



EUR 271-20 / WG115-13
RTCA 300-20/SC238-011



Saint-Denis, 29th September 2020

EUROCAE WG-115 “C-UAS”

Meeting #6 Minutes

Date	22nd, 23rd & 29th September 2020
Place	Webex
Venue	Webex
Hosted by	EUROCAE

1. Welcome and Tour de Table

Jorge Munir El Malek Vázquez [JM] welcomed the participants to the 6th meeting of the Joint Activity EUROCAE WG-115 and RTCA SC-238. Meeting took place over the 3 days according to the agreed agenda:

Day 1

1. Plenary Session (1h00)
 - 1.1. Welcome, adoption of Agenda
 - 1.2. RTCA and EUROCAE Statements review
 - 1.3. Approval of Meeting #5 Minutes
 - 1.4. Updates about Joint activity WG115-SC238
 - 1.5. Updates from partners
2. Review of OSED, following WG Peer Review / SC RAC
 - 2.1. Global review focused on Non-Concur (NC) & High Comments
 - 2.2. Review by chapter (Medium, Low and Editorial Comments)
 - 2.2.1. OSED Chapter 1 & 2
 - 2.2.2. OSED Chapter 3
3. Close of Day 1

Day 2

1. Review Day 1 results
2. Review of OSED, following WG Peer Review / SC RAC
 - 2.1. Appendix B
 - 2.2. Review by chapter (Medium and Low Comments)
 - 2.2.1. EUROCAE Comments – Pending Comment (R&S)
 - 2.2.2. RTCA Comments
 - 2.3. Review comments provided by Frequentis
 - 2.4. Additional Comments
3. Way ahead on OSED
 - 3.1. Decision on Open Consultation/FRAC
 - 3.2. Next draft and planning
4. Close of Day 2

Day 3

1. Updates from partners
 1. EASA C-UAS action plan
2. Workplan for SPR/INTEROP
 1. Introduction to deliverables (ToR, Scope, ...)
 2. Tables of content
 3. Editor/contributors
 4. Planning - Next plenary
3. AOB
 1. SC-238 Secretary Position
4. End of Meeting

JM requests all participants to register with their name and organisation under the Webex chat. RTCA members are also asked to register using the RTCA link.

ATTACHMENT A includes “WG-115 and SC-238 Meeting 6 Attendance”.

Presentation used during the meeting can be found under EUROCAE and RTCA workspaces. [EUROCAE Link](#)

2. RTCA and EUROCAE Statements review

Karan Hofmann presents the standard announcements regarding RTCA Anti-Trust policy, Proprietary policy, and Committee Participation Membership policy.

Alain Vallée [AV] presents the standard announcements regarding EUROCAE membership-based status, IPR policy, including the Workspace tool available for EUROCAE members.

3. Approval of Meeting #5 Minutes

Without any comment, final draft of the Meeting #5 Minutes is approved.

4. Updates about joint activity WG115-SC238

JM announces Max Fenkell [MF] is stepping down as SC-238 Chairman given his new professional responsibilities. Ryan Wallace [RW] replaces him as new SC-238 Chairman.

5. Updates from Partners

JM presents the updates from some of the related organisations (NATO, EDA):

Regarding NATO, the C-UAS WG – Technical Standardization Sub-group held two meetings so far (17th July and 28th August 2020), next meeting date will take place next 25th September 2020. The scope of the WG is to establish a reference architecture/functional mapping of the C UAS architecture in different scenarios and identify potential interfaces, either already developed or to be further defined standardized.

JM also reports the next meeting of then NATO Drone SLAP (Single Local Air Picture) will take place next 6th October 2020.

Finally, JM reports on the C-UAS Workshop organized by European Defence Agency (EDA) took place the 15th September 2020. The agenda included a bullet for a presentation by EUROCAE representative (Alain Vallée). Some members of the WG-115 participated in the workshop.

6. Review of OSED, following WG Peer Review / SC RAC

- Initial remarks and guidelines
 - Important reminder: ToR of WG-115 and SC-238 as reference.
 - The last OSED draft was distributed the 24th July 2020 through the workspace and it was available for peer review during four weeks until the 24th August 2020.
 - JM thanks the people who have contributed providing their comments.
 - Once the peer review was closed, the received comments were shared with chapter leaders and leadership team (LDT) in order to review them and provide a draft resolution, two Excel files were the result of this activity one containing the comments provided by EUROCAE members and another one for RTCA members. These files were shared with the WG/SC in advanced the 18th September 2020 (available in the EUROCAE workspace, [here](#)). Additional comments were received after deadline. LDT did their best to review them before starting the Day 1, these comments will also be considered during the plenary meeting #6, using a separate file.
 - JM explains the review of OSED starts with the review and approval of the proposed resolution by the LDT, comment by comment, following the high-to-low priority order (Non-Concur, High, Medium and Low priority Comments). JM states the WG/SC is open to additional comments about the OSED draft.

