



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

(Virtual, 20 & 21 October 2020)



**Federal Aviation
Administration**

Agenda Item 2: Report on Relevant Outcomes from
Other Meetings

Updates from Operational Data Link Working Group (OPDLWG)

Presented by: Federal Aviation Administration

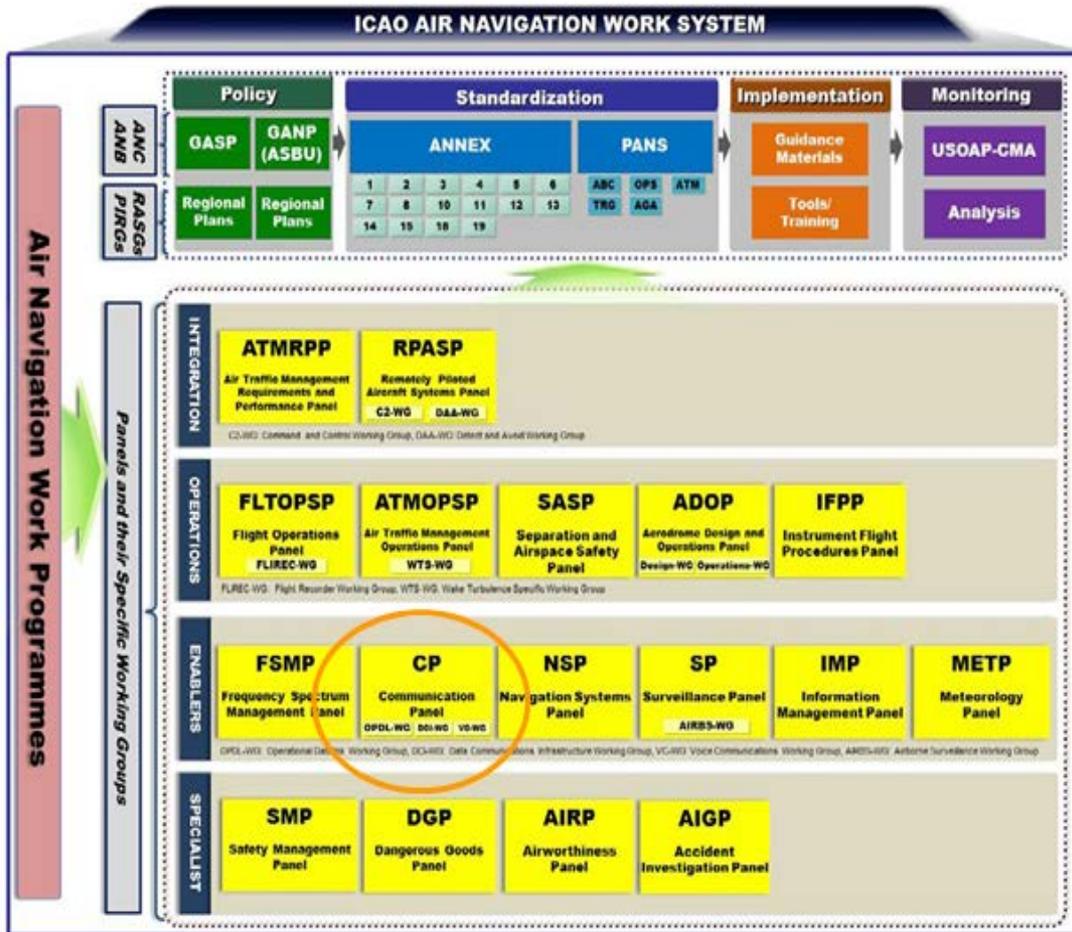


Overview

- OPDLWG background
- General meeting notes
- **Job card 001:** Air-ground (A-G) data link
- **Job card 002:** Performance-based communication and surveillance (PBCS)
- **Job card 003:** Ground-ground (G-G) data link
- **Job card 005:** Long range voice communications
- Inter-panel coordination
- Future meetings



