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St Denis & Washington

EUROCAE WG-78 Plenary # 36 / RTCA SC-214 Plenary # 46 **"Standards for Air Traffic Data Communication Services" - Minutes**	

Date	*July 10 – 14, 2023*
Place	*Maastricht, NL*
Hosted by	*EUROCONTROL*

Meeting Summary:

The joint plenary of RTCA Special Committee 214 (SC-214) (#46) and EUROCAE Working Group 78 (WG-78) (#36) was held July 10 – 14, 2023. The meeting was conducted as an in-person and WebEx meeting with the following attendees participating (* indicates in person attendance).

Name	Company	
Alexander Engel*	EUROCAE	X
Andrew Ives	Inmarsat	X
Arndt Sündermann	DFS	X
Bjarni Stefansson*	ISAVIA	X
Brandi Teel*	RTCA	X
Christophe Visee*	EUROCONTROL	X
Claire Robinson*	Universal Avionics	X
Clément Selles	Airbus	X
Craig Boxrucker	ALPA	X
Cyril Ollier*	EUROCONTROL	X
Edward San	FAA	X
Eivan Cerasi	EUROCONTROL	X
Frederic Beltrando*	Airbus	X
Greg Saccone*	Boeing	X
Hendrik Oberheid	DFS	X
Isabelle Herail	EUROCONTROL	X

Kim Cardosi	The Volpe Center	X
Lesley Weitz	MITRE	
Luc Emberger*	Airbus	X
Mike Matyas*	Boeing	X
Natacha Nombrail*	Airbus	X
Nico de Gelder	NLR	X
Noah Inahara*	Boeing	X
Randy Bone	MITRE	X
Santi Ibarz*	Airtel ATN	X
Shelley Bailey*	NavCanada	X
Steve Ferra	FAA	X
Thierry Lelievre*	Cap Gemini (on behalf of Airbus)	X
Thierry Salée*	EUROCONTROL	X
Thomas Hess	DFS	X
Thomas Mustach	FAA	X
Viktor Jagasits*	EUROCONTROL	X
Vincent McMenamy*	FAA	X
Wendy Gutierrez*	Collins	X

* Indicates attendance in person

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1 July 10th

1.1 Welcome, Introductions and Administrative Remarks

The joint 46th Plenary of SC-214 / 36th Plenary of WG-78 was convened in person at MUAC in Maastricht, NL hosted by EUROCONTROL and via Webex from July 10th to 14th, 2023 at 9:00 am CET by Chairs Claire Robinson (Universal Avionics) and Luc Emberger (Airbus). RTCA and EUROCAE anti-trust statement, proprietary policy and membership policy were read by Brandi Teel (RTCA) and Alex Engel (EUROCAE). Welcoming remarks were then made by the MUAC host, followed by each attendee introducing themselves.

1.2 Agenda, Meeting Minutes and Action Item Review

Claire Robinson and Thierry Lelievre presented the detailed agenda. The agenda was reviewed with some minor changes based on key participants availability. The agenda was then agreed to with the changes noted.

The whole week (10th to 14th) was a Plenary meeting, with the objective to review all comment resolution proposals following the FRAC/OC for the documents ED-228B & DO-350B/ED-229B & DO-351B, and agree on those resolutions to proceed with the publication of the documents.

1.3 Editors Progress Report

Thierry presented the last status of the documents and the proposals for comments resolution:

For the SPR:

DO350B/ED228B SPR

	Number	Not Started	In Process	Complete
Non-Concur	1	0	0	1
High	40	0	3	37
Medium	94	0	11	83
Low	75	0	4	71
Editorial	203	0	0	203
N/A	0	0	0	0
Substantive	0	0	0	0
Total	413	0	18	395

- 115 (SPR) Comments related to Safety and Performance

	Number	Not Started	In Process	Complete
Non-Concur	0	0	0	0
High	4	0	0	4
Medium	37	0	2	35
Low	8	0	0	8
Editorial	66	0	0	66
Total	115	0	2	113

As presented, some comments were still in progress and were discussed during the plenary. The comments with the status "complete" have a resolution proposal available and integrated in the redline documents distributed before the meeting.

