

**MEETING MINUTES OF THE THIRTY-SECOND MEETING  
JOINT RTCA SPECIAL COMMITTEE 217  
EUROCAE WORKING GROUP 44**

26<sup>th</sup> February through 2<sup>nd</sup> March 2018, Brussels, Belgium - Hosted by EUROCONTROL

**Executive Summary**

RTCA SC-217 met jointly with EUROCAE WG-44 at EUROCONTROL in Brussels from 26<sup>th</sup> February to 2<sup>nd</sup> March 2018. The objective of the meeting was to continue revision of RTCA DO-201A/EUROCAE ED-77.

A working group session was held on the 26<sup>th</sup> of February aimed at progressing the work on the Data Quality Requirements and data catalog for Navaids, Aerodromes, Airspace, Instrument Flight Procedures, and Routes.

On the 27<sup>th</sup> of February, in opening plenary, the group addressed organizational items, approved the minutes from the 31<sup>st</sup> meeting, approved the agenda for the 32<sup>nd</sup> meeting, and reviewed the status of the action items. During the subsequent working group session, the following topics/papers were discussed:

- RNP Holding (WP 31-05) - The proposal was to highlight the difference between conventional and RNP holds. It was decided to add two data elements to the Procedure Holding data item in the Routes theme, but not to include the proposed introductory text.
- Industry requirements in the AIXM Coding Rules for the new ICAO Data Sets (WP 32-01) - The group noted the work done by the AIS community for the development of the AIXM coding specifications for the new ICAO digital data sets, and discussed to what extent DQRs developed by WG-44/SC-217 could be translated into equivalent coding and data validation rules.
- Appendix I (Action 29-02) – FAA, EASA and EUROCONTROL publication references have been provided and added to the appendix. EUROCAE/RTCA references were reviewed and revised. The reference to ICAO PANS AIM will be added once it is published. Regarding EASA reference on NPA 2018-02, it was decided to reconsider when DO-201B/ED-77A is closer to publication.
- Data-Driven Charting (DDC) (Action 27-03) – The FAA’s preference was that the subject is covered in the revised document. However, it was recognized that there was not a sufficient set of application requirements to form a basis for defining the data needs at this time. It was decided not to cover DDC in DO-201B/ED-77A, but it may be addressed in future work of SC-217/WG-44.
- Requirements on additional data from ARINC 424 (Action 30-01) - The group reviewed data elements in ARINC 424 that are not in the ICAO Data Catalog, and decided which ones should be added in DO-201B. The gap analysis still needs to be finalized, and telecons will be used to complete this task.
- Procedure encoding (Action 25-22) - The group reviewed an example of PBN to xLS Approaches. The text in Section 3.2 was completely revised. Section 3.3 will contain the coding examples.
- Coding examples (Action 31-04) - A list of examples related to procedure design was reviewed. The examples illustrate typical problems encountered when encoding procedures into navigation databases, as well as good practices. The examples will be completed before the meeting in Washington, DC.
- Data Quality Requirements and Data Catalog (Actions 30-03 through 30-07) - Data items and their values were reviewed. The work is almost complete; what remains to be finalized is the addition of the additional ARINC 424 data items that are not in the ICAO Data Catalog.

In closing plenary, the document update status was reviewed, and respective actions were confirmed. As there is not yet a mature draft ready for FRAC, the group decided to have one additional meeting for FRAC resolution in October 2018. Delivery of the document to RTCA/EUROCAE will be no later than 1st Nov 2018, to avoid the need for formal approval to extend the Terms of Reference from PMC. An Editorial Team was formed to prepare the document for FRAC and process the comments prior to FRAC resolution.

The next meeting will take place from the 18<sup>th</sup> to 22<sup>nd</sup> of June 2018 at RTCA in Washington DC, with the main objective to have a document approved for submission to FRAC. At this meeting, the future of the Committee will be discussed to have a proposal to RTCA/EUROCAE together with the release of DO-201B/ED-77A.

