Africa "T4" according to the evaluation documentation.

7. Management started evaluating the 1064 tender on 8 May 2013 according to the first register of evaluators for the TFRAC-HO-8608 Electrical and TFRAC-HO-

8609 Diesel tenders.

8. According to a memorandum submitted by Mr Molefe ("Management") to the BADC dated 17 January 2014 with the subject: "*Request for approval to negotiate and award of business to the short listed tenderers for the supply of 599 (COCO) new dual voltage locomotives for the general freight business (GFB)*", the tenderers scored as follows during the evaluation of the Electrical locomotive tender:

	WHAT IS BEING MEASURED	WEIGHT	T1	T2	T3	T5	T7
1	BBBEE SCORE CARD	10.00	8.00	6.00	4.00	6.00	6.00
2	SD	20.00	15.50	16.75	15.12	15.67	15.89
3	Further Recognition Criteria (Current)	5.00	0.88	0.47	0.16	1.66	2.16
4	Further Recognition Criteria (Future)	5.00	0.94	2.11	1.23	2.45	1.82
5	Price (Total Cost of Ownership (TCO) excl. unscheduled and excl. scheduled maintenance and excl. Bonus point allocation	60.00	40.65	36.60	11.65	15.88	25.78
	TOTAL SCORE	100	65.96	61.33	32.41	44.60	52.64

9. Tenderers T4 and T6 did not meet the technical requirements for urther evaluation and therefore their scores are not included in the table above.

10. According to this memorandum, management recommended that tenderers T1 (Bombadier Transportations) and T2 (CSR E-Loco Supply Proprietary Limited) be awarded the contract to supply the Electrical locomotives.

11. This recommendation by management was approved by the BADC on 24 January 2014.

12. According to a memorandum submitted by Mr Molefe ("Management") to the BADC dated 17 January 2014 with the subject: "*Request for Approval to Negotiate and Award of Business to the Short Listed Tenderers for the Supply of 465 New Diesel Locomotives for the General Freight Business (GFB)*", the tenderers scored

negotiations will be within the allowed premium.

g) The final results of the evaluations after the best and final offers are summarised in the table below:

	WHAT IS BEING MEASURED	WEIGHT	T1	T2	T3	T4
1	BBBEE SCORE CARD	10.00	6.00	0.00	10.00	9.00
2	SD	[illegible]	13.23	15.12	14.86	13.84
3	Further Recognition Criteria (Current)	[illegible]	0.60	0.36	1.9	1 1
	Further Recognition Criteria (Future)	5.00	1.44	0.99	1.32	1 93
5	Price (Total Cost of Ownership (TCO) excl. unscheduled and excl. scheduled maintenance and exc. borus poi(Relocation)	60.00	20 48	19.65	13.85	37 13
	TOTAL SCORE	100	41.75	37.12	40.93	62.76

14. According to this memorandum, management recommended that tenderers T1 (CNR Import Corporation LTD) and T4 (G E South A[illegible] be awarded the contract to supply the Diesel locomotives.

15. This recommendation by management was approved by the BADC on 24 January 2014.

16. Letters of Intent were sent on 28 January 2014 to the following entities:

a) Bombadier Transportation SA (Pty) Ltd,
b) CSR,
c) CNR Consortium, and
d) GE South Africa Technologies (Pty) Ltd

5.13	FINDINGS: THE ROLE MR SHARMA PLAYED IN AWARDING OF THE LOCOMOTIVE CONTRACT TO THE FOUR WINNING BIDDERS

1. Mr Sharma was a member of the BADC from the BADC's first meeting held on 23 February 2011.

2. Mr Sharma was appointed by the BOD as the Chairman of the BADC on 29 August 2012.

3. As noted above, the BADC approved the TFR Locomotive Procurement Strategy on 3 August 2011. Mr Sharma was present at this meeting in his capacity as member of the BADC and therefore Mr Sharma had full knowledge of Transnet's intention to acquire a fleet in excess of R50bn.

4. The GCE approved a decision that all the tenderers of the Diesel tender must be requested to submit a best and final commercial offer after consultation with the Chairman of the Board (Mr Mkwanazi), the Chairman of the BADC (Mr Sharma) and TIA. This resulted in GE South Africa being awarded part of the Diesel contract instead of EMD Africa.

5. 4 FINDINGS:

THE MANDATE OF THE BADC RELATING TO THE LOCOMOTIVE CONTRACT

The BADC mandate presented by the Chairperson on 21 November 2013. The BADC or 'the Committee' is constituted as a Committee of Transnet SOC Ltd in respect of all other duties assigned to it by the Transnet BOD. This mandate has been updated to reflect the new Companies Act, No. 71 of 2008 as well as the King III code of governance principles and King Report on Governance for South Africa (King III).

PURPOSE

a) To advance and maintain the Company's acquisition and disposals policies.
b) To approve procurement transactions within the Committee's delegated authority.
c) To monitor trends in supplier development spent and progress on plan.

d) To consider strategic acquisitions and disposals and make recommendations to the Board.

e) To consider, for recommendation to the Board, potential private sector participation models.

f) To review quarterly capital expenditure reports, and monitor execution of approved projects.

g) To monitor the implementation of strategic acquisitions against the approved plans.

h) To approve procurement strategies for proposed acquisitions.

COMPOSITION

a) At least four Directors of the Company shall be members of this Committee, the majority of whom must be independent non-executive directors. The Chairman of the Board shall be a member of this Committee.

b) The members of the Committee as a whole must have sufficient qualifications and experience to fulfil their duties.

c) The Secretary shall be the Group Company secretary or her designate.

d) The remuneration of the Chairman and Committee members will be determined by the Remuneration, Social and Ethics Committee and recommended by the Board for approval by the Shareholder Minister in accordance with the approved fee structure.

e) The following shall attend by invitation:

- The Group Chief Executive or a duly mandated designate;
- The Group Chief Financial Officer or a duly mandated designate; and
- The Group Executive: Group Legal Services.
- Such other persons determined by the Committee, who may include, where deemed necessary by the Committee, members of senior management and independent acquisition and disposal experts.

f) The other Non-Executive Directors may attend the Committee's meetings.

ROLES AND RESPONSIBILITIES

a) The Committee has an independent role, operating as an overseer and a

maker of recommendations to the Board for its consideration and final approval.

b) The Committee does not assume the functions of management, which remain the responsibility of the executive directors, officers and other members of senior management.

AUTHORITY

a) The Committee has authority to-

- Have access to any information it needs to fulfil its responsibilities.
- Seek independent advice through the Group Company Secretary's Office, at the Company's expense
- Have direct access to any executive of the Company or its subsidiaries.
- Make amendments to the mandate, subject to approval by the Board.

b) The Committee may form, and delegate authority to, steering committees composed of designated members of the Committee.

c) The Committee shall make the recommendations to the Board that it deems appropriate on any area within the ambit of its terms of reference where action or improvement is required.

d) Direct access to the Chairman of the Board, Group Chief Executive and members of the Group Executive Committee.

