



EASA
European Aviation Safety Agency

Planned TIP update for U.S. – EU bilateral agreement

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Overview

- Background
- Concept
- What will happen after September 2015
- Implications for industry
- Next steps for FAA / EASA



Present Technical Implementation Procedures (TIP) rev. 4 require validation of ETSO/TSO authorizations:

- ▶ FAA-LODA for EU manufacturers
- ▶ ETSOA for U.S. manufacturers
- ▶ Majority of ETSO/TSO standards have similar technical requirements
 - ▶ Industry considers it a redundant check by validating authority
 - ▶ Undue burden to only add marking (ETSO, TSO) on technically similar ETSO/TSO articles
- ▶ In any case an ETSO/TSO article needs an installation approval



FAA/EASA team under Certification Oversight Board (COB) proposed following changes to the present TIP:

- Reciprocal acceptance for all ETSOA/TSOA
 - Including ETSO/TSO standards with technical difference
 - Including all deviations
 - Present lists of accepted deviations have been checked and found to be acceptable from both sides
- Validations only for few specific ETSOA/TSOA

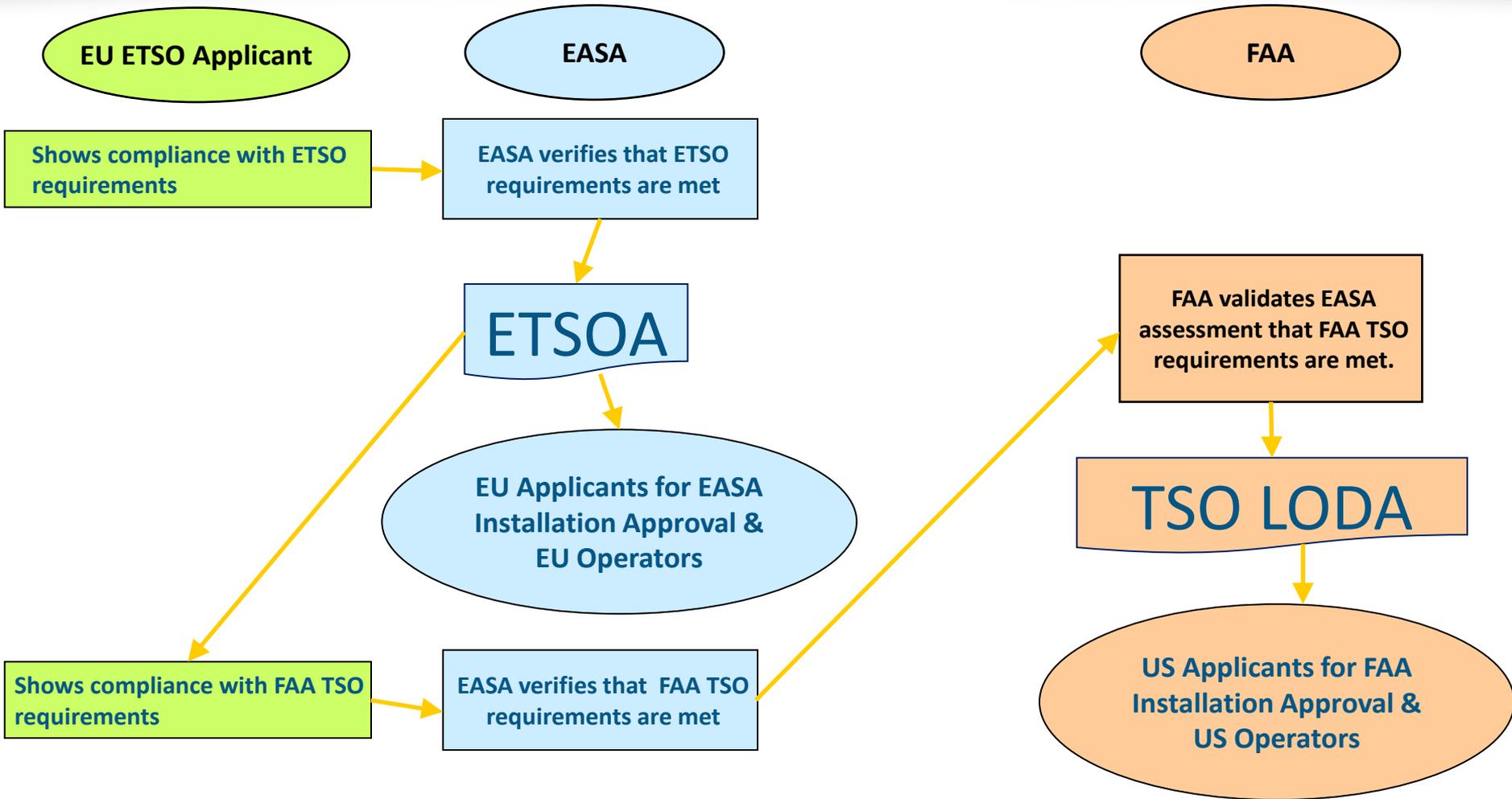


The revision 5 of the TIP is expected to be signed during COB meeting on 14th September.

After that date the TIP set the new rules how to treat ETSO / TSO authorizations between FAA and EASA