# 1 Working Group session

## 1.1 Introduction

RTCA SC-217 met jointly with EUROCAE WG-44 at EUROCONTROL in Brussels from the 26<sup>th</sup> of February to the 2<sup>nd</sup> of March 2018. The objective of the meeting was to continue revision of RTCA DO-201A/EUROCAE ED-77.

A working group session was held on the 26<sup>th</sup> of February and aimed at progressing the work on the Data Quality Requirements and data catalog for Nav aids, Aerodromes, Airspace, Instrument Flight Procedures, and Routes.

Brian Gilbert opened the session. Attendees introduced themselves. Brian Gilbert introduced the organization of the work during the week.

## 1.2 Attendance List

Name	Company/Organization	Email address
Reuss Anderson*	Garmin	<a href="mailto:reuss.anderson@garmin.com">reuss.anderson@garmin.com</a>
David Baker	MITRE	<a href="mailto:dbaker@mitre.org">dbaker@mitre.org</a>
Kevin Carey	US Air Force	<a href="mailto:kevin.carey.1@us.af.mil">kevin.carey.1@us.af.mil</a>
Matthew Colburn	Boeing	<a href="mailto:matthew.j.colburn@boeing.com">matthew.j.colburn@boeing.com</a>
Torsten Domroes	Jeppesen	<a href="mailto:torsten.domroes@jeppesen.com">torsten.domroes@jeppesen.com</a>
Stéphane Dubet	DGAC / DSNA / SIA	<a href="mailto:Stéphane.dubet@aviation-civile.gouv.fr">Stéphane.dubet@aviation-civile.gouv.fr</a>
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Brad Miller	FAA	<a href="mailto:brad.miller@faa.gov">brad.miller@faa.gov</a>
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Rebecca Morrison*	RTCA	<a href="mailto:morrison@rtca.org">morrison@rtca.org</a>
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Erik Ringnes	Honeywell	<a href="mailto:erik.ringnes@honeywell.com">erik.ringnes@honeywell.com</a>
Scott Roesch	Honeywell	<a href="mailto:scott.roesch@honeywell.com">scott.roesch@honeywell.com</a>
Lendina Smaja	EUROCONTROL	<a href="mailto:lendina.smaja@eurocontrol.int">lendina.smaja@eurocontrol.int</a>
Martin Zillig	Lufthansa Systems	<a href="mailto:martin.zillig@lhsystems.com">martin.zillig@lhsystems.com</a>

\* Participation via WebEx

### 1.3 *Data Quality Requirements (DQR) actions/topics*

#### 1.3.1 Requirements on additional data from ARINC 424<sup>1</sup> (Action 30-01)

The group reviewed the spreadsheet with additional data elements in ARINC 424 that are not in the ICAO Data Catalog. The group reviewed the list of data items and decided which ones should be added in DO-201B/ED-77A. The group also determined in which one of the five themes the data items needed to be included. The gap analysis still needs to be finalized, and WebEx meetings will be used to complete this task. The WebEx meetings were scheduled for 17, 24 and 31 May 2018.

It was agreed that while there is a need for flexibility in maintenance and update of DO-201/ED-77 and ARINC 424, a clear delineation between the roles of the two documents would be helpful moving forward after the next revisions of each is published. It is desirable for the two documents to be in alignment both content and schedule-wise similar to the situation with the other aeronautical database standards.

#### 1.3.2 Data-Driven Charting (DDC) (Actions 27-03 and 31-06)

The group discussed whether DDC needs to be covered within the updated document. The FAA's preference was that the subject is covered in the revised document. FAA further explained that another option would be to publish an AC for the DDC application side – including intended functions. As far as the data side is concerned, standards support from industry would be very valuable. However, it was recognized that there was not a sufficient set of application requirements to form a basis for defining the data needs at this time. The group, therefore, concluded not to cover the DDC subject in DO-201B/ED-77A, but it may be addressed in future work of SC-217/WG-44. It was agreed to formalize this decision during Plenary.

