



EASA

European Aviation Safety Agency

RPAS- EASA update

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5th Certification Workshop 29/01/2015

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Present EASA remit to set the scene

- The Agency is competent for drones with an MTOM above 150 kg (annex II (i)) that are not used for:
 - Military, customs, police, search and rescue, firefighting, coastguard or similar activity or services (article 2 basic regulation)
 - Specifically designed or modified for research, experimental or scientific purpose to be produced in very limited numbers
- Policy E.Y013-01: interim solution
 - Shall be used by the Agency's staff when certificating UAS.
 - Represents a first step in the development of comprehensive civil UAS regulation
 - may be regarded as providing guidance to Part--21 This policy statement is therefore an interim solution.



What is in preparation?

- Fast developing activity in particular small UAS with multiple applications: In EASA countries:
 - 2495 operators and 114 RPAS manufacturers. Very small to small RPAS with a maximum take-off mass (MTOM) below 150kg.
 - 16 Countries have rules, 11 are preparing rules but they are not harmonised
- Wide range of machines from micro RPAS to High Altitude Long Endurance, rotorcraft, airships
- Use of new technologies (e.g. high level of automation, sense and avoid, electrical propulsion, unusual configurations, cooperative operations)
- Quite often developed by SME and universities
- Adapted regulations to be developed in an international context (JARUS/ICAO)
- Technology may have spin-off for other aviation applications notably GA