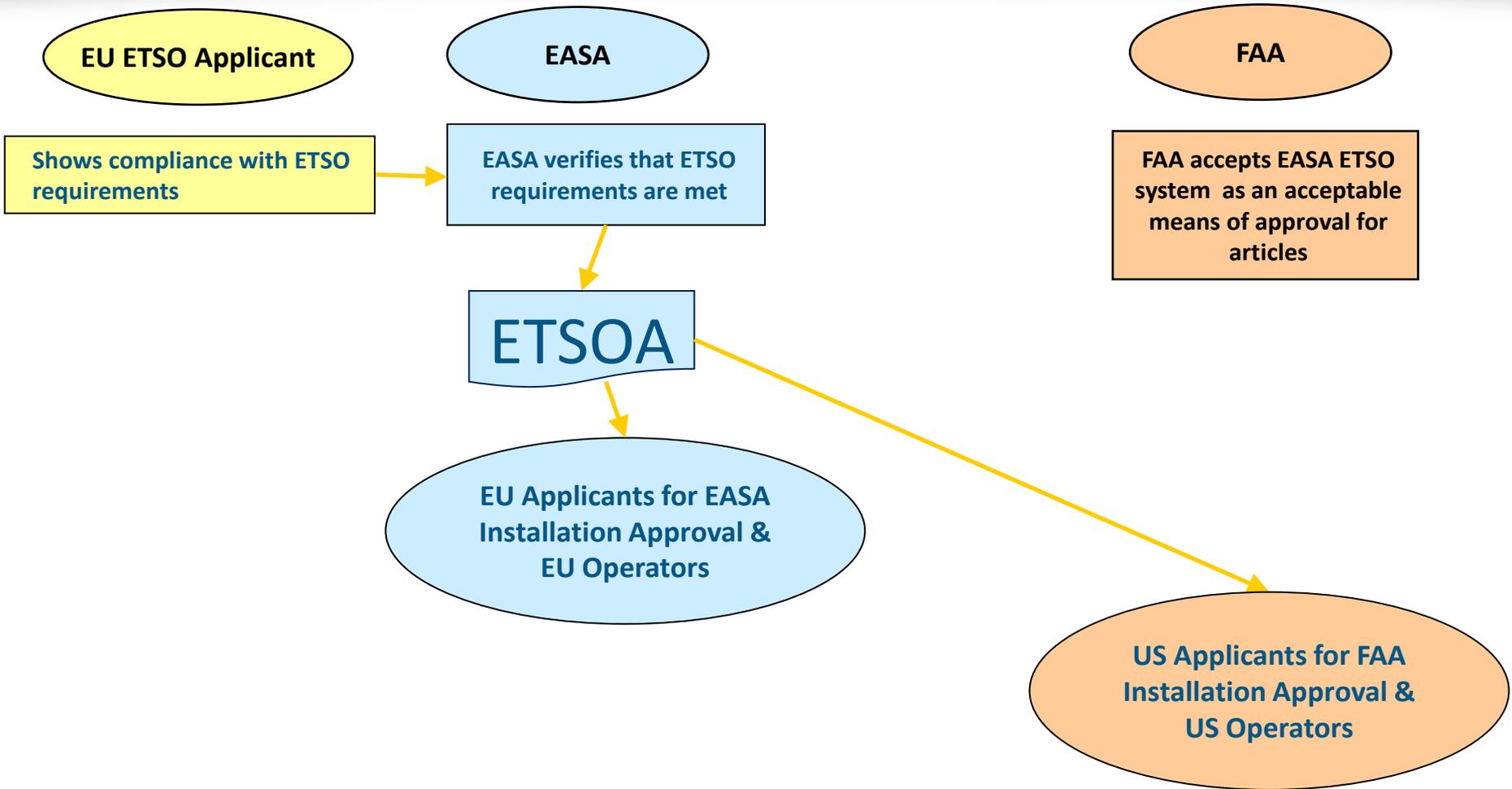


Current Process ETSOA



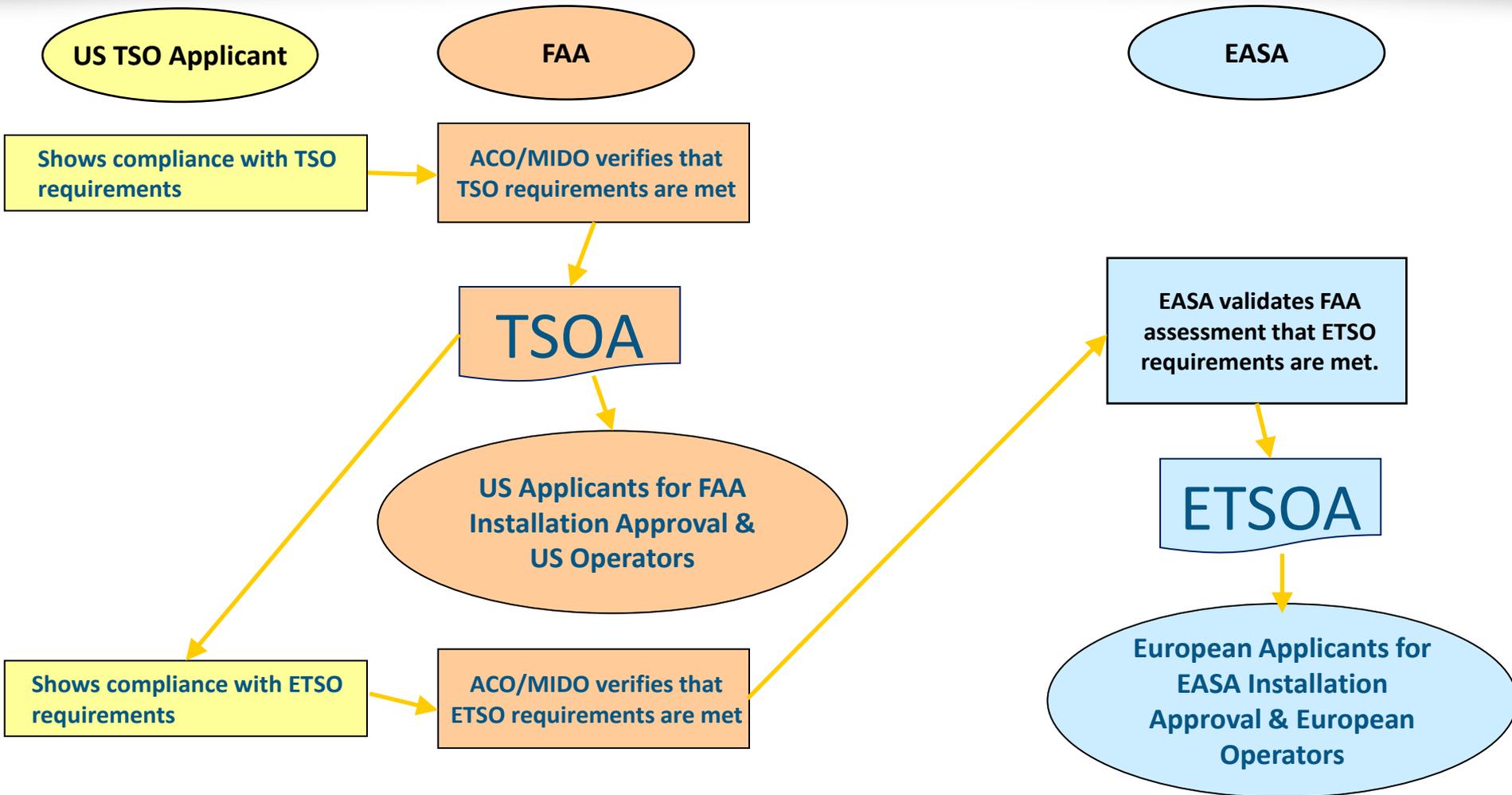


Reciprocal Acceptance Process for ETSOA



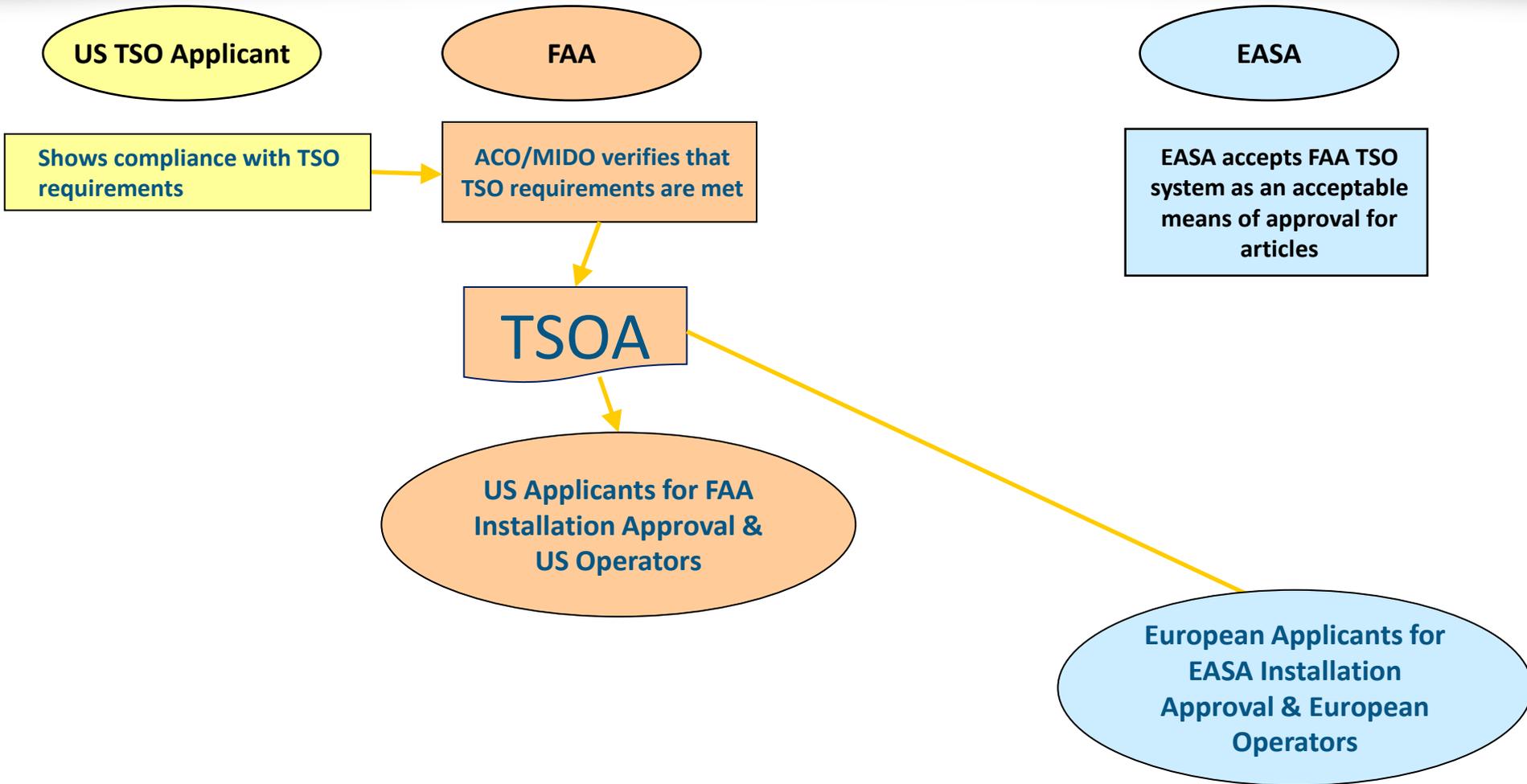


Current Process for TSOA





Reciprocal Acceptance Process for TSOA





What will happen after September 2015

- All existing ETSOA/TSOA are reciprocally accepted
 - Including European NAA approvals issued prior to EASA (28th September, 2003)
- Validations required only for:
 - Integrated Modular Avionics (IMA)
 - Emergency parachutes
 - active ULD (Cargo Container with cooling/heating system)
 - APU
- All existing ETSOA for U.S. manufacturers and TSO-LODA for EU manufacturers remain valid



What will happen after September 2015

- No „voluntary“ validations on request of industry