#### 1.3.3 Aerodrome data catalog and table

The definitions were updated for the following data items (not contained in PANS AIM), starting from the ARINC 424 definition and adapting it for DO-201/ED-77, i.e. formulating it as higher level of definition. The accuracy and integrity requirements for both Advanced and Basic categories were reviewed and confirmed.

- Speed Limit
- Speed Limit Altitude
- Datum Code
- Threshold Crossing Height
- Starter Extension
- Helipad shape
- Maximum Allowable Helicopter Weight
- Helicopter Performance Requirements

For Magnetic Bearing, additional considerations/requirements were added: When not provided by States, Magnetic bearing should be derived based on authoritative source publication, e.g. calculated from provided True bearing and Magnetic variation data.

Minor editorial changes were introduced.

With this, the review of the Aerodrome DQR section was considered completed.

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<sup>1</sup> The topic was covered during the WG session on Day 1, as well in Plenary session on Day 3 and 4 of the meeting  
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### 1.3.4 Nav aids data catalog and table

Matt Colburn presented the progress since the previous meeting.

Addressing Action 29-01, Sasho Neshevski and Lendina Smaja (EUROCONTROL) presented proposed input for the Navaid DQR catalog and table.

- For GBAS Position, 1m accuracy has been added as per ICAO requirement.
- ‘Routine integrity’ was retained for GBAS Reference point (ICAO requirement is ‘Essential’).

The review of the Nav aids section continued in plenary session. Items not included in ICAO PANS AIM but in ARINC 424 were reviewed, in particular:

- Figure of Merit (FOM) attribute was revised; the name was changed to “Usable Range”. The additional considerations/requirements were revised.
- Threshold crossing height (TCH)
- Facility Characteristics – it was decided to remove it.
- ILS Localizer Beam Width
- ILS Glide Slope Beam Width
- Weather broadcast
- Voice
- Beat Frequency Oscillator

With this, the review of the Nav aids DQR section was considered completed, unless any issues are found with the references.

### 1.3.5 Instrument Flight Procedure (IFP) data catalog and table<sup>2</sup>

Reuss Anderson informed on the work since the last meeting. The editorial clean-up has been completed; what remains to be done is the review of the four data elements from ARINC 424. The following data items were reviewed:

- PBN requirements
  - Navigation Specification, Sensor Limitations and Functional Requirements - the group decided to keep integrity requirement ‘Routine’ for all three of them.
- Procedure segment
  - MOCA – it was agreed to set the integrity requirement to ‘Routine’.
  - True Bearing and Magnetic Bearing – The wording of the definitions was revised. It was decided to keep two separate elements (True and Magnetic) and for both of them to set the integrity requirement to ‘Essential’.
  - Gradient – It was decided to set the integrity requirement to ‘Routine’.
  - Threshold Crossing Height (TCH) – It was discussed if IFP was the right place for TCH, or it would rather be better placed in Aerodromes. The various uses of TCH were discussed, i.e. procedure design and vertical guidance. It was decided to keep the element in the IFP section and set the integrity requirement to ‘Essential’.
  - Speed – It was decided to set the integrity requirement to ‘Essential’.

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<sup>2</sup> The topic was covered during the WG session on Days 1 and 5, as well in Plenary session on Day 4 of the meeting