A few additional items (added in the comments matrix after the FRAC/OC period) were to be discussed at the end of the plenary, in the available time remaining. Recommendations for some CPDLC messages display were to be discussed.

For the B2 Interop:

DO351B/ED229B INTEROP

	Number	Not Started	In Process	Complete
Non-Concur	0	0	0	0
High	32	0	5	27
Medium	43	0	0	43
Low	29	0	0	29
Editorial	50	0	0	50
N/A	0	0	0	0
Substantive	0	0	0	0
Total	**154**	**0**	**5**	**149**

5 comments still in progress were to be discussed this week. If the time permits an additional proposal on Dialogue handling after Tr Timer Expiry (EUROCONTROL) and on ADSReportB Backward Compatibility (Airtel ATN) will be discussed.

1.4   Detailed discussions

1.4.1 Non concur Resolution proposals

« NON CONCUR » Cmt#62506 (ALPA) Removal of conditional clearances from B2 Rev B Message Set

Luc presented the letter from ALPA which confirms that the concerns explained in Cmt#62506 (requesting removal of conditional clearances) are not sufficient to block the approval and publication of DO350B/ED-228B even though the proposed resolution was rejected by the committee.

The group warmly thanks ALPA for the very constructive discussions and the resolution of the issue. **The rejection of the comment is approved.**

1.4.2 "Not agreed" Resolution proposals

INTEROP Cmt#62390 & Cmt#62391 (BOEING) – Revision of sections dealing with CPDLC Start/End indication

Considering that ground system will close any open CPDLC dialogues and will reject any received responses related to these (previous) dialogues, there would be an operational desynchronization between the ground and the aircraft systems if the aircraft is maintaining the CPDLC dialogues open.

The group agreed with closing the open CPDLC dialogues and to set the latency time to the default value of 999 sec. According to operational methods the ground must send the latency value when it becomes CDA and therefore there is no interest to keep the old value. The group decided not to leave the choice for the aircraft (if needed it is expected that a new value will be uploaded when a new dialog is established).

The group agreed on the following changes:

CPC IR 147B If the aircraft system receives a CPDLC-start indication containing no uplink message elements from the connected CDA, then the aircraft system shall:

   a. send a CPDLC-user-abort request with reason choice 0 (undefined) on the existing CDA connection, then
   b. terminate the associated CDA connection, including closing any open CPDLC dialogues ~~messages and reports~~, then
   c. establish an associated CDA connection by sending a CPDLC-start response with the result parameter set to "accepted", then
   d. send a CPDLC-message request containing DM99 CURRENT DATA AUTHORITY to the CDA, and
   e. set the latency time value to 999 seconds ~~or maintain the previous latency time value~~.

CPC IR 156B If the aircraft system receives a CPDLC-end indication containing no uplink message elements from the CDA, then the aircraft system shall:

   a)   send a CPDLC-end response with the result parameter set to "accepted", then

   b)   terminate the associated CDA connection, including closing open CPDLC dialogues ~~messages and reports~~, then,

   c)   if the aircraft system has an NDA designation but no NDA connection, then delete the NDA designation, and

   d)   if the aircraft system has an NDA connection, then:

      - promote the NDA connection to be the new CDA connection,

      - send a CPDLC-message request containing DM99 CURRENT DATA AUTHORITY to the new CDA, and

      - set the latency time value to 999 seconds.

SPR Cmt#62624 : Making Optional the provision of "VIA [Route ClearanceR]" in DM59R

▪   **The group agreed** with making optional the "route clearanceR" parameter. This will allow the provision of DM59R with only DIVERTING TO [PositionR] which is operationally required (valid option).

▪   **The group agreed** with the following changes:
   •   New DM59R**B** is replacing the DM59R
   •   Definition of DM59R**B** in SPR Table 5-5 is changed as follow:
      ○   DM59RB DIVERTING TO [*positionR*] VIA [~~*route clearanceR*~~*route clearanceRO*][*arrival approach dataO*]
   •   Intent of DM59R**B** in Table 5-5 is changed as follow:

"Report indicating diverting to the specified position and may include ~~via~~ the specified route.~~, which~~ This message may be sent without any previous coordination with ATC.

