

International Civil Aviation Organization

Fifteenth Meeting of the FANS Interoperability Team – Asia (FIT-Asia/15)

Bangkok, Thailand, 24 – 27 June 2025

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 <u>www.fans-cra.com</u> 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/14 PR briefing in July 2024 and preparation of this PR briefing in June 2025, the FIT-Asia CRA received 6 new PRs. For comparison, the FIT-Asia/14 PR briefing indicated that the FIT-Asia CRA received 56 new 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 2025.

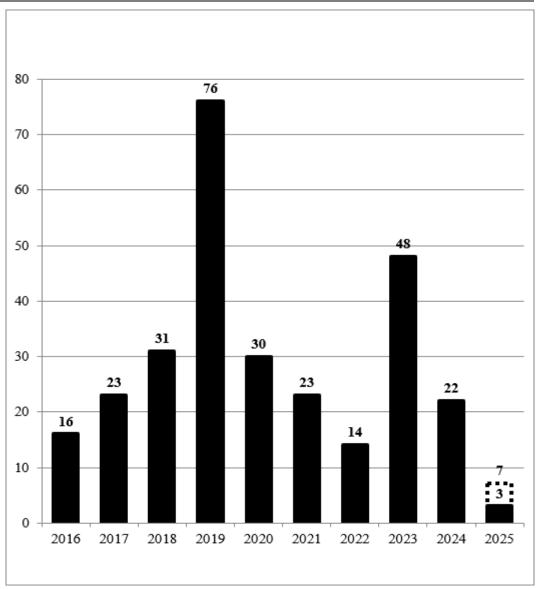


Figure 1: FIT-Asia PRs Per Year

- 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:
 - 3611-MM, Closed / Air Technical; 3613-MM, 3619-MM, 3636-NW, 3645-NW, a) and 3650-NW, Closed as Duplicate / Air – Technical. CAA Singapore reported that two Boeing 787s operated by the same aircraft operator did not meet the 95% RSP180 delivery time requirement during various periods in 2023. CAA Singapore also reported that the same two aircraft did not meet the 95% RCP240 Actual Communications Performance (ACP) and Actual Communications Technical Performance (ACTP) requirements from July through December 2023. Analysis by the CRA of the data provided by CAA Singapore indicates that the primary cause of the poor performance by both aircraft (mainly on east-west flights, apparently to/from Brunei) is their lack of SATCOM use after the middle of August 2023. The CRA assigned PR 3611-MM to the aircraft operator to investigate or otherwise respond to the lack of SATCOM use, but based on additional cases of poor performance by the same two aircraft that other ATS providers identified at the FIT-Asia/14 meeting the CRA investigated further and found that the aircraft operator sold the two aircraft to another aircraft operator in Europe in November 2023. The CRA believes that the original aircraft operator likely terminated SATCOM service for the two aircraft in August 2023 before selling them and accordingly closed that PR. The secondary cause of the poor performance by both aircraft (mainly on north-south flights, apparently to/from Jakarta) is their operation on the edges of VHF coverage where communications via VHF are unreliable. Boeing is implementing the ACARS RAT1 function that is expected to mitigate this issue in 787 CMF BPv7 software.
- 2.2 The FIT-Asia CRA received the following significant new PRs that are relevant to FIT-Asia:
 - a) 3724-RA, Closed / Multiple. CAA Singapore reported airframe type A321 did not meet 95% ASP for ADS-C RSP180 requirements. The CRA found that the aircraft's underperformance was due to VHF/SATCOM transition delays in the South China Sea. At the edge of VHF coverage, the aircraft was repeatedly broadcasting, gaining and losing VHF coverage. RAT1 timer, available in software version ATSU CSB7.5, aims to minimize message delays during VHF/SATCOM transitions. CAA Singapore indicated that the aircraft will be replacing its VHF3 units, as Collins found that VHF comms were frequently lost.

- b) 3745-RA, Open. CAA Singapore reported that a Boeing 777 did not meet the 95% RSP180 delivery time requirement from September through November 2024. The CRA found that this non-compliance was entirely caused by a small period of delayed reports on September 17, 2024. The primary reason behind this period of delayed reports was a known 777 AIMS issue where queued ADS-C downlinks are sent twice when the avionics transitions from VHF to SATCOM and has queued up ADS-C reports. These duplicated reports caused the avionics downlink queue to fill up, leading to further reports being delayed and causing this PBCS non-compliance. 777 AIMS Block Point V19 will fix this issue. This PR will be kept open until Block Point V19 is available to operators.
- c) 3764-RA, Closed as Duplicate. This issue is the same as FANS PR 3745 and was closed as a duplicate.
- 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) 3723-MM, Closed / Multiple. The FAA reported an aircraft operating in Oakland Oceanic airspace received a CPDLC climb clearance from a test system, not an air traffic controller. After ACARS log analysis, the CRA found that a pilot, maintainer, or another individual logged on and established a CPDLC connection to the test system while the aircraft was on the ground between flights. The plane flew and flight crew mistook climb clearance sent from test system to be from an air traffic controller. The situation was corrected through HF voice communications. The operator of the test system made changes to prevent this situation from occurring again. These changes include automatic CPDLC connection termination after 20 minutes and responding to any CPDLC clearance request with "UNABLE" and "TEST SYSTEM ONLY" free-text uplink.
 - b) 3801-RA, Active. ISAVIA reported that when BIRD attempted to set up ADS-C contracts with a B777, a MAS success was received but the aircraft did not acknowledge the contracts. Upon re-attempting to establish the ADS-C contracts, the aircraft successfully acknowledged the contract. The flight crew reported that this issue was seen before on the same aircraft. This is not a known issue on the B777, and Boeing is actively investigating the cause of this issue, as well as monitoring for further occurrences.

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

- a) 3785-RA, Active. 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. The PR has been assigned to Airbus to investigate the long delays over SATCOM and frequent use of HF media on the specified A21N tails during this time period.
- b) 3789-RA, Active. 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. The PR has been assigned to Airbus for further investigation.

c) 3797-RA, Closed. CAA Vietnam reported that the CPDLC function cannot be used, with the causes of errors being the service provider. The CRA was unable to investigate the problem report with no additional data and limited information available, and the PR was closed accordingly. The CRA is willing to help if additional assistance is needed.

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.

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