EDA Materiel Standardisation Conference 2014

EUROCAE

Harmonisation of aeronautical standardisation in Europe to meet civil and defence requirements

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EUROCAE
Short briefing

Role & positioning

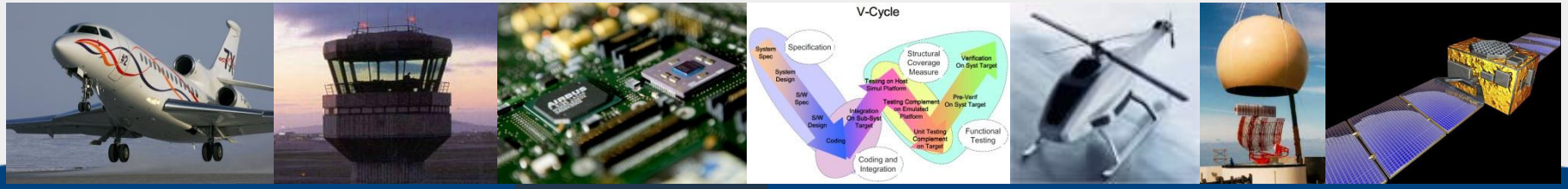
- EUROCAE is a standardisation body recognised globally by the **ICAO**, which references its EUROCAE Documents (EDs);
- EUROCAE is recognised by the **European Union** as the technical body for the development of Community Specifications (CS) under the Single European Sky framework (Regulation (EC) 552/2004);
- EUROCAE has long lasting strategic partnerships with **RTCA**, **SAE Aerospace** and **ARINC**, with which it often develops standards jointly.

Vision Statement & Core Business

- EUROCAE works in the interest of the European and International **aviation industry**, creating technical specifications;
- EUROCAE supports European legislation and global standardisation;
- EUROCAE aims at increasing safety, market potential, interoperability and technological development;
- EUROCAE is reinforcing its **leadership** in the production of technical standards to support the SESAR JU, EASA, EUROCONTROL, ICAO and its Members.

50 Years of Excellence

- **>140 technical specifications**, "EDs", recognised worldwide as high quality technical specifications;
- These EDs can be **system or equipment** performance specifications, safety and performance requirements, interoperability requirements, technical specifications or guidance material;
- EDs cover **all segments of aviation** (Air/Ground/Space);
- EDs are widely referenced as **means of compliance** to regulatory documents by EASA, EUROCONTROL, EC & ICAO.



Strategic Resources

- Member-driven organisation (**>150**), in the world (**30** countries);
- More than **1400** experts are currently collaborating in about **30 active Working Groups** to develop future EDs;
- ED development is governed by well-proven **core processes** promoting teamwork, excellence, industry buy-in and consensus while ensuring safety;
- The **Technical Advisory Committee** (TAC), a group of leading experts of all stakeholder categories in aviation, monitors the EUROCAE **Strategic Work Programme**.

Working Groups per Domain

COMMUNICATION

WG-67 VoIP for ATM
WG-78 Datalink Applications
WG-92 VDL2 MOPS updates

NAVIGATION

WG-28 GNSS
WG-62 Galileo
WG-85 4D Navigation

SURVEILLANCE

WG-49 Mode S Enhanced Surveillance
WG-51 ADS-B
WG-75 TCAS

GROUND SYSTEMS

WG-41 SMGCS
WG-44 Terrain & Airport databases
WG-49 FDP Interoperability
WG-81 Interop of ATM Validation

PLATFORMS

WG-83 Airport FOD Detection Systems

ENVIRONMENT

WG-14 Environment

AIRCRAFT

WG-31 Lightning
WG-63 Complex A/C Systems
WG-68 Altimetry
WG-79 EVS, SVS, ESVS (dormant)
WG-80 Hydrogen Fuel Cells
WG-88 On-board Weight + Balance
WG-89 Pitot Tubes
WG-90 Crash protected airborne recorders
WG-94 T/O Perfo monitoring systems
WG-95 Inflight Ice Detection Systems
WG-96 Wireless Intra-Aircraft Communication

SYSTEM ENGINEERING

WG-71 Software in aeronautical systems
WG-72 Aeronautical Systems Security
WG-91 Support ED-78A

