First yearly release of AW-Drones Repository

D6.2

AW-Drones

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Rejected By - Representatives of beneficiaries involved in the project

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00.01.00	30/06/2020	Final	Damiano Taurino	Final check and upload to EC portal

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AW-Drones

CONTRIBUTING TO A WELL-REASONED SET OF AIRWORTHINESS STANDARDS FOR MASS-MARKET DRONES

Abstract

This document presents the first version of the AW-Drones open repository. The AW-Drones open repository is an online platform where users will be able to easily identify relevant information from the AW-Drones database of standards and regulations. Since the nature of this report is "Websites, patents filling, etc.", this document presents some basic screenshots of the platform and it presents an initial URL that is being used for feedback from EASA and INEA. The next steps are:

- to populate the AW-Drones repository with the content,
- to receive feedback from EASA and INEA before making the AW-Drones url publicly available,
- to continuously extend the functionalities of the repository.

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Executive Summary

This document presents the first version of the AW-Drones open repository. The AW-Drones open repository (first version available here: http://drones.ortelio.co.uk) is an online platform that will provide a single point of access to relevant information about:

- rules, procedures and technical standards developed for civilian drones;
- best practices, gaps and bottlenecks;
- technical standard for each category of drone operations;

This is a temporary URL and it is mainly used to receive a first feedback from EASA and INEA. After EASA's and INEA's approval, we will move the repository to a URL under the AW-Drones website.

1 Introduction

1.1 Purpose and Scope of this document

The purpose of this document is to briefly present the the AW-Drones open repository that is developed in AW-Drones project and acts as the synthesis for the whole project. According to the Grant Agreement, the nature of this report is “Websites, patents filling, etc.”. The URL of this first version of the AW-Drones repository is available here: http://drones.ortelio.co.uk.

1.2 Deliverable Structure

This document is divided in two different sections.

Section 1 defines the main scope and objectives of this deliverable, Section 2 provides some screenshots of the AW-Drones repository and Section 3 summarizes future work.

1.3 List of Acronyms

AEH	Airborne Electric Hardware
ANSP	Air Navigation Service Provider
ATM	Air Traffic Management
ATS	Air Traffic Services
C2	Command and Control
CA	Consortium Agreement
DoA	Description of Action
EASA	European Aviation Safety Agency
EC	European Commission
GA	Grant Agreement
HMI	Human Machine Interface

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IFR	Instrument Flight Rules
RPAS	Remotely Piloted Aircraft Systems
RPS	Remote Pilot Station
UI	User Interface
UAS	Unmanned Aircraft System
URL	Uniform Resource Locator
UTM	UAS Traffic Management
VLL	Very Low Level
WP	Work Package

2 The AW-Drones repository

2.1 Purpose of the platform

The AW-Drones open repository (first non-public version is available here: http://drones.ortelio.co.uk) is an online platform that provides single point of access to relevant information about:

- rules, procedures and technical standards developed for civilian drones;
- best practices, gaps and bottlenecks;
- technical standards for each category of drone operations;

The main objective is to support the European Aviation Safety Agency (EASA) and the European Commission (EC) in their rulemaking process for the definition of rules, technical standards and procedures for civilian drones. The mid-term aim of the open repository is to become a relevant **drone-focused informative tool** where experts can easily identify relevant information and contribute to the extension of the AW-Drones database.

From a technical point of view, an **online repository** is a web-based software application that brings together various data sources to make them available to stakeholders. It allows administrators to publish data to a web portal in order to make it available to the target audience. An **open repository** is a digital platform that provides free, immediate and permanent access to data for anyone to use, download and distribute. To facilitate open access such repositories must be interoperable and search engines must be able to harvest the content of such repositories.

2.2 Functionalities

The screenshots presented below use mock-up data taken from WP4. The full list of requirements will be displayed to the AW-Drones open repository at the end of July 2020. Using the full list of requirements will help have a better understanding of the core functionalities of the platform.

2.2.1 Frontend

The homepage of the AW-Drones repository displays a list with the available standards:

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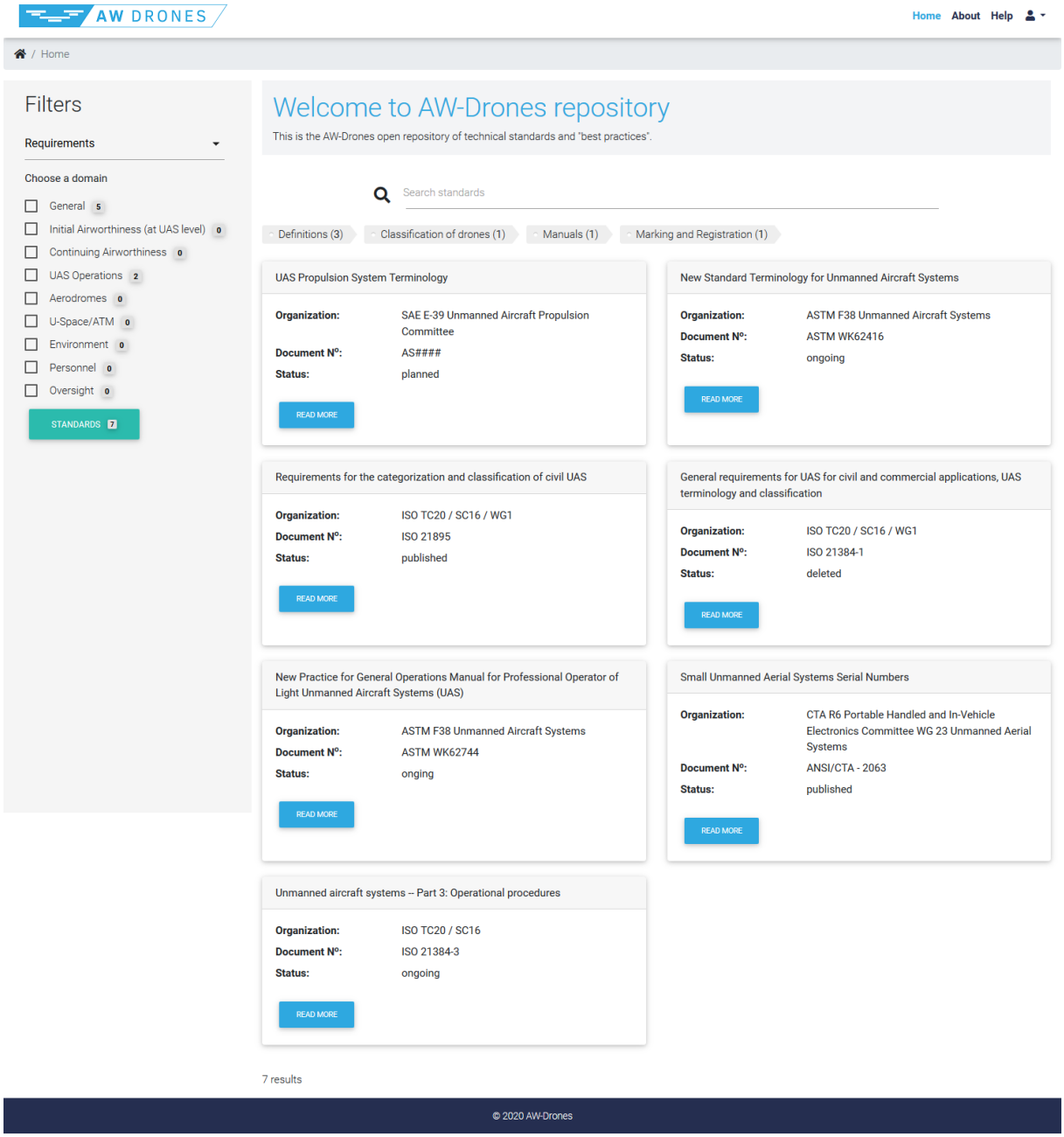

Figure 1. AW-Drones repository (Home page)

Users can filter via Requirements and Domain:

