

**DESIGN, SUPPLY, INSTALL AND COMMISSIONING OF DUVHA ELECTRIC COMPRESSORS, DRYERS AND PLC
E2741GXMPDUV**

No.	Document	Section	Page	Requirement	Clarification Questions	Client Response
1.	Rev2 Electric Dryers and PLC upgrade_TM (005) (002) (003) (002).pdf	/	/	Scope of work	<p>The bidder requests clarification on these questions:</p> <ol style="list-style-type: none"> 1. The individual compressors onboard controlled will be bypassed/removed and each compressor will be fully controlled from their respective slave PLC's (Siemens 1500)? 2. The required new tapping points for additional instrumentation as per technical specification are for the water supply and return pipelines temperature measurement instruments? 3. What is SCADA system and VA version and OEM? 4. For the master PLC, is Eskom open to other PLC Vendors or must the solution be Siemens Only? 5. Does Eskom require a Compressor Surge Test during commissioning? 6. Is Eskom interested in Anti-Surge Control or Traditional Pressure Control? 7. Is Eskom interested in replacing the traditional pneumatic actuation with electrical actuation? 8. What is the existing onboard controller (black box) make and model? 9. Do you have any cable block diagrams, instrument list, P&IDs, 	<ol style="list-style-type: none"> 1. On board controller to be removed and replaced with Siemens S7 PLC 2. Use the existing and recommend if necessary. 3. New SCADA Wincc V.8, Vav4 and OEM OPC UA 4. Yes 5. No 6. No we require traditional pressure/flow control — NOT anti-surge control. 7. Eskom is open to considering electrical actuation and welcomes proposed designs that meet technical, safety, and operational requirements. 8. Ingresol Rand 9. See the attachment

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					<p>single-line diagrams, drive schedule or Loop diagrams for compressor & dryer systems?</p> <ul style="list-style-type: none"> • Please provide these if available. <p>10. Who will be responsible for SCADA-side integration or the contractor or Eskom's SCADA team? And what is the communication protocol from Marshalling PLC to SCADA?</p> <p>11. What is the OEM and version of Marshalling PLC?</p> <p>12. What is the IO count for master and slave controllers/PLC respectively?</p> <p>13. What is the As-Built Compressor onboard controller communications protocol to slave controller?</p> <p>14. Are there any screenshots or exports of the existing HMI screens available? These will help us understand the current visualisation, navigate requirements, and ensure continuity in the upgraded Master HMI.</p> <p>15. What is the communication protocol of the mobile Diesel Compressors (DC) that will be used to connect to DC's to Control Air system? And How many DC's do you have?</p> <p>16. State whether the compressors on-board controller's panels can be reused?</p> <p>17. New compressor instruments must be supplied and installed? Or state if current instruments will be reused?</p> <ul style="list-style-type: none"> • If they will be replaced please share compressor instrument list. 	<p>10. The Contracted Supplier for this project. Protocol is profinet</p> <p>11. Siemens S7</p> <p>12. Not sure</p> <p>13. Not sure, because currently they are not connected to the slave. New slave controller is required on this project.</p> <p>14. There is a separate new project for two diesel compressors with their controller; the Master controller should cater to interfaced them.</p> <p>15. Should be determined on this project, preferred Profinet.</p> <p>16. No, new slave controller</p> <p>17. To use the installed instruments</p>

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					<p>18. The old master PLC can be removed and install new master PLC on the old master PLC location?</p> <p>19. Will access to the existing PLC program (source code) be provided to the contractor?</p> <p>20. Please confirm whether Ex/hazardous area classification applies to any of the field instruments?</p>	<p>18. New master PLC to be installed on the old master PLC slot.</p> <p>19. No, access to the existing PLC program (source code) will not be provided. The system is currently under a maintenance contract with the OEM (IR), who will provide the necessary assistance, and support should it be required.</p> <p>20. Yes, Ex/hazardous area classification does apply to some of the field instruments.</p>

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