



**THE FORTY-SIXTH MEETING OF THE
INFORMAL PACIFIC ATC CO-ORDINATING GROUP
(IPACG/46)**

**THE THIRTY-THIRD MEETING OF THE
FANS INTEROPERABILITY TEAM (FIT/33)**

(Virtual, 14 & 15 October 2020)

Agenda Item 4: Any Other Business

NAT NODAR Project Team Update

(Presented by the Federal Aviation Administration)

SUMMARY

This paper provides updates related to the work of the North Atlantic (NAT) Network Outage Detection and Reporting (NODAR) Project Team.

1. Introduction

1.1 During the fifth meeting of the North Atlantic Technology and Interoperability Group (NAT TIG/5), the Network Outage Detection and Reporting (NODAR) Project Team (PT) was established to work collectively between data link system stakeholders to improve the detection and reporting related to outages at the communication service provider (CSP) and satellite service provider (SSP) system levels.

1.2 Since the establishment of the NODAR PT, there have been 8 teleconference meetings and 1 in-person meeting. Following TIG/7, an informal NODAR sub-group was formed by the CSPs and SSPs to progress the coordination on the advisory template and list of services.

1.3 Following the NAT TIG/9 meeting, coordination by the NODAR PT has continued slowly amidst the various furloughs, shifting work priorities, etc. due to Covid-19.

2. Discussion

2.1. During the NAT TIG/9 meeting there were several areas that were noted for action by the PT, and updates for these areas were provided to the NAT TIG/10 meeting.

(1) finalization of the template and services list and corresponding proposal for actions needed by ICAO to formally coordinate the changes with other ICAO regions

- the template and service list were finalized and agreed by the NODAR PT in coordination with the CSPs, as at **Appendices A** and **B**, respectively. While agreeing to finalize the template and list of services at this time, the CSPs indicated that refinement may be needed

as they are tested and implemented. The CSPs also explained that they were unable to provide the projected implementation date at this time, partly because further coordination is needed with the SSPs on when they will be able to provide the level of detail required for the satellite-related outages and degradations.

- The next step is to work with the CSPs to develop clear explanation of each of the items in the services list and the expected impact on air traffic operations in order to finalize the guidance document that will assist system operators.
 - Pending ICAO action: coordination with concerned ANSPs in other ICAO Regions.
- (2) coordination by IFALDA with the dispatch community to provide information to the NODAR PT on how the CSP notifications are currently provided to the dispatchers, whether they are considered useful in their current format, and whether any system modifications would be needed if the format were to change.
- IFALDA indicated that there are no direct messages from CSPs to dispatchers and that the main source of information on outages comes via NOTAMs from air traffic service providers (ATSPs). Therefore, no impact was expected for the dispatch community.
- (3) identification of any impacts that the changes proposed by the NODAR PT may have on the operators, with the support of IATA
- Collins (ARINC) shared with the group that their implementation plan is to make the changes agreed by NODAR only for the ATSP customers that have signed the PBCS Global Charter and provided their respective email address(es) in the appropriate box of their profile on the www.FANS-CRA.com website. In this case there are no impacts to operator customers.
 - SITA indicated that they could align with the Collins approach but that this may extend the time it will take to implement and increase the associated costs. The group supported this approach as having the least potential for impact to non-ATSP customers.
 - IATA did not elaborate on any other operator concerns.
- (4) provision by the CSPs of information concerning the implications of the proposed change to the non-aviation customers and any flexibility there may currently be with using different formats.
- With the scope of implementation being changed to only those ATSP customers that have signed up to the PBCS Charter, there will be no impact for non-aviation customers.

2.2. The TIG noted with appreciation that the NODAR PT has made a good progress and agreed that its work needs to continue. Therefore, the Group agreed to extend the NODAR PT until NAT TIG/11 (March 2020). The Group noted that the remaining work included:

- CSPs in coordination with SSPs; agree on the projected implementation date;
- update the document initially provided by Iceland, which is used to assist the system operators and shift supervisors in analyzing the operational effect of advisories received from

the CSPs, based on the agreed list of services and notification template, for use as a template for all interested ATSPs;

- identify ICAO global and/or NAT documentation that may require or benefit from amendments concerning the NODAR PT outcomes and products.
- The next meeting of the NODAR PT will be scheduled based on the progress of the CSP/SSP sub-group actions.

2.3. **Figure 1** provides a snapshot of the current signatories of the PBCS Global Charter (minus the Aircraft Operators because there are numerous signatories under that category) as of 6 September 2020. It is noted that the FAA (United States) and Japan Air Navigation Services are currently signed up.

Charter Stakeholders

Aircraft Manufacturers and Aircraft Equipment Suppliers			
<input checked="" type="checkbox"/> Boeing	<input checked="" type="checkbox"/> Gulfstream	<input checked="" type="checkbox"/> Bombardier	<input checked="" type="checkbox"/> Collins Aerospace
<input checked="" type="checkbox"/> Airbus			
Communication Service Providers and Satellite Service Providers			
<input checked="" type="checkbox"/> Inmarsat	<input checked="" type="checkbox"/> Iridium	<input checked="" type="checkbox"/> GoDirect	<input checked="" type="checkbox"/> SITAONAIR
<input checked="" type="checkbox"/> ARINCDirect	<input checked="" type="checkbox"/> ADCC	<input checked="" type="checkbox"/> AVICOM JAPAN CO., LTD.	<input checked="" type="checkbox"/> Rockwell Collins IMS (ARINC)
ANSP and CAA			
<input checked="" type="checkbox"/> Japan Air Navigation Service	<input checked="" type="checkbox"/> NAV Portugal	<input checked="" type="checkbox"/> Airports Fiji Limited	<input checked="" type="checkbox"/> NAV CANADA
<input checked="" type="checkbox"/> ATMB of CAAC (China ANSP)	<input checked="" type="checkbox"/> AirNav Indonesia	<input checked="" type="checkbox"/> DECEA Brazil	<input checked="" type="checkbox"/> DGAC-Chile
<input checked="" type="checkbox"/> CAA Philippines	<input checked="" type="checkbox"/> NATS (United Kingdom)	<input checked="" type="checkbox"/> ISAVIA ANS (Iceland)	<input checked="" type="checkbox"/> FAA (United States)
Aircraft Operators			