TERMS OF REFENCE

a) The Committee shall-

- Oversee the review of and recommend for approval by the Board policies relevant to the Committee's Mandate.
- Approve procedure manuals that are legally compliant (where applicable) and provide for an appropriate procurement and provisioning system which is fair, equitable, transparent, cost-effective.
- Approve tenders and contracts up to the maximum of investment decision/budget. This includes acquisition and disposals of movable and immovable property, capital investments operational expenditure, provision and acquisition of services approval for establishing

infrastructure, maintenance, refurbishment, and purchasing fuel, and excludes guarantees, indemnities and securities.

- Monitor trends in supplier development spend and progress on plan (including support of government's economic policies, Competitive Supplier Development Programme, local supplier development and BBBEE (preferential procurement and enterprise development).
- Consider strategic acquisitions and disposals and make recommendations to the Board
- Consider, for recommendation to the Board, potential private sector participation models.
- The Committee may approve, where so delegated by the Board of Directors, following in accordance with the Company's Delegation of Authority Framework.

Table 3: Capex Delegations

Reference to DOA	Specific Delegation	Board Acquisitions and Disposals Committee's Delegation
5.1.1	Capex included in annual Corporate Plan and Budget of the Company: To commence with a project	Approval of all transactions between R1000m and R2000m
5.1.2	Capex not included in annual Corporate Plan and Budget of the Company: To commence with a project	Approval of all transactions between R500m and R1000m
5.1.3	Increase in Estimated Total Cost (ETC) of existing/approved projects	Approval of all transactions between R1000m and R1400m
5.1.4	Asset Write-off/Scrapping: Moveable Assets	Approval of all transactions between R250m and R700m
5.1.5	Asset Write-off/Scrapping/Demolition of Immovable Assets (excluding land) e.g. buildings, structures	Approval of all transactions between R250m and R300m

	5.1.6	Disposal of moveable assets (excluding sale of scrap)	Approval of all transactions between R250m and R700m
	5.1.8	Alienation/acquisition of immovable property (land and servitude)	Approval of all transactions between R350m and R500m

5.15	FINDINGS: TRANSNET VENDOR LISTS COMPARED TO ENTITIES IDENTIFIED DURING THE COURSE OF THE INVESTIGATION
	1. As previously mentioned, VR Laser Services is listed as an active vendor of Transnet, of which the most recent procurement occurred in the period February 2014 to April 2014. (VR Laser Services tax invoice dated 5 March 2014, to a total value of R 4,049.57, attached hereto as *Appendix 11.1)*

5.16	FINDINGS: FORENSIC IMAGING AND ANALYSIS OF TRANSNET DEVICES ALLOCATED TO MR SHARMA
	1. During consultations with Ms Ceba it was confirmed that Mr Sharma does not have a Transnet owned laptop/desktop computer or email address. However, Mr Sharma was allocated a Transnet owned iPad which was stolen last year. The replacement iPad is currently in the possession of Transnet and as such, no forensic imaging was performed during the course of the investigation as we were advised that Mr Sharma did not have access to the replacement iPad.

5.17	FINDINGS: INTERVIEWS AND CONSULTATIONS WITH THE MAIL & GUARDIAN
	2. A discussion with the Mail & Guardian was held on 18 August 2014 and we were provided with the Mail & Guardian's response to the Ombudsman relating to Mr Sharma's complaint. The contents of this response, including attached share

	registers were included throughout this report.

5.18	FINDINGS: INTERVIEWS AND CONSULTATIONS WITH MR SHARMA

a) In an interview conducted with Mr Sharma on 19 November 2014 he informed us of the following:

Declarations:

b) He is currently not a shareholder of Elgasolve and also was not a shareholder of Elgasolve when he made his declarations in 2013 and 2014. He only declared the interest in his February 2013 declaration, as he was under the impression that he was a shareholder.

c) He did not declare his interests in Appiesore Investments (Pty) Ltd and Mufase Investments (Pty) Ltd in his February 2013 and April 2014 declarations because he thought he was no longer a director of these entities. According to him he resigned as a director of these entities two or three years ago.

d) He did not declare his interest in Meer Sharma and Associates CC as this entry should have been deregistered.

e) He failed to declare his interests in NADP and VRLS Properties as he was not aware that he was a director of these entities, he thought he was only a shareholder of VRLS Properties. According to Mr Sharma it sometimes happens that he signs documents put in front of him without him reading what it is that he is signing. Mr Sharma did not provide us with an answer as to why he did not declare his shareholding in VRLS Properties.

f) Mr Sharma stated that he should have declared his interests in NADP and VLRS Properties in his April 2014 declaration. Not declaring this was an oversight by him. In addition he informed us that there are no conflicts that he failed to declare in his February 2013 or April 2014 declarations.

g) Mr Sharma's understanding of what he is required to declare is any interests of him or his family that is in conflict with Transnet.

Purchase of VR Laser Services:

h) Mr Sharma saw an opportunity in VR Laser Services within he defense business. In his travels he met various people who kept asking about defense vehicles (armed vehicles) and one individual in Saudi Arabia from G4Security wanted armed vehicles for cash in transit purposes.

i) Mr Sharma conducted internet searches looking for entities that would be able to provide these services. This is how he happened to stumble upon VR Laser Services.

j) "Salim" (Mr Essa) knew someone at VR Laser Services and introduced Mr Sharma to "Benny" (Mr Jiyane). Mr Sharma and "Benny" chatted in March 2013. "Benny" wanted to buy out his other shareholders and keep his interest (24% or 25%) in the business. Mr Sharma and his advisors then met with John van Reenen who gave them four financial statements to look at for pricing and they concluded the transaction in December 2013. According to Mr Sharma negotiations never broke down, the hat was just part of the normal negotiation process.

k) During October 2013 he involved "Salim". VR Laser Services had potential (with pedigree as it is a 40 year old business) but it was going through a slump. Mr Sharma's idea was to use VR Laser Services as an OEM to make armed ambulances and cash in transit vehicles. The company had losses with no future plans but he saw that he could trim a lot of fat off the expenses. "Salim" was only loosely aware of what was going on and his involvement was going to be limited. However once Mr Sharma realised that it was going to take up to two years to break even with VR Laser Services he knew he did not have enough liquidity. Mr Sharma then handed VR Laser Service to "Salim". The transaction was split in two: "Salim" took the business and he took the property.

l) During January 2014 Mr Sharma had a fallout with "Benny" as a result of undisclosed matters relating to the income and expenses of VR Laser Services. After this Mr Sharma had no dealings or communication with "Benny". He later read in the newspaper that Westdawn bought Benny's share. Mr Sharma does not know how Westdawn got introduced to "Benny" as he did

not introduce "Benny" to Westdawn. Mr Sharma confirmed that Westdawn is owned by Mr Zuma and Mr Gupta and that he knows them well.

m) In return for giving "Salim" VR Laser Services, Mr Sharma obtained "Salim's" share in "DAQO".

n) The purchase of VR Laser Services coinciding with the locomotive contract was pure coincidence.

