SCOPE OF WORK - E1215CXMWPR - DIGITAL SIGN BOARD

1. SCOPE OF WORK

1.1 Primary supply and installation requirements

- **Supply and Delivery**: Provide a complete 65-inch outdoor LED digital display system including all necessary components, accessories, and spare parts.
- **Site Installation**: Professional installation of the LED digital display located at least 50 meters away from the gate (entrance) at ERIC facility, Rosherville.
- **Mounting Structure**: Design, supply, and install appropriate mounting/housing structure for the installation of the board.
- **Connectivity**: Board to provide remote connectivity and be capable of displaying different types of content
- **Software Provision**: Provide non-proprietary software for content management and display control
- **Training Services**: Provide comprehensive training on-site at ER&IC, Rosherville on the use of the software and the operation and management of the digital board
- **Support Services**: Provide after-sale support and maintenance service during the warranty period.

1.2 Detailed installation requirements

- **Site Assessment**: Conduct detailed site survey and provide installation recommendations.
- **Electrical Infrastructure**: Assess and provide electrical supply requirements (220V/380V as needed).
- **Network Connectivity**: Establish reliable internet/network connection for remote management capabilities.
- **Foundation Work**: Provide appropriate foundation and structural support as required.
- **Regulatory Compliance**: Ensure all installations comply with local building codes and safety regulations.
- **Corporate Identity**: Ensure installation aesthetics comply with Eskom corporate identity guidelines.

1.3 Project management and documentation

- **Project Planning**: Provide detailed project timeline and milestone schedule.
- **Quality Assurance**: Implement quality control measures throughout installation process.
- **Documentation**: Provide complete technical documentation, user manuals, and maintenance guides.
- **Commissioning**: Complete system testing, configuration, and performance verification.
- **Handover**: Formal system handover with signed acceptance certificates.

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2. SPECIFICATION OF PRODUCT OR GOODS

2.1. Display Unit Requirements

Display Specifications:

- **Screen Size**: 65-inch diagonal minimum.
- **Display Technology**: High-quality LED with minimum P4 pixel pitch for optimal 50+ meter visibility.
- **Resolution**: Minimum 1920 x 1080 pixels (Full HD), preferred 4K UHD (3840 x 2160).
- **Aspect Ratio**: 16:9 standard format.
- **Viewing Angle**: Minimum 160° horizontal and 160° vertical.
- **Refresh Rate**: Minimum 60Hz for smooth video playback.
- **Colour Depth**: Minimum 16-bit colour processing.

2.2. Performance Requirements:

- **Optimal Readability**: Ensure visible and clear readability from a distance (≥ 50m away).
- **Brightness**: Minimum 6,000 nits for excellent daylight visibility with automatic brightness sensors.
- **Contrast Ratio**: Minimum 5000:1 for superior image quality.
- **Colour Accuracy**: Professional colour calibration with minimum 16.7 million colours.
- **Response Time**: Maximum 8ms for crisp video and animation display.

2.3. Environmental Protection and Durability

Weather Resistance Requirements:

- **IP Rating**: Minimum IP65 rated - capable to withstand different adverse weather conditions.
- **Operating Temperature**: -20°C to +60°C ambient temperature range.
- **Storage Temperature**: -30°C to +70°C.
- **Humidity Resistance**: 10% to 95% relative humidity (non-condensing).
- **Wind Load**: Capable of withstanding wind speeds up to 150 km/h.
- **UV Protection**: UV-resistant materials and anti-fade coatings.

Structural Integrity:

- **Seismic Resistance**: Compliance with local seismic building requirements.
- **Fire Safety**: Non-combustible materials meeting fire safety standards.
- **Vandal Resistance**: Tamper-proof design with security locking mechanisms.

2.4. Connectivity and Control Features

Remote Control Capabilities:

- **Network Options**: Ethernet, Wi-Fi, and optional 4G/LTE connectivity.

- **Remote Management**: Cloud-based content management system compatible for remote connectivity.
- **Real-time Updates**: Capability for real-time information updates publication.
- **Multiple Content Support**: Text, images, videos, animations, live feeds, and data integration.