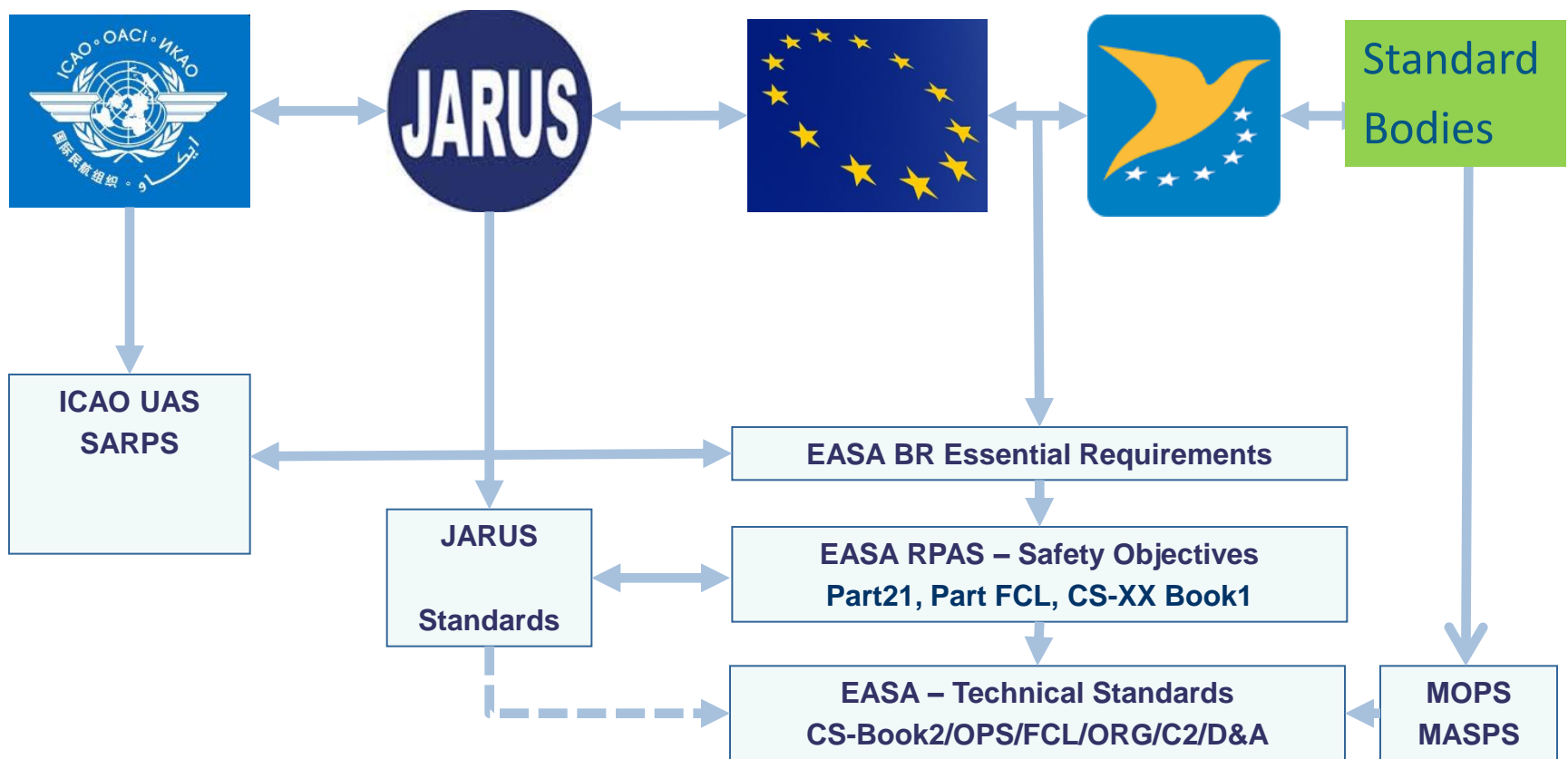
Background and Objectives

Commission communication

- Performance based approach
- Use of JARUS
- Role of EASA



RPAS Regulatory System



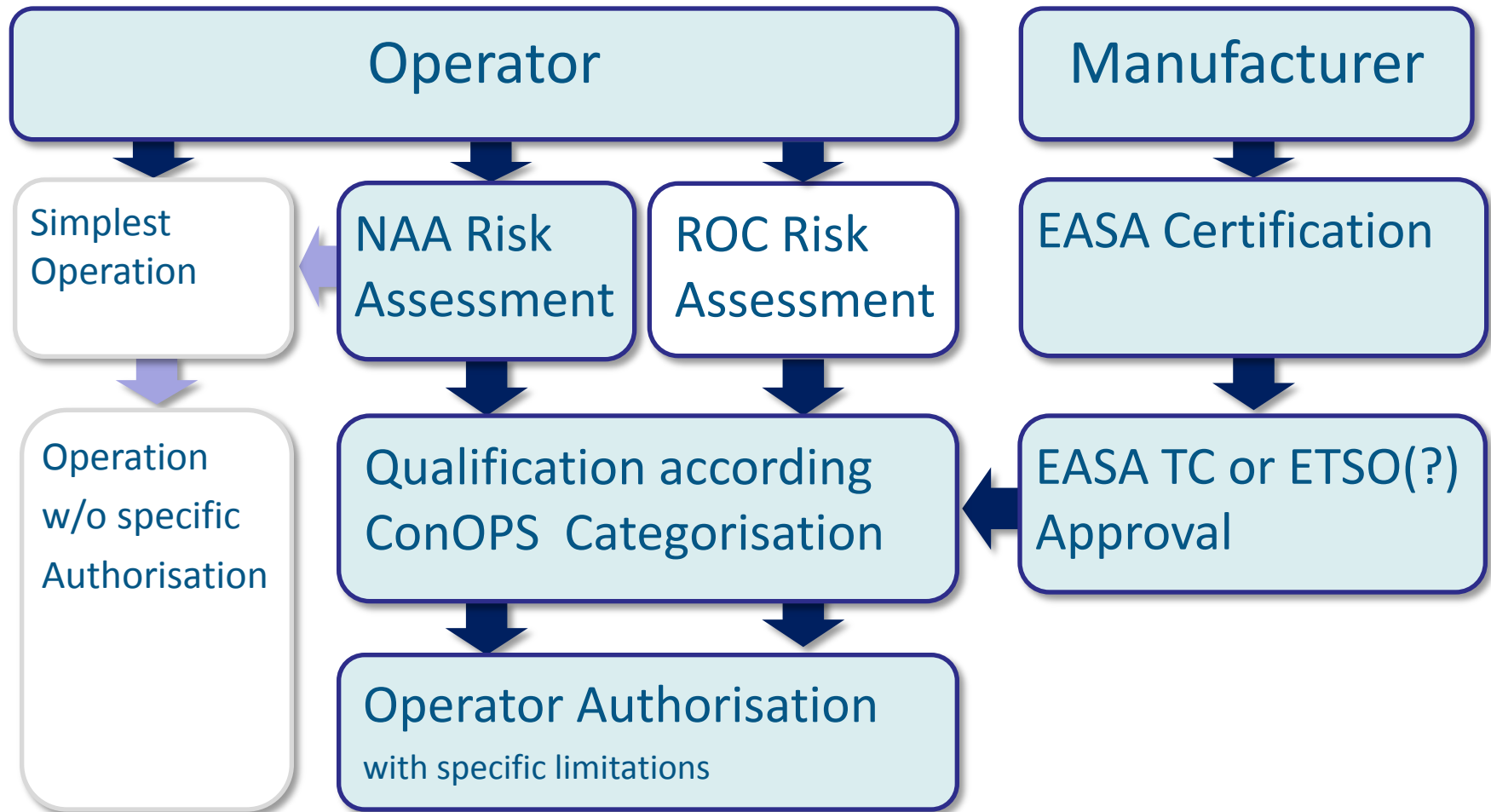


JARUS: RPAS Operation Categorisation

	OPEN	SPECIFIC	REGULATED
Airworthiness	Nothing	Risk mitigation	Certificates (TC, CofA)
Licensing	Nothing	Specific Training	Licence
Organisations	None	Industry attestation	Approval (ROC, etc.)
C2	Nothing	Specific Demonstrations	Certified (ETSO?)
D&A	Nothing	Industry attestation	Certified (ETSO?)



Operator Authorisation





- EASA (Eric Sivel) is now Chairman
- Secretariat has been installed
- JARUS working groups:
 - WG 1: Licencing and OPS: JARUS-FCL in preparation
 - WG 2: Organisations : group is reviewing comments received
 - WG 3: Airworthiness: CS-LURS published
 - WG 4: Detect and Avoid
 - WG 5: Command and Control: CPDLC was consulted this summer
 - WG 6: AMC 1309: consultation led to many comments
 - WG 7: Categorisation/ proportionality: proposals for classification of RPAS expected by Q1/15



- One section of the General Aviation Department responsible of the certification of RPAS, together with the certification of other aircraft types
- 2 application is being handled now; 4 in the pipeline
- Considering for the future that Design Approvals could range from Industry certificates to TC/ RTC issued by the Authority depending on the risk and complexity of the operation.



Recent activities

- Implementation group: 28/11/2014
 - The main objective is to better organize and synchronize the efforts in Europe regarding the overall RPAS integration