- New "*Route ClearanceRO*" parameter is added in Table 5-7 as "Allows optional specification of "*Route clearanceR*.""
- CPLDC-OR 133B is modified as follow:

    CPDLC-OR 133B When the route clearance parameter is provided in DM59RB, the aircraft system shall provide the route clearance parameter ~~in DM59R~~ from the route in the aircraft's FMS active route or from a manual entry.

- **The group agreed** with the following changes in INTEROP:
    - **=> New INTEROP Cmt#62597**
    - In ASN-1 DM59R is indicated as "This message is replaced by dM59RB in B2 Rev B. Used only for B2 Rev A Backward compatibility" and color is changed to "green".
    - DM59RB DIVERTING TO [positionR] (VIA ([route clearanceR])([arrival approach data])) is added
    - No need for New *Route CleranceRO* variable in ASN-1 because the Route Clearance data is provided in "Constrained data" and is already optional
    - B2 Rev A Backward Compatibility:
        - DM59R is added in the list of B2 Rev B Messages in CPC-IR 165B (B2 Rev A Message that shall not be sent by B2 Rev B aircraft system to B2 Rev B ATSU system)
        - DM59R is added in the list of B2 Rev B Messages in CPC-IR 166B (Error when B2 Rev A Message is received by B2 Rev B ATSU from a B2 Rev B Aircraft system)

- **Action Shelley & Bjarni**: GOLD to be aligned

1.4.3 FRAC/OC "In process" Comment resolution

SPR Cmt#62504 (IATA) Provision of a definition of the term "Route Data" used in SR-27 => **REJECTED**

- The definition of Route Data is implicitly included in the ORs/IRs for ADS-C and CPDLC and Messages and variable definition.
- **The group agreed** with Rejecting the comment. No need for Route Data definition

SPR Cmt#62626 (AIRBUS) Provision of route parameter in DM40 and DM59R => **COMPLETE** (refer to the comment resolution matrix)

- **The group agreed** with the proposed resolution

SPR Cmt#62733 (Airbus): Adding rules for using DM65R => **REJECTED**

- Pilots and/or ATCO training will have to address use of the reason values. It is recognized that some of the parameters are for IM service only
- **The group agreed** with rejecting the comment.

SPR "New" Cmt#62765 (Airbus): Provision of « Waypoint Name » of parent waypoint when flying an Offset => **COMPLETE**

- **The group agreed** with the proposed resolution

SPR Cmt#62523 (Boeing): Clarification for using the "Offset tag" indication in the Lateral Deviation Event type **=> IN PROCESS**

- **The group agreed** that the "Offset Tag" is useless. The lateral deviation is triggered when the absolute value of the lateral distance between the aircraft's actual position and the aircraft's expected position on the aircraft active flight plan becomes greater than the left or right lateral deviation threshold. The aircraft active flight plan is the reference and includes entering, maintaining or exiting lateral offset if any
- Resolution needs to be coordinated with OPDLWG
- Discussion is postponed to day 3

SPR Cmt#62729 (Airbus) : SPR/PBCS Inconsistency on "Detected loss of the communication service or datalink capability to use the service while transactions are pending completion" **=> REJECTED**

The proposed note will not be added to the SPR volume II. The text will remain as it is in rev A. This has been discussed in several other forums, none of the discussions support changing the text.

2 July 11th

2.1   Detailed discussions

2.1.1 FRAC/OC "In process" Comment resolution (continue)

SPR Cmt#62676 (AIRBUS) - Getting rid of [runwayO] from UM308 [runwayO] TAXI [taxi route] => **REJECTED**

- **The group agreed** with Rejecting the Comment & resolution as proposed. The optional runway parameter is operationally required in UM308. No change to the message parameters.
- **The group agreed** with the following changes for consistency with the text, the intent and the display:

  o The message text is changed as follow in Table 5-5: UM308B (RUNWAY [runwayO]) TAXI [taxi route]
  o New intent = "Instruction to taxi to the specified location. It may include the runway at the beginning for flight crew awareness."
  o Same change applies to the UM317 text: (RUNWAY [runwayO]) INTERSECTION DEPARTURE [intersection] ([distance ground availableO] AVAILABLE).

