

Ground Based Mobile ELINT System (GBMES) comprises of one Control Station (CS) and three Receiving Stations (RxS) integrated in master slave concept to search, detection, monitor, record and process the hostile emissions as well as to find the location of the emitter fulfilling the strategic EW requirements of the Indian Air Force (IAF). One of the three Receiving Stations is also configured to operate in master slave configuration (with minimal degradation) in the absence of Control station. Each Receiving Station contains three ELINT Receiver Segments in the 70MHz-40GHz frequency range. In addition, one COMINT Receiver Segment covering the 30 -1000MHz frequency range is employed to intercept, Monitor the COMINT signals.

GBMES is envisaged to operate in the frequency range from 70 MHz to 40 GHz covering Radar bands and 30 MHz to 1000 MHz communication bands. The system is capable of interception, analysis and location fixing of radar signals and interception, monitoring of communication signals. The configuration of system is as shown in Fig 1.0. The salient features of the system are as follows

- Wide Frequency coverage from 70MHz to 40GHz and COMINT segment 30-1000 MHz
- Achieve High Sensitivity & DF Accuracy with accurate Emitter Parameters
- Quad Superhet Receiver Front-end Technology
- Quad Digital Receiver Technology
- Built-in Radar Finger Printing System (RFPS)
- Location Fixing (LF) using triangulation
- Generate Electronic Order of Battle (EOB)
- Provide interface with onboard units i.e., GPS Receiver, SATCOM Link and Data Link Communication Unit of Air Force

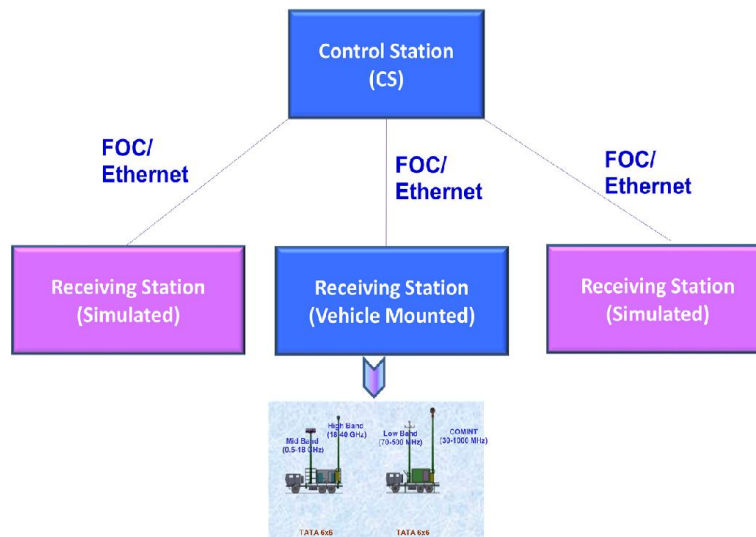


Fig 1.0: Configuration of Ground Based Mobile ELINT System (Project HIMRAJ)