

ICAO CP-OPDLWG UPDATE

Written by Markus Johnston

SUMMARY

This report provides an update on the current progress of work being undertaken by the ICAO Communications Panel – Operational Data Link Working Group (CP-OPDLWG).

1. INTRODUCTION

- 1.1 The OPDLWG meets twice a year holding weeklong meetings. Outside of this, work is progressed by smaller project teams.
- 1.2 There are currently four major project streams in OPDLWG, namely Air-Ground Data Link, Ground-Ground Data Link, Performance Based Communications & Surveillance (PBCS) and Voice Communications by Data Link. An update for each project stream is provided below.

2. AIR-GROUND DATA LINK

- 2.1 The OPDLWG has completed its work on the 2nd Edition of the Global Operational Data Link (GOLD) Manual (Doc 10037) and submitted this together with proposed amendments to Annexes and PANS to align the contents to the ICAO Air Navigation Commission (ANC) for their review later this year. It is anticipated that following this review, this work package will be distributed to States for comment and hopefully publication will occur around Q4 2026.
- 2.2 Significant work has gone into this 2nd Edition to capture lessons learned following implementations throughout the world on both the air and ground sides, ensure the ICAO documents are harmonised with the industry specifications and to include best practices are followed. This has been an enormous undertaking with significant technical details and potential knock-on effects having to be considered for every change.
- 2.3 Whilst many of the changes will not directly impact Controllers, an example which we hope will positively impact Controllers is changing the display of RTEU-6 CPDLC route segment revision messages – CLEARED TO (position) VIA (route clearance) on the flight deck. This is to reduce the likelihood of pilot misinterpretation as global data has shown many occurrences where pilots have interpreted this message as PROCEED DIRECT TO (position) due to poor flight deck display. The OPDLWG

has included in its proposal that RTEU-6 is now displayed in the flight deck as CLEARED (route clearance) TO (position), with a requirement that the (route clearance) element displays the route information in full. e.g. "CLEARED ALPHA BRAVO CARLY TO DELTA" and not displayed as "CLEARED ROUTE CLEARANCE TO DELTA". It is hoped that this improved flight deck display will greatly reduce the number of these clearances being incorrectly interpreted by the flight crew.

- 2.4 Similarly, RETU-24 which is only available in ATS B2 messages set is also being changed from "AT (position) CLEARED TO (position) VIA (route clearance)" to "AT (position) CLEARED (route clearance) TO (position)".
- 2.5 Whilst the 2nd Edition of the GOLD is complete (pending feedback from ANC and States), it is clear to the OPDLWG that a draft 3rd Edition will need to be commenced to capture the new work being completed at the industry level for ATS B2 revision B as this technical specification is currently open and being amended. The OPDLWG is therefore fortunate enough to be able to provide some input directly into the industry working groups to inform their decision making.

3. GROUND-GROUND DATA LINK

- 3.1 The OPDLWG has almost finalised a proposal for amendment to provisions contained in Annexes and PANS relating to Ground-Ground Data Link which has been prepared by the IFATCA member. Generally, most provisions are in a good state, however there are some key items which needed to be addressed.
- 3.2 Specifically amended destinations in Coordinate Negotiate messages and the operational response messages, there is inconsistent use of the term used to describe the destination of the aircraft prior to the amendment. There are also inconsistent requirements as to whether the operational response shall or may (optionally) contain the destination prior to the amendment. Further, there is no detail on which destination is to be included in a Coordinate Cancel message due to an amended destination.
- 3.3 There is also a sub-section which describes coordination environments specifically as either surveillance or procedural. With the advent of technologies such as space-based ADS-B these previously clear delineations are no longer representative of today's mixed environments. For example, remote/oceanic airspace where surveillance is provided by space-based ADS-B whilst communications are provided by CDPLC backed up by SATVOICE or HF. The proposal therefore includes a change to more generic language which encourages Air Traffic Services Providers to evaluate the environment and determine coordination parameters which are appropriate to their needs.
- 3.4 This work package is expected to proceed to inter-panel coordination this year for other expert groups to provide feedback, prior to submission to the ANC.