- All editorial comments will be directly addressed by the editorial team.
- The final resolutions agreed by the committee can be found in three Excel files uploaded in the EUROCAE workspace, [here](#):
 - (1st file) “Comment table Draft OSED CUAS WG115_VFull_4a+Plen”: Final resolution for comments provided by EUROCAE members.
 - (2nd file) “FORMATTED COMMENTS – OSED RAC comments_VFull_4+Plen”: Final resolution for comments provided by RTCA members.
 - (3rd file) “Comment table OSED CUAS Frequentis_v3-WGR+Plenary”: Final resolution for comments provided by Frequentis (EUROCAE member).
- Appendix B
 - During the Day 2 session Julia Sanchez [JS] introduces a new Appendix B, particularly, a new reduced flow chart.
 - [JS] receives some comments and asks WG member to provide by email their inputs to be considered in the final review of the Appendix B draft which will be included in the new OSED draft.

7. Way ahead on OSED

- Once finished the review of OSED, JM states the next step will consist on updating the OSED draft, including all the resolutions agreed by the WG/SC.
- The chapter leaders agree they will update and send new version to AV. Deadline: Monday, 28th September.
- AV is in charge of merging all contribution and provide new version of OSED.
- Considering the new OSED with the resolutions agreed during day 1 and 2, JM and Albert Secen [AS] asked the Committee: “Has the plenary reached consensus to submit the draft to Open Consultation (OC) / Final Review And Comments (FRAC)?”
- Then, Ryan Wallace (RW) made a motion to enter OC/FRAC. Nancy Ford seconded. AS called for any objections, no objections were raised.
- In conclusion, motion passes to enter OC/FRAC at Plenary #6 in September 2020.

8. End Day 2

- JM opens the floor for Any Other Business. No comments
- JM introduces the draft agenda of Day 3
- Finally, JM thanks the attendees their time and effort and closes the Day 2

9. Day 3 – Updates from Partners

During an internal meeting of the LDT preparing the 3rd Day of the 6th plenary meeting, it was considered useful for the new stage (SPR/INTEROP) of the WG/SC to know more about EASA and FAA's plans/expectations about the future C-UAS. EASA and FAA representatives were contacted/invited by the LDT. Considering the short available period of time for receiving feedback, only EASA could confirm for the 3rd Day.

Thomas Oster [TO], EASA representative in the EUROCAE WG, was invited for introducing the lines of the EASA C-UAS action plan. TO explains the EASA C-UAS Action Plan and answers several questions from participants such as law enforcement involvement in the Action, state of C-UAS at airports in Europe, interaction between EASA and FAA or conclusions in Europe about effectiveness of detection systems.

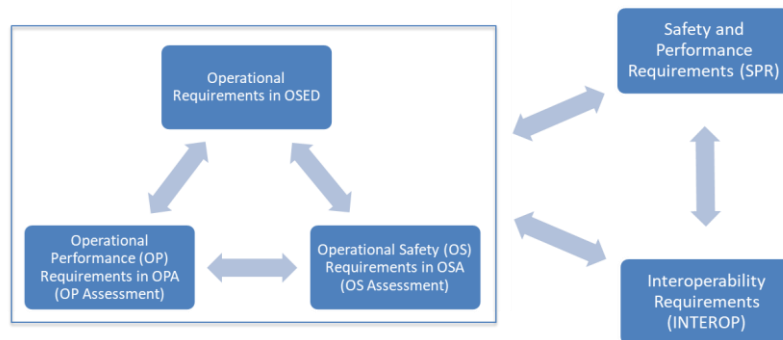
During the timeslot for questions, the representative of FAA, Mohan Gupta, points out he will consult internally and try to respond to the request from the joint activity.

10. Workplan for SPR/INTEROP

JM presented the workplan for the next stage (SPR/INTEROP):

- First, JM introduces the deliverables, their scope and target dates according to the TOR, completing this introduction with an extract of the Meeting Minutes #5 about SPR and INTEROP.

