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Swiss Remote Identification

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Swiss Remote Identification

SUSI members, under the coordination of the Swiss Federal Office of Civil Aviation (FOCA), have implemented a voluntary Network Remote Identification (NET-RID) service that enables information sharing about drone operations via the internet. The NET-RID service complies with the ASTM F3411 standard, which ensures that only necessary information is shared. For example, public safety, law enforcement officials and the general public can see drone operators' registration numbers and information related to the flight. Operators' details are only shared by FOCA with authorized entities upon request. This protects operator privacy while also reassuring the general public that nearby Unmanned Aircraft Systems (UAS) operations are safe and compliant.

1. Key Information
a. What?

NET-RID, which enables information sharing about drone operations via the internet, is one of the U-space (otherwise known as UAS Traffic Management or UTM) services listed in the [U-space regulation (EU) 2021/664](#). The Regulation aims to create and harmonise the necessary conditions for manned and unmanned aircraft to operate safely in low-altitude airspace, prevent collisions between aircraft, and mitigate air and ground risks.

The NET-RID service being developed and implemented in Switzerland is based on the ASTM F3411 standard.

b. Who?

Nine SUSI members ([AirMap](#), [ANRA Technologies](#), [Avision](#), [Involi](#), [OneSky](#), [Orbitalize](#), [Skyy Network,](#) [skyguide](#) and [Wing](#)) under the coordination of FOCA.

c. How?

Based on ASTM F3411, FOCA has defined four roles related to the provision of a Network Remote ID service:

1. *Discovery and Synchronization Service (DSS) provider*: an entity running an instance of the distributed system required to connect multiple U-space Service Providers (USSP) operating in the same area.
2. *NET-RID Service Provider*: an entity receiving data from the UAS and sharing it in the network, for instance by integrating APIs (interfaces) into drone operators' ground control stations and sharing data over a mobile connection.

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3. *NET-RID Display Provider*: an entity that aggregates data from Net-RID Service Providers.
4. *Display Application Provider*: an entity providing an interface to authorised users (police, citizens, etc.), typically an app or webpage showing drones on a map.

Participants can fulfil one or more of the roles above. The role of "Display Application Provider" is not subject to any qualification by FOCA. It is FOCA's role to ensure that data flowing into the system is of high quality. It is up to the authorised users to select the display application they intend to use.

d. Why?

After demonstrating the ASTM standard in September 2019, SUSI members decided to move to the implementation phase in anticipation of the legal requirement for operators to use the remote identification service. The U-space regulation includes a mandatory NET-RID service. This implementation phase will serve to fill the gaps in the standard (legal agreements and test plans had to be developed), to gain operational experience in the implementation of the standard, and to develop a blueprint for approval of future U-space services. Above all, it will test the impact of the service on public acceptance of drones and operators' voluntary compliance. NET-RID offers another level of security, transparency and reassurance that drone operators, recreational and commercial, are flying in a manner that is compliant with regulations.

2. Abbreviations

ASTM International: American Society for Testing and Materials International, with an office in Brussels, is a not-for-profit organization that provides a forum for the development and publication of international voluntary consensus standards for materials, products, systems and services

DSS: Discovery and synchronization service enables U-space Service Providers (USSP) to exchange safety-critical information while protecting operator privacy.

EASA: European Union Aviation Safety Agency

UAS: Unmanned Aircraft Systems

U-space: UAS Traffic Management (also referred to as UTM) is an air traffic management ecosystem under development for autonomously controlled operations of unmanned aerial systems (UAS)

USSP: Means any legal or natural person providing or intending to provide U-space services (also known as UAS Service Suppliers or USS)

SUSI: Swiss U-space Implementation is a Public-Private Partnership launched in December 2018 with the overarching goal to integrate drones into the airspace in a safe and secure way, enforcing collaboration, pushing progress, quality and innovation.