

Merging AP-DOA and DOA for ETSO

Zodiac Elastomers Europe

EASA Product Certification & DOA workshop

October 31st, 2018

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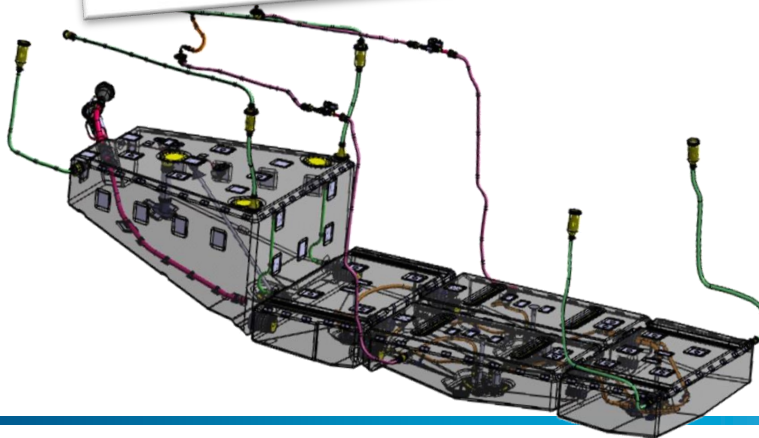
- **Problem introduction - Why merging DOA and AP-DOA?**
- **Advantages**
- **Methodology**
- **Next steps**

Zodiac Aerosafety Systems – Fuel Systems



Zodiac Aerosafety Systems design and certify Fuel systems

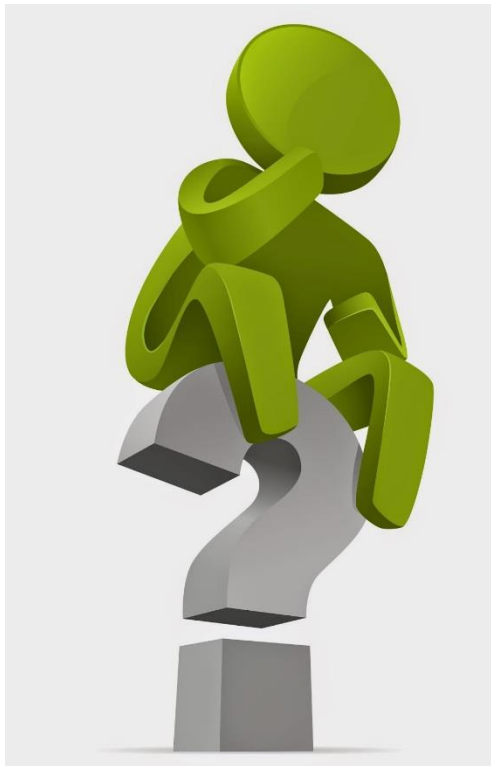
- STC for Auxiliary Fuel Systems
- ETSO for fuel cells
- Support OEM for initial certification



Feedback from the field to merge AP-DOA & DOA

- Confusion about the process to use
- Confusion about who shall sign

The problem



To sign or not to sign?

DOA or AP-DOA?

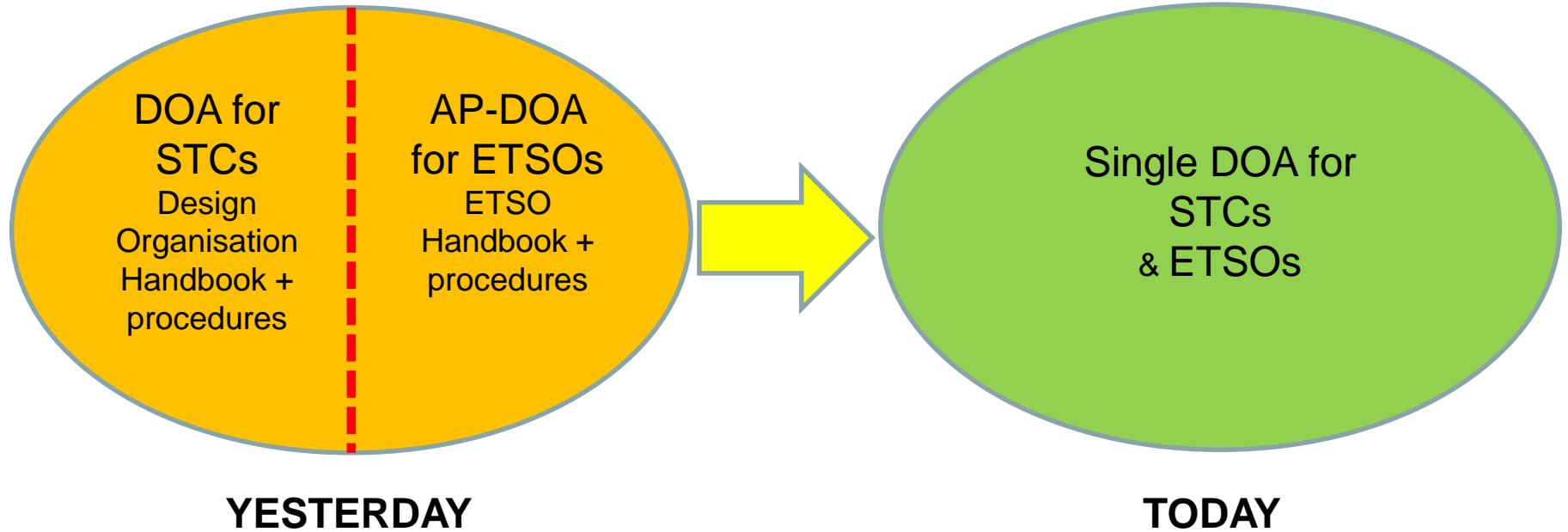
16.0 Puncture Resistance. A cell wall shall be fastened in a specimen holder in accordance with Figure 2. A piercing instrument with its end conforming to Figure 2 shall be forced against the cell wall at approximately the centre of the area enclosed by the specimen holder. The force required to puncture the cell shall not be less than 15 pounds.

