ARINC IA Project Initiation/Modification (APIM)

Name of proposed project  APIM #: __16-101___
UPDATE OF ARINC Report 625-3

Suggested Subcommittee assignment
TPS Working Group

Project Scope
In ARINC 625, the introduction of the TSDP concept has led to minimize the first OEM obligation which is to provide, in the CMM, a Test Specification with the best possible quality.

Currently, OEMs often deliver a Technical Support and Data Package (TSDP) that contain a large amount of documents. The relevant Test Specification data is obscured and difficult to ascertain within the large amount of data that is not relevant to the test specification.

The Aim of this project is to update the ARINC REPORT 625-3 in order to emphasize the importance that the OEM provides a Test Specification that is intelligible, unobscured, and complete as possible.

The role of the TSDP is to provide the minimal amount of data required to fully understand and implement the Test Specification. Only data that is pertinent to the Test Specification should be provided. It should be separate and independent of all non-pertinent data.

Project Benefit
This evolution of ARINC 625 will be beneficial to:
First, it will be beneficial to the airframe manufacturers that currently have difficulties understanding how to evaluate the completeness of the Test Specification. This prevents them from being able to ensure that the LRU manufacturer produces and delivers a complete, comprehensible, fully supported Test Specification.

Secondly, the Airline Customers will be in better position to choose the best maintenance test solution, instead of attempting to dig up the relevant information from a TSDP crate largely packed with non-relevant information.

When a Customer or Airline chooses to request a test implementation from a test solution supplier, having an organized representation of a manageable comprehensive Test Specification will ease the TPS/TIP development as well as the final validation of the concerned TPS/TIP.

Thirdly for the End-User, Airline, or MRO, this will help on the conformance checking process which today is very difficult to fulfill due to the complexity of using an obscured convoluted view of the Test Specification.

As a TPAM manufacturer we could add to this argumentation with a statement stating that today, the only way to evaluate the real quality of the Test Specification is to develop the TPS/TIP and to cope step by step with the lack of incoherent data.
Airlines supporting effort

SPHEREA through P. FRENEUIL had a discussion with Anthony Mueller at the last AMC on that topic.

Airbus is supporting this project too; they are facing same difficulties as Boeing.

I have not yet contacted my friends in the airlines, but I suppose, that with the (bad) experience they are facing on 787 and A350, they should adhere to this project of update

- Air France/KLM, Delta, United, Lufthansa, ANA, BAW, THY.

Issues to be worked

The major issue is to give back its FULL legitimacy to the Test Specification, having it delivered on time, in a clear un-obscured format, and banishing the IP concern (i.e. using the term “IP” as an invalid reason for failing to provide data required Test Specification data).

Recommended Coordination with other groups

None at the moment

Projects/programs supported by work

Next evolution of avionics for existing aircraft and next development of Avionics

Timetable for projects/programs

End of 2017

Documents to be produced and date of expected result

ARINC 625-4

Meetings

The following table identifies the number of meetings and proposed meeting days needed to produce the documents described above.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Mtgs</th>
<th>Mtg-Days</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARINC 625-4</td>
<td>3</td>
<td>2.5 days</td>
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For IA Staff use

Date Received: 12 Oct 2016  IA Staff Assigned: SPB

Potential impact: D

(A. Safety  B. Regulatory  C. New aircraft/system  D. Other)

Forward to committee(s) (AMC):  Date Forward:

Committee resolution: 1

(0 Withdrawn 1 Authorized 2 Deferred 3 More detail needed 4 Rejected)

Assigned Priority:  Date of Resolution:

A. – High (execute first)  B. – Normal (may be deferred for A.)

Assigned to SC/WG: TPS