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**Framework and requirements for civilian
unmanned aerial vehicle flight control using
artificial intelligence**

Recommendation ITU-T F.749.13

ITU-T F-SERIES RECOMMENDATIONS
NON-TELEPHONE TELECOMMUNICATION SERVICES

TELEGRAPH SERVICE	
Operating methods for the international public telegram service	F.1–F.19
The gentex network	F.20–F.29
Message switching	F.30–F.39
The international telemessage service	F.40–F.58
The international telex service	F.59–F.89
Statistics and publications on international telegraph services	F.90–F.99
Scheduled and leased communication services	F.100–F.104
Phototelegraph service	F.105–F.109
MOBILE SERVICE	
Mobile services and multideestination satellite services	F.110–F.159
TELEMATIC SERVICES	
Public facsimile service	F.160–F.199
Teletex service	F.200–F.299
Videotex service	F.300–F.349
General provisions for telematic services	F.350–F.399
MESSAGE HANDLING SERVICES	F.400–F.499
DIRECTORY SERVICES	F.500–F.549
DOCUMENT COMMUNICATION	
Document communication	F.550–F.579
Programming communication interfaces	F.580–F.599
DATA TRANSMISSION SERVICES	F.600–F.699
MULTIMEDIA SERVICES	F.700–F.799
ISDN SERVICES	F.800–F.849
UNIVERSAL PERSONAL TELECOMMUNICATION	F.850–F.899
ACCESSIBILITY AND HUMAN FACTORS	F.900–F.999

For further details, please refer to the list of ITU-T Recommendations.

Recommendation ITU-T F.749.13

Framework and requirements for civilian unmanned aerial vehicle flight control using artificial intelligence

Summary

Recommendation ITU-T F.749.13 provides a framework of civilian unmanned aerial vehicle flight control using artificial intelligence, including the flight navigation control of a civilian unmanned aerial vehicle (CUAV) itself and the specific flight control based on the vertical industry application requirements. Although CUAVs have been widely used in industry and consumption areas, there are also problems in the development of CUAVs. In addition to the policy and legal supervision, the other problem is how CUAVs avoid obstacles during the flight, and how the CUAVs applied in the vertical industry can automatically navigate, track or fly along a specific area according to the mission requirements, to achieve partial or complete autonomous flight and control.

This Recommendation also provides a flight control framework and functional requirements for each specific implementation. This way the product and system integrators can design and produce specific products and systems according to this framework.

History

Edition	Recommendation	Approval	Study Group	Unique ID*
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Artificial intelligence, civilian unmanned aerial vehicle, flight control.

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The World Telecommunication Standardization Assembly (WTSA), which meets every four years, establishes the topics for study by the ITU-T study groups which, in turn, produce Recommendations on these topics.

The approval of ITU-T Recommendations is covered by the procedure laid down in WTSA Resolution 1.

In some areas of information technology which fall within ITU-T's purview, the necessary standards are prepared on a collaborative basis with ISO and IEC.

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Table of Contents

		Page
1	Scope	1
2	References.....	1
3	Definitions	1
	3.1 Terms defined elsewhere	1
	3.2 Terms defined in this Recommendation.....	2
4	Abbreviations and acronyms	2
5	Conventions	2
6	Introduction	2
7	Framework of CUAV flight control using AI	3
	7.1 Flight and application data provision	4
	7.2 Platform for training model and inference of AI capability	4
	7.3 Integration of flight control system	5
8	Functional requirements for CUAV flight control using AI	5
	8.1 Requirements for flight and application data provision	5
	8.2 Requirements for platform for training, modelling and inference of AI capabilities.....	6
	8.3 Requirements for integration of flight control system	8
	Appendix I – Use case of civilian unmanned aerial vehicle flight control using artificial intelligence.....	10
	Bibliography.....	12

