

**ANNEXURE A: LIST OF COMPONENTS CAPABILITY LIST**

1. Respondents are to indicate their capability to manufacture or supply the below items. Please indicate with a Yes or a No which items will be manufactured by you as the Respondent or sourced elsewhere and supplied to Transnet. This spreadsheet must be fully completed.

2. Please refer to the tab titled 'Category' for details on what the various categories are [CAT1, CAT2 and CAT3]

	Component/system/sub system list for OEM Capabilities	Manufacture	Supply
1	Traction Motor: Replacement part designs for existing CRRC TM CAT1		
2	Traction Motor: New alternate AC Traction Motor - CAT1		
3	Blower Motors, Brake Resistor, CAT3		
4	Brake resistor cubicles: CAT3		
5	HV switchgear: HSCB, VCB, AC/DC switches: CAT2		
6	Pantograph: CAT1		
7	Batteries: CAT3		
8	Power System/ High Voltage: CAT1		
9	Power System/ High Voltage: Alternate Component Supply and setup COE: CAT1		
10	Traction Transformer Repairs: CAT1		
11	Control Systems: 20E, 21E, 22E: replace with alternate OEM: CAT1		
12	Low Voltage systems: CAT2		
13	Driver Master Controller: CAT1		
14	Lighting: CAT2		
15	Cabling and Looms; CAT2		
16	Busbars and Copper Strips: CAT2		
17	Cables: All Electrical Cable Types: CAT2		
18	Compressor Repairs: CAT2		
19	Compressor Replacement with Old		
20	Compressor Replacement with new Alternate: CAT2		
21	Electro-pneumatic Brake Systems: CAT3		
22	Mini - compressor: CAT2		
23	Piping: CAT3		
24	Car Body refurbishment: CAT3		
25	Bogie Refurbishment: CAT3		
26	Bogie: Procure alternative Bogie components, and castings etc : CAT1 & 3		
27	Suspension system: Shocks, Springs etc.: CAT2		
28	Coupling system (draftgear, coupler, rubber component suspension): CAT2		
29	Drawgear: CAT2		
30	Coupling System: Release mechanism and the coupler support plates, brackets and wear plates: CAT1		
31	Wheel set Manufacture and Refurbishment localized: CAT2		
32	Gear Case Repairs: CAT1		
33	Gear Case Manufacture: CAT1		
34	Cooling-Tower radiators: CAT1		
35	Driver's Desk manufacture: CAT2		

CATEGORIZATION: Systems, Components, Part, Material		
i.	Category 1 [CAT1]	<b>CAT1:</b> Critical integrated system designs: Where items were not localized by the OEM and he owns the designs and original manufacturing as done by current OEM in China; components such as the control system, power convertor systems, power drive systems, traction motors; and its related software that enables the existence of the locomotive. This also relates to the complete software that enables the functioning of the complete locomotive. For these components (and software) the alternative OEM will re-engineer, design, test and approve the new systems and/or products as well as the integration into the "New-alternate locomotive". Other items that were manufactured and supplied by current OEM include the pantograph, bogie casted products (pivot pin etc) are also included in this category. [Transnet has already developed two local suppliers for the pantograph, and hence is not reliant on current OEM for this anymore].
		For the other items, the alternative OEM will need to integrate their designs and source and supply their own critical products.
ii.	Category 2 [CAT2]	<b>CAT2:</b> Critical components: Where components were not localized and supplied from other component global OEMs by current OEM: components such as the Sesheron HSCB & VCB, roof switches, compressors, airdryers, coupling system, lighting, low voltage contactors, sensor, switchgear, etc. The alternative OEM and Transnet will source the direct replacement from the global component OEMs, as well as find sources to supply direct alternate OEM replacements.
iii.	Category 3 [CAT3]	<b>CAT3:</b> Critical integrated system designs: Where items have been localized, Transnet and/or the alternate OEM will negotiate options from the local OEMs and suppliers to continue supply and technical support to Transnet but taking into consideration IP infringements, and other legal issues that may exist between local OEMs and current OEM, after cancellation of contracts. Examples of these are the complete brake systems (which is a safety critical item), that were supplied locally by the 2 brake OEMS, Wabtec and Knorr Bremse and the airconditioner (HVAC).