Figure 1. PBCS Global Charter signatories on FANS-CRA website as of 6 September 2020

2.4. **Figure 2** contains a snapshot of how the PBCS Charter signatories provide their email for the CSP Outage notifications. This information can be accessed by clicking the profile name in upper right corner (when signed into the website) and selecting “Profile”.

Username:	Password:
First Name:	Last Name:
Email for CRA communications:	
Email for CSP Outage Notifications(If Required):	
Display Name (If Applicable):	Organisation:
Location:	Phone Number:
Additional Emails for CRA communications(separate by <i>semicolon</i> or <i>space</i>):	
Theme: light	
<input type="button" value="UPDATE"/>	

Figure 2. Providing email address for CSP notifications in FANS-CRA profile

2.5. Further coordination amongst the secretariats from the affected ICAO regions may be forthcoming, but ATSPs are encouraged to ensure they have provided all information necessary to receive CSP notifications to support PBCS applications, and coordinate about these changes with the CSPs as needed.

Conclusion

3.1 The meeting is invited to note the information provided.

APPENDIX A — COLLINS/SOA NODAR SERVICE LIST RECOMMENDATIONS

Proposed list of services, factoring in the unique identification for each CSP (e.g. AIRCOM or ARINC) in order to clearly delineate the provider along with the service and also to retain what is recognized by the customers, is provided again below.

1. All (AIRCOM or ARINC) VHF and Satellite ACARS Services
2. All (AIRCOM or ARINC) VHF Satellite and ATN Data Services
3. (AIRCOM or ARINC) Enhanced Ground to Air Voice
4. (AIRCOM or ARINC) VHF ACARS Services
5. (AIRCOM or ARINC) VDL ACARS Services
6. (AIRCOM or ARINC) - Iridium Legacy Voice and ACARS Services
7. (AIRCOM or ARINC) - Iridium Legacy Voice Services
8. (AIRCOM or ARINC) - Iridium Legacy ACARS Services
9. (AIRCOM or ARINC) - Iridium Certus Voice and ACARS Services
10. (AIRCOM or ARINC) - Iridium Certus Voice Services
11. (AIRCOM or ARINC) - Iridium Certus ACARS Services
12. (AIRCOM or ARINC) - Iridium Legacy & Certus Voice and ACARS Services
13. (AIRCOM or ARINC) - Iridium Legacy & Certus Voice
14. (AIRCOM or ARINC) - Inmarsat Classic Aero Voice and ACARS Services
15. (AIRCOM or ARINC) - Inmarsat Classic Aero Voice Services
16. (AIRCOM or ARINC) - Inmarsat Classic Aero ACARS Services
17. (AIRCOM or ARINC) - Inmarsat SB-Safety Voice and ACARS Services
18. (AIRCOM or ARINC) - Inmarsat SB-Safety Voice Services
19. (AIRCOM or ARINC) - Inmarsat SB-Safety ACARS Services
20. (AIRCOM or ARINC) - Inmarsat Classic Aero & SB-Safety Voice and ACARS Services
21. (AIRCOM or ARINC) - Inmarsat Classic Aero & SB-Safety Voice

APPENDIX B — COLLINS/SOA NODAR ADVISORY RECOMMENDATIONS

Subject Lines:

Collins: AAM or Advisory – TT# - Type (shortened) – Status – Service – Location

SOA: Advisory Ref no. - Type (shortened) – Status – Service – Location

Subject Line Notes:

Type:

Planned (C), Unplanned (C),

Planned (S), Unplanned (S),

Status:

Collins: **Initial, Update** (*only included with changes*), **Correction, Restored, Postponed, Cancelled**

(Note: Post Incident Reports are handled by email including RCA on individual bases - they are not currently sent as AAM.)

SOA: **Open, Advanced notice, Update, Close, Postponed, Cancelled, Post-incident, Correction**

(Note: Post Incident Reports are handled by email on individual bases.)

Service: (see Appendix A)

Location:

Collins: **Global, Region**

SOA: **Global, Region**

(Note: for “Region” SOA GES ID will be used. If a standard region name needs to be used by both SOA and Collins, SSPs should provide.)

Body text:

Remove subject line, agreed by Collins and SOA

Type:

Planned system maintenance, Unplanned service outage, Unplanned service degradation - agreed

Status:

Collins: Initial, Update (only with changes), Advanced notice, Correction, Restored, Postponed, Canceled

Note: Post Incident Reports are handled by email on individual bases (not AAM)

SOA: Open, Advanced notice, Update, Close, Postponed, Cancelled, Post-incident, Correction

Service:

(see lists in paragraph 2.2 of main body)

Location:

Global, Specific satellite region, All VHF, Specific VHF station, All HF stations, Specific HF station

First notification issued at [Time]: First email notification time [UTC e.g. *Oct 01, 2018 1900 UTC* or Zulu, e.g. *June 26, 2019 @ 2227Z*]

Start Time: OK as agreed on “Start time planned or when unplanned was detected”

End Time: Remove “Estimated” for end time

Duration: as agreed (calculated by CSP)

Additional information (optional): e.g. for planned event, suggest providing more information what it

means by Duration (impact duration vs Maintenance window).