

SESAR Deployment Manager Workshop

Data Link Services

Brussels
17 January 2019



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EUROCAE contribution to the DLS recovery plan

EUROCAE was mandated by the European Commission to contribute to the DLS recovery plan in the two following domains:

- 1. Improvement of the existing VDL mode 2 standards in answer to ELSA recommendations**
- 2. Contribution to the end to end certification consideration with the development of potential complementary standards**

In parallel EUROCAE was invited to participate to the coordination of the DLS recovery activities within the framework set up by SDM along with the NM and EASA



Improvement of existing standards

EUROCAE had developed a set of standards covering:

- 1. the Data Link Services and their associated performances (ED-120 for ATN B1 & ED-228 for ATN B1 & B2)**
- 2. the avionic component of VDL mode 2 (ED-92) based upon an RTCA MASPS covering the VDL Mode 2 complete system**

No action was identified by ELSA regarding the first domain dealing with the services considering that the future data link services reference standard will be ED-228 superseding ED-120.



Improvement of existing standards

Regarding the avionic standard (ED-92):

It was revised to address the relevant recommendation from ELSA leading to the publication of ED-92C in the middle of 2018.

- **No significant changes were introduced in this revision (except one new requirement dealing with multiple frame concatenation). The majority of the changes were focusing on clarifications and additions**

It was also agreed to develop an additional document focusing on the respective expected behaviour of the various components (ground network and airborne component) for the most complex AVLC protocol interactions .

- **This activity is on-going within WG 92 with the intention to deliver it next year (joint activity with RTCA)**
- **The topics identified today are: DISC & DM usage, X25 packet size, grouped frames, assumptions on ground deployment, number of VGS within a given area, coordination mechanisms between CSPs, ..**



Potential additional activity

Discussions are also going on within EUROCAE regarding the potential development of another document addressing the end to end validation aspects from an airborne VDL mode 2 perspective.

- **No decision for the time being**



EUROCAE contribution to « end to end certification »

**EUROCAE is supporting this activity within the RMG EASA framework
EUROCAE supports the concept of extended end to end validation instead of end to end certification**

EUROCAE considers that achieving end to end data link performance is the ultimate objective. The demonstration of this achievement can only be done through a step wise validation approach including the following steps:

- 1. avionic package compliance to existing standards is the first validation layer (manufacturer responsibility)**
- 2. avionic package integrated on board an aircraft type compliance is the second validation layer (aircraft manufacturer or aircraft operator responsibility)**
- 3. avionic package compliance monitoring during flight operation is the third validation layer (responsibility to clarify including the current duty of the CSP)**