SPR Cmt#62651, Cmt#62652 Cmt#62653, Cmt#62758 and Cmt#62759 (Airbus) : Clarification for handling "Impaired" Event Type => **COMPLETE**

- The ATSU system representatives confirmed that they need and expect contracts to remain active even if it does not apply to the flight plan currently. For example, if an RTA event is sent up and there's no RTA in the flight plan, the ATSU still expects the contract to be in place if an RTA is established later during the flight.
- Airbus expressed concern that this will negatively impact avionics processing capabilities.
- The ATSUs expressed a desire for a notification from the avionics about which specific event is impaired and a separate notification if the event becomes un-impaired. They recognized that it was too late to add to revision B of the standard though.

- **The group agreed** that ADSC-OR 16 is applicable only for <u>System failure</u> for all event types:

    o A notification is sent to the ATSU system indicating that the capability of monitoring the event type is impaired/no longer possible
    o The "impaired" event type should remain in place during the impairment period. If the event contract remains in place, there is no need for the ATSU to resend an ADS-C event contract request for this event type after the impairment.
    o Only the indication "ability-to-detect-events-impaired" is sent to the ATSU system even if multiple event types are impaired. No indication of which event types are impaired.

      → Need to remove « ability-to-detect-active-vhf-change-impaired » from the EventTypeReported

      → When an EPP Multiple Tolerance is impaired, then no indication of the impacted waypoints is provided.

- **The group agreed** that ADS-C OR 16 does not apply when the event setting condition is absent (e.g. No RTA in the active route).

- **The group agreed** that if the aircraft system receives an event type request for which the ability to detect the event is impaired then it will reject the event type request. => Need for new ADSC-OR

- **The group agreed** on the following SPR changes:

 ADSC-OR 16 When an event contract is in place and if **failure** conditions are such in the aircraft system that it cannot detect one or more of the specified events, then the aircraft system shall send an event report indicating its capability to detect the required events is impaired **and maintain the current event contract**.

  Note:

            1.   _Inability to detect a specified event is a local implementation matter._

            2.   ***An event is not considered as impaired when the event setting condition is absent (e.g. No RTA in the active route).***

            3.   _The indication provided by the aircraft system depends on the event type(s) for which the detection is impaired._

            4.   ***When the capability to detect an event is no longer impaired, no explicit indication is sent to the ATSU system.***

ADSC-OR 59B When it receives an event contract request containing an event type for which the ability to detect the event is impaired, then the aircraft system shall reject this event type request.

__Note:__ the aircraft system will reject the event type request by sending an ADS-C non compliance notification if some other event types in the event contract request can be accepted or by sending the ADS-C reject if all of the event types in the event contract request cannot be accepted.

- **The group agreed** on the following INTEROP changes**:**
  - o Reinstate ADSReport and EventReport
  - o Delete *ADSReportB*, *EventReportB*, and *EventTypeReportB*
  - o Delete the *"ability-to-detect-active-vhf-frequency-change-event-impaired"* indication from the *EventTypeReported*

SPR Cmt#62396 and INTEROP Cmt#62397 (Nav Canada): Restricted the use of UM260/UM261/UM262 and UM263 **=> IN PROCESS**

The papers "*2023-07-07 SC214WG78 FAA Comment Paper CV-DV Final for Meeting (1).docx*" (FAA) and "*UM382-385 ASN1 accomodations_v1.pdf*" (Boeing) were presented.

Vincent presented the intended operations and the group discussed a way to implement these operations with UM382, 383, 384 and 385.

- **The group proposed** the following changes**:**
  - o Deletion of UM260, UM261, UM262 and UM263 from the B2 Rev B Message Set
  - o Modification of new UM382, UM383, UM384 and UM385 as follow
    - ▪ UM382 DESCEND VIA ~~STAR~~[*named instructionB*] TO [*level*]
    - ▪ UM383 AFTER PASSING [*positionR*] DESCEND VIA ~~STAR~~ [*named instructionB*] TO [*level*]
    - ▪ UM384 CLIMB VIA ~~SID~~ [*named instructionB*] TO [*level*]
    - ▪ UM385 AFTER PASSING [*positionR*] CLIMB VIA ~~SID~~ [*named instructionB*] TO [*level*]
  - o No change to the message intents
  - o No requirement for these messages to be loadable
  - o In INTEROP – ASN-1, update the ASN.1 for the new parameter:

2.1.2 New issues/topics

IM Service / Provision of IM 4D Trajectory

MITRE paper "*IM Data Comm Lead IFPI v1-0.ppt*" was addressed.