UAS/RPAS

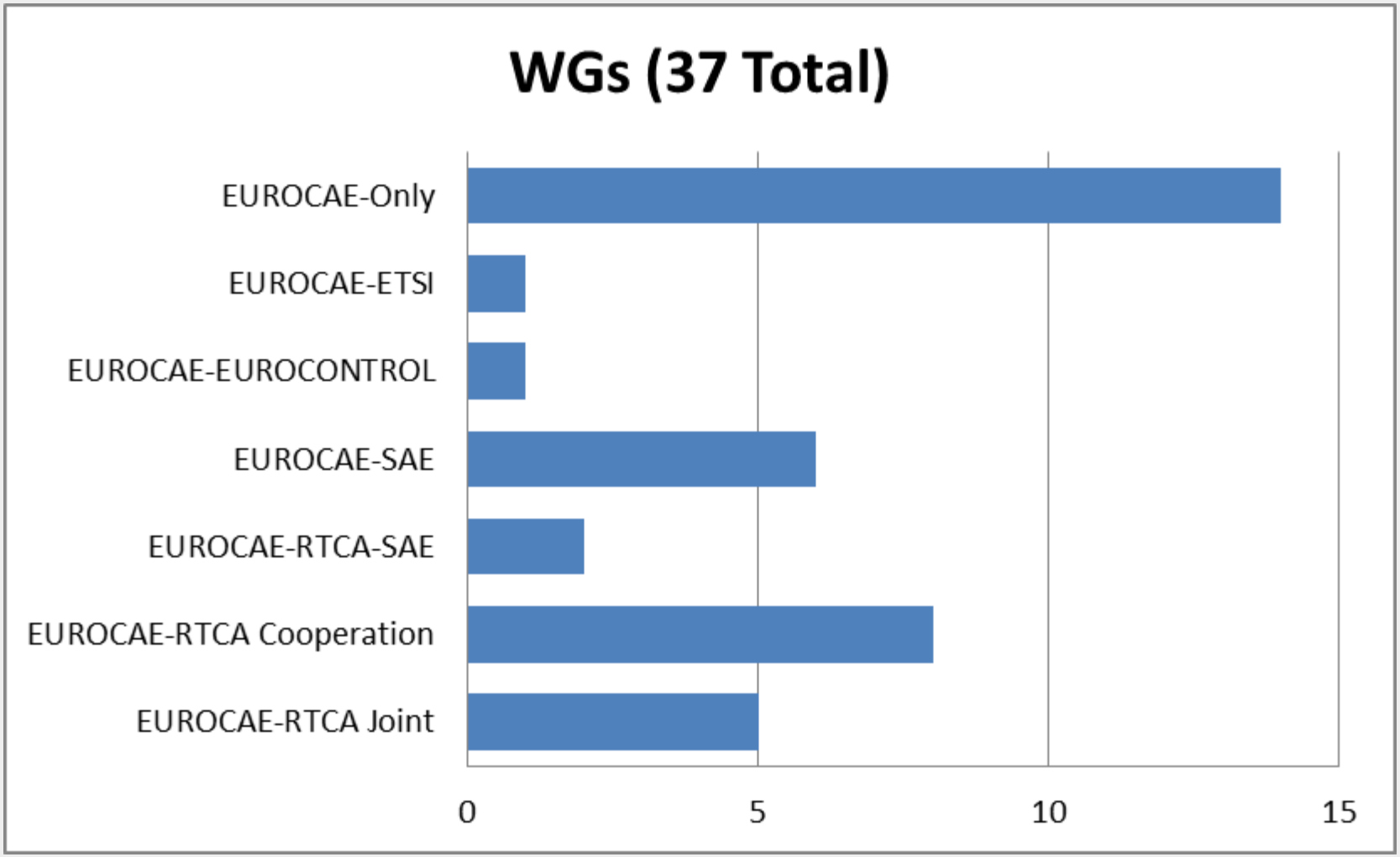
WG-73 UAV systems
WG-93 Light UAS

Cooperation between EUROCAE and RTCA

EUROCAE –RTCA work arrangement 1/2

- De Facto agreement established since the beginning of EUROCAE
- Ability for WG and the SC of the 2 organisations to work together according to the INTEROP requirements either:
  - Jointly – On same document is produced (DataCom)
  - In Cooperation – WG & SC coordinate in there work but produce different ED and DO (RPAS) or
  - Separately – No need of coordination (VoIP ED-137)
- EUROCAE and RTCA are working now to formalise this agreement.