Communication Panel (CP)

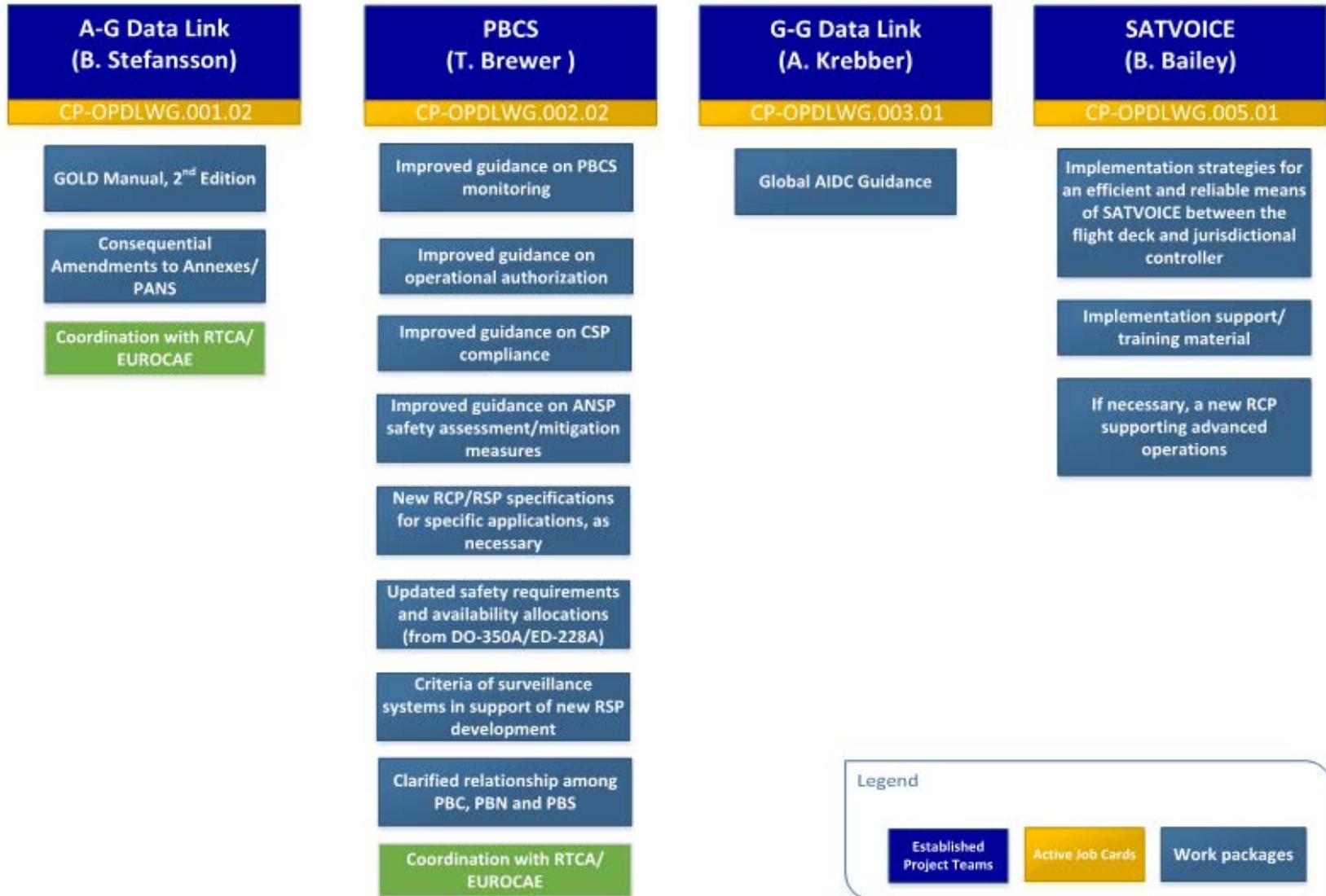


- Undertakes specific studies and develops technical and operational ICAO provisions for ATM voice and data communications systems, supporting procedures and their applications
- CP subgroups:
 - **OPDLWG** (Operational Data link Working Group)
 - **DCIWG** (Data Communications Infrastructure Working Group)