Leak of information:

o) Mr Sharma is aware of the Chairman of the Board, having a direct interest in a company ("Stefanutti Stocks") who is dealing directly with Transnet and which is making lots of money from Transnet. Mr Sharma believes this is inappropriate even though the Chairman of the Board declared it to Transnet.

p) Mr Sharma cannot give further information on who on the board leaked information, because he is reserving his right to take further action as he thinks the chairperson's conduct has not been appropriate. In this regard, he states:

- Within hours of the M&G article, the chairperson called a meeting to deal with the matter. The chairperson insisted on having a meeting without Mr Sharma being able to attend due to being out of the country;
- The chairperson of the board has an agenda against him (Mr Sharma);
- He (Mr Sharma) was called by the company secretary who informed him that the meeting would be rescheduled, however a full board meeting was called and the matter was dealt with differently than as with other matters;
- In the board meeting he (the chairman of the board) proposed an investigation even after the Chief Executive had (after the article) sent out an internal email saying that they found no substance in the article and there is no need to further investigate;
- During this meeting the chairman of the board said the audit committee will lead the investigation. This means they (the audit committee) would have determined the terms of reference and they would be the committee to deal with this. Then a separate committee was established to deal with this matter;

- I (Mr Sharma) question the intent of the chairman of the board, because he appointed a separate committee which is not normal practice;
- I (Mr Sharma) had sight of the preliminary findings report submitted by PwC to Transnet. When I (Mr Sharma) did not get it from PwC, I (Mr Sharma) got it from the company secretary on 18 November 2014;
- I (Mr Sharma) believe it is retribution for taking action in the past against another board member that is related to the chairperson of the board;
- The chairperson of the board is making executive decisions when he is a non-executive; and
- The audit committee did not oversee the investigation and it was not handled with transparency and objectivity.

6. SUMMARY

1. Based on the findings emanating from our procedures performed, the following conclusions were reached:

2. Declarations of interest

a) Mr Sharma declared the following entities, including his shareholding in his February 2014 declaration:

i. Nutane Investments 204 (Pty) Ltd (100% shareholding);

ii. Issar Investment Holdings (Pty) Ltd (100% shareholding);

iii. Issar Capital (100% shareholding);

iv. GMT Concepts (Pty) Ltd (20% shareholding);

v. DAQO South Africa (Pty) Ltd (did not declare a shareholding); and

vi. Elgasolve (50% shareholding).

b) According to our entity searches, Mr Sharma was a director in the following

entities during February 2013: -

i. Nulane Investments 204 (Pty) Ltd (appointed as a director on 2008/09/17);

ii. Issar Investment Holdings (Pty) Ltd (appointed as a director on 2011/01/14);

iii. Issar Capital (appointed as a director on 2010/12/17);

iv. GMT Concepts (Pty) Ltd (appointed as a director on 2009/11/12 ;

v. DAQO South Africa (Pty) Ltd (appointed as a director on 2012/11/07);

vi. Appledore Investments (Pty) Ltd (appointed as a director on 2006/05/18);

vii. Mufase Investments (Pty) Ltd (appointed as a director on 2006/05/10 ;

viii. Transnet (appointed as a director on 2010/12/13); and

ix. Meer Sharma and Associates CC (appointment date not available but Mr Sharma is the sole member of this entity and it has been active since 2 December 1994). Our probity searches indicate that this entity has been deregistered however no date of deregistration is provided. In addition Mr Sharma is still shown as an active member.

c) In his February 2013 declaration, Mr Sharma failed to declare his interests in the following entities:

i. Appledore Investments (Pty) Ltd,

ii. Mufase Investments (Pty) Ltd, and

iii. Meer Sharma and Associates CC (current status of entity is "deregistration final", however no date of when this entity was deregistered could be obtained).

d) Probity searches do not show Mr Sharma being a director in Elgasolve at any point in time.

e) We are not in possession of the share register for Elgasolve in order to ascertain Mr Sharma's possible shareholding in this entity.

f) Mr Sharma declared the following entities with his shareholding, in his April 2014 declaration:

i. Nulane Investments 204 (Pty) Ltd (100% shareholding);

ii. Issar Investment Holdings (Pty) Ltd (100% shareholding);

iii. Issar Capital (100% shareholding);

iv. GMT Concepts (Pty) Ltd (20% shareholding); and

v. DAQO South Africa (Pty) Ltd (28% shareholding).

g) Elgasolve was not declared in Mr Sharma's April 2014 declaration.

h) According to our entity searches, Mr Sharma was a director in the following entities during April 2014:

i. Nulane Investments 204 (Pty) Ltd (appointed as a director on 2009/08/17);

ii. Issar Investment Holdings (Pty) Ltd (appointed as a director on 2013/01/14);

iii. Issar Capital (appointed as a director on 2010/12/17)

iv. GMT Concepts (Pty) Ltd (appointed as a director on 2009/11/12);

v DAQO South Africa (Pty) Ltd (appointed as a director on 2012/11/07);

vi. Appledore Investments (Pty) Ltd (appointed as a director on 2006/05/18);

vii. Mufase Investments (Pty) Ltd (appointed as a director on 2006/05/10);

viii. Transnet (appointed as a director on 2010/12/13);

ix. Meer Sharma and Associates CC (appointment date not available, but Mr Sharma is the sole member of this entity and it has been active since 2 December 1994). In addition, our probity searches indicate that this entity has been deregistered however no date of deregistration is provided;

x. NADP (appointed as a director on 2013/11/07);

xi. 79 NDC Swellendam (Pty) Ltd (appointed as a director on 2013/08/12); and

xii. VRLS Properties (appointed as a director on 2013/12/09).

i) In April 2014 Mr Sharma failed to declare his interests in the following entities:

i. Appledore Investments (Pty) Ltd;

ii. Mufase Investments (Pty) Ltd;

iii. Meer Sharma and Associates CC (current status of entity is "deregistration final", however no date of when this entity was deregistered could be obtained);

iv. NADP; and

v. VRLS Properties.

j) In terms of Transnet's Declaration of Interest Policy, a director has a duty to disclose any interests of "*Related and Inter-Related person(s)*".

k) Mr Sharma failed to declare his wife's, Ms Tarina Patel, interest in Appledore Investments (Pty) Ltd.

l) NADP is jointly owned by Issar Capita and Elgasolve.

m) Mr Sharma is the sole director of Issar Capital and Mr Essa is the sole director of Elgasolve. Mr Sharma did not declare his business interest with Mr Essa to Transnet.

n) Furthermore, Mr Essa is one of the directors of VR Laser Services. VR Laser Services' most recent procurement with Transnet occurred in the period February 2014 to April 2014.

o) According to the share register of VR Laser Services, Elgasolve owns 74.9% of VR Laser Services.

p) According to Mr Sharma VR Laser Services leases the property which it conducts business from. This property is owned by VRLS Properties.

q) VRLS Properties is 100% owned by Issar Capital. Mr Sharma is a co-director of VRLS Properties.

r) Mr Sharma did not make any additional declarations of interests at any BADC meetings.

3. <u>The Gupta family and Mr Zuma</u>

a) The share register for VR Laser Services shows that Elgasolve owns a 74.9% share in VR Laser Services and Craysure Investments owns the remaining 25.1% share in VR Laser Services.

b) The share register for Craysure Investments shows that it is wholly owned by Westdawn Investments.