Content Management:

- **Flexible Message Display**: Allow displaying multiple lines of text and/or messages.
- **Multi-zone Display**: Capability to display different content in multiple screen areas.
- **Scheduling**: Advanced content scheduling for different times and dates.
- **Emergency Override**: Immediate content update capability for urgent communications.
- **Template Library**: Pre-designed templates for consistent corporate branding.

2.5. Software Requirements

Non-Proprietary Software:

- **Platform Independence**: Open-standard software to avoid vendor lock-in.
- **User Interface**: Intuitive, web-based interface accessible from multiple devices.
- **Multi-user Access**: Role-based access control for different authorization levels.
- **Content Creation**: Built-in tools for creating text, image, and video content
- **Analytics**: Usage statistics and performance monitoring capabilities.
- **Integration**: API capabilities for integration with existing Eskom systems.

2.6. Safety and Security Features

Safety Control Requirements:

- **Physical Security**: Have safety control feature against foreign objects interference/intrusion.
- **Access Control**: Multi-level user authentication with password protection.
- **Intrusion Detection**: Sensors and alarms for unauthorized access attempts.
- **Electrical Safety**: RCD protection, proper earthing, and surge protection.
- **Emergency Shutdown**: Remote emergency shutdown capability.

Corporate Identity Compliance:

- **Aesthetic Design**: Housing design to comply with Eskom corporate identity guidelines.
- **Colour Scheme**: Corporate colour compliance options.
- **Logo Integration**: Provision for Eskom logo and branding elements.
- **Professional Appearance**: Clean, modern design suitable for research facility environment.

Figure 1 below provides an example of the housing unit and aesthetic required for the display for corporate identity compliance. The costs are to be determined by the Buyer (Procurement Department).
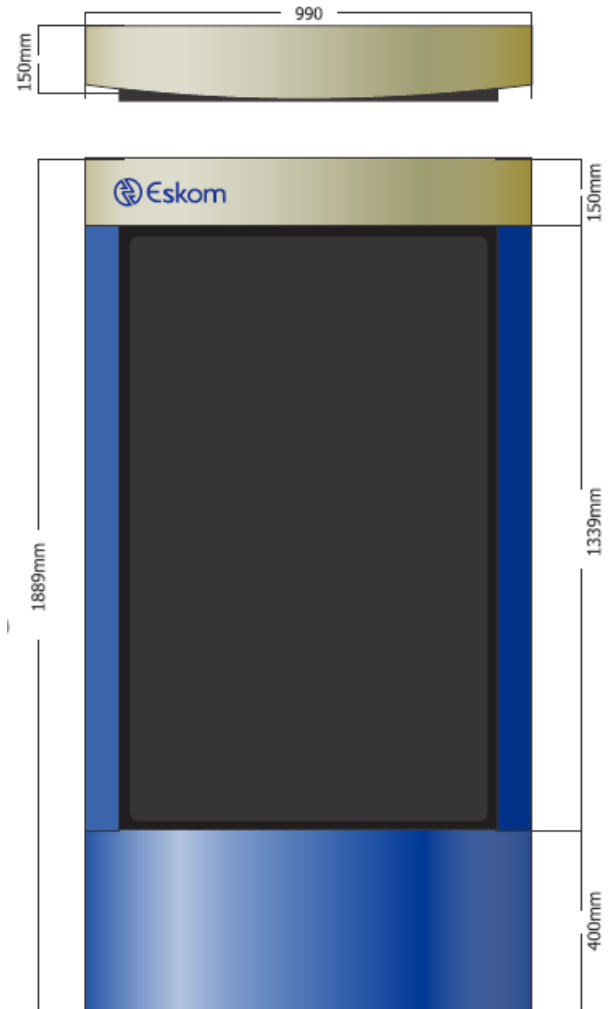

Figure 1: Digital Board - Corporate Identity Compliance and Display

2.7. Warranty and Guarantee Requirements

Warranty Coverage:

- **Duration**: Display unit to have ≥ 24 months warranty and guarantee cover.
- **Comprehensive Coverage**: Parts, labour, software, and technical support included.

Response Time:

- Critical issues: Maximum 4 hours response, 24 hours resolution.
- Non-critical issues: Maximum 8 hours response, 48 hours resolution.

- **On-site Service**: Local technical support with on-site service capability

- **Replacement Policy**: Loaner equipment provision during extended repair periods.