The Operational Data Link Specific Working Group (formerly known as OPLINKP)

- **Last plenary meeting:** Montréal, Canada, 21-25 Oct 2019
- **Next plenary meeting:** Virtual, (1-10 tbd) December 2020
- Aims to advance the use and performance of datalink and satellite voice technologies, addressing all operational aspects of ATS that use these technologies for communications, whether between aircraft and the ground or multiple ground facilities

CP-OPDWLG PROJECT TEAM STRUCTURE & MEMBERS



Legend

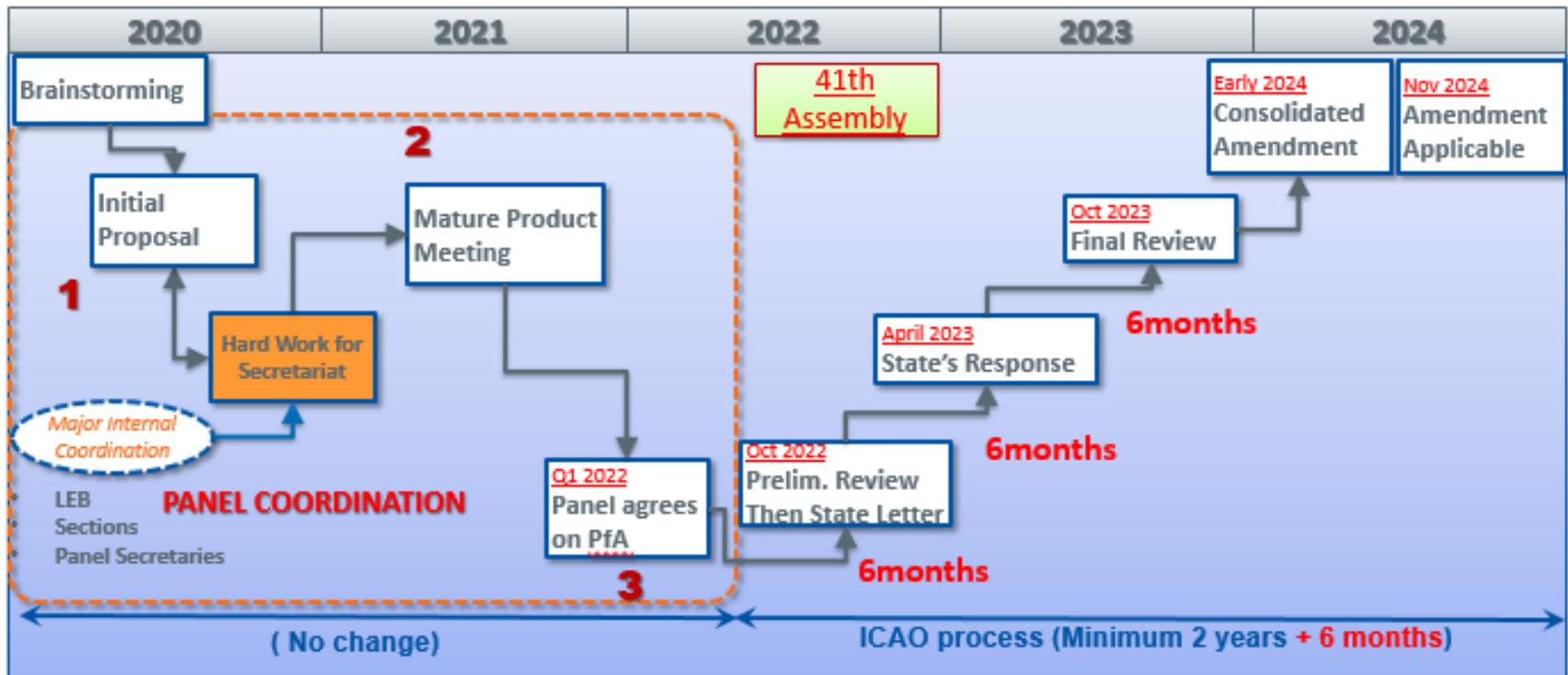
- Established Project Teams
- Active Job Cards
- Work packages