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c) Our entity search on Westdawn Investments revealed that the following individuals are directors in this entity:

i. Ravindra Nath (appointed as director on 2008/07/30)

ii. Mr Gupta (appointed as a director on 2009/02/03)

iii. Ronica Goverder (appointed as a director on 2008/07/30)

iv. Ronice Ragavan (appointed as a director on 2008/07/30)

v. Mr Zuma (appointed as a director on 2008/09/30)

d) Mr Jiyane confirmed that he is in the process of selling his shares in VR Laser Services to Crayzure Investments. However the share register of VR Laser Services reflects Crayzure Investments as being the majority shareholder.

e) Mr Jiyane further confirmed that he is aware that Crayzure Investments is owned by Westdawn Investments.

f) According to the share register of NADP, Mbangela Investments (Pty) Ltd and Shiva Uranium (Pty) Ltd are both entities that held a majority share in NADP.

g) Mbangela Investments (Pty) Ltd and Shiva Uranium (Pty) Ltd are both companies in which the Gupta family as well as Mr Zuma have directorships.

h) Mr Sharma and Mr Essa are the current directors/owners of NADP.

4. Negotiations pertaining to VR Laser Services

a) The directors of VR Laser Services mentioned the following:

Mr Jiyane was the one who initially had contact with Mr Sharma.

ii. Mr Sharma subsequently met with Mr Van Reenen and Mr Bloxham around three to four times during the course of 2013.

iii. Negotiations for the sale of VR Laser Services broke down aroun July 2013.

iv. Mr Sharma returned, in September 2013, to Mr Van Reenen and Mr Bloxham with a new offer.

v. They managed to reach an agreement of sale and the deal was done on 9 December 2013.

vi. According to Mr Van Reenen, Mr Essa only became involved in the deal when they were about to sign the purchase agreement.

vii. According to Mr Van Reenen, Mr Sharma disclosed from the outset that he is on the Board of Transnet.

viii. Mr Essa purchased VR Laser Services and Mr Sharma purchased VRLS Properties.

ix. Mr Essa is currently the majority shareholder in VR Laser Services. Mr Essa purchased these shares through Elgasolve.

5 Visits to VR Laser Services

a) Mr Jiyane stated the following in respect of the visits made by the winning bidders to VR Laser Services:

i The two Chinese companies who visited VR Laser Services in 2013 were "CSR" and "CNR". They approached VR Laser Services around November or December 2013.

ii. CSR and CNR were manufacturing the "95 locomotives" in terms of t previous Transnet locomotive contract. They visited VR La Services because of this contract.

iii. The purpose of the visit was to evaluate the capacities and capabilities of VR Laser Services'.

iv. CSR and CNR were manufacturing the "95 locomotives" in terms of the previous Transnet locomotive contract.

v. The third company was "General Electric". Mr Jiyane met them towards the end of 2012 or early 2013. "General Electric" never visited the premises of VR Laser Services.

6. Response from Winning Bidders

a) Bombardier Transportation stated that they never visited VR Laser Services.

b) CSR Zi-Loco stated that they visited VR Laser Services in October 2013, however they did not appoint VR Laser Services to perform any work for them as they did not meet the manufacturing specifications.

c) CSR Zi-Loco further stated that they had no contact with Mr Sharma.

d) General Electric stated that they never visited the premises of VR Laser Services.

e) General Electric did, however, meet with Mr Sharma as he was part of a Transnet delegation who visited General Electric in the United States of America.

f) We are still awaiting feedback from CNR

7. Mr Sharma's role in awarding of the 1064 contract

a) Mr Sharma has been a member of the BADC since 23 February 2011.

b) Mr Sharma was appointed as the Chairman of the BADC by the BOD on 29

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CLIENT SIGNATURE	
COMMENTS	
SIGNATURE	
CLOSE OUT DATE	

Status Key:

AS= Ahead of Schedule OT = On Track BS = Behind Schedule

EXHIBIT 9

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Analysis of Cost Increase

for

Locomotive Delivery

and

Locomotive Factory Relocation

from

Pretoria, Gauteng to Durban, Kwa-Zulu Natal

in terms of

Manufacturing Facility Relocation for Class 45D Locomotives Supply Project

July 2015

CNR Rolling Stock South Africa (Pty) Ltd (reg 2014/033382/07) t/a
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Executive Summary

We have been requested to analyse the Cost Increase for the Locomotive Delivery and Locomotive Factory relocation in terms of Manufacturing Facility Relocation for Class 45D Locomotives Supply Project. The decision to relocate from Pretoria, Gauteng to Durban, Kwa-Zulu Natal will cost an estimated R719 090 548.

On this amount we happy to offer a settlement discount of 10% amounting to R71 909 054 Therefore the reduced amount due to CNR after deducting the settlement discount amounts to R647 181 494.

In order to align the balance of the payment with the project execution, the settlement discount assumes the following settlement terms.

- 50% payable within 14 days of signature and the balance R323 590 747
- 50% payable in 24 equal instalments of R13 482 948 ("the relocation payment") commencing the end of th first month that the project commences
- Therefore CNR RS SA will invoice for 24 monthly instalments of R13 482 948
- Please note that the relocation payment will be invoiced separately from the milestone payment invoice as per the Locomotive Supply Agreement for the manufacture of the 212 locomotives ("the LSA"), which will be paid as per the document approved by Transnet. In addition, the relocation payment should not reduce nor increase or affect the milestone payment stipulated in the LSA.

Description	Cost (R)	% of total
Labour costs	54 867 833	8%
Material costs	223 982 441	31%
Logistical costs	6 420 941	1%
Technical support	70 000 000	10%
Transportation	94 194 785	13%
Delta to Warehouse costs	75 650 745	10%
Other costs	194 474 302	27%
Total	719 090 548	100%

Due to the tight time for preparation, there are some elements which affect this Durban relocation project. We reserve the

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Introduction

In order to be able to relocate the entire operation of manufacturing, production, assembly and servicing from Pretoria to Durban, there are several incremental costs, risks and material changes that will need to be considered.

During the execution of this project, in order to complete the technology transferring, manufacturing, training, testing and maintenance tasks for this locomotive project successfully, as well as the empowerment of the black economy, the manufacturing facilities are relocated from Pretoria to Durban. Thus this proposal is submitted. This proposal is seen as the project document as per the contract.

These considerations can be broken down into:

- Labour costs
- Material costs
- Operational and logistical effects
- Technical support
- Physical transportation of materials and resources
- Incremental warehousing costs
- Financing and risk costs due to time constraints and delays.

Each of these areas carry a substantial weight on the total cost of relocation, considering the move from a skilled factory with high-end technology in a nationally-central location to an environment where locomotive manufacturing skills are limited and supply of manufacturing engineers is limited. Added to that, being the largest industrial port in South Africa, industrial property is highly sought after, especially in and around railway areas due to the high traffic on the railway lines between Durban and Johannesburg.

The largest non-operational and logistical cost faced is also the 5-month delay in production of entire 232 locomotive, which is placing substantial currency-hedging risk, import and inflationary risk, insurance, and training costs.

All-in-all, there will also be ancillary benefits in using the same team to relocate as will be running the day-to-day operations in Durban. This will minimise team friction, hand-over wastage and delays, lack of accountability and a host of expertise-related risks.

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Below is a breakdown of each of the above-mentioned sections, justifying the detailed cost analysis of the relocation project

Cost Breakdown

The total cost implications of the relocation and the inherent costs of relocating manufacture to Durban from Pretoria amount to an estimated R719m. Importantly, this amounts to less than 10% of the total Class 45D locomotive manufacturing project. The attached outline details and explains the R719m.

