



Risk based oversight of the unmanned aviation sector

Picture



Background

New European drone regulations have laid the foundation for safe drone operations in the *Open* and *Specific* category. The regulatory framework is operation-centric and risk based, with Safety Management Systems (SMS) in accordance with ICAO Annex 19 expected to be required for the *Certified* category only. This means that oversight of organizations and remote pilots in the other categories of unmanned aviation must be dealt with in a different way. To that end, new methods are needed to gain insight in the safety performance of the unmanned aviation sector and to conduct risk based oversight of unmanned aircraft operators and U-Space Service Providers. This helps to ensure the safety of other (manned) aircraft in the air and third parties on the ground (external safety).

Goals

The objective of the project for the Dutch Ministry of Infrastructure and Water Management (IenW) is to develop new methods for risk-based oversight of the unmanned aviation sector:

- Develop a method for risk based oversight of European UAS operators based on their complexity and maturity, in order to determine the rigor and the type of surveillance that is suitable;
- Develop a method for risk based oversight of European U-Space service providers, as required by the new EU regulation 2021/664 on a regulatory framework for the U-Space.

Risk based oversight prototype tools are developed to support competent authorities with collection, storage, processing and analysis of the necessary data and information from regulated organizations.

Utilisation

The methods and prototype tools developed can be used by safety inspectors of the authorities to design and implement oversight activities for regulated organizations in unmanned aviation.

The proposed approaches to risk based oversight can be used to effectively oversee operational risks of UAS operations and enhance the maturity of the regulated organizations in unmanned aviation.