- **The group agreed** that no changes are needed in the document.

The provision of Latitude and Longitude remains Mandatory

The recommendations for display the messages containing the IM Traffic Aircraft Routing should be provided in IM Materials/Standards

ADSReportB Backward compatibility

Santi presented the AIRTEL paper "*ADSReportB-AIRTEL.ppt*".
- The ADSReportB is no longer part of B2 Rev B (resolution of comments SPR Cmt#62651, Cmt#62652 Cmt#62653, Cmt#62758 and Cmt#62759 (from Airbus))
- Reinstatement of B2 Rev A version. This solves the issue reported in the paper.

3 July 12th

3.1 Detailed discussions

3.1.1 FRAC/OC "In process" Comment resolution (continue)

SPR Cmt#62523 (Boeing): Clarification for using the "Offset tag" indication in the Lateral Deviation Event type => **COMPLETE**

• **The group agreed** that the "Offset Tag" is not operationally useful. The lateral deviation is triggered when the absolute value of the lateral distance between the aircraft's actual position and the aircraft's expected position on the aircraft active flight plan becomes greater than the left or right lateral deviation threshold.

The aircraft active flight plan is the reference and includes entering, maintaining or exiting lateral offset if any.

• **The group agreed** on the following changes that ensure the same behavior for rev A aircraft and rev B aircraft**:**

    o Add in Table 6-4:
Note:
      1.   *The aircraft active flight plan may include a lateral offset. The lateral offset is manually entered by the flight crew (i.e. ATC Clearance, SLOP procedure)* ~~Use of the active route (without the lateral offset) with different left and right deviation threshold allows for monitoring of an aircraft deviating from the cleared route or on a weather deviation. Use of the offset route is appropriate for monitoring an aircraft cleared on a parallel offset.~~
      2.   *For some aircraft, the lateral deviation is not triggered while transitioning from original path to offset path and from offset path to original path.*

    o Add the following new ADSC-ORs:
ADSC-OR xxxB When requesting the lateral deviation event, the ATSU system shall set the Offset tag
Note: *This is to allow backward compatibility with B2 Rev A aircraft implementations*
ADSC-OR xxxB When it receives a lateral deviation event request, the aircraft system shall ignore the offset tag.
Note: *The B2 Rev B aircraft system always considers the active flight plan route to trigger the lateral deviation event independently of the offset tag indication.*

SPR Cmt#62701, Cmt#62702, Cmt#62703, Cmt#62760, and Cmt#62761 and INTEROP Cmt#62604, Cmt#62605, and Cmt#62606: Clarification for using ADS-C reject and ADS-C NCN and associated reasons **=> COMPLETE**

Natacha (Airbus) presented the "*RejectAndNcn - after Plenary#45.pptx*" paper, with several improvements on the ADS-C contracts rejection management.

- **The group agreed with** the proposed list of:

    - Error cases leading to an ADS-C Non-Compliance Notification (partial rejection) if other even type(s) in the contract request can be accepted
    - Error cases leading to an ADS-C Reject (full rejection) of the contract request even if other request(s) in the contract request can be accepted

- **The group agreed** that when the aircraft system receives an RTA Status Change event request or an EPP Level Constraint Status Change event request or an EPP Speed Constraint Status Change event request or a Hold Status Change event request and the constraint/hold does not exist in the active route, the aircraft shall accept the event type request.

- **Action Thierry** To Delete of Sections 6.1.2.4.2 (including ADSC-OR 80B), Sections 6.1.2.4.3 (including ADSC-OR 81B), Sections 61.2.4.4 (including ADSC-OR 83B) and Sections 6.1.2.4.5 (including ADSC-OR 84B). **=> DONE during the meeting**
- **Action Thierry** To revise proposed resolution of SPR Cmt#62545, Cmt#62546, Cmt#62547, Cmt#62548, Cmt#62549, Cmt#62550
- **Action Thierry** To delete the "no-hold-planned", "no-RTA-defined-on-the-route", "no-level-constraint-defined-in-the-window" and "no-speed-constraint-defined-in-the-window" from ADS-C NCN (in SPR and INTEROP) **=> DONE during the meeting**

- **The group agreed** with adding the capability to provide error reason indication in the ADS-C Reject. In the current version, only a generic reason is provided.

