



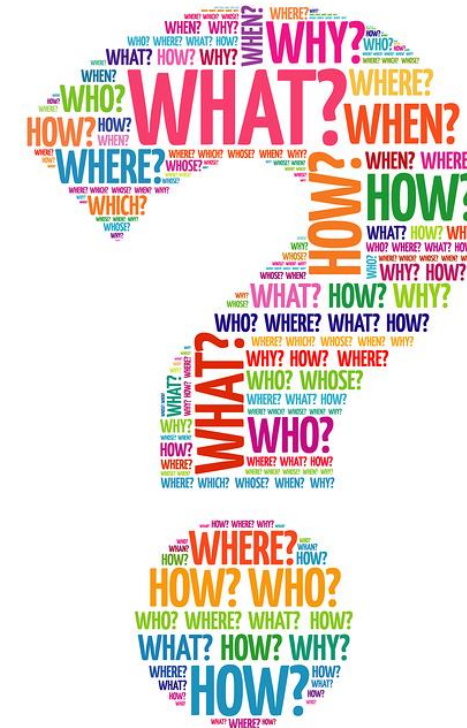
Project Overview

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- What is AW-Drones?
- Objectives and scope
- Approach
- Involvement of external experts
- Outcomes



A list of recommended industry standards to allow operators to comply with regulatory requirements is not yet available

- Developing a comprehensive list of recommended standards requires:
 - **Collecting information** about on-going and planned activities of all Standard Making Bodies
 - Evaluating to what extent a standard is **covering** a given requirement
 - Ranking the available standards and **identify gaps**

AW-Drones is a **3-years** Coordination and support action (CSA) funded under the EU H2020 program.



This project has received funding from European Union's Horizon 2020 Research and Innovation Programme under Grant Agreement No°824292.



- **Collect information** on on-going and planned work with regards to technical and operational **standards** developed for drones worldwide
- Carry out a **critical assessment/benchmarking** of all collected data to identify best practices, gaps, bottlenecks and applicability **... in other words a “metastandard”**
- Propose and **validate** a well-reasoned set of standards for each category of drone operations
- Create a **knowledge base** (online repository) to explore the data
- **Engage** with key stakeholders and end-users, i.e. representatives of the whole drone value chain

Collection of drone standards

→ airworthiness, operations & procedures, ...

EUSCG RDP
ANSI Roadmap



Collection of drone-related and applicable general standards

EUROCAE, RTCA, ISO, ASTM, ASD-STAN, ...

→ component, subcategories, industrial level

Assessment of standards - categorization & evaluation

→ maturity, safety, cost, suitability ...

- Over **600** standards collected
- **300** standards fully assessed from:

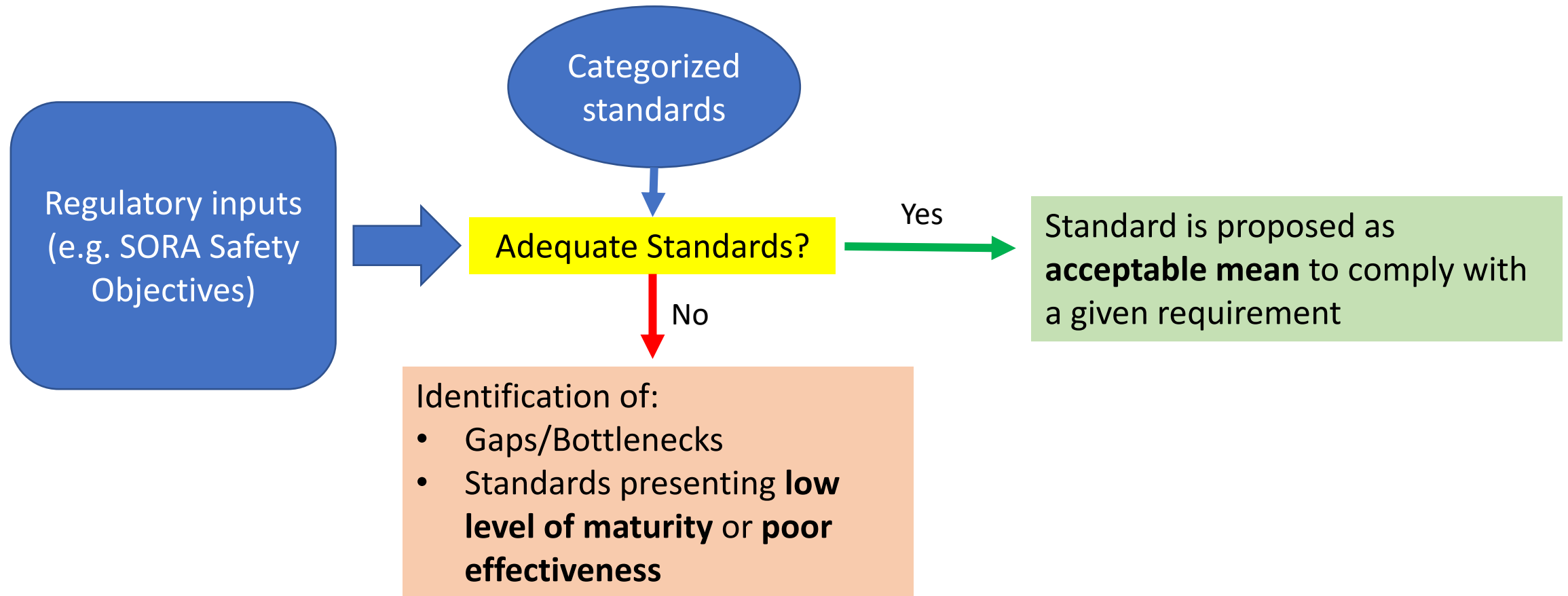


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and more...