Labour Costs

Total cost R54.4m: 8% of relocation costs

The amount is broken down below. This is ~8% of total relocation cost.

- Manufacturing costs, amounting to R38.3m, relate to the added size of each team that will be required in order to complete each locomotive build. Due to the lack of skills and experience in Durban, the average team size per locomotive (of 25) will need to be increased to 31 (i.e. 6 additional mentorships from CNR) in order to maintain production levels of 12 locomotives per month, which is imperative for the success of the project. The increase in team size accounting for the R38.3m over the period of production is available on request.
- Quality assurance relates to the increase in supervision labour required to inspect and monitor production of locomotives due to the lack of experience in the new Durban factory. An additional 6 specialists from CNR will be required to mentor and supervise the production of 12 locomotives per month, with each supervisor monitoring the production of up to 2 locomotives at a time. This additional cost amounts to R4.6m over the period.
- Customer Service Team ("CST") will need to increase marginally to account for the increase in pressure derived from dealing with more supplier and client issues from a remote location. This will require an additional 8 agents and the setting up of a CST infrastructure sufficient to manage the CST requirements. This will total R8.1m over the period.
- Program management for the relocation and new operation will require an additional 3 senior managers due the substantial increase in team size, logistical complexity and supervision. This will amount to an additional R3.4m over move and the initial production phase.

Labour Costs	Manufacturing related costs	(Avg Cost per Emp * Num Durban Emp Required) - (Avg Cost per Emp * Num Pretoria Emp Required)	38 280 000

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	QA	Num Supervisors * Cost per Supervisor	4 640 000
	Customer service	Additional Emp * Cost	8 064 000
	Program mgt	Senior Managers Req * Cost Per Manager	3 383 333
Total			54 367 333

Material Costs

Total cost R224m: 31% of relocation costs

Additional material costs amount to R203m as a result of the relocation. This has the largest impact on relocation, amounting to ~30% of relocation cost.

- Inflationary costs equating to R203m will be incurred, based on a 5-month delay. This is calculated using the South African inflation rate of 5.5%pa, decomposed to 2.3% over the 5 months.
- Incremental estimated procurement costs of R21m. Considering than certain raw materials will not be available in South African warehouses at the outset of the project, and considering the target of 12 locomotives per month, we estimate 3 months' storage to various warehouse suppliers will cost approximately 9% per annum over the 5-month delay.

Material Cost	Inflation due to schedule shift	5-month Inflation * Total Project Cost	203 034 165
	Additional procurement costs	Raw Materials * 5 months Financing Cost * % of Stock on Hand for 3 Months	20 948 276
Total			223 982 441

Operational & Logistics Costs

Total cost R6.4m: <1% of relocation costs

Impact of changes to logistics and operations will amount to R6.4m. This is ~<1% of total relocation cost.

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- Administrative costs to re-work logistics will be required, as the roll-out and execution of the relocation and final manufacturing project will need to be altered. This amounts to R1.7m.

- A new environment will require to be thoroughly tested in order to maintain the required level of quality and delivery. This will amount to R475k.
- Additional staff travel costs due to the move will amount to an estimated R2m.
- Higher inventory requirements will be required due to the distance from Gauteng. This will result in a cost of R2.2m.

Logistics Costs	Admin costs to re-work logistics	As per Fixed Quotation	1 731 158
	Dry run in new environment		474 576
	Additional travel costs		2 024 410
	Higher Inventory - cost of capital		2 190 797
Total			6 420 941

Technical Support

Total cost R70m: 10% of relocation costs

Additional technical support will be required, amounting to R70m. This is 10% of total relocation cost.

- The additional technical support comprises the additional technical and engineering teams that will need to be available on the ground beyond the initial ~19month production phase. These specialised teams will be in addition to the requirement from the Pretoria plant due to the lack of expertise in maintenance and post-production servicing currently available in Durban. This will amount to R38.5m.
- There will also be an increased cost of on-site service by suppliers due to the increase in travel and relocation of Gauteng-based suppliers. This is estimated at R31.5m over the pre- and post-production periods.

Technical Support	Increased cost of tech support	As per Fixed Quotation	28 000 000
	Engineering		10 500 000
	Increased cost of on-site service by local small business supplier		31 500 000

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Total			70 000 000

Transportation

Total cost R94.2m: 13% of relocation costs

Physical transportation from Pretoria to Durban will amount to R94.2m. This is ~10% of total relocation cost.

- There will be a R567k cost saving to being based in Durban due to proximity to an industrial port.
- Physical transportation of assembly parts of locomotives is estimated at R64.8m, explained as follows: the cost of road logistics in South Africa is estimated at (average) 5% of pre-transport costs. Assuming the project is transporting ~R1.3b worth of raw materials. The total is thus estimated at R64.8m.
- Short-term insurance on the value of transported goods will amount to R22.5m, based on industry-level Goods in Transit insurance premiums of between 0.2% and 0.8% of value.
- Transport protection, express shipments (for time-sensitive delivery), Trucks for handover and Testing goods when received are directly inherited costs of the relocation, amounting to incremental costs of R7.5m.

Transportation	International shipments	As per Fixed Quotation	-567 104
	Engine - Durban		64 [illegible]
	Brake System - Durban		
	Traction Chain - Durban	% Cost of Road Logistics * Cost of Raw Local Materials	
	Delta supply chain - Durban		
	Insurance	Insurance Premium % * Total Insurable Value	22 500 000
	Transport protection		3 283 231
	Express shipments	As per Fixed Quotation	895 427
	Truck for handover		1 492 378
	Locos testing		1 790 853
Total			94 194 785

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Incremental

Warehousing Costs

Total cost R75.7m: 10% of relocation costs

Additional warehousing costs will amount to R75.7m, which is ~10% of total relocation cost

- As a result of the scarcity of prime industrial factories in Durban, the cost per square metre is substantially higher than Pretoria by between R35/sqm-R55/sqm. This will result in an increase in lease cos of R16.8m over the long-term period.
- Fencing, security and office furniture of R300k.
- Office construction and civil works upgrades will amount to R3.9m, based on estimated office space of ~850sqm.
- The project necessitates that ~5-15% of total factory space is used for shelving and storage. This will result in a additional cost of R12m. This is based on a calculated build cost of R11,200/sqm.
- Additional forklifts and stacking trucks will be required that would not have been as necessary or as costly in Pretoria. This will amount to 20 forklifts and trucks in total, at a cost of R5.8m.
- Additional delivery vehicles and (new) systems to be implemented in the new factory will amount to R7m.
- Additional staff & personnel will be required, incurring a substantial relocation cost to bring in skilled labour from Gauteng (~90 personnel). With incentive salaries and a relocation incentive, this amounts to R24.5m.
- Due to the lack of experience of the new teams, external labour and professional consulting/supervisory teams will need to be brought it. Four of these engineering consultants will be needed during the primary production phase, costing R5.8m.

