

# Tender Report: SITC of 12 Nos. Tripod Chemical Earthing System

AIRPORTS AUTHORITY OF INDIA — Goa International Airport (Dabolim)

GeM Bid No.: GEM/2025/B/6899417

Last Date and Time : 08-Dec- 2025, up to 17:00 Hrs.

## 1 Overview

- **Title of Work:** Supply, Installation, Testing and Commissioning (SITC) of 12 Nos. Maintenance-Free Tripod Chemical Earthing Systems at CNS Sites of Goa International Airport (MDS, VHF, NDB, GP).
- **Bid Identification No.:** GEM/2025/B/6899417.
- **Date of IFB Publication:** 17-Nov-2025.
- **Last Date and Time for Submission of Bids (Online):** 08-Dec-2025, up to 17:00 Hrs.
- **Date and Time of Technical Bid Opening:** 08-Dec-2025, at 17:30 Hrs.
- **Bidding Mode:** GeM Online Two-Packet System (Technical + Financial).
- **Organisation / Employer:** Airports Authority of India (AAI), CNS Department, Goa International Airport, Dabolim.
- **Funding Source:** Fully funded through AAI's Internal Resources.
- **Brief Description of Work:** Complete SITC of maintenance-free Tripod Earthing Systems including supply of materials, civil excavation, electrode installation, backfill charging, copper strip laying, chamber installation, testing, commissioning and handing over as per AAI technical requirements.
- **Site of Work:** CNS Operational Sites — MDS, VHF, NDB and Glide Path (GP) locations at Goa International Airport.
- **Consignee / Project Officer:** CNS In-Charge, Goa Airport; Responsible Officer: Shri Ruturaj Ashok Bhosale.
- **Contract Completion Period:** 30 (Thirty) Days from the date of issuance of Purchase Order.

## 2 Financial Details

- **Estimated Cost:** 13,62,162/- (indicative as per GeM).
- **EMD:** 27,240/-; MSME exemption allowed as per GeM guidelines.
- **Payment Terms:** 100% payment after delivery, installation, SAT and document submission.
- **Bid Fee:** As per GeM; exemptions applicable for MSE.
- **e-RA:** Not applicable for this bid.

## 3 Eligibility Criteria

- **Local Supplier Requirement:** Class-I / Class-II suppliers meeting minimum local content (50% / 20%).
- **Work Experience:** One order 80%, OR two 50%, OR three 40% of estimated value in past 7 years.
- **Turnover:** Minimum average 4,00,000 in last 3 FYs; MSME / Startup exemptions allowed.
- **Mandatory Documents:** OEM Authorization, datasheets, past performance proofs, financials, Udyam/DPIIT certificate if applicable.

## 4 Scope of Work (Clear & Simplified)

- Supply, Installation, Testing and Commissioning of **12 Tripod Chemical Earthing Systems** at MDS, VHF, NDB and GP CNS sites of Goa Airport.
- Supply of all materials including copper-bonded electrodes, backfill compound, copper strips, busbars, in-

spection chambers, clamps, waterproof covers and all installation accessories.

- Conduct excavation, tripod pit preparation, electrode placement in triangular pattern, backfill pouring, strip laying (25×3 mm), brazed/welded joints, chamber installation and earthing ID marking.
- Provide manpower, transport, tools, welding/brazing equipment, testing instruments (earth tester, continuity tester) and safety PPE for entire work.
- Ensure site protection and restoration after work without disturbing existing cables/equipment; dispose debris and restore area to original condition.
- Perform pre-installation checks (material verification, soil resistivity) and post-installation tests (earth resistance 1.5, joint continuity, visual inspection) in presence of AAI representative.
- Prepare and submit SAT report, installation photographs, OEM datasheets, copper purity certificates and warranty certificate.

## 5 Technical Requirements

- **Electrodes:** 3 rods per tripod, 17.2 mm dia, 3 m length, copper-bonded steel with 250 µm copper coating; withstand 20 kA for 1 sec.
- **Backfill Compound:** Min 125 kg/tripod, resistivity ≤0.12 m, non-corrosive, stable from -10°C to +50°C.
- **Copper Strip:** 25×3 mm, total 16 m per tripod (6 m grid + 10 m up to equipment termination), purity 90%.
- **Busbar:** 6×25×200 mm with rustproof hardware.
- **Inspection Chamber:** 300×300×300 mm RCC/FRP with locking cover.
- **Final Resistance:** 1.5 for each tripod system.
- **Standards:** IS 3043, IEEE 80, IEC 60364, BS 7430 (as applicable).

## 6 Testing & Acceptance

- Pre-installation: soil resistivity, material verification, copper purity certificates.
- Post-installation: earth resistance test, joint integrity test, continuity test and visual inspection.
- Documentation: SAT report, photos, datasheets, warranty certificate, as-built details.

## 7 Contractual Conditions

- **PBG:** 10% of contract value; validity 6 months beyond warranty.
- **Warranty:** Minimum 2 years; defects to be rectified within 5 days.
- **LD:** 0.5% per week, maximum 10%.
- **Arbitration:** As per Arbitration Act; jurisdiction New Delhi.
- **Risk Purchase:** Applicable for non-performance.

## 8 Submission Requirements

- **Hard Copies (if required):** EMD/Exemption proof, acceptance letter, POA.
- **GeM Uploads:** Technical bid, PQ documents, BOQ, OEM certificates, datasheets, compliance sheets.