EUROCAE –RTCA work arrangement 2/2



EUROCAE's activities in the context of RPAS/UAS

WG-73 UAS Standardisation / WG-93 Light RPAS

EUROCAE UAS Standardisation

Cross-Fertilisation & Coordination

WG-73 (2006) *SC-228*	WG-93 (2012)
UAS Standardisation	Light RPAS/UAS

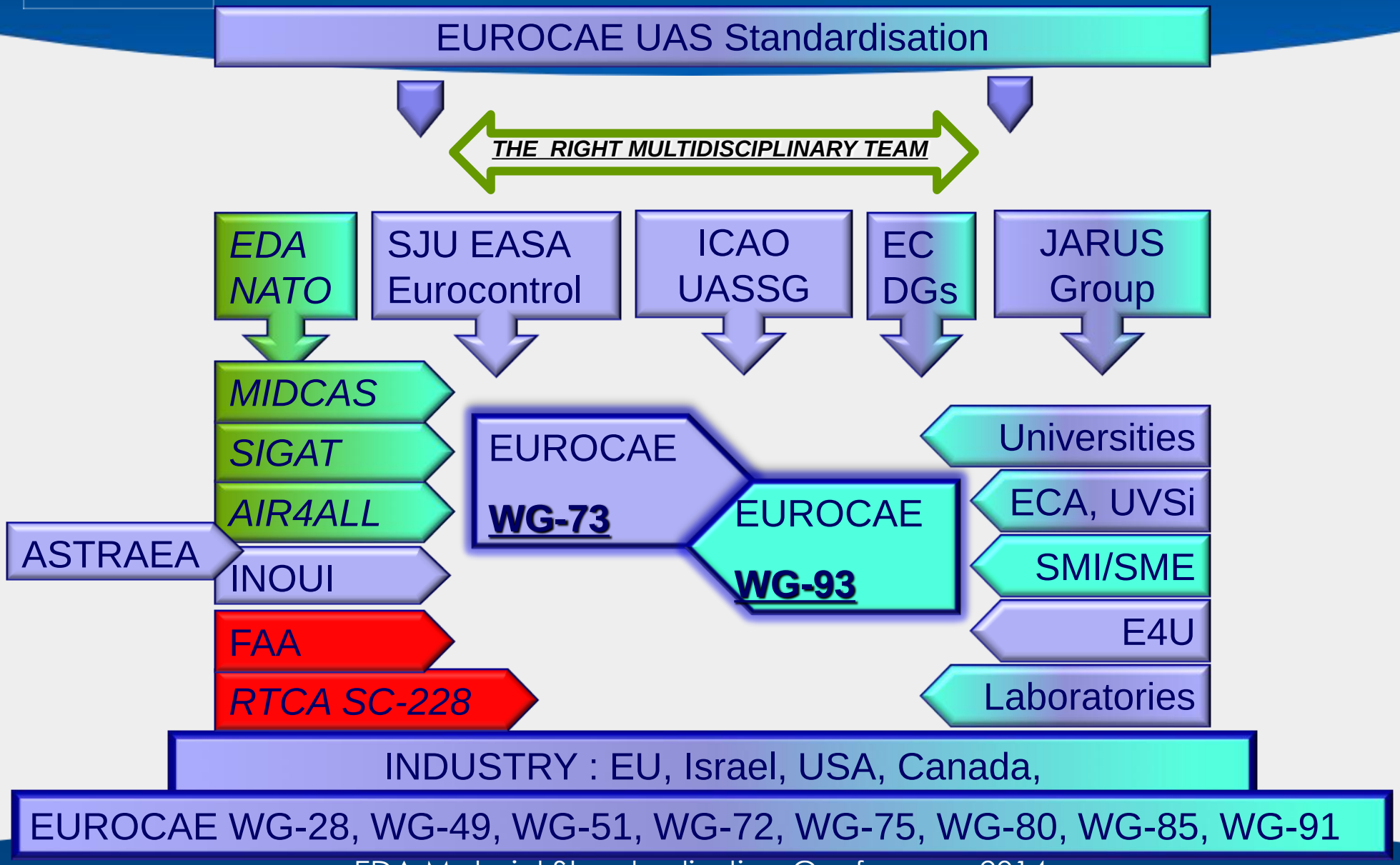
Large UAS Small and Light UAS

Large Companies, CAAs, ANSPs, Labs, Universities

SMI/SME/Individuals

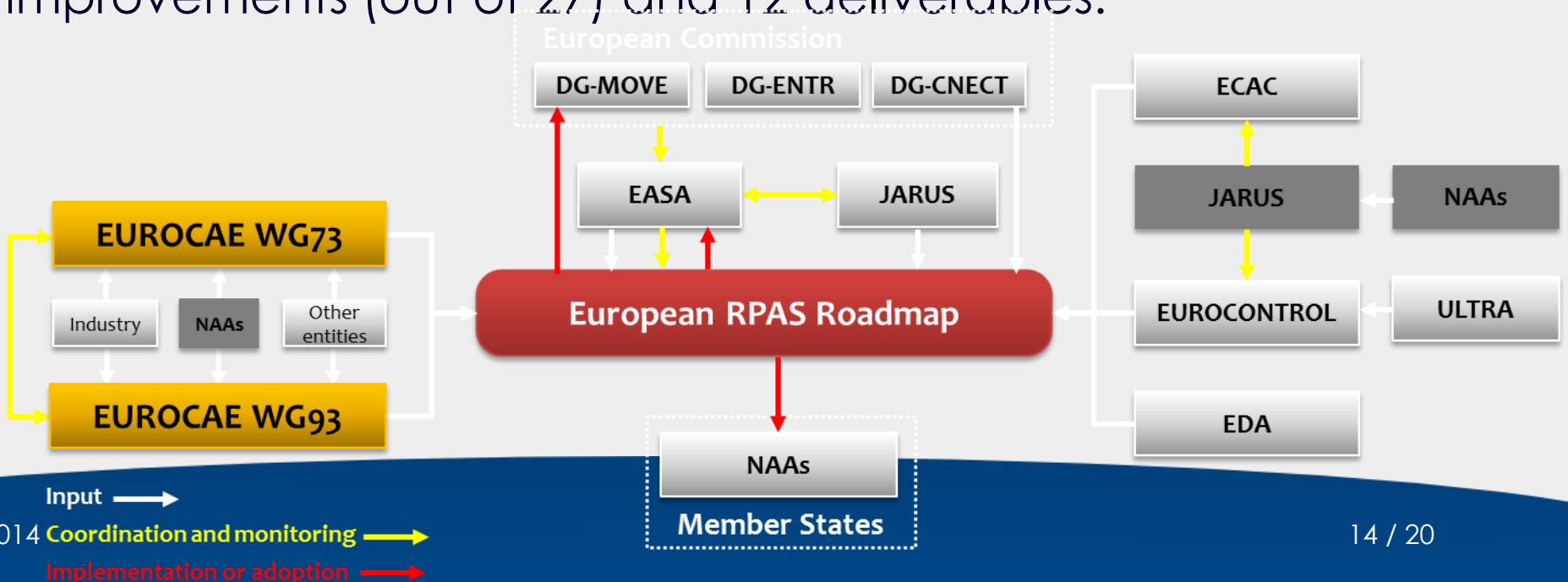
Initial Step	IFR Ops in A, B & C Class (entry-exit)	VLOS and Extended VLOS Ops
Inter Step	IFR Ops in D & F Class IFR/VFR, Airport Ops	Beyond Line Of Sight BLOS Ops
Final Step	Full UAS Integration including SESAR concept	

WG-73 UAS Standardisation / WG-93 Light RPAS Ecosystem



EUROCAE Commitment EUROPEAN RPAS Roadmap

- EUROCAE is member of the European RPAS Steering Group and has participated in the Regulatory work plan through representatives of the two RPAS related working groups: WG-73 and WG-93
- Furthermore, EUROCAE is expected to provide input at various stages of the Roadmap; 6 regulatory improvements (out of 27) and 12 deliverables.



Cooperation between EUROCAE and EDA

MIDCAS Project

Cooperation between EUROCAE and EDA: principles

- A letter stating cooperation aspects linking EUROCAE to EDA is being drafted;
- The Launch project of this cooperation is the MIDCAS project;
- Support to standardisation of the safety critical function of “sense & avoid” for RPAS;

Cooperation between EUROCAE and EDA: development opportunities

- Involvement of WG-73 in Autarkia, where EUROCAE could lead standardisation aspects of the project (TBC)
- EDA document: Military Assessment on the Content of the PCP (Standardisation) quotes:
  - ***"EDA, NATO and EUROCONTROL as far as feasible shall cooperate with EUROCAE to explore the opportunities of certifying the equivalence of military systems with SESAR requirements."***
- EUROCAE standards are critical to the Pilot Common Project especially for AF2 Airport Integration & Throughput, AF5 iSWIM and AF6 i4D and will remain open to any needed cooperation

Conclusion

Many Thanks

Next Symposium & GA

EUROCAE

EUROCAE

Symposium 2014

The Strategic Role of Standards in the Aviation Industry

51st General Assembly

Sevilla
22nd-23rd May

symposium.eurocae.net