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**MALAYSIA**

PHONE: 6-03-8529 1318  
FAX: 6-03-8529 1310  
Email: ais@caam.gov.my  
URL: aip.caam.gov.my

CIVIL AVIATION AUTHORITY OF MALAYSIA  
AERONAUTICAL INFORMATION SERVICES  
LEVEL 2, WEST WING TERMINAL NORTH  
JALAN CTA 3  
KUALA LUMPUR INTERNATIONAL AIRPORT  
64000 KLIA, SEPANG,  
SELANGOR DARUL EHSAN

**AIRAC AIP SUP**  
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**OPERATIONAL TRIAL OF SATELLITE COMMUNICATION VOICE (SATVOICE)  
FOR ATS COMMUNICATIONS IN THE OCEANIC AIRSPACE OF THE  
KUALA LUMPUR FLIGHT INFORMATION REGION.**

**1 INTRODUCTION**

- 1.1 The purpose of this AIRAC AIP Supplement is to notify the aviation industry of the operational trial of Satellite Communication Voice (SATVOICE) for ATS communication within the Oceanic Airspace of the Kuala Lumpur Flight Information Region (FIR), covering ATS routes N571, P628, L510, P627, L645, and P574. The trial will be effective from 31 October 2024 at 0400 UTC until 30 April 2025 at 0400 UTC.

**2 INTRODUCTION TO SATVOICE**

- 2.1 SATCOM voice or SATVOICE is a voice communication system based on satellite technology. It provides secure and high-quality ground-to-air voice communications via global satellite networks that keep air traffic controllers and pilots in clear contact during flight.

*Note: According to ICAO Doc 9869, the term SATCOM is used only when referring to both voice and data satellite communication or only data satellite communication while SATVOICE is for satellite voice communication.*

- 2.2 SATVOICE provides a means of reducing the risk of communication failures, improving safety and efficiency of operations and alleviating HF/VHF channel congestion. SATVOICE can improve current ATS communications via a radio operator and provide direct controller-pilot communications (DCPC) for more efficient ATS communications, such as in processing negotiations or requests from the flight crew.

- 2.3 ICAO recognizes SATVOICE as a valid means of communication. Satellite Voice Guidance Material (SVGM) has been developed and approved by the:

- ICAO Asia/Pacific Air Navigation Planning and Implementation Regional Planning Group (APANPIRG)
- North Atlantic Systems Planning Group (NAT SPG)

**3 SATVOICE USE IN KUALA LUMPUR FIR (OCEANIC AIRSPACE)**

- 3.1 In procedural airspace of Kuala Lumpur FIR where CPDLC and ADS-C is available and the aircraft is capable, the controller would normally choose CPDLC and ADS-C as the means of communication. The controller or pilot may choose to use SATVOICE for direct controller-pilot communication (DCPC), when necessary, as opposed to relaying through the radio operator.

- 3.2 SATVOICE is intended to enhance communication availability for both pilots and controllers. However, it is not a replacement for ADS-C/CPDLC or HF/VHF voice. SATVOICE can also be utilized in case of communication failure with ATC via VHF/HF or CPDLC.

- 3.3 The one-stage dialling of the SATVOICE system, installed and integrated within the existing Voice Communication System in the Kuala Lumpur FIR ATS facility allows Air Traffic Controllers to quickly establish voice communication links with aircraft. ATC can dial a single SATVOICE short code to connect with appropriately equipped aircraft.

3.4 Therefore, it is important for operators to ensure that the correct information is included in item 18 of the ICAO flight plan. Essential details, such as the aircraft registration number and Mode-S address, must be provided to facilitate the automated establishment of SATVOICE communication between the aircraft and the ATSU.

### 3.5 Priority Levels for SATVOICE Calls

Priority level	Application category	Examples
<b>1 / EMG / Q15</b> Emergency (highest) Safety of Flight	Distress and urgency	Rapid descent Urgent weather deviation
<b>2 / HGH / Q12</b> Operational High (second highest) Safety of Flight	Flight safety Typically Assigned to calls for ANSP.	Altitude request
<b>3 / LOW / Q10</b> Operational Low (third highest) Safety of Flight	Regularity of flight, meteorological, administrative Typically assigned to calls for aeronautical operational control (AOC).	Air traffic information service, Redispach Maintenance
<b>4 / PUB / Q9</b> Non-operational (lowest) Nonsafety	Public correspondence	Public phone calls

3.6 Safety-level priority (priority level 2) has been assigned to ATS communications by satellite service providers (SSP). When accepting an incoming call from ATC, the pilot shall visually confirm and verify that it is an ATS safety-level (level 2) priority call.

3.7 The flight crew should act only on air traffic control (ATC) clearances or instructions from SATVOICE calls with priority level 2 / HGH / Q12. (Priority level 1/EMG/Q15 is reserved for outbound calls from aircraft.). If in doubt terminate the call and initiate a new call for confirmation.

3.8 The flight crew should initiate calls to the ATSU using the appropriate priority level 2 / HGH / Q12 or priority level 1 / EMG / Q15.

3.9 Aircraft equipped with SATVOICE equipment may call the appropriate ATS unit using the following short code or public switched telephone network (PSTN) number:

ATS Unit	Short Code	PSTN Number (Long Code)
Kuala Lumpur FIR	453302	60387878670

**Note:** Short codes should always be used. However, long codes (phone number) can be used, but only if necessary. Call routing automation in the voice switching system is only available when the short code is used.

## 4 REQUIREMENTS AND CONDITIONS

4.1 Aircraft capable of both air-to-ground and ground-to-air SATVOICE must include the following in their ICAO flight plan.

- In item 10, as appropriate, insert:
  - “M1” for ATC RTF INMARSAT capability; and/or
  - “M2” for MTSAT RTF capability; and/or
  - “M3” for ATC RTF IRIDIUM capability; and
  - “P3” for SATVOICE RCP 400

- in Item 18, insert:
  - the indicator REG/ followed by the aircraft registration; and
  - the indicator CODE/ followed by the aircraft address expressed in the form of an alphanumerical code of six hexadecimal characters.

**Note:** *Inclusion of SATVOICE capability in the ICAO flight plan indicates to the air traffic controller that both the aircraft equipment is approved for use and that the flight crew has the appropriate qualifications and training to use it.*

## **5 PHRASEOLOGY STANDARDS**

- 5.1 Phraseology as mentioned in PANS ATM, Doc 4444 shall be applied for ATC-Pilot communication which is the same procedures used for other voice communications mediums((HF/VHF).

## **6 CANCELLATION**

- 6.1 This AIRAC AIP Supplement will remain current until the information is published in AIP Malaysia.

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