

SCOPE OF WORK

Description of Service/ product that needs to be provided

The product required is a **65-inch outdoor LED digital display media player** with comprehensive installation and maintenance services. The display unit will be used for informational purposes to publish messages, announcements, research highlights, and corporate communications. The complete solution must be user-friendly and easy to manage for the end user while maintaining professional corporate standards.

Key Deliverables:

- 65-inch outdoor LED digital display system.
- Professional mounting and housing structure.
- Content management software (non-proprietary).
- Installation and commissioning services.
- Comprehensive training program.
- Ongoing maintenance and technical support.

1. SCOPE OF WORK/SUPPLY

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.

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- **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.

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.

Performance Requirements:

- **Optimal Readability:** Ensure visible and clear readability from a distance ($\geq 50\text{m}$ 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.

2.2. Environmental Protection and Durability

Weather Resistance Requirements:

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- **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.

2.3. 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.

2.4. 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.

2.5. Safety and Security Features

Safety Control Requirements:

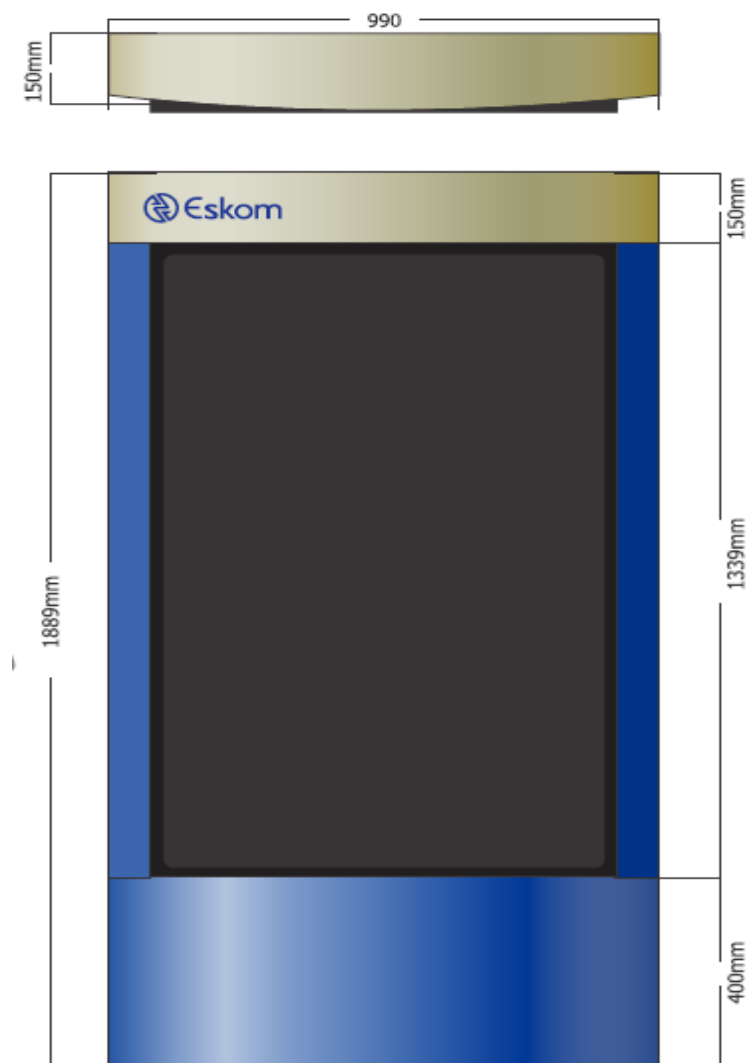
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- **Physical Security:** Have safety control feature against foreign objects interference/intrusion.
- **Access Control:** Multi-level user authentication with password protection.
- **Intrusion Detection:** Sensors and alarms for unauthorized access 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).



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Figure 1: Digital Board - Corporate Identity Compliance and Display

2.6. 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.