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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).

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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.

Introduction

This document outlines requirements for unmanned aircraft (UA) operational procedures which, when applied together with any other current and future standard on unmanned aircraft systems (UAS) form a robust UA safety and quality standard. This document applies to all commercial UAS regardless of size, categorization, application or location and represents the international best practice for the safe operation of all commercial UAS. This document is structured in a way to provide a logical pathway from core principles to specific requirements, and the detail has been espoused in [Annex A](#) for reference.

Unmanned aircraft systems —

Part 3: Operational procedures

1 Scope

This document specifies the requirements for safe commercial UAS operations.

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

crew resource management

CRM

utilisation of all resources available to the crew to manage human error

3.2

remote pilot in command

RPIC

pilot designated by the operator as being in command and charged with the safe conduct of a flight

3.3

safety management system

SMS

systematic approach to managing safety, including the necessary organisational structures, accountabilities, policies and procedures

[SOURCE: ICAO Doc. 9859]

3.4

unmanned aircraft accident

occurrence associated with the operation of an unmanned aircraft which takes place between the time the aircraft is ready to move with the purpose of flight until it comes to rest at the end of the flight and the primary propulsion system is shut down, in which:

- a) a person is fatally or seriously injured as a result of direct contact with any part or exposure to any emission of the UA or other component of the UAS, including parts which have become detached from the aircraft, or
- b) the aircraft sustains damage or structural failure which prevents safe operation