



AW DRONES

Project Overview

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

What is AW-Drones?

Objectives

Methodology

Scope

Involvement of external experts

Expected Outcomes



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



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- **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
- **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



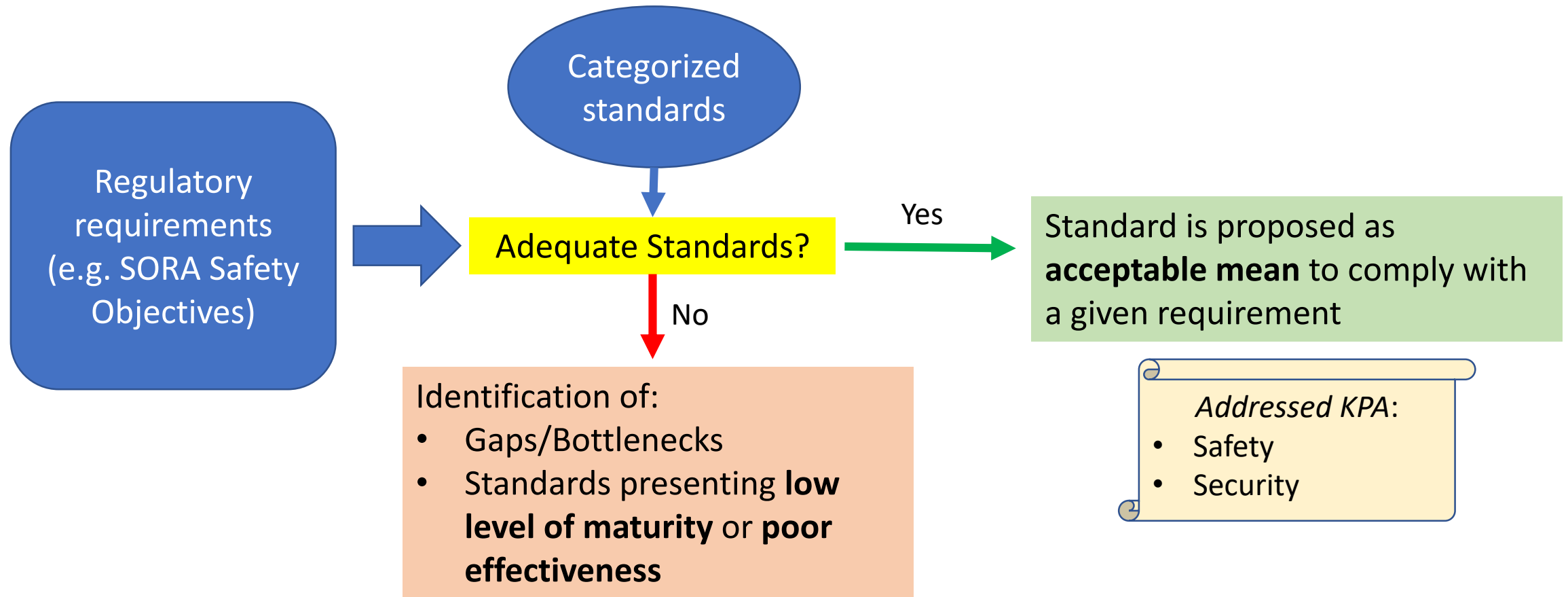
Collection of drone-related and applicable general standards

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

→ component, subcategories, industrial level

Assessment of standards - categorization & evaluation

→ maturity, safety, cost, suitability ...



- 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
- Year 3: Standards needed to support the operation of **highly automated UAS** and to ensure that they can be operated safely in a variety of applications



Iterative approach
throughout the project
duration

- European Commission (DG-MOVE, INEA)
- EASA
- CAA Representatives
- Standard Making Bodies Representatives
 - EUROCAE, RTCA, ISO, ASTM, ASD-STAN, ...
- UAS Manufacturers
- UAS Operators
- UTM Service Providers
- Research and Academia
- ... do not feel left out!