- Final Approach Segment (FAS)
  - It was decided to link the FAS with the Data Block – the title was changed to Final Approach Segment Data Block (FAS DB). It was noted that the requirements on FAS DB are published in RTCA DO-229, Appendix D. It was decided to refer to DO-229 in DO-201B, including for the definitions of the data elements and their data quality requirements. Matt asked if it would be possible to change the content of the FAS, e.g. add front course. Stéphane replied that in principle, it would be possible but in practice, it would be very difficult to do this as the FAS DB content has been agreed to following extensive discussions. Matt was of the view that there were missing data elements from the outset. Jeff M. explained that this type of requirement is at system level and the right group to address it is RTCA SC-159, not SC-217/WG-44, as database requirements are not the appropriate driver for the system requirements. It was agreed that changing FAS DB content is not something that should be addressed within the scope of SC-217/WG-44.
  - Thomas questioned what the added value was of individually defining the FAS DB data elements, having in mind that the totality of the FAS DB content will be ‘Critical’ integrity because it is in the FAS DB. On the other hand, if the same data element is outside of the FAS DB it may be ‘Essential’. This is because the integrity requirement will depend on the application that will use the data elements. In other words, in different operational contexts, a given data element may have different data quality requirements depending on the application. It was decided to group all data elements contained in the FAS DB in one field with integrity requirement ‘Critical’, since individual data elements needed by other applications are available in other areas of the data catalog. The CRC Remainder and the SBAS Channel Number data items were listed as separate data elements with integrity requirement Routine. Definition and Reference for CRC Remainder and SBAS Channel Number were added.
  - A discussion took place on accuracy & resolution of declared values. It was recalled that a special indicator – superscript “DV” after the value – is used to identify which data elements are declared values. Data elements that may have a known means of derivation in some cases, and be declared or unmeasurable in other cases, will continue to be denoted by an asterisk after the value, indicating that the accuracy value applies when it can be determined. Some reservations were expressed by members of the group as the use of an asterisk could be open to interpretation and potentially lead to long discussions and increased workload during implementation. Reuss proposed to use only DV. Brian drafted explanatory text for the use of asterisk, and the group decided to keep the asterisk designation.

## 2 Joint Meeting

### 2.1 Administration & Agenda

On the 27<sup>th</sup> of February, the group addressed organizational items, approved the minutes from the 31<sup>st</sup> meeting, and approved the agenda for the 32<sup>nd</sup> meeting. The meeting was opened by Stéphane Dubet (RTCA SC-217 co-chairman and EUROCAE WG-44 chairman) and Brian Gilbert (RTCA SC-217 co-chairman).

Brad Miller, in his role of DFO, read the FAA Public meeting announcement. Rebecca Morrison, RTCA Program Director, presented the RTCA IPR Policy, the EUROCAE IPR Policy Call, and the EUROCAE membership policy, with regard to participation in EUROCAE Working Groups.

The group reviewed the status of the action items.

Brian Gilbert summarised the conclusion on the subject of DDC. The proposed decision was not to cover DDC within DO-201B/ED-77A; nevertheless, the DDC applications identified in Appendix A will be retained. Any further work on DDC will be deferred until the DO-201A/ED-77 revision is complete. This decision was approved by the Plenary.

## 2.2 *Working Group Session*

The group continued the work in WG session addressing the following topics:

**Action 31-04:** to review Figures 3-21 through 3-36 and compile a list of new examples of positive and negative practices related to coding of procedures.

The examples illustrate typical problems encountered when encoding procedures into navigation databases, as well as good practices. The aim is to have a better correspondence between the intent of the procedure designer and the actual way the procedure is flown based on the onboard navigation database. There is no intent to finger point at specific sources.

Examples of problems and possible fixes were reviewed as follows:

- Intercept more than 90°.
- Bank angle restrictions not encodable - a procedure containing a bank angle restriction on a turn, e.g. minimum bank angle of 25°
- Double condition on procedure
- PBN to ILS Database Coding Error
- Magnetic variation
- Different charted altitudes for the same fix
- Course reversal on departures
- Differences between designer intent and actual performance: e.g. CA to CA leg with big course difference makes the ground track based entirely on aircraft performance.
- Course reversal approach transitions coded in the navigation database as different procedures for CAT C & D aircraft and for CAT A & B aircraft respectively.

The following examples were identified as being good ones:

- Coding of a short final with a near 180° RF leg, where the RF leg is inside the FAP, and the procedure is AR and has RNP-based minima.
- PBN to xLS

In conclusion, there were six “things to avoid” and corresponding good practice examples selected for inclusion, and three good practices that will be included.