General meeting notes

- **39 meeting participants (33 last in-person meeting)**
 - 12 Member States (9 last in-person meeting)
 - 7 international organizations (5 last in-person meeting)
- **Secretary briefed the group that:**
 - OPDLWG/9 report had not been reviewed yet by the ANC due to incomplete discussion on the job card revisions
 - Job cards are main source used by ANC to monitor progress of work, and by ICAO Secretariat for resource planning (e.g. scheduling of ANC and Council meetings)
 - Coordination with ATMOPSP on draft 2nd Edition of GOLD Manual delivered at OPDLWG/9 did not occur so delay in the processing of the GOLD manual expected
 - OPDLWG (OPLINKP) website on ICAO secure portal overhauled
 - Secretary asked for updated lists of member and advisors to provide contact info on the website and ensure appropriate access

General meeting notes (cont)

- New 6-6-6 rule, undertaken before COVID-19, to give States and the Secretariat more time to assess, coordinate and respond to the proposed amendments (does not apply for guidance material)



Job Card 001: A-G data link

- **Project team lead: Bjarni Stefansson (Iceland)**
- **Pre-coordinated papers agreed by meeting**
- **Changes now slated for 2024 amendments**

Ref.	Action	Who	By When
JPT01-08	Coordinate the proposed amendments concerning “ATS surveillance service” and “DCPC” with expert groups concerned	Secretary	20/11/2020
JPT01-09	Prepare an updated version of proposed amendments concerning “ATS surveillance service” and DCPC” incorporating feedback from other expert groups	A-G Data Link PT lead (Bjarni)	30/11/2020

Job Card 002: PBCS

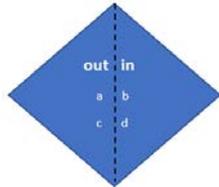
- **Project team lead: Theresa Brewer (United States)**
- **136 comments received against Edition 2 of ICAO Doc 9869**
 - 71 comments against the published version of Edition 2
 - 65 comments against Edition 3, Draft 1.0 (circulated to the PBCS Project Team for review in January 2020)
- **Resolution status**
 - 88 of the comments have been resolved and closed
 - with 71 “agreed and integrated in document master”
 - 17 “closed without change made”



Topic	Primary PoC(s)	Target date for completion
PBCSPT-3 Improve guidance on PBCS monitoring	Theresa Brewer/ David Isaac	Fall 2021
PBCSPT-5 Develop new RCP/RSP specifications for domestic data link operations for specific applications and any other ATM operations defined in ASBU B1 and B2 as necessary *Note* RCP130 agreed for inclusion in next Draft with explanatory text	Thomas Mustach/ David Isaac	Spring 2021
PBCSPT-1 Improve guidance on operational authorization for all RCP and RSP specifications requiring operational authorizations	Tomo Tsuruzono / Mark Patterson	Fall 2021
PBCSPT-2 Improve guidance on means of compliance for CSP requirements	Andrew Yang/ Dutch Gurtshaw	Fall 2021
PBCSPT-1 Improve guidance on the ATSP's safety assessment procedures and development of mitigation measures	TBD	TBD
PBCSPT-4 Incorporate revisions to the safety requirements and availability allocations from the updated operational performance and hazard assessments documented in DO-350A/ED-228A, as deemed appropriate	Thomas Mustach/ Bjarni Stefánsson	Spring 2021



