EUROCAE WG-115 "C-UAS"

Meeting #4 Minutes

Date	*28th April 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 4rd meeting of the Joint Activity EUROCAE WG-115 and RTCA SC-238.

Then the proposed agenda was agreed:

1. Welcome
2. Adoption of Agenda
3. RTCA and EUROCAE Statements review
4. Approval of Meeting #3 Minutes
5. Updates from partners (WGs, organisations)
6. OSED Draft: Contributors Table, Table of Content and Chapters
7. Review of Actions
8. Review of Work Plan (update) – Date of next meetings
9. AOB
10. Close

[JM] requested all 31 participants to register with their name and organisation under the Webex chat. RTCA members were also asked to register using the RTCA link.

ATTACHMENT A includes "WG-115 and SC-238 Meeting 4 Attendance".

Presentation used during the meeting can be found under EUROCAE and RTCA workspace. EUROCAE Link

2. RTCA and EUROCAE Statements review

Al Secen [AS] presented the standard announcements regarding RTCA Anti-Trust policy, Proprietary policy, and Committee Participation Membership policy.

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

3. Approval of Meeting #2 Minutes

Only comment was about the name and organisation of one participant that cannot be traced. Without any feedback on this issue, final draft of the Meeting #3 Minutes was approved.

4. Updates from Partners

The following information were presented to the audience:

- The EASA Task Force shared a draft version of Glossary and Abbreviations that could support our work.
- ACI (Airports Council International) published the "Drones in the Airport Environment: Concept of Operations & Industry Guidance".
- Patrick Garnier [PG] provided some public information from the ALADDIN project[1]: ALADDIN_Terminology and ALADDIN_D3.1_DataProtectionSoEL_Framework_V1_0_ PU
- [AV] informed that there was no news from NATO and potential further cooperation[2].
- RTCA provided some reference documents from FAA and Blue Ribbon.

5. OSED Draft

After a reminder of the ToR of WG-115 and SC-2238, [JM] updated the group on the status of the draft OSED in version "WG115-SC238 CUAS OSED - 20200425". available on the workspace and proposed for comments and inputs. Following feedback from previous plenary and first inputs, this version is now based on an updated Table of Content:

Thanking the chapter leaders and extant contributors, [JM] made an additional call for contributions as the task is not finished yet and a lot of work still lay ahead of us to be able to provide a complete version by the June plenary meeting.

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[1] The ALADDIN project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under Grant Agreement No 740 859

[2] Note: the day after the plenary meeting, NATO HQ sent an invitation to industries involved in the NATO C-UAS activity for the first online meeting (26th of May 2020) of the newly created "NATO C-UAS Technical Standardization Sub-group". AV, PG, JM at least will participate

Following this introduction, the draft OSED was presented and proposed for discussion in more details by [JM] and each chapter leaders.

5.1. Chapter 1 – Purpose and Scope
- Scope: the content of the document may be adapted or limited later on to cope with the agreed scope.

5.2. Chapter 2 – Counter UAS Concept
- UAS Threat: The definition is presented. James Johnson (Raytheon) points out that some small (or larger) drones could be detected by existing surveillance system. It is proposed to modify to read "UAS that are not detected by current surveillance systems". This would cover the needs for C-UAS.
- Remark by Patrick: should we also take into consideration the correlation needs between current surveillance system and C-UAS in the scope of this WG? Answer is yes at it is in the scope of WG-115 with a dedicated task in the INTEROP deliverable.
- Section 2.2.1 EXISTING C-UAS TOOLS AND METHODS – There are little data for this section. It is recognised that it would require a lot of time and effort to provide a correct description (or list) of existing systems
- The involvement of ACI representatives should be considered
- Section 2.2.2 - C-UAS CONCEPT AND GENERIC HIGH LEVEL ARCHITECTURE – Jorge presents the chapter and indicates that this chapter will need some reshuffle. Any comments are welcome in that sense.
- Discussion on the passive radar derives in the idea of connecting with work carried in WG-41 "Advanced-Surface Movement Guidance and Control System (A-SMGCS)" should be assessed (Patrick directly or Alain through Eurocae)
- Section 2.3 – Legal Framework – Title may be changed to "High level legal framework". Jim Wiliams (JW) presents the content of this chapter. It is currently documented with US examples: European or other inputs are welcome. It covers authorisation to emit, Privacy aspects, Personnel safety, obstacle clearance (buildings), etc.

5.3. Chapter 3 – Operational Services
- Update from Nancy: description at high level (to avoid describing the How?).
- Agreement to use to "Neutralisation" for defeating means. (equivalence with other terms (e.g. mitigation) to be specified in the Definition section at the beginning)
- Discussion on Command & Control: this term is used for the remote control of UAV and also for surveillance systems. This leads to confusion. It is recognised that clarification must be provided and decided for the rest of the effort. A first approach could be to use C2 Link for RPUAS C&C and C&C for the C-UAS system. It is proposed that interested participants provide their definitions to the leading team on the terms that are proposed. The leading team will propose terms that could reach consensus in this joint WG.
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- Training: the need for training of personnel and a kind of certification is identified. This will have to be inserted in the OSED, noting that it is not a capability/service.

