# Proposal for Digital Infrastructure Enhancement Project Submitted by Company E to MTCIT

Company E

May 2025

#### Cover Letter

**Date:** May 17, 2025

To: Mr. Ahmed Al-Masroori Procurement Department Ministry of Transport, Communications and Information Technology (MTCIT) Sultanate of Oman

Dear Mr. Al-Masroori,

Company E is honored to submit our proposal for the "Digital Infrastructure Enhancement Project" tender issued by MTCIT. As a leader in edge computing and IoT-driven solutions, we bring a decade of expertise in delivering resilient, community-focused digital infrastructure. Our innovative approach, rooted in sustainability and local collaboration, is designed to empower MTCITs mission and advance Omans digital transformation. Sincerely,

Your Name

Chief Technology Officer, Company E

#### Company Profile 1

Founded in 2014, Company E is a trailblazer in edge computing, IoT integration, and sustainable digital solutions. Headquartered in Dubai with a Muscat office since 2019, we have delivered over 35 high-impact projects across the GCC, including an IoT-enabled smart port system for Omans Port of Duqm in 2022. Our certifications include ISO 27001, ISO 14001, and Cisco IoT Advantage, and we were awarded the "GCC Leader in IoT Innovation" in 2024.

#### 2 Technical Proposal

#### 2.1 Methodology

Our Community-Driven DevOps methodology integrates stakeholder feedback and local expertise for agile, high-quality delivery.

#### 2.2 Technology Stack

- Edge Computing: Kubernetes-based edge nodes.
- IoT Integration: MQTT protocol for device communication.
- Backend: Go with gRPC for scalable APIs.
- Database: Cassandra for high-availability storage.
- Security: Quantum-resistant encryption.

#### 2.3 Integration

gRPC APIs with protocol buffers for seamless integration.

### 2.4 Security

Exceeds Omani standards with quantum-resistant encryption and AI-based intrusion detection.

### 2.5 Sustainability

Energy-efficient edge nodes targeting a 30% reduction in energy consumption.

#### 3 Timeline

The project will be completed within 10 months:

- Month 1: Requirements and edge framework design.
- Month 2-3: IoT and edge module development.
- Month 4-6: Integration and security implementation.
- Month 7-8: Testing and optimization.
- Month 9-10: Deployment and training.

# 4 Financial Proposal

Total cost: 1,160,000 OMR

- Edge and IoT Framework Design: 200,000 OMR
- Development and Integration: 420,000 OMR
- Security Implementation: 160,000 OMR
- Testing and Optimization: 180,000 OMR
- Training and Community Engagement: 200,000 OMR

Payment terms: 20% upon signing, with a 3% discount for early milestone approvals.

### 5 References

#### 1. IoT-Enabled Smart Port System, Port of Duqm, Oman (2022)

Contact: Mr. Saleh Al-Balushi, +968 9876 5432

Outcome: Increased efficiency by 35%.

#### 2. Edge Computing Infrastructure, Saudi Ministry of Energy (2021)

Contact: Eng. Nasser Al-Ghamdi, +966 6677 8899

Outcome: Reduced latency by 40%.

#### 3. Smart City IoT Platform, Qatar Foundation (2020)

Contact: Ms. Noor Al-Khalifa, +974 5544 3322

Outcome: 99.9% system uptime.

# 6 Compliance

Company E complies with Omani regulations, including the Commercial Companies Law and Tender Law, and commits to 50% local SME engagement.

# 7 Evaluation Criteria Alignment

- Technical Capability (3/3): Edge computing and IoT for unmatched performance.
- Experience (3/3): Proven success in Oman and GCC projects.
- Cost (3/3): Competitive pricing with energy savings.
- Compliance (3/3): Full adherence to Omani laws.

#### 8 Additional Commitments

- Community Innovation: Omani Innovation Lab with local universities.
- Sustainability: 30% energy consumption reduction.
- Training: Training for 80 Omani professionals.
- **Support**: 18 months free maintenance.