**Action 31-04** remained open; David Baker will complete the examples and have WebEx meetings before the next meeting.

### **Procedure encoding (Action 25-22)**

The group reviewed an example of Hybrid Approaches - PBN to xLS Approaches. Kevin presented the draft revised text in Section 3. The group reviewed and introduced changes in the text during the discussion. The text in Section 3.2 was completely revised. Section 3.3 will contain the examples (input from Action 31-04).

**Action 25-22** remained open to finalize the text revision (produce a “clean” version) and to add the examples.

### **Industry requirements in the AIXM Coding Rules for the new ICAO Data Sets WP 32-01**

Eddy Porosnicu (EUROCONTROL) presented the paper and introduced the AIXM website, highlighting the subsite dedicated to coding guidelines for the ICAO data sets, including AIXM business rules. The group discussed to what extent DQRs developed by WG-44/SC-217 could be translated into equivalent coding and data validation rules for AIXM. He also presented the Eurocontrol SESAR Deployment project that aims at providing an AIXM data verification service, based on the coding guidelines and the AIXM business rules.

Thomas enquired if the objective was to introduce automation in the State provided data, how accuracy requirements are included. Eddy replied that in AIXM there are explicit attributes for accuracy and vertical dimensions, based on the ICAO requirements.

Torsten Domroes stated that it would be useful if the handshake between State AIS providers and Data Service providers is made even better than it is today, however, he underlined that a validation service may be a problem for Jeppesen, having in mind that various systems have different implementations. He asked for clarification if the aim was that everyone in the world would have to comply with the EUROCONTROL Guidelines. Eddy replied that the coding guidelines are based on the ICAO SARPS and PANS-AIM, therefore they should be globally applicable. In the end, this will depend on what ICAO decides. The expectation is for ICAO to issue this material as Guidelines to States – as part of the revised ICAO AIS Manual (DOC 8126).

Eddy Porosnicu underlined the importance of the Interoperability rules; every effort is being made to avoid conflicting implementations by using interoperability rules.

Torsten Domroes was of the opinion that verification is not only challenging but it is impossible, unless Group EAD has the authority to declare a given data set as the valid one. Eddy clarified that with the AIXM Business Rules expressed in SBVR any organization will be able to verify against a single set of rules and also to define their own specific rules, if necessary.

Eddy Porosnicu highlighted that this group may be able to provide valuable contribution especially on IFP data coding guidelines.

Torsten Domroes stated that there are still big differences between EUROCONTROL and FAA related to data sets and service. Eddy Porosnicu replied that there are different ways to provide the data, for example, FAA trying to develop interactive data services, which go beyond the provision of a data set as a whole. Some manufacturers tend to include such advanced capabilities in their systems. However, this should not trigger significant differences in the data itself.

Stéphane Dubet stated that the tool has value but it remains to be seen how it is going to be implemented and used; this was still under discussion.

In conclusion, the group noted the work done by the AIS community for the development of the AIXM coding specifications for the new ICAO digital data sets and requested to be kept informed on the progress through updates at the next joint meetings.

**New Action 32-01:** Sasho to provide progress update on the work done by the AIS community for the development of the AIXM Coding specifications for the new ICAO digital data sets.

### **Review and update of Appendix I (Actions 29-02, 31-02 and 31-03)**

Scott presented the updated Appendix I. The group reviewed the revised draft Appendix I and made changes. After the meeting in Phoenix, FAA, EASA and EUROCONTROL publication references have been provided and added to the appendix. EUROCAE/RTCA references were reviewed and revised. The reference to ICAO PANS AIM will be added once it is published. Regarding the reference for EASA NPA 2018-02, it was decided to reconsider when DO-201B/ED-77A is closer to publication.

In conclusion, it was decided that Scott will finalize the content with the updates made during the meeting, will add any necessary comments, and will upload the file on Workspace in the folder containing the approved documents. The text will be moved to Section 1.2 of the main body.