- **Action Thierry** To update SPR Table 6-11 for ADS-Reject in order to add the new reason code for rejection and to check consistency for ADS-C No compliance notification
- **Action Thierry** To update INTEROP ASN-1 for the ADS-C Reject

INTEROP Cmt#62544 (Airbus): Need for DLIC Logon for using CPLDC and ADS-C **=> COMPLETE**

Frederic presented the paper "*DLIC - ADSC- Safety Requirements - FB - 12072023.pptx*"

- **The group agreed** with the following resolution:

DLIC-IR 1 is no longer applicable and shall be indicated as Deleted and Replaced by the 2 following IRs and notes:

- **DLIC-IR xxB** For a given flight, the ATSU system shall be prohibited from requesting establishment of a CPDLC connection before the reception of aircraft logon information as provided by the aircraft system, directly or through ground-ground coordination.
- **DLIC-IR yyB** For a given flight, the ATSU system shall be prohibited from requesting the establishment of an ADS-C Contract before the reception of the aircraft logon information as provided by the aircraft system, directly or through ground-ground coordination.

Notes:
- *For a given flight, at least one CM-logon service has to be performed with an ATSU to retrieve the aircraft logon information from the aircraft system. Once this CM-logon service is performed, the aircraft logon information may be disseminated to downstream ATSUs when required.*
- *For a given flight, at least one CM-logon service (or an AFN logon) has to be initiated and sent by the flight crew to an ATSU to enable the CPDLC use at aircraft system level. See 3.3.1.2 dealing with CPDLC inhibited state at aircraft system level.*

- No changes are needed in the SPR

SPR Cmt#62396 and INTEROP Cmt#62397 (Nav Canada): Restricted the use of UM260/UM261/UM262 and UM263 **=> COMPLETE**

- **The group agreed** assessed the proposed resolution of Day#1 and agreed on the following changes:

  - Deletion of UM260, UM261, UM262 and UM263 from the B2 Rev B Message Set
  - Modification of new UM382, UM383, UM384 and UM385 as follow

    - UM382 DESCEND VIA ~~STAR~~[*SidStarClearancename*] TO [*level*]
    - UM383 AFTER PASSING [*positionR*] DESCEND VIA ~~STAR~~ [*SidStarClearancename*] TO [*level*]
    - UM384 CLIMB VIA ~~SID~~ [*SidStarClearancename*] TO [*level*]
    - UM385 AFTER PASSING [*positionR*] CLIMB VIA ~~SID~~ [*SidStarClearancename*] TO [*level*]

  - No change to the message intents
  - No requirement for these messages to be loadable
  - In INTEROP – ASN-1:

    --   This message is replaced by uM384 in B2 Rev B.
    null260   [260] NULL,

    --   This message is replaced by uM382 in B2 Rev B.
    null261   [261] NULL,

    --   This message is replaced by uM385 in B2 Rev B.
    null262   [262] NULL,

    --   This message is replaced by uM383 in B2 Rev B.
    null263   [263] NULL,

    --   DESCEND VIA [*SidStarClearancename*]~~STAR~~ TO [level]
    --   Alr(M)/Resp(W/U)
    uM382   [471] *SidStarClearancename*Level,

    --   AFTER PASSING [positionR] DESCEND
    VIA [*SidStarClearancename*]~~STAR~~ TO [level]
    --   Alr(M)/Resp(W/U)
    uM383   [472]
    PositionR *SidStarClearancename*Level,

    --   CLIMB VIA [*SidStarClearancename*]~~SID~~ TO [level]
    --   Alr(M)/Resp(W/U)
    uM384   [473] *SidStarClearancename*Level,