1. As source of information for data collection

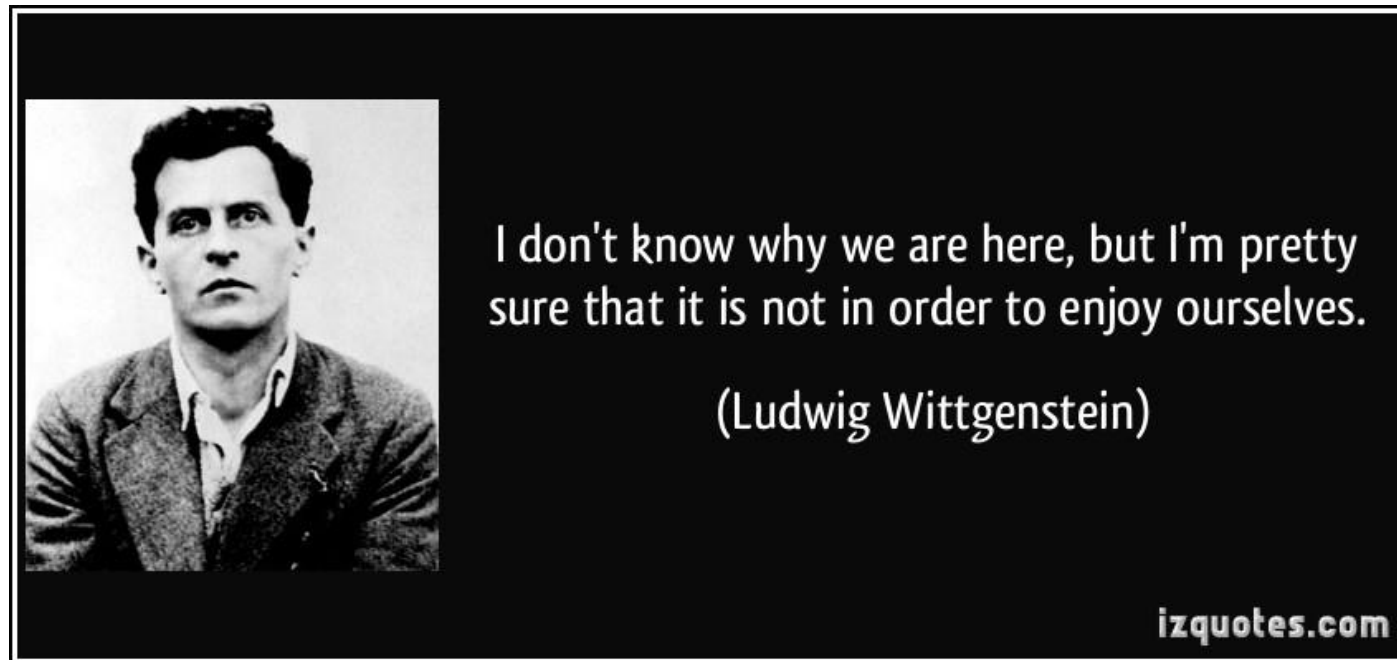


2. As source of feedback about methodology, standards assessment, correctness and completeness of information, etc.

By means of **workshops**, online surveys, ad-hoc round-tables, interactions on the social-media, etc.

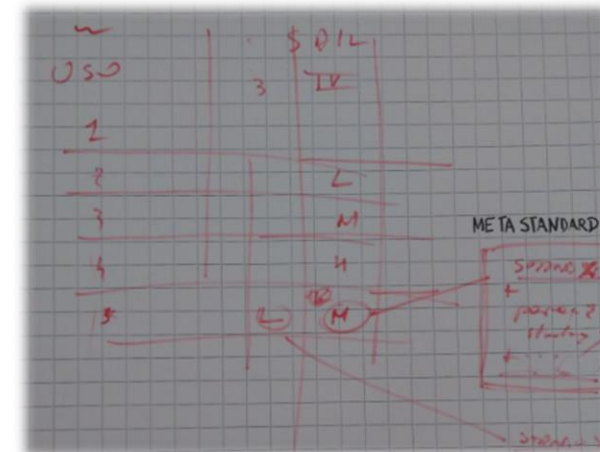


2. As source of feedback about methodology, standards assessment, correctness and completeness of information, etc.



- Additional External experts will be able to contribute through:
 - Online surveys
 - Public Workshops
 - **Workshop 1 (today):** Overview of the collected set of standards to support effectively the Specific Operations Risk Assessment (SORA) methodology
 - **Workshop 2 (June 2020):** Overview of the collected set of standards to support U-Space implementation
 - **Workshop 3 (June-July 2021):** Overview of the collected set of standards/principles for Autonomous UAS certification

- AW-Drones has a dedicated link with the EC and EASA:
 - Mutual awareness about activities of common interest
 - Shared timeline following the regulatory roadmap
 - One collaborative workshop already took place last June in Cologne, others will follow shortly



AW-DRONES PUBLIC EVENTS

JANUARY 2019
START OF PROJECT

AUTUMN 2019
"DRONE OPERATIONS IN THE SPECIFIC CATEGORY" WORKSHOP

AUTUMN 2020
"U-SPACE" WORKSHOP

SUMMER 2021
"AUTONOMOUS UAS OPERATIONS" WORKSHOP

DECEMBER 2021
PRESENTATION OF AW-DRONES FINDINGS

DECEMBER 2021
END OF PROJECT

RELEASE OF AW-DRONES PROPOSED STANDARDS

SORA SUPPORTING STANDARDS

U-SPACE SUPPORTING STANDARDS

AUTONOMOUS UAS OPS. SUPPORTING STANDARDS

DECEMBER 2019
SORA
DRONE OPERATIONS IN THE SPECIFIC CATEGORY

DECEMBER 2020
U-SPACE
UNMANNED TRAFFIC MANAGEMENT

DECEMBER 2021
AUTONOMOUS UAS
OPERATIONS



- 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**

- AW-Drones does not draft UAS regulation
- AW-Drones does not produce UAS standards
- AW-Drones does not assess the technical quality of UAS standards



Questions?





<http://www.aw-drones.eu/>



Thank you for the attention

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