Improvements on CSP allocations and compliance



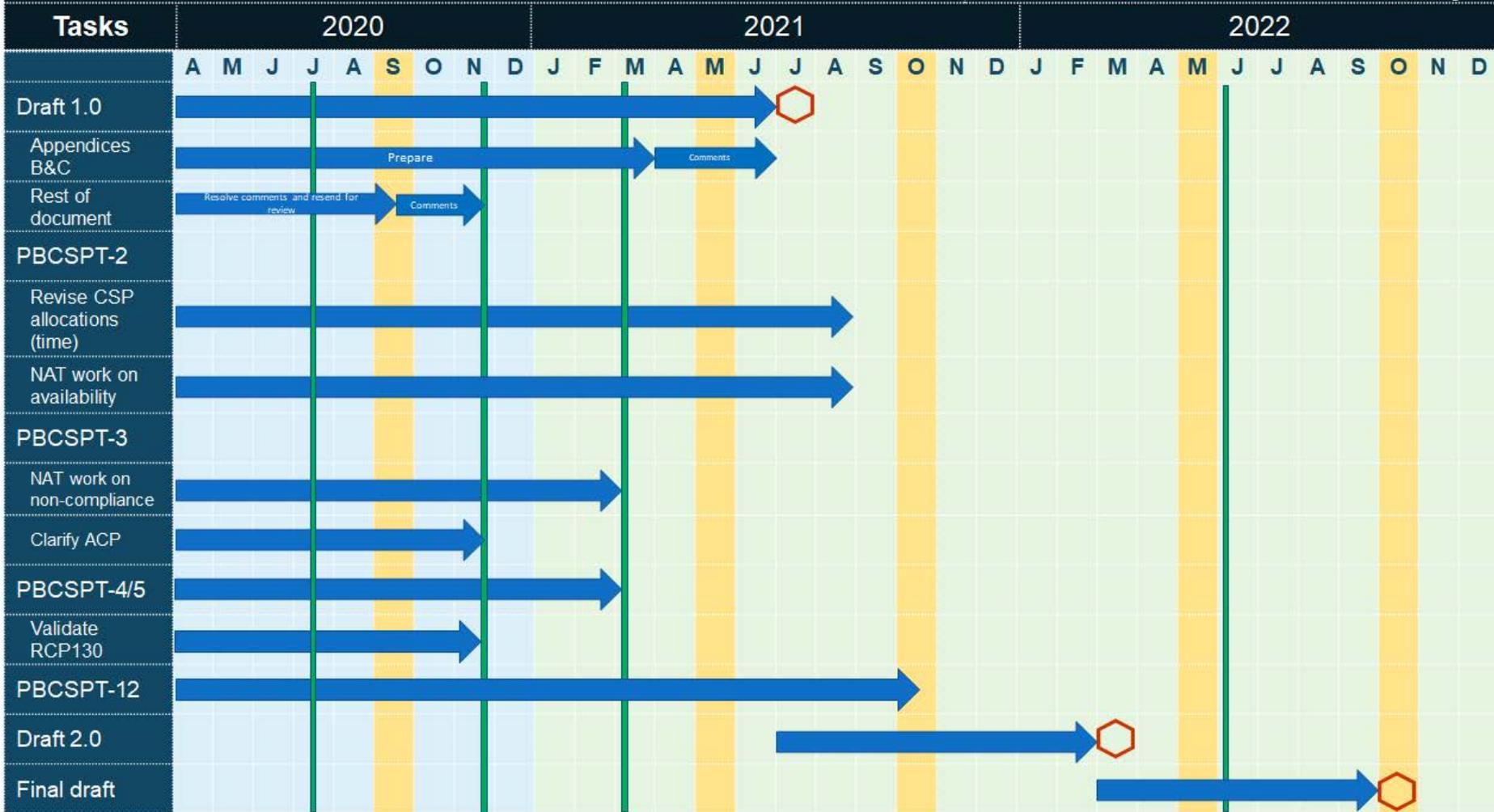
RCP 240 specification (communication transaction times and RCP continuity)		
RCP	240	RCP
95%	210	90%
RCP 240/D allocations – CPDLC example		
ATM	Controller issue ATC instruction	Controller receive response
99.9%	$P_{\text{total}}(20)$	$P_{\text{total}}(20)$
95%	$P_{\text{total}}(20)$	$P_{\text{total}}(20)$
RCMP	RCTP	RCP PORT
99.9%	$P_{\text{total}}(150)$	$P_{\text{total}}(150)$
95%	$P_{\text{total}}(120)$	$P_{\text{total}}(120)$
RCTP	ATIS	Aircraft system
99.9%	$P_{\text{total}}(120)$	$P_{\text{total}}(15)$
95%	$P_{\text{total}}(100)$	$P_{\text{total}}(10)$