Delta to warehouse costs	Additional Lease costs	Incremental Cost Per Sqm * Total Sqm	16 800 000
	Fencing/Security	As per Fixed Quotation	110 395
	Civil works upgrades/office construction	Office Sqm * Rate per Sqm	3 927 000
	Office & warehouse furniture	As per Fixed Quotation	188 899
	Racks & Shelving	% of Sqm * Cost per Sqm	11 962 500
	Local forklifts/stacker	(Cost per Truck * Num Trucks) + (Cost	

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	trucks	per Forklift * Num Forklifts)	
	Additional delivery vehicles	As per Fixed Quotation	3 924 552
	Technology & inventory systems	As per Fixed Quotation	3 133 999
	Additional staff & personnel	(Team To Be Relocated * Salary Increase) + Once-off Relocation Incentive	24 503 400
	Extra outside labour & services	Engineer Consulting Fees * Num Engineers	5 800 000
Total			75 650 745

Financing & Risk Costs

Total cost R194m: 27% of relocation costs

Financing costs are the second biggest cost to the relocation, amounting to R194m, or ~27% of total relocation cost.

- Labour inflation due to the 5-month delay and the additional required resources amounts to R1.8m based on 5.5%pa CPI.
- Finance cost s a result of rolling over forward currency (USD) contracts are estimated at R87m. The buy and sell spread onforward contracts equals 2 x ZAR 0.12.
- Bond /debt instrument costs increase will amount to R18m based on cash flow risk and upfront payments.
- Contingency risk of 4% on assumptions, amounting to R25.9m.
- There will be increased insurance costs amounting to R2.8m due to the relocation and new teams involved.
- Training costs of additional teams and new staff will be required, amounting to R3.6m, based on industry standard of 6% training costs.
- There is a risk provision of 9%, amounting to R54.7m. This risk is primarily focused around the pressure the relocation will put on the final locomotive production project. The overall effect on a large-scale relocation, with new teams, staff, specialists, expertise and a less-known environment will create substantial risk in meeting deliverables and timelines.

Finance Costs	Labour inflation original contract	Additional Staff Costs * CPI	1 810 405
	Finance costs on forward contracts	% Premium * 2 *ZAR 0.12 Spread on USD	87 750 000
	Bond costs increase	Duties * Total Value Added	

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	Contingency	4% on Cost	25 867 599
	Increased insurance costs	As per Fixed Quotation	2 750 000
	Increased training costs	Std % Training Cost * Value of Additional Staff	3 587 623
	Risk provision increase project	9% on Cost	54 708 676
Total			194 474 302

Costing Summary

The above mentioned breakdown, detailed in the attached cost spread-sheet, outlines the need for the further investment of R719m for the reloca ion of operations and manufacture to Durban. Any costs attributable to TE with regards to the Durban relocation have not been taken into account in the cost of R 719m.

Although this is a marginal cost in terms of the total project, it should be treated as material to the final project production. In order to not impact on the quality of service, manufacture and delivery of this crucial element of the total locomotive project, it makes sound business sense to maintain the same teams throughout the rel tion and manufacture, allowing the seamless handover between the two phases, and maintaining the level of skill and experience throughout.

The above breakdown should address any issues pertaining to the costs of the relocation taking into account a 5month delay. If not, please do not hesitate to contact us for further details, relating to any or all of the summarised figures.

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Definition

1. **TRANSNET SOC LTD**(acting through its Transnet Freight Rail division), a public company incorporated in South Africa (registration number 1990/000900/30) and referred to in Section 2 of the Legal Succession to the South African Transport Services Act, No 9 of 1989 (the Company);
2. **CNR RS SA**, a company registered under the laws of South Africa(registration number 2014/016892/07) and, subject to a name change, to be known and registered as CNR ROLLING STOCK SOUTH AFRICA PROPRIETARY LIMITED (the Contractor);
3. **TE**, means Transnet SOC Limited acting through its TRANSNET ENGINEERING Division (registration number 1990/000900/30) (the "Subcontractor");
4. **Local Supplier**, means the suppliers in South Africa other than TE;
5. **Locomotive**, means collectively or individually, the locomotives to be manufactured and supplied to the Company by the Contractor in accordance with this Agreement, with each individual locomotive being identified by its vehicle number;
6. **Training**, means the training to be provided by the Contractor to the Company personnel in accordance with Part 12 (Training) of Schedule 3 (Agreement Management),

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Mr. Jeff Wang

Chief Executive Officer

CNR Rolling Stock (Pty) South Africa

Mr. Anoj Singh

Chief Financial Officer

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Bond cost increase	
Total Value	9,000,000,000
Value Added (margin)	20%
Total Value Added	1,800,000,000
Duty	1%
Duty Amount	18,000,000

Forward Contract Cost		
Imported Value	4,050,000,000	
12c Spread on Fwd	0.13	
Paying Double for Buy-	0.26	Rand to the USD
R/USD	12	ZAR/USD
Additional Cost %	2.2%	
Total Cost	87,750,000	

Insurance on Transportation	
Standard Insurance	20,000,000
Insurance	50,000
	0.25%
Value	9,000,000,000
Insurance	22,500,000

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Additional Lease costs				
	600,000	R pa		
Industrial Rent Pta	150,000	5,000	sqm	30
Industrial Rent Dur	350,000	5,000	sqm	70
Diff	200,000			
	16,800,000			

Racks & Shelving	
17%	of sqm
5,000	sqm
14,500	cost per sqm
11,962,500	

Small Office	
850	sqm
55	R/sqm
3,927,000	

Local forklifts/stacker trucks		
#	R	
15	120,000	lifts
5	700,000	trucks
	5,300,000	

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	Durban Clearing	www.durbanclearing.co.za	
	Road Freight Logistics	www.rfflogistics.co.za	
	South African Railways	www.southafricanrailways.co.za	
Finance Costs			
	South African Reserve Bank	www.resbank.co.za	
	Consulting with various finance experts		*consulting*
	Standard Bank		
	SASFin		
	Bidvest Bank		
Labour Related Research			
	SA Board for People Practices		
	EVA Solutions	www.evasolutions.co.za	
	Exceed HR Consulting	www.exceed.co.za	
Property Research			
	Seeff Property Agency	www.seeff.co.za	*agency*
	Property24	www.property24.com	*non-agency*
	Standard Bank Property		*banking portfolio assistance*
	Nedbank Preferred Property Guide		*banking portfolio assistance*
	FNB Property		*banking portfolio assistance*
	Industrial Listings	www.industriallistings.co.za	
	SA Commercial Property News	ww.sacommercialpropnews.co.za	
Factory & Materials Costs			
	Industry experts in manufacture		*consulting*
	Industry experts in mining & efficiencies		*consulting*
	Industry experts in cost-optimisation		*consulting*
	Trading Economics	www.tradingeconomics.co.za	
	Manufacturing Circle	www.manufacturingcircle.co.za	

CNR Rolling Stock South Africa

CNR Rolling Stock South Africa
China Construction Bank Building
95 Grayston Drive
+2196 Sandton Johannesburg
cnrssapm@163.com

