TECHNICAL REPORT

ISO/TR 23629-1

First edition
2020-04

UAS traffic management (UTM) —

Part 1: Survey results on UTM

Reference number
ISO/TR 23629-1:2020(E)

© ISO 2020



COPYRIGHT PROTECTED DOCUMENT

© ISO 2020

All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Fax: +41 22 749 09 47
Email: copyright@iso.org
Website: www.iso.org

Published in Switzerland

Contents

Page

Foreword ..... **iv**
1 Scope **1**
2 Normative references **1**
3 Terms and definitions **1**
4 UTM survey **1**
4.1 General 1
4.2 UTM survey items 2
4.2.1 UTM survey part 1 2
4.2.2 UTM survey part 2 3
4.3 UTM survey results 3
4.3.1 UTM survey part 1 3
4.3.2 UTM survey part 2 6
4.4 Conclusion 14
Bibliography **15**

© ISO 2020 – All rights reserved

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see www.iso.org/iso/foreword.html.

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

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.

© ISO 2020 – All rights reserved

UAS traffic management (UTM) —

Part 1:
Survey results on UTM

1 Scope

This document provides results of a survey on UTM which indicates aggregated data from survey respondents. It does not cover detailed analysis of regions and organizations.

UTM is expected to reveal hundreds of commercial applications already in place, as well as social systems as their background conditions. The results can be used to analyze benefits and gaps for possible future standardization topics in consultation with authorities such as ICAO.

2 Normative references

There are no normative references in this document.

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

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

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

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

3.1
detect and avoid
DAA
capability to see, sense or detect conflicting traffic or other hazards and take the appropriate action to comply with the applicable rules of flight

Note 1 to entry: The definition is adapted from Reference [2].

3.2
unmanned aircraft system
UAS
aircraft and its associated elements which are operated remotely or autonomously

[SOURCE: ISO 21384-4:—, 3.79]

4 UTM survey

4.1 General

This survey is composed of part 1 and part 2. The survey period is March 3, 2019 to March 22, 2019. ISO/TC 20/SC 16 conducted a survey to gather information about UAS traffic management around the world. Part 1 is a survey of selection type. Part 2 is a follow-up survey of part 1 for the respondents to provide free responses. During the survey period, 107 people responded to part 1, 16 people responded to part 2. In part 1 and part 2, it's not required to provide responses to all items.

© ISO 2020 – All rights reserved