AATC _e -in	CATC _e -out	CATSU-in	D1ATSU-out	D1DSP-in	D1DSP-out	D1SN-in	D2SN-out	D2AIR-in	D3AIR-out	D3PILOT-in	D3PILOT-out	D4AIR-in	D5AIR-out	D5SN-in	D6SN-out	D6DSP-in	D6DSP-out	D6ATSU-in	XATSU-out	XATC _e -in	XATC _e -out		
A	Ca	Cb	D1a	D1b	D1c	D1d	D2a	D2b	D3a	D3b	D4a	D4b	D5a	D5b	D5c	D5d	D6a	D6b	Xa	Xb	Z		
		PATSLU(15)		PNET(120)				PAIR(15)				PAIR(15)				PNET(120)				PATSLU(15)			



Ref.	Action	Who	By When
JPT01-06	Draft proposed changes to the draft PBCS Manual (extension of Appendix D) to improve guidance on CSP compliance with transaction/delivery time and continuity criteria	PBCS-PT/2 PoC (Andrew Yang & Dutch Gurtshaw)	Q1/2021





Job Card 003: G-G data link

- **Project team lead: Andreas Krebber (Germany)**
- **Draft guidance (version 0.6) developed based on the APAC AIDC Implementation Guidance version 1.0**
- **Updated draft (version 0.9) will be available by mid of Q4 2020**
- **Target delivery date in the revised job card needs to account for additional time required for inter-panel coordination**

Ref.	Action	Who	By When
JPT01-04	Organize AIDC PT virtual meeting(s) and communicate meeting details	G-G Data Link PT Lead (Andreas)	18/09/2020
JPT01-05	Distribute an updated draft guidance document (version 0.9)	G-G Data Link PT Lead (Andreas)	31/12/2020



Job Card 005: Develop long range voice communications implementation strategy

- Proposal provided to OPDLWG with parameters applicable to characterize voice communications – dialogue establishment, time, audio quality, availability, integrity, and monitoring and alerting criteria
- Discussion group formed by authors of the current RTCA standard, and representatives from Inmarsat and Iridium to discuss replacement of current integrity assessment method (diagnostic rhyme test-DRT) with the perceptual evaluation of speech quality (PESQ)



New job card

- Group agreed that existing performance specifications had been developed to characterize data communications, and were not adequate to characterize voice communications
- Group noted that while the proposal stemmed from the active job card on SATVOICE, the actual scope of work should encompass voice communications in general

Ref.	Action	Who	By When
JPT01-07	Draft a new job card regarding parameters for RCP specification for voice communications	Thomas Mustach	30/11/2020