	Costs	% of Total Relocation	Notes
Labour Costs	R 54,367,333	8%	19
Manufacturing cost increase	R 38,280,000	5%	3
Increase quality assurance	R 4,640,000	1%	3
Customer service	R 8,064,000	1%	3
Program management	R 3,383,333	0%	3
Material Cost	R 223,982,441		
Inflation due to schedule shift	R 203,034,165		2
Additional procurement costs	R 20,948,276	3%	2
stics Costs	R 6,420,941	1%	
dmin costs to re-work logistics	R 1,731,158	0%	Fixed Quotation
ry run in new environment	R 474,576	0%	Fixed Quotation
Additional travel costs	R 2,024,410	0%	Fixed Quotation
Higher inventory - cost of capital	R 2,190,797	0%	Fixed Quotation
Technical Support	R 70,000,000	10%	
Increased cost of tech support	R 28,000,000	4%	3
Engineering	R 10,500,000	1%	3
Increased cost of on-site service by suppliers	R 31,500,000	4%	3
Transportation	R 94,191,785	13%	
International shipments	-R 567,104		Fixed Quotation
Parts Transportation to Durban	R 64,800,000	9%	6
Insurance	R 22,500,000	3%	1
Transport protection	R 3,283,231	0%	Fixed Quotation
Express shipments	R 895,427	0%	Fixed Quotation
Truck for handover	R 1,492,376	0%	Fixed Quotation
Locos testing	R 1,790,853	0%	Fixed Quotation
to warehouse costs	R 75,650,745	11%	
Additional Lease costs	R 16,800,000	2%	5
Fencing/Security	R 110,395	0%	Fixed Quotation
il works upgrades/office constr	R 3,927,000	1%	5
Office & warehouse furniture	R 188,896	0%	Fixed Quotation
Racks & Shelving	R 11,952,500	2%	5
Local forklifts/stacker trucks	R 5,330,000	1%	5
Additional delivery vehicles	R 3,924,552	1%	Fixed Quotation
Technology & inventory systems	R 3,133,999	0%	Fixed Quotation
Additional staff & personnel	R 24,503,400	3%	3
Extra outside labour & services	R 5,800,000	1%	3
ther Costs	R 191,471,302	27%	
Labour inflation original contract	R 1,810,405	0%	3
Finance costs on forward contracts	R 87,750,000	12%	4
Bond costs increase	R 18,000,000	3%	4
Contingency	R 25,867,599	4%	Contingency Risk - Fixed %
Increased insurance costs	R 2,750,000	0%	Fixed Quotation
Increased training costs	R 3,587,623	0%	3
Risk provision increase project	R 51,708,676	8%	Standard Risk - Fixed %
otal	R 719,090,548		

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Global Variables	
Diesel Locomotive	232 locomotives
Locomotive Weight	200 tons
Project Value	9,000,000,000
SA Value	4,950,000,000
Delay	5 mths

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Inflation		
Annual Inflation		5.5% SARB CPI
5 Months Inflation		2.3%
Total Cost	9,000,000,000	(CNR imported cost &Local supplier cost)
Inflation	203,034,165	

Additional Cost		
Materials	3,600,000,000	
interest		9% pa
Cost	135,000,000	
% on hand		16%
	20,948,276	

ariables	
	25
	232
	12
pa	300
	19
	Per Loco
	5
	17
	3
loyee	17,500
	10,000
	20,000
	35,000
	19,800
eam	495,000
	5,940,000

ng Costs	
	24,503,400
lated cost	38,280,000
	62,783,400
ng	6%
	3,587,623
ost	700,000
	40,000
	6%

rience	
m	12
sor	
	2
sors	6
or pa	40,000
	4,640,000

35%	Portion of Total costs for Labour
9,000,000,000	Total Value
30%	Margin
6,300,000,000	Costs
2,205,000,000	Labour
49,743,370	Labour Inflation

5,051,503	Calculated Inflation
223,920,675	Total Original Labour Cost
11,309	Total FTE (over period)

Extra outside labour & services	
Engineering Consulting	
Fees pa	900,000
pm	75,000
Period	1,450,000
Number of Experts	4
Total	5,800,000

Labour inflation original contract	
Additional Payments	
for Staff	80,250,738
Inflation	2.3%
Total Cost	1,810,405

Long Term Maintenance Consulting		
Years	4	
Avg Salary	1,000,000	
Number of Engineers, T	20	
	70,000,000	pa
Weighting		
CNR Tech Support	8	
CNR Engineers	3	
Local Small Business Supplier	9	

Customer Service (Increase in #)	
Additional team	*8*
Cost	12,000
	8,064,000

Mix Change Due To Inexperience & CNR Additional skill training/mentorship Support	Old	New
Unskilled	5	5
Skilled	17	20
Managers	3	0
Per Loco	25	31
Direct Labour per Loco	*495,000*	*660,000*
Total Cost	114,840,000	153,120,000
Diff	38,280,000	

Additional staff & personnel	
Relocation %	30%
Total CNR Team	300
Relocated Team	90
Salary Growth	25%
Relocation Cost	100,000
Total Cost	17,613,000
Additional CNR Staff	72
Incremental Salary	25%
Total Cost	6,890,400
Grand Total	24,503,400

Program management		
Senior Manager For Relocation	700,000	pa
	58,333	pm
Total	1,127,778	
Number	3	
Total Cos	3,383,333	

Negotiation Point:	Pricing – deferral of delivery schedule
Current Offer:	No offer currently
Negotiation Issues:	Consignment stock principle - Cost would change for time value of money and holding costs if delivery deferred to later
Comments	

Less than market related cost increase for time value of money and warehousing costs	Beyond market related cost increase for time value of money and warehousing costs	Market related cost increase for time value of money and warehousing costs

Negotiator:	*Approver* :*
Outcome:	
Date:	
Signed:	

EXHIBIT 10

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Negotiations Baseline Worksheet – Price	
Negotiation Point:	Base price – escalation risk indices
Current Offer:	Current offered price includes an escalation clause
Negotiation Issues:	Escalation from date of signature to date of delivery e.g. increase labour, Raw Material and any other inflationary items
Comments	Transnet's expectation is for a fixed price for the Locomotive as such any escalations in price until delivery must be built into the cost of the Locomotive.

Most Desirable Outcome (MDO)	Least Acceptable Agreement (LAA)	Target Agreement
Fixed price with no escalation and on the upside should there be a reduction in these indices this will revert to Transnet.	Acceptable market determined escalation clauses included in contract	Acceptable market determined or CPI related escalation clauses (as per RFP) built into contract with market related impact on price
This aspect will be negotiated based on the bidder specific situation.	This aspect will be negotiated based on the bidder specific situation.	This aspect will be negotiated based on the bidder specific situation.