    --   AFTER PASSING [positionR] CLIMB VIA [named instructionB]~~SID~~ TO
    [level]

```
--                                                    Alr(M)/Resp(W/U)
uM385                                    [474]
PositionR SidStarClearancenameLevel,


        SidStarClearancenameLevel ::= SEQUENCE
          {
          nameinstructionB        [0]      NamedInstructionB,
          level                   [1]      Level,
           ...
          }

        PositionRSidStarClearancenameLevel ::= SEQUENCE
          {
          Position                    [0]      PositionR,
          SidStarClearancename        [1]      SidStarClearancename,
          level                       [2]      Level,
           ...
          }

  SidStarClearancename ::= CHOICE
     {
     sid            [0]      NULL,
     star           [1]      NULL,
      clearanceName        [2]      ClearanceName,
     ...
     }

  ClearanceName ::= IA5String (SIZE (1..24))

  Level ::= CHOICE
     {
     singleLevel            [0]      LevelType,
      blockLevel               [1]       SEQUENCE  SIZE  (2)  OF
LevelType
     }

  PositionR ::= CHOICE
     {
     namedIdentifier          [0]      NamedIdentifierR,
     latlong                  [1]       LatitudeLongitudeR,
     placeBearingDistance     [2]      PlaceBearingRDistance
     }
```

3.1.2   Detailed review and approval of all "High" and "Medium" comments resolution proposals

Claire presented to the group all the comments resolution proposals documented in the comments matrix, classified as "High" and "Medium for the documents ED-228B & DO-350B/ED-229B & DO-351B

Some clarifications have been discussed on some of them, and the matrix has been updated accordingly.

At the end of the day, **the resolution of all comments classified as "High" on ED-228B/DO-350 and some of the comments classified as "Medium" on ED-228B/DO-350 has been approved.** The review will continue on day 4.

Note. Some comments are still tagged "in process" waiting for Thierry to update the matrix and the document with the agreed resolution during this plenary meeting.

4 July 13th

4.1   Detailed discussions

4.1.1   Detailed review and approval of all "High" and "Medium" comments resolution proposals (continue)

Claire continued to present to the group all the comments resolution proposals documented in the comments matrix, classified as "Medium" for the documents ED-228B/DO-350B and classified as "High" and "Medium" on ED-229B & DO-351B.

After some clarifications have been discussed on some of them, and the matrix being updated accordingly, **the resolution of all comments classified as "High" and all comments classified as "Medium" has been approved. This approval is captured in the matrix as a Plenary decision.**

The group also agreed that the editor of the document (Thierry) can manage all "Low" and "editorial" comments without an additional review from the group.

The detailed resolution of all comments is captured in the FRAC/OC comments matrix available on AerOpus.

Note. Some comments are still tagged "in process" waiting for Thierry to update the matrix and the document with the agreed resolution during this plenary meeting.

4.1.2 Comments received after FRAC/OC

CPDLC messages display recommendations

The group agreed that recommendations for CPDLC messages display should be described in the GOLD. The group decided to just add a note/recommendation in DO-350B/ED-228B making the link with the GOLD.

Nevertheless, the group agreed to add a note in ED-228B (A1.4.1) for UM79R (because of the potential safety impact):

> *When displaying UM79R to the flight crew, it is suggested the aircraft system display the route contained in* route clearanceR *instead of fixed text only (such as "ROUTE CLEARANCE"). This is to avoid the flight crew misinterpreting the "CLEARED TO" instruction as a "DIRECT TO" instruction.*

RECOMMENDATION ON DIALOGUE STATUS PROCESS AFTER TR TIMER EXPIRY (EUROCONTROL)

Isabelle presented the paper "Proposal_WG-78_dialogue-tr-timer-expiry-VerC_29Jun23.docx" with recommendations on dialogue status processing after TR Time expiry.

It is proposed to add a recommendation and a note at the end of paragraph 4.1.2.2 (after the CPC-IR 119 Text and Note), of ED-229:

- CPC-IRec xx: A tr timer expiry on an aircraft system or an ATSU system should not affect the status of a dialogue if a closure response is pending.
- Note: This will ensure that an open dialogue will remain open until a closure response is received or the tts timer expires, or the dialogue is closed by local means.

- **The group agreed** to update the document with the following proposal:

The tr timer implementation is optional for the air and the ground. The group requested that the recommendation becomes a requirement for the ground and only a recommendation for the aircraft system. The following is added in section 4.1.2.2:

CPC-IR 169B: When the tr timer is implemented, upon tr timer expiry, the ATSU system shall keep the dialogue open if a closure response is pending.

