



EUR. 23-22 / WG82-105

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St Denis & Washington, 15 January 2022

**Minutes of EUROCAE WG-82 (Meeting #54) / RTCA Special Committee SC-223
(Plenary #48) Joint Telecon Meeting
“AeroMACS Standards”**

Date	January 11, 2021
Time	10am-12pm EST, 16h-18h CET
Hosted by	Virtual Meeting
Venue	For WebEx, contact Rebecca or Anna Guegan
Contact	<p>Rebecca Morrison, Program Director, RTCA (202) 330-0654 or rmorrison@rtca.org</p> <p>Anna Guégan, Technical Programme Manager, EUROCAE anna.guegan@eurocae.net</p>

Attendees:

Name	Role	Affiliation
Roy, Alope	SC-223 Chair	HONEYWELL INTERNATIONAL, INC.
Phillips, Brent	Government Authorized Representative	FEDERAL AVIATION ADMINISTRATION (FAA)
Schlereth, Armin	WG-82 Chair	DFS DEUTSCHE FLUGSICHERUNG GMBH
Zeng, Dongsong	SC-223 Secretary	THE MITRE CORPORATION
Morrison, Rebecca	Program Director	RTCA, INC.
Guégan, Anna	Technical Programme Manager	EUROCAE
Jain, Ravi	Member	FEDERAL AVIATION ADMINISTRATION (FAA)
d'Humières, Francois	Member	FREQUENTIS
Ishii, Hideyuki	Member	JAPAN RADIO AIR NAVIGATION SYSTEMS ASSOCIATION
Ladron, Daniel	Member	BOEING
Maiolla, Vaughn	Member	ICAO
Malaga, Alfonso	Member	ACES, INC.
Prieto, Gonzalo	Member	ESSP
Scheffler, Craig	Guest	WISK
Soléry, Michel	Member	DGAC
Stouffer, Virginia	Guest	AURA NETWORK SYSTEMS

Agenda Items 1. Welcome address. Meeting Organizational Issues

After a roundtable introduction, Alope Roy, SC-223 Chair, and Armin Schlereth, WG-82 Chair, welcomed the participants, and started the meeting.

Agenda Item 2. Administrative Remarks

Rebecca Morrison, Program Director, RTCA, and Anna Guégan, Technical Programme Manager, EUROCAE, presented the RTCA/EUROCAE antitrust, proprietary and membership policy statements. All participants agreed on the statements and no issue were raised.

Agenda Item 3. Approval of the Agenda

The group reviewed and approved the meeting agenda.

Agenda Item 4. Review Minutes and Action Items from Previous SC-223/WG-82 Meeting

Dongsong Zeng, SC-223 Secretary, went through the previous meeting minutes and updated the status of action items. The group reviewed and approved the previous meeting notes.

Agenda Item 5. Consider a motion to send DO-346A/ED-223A to the PMC and Council for publication

During the FRAC/OC period, only one editorial comment from Alfonso Malaga, ACES, Inc., was received, which proposes to replace “Frame Size” and “Frame Length” with “Frame Duration” in Section 3.1.4 of the draft DO-346A/ED-223A release for FRAC/OC. The group reviewed the comment and accepted the changes.

During the meeting Alfonso Malaga, ACES, Inc., objected to Table 3-1 in the draft MOPS because it did not include all possible UL and DL OFDM symbol ratios.

Table 3-1 simply listed UL and DL ratios and did not explicitly specify the ratio is UL over DL or DL over UL. Although one might infer that the ratios could be valid for both UL/DL and DL/UL, to avoid confusion the group proposed to remove Table 3-1.

As this is a significant change introduced at the last minute after FRAC/OC, the Committee felt that all members should have enough time to carefully review this unexpected change. As such, the group decided to re-release the updated version of DO-346A/ED-223A for another FRAC/OC and schedule a separate plenary meeting in March to hopefully resolve all the comments received during this FRAC/OC period.

Agenda Item 6. Future Meeting

Next joint SC-223/WG-82 meeting will be in March 2022. Date and time are TBD.