**RNP Holding (Action 31-05)** – WP 31-05 was presented and discussed. The proposal was to add text highlighting the difference between conventional and RNP holds.

It was decided not to include the proposed text and to add the following two elements to the Procedure Holding sub-section of the IFP DQR table:

- (An) **Inbound Track** (to holding fix, in degrees relative to true North) – Accuracy 0.1 degree<sup>DV</sup>, ‘Essential’ integrity
- (An assigned) **RNP** (type) – Accuracy 0.01 nm<sup>DV</sup>, ‘Essential’ integrity

As part of Action 25-22, the issues related to coding of RNP holding procedures were discussed.

The paper was updated during the discussion.

### **DQRs (Continuation)**

- **Routes data catalog and table<sup>3</sup>**

Erik Ringnes summarized the main changes that were introduced since the last meeting. These concerned the data elements for Waypoints in ARINC 424 that are not in the PANS AIM data catalog. The following data elements were reviewed:

- **ATS Route**
  - Level – ‘Essential’ integrity
  - RVSM Minimum Level – ‘Routine’ integrity
  - RVSM Maximum Level – ‘Routine’ integrity
  - Class of airspace – ‘Routine’ integrity
  - Direction of Course – ‘Routine’ integrity
  - Availability – ‘Routine’ integrity
- **Waypoint**
  - Controlled Airspace Intersection – ‘Routine’ integrity
  - En Route – ‘Routine’ integrity
  - FIR/UIR Airspace Intersection – ‘Routine’ integrity
  - Full/Half Degree Latitude – ‘Routine’ integrity
  - Oceanic Gateway – ‘Routine’ integrity
  - Required Off-Route – ‘Routine’ integrity
  - Unnamed – ‘Routine’ integrity
  - VFR – ‘Routine’ integrity
  - FIR/FRA Transition Waypoint – ‘Routine’ integrity
- **En-route Holding**
  - Arc Radius – Accuracy 0.001 nm DV, ‘Essential’ integrity
  - Inbound/Outbound Indicator – ‘Routine’ integrity

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<sup>3</sup> The topic was covered in Plenary session and during the WG session on Day 5 of the meeting

A note was added to the DQR Table: “The DQRs apply to the en route part. For terminal area, see IFP DQR”.

## 2.3 *Closing Session*

In closing plenary, the document update status was reviewed, and respective actions were confirmed.

### **Status on DQRs**

- **Progress status check per theme<sup>4</sup>**
  - **Aerodromes:** Completed
  - **Nav aids:** Completed
  - **Routes:** (Nearly) completed
  - **Airspace:** Completed
  - **IFP:** (Nearly) Completed

### **Document update status**

- Structure of the document - Completed
- Section 1 – Completed
- Section 2 - Completed
- Section 3
  - “Clean” version to be tabled
  - Examples need to be added
- Section 4
  - Text completed
  - Tables: to be completed as per ‘Status on DQRs’ above
- Appendices
  - Appendix A - Completed
  - Appendices B, C, D, E, F, G and H - Removed
  - Appendix I – reviewed and edited – to be included in the main body (Section 1.2)
  - New Appendices :
    - NOTAM/AIRAC - Completed
    - PBN procedures related terminology - Completed
    - Abbreviations and acronyms: to be completed at the end by the Editorial Team
    - Glossary: to be completed at the end by the Editorial Team
    - Membership: to be completed at the end by the Editorial Team
- **Remaining work:**

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<sup>4</sup> Pending completion of the ARINC 424 gap analysis

- ARINC 424 gap analysis and addition of various data items that are not in PANS AIM Data Catalog.
- Finalization of the work on coding examples
- Overall consistency check: to be done by the Editorial Team at the end

As there is not yet a mature draft ready for FRAC, the group decided to have one additional meeting for FRAC resolution in October 2018. An Editorial Team was formed to prepare the document for FRAC and process the comments prior to FRAC resolution. The following members volunteered to be on the editorial team: Stephen Moody, Rebecca Morrison, Matthew Colburn, Kevin Carey, Scott Roesch, and Brad Miller.

