International Civil Aviation Organization

Sixteenth Meeting of the FANS Interoperability Team – Asia (FIT-Asia/16)

Bangkok, Thailand, 9 – 11 June 2026

Agenda Item 2: Central Reporting Agency Reports

FIT-ASIA CENTRAL REPORTING AGENCY (CRA) PROBLEM REPORT BRIEFING

(Presented by the FIT-Asia CRA)

SUMMARY

This paper presents information describing the investigation and disposition of submitted Air Traffic Services (ATS) data link problem reports (PRs) that are relevant to FIT-Asia.

1. INTRODUCTION

1.1 ATS data link stakeholders may submit PRs via the www.fans-cra.com website.

a) Airways Corporation of New Zealand (ACNZ) graciously hosts and maintains the website.

b) The website is used by multiple organizations, namely FIT-Asia, the Informal South Pacific ATS Coordinating Group (ISPACG) FIT, the Informal Pacific Air Traffic Control (ATC) Coordinating Group (IPACG) FIT, and the North Atlantic (NAT) Technology and Interoperability Group (TIG).

1.2 Between preparation of the FIT-Asia/15 PR briefing in June 2025 and preparation of this PR briefing in May 2026, the FIT-Asia CRA received 6 new PRs. For comparison, the FIT-Asia/15 PR briefing indicated that the FIT-Asia CRA received 6 PRs.

1.3 **Figure 1** illustrates the number of PRs that the FIT-Asia CRA received per calendar year starting in 2016. The dotted line and associated number in the figure represent a linear projection of the number of PRs that the FIT-Asia CRA will receive in 2026.

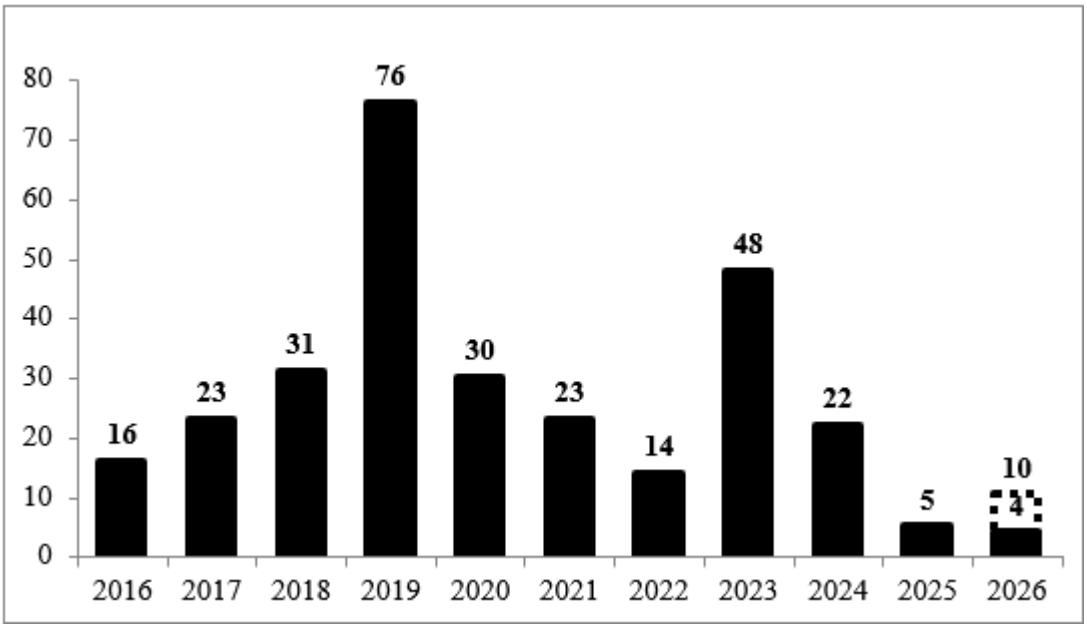

Figure 1: FIT-Asia PRs Per Year

1.4 PR status definitions include the following:

a) **Raised**: The PR originator submitted the PR, but the CRA has not yet processed it.

b) **Active**: The CRA processed the PR and assigned it for investigation.

c) **Open**: The CRA completed the PR investigation, but some form of corrective action is required before the CRA can close it.

d) **Open – Fix Available:** The appropriate stakeholder implemented corrective action, and a fix is available for installation**.**

e) **Closed As Duplicate**: The CRA closed the PR because it is already tracking the same problem with another PR.

f) **Closed**: The appropriate stakeholder implemented corrective action.

g) **Closed – Monitoring:** The CRA closed the PR because it cannot determine the corrective action. The CRA will monitor future PRs for any recurrences of the problem.