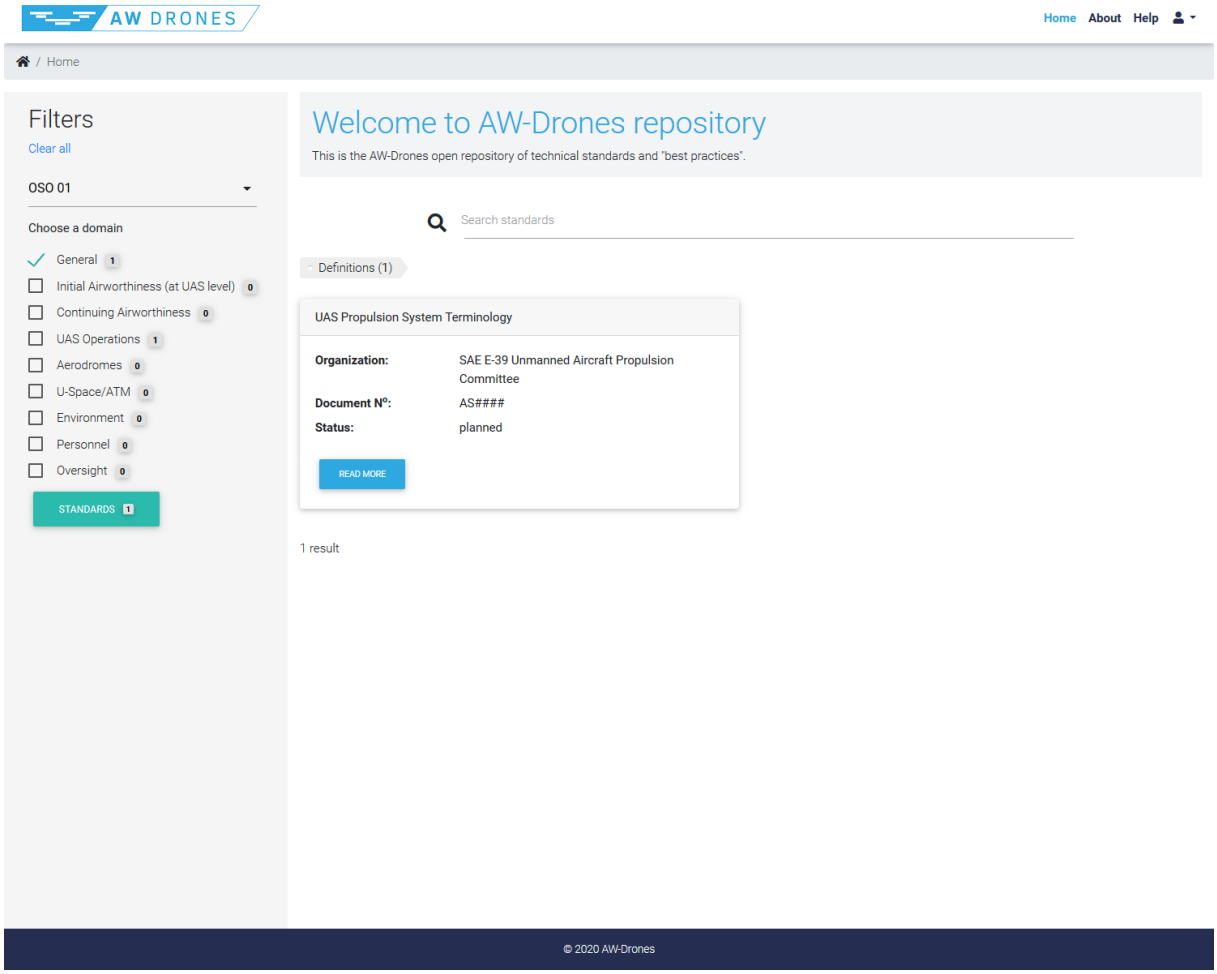

Figure 2. Filtered results

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Users can use the live search functionality:

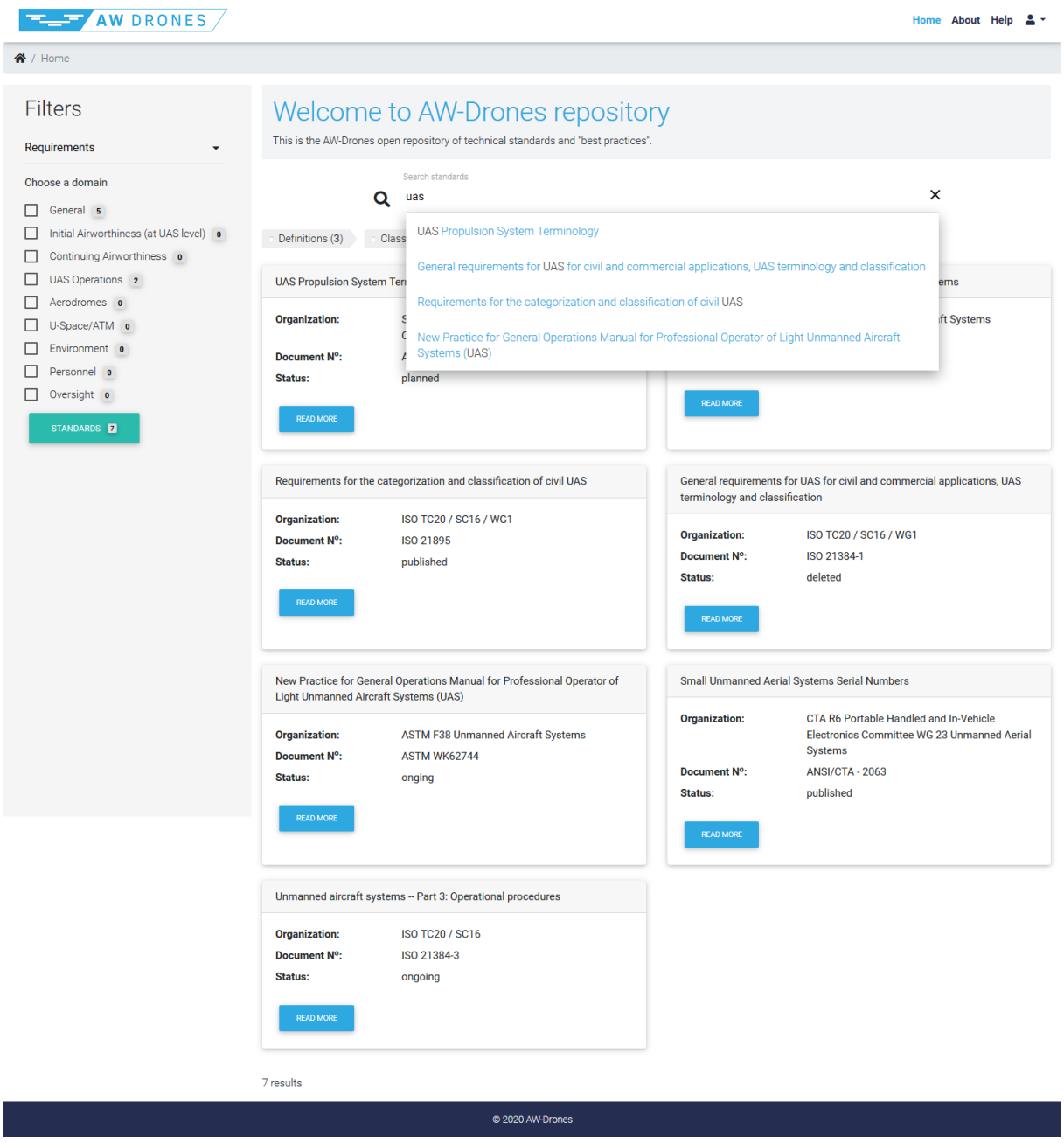

Figure 3. Search standard with autocomplete

Users can view a specific standard:

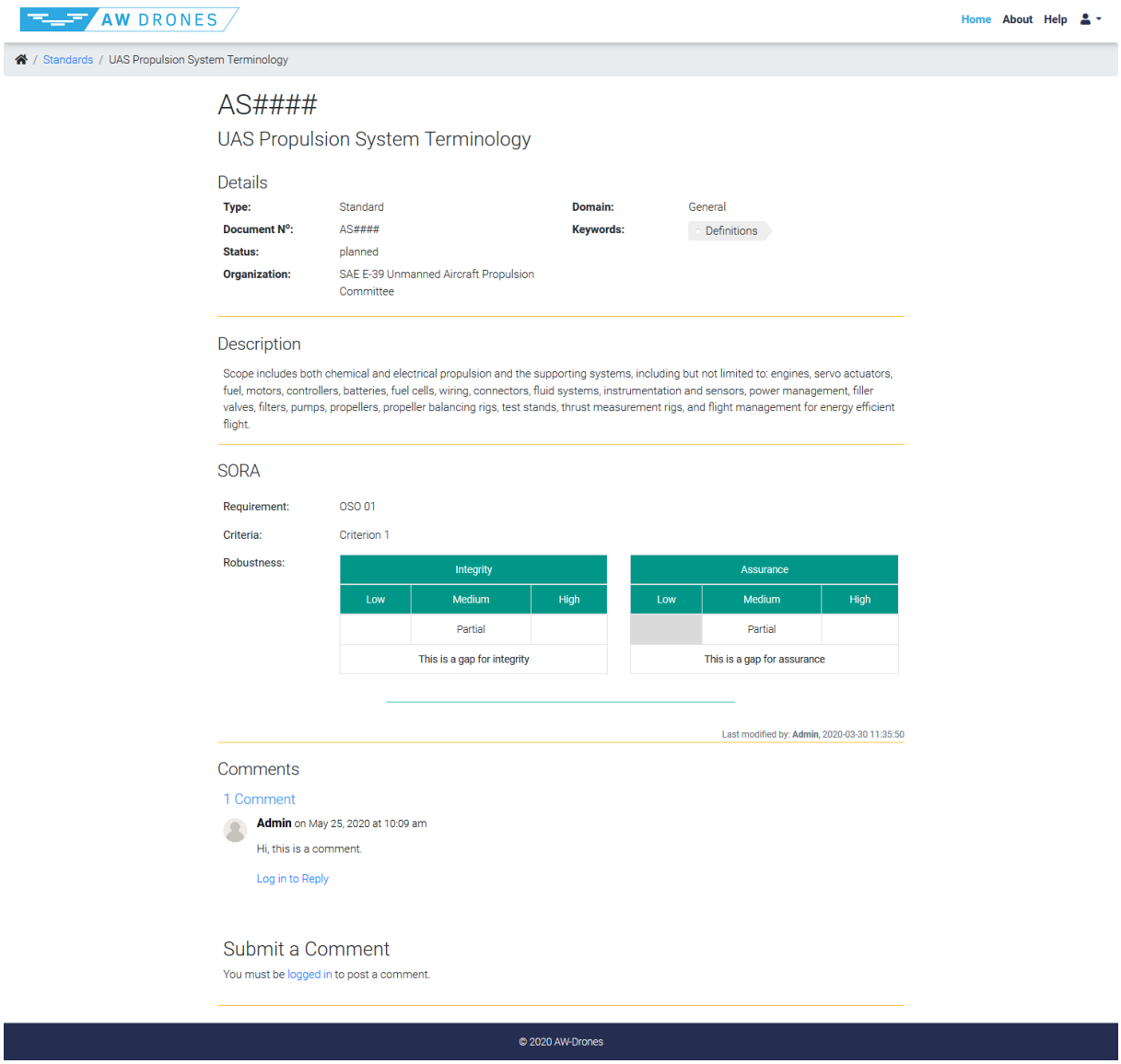

Figure 4. Standard page with one requirement

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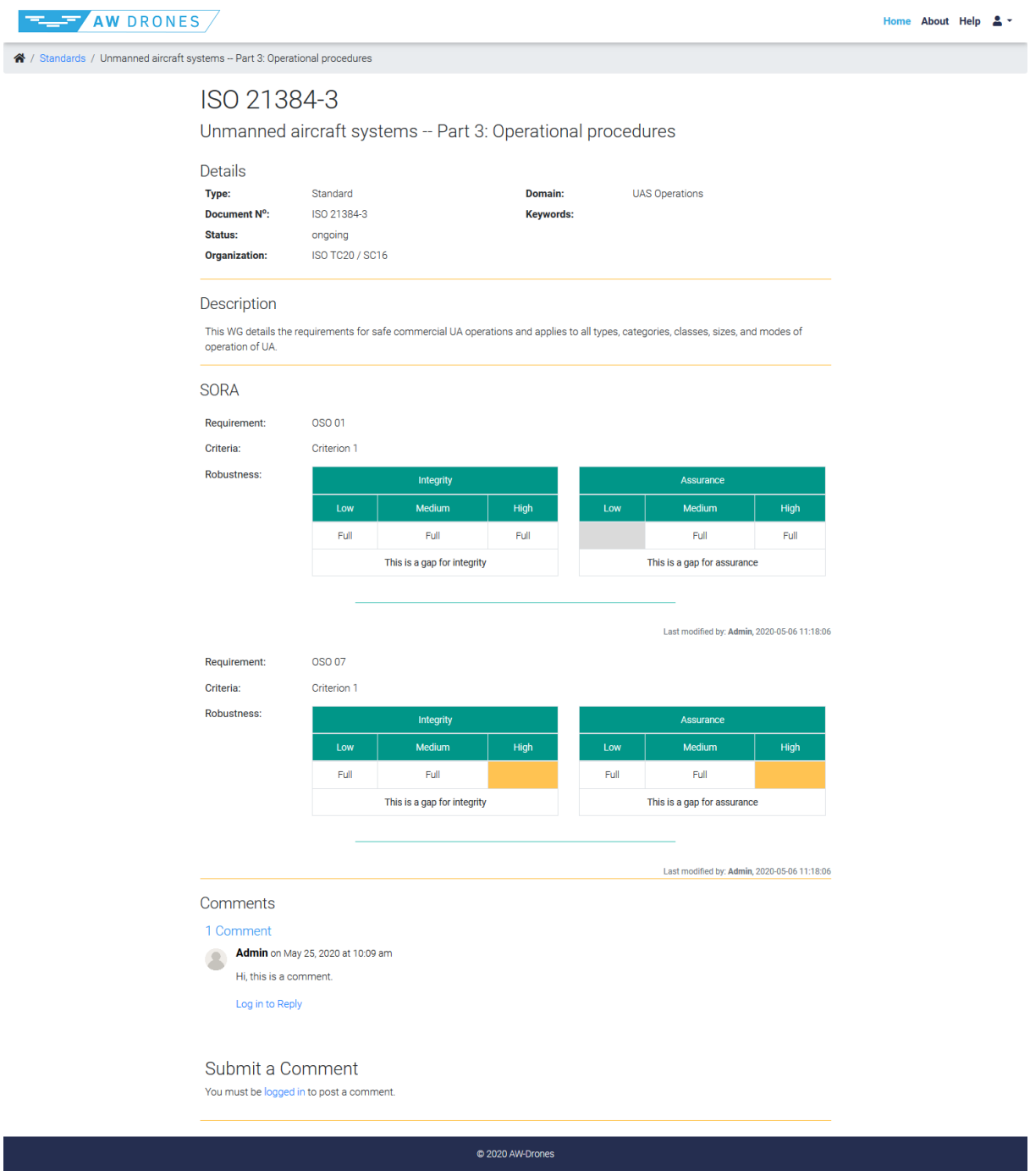

Figure 5. Standard page with many requirements

2.2.2 Backend

Below we present a list of screenshots that showcase the functionality of the backend environment of the platform. Administrators can login to the platform using their credentials:

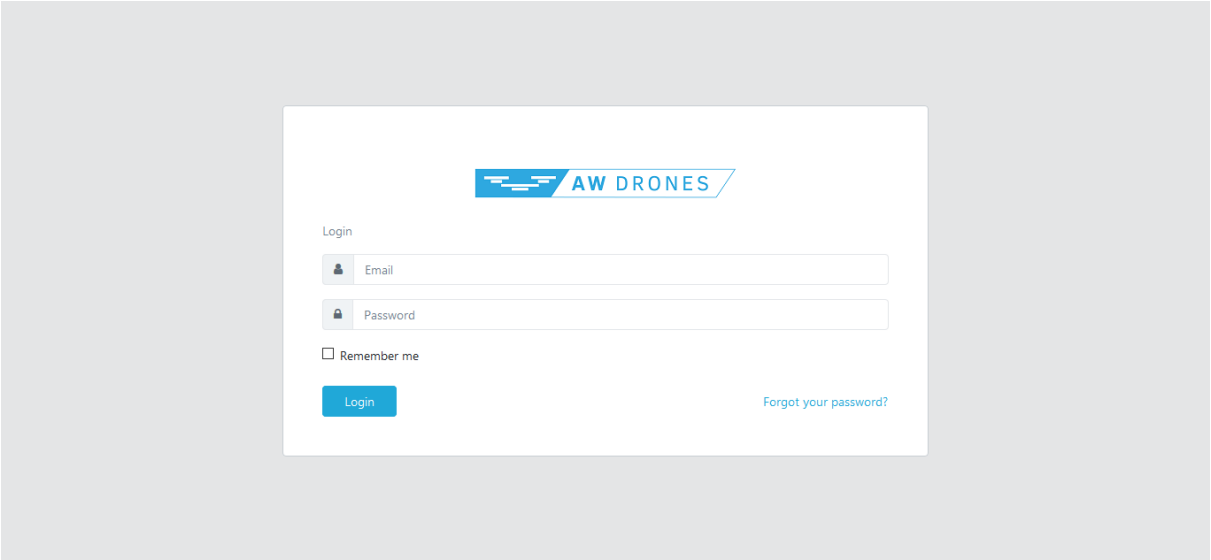

Figure 6. Backend login

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This is the dashboard of the administrators:

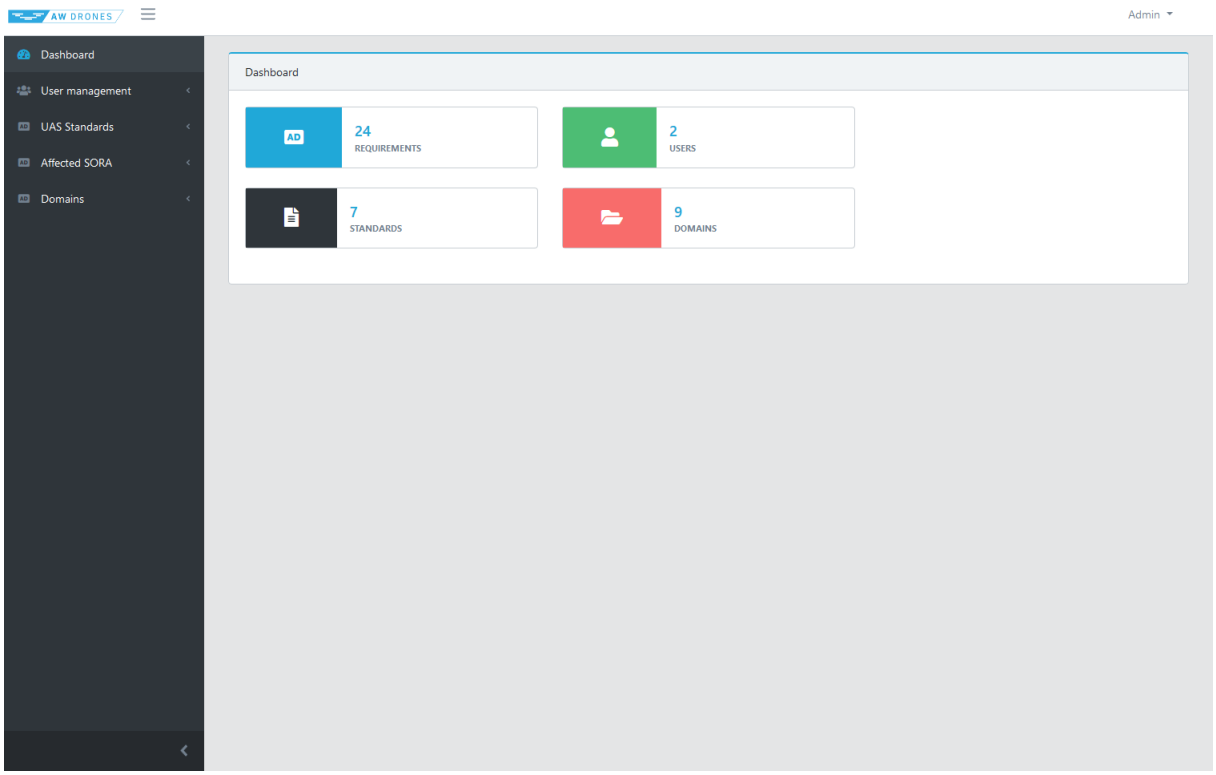

Figure 7. Backend dashboard

Administrators can manage the users of the platform:

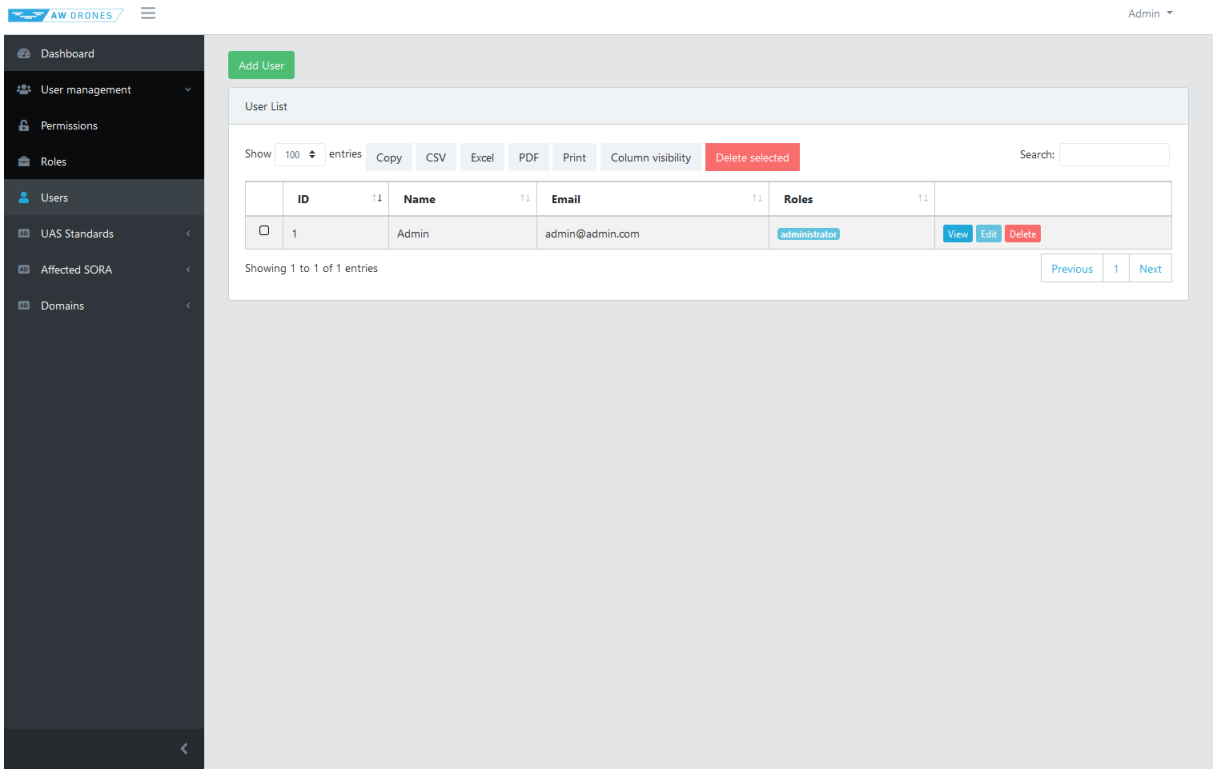

Figure 8. Backend user management

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Administrators can manage the roles of the users:

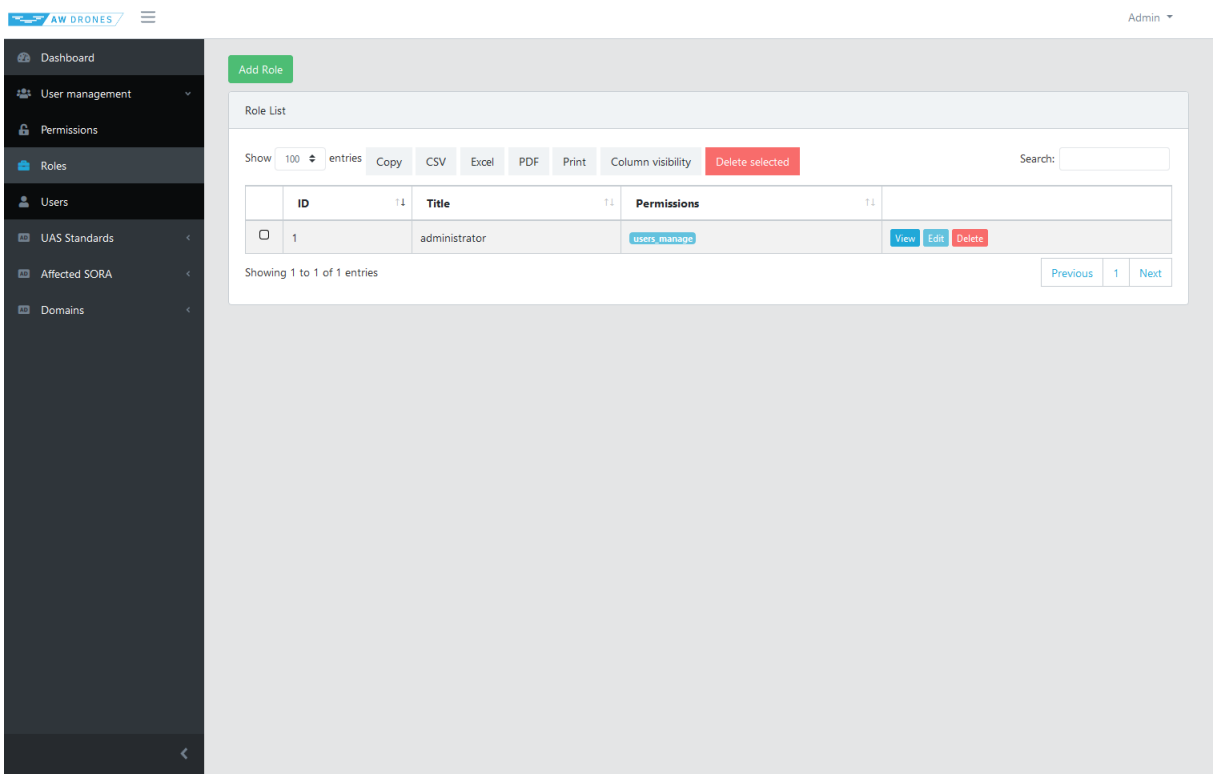

Figure 9. Backend roles management

Administrators can manage the permissions of the users:

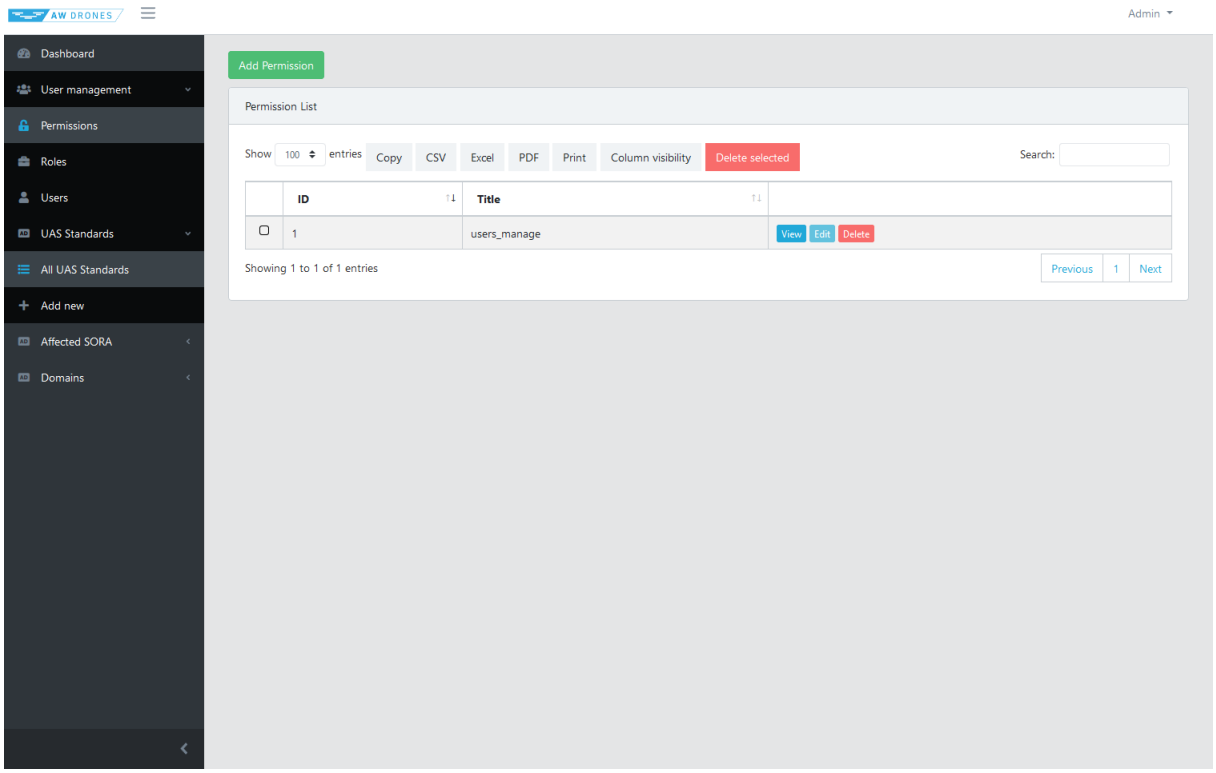

Figure 10. Backend permissions management

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Administrators can easily edit the Domains of the Standards:

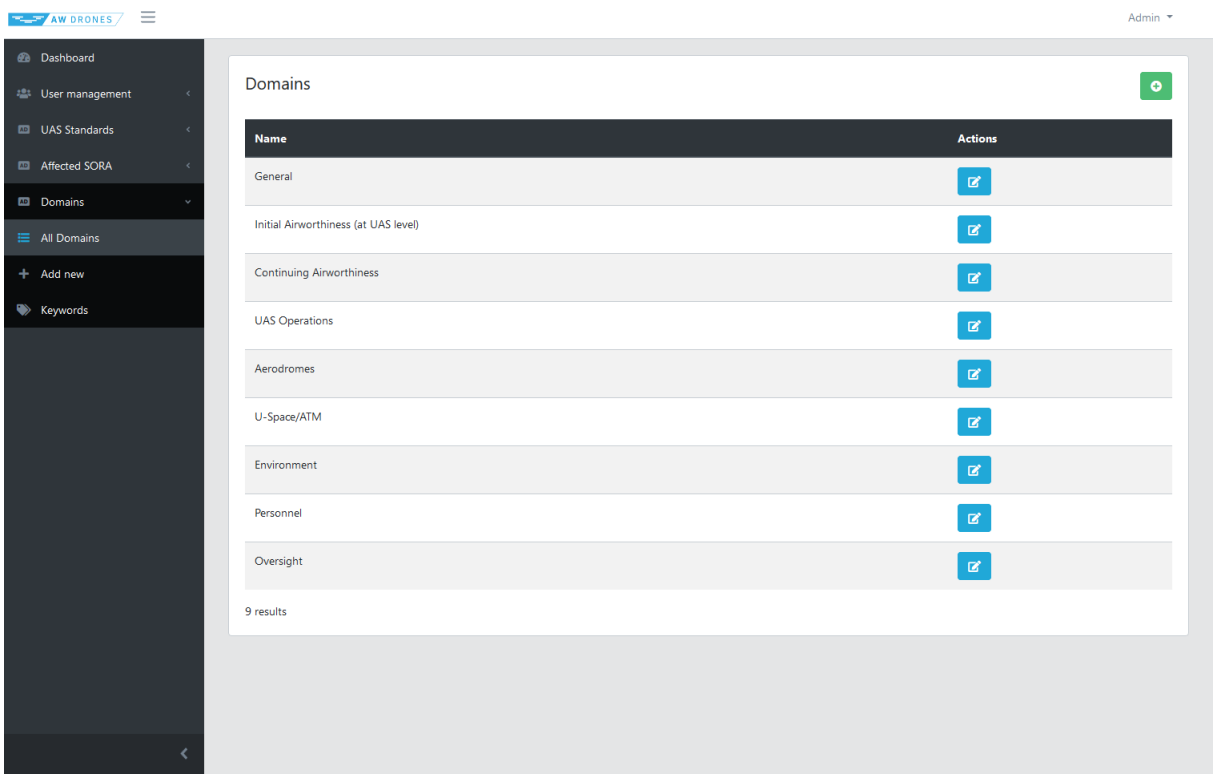

Figure 11. Backend domains management

Administrators can edit the keywords:

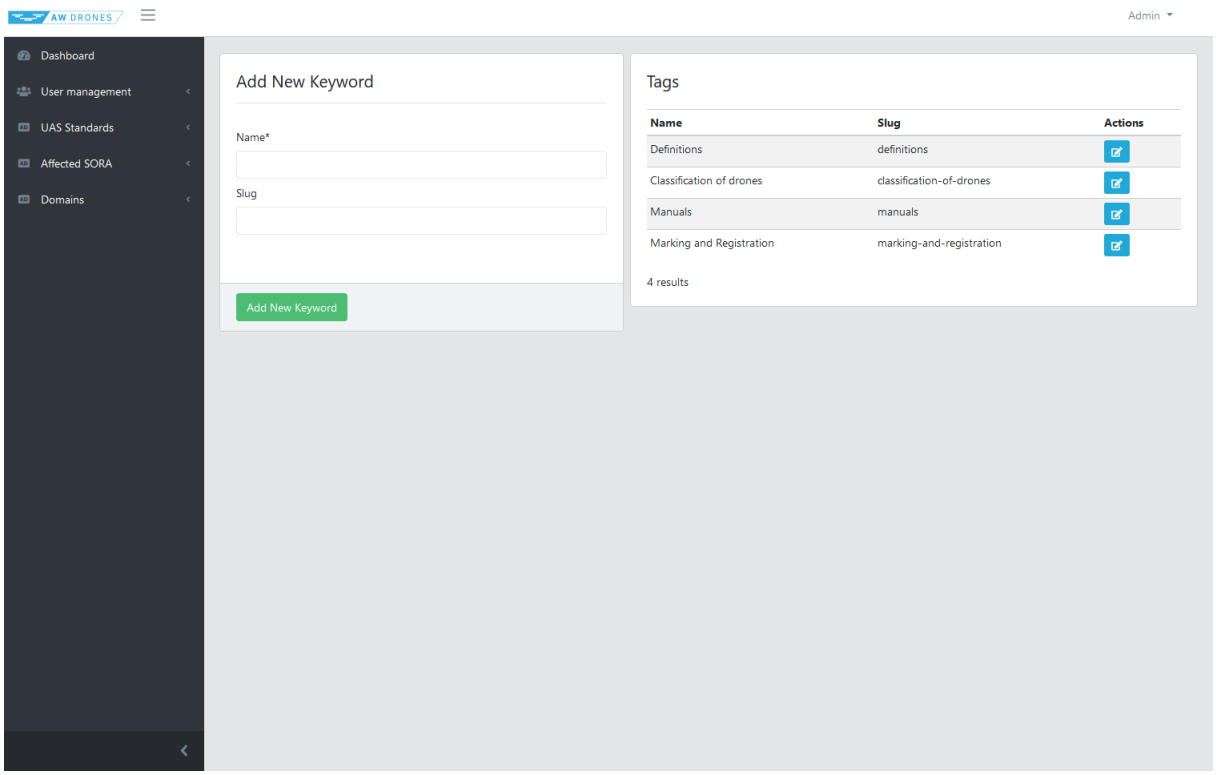

Figure 12. Backend keywords management

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Administrators can manage the standards of the repository:

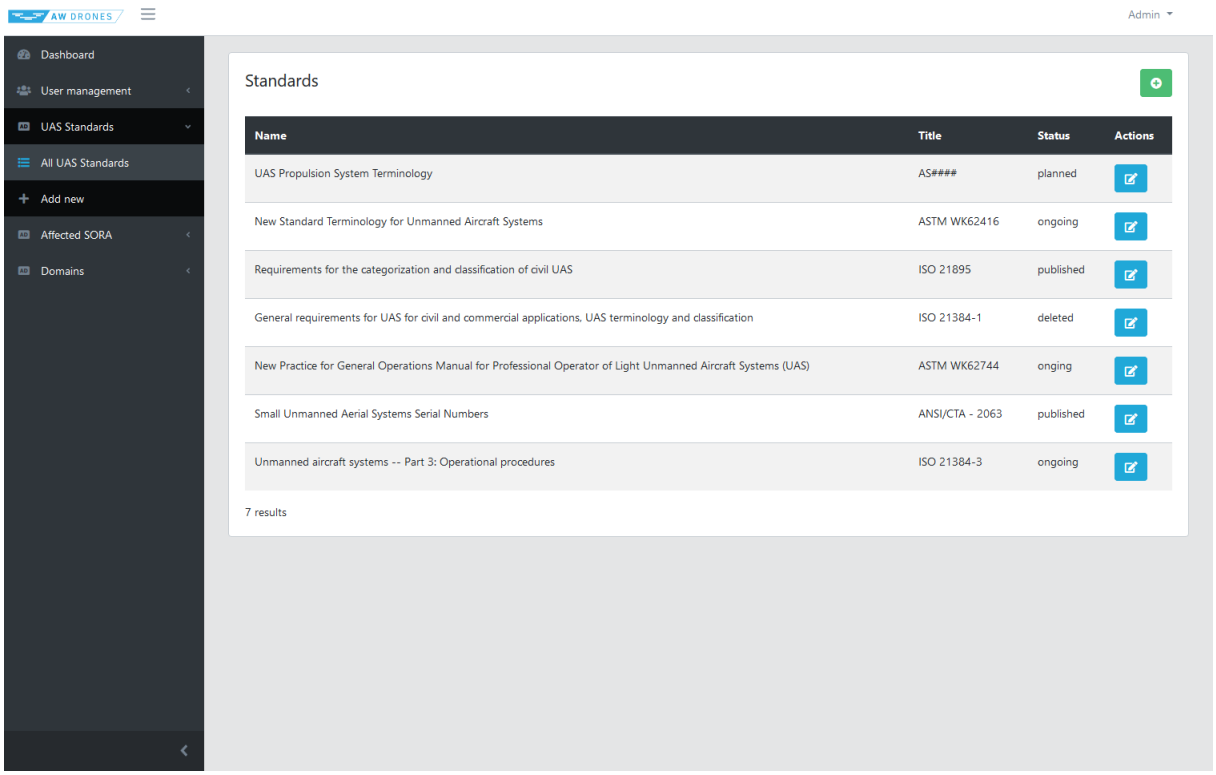

Figure 13. backend standards management

Administrators can add/edit new standards:

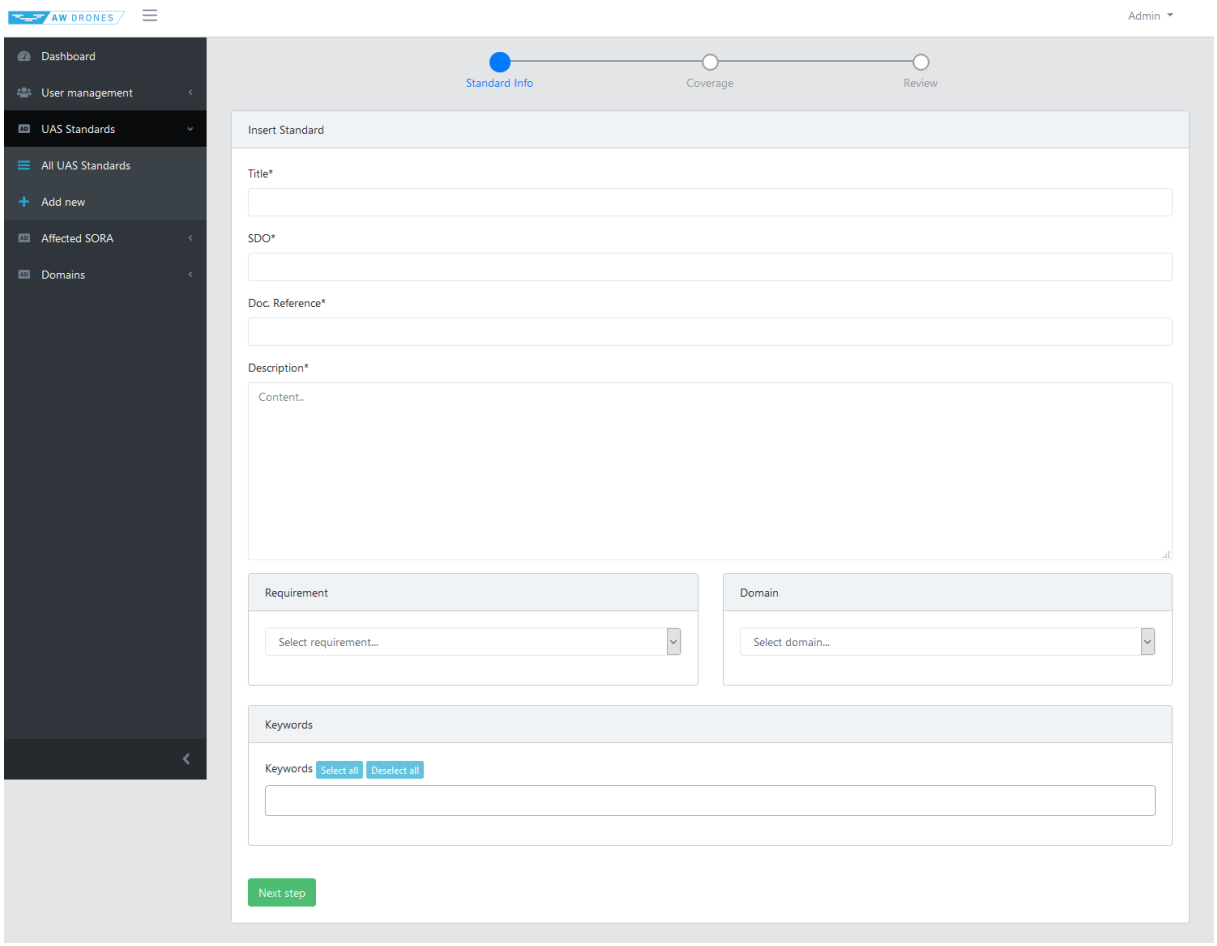

Figure 14. Backend standards add/edit form

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Administrators can manage the requirements:

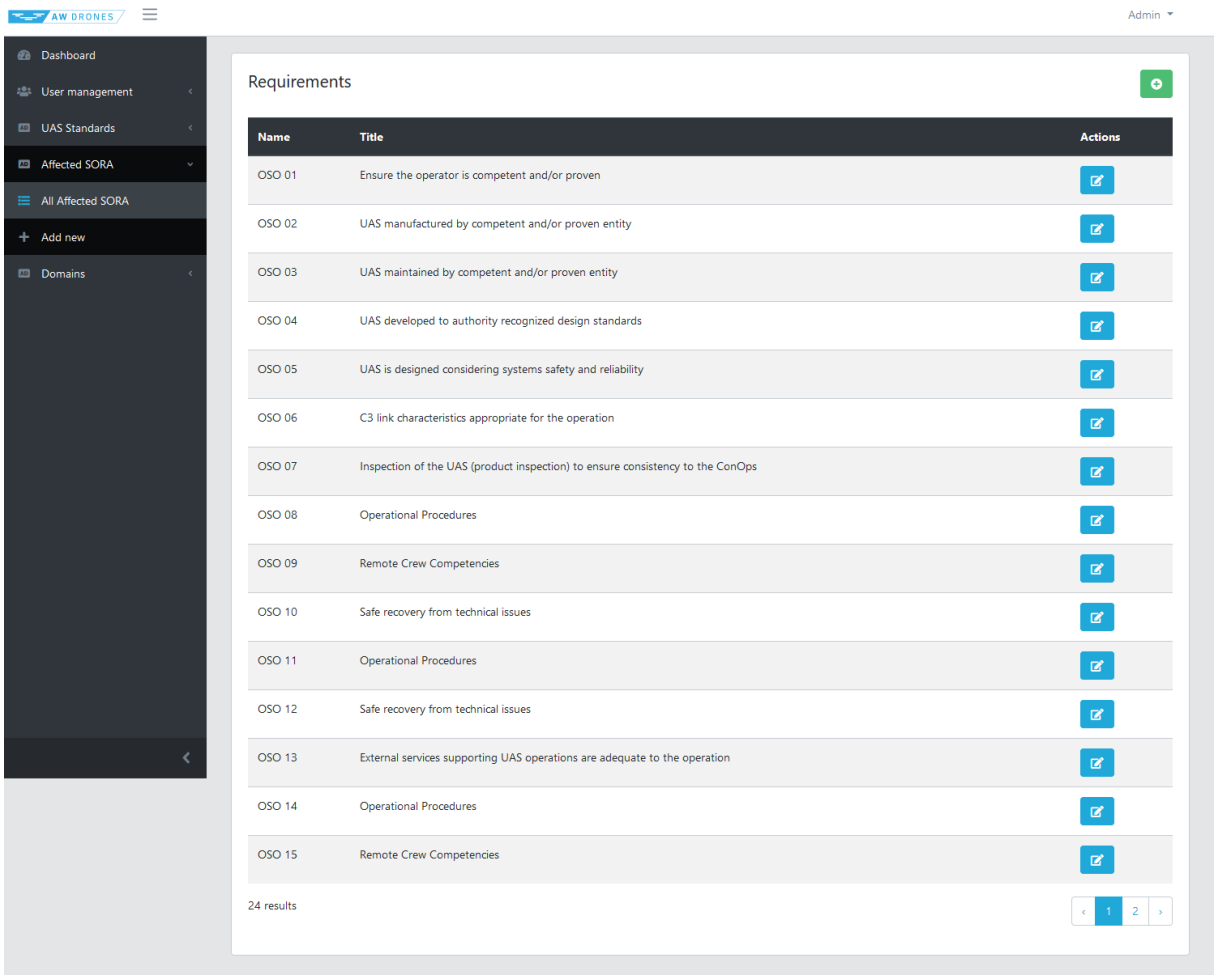

Figure 15. Backend requirements management

Administrators can add/edit the requirements:

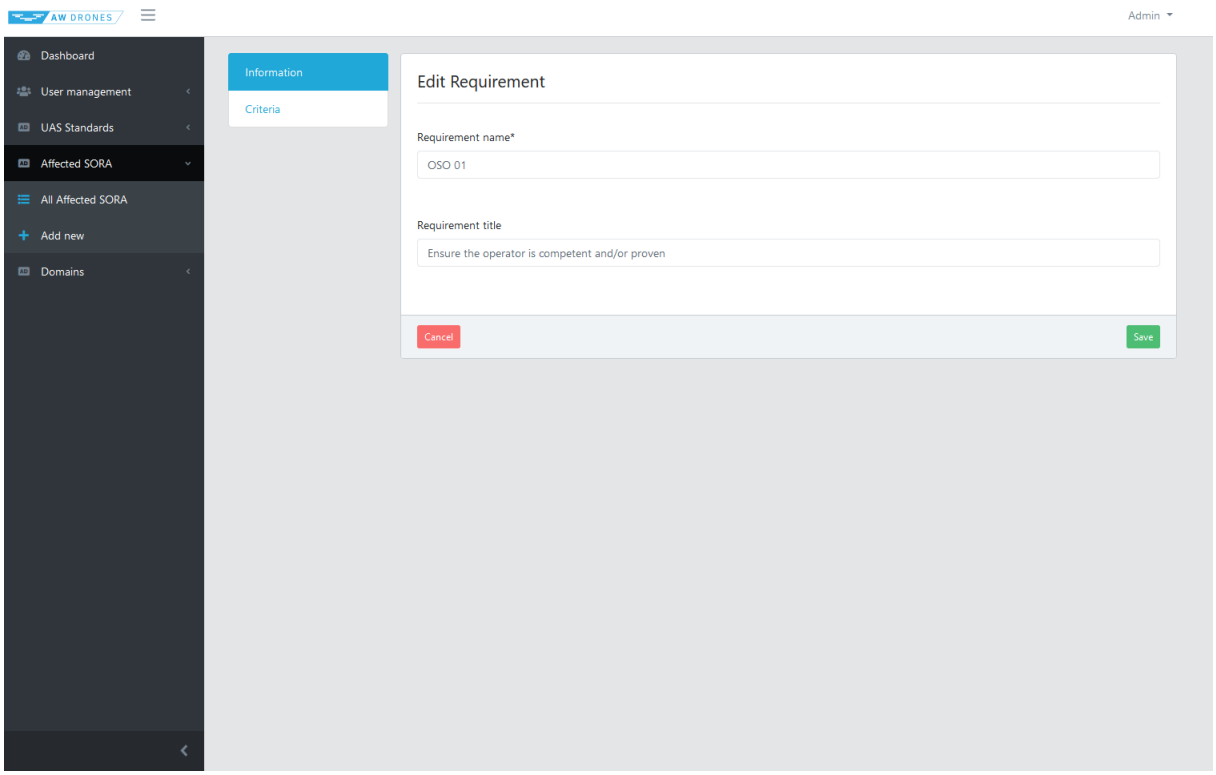

Figure 16. Backend add/edit requirement form – Information tab

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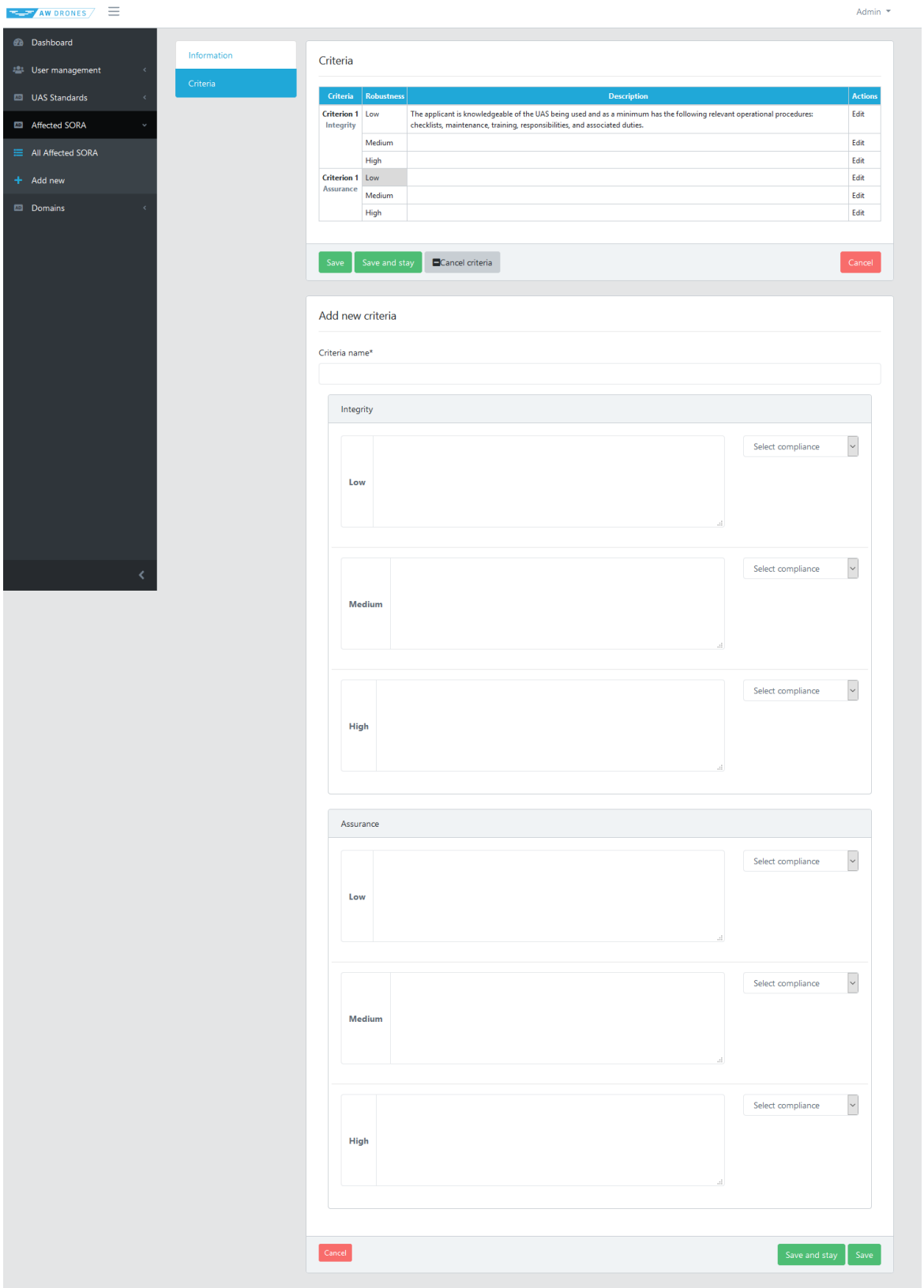

Figure 17. Backend add/edit requirement form - Criteria tab

3 Conclusions and next steps

The AW-Drones open repository is an online platform where users are able to easily identify relevant information from the AW-Drones database of standards. The development of the platform focuses on the following key principles: a) focus on the user, b) focus on quality, c) keep UI simple, d) think long term (exploitation prospects of AW-Drones). To accomplish this, the platform is being developed in several iterations:

a) A very first draft of the AW-Drones open repository was presented during the 1st AW-Drones workshop in Brussels on the 19th of September 2019.
b) A preliminary version of the AW-Drones open repository was released end of March 2020 for comments. Comments received by the AW-Drones consortium (during the WP leaders meeting) and selected external experts (during the EUSCG plenary).
c) The first release of the AW-Drones open repository on M18 of the project (June 2020), where "D6.2 First yearly release of AW-Drones repository" is submitted.
d) Comments will be received from EASA and INEA.
e) The platform will be released to the public and dissemination will focus on on receiving feedback from users (through various means) and on disseminating and exploiting the platform to a wide audience
f) The final version of the platform will be ready at the end of the project on M36. A sustainability plan will be developed to ensure that the platform will be active even after the end of the project.

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