**Dates of next meetings**

The next meeting will take place from the 18<sup>th</sup> to the 22<sup>nd</sup> of June 2018 at RTCA in Washington DC. The main objective of this meeting will be to have a document approved for submission to FRAC. The meeting will be structured as follows:

- **Plenary meeting:** 18-21 June 2018 – to conduct a final review of the Data Catalog and DQRs, to review the new material on examples and to approve the release of the draft document for FRAC.
- **Editorial Team meeting:** 22 June 2018 – to conduct editorial cleaning and to prepare the final draft document to be submitted to FRAC.

At this meeting, the future of the Committee will be discussed in order to have a proposal to make to RTCA/EUROCAE together with the release of DO-201B/ED-77A.

One additional meeting is scheduled for FRAC resolution from the 22<sup>nd</sup> to the 26<sup>th</sup> of October 2018 in Bordeaux, France, structured as follows:

- **Editorial Team meeting** – 2 days: 22-23 October 2018
  - Sort comments out (duplicates, conflicting, by categories, etc.)
  - Propose resolution of editorial / minor comments
  - Prepare elements for resolution of other comments
- **Plenary meeting** - 3 days: 24-26 October 2018
  - Resolve all comments
  - Approve FRAC resolution

Following the meeting in Bordeaux, the Editorial Team will proceed with any remaining action as approved by Plenary. Delivery of the document to RTCA/EUROCAE will be no later than the 1<sup>st</sup> of November 2018, to avoid the need for PMC formal approval to extend the Terms of Reference.

WebEx meetings to complete the ARINC 424 gap analysis were scheduled for 17, 24 and 31 May 2018.

Stéphane Dubet and Brian Gilbert thanked all members for the participation and, in particular, Sasho for hosting of the meeting by EUROCONTROL, and closed the plenary meeting.

**3 List of Open Actions**

The following table contains a list of all open action items:

Ref#	Member/Team Assigned	Task Description
25-22	Steve, Erik, Cedric, Kevin, David, John	Draft text on Procedure encoding

Ref#	Member/Team Assigned	Task Description
		- Path terminators (ARINC 424) basics (3.1.3) - Considerations for encoding of procedures in DB (3.1.1, 3.1.2, 3.2 and 3.3) including for new RNP DB Final review needed, plus work on examples (see Action 31-04).
30-01	Steve, Lee, Jeff P/, Greg	Consider requirements on additional data from ARINC 424, which is not in the ICAO Data Catalog.
30-03	Thomas and Brian G.	Prepare a WP for the Aerodromes DQR table and catalog for inclusion in the master document.
30-04	Matt	Prepare a WP for the Nav aids DQR table and catalog for inclusion in the master document.
30-05	Brian Gilbert	Prepare a WP for the Airspace DQR table and catalog for inclusion in the master document.
30-06	Erik	Prepare a WP for the Routes DQR table and catalog for inclusion in the master document.
30-07	Reuss	Prepare a WP for the IFP DQR table and catalog for inclusion in the master document.
31-04	David, Erik, Steve, Mike, Kevin, Greg, Lee	To review Figures 3-21 through 3-36 and compile a list of new examples of positive and negative practices related to coding of procedures.
32-01	Sasho	Provide progress update on the work done by the AIS community for the development of the AIXM Coding specifications for the new ICAO digital data sets.
32-02	Editorial Team: Steve, Rebecca, Matt, Kevin, Scott, Brad	To complete editorial cleaning and prepare the final draft document to be submitted to FRAC.

**Certified** as a true and accurate summary of the meeting:



Sasho Neshevski  
Secretary, RTCA SC-217, EUROCAE WG-44



Brian Gilbert  
Chairman, RTCA SC-217



Stéphane Dubet  
Chairman, EUROCAE WG-44