CS 27 / CS 29.963

(b) Each flexible fuel tank bladder or liner must be approved or shown to be suitable for the

particular application and must be puncture resistant. Puncture resistance must be shown by meeting the ETSO-C80, paragraph 16.0, requirements using a minimum puncture force of 1646 N (370 pounds).

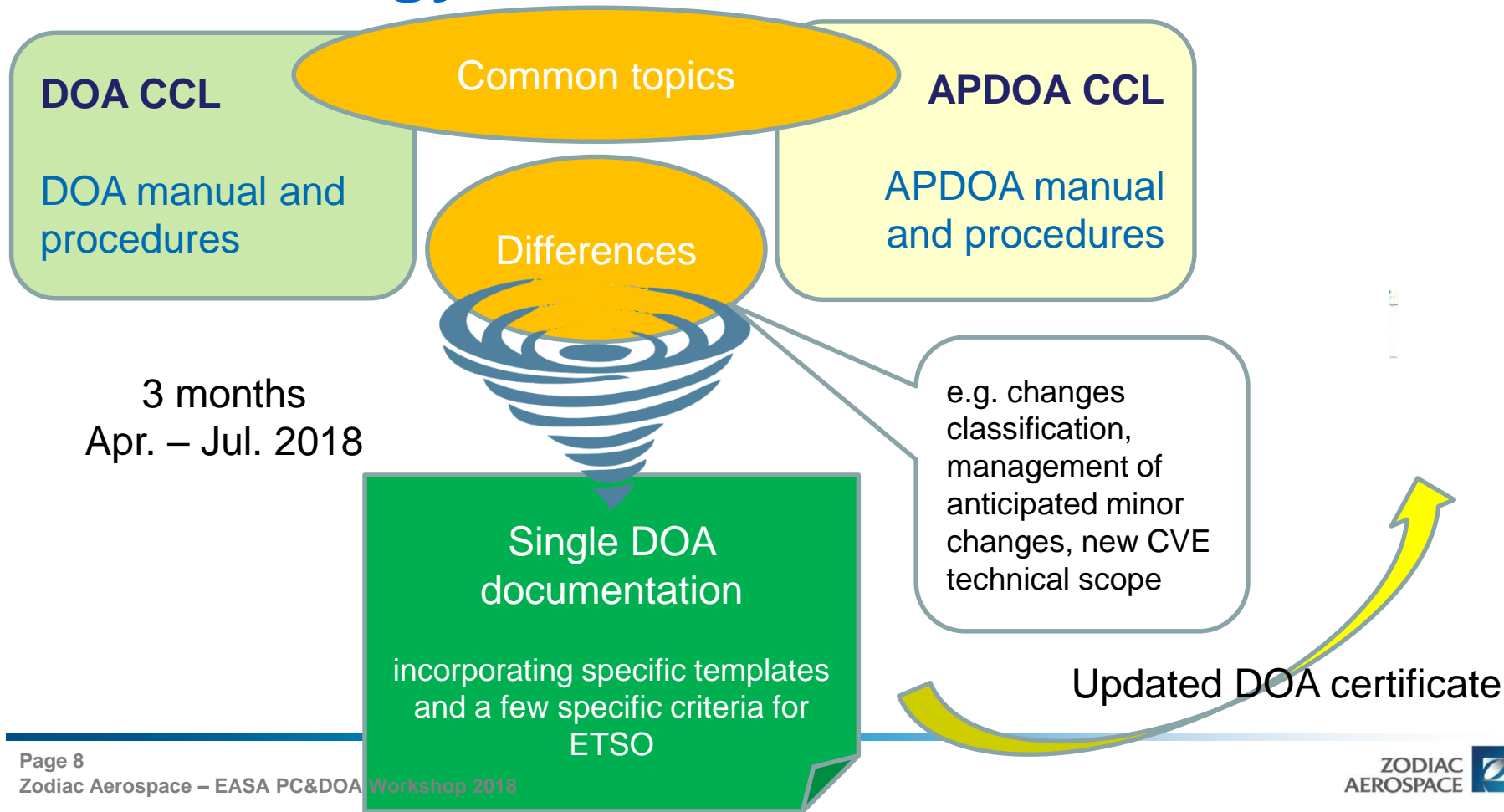
Why?



Advantages

- **Need expressed from the field**
 - Harmonize the processes and procedures
 - > less stress on staff related to working under several umbrellas: no more questions regarding what is the applicable process / reference document
 - Simplify the training
 - Simplify the documentation management
- **Single CCL**
- **Harmonized oversight**
- **Develop a consistent Airworthiness culture for all activities in the company**
- **Easier bridging between ETSO and STC activities for CVE**

Methodology





Terms of Approval 21J.466
Issue 3, 11/07/2018

Zodiac Aerosafety Systems

Annex B

ETSO Authorisation

ETSO	Title
C80	Flexible fuel and oil cell material

Next steps

- **Zodiac Seats UK**
- **Use of ETSO activity assessment for DOA performance?**
- **New DOA privilege for ETSO authorizations?**