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Responsible committee: IOT/1 Internet of Things and Digital Twin

Interested committees:

Title: BS ISO/IEC 30187 Internet of Things (IoT) - Evaluation indicator for IoT systems

Please notify the secretary if you are aware of any keywords that might assist in classifying or identifying the standard or if the content of this standard

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- ii) affects other national standard(s)
- iii) requires additional national guidance or information

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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.

For national standards, comments will be reviewed by the relevant UK national committee and the resulting standards published as a British Standard.

UK Vote

Please indicate whether you consider the UK should submit a negative (with supporting technical reasons) or positive vote on this draft. Please indicate if you are aware of any reason why this draft standard should not be published as a British Standard.

Submission of Comments

- **Annotated drafts are not acceptable and will be rejected.**
- All comments should be submitted online at <https://standardsdevelopment.bsigroup.com/>. You will need to register in order to comment.

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-SC41/403/CD

COMMITTEE DRAFT (CD)

PROJECT NUMBER:

ISO/IEC 30187 ED1

DATE OF CIRCULATION:

2024-01-12

CLOSING DATE FOR COMMENTS:

2024-03-08

SUPERSEDES DOCUMENTS:

JTC1-SC41/359/CD, JTC1-SC41/374A/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:

SyC Smart Cities

PROPOSED HORIZONTAL STANDARD:



Other TC/SCs are requested to indicate their interest, if any, in this CD to the secretary.

FUNCTIONS CONCERNED:

☐ EMC

☐ ENVIRONMENT

☐ QUALITY ASSURANCE

☐ SAFETY

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Recipients of this document are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

Recipients of this document are invited to submit, with their comments, notification of any local regulations or technical reasons that may exist and should be considered should this proposal proceed, recognizing that failure to address such requirements could result in the need for new or existing "In Some Countries" clauses. (SEE [AC/22/2007](#) OR [NEW GUIDANCE DOC](#)).

TITLE:

Internet of Things (IoT) - Evaluation indicator for IoT systems

NOTE FROM TC/SC OFFICERS:

As per the SC 41/WG 5 recommendation (2023-10-23), this document is circulated for the 2nd round of CD comments.



Documents

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

INTERNET OF THINGS (IOT) –

EVALUATION INDICATOR FOR IOT SYSTEMS

FOREWORD

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ISO/IEC 30187, which has been prepared by subcommittee 41: Internet of Things and Digital Twin, of ISO/IEC Joint Technical Committee 1: Information technology. The text of this International Standard is based on the following documents:

Draft	Report on voting
JTC1-SC41/XX/FDIS	JTC1-SC41/XX/RVD

Full information on the voting for its approval can be found in the report on voting indicated in the above table.

The language used for the development of this International Standard is **English**.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/standardsdev/publications.

83 The committee has decided that the contents of this document will remain unchanged until the
84 stability date indicated on the IEC website under webstore.iec.ch in the data related to the
85 specific document. At this date, the document will be

- 86 • reconfirmed,
- 87 • withdrawn,
- 88 • replaced by a revised edition, or
- 89 • amended.

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INTRODUCTION

System evaluation is used to review and select the newly developed or rebuilt system with the method of systematic analysis from the aspects of technology, economy, society, ecology and so on. The system evaluation is carried out according to predetermined system objectives. The purpose is to evaluate the optimal suite to the application or use case.

System evaluation can be divided into seven steps:

1. defining the IoT system of interest and the associated environment,
2. determining the evaluation items and the resulting list of indicators,
3. determining the observable items and collect relevant information,
4. determining the methods and criteria for evaluation,
5. feasibility check,
6. technical and economic evaluation, and
7. comprehensive evaluation.

Evaluation indicator scheme conclusion is the basis of system evaluation process, which can provide evaluation criterion for the objective IoT systems.

IoT systems are being widely used in energy, agriculture, manufacturing, finance, environmental protection and other industries. To identify the pros and cons among the IoT systems, it is necessary to develop a standard to help users to select appropriate indicators when evaluating the performance of targeted systems.

The set of evaluation indicators described in this document can be considered as a profile. The specification of other profiles depends on the system that is evaluated. For instance if the IoT system includes AI or digital twin capabilities, additional indicators could be added. Likewise if the IoT system corresponds to a vertical domain (e.g. health, manufacturing, energy) additional indicators could be added.