 - Present membership: EC (MOVE and GROWTH); EUROCONTROL, EASA, JARUS, SESAR, EDA, EUROCAE, Industry, UVS
- ICAO RPAS panel: 17-21/11/2014
 - FAA Chair, CAA-UK vice Chair
 - EASA tasked to develop the OPS and LIC aspects



Challenges

- Resistance to
 - Re-focus JARUS
 - Industry participation in JARUS
- Availability of budget and resources
- Need to obtain buy in from all involved parties
- Strong expectations from stakeholders and applicants
- New problems like privacy, cyber-security, enforcement, data from military partners, ...





Short term action plan

Define a concept of operation and RPAS principles

- Proper RPAS regulatory segmentation
- Establish a corresponding regulatory structure

Review the flows and rationalise to accelerate implementation of the RPAS strategy.

Continue to update detailed planning to take into account streamlining of flows.

EASA proposals for regulatory framework by March 2015
JARUS proposals for classification of RPAS by Q1/15

Issue NPA/ guidelines on the smallest RPAS by the end of Q2/15



Conclusions

- EASA Main actions:
 - ICAO participation
 - JARUS re-organisation and re-focus
 - Create JARUS Secretariat & funding mechanism
 - EXCOM has agreed in principle allocation of a budget and resources in EASA
 - Review TOR/Composition and programme of RPAS WG
 - Priority on regulatory framework and small RPAS
 - Support to Commission Roadmap (impact assessment, article in Basic regulation/ essential requirements)
 - Draft SARPS for OPS and LIC for ICAO
 - Review rulemaking programme



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Thank You for your attention

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