Fortieth Meeting of the
Informal South Pacific ATS Coordinating Group
(ISPACG/40)

Brisbane, Australia
5-7 May 2026

Agenda Item 4: Information and Working Papers

Space / Rocket Activity

Presented by: Qantas Group / Daniel Smith

SUMMARY

This is an update from 2025 information paper on Rocket and Space Activity that Qantas presented at ISPACG 39 in Port Moresby.

The frequency and operational complexity of space launch and re-entry activity is increasing and is creating measurable impacts for airline operations through large hazard geometries and long-duration NOTAM windows.

Qantas operational experience indicates that disruption can be reduced when "live" hazardous windows are refined close to real time and communicated in an operationally usable way (e.g., structured notifications and direct coordination).

Where final hazard timing/confirmation is delayed, inconsistent, or unclear, airlines are forced into conservative planning against broad published windows, increasing the likelihood of delay, additional fuel uplift, payload penalties, and en route holding)

1. INTRODUCTION

1.1 At the previous ISPACG meeting, this information paper noted the importance of better management of avoid areas, timely, accurate and consistent information from Space/ Rocket Companies and ANSPs, and for ANSPs (and regulators) to work with airlines to have a common view of risk based approaches when operating in this environment.

1.2 A key operational challenge is the mismatch between broad NOTAM "planning windows" and the shorter "live" hazardous period that may only be confirmed after lift-off (T 0) and subsequent de orbit timing refinement. This can drive conservative decision-making and unnecessary disruption.

1.3 This Information Paper hopes to highlights practical opportunities to improve the quality, timeliness, and usability of information to support safe and efficient operations.

2. DISCUSSION

2.1 Qantas has observed the following in the past 12 months:

a) Delay, re-route, and network disruption when avoidance routing is not viable. Airlines need to delay until the hazard is no longer active.

b) Fuel uplift and payload penalties. Tactical strategies often require additional fuel carriage to hold outside a live hazard window; in some cases, payload/cargo must be reduced to enable the uplift.

c) En route holding and workload. Delayed or uncertain confirmation of "live" hazard windows can force aircraft to hold as they approach hazard boundaries, particularly when limited track miles remain to manage timing via speed control.

d) Communications resilience. Tactical management depends on timely communications to aircraft; debriefs have identified where intermittent SATCOM outages increased risk and complexity.

2.2 Qantas has can share specific examples including;

a) Initial delay of 3:40 hrs based on the published window; refined to 30 mins due close communication and clarification of actual 'live' airspace timing.

b) Operational trade-off decisions to either delay or carry holding fuel to manage expected "live" hazard duration.

c) Examples of aircraft holding requirements (in some cases up to 72 minutes) emphasizes the need for earlier receipt of final hazard-window confirmation. This information is critical when the aircraft is approaching the active hazard area with limited remaining tactical options.

2.3 Structured tactical decision making eg (pre-launch monitoring, fuel/holding feasibility, tactical delay options, and in-flight re-run/confirmation processes) ensures avoidance of the "live" hazard area while reducing unnecessary disruption.

3. ACTION BY THE MEETING

The meeting is invited to note the information provided and discuss opportunities to improve coordination and information sharing to support safe and efficient operations. For example:

3.1 How can information flows (including time-bound T 0 confirmation and explicit "hazard cold" closeout messaging) be made more consistent and operationally usable for airlines and affected ANSPs?

3.2 Can common definitions and expectations (NOTAM planning window vs refined "live" hazard window) can be reinforced regionally in alignment with ICAO Asia/Pacific guidance?

-- END --