5.4. Chapter 4 – Operational Environment
- Julia Sanchez (Eurocontrol) quickly presented the content of the chapter. It contains mainly bullet points. Any input to complete each bullet is more than welcome. As each chapter has been written in "isolation" to expedite the elaboration of the draft OSED, it is recognised that some parts need to go in other chapter or in the Interop document for instance. Comments and suggestions are welcome to support the review of this chapter. Dedicated working sessions will be organised for this purpose.

5.5. Chapter 5 – Scenarios description

- – Max Fenkell presents this chapter.

5.6. Requirements and Assumptions

- [AV] reminded the need to differentiate between requirements and assumptions, and to avoid providing too technical inputs in this section. As this will be a summary of all inputs from previous chapters, this check will be performed when OSED comes close to completion. Leadership took the action to check this chapter.

Final Remarks:

- [JM] highlighted the fact that there is a need to improve the quality of the Draft throughout the document, avoiding duplication and inconsistency between chapters. This is the work the leadership team will initiate now that we have a first draft

- It is requested to all members to quickly provide their feedback and additional inputs on the current OSED draft to the leadership team. A deadline will be provided after the meeting.[3]

6. Review of Actions

Actions from previous meetings were closed, apart from actions on Definitions and on Requirements/Assumptions. One new action from this meeting on draft review will be added on the list in Attachment B.

7. Review of Work Plan

[JM] presented the work plan and the next meetings:

- 5th Meeting – Webex, with a proposal to have 2 or 3 half days (9th, 10th and 11th June) combining plenary sessions and working sessions on the different chapters. A poll will be organised by [JM] to evaluate the possibilities of members before decision[4]

- 6th Meeting - F2F (optionally Webex), venue in EU TBD, date under analysis (Mid-September?).

Of course, this planning is dependent on the worldwide situation regarding the coronavirus (COVID-19) and the impact upon our communities.

8. AOB

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

Active contributors and editors are still needed to achieve our objective.

9. Close

As there was no other remark, the meeting adjourned at 17:00 (CET).

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[3] By email on 30 April [JM] asked all members to provide their inputs on the draft OSED by 8th May
[4] By the same email, the poll for next plenary meeting was launched with a deadline by 5th May

ATTACHMENT A

WG-115 and SC-238 Meeting 3 Attendance

Organisation	First name	Last name
AcceleratUM	Brett	Feddersen
AIA Aerospace	Max	Fenkell
ALPA	Mark	Reed
ALPA	Randy	Williams
AOPA	Christopher	Cooper
CS Group	Patrick	Garnier
DSNA	Marion	Okunowski
EASA	Thomas	Oster
Embry-Riddle Aeronautical University	Ryan	Wallace
EUROCAE	Sergiu	Marzac
EUROCAE	Alain	Vallée
EUROCONTROL	Julia	Sanchez
EUROCONTROL	Javier	Ceballos Gutierrez
EVERIS	Jorge	Estevez Garcia
FAA	Diane	McClatchy
Frequentis	Markus	Heichel
Indra Systemas	Jorge Munir	El Malek Vazquez
Japan Radio Air Navigation Systems Association	Katsuyuki	Nakatsubo
JHW Unmanned Solutions LLC	Jim	Williams
NEC Corp	Eiichi	Tokumi
NLR	Gerald	Poppinga
One-ATM	Ray	Young
Raytheon	James	Johnson
RETIA	Pavel	Sedivy
Rinicom Intelligent Solutions	Garik	Markarian
Rohde & Schwarz GmbH	Goetz	Mayser
RTCA	Al	Secen
RTCA	Karan	Hofmann
Security101	Nancy	Ford
US Air Force	Antony	Militello
US Air Force	Chris	Morrison

Action items

Number	Action	Responsible	Due By	Status
1	Correct errors detected in the OSED draft and provide new version	*Lead Team*	1st 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*	5th Meeting	Action on-going. See decision from plenary 4
3	Review and provide clarifications about SPR comments	*Lead Team*	3rd meeting	"update after meeting" included in meeting #2 minutes. Closed
4	Evaluate feedback about focusing on specific drone categories	*Lead Team*	3rd 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*	3rd 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*	3rd 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*	4th meeting	Closed
9	RTCA to look for applicable documents to suxport the OSED and verify that there is no impediment to share them with WG participants.	*Al Secen*	4th meeting	Document provided. Closed
10	Check chapter 6 to differentiate between requirements and assumptions, and to avoid providing too technical inputs	*Lead Team*	5th Meeting	Still pending
11	Integrate last inputs received before meeting #3 and share new document	*Lead Team and Contributors*	23rd 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*	16th March week	**Done** (Uploaded to the workspace)
13	Provide inputs on the draft OSED version *"WG115-SC238 CUAS OSED – 20200425"* by 8th May	*All*	8th May	Open