



# Indigenous SODAR (Sound Detection and Ranging) System



## Importance of SODAR:

- SODAR is one of the best remote sensing techniques which is internationally recognized and proven cost effective to provide continuous real-time data of air pollution meteorological parameters.
- It is recommended by Environmental Protection Agency (EPA) for air quality dispersion modelling in Environmental Impact Assessment (EIA).
- It is indigenously designed and developed for environmental studies and climate science.

The SODAR System consists of two parts: Part A and Part B.

Part A	Part B
Fabrication, transportation, installation and maintenance of Antenna	Software and electronics

Expression of interest (EOI) is invited for Part A for the fabrication, transportation, installation and maintenance of SODAR Antenna at all over India locations. Interested parties are invited to submit their EOI for Part A. Shortlisted parties will be called for discussion and an NDA will be signed.

**Scope for Part A is given below:**

### 1. Fabrication of Antenna (Mild Steel)

- Hexagonal frame with instrumentation box, door with a handle, and lock
- Height: 8 feet, Diameter: 5 feet (base), 8 feet (on top)
- Sheet thickness: 2 mm, Angle thickness: 2 mm (main frame), 5 mm (base frame angle thickness)

### 2. Powder coating of the Antenna

### 3. Concrete structure (10 ft. x10 ft.) for Antenna fixing with fasteners

### 4. Fabrication of Tripod stand with Stainless Steel (SS)

### 5. Installation of High-Density Acoustical foam ( $40 \text{ kg/m}^3$ , 4 inches thick) on inner side of hexagonal structure

### 6. Installation of Audio and power cables (approx..30 feet) with casing and capping

### 7. Steel name plate (1.5 ft. x 1.0 ft.) with CSIR and AMPRI logo and name

### 8. Power amplifier and Desktop computer

**Time duration:** The time duration for the submission of Expression of Interest (EOI) is one month from the date of publication of the EoI.

**Attached:** SODAR System Brochure