NOTE: This will ensure that an open dialogue will remain open until a closure response is received or the tts timer expires, or the dialogue is closed by local means.

CPC-IRec 1B: When the tr timer is implemented, upon tr timer expiry, the aircraft system should keep the dialogue open if a closure response is pending.

NOTE: This will ensure that an open dialogue will remain open until a closure response is received or the tts timer expires, or the dialogue is closed by local means.

5   July 14th

5.1   Approval of DO-350B/ED-228B and DO-351B/ED-229B comments resolution and readiness for publication process

The group acknowledged that:
- the comprehensive review of all "Medium" and "High" comments resolution proposals was achieved during this plenary, leading to a consensus on the proposals
- the resolution of the "Non concur" comment was agreed
- the editor (Thierry) can manage the "Editorial" and "Minor" comments

The group also trusts Thierry to properly implement the resolution as agreed in the comment matrix and does not need additional review of the final documents.

As a consequence, DO-350B/ED-228B and DO-351B/ED-229B comments resolution is approved, and the documents can be submitted for review and approval by the RTCA PMC and EUROCAE Council

Thierry will deliver the documents to Brandi in the coming days (the 4 parts) to start the editorial process.

In parallel, Thierry will also share the last draft on AerOpus, and the group thanks several participants for their offer to review the editorials changes (in particular Mike).

5.2   Upcoming Schedule

Due to the editorial work still to be done, it was decided to postpone the next virtual plenary to August 10th 2023. The purpose of this virtual plenary is to approve ED-230B/DO-352B and ED-231B/ DO-353B for FRAC/OC. The calling notice will be updated accordingly.

Tentative dates (TBC) have been proposed for the next Editorial Meeting and Plenary dedicated to the completion of ED-230B/DO-352B and ED-231B/ DO-353B documents.
-    Editors meeting October 30th – Nov 3rd (hosted by Boeing TBC)
-    Plenary meeting Nov 13-17th (hosted by Collins Annapolis TBC)

Note: the November plenary will give the opportunity to the review the planning and activities for the development of the Verification Test documents. We still miss an Industry editor for these documents, and any volunteer is very welcome.
EUROCONTROL (Viktor) offered to start capturing inputs for the Verification test documents based on Operations in Europe.

Post Meeting note:
We have now meeting rooms booked for the next editor and plenary meetings (two consecutive weeks).

- SC-214/WG-78 Editors meeting Tuesday October 24th to Friday October 27nd hosted by Boeing in Seal Beach
- Next SC-214/WG-78 plenary Tuesday October 31st to Friday November 3rd hosted by Collins in Annapolis

5.3   Any Other Business
Claire opened the floor for any new business.

Bjarni gave an update on the schedule for the GOLD publication (Target December). A set of teleconferences will be proposed.

Viktor reported the potential need to update the document ED-110B:

Present description in the ED-110B of UM79 is as follows:
     UM 79 CLEARED TO [position] VIA [route clearance]
     3.3.7.6.4.10.2 When a ground system intends that the change in route will rejoin the current route the UM79 [position] field shall be the same as a point on the current route and be the last point in the [routeinformation] field

The majority of ANSPs don't conform to this in Europe, to avoid the risk of misunderstanding by the crew to see twice the point on the display.
The requirement does not exist anymore in B2 Rev B but is in the ED-110B for B1.

Alex explained that ED-110B can be updated with a change (Change 2). In order for WG-78/SC-214 to work on this update a Terms of Reference Update needs to be submitted to TAC/PMC for approval and then the work can start.

If available, a ToR update proposal can be discussed during our next Plenary on August 10th. Luc mentioned that only a Change can be envisaged (and not a new Revision), as there is a consensus that FANS 1/A and ATN B1 standards will not evolve anymore. DO-350/ED-228 and DO-351/ED-229 B2 interop documents will support all future evolutions.

6 Adjourn

The meeting was adjourned on July 14th, 2023 at 12:00pm CET. All documents and presentation material reviewed during Plenary have been uploaded and are available in the applicable RTCA AerOpus documents folder.

Todd Kilbourne
Secretary, SC-214

CERTIFIED as a true and accurate summary of the meeting.

Claire Robinson
Chair, SC-214

Luc Emberger
Chair, WG-78