- Existing ETSOA or FAA-LODA should be kept:
 - Continuing Airworthiness for delivered articles
 - TC/STC holder compliance documentation does include ETSOA or FAA-LODA
 - If ETSOA/FAA-LODA would be surrendered the aircraft documentation at installation and ETSO/TSO article level (marking etc) would require an update.



Implications for industry

- ETSOA/TSOA needs to be obtained through Home Authority („state of design“)
 - This includes any deviation requests
- ETSO standard may be different from TSO standard (CS-ETSO, Subpart B: Category 2)
 - consequently a TSO article may not comply with the EASA TC basis on aircraft level
 - the European installer (TC/STC holder) needs additional qualification proof from TSO manufacturer
 - designated Compliance Verification Engineer (CVE) of the installer needs to verify the additional qualification documents



Implications for industry

- Example: Hydraulic Hoses
 - ETSO-2C75 = Proof pressure $2xP_w$ (per CS-25, App. J)
 - TSO-C75 = Proof pressure $1.5xP_w$
 - To install TSO-C75 hoses on European TC/STC a different test is required
- Same applies vice-versa for ETSO articles installed on U.S. products
- More coordination necessary between installer (DOA) and article manufacturer (ETSOA/TSOA holder)
- TC/STC organizations need to be aware of CS-ETSO, Subpart B and the differences between ETSO and TSO



Implications for industry

ETSO articles originating from companies outside of EASA member states will not be accepted by FAA based on territorial clause in the bilateral agreement

- ▶ Production organizations outside EU territory are approved by EASA.
- ▶ Consequently the organization approval number starts with **EASA.21G.XXXX**.
- ▶ EASA Form 1 issued by approved organizations located in non EASA member states will contain in block 13c an Approval / Authorization like: EASA.21G.XXXX.



Next actions for FAA/EASA

Guidance or policies need to be established for:

- Acceptance of EASA Form 1 or FAA 8130-3
 - EASA Form 1 issued by a POA of EASA member states
- Marking may be TSO or ETSO or European national marking (e.g. JTISO-xxx, QAC-xxx) for articles approved prior to EASA
- Awareness for DOAs about technical differences between ETSO/TSO standards (Cat. 2 in CS-ETSO, Subpart B)
- Develop a sound Confidence Keeping concept



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Any questions?

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