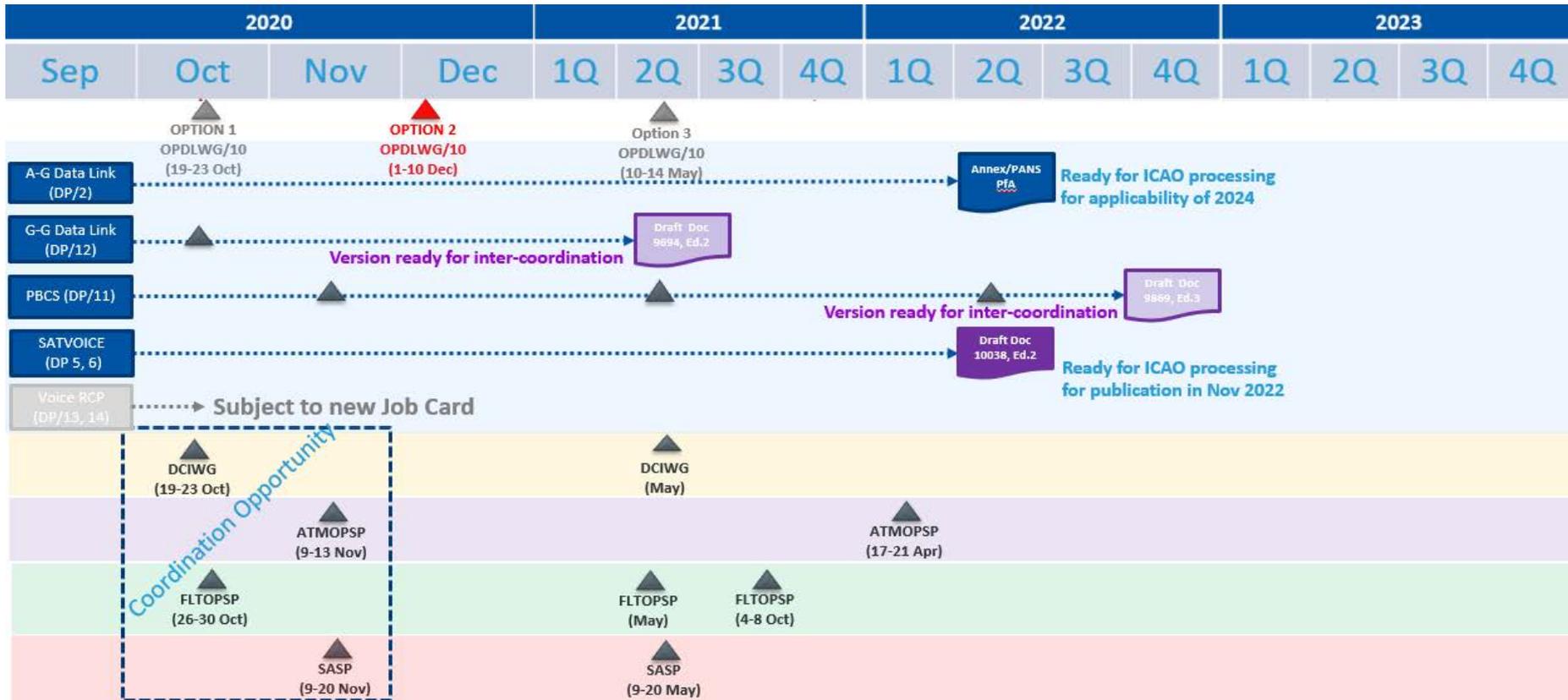
Inter-panel coordination: RPASP

- **Proposed amendment to Annex 6, (new) Part IV – RPAS operations**
- **Proposed amendment to Annex 10, Volume IV, Part 2 SARPs on Detect and Avoid**

Ref.	Action	Who	By When
JPT01-12	Provide comments on proposed amendments to Annex 6 concerning RPAS operations (OPDLWG-JPT/01-DP/09)	All	18/09/2020
JPT01-13	Provide comments on proposed amendments to Annex 10 concerning DAA (OPDLWG-JPT/01-DP/10)	All	15/11/2020



Future meetings



Questions?

