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Interested committees:

Title: BS ISO/IEC 30177 Internet of Things (IoT) - Underwater network management system (U-NMS) interworking

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Introduction

This draft standard is based on national and international discussions. Your comments on this draft are invited and will assist in the preparation of the consequent standard.

For international standards, comments will be reviewed by the relevant UK national committee before sending the consensus UK vote and comments to the international committee, which will then decide appropriate action. If the international standard is approved, it is usual for the text to be published as a British Standard.

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Template for comments and secretariat observations

Date: xx/xx/20xx	Document: ISO/DIS xxxx
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1	2	(3)	4	5	(6)	7
MB	Clause No./ Subclause No./Annex (e.g. 3.1)	Paragraph/Figure/ Table/Note	Type of comment	Commend (justification for change) by the MB	Proposed change by the MB	Secretariat observations on each comment submitted
	3.1	Definition 1	ed	Definition is ambiguous and needs clarifying.	Amend to read '...so that the mains connector to which no connection...'	
	6.4	Paragraph 2	te	The use of the UV photometer as an alternative cannot be supported as serious problems have been encountered in its use in the UK.	Delete reference to UV photometer.	



JTC1-SC41/411/CDV

COMMITTEE DRAFT FOR VOTE (CDV)

PROJECT NUMBER: ISO/IEC 30177 ED1	
DATE OF CIRCULATION: 2024-04-12	CLOSING DATE FOR VOTING: 2024-07-05
SUPERSEDES DOCUMENTS: JTC1-SC41/378/CD, JTC1-SC41/399A/CC	

IEC ISO/IEC JTC 1/SC 41 : INTERNET OF THINGS AND DIGITAL TWIN	
SECRETARIAT: Korea, Republic of	SECRETARY: Ms Jooran Lee
OF INTEREST TO THE FOLLOWING COMMITTEES:	PROPOSED HORIZONTAL STANDARD: ☐ Other TC/SCs are requested to indicate their interest, if any, in this CDV to the secretary.
FUNCTIONS CONCERNED: ☐ EMC ☐ ENVIRONMENT ☐ QUALITY ASSURANCE ☐ SAFETY	
☐ SUBMITTED FOR CENELEC PARALLEL VOTING	☒ NOT SUBMITTED FOR CENELEC PARALLEL VOTING

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TITLE: Internet of Things (IoT) - Underwater network management system (U-NMS) interworking

PROPOSED STABILITY DATE: 2030

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INTERNET OF THINGS (IOT) –

Underwater network management system (U-NMS) interworking

FOREWORD

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International Standard IEC **XXXXX** has been prepared by subcommittee 41: Internet of Things and related technologies, of ISO/IEC joint technical committee 1: Information technology.

The text of this International Standard is based on the following documents:

FDIS	Report on voting
XX/XX/FDIS	XX/XX/RVD

Full information on the voting for the approval of this International Standard can be found in the report on voting indicated in the above table.

This document has been drafted in accordance with the ISO/IEC Directives, Part 2.

A bilingual version of this publication may be issued at a later date.

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INTRODUCTION

Terrestrial communication uses radio frequency (RF) waves in wireless networks. It is essential to monitor the oceans and rivers for various applications. RF communication has severe limitations for underwater communications because of the very nature of the radio waves. Acoustic waves may give better performance for wireless communication in the underwater environment.

Modern technologies introduce new methods for underwater environmental monitoring with wireless communication. The underwater acoustic sensor networks (UWASNs) is intended to play a safe and essential role in data acquisition's reliability and robustness. Oceanography, Pollution monitoring, exploration of natural resources, and underwater pipeline monitoring are widely used applications of UWASN.

Among the available UWASN standards, ISO/IEC 30142 provides an overview and requirements of the underwater network management system (U-NMS). U-NMS belongs to UWA-Application layer as per the ISO/IEC 30142. Based on ISO/IEC 30142, this document explains the interworking between the various components of U-NMS.