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# **EASA EFB Workshop ETSO-C165 update**

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# Reasons to update ETSO-C165

- Provide EASA approval path for map applications
- Align requirements with taxi way width for airport moving map applications



# ETSO approval path

- ETSO prerequisites:
  - Demonstrate design capabilities (ADOA approval from EASA)
  - Demonstrate production capability (POA approval from national aviation authority)
- ETSO authorisation does not cover an aircraft installation but installation must be possible.
- ETSO can be granted for an incomplete system but how to complete the system must be documented.

# ETSO for software only?

- Specific procedural guidance has been added in section 2.2 to clarify the issue.
- Path how to complete the system must be described
- Software integration and testing needs a hardware, which needs to be defined. Some testing needs to be repeated on the final system.



C165a



# Additions to DO-257A for AMMD

- Activity monitor for the software (watchdog)
- Data Base: To allow the ED-76/DO-200A data base process as a minimum Data Quality Requirements (DQRs) are required for the application.



# Accuracy

- Necessity to ensure that aircraft is shown on the (correct) runway
- The overall system accuracy is improved to approximately 40 meters or better. The 40 meter accuracy requirement is based on half the separation of taxiways at aerodrome code letter E as specified in ICAO Annex 14
- GNSS sensor + 5 meter data base accuracy



# FAA harmonisation

- FAA is working to update C165 as well.
  - First internal draft recently received
  - Currently in FAA internal review
  - Publication expected in September 2013
- In addition to the presented ETSO-C165a it is clarified that the ED-76/DO-200A process is applicable to internal and external housed data bases and that the equipment housing the data base need to be approved.
- EASA plan to follow the FAA in this points to achieve full harmonisation and publication in CS-ETSO index 1



# Next steps

- Consider comments from the workshop
- Align text with FAA TSO-C165a proposal
- Allow further industry commenting during the CRD phase



# Questions?

