

IEEE Standard for Drone Applications Framework

IEEE Communications Society

Developed by the
Access and Core Networks Standards Committee

IEEE Std 1936.1™-2021

IEEE Standard for Drone Applications Framework

Developed by the

Access and Core Networks Standards Committee
of the
IEEE Communications Society

Approved 9 November 2021

IEEE SA Standards Board

Abstract: A framework for support of drone applications is established in this standard. Typical drone application classes, application scenarios, and required application execution environments are specified. The general facility requirements of drone applications are listed, including flight platform, flight control system, ground control station, payload, control link and data link, takeoff and landing system, etc. The drone safety and management requirements include airworthiness, airspace and air traffic requirements, qualification of operators, qualification of personnel, insurance, confidentiality, and others. The general operation process is detailed. The operation results stipulate the operation record and operation report, including data classification, data collection and processing, data record and analysis, and data reference format.

Keywords: airspace, airworthiness, confidentiality, control link and data link, data reference format, drone, drone application, drone application services, drone observer, drone pilot, emergency response procedure, flight control system, flight platform, goods loading, ground control station, IEEE 1936.1™, information collection, insurance, operator, qualification of operator, qualification of personnel, releasing, takeoff and landing system, transmission and processing, transportation and processing, unmanned aerial system (UAS), unmanned aerial vehicle (UAV)

The Institute of Electrical and Electronics Engineers, Inc.
3 Park Avenue, New York, NY 10016-5997, USA

Copyright © 2021 by The Institute of Electrical and Electronics Engineers, Inc.
All rights reserved. Published 17 December 2021. Printed in the United States of America.

IEEE is a registered trademark in the U.S. Patent & Trademark Office, owned by The Institute of Electrical and Electronics Engineers, Incorporated.

PDF: ISBN 978-1-5044-8136-6 STD25070
Print: ISBN 978-1-5044-8137-3 STDPD25070

IEEE prohibits discrimination, harassment, and bullying.

For more information, visit <https://www.ieee.org/about/corporate/governance/p9-26.html>.

No part of this publication may be reproduced in any form, in an electronic retrieval system or otherwise, without the prior written permission of the publisher.