



भारत सरकार  
नागर विमानन महानिदेशालय  
Government of India  
Directorate General of Civil Aviation  
**STANDARD OPERATING PROCEDURE**

Ref. DGCA ANSS AC 01 of 2023  
Issue date: 10-11-2025

**Sub: Real-Time reporting of GNSS Spoofing/ GNSS Interference  
events around IGI Delhi airport**

**1. Introduction**

- 1.1 In view of the recent occurrences of GNSS interference events reported in and around IGI Airport, New Delhi, it is imperative that all aviation stakeholders ensure prompt detection and real-time reporting (within 10 minutes of occurrence) of such events to maintain flight safety and operational integrity.
- 1.2 This Standard Operating Procedure (SOP) is issued in continuation with DGCA ANSS Circular 01 of 2023 to streamline the reporting and coordination mechanism among all concerned entities.

**2. Objective**

To ensure immediate, accurate, and standardized reporting of any suspected GNSS interference incident for effective investigation, analysis, and mitigation. GNSS interference incident may be either GNSS Jamming/ Spoofing / Signal Loss or Integrity Error.

**3. Applicability**

This circular is applicable to all Aircraft Operators, Flight Crew and Airports Authority of India (AAI) including ATC and CNS units, operating in and around IGI airport, New Delhi.

**4. Effective Date**

This SOP shall come into immediate effect and shall remain in force until further instructions are issued by DGCA.



## **5. Reporting Protocol**

### **5.1 Detection/ Observation**

Any pilot, ATC controller, or technical unit detecting abnormal GPS behaviour (e.g., position anomalies, navigation errors, loss of GNSS signal integrity, or spoofed location data) shall initiate real time reporting (within 10 minutes of occurrence).

### **5.2 Mandatory Information for Real-Time Reporting:**

Initial reports shall mandatorily include the following details:

- Date and Time (UTC/local) of occurrence
- Aircraft Type and Registration
- Operator / Airline Name
- Flight Sector / Route
- Coordinates (Latitude/Longitude) of occurrence or area affected
- Type of Interference (e.g., Jamming / Spoofing / Signal Loss / Integrity Error)
- Aircraft Equipment(s) affected by the interference and aural warnings, if any
- Any operational impact observed (optional but recommended)

In addition, airlines operators, pilots and ATS units may include further supporting details such as preservation of system logs, screenshots or images of the Flight Management System (FMS), and records of effects on connected systems and platforms, wherever applicable.

### **5.3 Reporting Format**

Full reports shall be submitted strictly as per the format prescribed in DGCA ANSS Circular 01 of 2023.

### **5.4 Reporting Channel**

Any aircraft observing GNSS RFI shall report the mandatory information as mentioned in para 5.2 above to the concerned ATS unit. The ATS unit shall immediately forward the same to DGCA.

The initial and follow-up reports shall be transmitted in real time (within 10 minutes of occurrence) to:

- Director (ANSS), DGCA – for technical analysis and coordination with national agencies
- Director (Air Safety), DGCA – for safety assessment and occurrence tracking

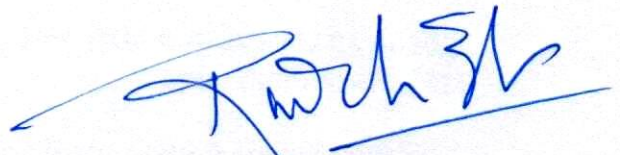


A copy of the same shall also be shared with the following:

- ATC Watch Supervisor,
- Airline OCC,
- AAI CNS Directorate (Delhi Region), and
- GM (CNS), GAGAN, Bengaluru.

**6. Compliance**

All airline operators, AAI units, and ATC controllers are directed to ensure strict compliance with this SOP. Non-adherence or delayed reporting may hinder timely assessment and mitigation of GNSS interference events.



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