Agenda Item 7. Any Other Business of Interest

No other business of interest was raised during the meeting.

Agenda Item 8. Adjourn

The meeting was adjourned around 12:00 pm EST, January 11th, 2022.

List of Action Items

Action Item #	Action Content	Responsible	Due Date	Status
P39-1	Reach out to AeroMACS manufacturers for their real product emission data	Simona Pierattelli, Giulio Vivaldi, and Ishii Hideyuki	Nov. 25, 2020	2020-12-02: Closed. Richard Hawkins will reach out to WiMAX

				and AeroMACS manufacturers for measurement data.
P39-2	Recalculate and verify the unit conversion of various emission masks.	Dongsong Zeng and Alfonso Malaga	Nov. 25, 2020	2020-12-02: Closed.
P39-3	Draft SC-223/WG-82 TOR revision proposal	Aloke Roy and Armin Schlereth	Dec. 2, 2020	2021-2-10: Closed.
P40-1	Provide absolute AeroMACS spurious emission levels required by SC-228	Alfonso Malaga	Feb. 3, 2021	2021-2-10: Closed.
P40-2	Flesh out Decision 1 in the draft SC-223 TOR revision proposal and share it with Armin for WG-82 TOR update	Aloke Roy	Feb. 3, 2021	2021-2-10: Closed.
SG-1	Continue coordination with WiMAX forum to receive technical inputs from AeroMACS manufacturers as well as their stances on the emission mask change	Richard Hawkins	May 4, 2021	2021-5-11: Closed. The inputs from WiMAX are available in the plenary meeting.
SG-2	Coordinate with FAA spectrum and certification offices on their AeroMACS TSO activities to understand (1) whether they still need MOPS revision for the TSO update; and (2) whether they have issues with the current SC-223/WG-82 schedule	Brent Phillips and Ravi Jain	May 4, 2021	2021-5-11: Closed. Ravi - FAA still needs MOPS revision. TSO will be revised. Cancelling the current AeroMACS TSO might help and wait for revision later. Schedule wise, the sooner the better.
P43-1	Siemens and Leonardo will validate Decision 1 .	Anders Rendahl, Lior Shimonovich, and Giulio Vivaldi	July 13, 2021	2021-7-20: keep open. Richard will coordinate with manufacturers. 2021-8-24: Closed and resolved. Decision 1 was updated and agreed.
P43-2	Alfonso Malaga will write a problem statement of UL/DL ratio and distribute to the group; and Lior Shimonovich will investigate into different UL/DL ratios.	Alfonso Malaga and Lior Shimonovich	July 13, 2021	2021-7-20: keep open. Al provided his investigation results. Still waiting for Lior's inputs. 2021-8-24: Closed. Add a guidance that BS and SS in the same airport should use the same (e.g, 5 ms) frame duration in AeroMACS MOPS Section 1. Note: This is for implementation guidance. Care must be taken by first adopters to ensure their choices do not preclude other adopters and traffic flow requirements.
P45-1	Review the recommendations on slide 4 dealing with channel rejection.	All members	August 17, 2021	2021-8-24: Closed and accepted. Add requirement to MOPS Section 2.2.8.4.14.2 that:

				<ul style="list-style-type: none"> • Adjacent Channel Rejection = 29 dB – SNR_{Rx} – 5 dB Implementation Loss • Non-adjacent Channel Rejection = 48 dB - SNR_{Rx} – 5 dB Implementation Loss
P45-2	Review the need for additional emission requirements for ground stations.	All members	August 17, 2021	2021-8-24: Resolved in P43-1 resolution.
SG-1	Review and investigate whether MOPS and the Profiles (DO-345/ED-227) are aligned	All members	September 20, 2021	2021-9-27: Closed.
SG-2	Draft initial MOPS changes	Armin, Aloke and Dongsong	September 20, 2021	2021-9-27: Closed.

-S-
Dongsong Zeng
Secretary

CERTIFIED as a true and accurate summary of the meeting.

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Aloke Roy
SC-223 Chairman

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Armin Schlereth
WG-82 Chairman