JM concludes with an slide which provides an overview of the process and relationship among documents:



- JM introduces the first draft of the table of content for SPR and INTEROP. AV comments the Annex A – OSED could contain an updated version of the Operational Requirement List resulting of associated iterative process.
- JM opens again the Call for editor and contributors. RW points out the importance of these roles in the new stage and the technical background.
- JM presents a first approach of the workplan, considering as first objectives: build the team for this new stage (editor, chapter leaders, contributors) and later establish methodology based on experience of team experts. A sequential order is proposed, starting with Performance requirements (2020'Q4 and 2020'Q1) and later Safety Requirements & INTEROP (2021'Q1 and 2021'Q2), open to review.
- JM proposes next plenary meeting will take place in November (2nd or 3rd week). This meeting will be complemented by periodical focused session according to editor/chapter leader's criteria.
- RW proposes to get involved experts and leaders from airports and related entities who can provide their view about their needs about C-UAS systems (performance, integration, requirements, etc). The working group provides good feedback and support to this idea, complementing it with additional initiatives such as contact with other EUROCAE WGs/RTCA SCs which can be aligned/interested in contributing to this new stage. AV adds there are several WGs whose activity connects with WG115 which were identified at the beginning of the joint activity (WG-41, WG-103, WG-105 and WG-111), AS agrees from RTCA side. The LDT will contact with potential interested groups and entities proposing to get involved in the WG-115/SC-238 initiative. The LDT will prepare a short text that will explain the objective of this new task the Group is starting, the plan and the expertise needed to support the work.
- A Call for Participation will be launched early October on both EUROCAE and RTCA sides to attract more experts to contribute to the technical work to come.

11. AOB

JM asks AS if some candidature for the vacancy of SC-238 Secretary has been received. AS answers no candidature has been received so far. AS explains the importance of this role, in charge of different tasks including: draft the calling notices for WG meeting and submit them to the Technical Programme Manager (TPM), draft the minutes of the WG meeting and submit them to the TPM, manage the workspace by uploading and managing documents, manage the list of meeting participants and ensure registration procedures are respected, etc. Additionally, AS highlights this role is not time demanding.

JM thanks all for their contributions and asked all participants to continue providing effective support to the work on the OSED.

12. Close

As there was no other remark, the 3rd Day meeting ends at 16:50 (CEST).

ATTACHMENT A

WG-115 and SC-238 Meeting 6 Attendance Day 1

Organisation	First name	Last name
AcceleratUM	Brett	Feddersen
AIA Aerospace	Max	Fenkell
ALPA	Mark	Reed
ALPA	Randy	Williams
AOPA	Christopher	Cooper
Business Growth Accelerators	Paul	Smith
D-FEND	Itai	Bar-Guil
EASA	Thomas	Oster
Embry-Riddle Aeronautical University	Ryan	Wallace
EUROCAE	Alain	Vallée
EUROCAE	Sergiu	Marzac
EUROCONTROL	María Julia	Sánchez Pinilla
FAA	Mohan	Gupta
Fortem	Gary	Watson
Frequentis	Karl	Tschetschonig
Frequentis	Markus	Heichel
Hidden Level, Inc	Kevin	Nasman
Indra	Jorge Munir	El Malek Vázquez
NLR	Christian	Muller
One-ATM	Ray	Young
Rinicom Intelligent Solutions	Garik	Markarian
RTCA	Karan	Hofmann
Security101	Nancy	Ford
Technology Providers, Inc.	Marvin	Hammond
WhiteFox Defense	Luke	Fox

WG-115 and SC-238 Meeting 6 Attendance Day 2

Organisation	First name	Last name
AcceleratUM	Brett	Fedderson
ALPA	Randy	Williams
AOPA	Christopher	Cooper
Battle Road Advisors (SAIC contractor)	Tom	Gramaglia
EASA	Thomas	Oster
Embry-Riddle Aeronautical University	Ryan	Wallace
EUROCAE	Alain	Vallée
EUROCAE	Sergiu	Marzac
EUROCONTROL	María Julia	Sánchez Pinilla
FAA	Mohan	Gupta
Fortem	Gary	Watson
Frequentis	Karl	Tschetschonig
Hidden Level, Inc	Kevin	Nasman
Indra	Jorge Munir	El Malek Vázquez
RETIA	Pavel	Sedivy
Rinicom Intelligent Solutions	Garik	Markarian
RTCA	Al	Secen
Security101	Nancy	Ford
Technology Providers, Inc	Maevin	Hammond
Technical University of Berlin	Nicolas	Tellner
WhiteFox Defense	Luke	Fox

