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UAS traffic management (UTM) —

Part 8: Remote identification

Gestion du trafic des aéronefs sans pilote (UTM) —
Partie 8: Identification à distance

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Foreword

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This document was prepared by Technical Committee ISO/TC 20, *Aircraft and space vehicles*, Subcommittee SC 16, *Unmanned aircraft systems*.

A list of all parts in the ISO 23629 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Introduction

Remote identification is the ability of a UAS in flight to provide identification information that can be received by other parties. The objective of this document is to increase UAS operator accountability by removing anonymity. While network remote identification is important for UTM and safety, direct remote identification improves operator accountability by removing anonymity, and provides local situational awareness including supporting potential law enforcement actions.

Some organizations have already created specific performance requirements of remote identification functions, for example, existing documents and ongoing discussion in ASTM International, ASD-STAN and EUROCAE (Figure 1). ISO/TC20/SC16 recognise that these models share a lot of common aspects and concepts. Annex A shows the gap between this document and standards from other organizations.

NOTE See ASTM F3411-22 and prEN 4709-002.

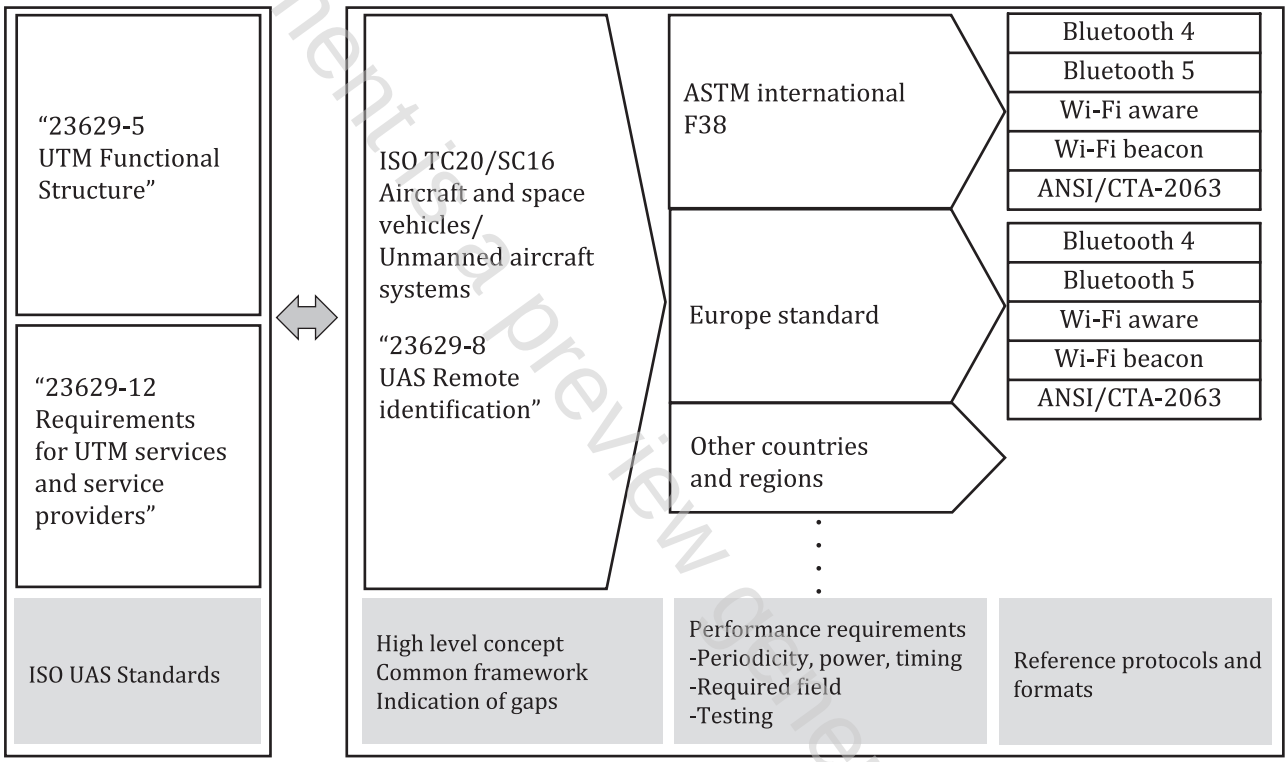

Figure 1 — Document structure of remote identification

The document is applicable to UAS that operate at low-altitude over diverse environments, including but not limited to, rural, urban, networked, network degraded, and network denied environments, regardless of airspace class.

This document does not to purport to address UAS operating with approval to use ADS-B (automatic dependent surveillance – broadcast) or secondary surveillance radar transponders nor does it purport to solve ID needs of UAS for all operations.

UAS traffic management (UTM) —

Part 8:
Remote identification

1 Scope

This document defines the generic concept and common framework of unmanned aircraft system (UAS) remote identification, which is mainly used to electronically identify an in-flight unmanned aircraft (UA). This document sets the minimum performance standards for direct remote identification.

This document does not cover requirements for modules installed in UA or requirements for network remote identification.

This document does not cover the identity of other information technology (IT) entities, such as the station of the remote pilot, the workstation of the fleet manager or any other connected entity.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 21384-4, *Unmanned aircraft systems — Part 4: Vocabulary*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 21384-4 and the following apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at https://www.electropedia.org/

3.1
ADS-B
automatic dependent surveillance – broadcast
means by which aircraft, aerodrome vehicles and other objects can automatically transmit and/or receive data such as identification, position and additional data, as appropriate, in a broadcast mode via a data link

[SOURCE: ICAO Doc 4444 PANS-ATM]

3.2
altitude
vertical distance of a level, a point or an object considered as a point, measured from a specified datum

[SOURCE: ASTM F3411-22]