4. PERFORMANCE BASED COMMUNICATIONS & SURVEILLANCE (PBCS)

- 4.1 Work was progressing well on the 3rd Edition of the PBCS Manual (Doc 9869) with agreements being reached on new definitions for the Communication Service Provider (CSP), Communication Network Provider (CNP) and Satellite Service Provide (SSP). These new definitions are more relevant with today's technology and will replace existing definitions including Data Link Service Provider (DSP), HF Subnetwork Service Provider (HSP) and VHF Subnetwork Service Provider (VSP) as appropriate.
- 4.2 The OPDLWG has learned of work being conducted by the North Atlantic Technology Interoperability Group (NAT TIG) and the North Atlantic Network Outage Detection and Reporting Project Team (NODAR PT) to develop a common template for CSPs and SSPs to use to notify of planned and unplanned outages, together with a handbook to assist ATSPs interpret these notifications. The OPDLWG sees the value in such work and is keen to see a more global approach to such initiatives. We will look to explore the expansion of such work in the future.
- 4.3 More recently, the OPDLWG is struggling to progress work on the PBCS Manual due to some Members being unable to secure funding from their respective States or professional bodies to attend meetings. This is proving to be a more regular occurrence and introduces significant challenges in meeting timelines.

5. VOICE COMMUNICATIONS BY DATA LINK

- 5.1 There is considerable work being conducted in the Voice Comms space by OPDLWG across three sub-project teams, namely SATVOICE Manual, Dual Dissimilar SATCOM and New Voice Specification.

5.2 SATVOICE Manual (SVOM)

- 5.2.1. Work continues on the SVOM and whilst many comments received from DCIWG have been incorporated into the latest draft, some items require further negotiation. The OPDLWG however is satisfied that the content is now mature enough to progress with further inter panel coordination to other expert groups including FLTOPSP and ATMOPSP while discussions with DCIWG continue.

5.3 Dual SATCOM

- 5.3.1. The OPDLWG is monitoring the work coming out of EUROCAE WG82 / RTCA SC-222 regarding the development of monitoring and switching requirements to enable dual dissimilar SATCOM as a sole means of long range communication system (LRCS). Essentially this would permit an aircraft to carry two separate SATCOM systems for remote/oceanic airspace communications and no longer having to carry HF radio. The OPDLWG will continue to mature its work in this space as the technological capabilities are

developed, and we envisage working collaboratively with SASP to realise the benefits such developments may enable.

5.4 New Voice Specification

- 5.4.1. Work continues on developing Voice RCPs and is proving to be quite a challenge, particularly with the intrinsic differences between data and voice communications. A Data RCP measures the complete round trip time of a message - i.e. from the time a Controller sends a CPDLC message to the time the controller receives the operational response from the aircraft. Therefore, this includes the time it takes the flight crew to disseminate the message and act on it.
- 5.4.2. Discussions are also starting to be had within OPDLWG regarding how a remotely piloted aircraft will fit into domestic airspace, i.e. where 5NM separation is applied with direct controller pilot communications (VHF voice), when the pilot is not aboard the aircraft. Potentially the pilot could be sitting in a control room on the opposite side of the world so how then is the VHF voice DCPC requirement to apply 5NM separation standard met? Based on further discussions to be had with RPASP and SASP, it is envisaged that this may well be a use case for these new voice RCPs under development.

6. CONCLUSION

- 6.1 The OPDLWG is meeting in May and November this year to continue progressing the work outlined in this report.
- 6.2 I would like to take this opportunity to personally thank Civil Air (Australia) and IFATCA for supporting this work and my membership on OPDWLG.

7. RECOMMENDATIONS

- 7.1 It is recommended that this report be accepted as information paper.

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