WG-115 and SC-238 Meeting 6 Attendance Day 3

Organisation	First name	Last name
AcceleratUM	Brett	Feddersen
ALPA	Randy	Williams
AOPA	Christopher	Cooper
D-FEND	Itai	Bar-Guil
EASA	Thomas	Oster
Embry-Riddle University	Aeronautical Ryan	Wallace
EUROCAE	Alain	Vallée
EUROCAE	Sergiu	Marzac
EUROCONTROL	María Julia	Sánchez Pinilla
FAA	Mohan	Gupta
Hidden Level, Inc	Kevin	Nasman
Indra	Jorge Munir	El Malek Vázquez
NAVIAR/DK	Jens	Skinneholm
NLR	Gerald	Poppinga
RETIA	Pavel	Sedivy
RTCA	Al	Secen
RTCA	Karan	Hofmann
Security101	Nancy	Ford
Nordic Radar Solutions ApS	Morten	Novak Bro
?	Andreas	Berry

ATTACHMENT B

Action items

Number	Action	Responsible	Due By	Status
1	Correct errors detected in the OSED draft and provide new version	Lead Team	1 st week March	Version V0.1 available. Closed
2	Define multiple key terms to get clarity and alignment (terms such as collaborative and non-collaborative drones, threat, detection, identification,)	Lead Team and Contributors	5 th Meeting	Closed. Proposal shared 20200605. See action #14
3	Review and provide clarifications about SPR comments	Lead Team	3 rd meeting	“update after meeting” included in meeting #2 minutes. Closed
4	Evaluate feedback about focusing on specific drone categories	Lead Team	3 rd meeting	“update after meeting” included in meeting #2 minutes. Closed
5	Share with the lead team the IATA document	Manfred Mohr	February 2020	Document available on workspace. Closed
6	Create list of out-of-scope topics and check with EUROCAE team what alternative groups, subgroups or forums	Lead Team, EUROCAE team	3 rd meeting	“update after meeting” included in meeting #2 minutes. Closed
7	Evaluate the suggestion about including Legal Framework section in the OSED scope	Lead Team	3 rd meeting	Chapter included in TOC. Closed
8	Check that the ConOps from ACI EU is aligned and coordinated with ACI North America and/or ACI World.	Lead Team	4 th meeting	Closed
9	RTCA to look for applicable documents to support the OSED and verify that there is no impediment to share them with WG participants.	Al Secen	4 th meeting	Document provided. Closed
10	Check chapter 6 to differentiate between requirements and assumptions, and to avoid providing too technical inputs	Lead Team	5 th Meeting	Closed. Finally, no chapter 6. Requirements were include in the chapter 2-5.
11	Integrate last inputs received before meeting #3 and share new document	Lead Team and Contributors	23 rd March week	Inputs integrated in version provided before plenary. Closed
12	Share the outcome of the legal framework study (deliverable) performed in the ALADDIN project	Patrick Garnier	16 th March week	Done (Uploaded to the workspace)
13	Provide inputs on the draft OSED version “WG115-SC238 CUAS OSED – 20200425” by 8th May	All	8 th May	Closed

14	Comments and inputs about the “Terms and Definitions” proposal	All	16 th June	Closed
15	Review and provide inputs about the OSED Draft 20200605	All	16 th June	Closed
16	Polling about 7th Plenary Meeting	Lead Team	18 th June	Closed. 39 th week has been the most voted
17	Creating first draft of chapter 6	Lead Team and Garik Markarian	24 th June	Closed
18	Analyse and achieve a common understanding about SPR	All	October	Open. Once the SPR editorial team (editor / chapter leaders) is completed
19	Arrange focus session for chapters 3 and 4	Chapter leader	Next days after meeting #5	Closed
20	Call for potential contributors or editor(s) for the SPR or INTEROP	All	October	
21	Update OSED chapters and share them with AV, including the agreed resolutions during the 6 th plenary meeting.	Lead Team and Chapter Leaders	28 th September	
22	Update the full OSED draft based on new chapter drafts	AV	30 th September	
23	New OSED draft enters OC/FAC	EUROCAE/RTCA TPM	16 th November	Deadline for providing comments
24	Contact with other EUROCAE WGs and RTCA SCs whose members can be interested in the new task the Group is starting	Lead Team	9 nd October	
25	Specify final dates for 7 th Plenary Meeting	Lead Team	9 th October	