1.5 PR type definitions include the following:

a) **TBA**: To be assigned.

b) **Air – Procedural**: Flight crew issue.

c) **Air – Technical**: Avionics issue.

d) **Ground – Procedural**: Controller issue.

e) **Ground – Technical**: ATS unit system issue.

f) **Network**: Communication service provider or SATCOM service provider issue.

g) **Multiple**: Multiple types of issues.

h) **None**: Report is not a problem.

2. DISCUSSION

2.1 The FIT-Asia CRA updated the status or progress of the following old PRs that are relevant to FIT-Asia:

a) 777 AIMS BPV18 software became available in April 2025. This software resolves PRs 2292-SN (inability to initiate logon), 2821-SH (no timestamp in CPDLC downlink message with dM63 NOT CURRENT DATA AUTHORITY), and 3090-SH (inability to initiate logon). This software also implements the ACARS RAT1 function to improve PBCS time performance in VHF-to-SATCOM transition areas.

b) 747 NG FMC BP4.1 software is currently expected to become available in the third quarter of 2026. This software will resolve PRs 2892-KS (inability to initiate logon) and 3251-GM (incorrect rounding of certain Mach speeds on ATC LOG page and printouts).

c) 787 CMF BPv7 software is currently expected to become available in the third quarter of 2026. This software will resolve PRs 2685-MM (inability to send downlink messages), 3119-MM (truncated CPDLC position reports when wind direction is between 0.0° and 0.9°), 3264-MM (incorrect rejection of CPDLC connection requests), 3344-MM (incorrect rejection of CPDLC connection requests), and 3534-MM (incorrect wind direction in ADS-C reports when wind direction is between 126° and 234°). This software will also implement the ACARS RAT1 function to improve PBCS time performance in VHF-to-SATCOM transition areas.

d) 3785-RA, Open. CAA Singapore reported that three A21Ns belonging to the same operator failed to meet the 95% and 99.9% PBCS requirements in December 2024 and January 2025. Airbus analysis of the data revealed that the delays were due to SATCOM unavailability when the delayed reports were queued up to be sent to the ground. The root cause of SATCOM unavailability is being investigated by Airbus, and Airbus has proposed to leave this PR open until further analysis is performed

e) 3789-RA, Open. CAA Singapore reported that an operator's A333 failed to meet the 95% RSP 180 requirement in the periods between October and December 2024, and November 2024 and January 2025. The operator noted that this tail also experienced several CPDLC logouts. Airbus analysis of the data revealed that the cause of the delayed reports was due to the non-compliant aircraft losing and regaining its SATCOM link over 150+ times on two particular days. The root cause of SATCOM unavailability is being investigated by Airbus, and Airbus has proposed to leave this PR open until further analysis is performed

2.2 The FIT-Asia CRA received the following significant new PRs that are relevant to FIT-Asia:

a) 3820-RA, Open, Air – Technical; 3856-GD, Closed as Duplicate / Air – Technical. CAA Singapore reported that an operator's B777W fleet did not meet the 95% RSP180 delivery time requirement from March to July 2025. CAA Singapore also noted that this fleet had an area of poor performance near Singapore, well within the coverage of multiple VHF ground stations. Analysis by the CRA revealed that the delayed reports in the problematic area are often proceeded with VHF link tests and VHF established/lost media advisories (between the time that the report is timestamped and when it is delivered at the ground), indicating intermittent and poor VHF connectivity. Similar issues with different airframes are seen on approach/arrival into airports on island coastlines. The root cause of this is the avionics VHF ground station handoff logic. As per ARINC 631-8, the aircraft should prefer connection to a destination ground station (such as the one at Changi airport) when connected to a non-destination ground station; the exact determination logic depends on signal strength, aircraft location, aircraft altitude, etc. It appears that on the B777, the handoff between the connected ground station and the destination ground station happens

