



FAS Topic Paper (FTP)		
TITLE	REVISION	REVISION DATE
FTP1007 Consistency between DO-330/ED-215 Tables 11-1 and 11-2 on COTS tools and SQA Objectives	5	03-Dec-2020
ABSTRACT/PURPOSE:		
This FTP clarifies the Software Quality Assurance (SQA) objectives typically applicable to the tool developer and the tool user as given in DO-330/ED-215 <u>Table 11-1</u> and <u>Table 11-2</u> .		
RELATED DO/ED DOCUMENTS:		
<input type="checkbox"/> DO-178C/ED-12C: SW Airborne Sys & Equip <input type="checkbox"/> DO-278A/ED-109A:SW (CNS/ATM) Systems <input type="checkbox"/> DO-248C/ED-94C: Supporting Information <input checked="" type="checkbox"/> DO-330/ED-215: Software Tool Qualification Considerations <input type="checkbox"/> DO-331/ED-218: Model Based Development & Verification Supplement <input type="checkbox"/> DO-332/ED-217: OO Technology and Related Techniques Supplement <input type="checkbox"/> DO-333/ED-216: Formal Methods Supplement <input type="checkbox"/> Other		
<i>For internal use only—This paper is based on internal FAS FTP1007 Revision 1</i>		

Any FAS Topic Papers released by FAS have been coordinated among the members of the FAS group and have been approved by the FAS executive management committee for release.

These papers do not constitute official policy or position from RTCA / EUROCAE or any regulatory agency or authority. These documents are made available for educational and informational purposes only

The present document was jointly developed by the EUROCAE / RTCA User Group 'Forum for Aeronautical Software' (FAS) and as such remains the exclusive intellectual property of EUROCAE and RTCA.

In order to maximize the use of the document and the information contained, the material may be used without prior written permission in an unaltered form with proper acknowledgement of the source.



FAS Team Definition and Goals:

The FAS user group monitors and exchanges information on the application of the following “software document suite” that was developed by joint RTCA/EUROCAE committee SC-205/WG-71:

- DO-178C/ED-12C - Software Considerations in Airborne Systems and Equipment Certification
- DO-278A/ED-109A - Software Integrity Assurance Considerations for Communication, Navigation, Surveillance and Air Traffic Management (CNS/ATM) Systems
- DO-248C/ED-94C - Supporting Information
- DO-330/ED-215 - Software Tool Qualification Considerations
- DO-331/ ED-218 - Model Based Development & Verification Supplement
- DO-332/ED-217 - Object Oriented Technology and Related Techniques Supplement
- DO-333/ ED-216 - Formal Methods Supplement

The goals of the FAS user group are as follows:

1. To share lessons learned in the use of the RTCA/EUROCAE “software document suite” and to encourage good practices and promote the effective use of RTCA’s and EUROCAE’s publications.
2. To develop FAS Topics Papers (FTP’s) relative to RTCA’s and EUROCAE’s publications or other related aeronautical software industry topics. These FTP’s may include clarification to the “software document suite” or a discussion on a new topic.
3. To identify and record any issues or errata showing the need for clarifications or the need for modifications to the “software document suite”.

The FAS user group does not have the authority to change the content of any approved RTCA/EUROCAE documents. Any publications of the FAS user group may be taken into consideration by a future RTCA/EUROCAE working group.

The text contained in this document is not to be construed as guidance, but is to be used for informational or educational purposes only.



Abstract / Purpose of the FAS Topic Paper:

This FTP clarifies the Software Quality Assurance (SQA) objectives typically applicable to the tool developer and the tool user as given in DO-330/ED-215 [Table 11-1](#) and [Table 11-2](#).

FTP Discussion:

Question from Industry:

For commercial-off-the-shelf (COTS) tools, what are the SQA objectives typically applicable to the tool developer and the tool user?

Response from FAS:

[Table 11-1](#) of DO-330/ED-215 lists the Annex A objectives applicable to the tool developer. [Table 11-1](#) indicates that all of the objectives in Annex A [Table T-9](#) are applicable to the tool developer. Further FAS clarification includes:

- For Objectives 1, 2, 4, and 5, the scope is limited to the activities performed by the tool developer.
- Objective 3 is fully within the scope of the tool developer.

[Table 11-2](#) of DO-330/ED-215 lists the Annex A objectives applicable to the tool user. [Table 11-2](#) indicates that all of the objectives in Annex A [Table T-9](#) are applicable to the tool user. Upon examination, Annex A [Table T-9](#) Objective 3 should be excluded for the tool user as this objective pertains to standards and not the conformity review as currently referenced in DO-330/ED-215 [Table 11-2](#). Further FAS clarification includes:

- Annex A [Table T-9](#) objectives are applicable to the tool user with the exception of Objective 3.
- Objective 3 pertains to assurance that tool processes comply with approved standards and is to be satisfied by the tool developer.
- Objectives 1, 2, and 4 apply to the tool user, but the scope is limited to only those activities performed by the tool user.
- Objective 5 pertains to tool conformity and is to be performed in the scope of a project by the applicant or tool user.