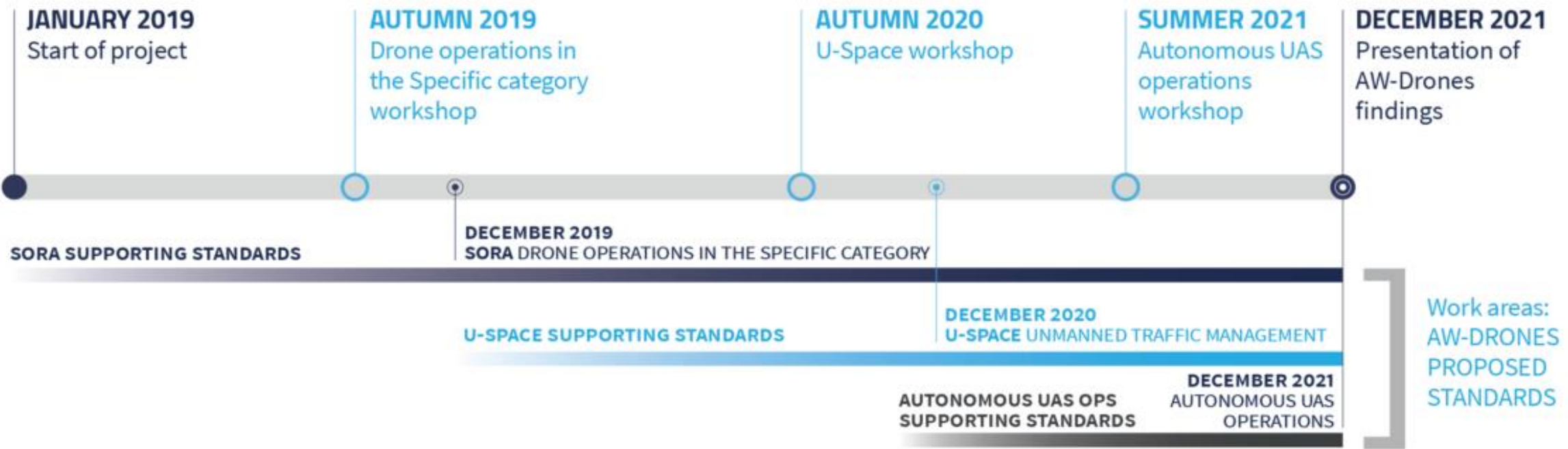
Approach - Developing a “meta” standard

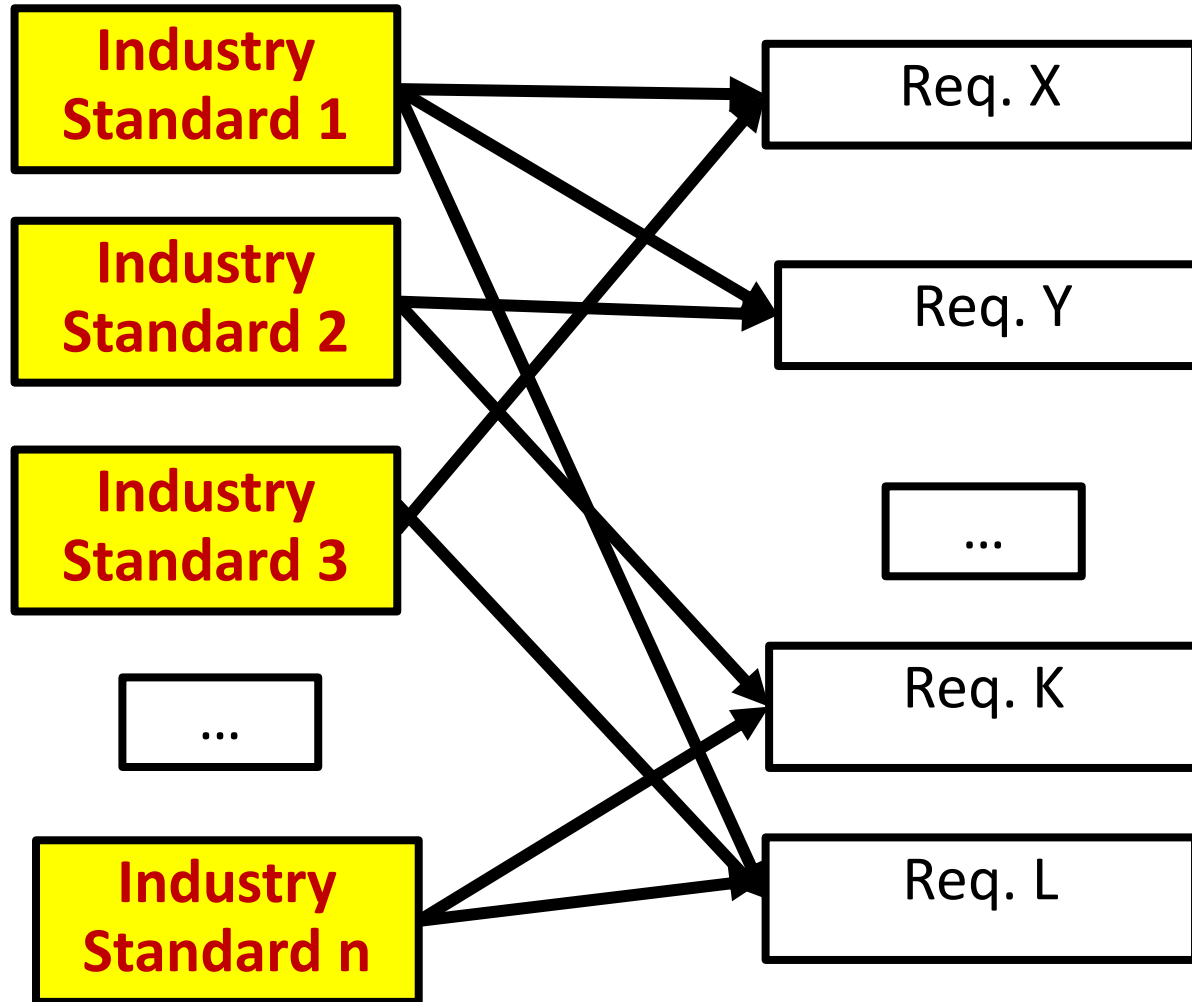


- Year 1: Standards required to support effectively the Specific Operations Risk Assessment (**SORA**) methodology
- Year 2: Standards supporting the development of **U-space** in Europe (+ 2nd iteration of SORA)
- Year 3: Standards to demonstrate compliance with SC Light-UAS requirements (+ 3rd iteration of SORA and 2nd iteration of U-space)