too early while the aircraft is flying 'under' the coverage of the destination airport, leading to a weak link that the avionics unsuccessfully attempts to deliver ADS-C reports through, before reverting to SATCOM. The combination of numerous VHF ground station handoff logic improvements and RAT1 timer implementation in BPV18, and further VHF ground station handoff logic improvements in BPV19 should greatly help to alleviate this issue and improve performance. This PR will be kept open, and B777 fleet performance should be monitored once BPV19 is released to identify if performance in this area indeed improves as expected.

b) 3874-RA, Closed – Ground – Technical. CAA Singapore reported that an ADS-C downlink report was received with invalid characters in the message header and payload. This resulted in a buffer issue at the receiving system which caused a disruption to operations and was only resolved with manual intervention. It was discovered that due to the poor signal strength between the aircraft and receiving VHF ground station at the time of message delivery, the message was received at the SITA ground system as corrupted with invalid characters. The CRC check at the SITA system did not detect the issue and SITA forwarded the message to CAA Singapore, causing the buffer issue. A fix is being implemented by SITA to discard downlinks containing illegal characters in the aircraft field to prevent this issue from occurring in the future. This PR was Closed as per CAAS recommendation.

c) 3862-GD, Open – Ground – Procedural. NCA reported that their B748 attempted to log on to RPHI but did not get “ATC COMM ESTABLISHED”. Further investigation showed that a previous connection to RPHI was successful. After disconnecting from another center and attempting to reconnect to RPHI, a full connection was not established. This was due to RPHI sending an AFN ACK without a successive Connection Request. The aircraft attempted to log on again by sending an AFN CON which again was responded to with an AFN ACK without the Connection Request. The PR has been assigned to RPHI for further investigation.

2.3 The FIT-Asia CRA is aware of the following significant new PR that occurred in other areas around the world, but which is relevant to FIT-Asia:

a) 3752-MM, Open. The FAA reported that on a particular B789, a CPDLC WILCO message was received with a timestamp that was 5 minutes in the future, the FOM value for all ADS-C position reports was 2, and the ETA for some ADS-C position reports was about 5 minutes off. Boeing notes that GPS interference can have adverse effects on the operation of avionics’ CPDLC and ADS-C applications. Boeing and its avionics suppliers are working to improve the robustness of their GPS avionics to better respond to and recover from GPS interference.

b) 3801-RA, Open. ISAVIA reported that when Iceland attempted to set up ADS-C contracts with a B777, a MAS success was received but the aircraft did not acknowledge the contracts. The issue was recreated by Boeing and found to be caused by an ADS-C Cancel Contracts and Terminate connection request from Montreal being sent and processed by the aircraft at the exact same time that the ADS-C Contract Request is received by the aircraft from Iceland. When the aircraft generates the downlink to disconnect ADS-C from Montreal, the Iceland ADS-C contract request is received, and the avionics ignores that contract request. The B777 avionics will ignore ADS-C contract requests when they are received at the exact same time that another center terminates their ADS-C connection with the avionics. This issue will be resolved in a future software update.

2.4 The FIT-Asia CRA received the following less-significant new PRs that are relevant to FIT-Asia:

a) 3857-CJ, Active. CAA Vietnam reported that the CPDLC function could not be used during a 45-minute period on 22 January 2026, with the causes of errors coming from ARINC. The CRA noted that SITA reported an outage near the time of the reported issue, but that there was no outage report from ARINC. The CRA has requested that CAA Vietnam provide additional details on this PR, including the specific aircraft tail numbers affected and whether all uplinks from CAA Vietnam failed during the reported time period.

b) 3825-MM, Active. An operator reported that after a flight crew logged onto RPHI, they did not receive a response after sending a weather deviation request. The CRA has assigned this PR to CAA Philippines to investigate why there was no response to the flight crew's weather deviation request.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

a) note the information contained in this paper; and

b) promote expeditious resolution of Active and Open PRs.

— END —