Sign off	
Negotiator:	*Approver* :*
Outcome:	
Date:	
Signed:	

Negotiations Baseline Worksheet - Price	
Negotiation Point:	Base Price – foreign exchange impacts
Current Offer:	Forex hedging cost not part of price offer
Negotiation Issues:	Limit foreign exchange impacts – ideal situation is full Rand based contract Change in price relating to foreign exchange movements – upward movements to be limited
Comments	

Most Desirable Outcome (MDO)	Least Acceptable Agreement (LAA)	Target Agreement
Rand based contract with Fixed Price including hedging costs (supplier manages hedging contract) – price premium for hedging costs at less than market related rates Due to weakness of Rand Transnet must have the ability to participate in Rand strength	Multi-currency contract – Transnet manages hedging contracts *Due to weakness of Rand – no upside for* Transnet	Rand based contract with Fixed Price including hedging costs (supplier manages hedging contract) – market related price premium for hedging costs. Due to weakness of Rand Transnet must have the ability to participate in Rand strength

Sign Off	
Negotiator:	*Approver* :*
Outcome:	
Date:	
Signed:	

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Negotiations Baseline Worksheet – Price	
Negotiation Point:	Base Price – impact of TE
Current Offer:	Price offered excludes additional cost of using TE
Negotiation Issues:	Limit impact to price for using TE
Comments	

Most Desirable Outcome (MDO)	Least Acceptable Agreement (LAA)	Target Agreement
Same price offered as was used for evaluation – i.e. no change in price for use of TE	Price offered is 20 % greater than price that was used for evaluation	Increase in Price is less than 20 % that the price was used for evaluation

Sign Off	
Negotiator:	*Approver* :*
Outcome:	
Date:	
Signed:	

Negotiations Baseline Worksheet – Price	
Negotiation Point:	Capital Acquisition Costs – Set up costs
Current Offer:	Included in Capital Acquisition price :
Negotiation Issues:	We need a detailed understanding of the plan to set up operations in South Africa. Consideration to the use of TE production lines already in use in SA – could significantly reduce the set up costs
Comments	

Most Desirable Outcome (MDO)	Least Acceptable Agreement (LAA)	Likely Agreement
Reduction of R 500,000 on price per loco	Accept price provided	Reduction of between R 100,000 and R 500,000 on price per loco
This aspect will be negotiated based on the bidder specific situation.	This aspect will be negotiated based on the bidder specific situation,	This aspect will be negotiated based on the bidder specific situation.

Sign Off	
Negotiator:	*Approver* :*
Outcome:	
Date:	
Signed:	

Negotiations Baseline Worksheet - TCO	
Negotiation Point:	Costs of maintenance interventions included in TCO model
Current Offer:	Include per TCO model submission
Negotiation Issues:	The cost of maintenance interventions included in the TCO model needs to be properly understood. TFR requires confirmation of the assumptions used in the model and submissions. These maintenance events trigger significant cost implications to TFR over the lifecycle of this asset should they be confirmed. An understanding is required of the averages utilised in the models and the appropriateness of their averages submitted. The technical team's involvement is required to assess the appropriateness of maintenance levels confirmed by the bidders. This significantly and directly impacts on total cost of ownership to TFR of the locomotive Understanding of the impact of their maintenance regime on reliability and availability of locomotives
Comments	The impact of the costs remaining as submitted will significantly impact the TCO over the 30 year period. The risk to TFR is that costs could be higher over the asset's life.

Most Desirable Outcome (MDO)	Least Acceptable Agreement (LAA)	Target Agreement
Include a clause locking in the TCO models submitted to a penalty regime over the life of the loco.	No change.	Include a clause locking in the TCO models submitted to a penalty regime over the life of the loco.

Sign Off	
Negotiator:	*Approver*:*
Outcome:	
Date:	
Signed:	

Negotiations Baseline Worksheet – Finance – payment terms Payment Schedule	
Negotiation Point:	Payment Schedule
Current Offer:	As per draft supply agreement and RFP R 200 m (Diesel) and R 300 m (electric) pre-payment *Balance excluding retention upon issuance of acceptance certificate* 5% upon achievement of mission reliability target 5% upon achievement of fleet availability target
Negotiation Issues:	Use
Comments	

Most Desirable Outcome (MDO)	Least Acceptable Agreement (LAA)	Target Agreement
10 % advance payment with a concomitant benefit passed on to Transnet (time value of money)	As per suppliers offer	5 % advance payment with a concomitant benefit passed on to Transnet (time value of money)
This aspect will be negotiated based on the bidder specific situation.	This aspect will be negotiated based on the bidder specific situation.	This aspect will be negotiated based on the bidder specific situation.

Sign Off	
Negotiator:	*Approver* :*
Outcome:	
Date:	

Negotiations Baseline Worksheet – Technical& Commercial Warranty & DLP	
Negotiation Point:	Extended Warranty
Current Offer:	**WARRANTY** Each locomotive carries a 24 month warranty period commencing on acceptance of such locomotive.
Negotiation Issues:	Extend the warranty period with NO additional costs
Comments	Detailed warranty required applicable to whole fleet.

Most Desirable Outcome (MOO)	Least Acceptable Agreement (LAA)	Target Agreement
Each locomotive carries a 60 month warranty period commencing on acceptance of such locomotive. Traction motors 6 years Spare parts 15 months from installation into locomotives	Each locomotive carries a 24 month warranty period commencing on acceptance of such locomotive. Traction motors 6 years Spare parts one (1) year or 15 months from acceptance	Each locomotive carries a between 24 and 60 months warranty period commencing on acceptance of such locomotive. Traction motors 6 years or greater Spare parts one (1) – two (2) years or 15 - 24 months from acceptance

Negotiator:	*Approver* :*
Outcome:	
Date:	
Signed:	

Negotiations Baseline Worksheet – Finance - Options Warranty & DLP	
Negotiation Point:	Options
Current Offer:	Current price offer excludes technical options
Negotiation Issues:	Include mandatory options into the offer price
Comments	

Most Desirable Outcome (MDO):	Least Acceptable Agreement (LAA)	Target Agreement
5 % discount offered to price including options (i.e. free)	Mandatory Options added to the base price offer	Include Mandatory options into the base price offer (i.e. free)

Sign Off	
Negotiator:	*Approver* :*
Outcome:	
Date:	
Signed:	

Commercial Negotiations Baseline Worksheet – Price	
Negotiation Point:	Base Price
Current Offer:	Base price new pricing after all negotiation issues finalised
Negotiation Issues:	Reduce base price – alignment between bidders
Comments	The base price between the 2 shortlisted bidders is slightly different – these need to be aligned.

Most Desirable Outcome (MDO)	Least Acceptable Agreement (LAA)	Target Agreement
5% reduction in base price of both bidders after the target adjustment	Current price offered	Alignment of price between bidders to price of lowest bidder

Sign Off	
Negotiator:	*Approver* :*
Outcome:	
Date:	
Signed:	

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Commercial Negotiations Baseline Worksheet – Price	
Negotiation Point:	Break Pricing – reduce risk and cost under breach
Current Offer:	Price changes due to breach
Negotiation Issues:	Price remains fixed – no risk of additional cost to Transnet
Comments	Transnet view on break pricing — no compensation for loss in profits - (no cost to Transnet for unallocated overheads on uncompleted units)

Most Desirable Outcome (MDO)	Least Acceptable Agreement (LAA)	Target Agreement
No compensation for loss in profits. Only 50 % of related sunk costs paid for.	Break pricing as offered by bidders	No compensation for loss in profits. Only related sunk costs paid for.

Sign Off	
Negotiator:	*Approver* :*
Outcome:	
Date:	
Signed:	

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Commercial Negotiations Baseline Worksheet – Price	
Negotiation Point:	Batch Pricing
Current Offer:	Price changes based upon quantity ordered
Negotiation Issues:	Price remains fixed as if order placed for full 599 electric or 465 diesel
Comments	

Most Desirable Outcome (MDO)	Least Acceptable Agreement (LAA)	Target Agreement
Remove batch pricing	Remove batch pricing	Remove batch pricing

Sign Off	
Negotiator:	*Approver* :*
Outcome:	
Date:	
Signed:	