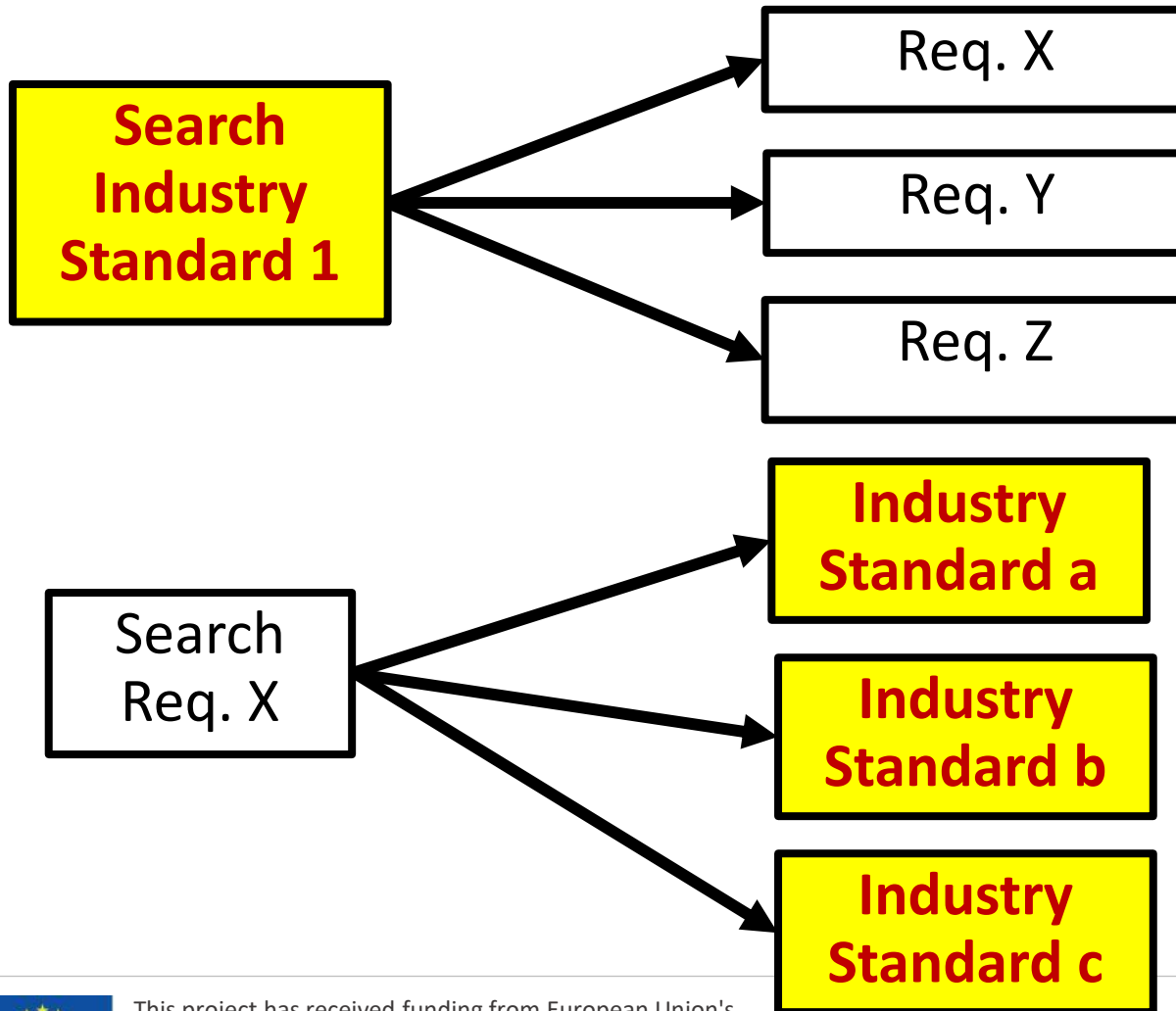


Iterative approach
throughout the project
duration

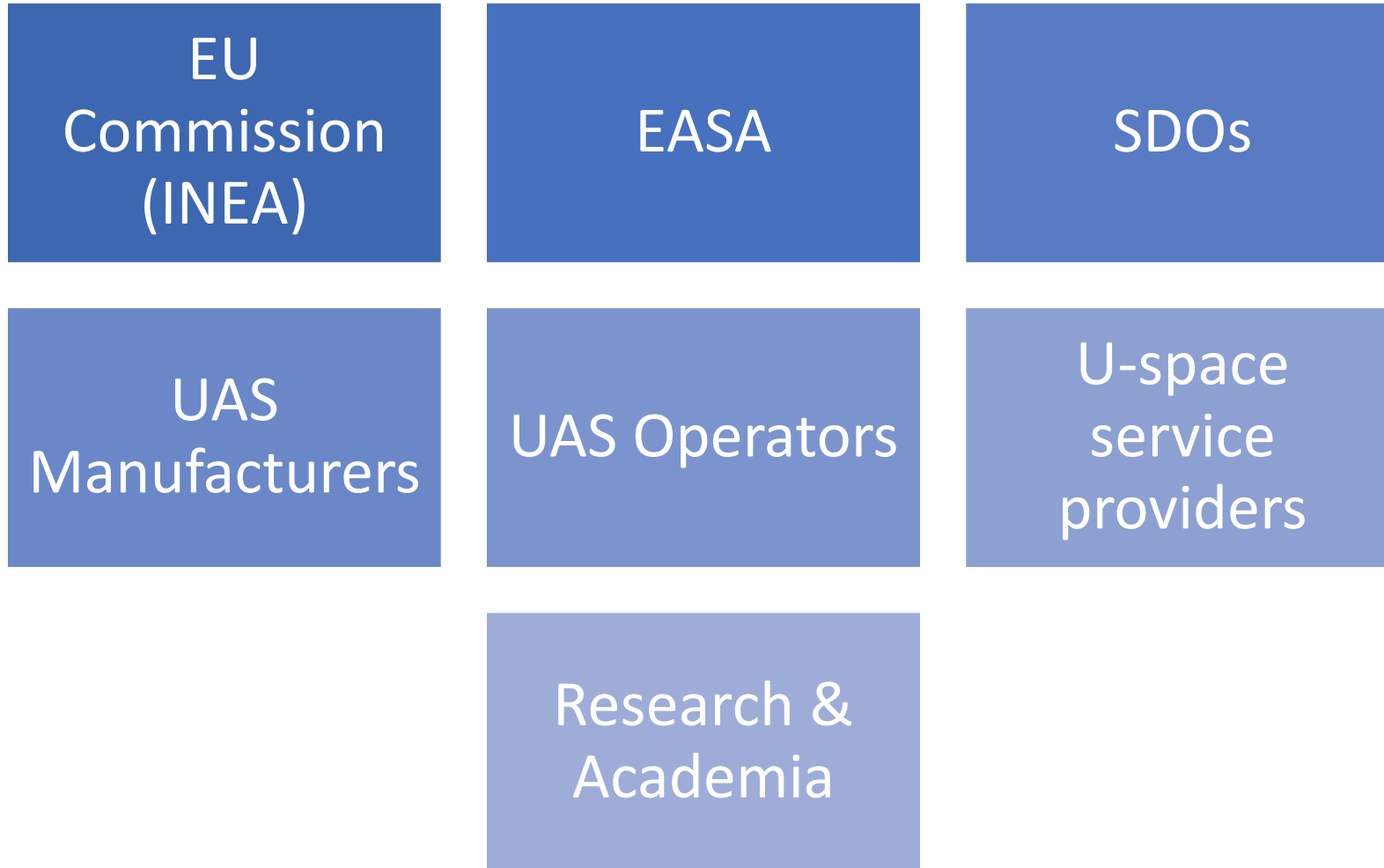




- There is no biunivocal relationship between one requirement and one standard
- One standard may contribute to several requirements
- One requirement may be supported by several standards
- **All possible relationships will be listed in AW-Drones outcomes**



- Online repository built from project results, would allow searching from “two directions”
- Searching a standard and finding to which requirement(s) it may contribute
- Searching a requirement and finding which standards may contribute to it



- **EASA** and **DG Move** gave feedback and steered the work in dedicated workshops
- **The Advisory Board** (made of regulators, manufacturers, operators, standard making bodies)
 - supported the methodological work of the project
 - provided review, recommendations and feedback on project activities and findings
 - brought an external view
- Everybody else provided inputs through online surveys and public workshops

- A **yearly report** about “State-of-the-Art” of standards for UAS
- A yearly report containing a “**well-reasoned**” **set of standards**:
 - Applicability
 - Maturity
 - KPA Effectiveness
- An **open repository** containing structured information about technical rules, procedures and standards for drones worldwide, including applicability to different UAS OPS categories and different SAIL = **metastandard**





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AW-Drones



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Questions?



Thank you for the attention

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