



DPC: 21/30439167 DC

BSI Group Headquarters

389 Chiswick High Road London W4 4AL

Tel: +44 (0)20 8996 9000

Fax: +44 (0)20 8996 7400

www.bsigroup.com

Date: 28 May 2021

Origin: International

Latest date for receipt of comments: 21 July 2021

Project No. 2018/03522

Responsible committee: SDS/2 Smart and sustainable cities and communities.Sustainable Communities

Interested committees:

Title: Draft BS EN IEC 60050-831 International Electrotechnical Vocabulary (IEV). Part 831: Smart city 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

- i) has any issues related to 3rd party IPR, patent or copyright
- ii) affects other national standard(s)
- iii) requires additional national guidance or information

WARNING: THIS IS A DRAFT AND MUST NOT BE REGARDED OR USED AS A BRITISH STANDARD. THIS DRAFT IS NOT CURRENT BEYOND 21 July 2021This draft is issued to allow comments from interested parties; all comments will be given consideration prior to publication. No acknowledgement will normally be sent. **See overleaf for information on the submission of comments.**

No copying is allowed, in any form, without prior written permission from BSI except as permitted under the Copyright, Designs and Patent Act 1988 or for circulation within a nominating organization for briefing purposes. Electronic circulation is limited to dissemination by e-mail within such an organization by committee members.

Further copies of this draft may be purchased from BSI Shop <http://shop.bsigroup.com> or from BSI Customer Services, Tel: +44(0) 20 8996 9001 or email cservices@bsigroup.com. British, International and foreign standards are also available from BSI Customer Services.Information on the co-operating organizations represented on the committees referenced above may be obtained from <https://standardsdevelopment.bsigroup.com/>.

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
------------------	------------------------

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.	

PROJECT NUMBER:

IEC 60050-831 ED1

DATE OF CIRCULATION:

2021-05-28

CLOSING DATE FOR COMMENTS:

2021-08-20

SUPERSEDES DOCUMENTS:

SyCSmartCities/164/CD, SyCSmartCities/187/CC

IEC SYC SMART CITIES : ELECTROTECHNICAL ASPECTS OF SMART CITIES

SECRETARIAT:

IEC Central Office

SECRETARY:

Mr Gennaro Ruggiero

OF INTEREST TO THE FOLLOWING COMMITTEES:

TC 1

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

This document is still under study and subject to change. It should not be used for reference purposes.

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.

TITLE:

International Electrotechnical Vocabulary (IEV) – Part 831: Smart city systems

NOTE FROM TC/SC OFFICERS:

Version control

Version	Date	Tracking	Contributors
Version 1	20180116	NWIP (Germany meeting)	Xiaomi An Ma Wanzhong
Version 2	20180712	Adding more contents to the outline (Washington Meeting)	Xiaomi An Ma Wanzhong Shuyang Sun
Version 3	20190107	Modifications made according to WG1 report of India Meeting	Xiaomi An
Version 4	20190211	(1) Modifications made in consistency with IEC/ISO/ITU Smart Cities Coordination Task Group Draft White Paper: Suggested Priority Terms in Need of Common Definitions to Support Standards Activities for Smart Cities (2) Feedbacks from Alexandre Samarine	Xiaomi An Mulquin Michael
Version 5	20190304	(1) Checking latest definitions from SDOs and updating definitions in conformity with principles built up in IEC WD TS 63235 (2) Adding Annex A with a taxonomy of vocabularies in consistent with IEC WD TS 63235 (3) Modify format in a consistent way (online meeting February 28, 2019)	Xiaomi An Shuyang Sun
Version 6	20190617	(1) Check sources of terms, citation, mistakes, format of IEC60050-831. (2) Reviewed comments, if agreed without change then “accepted”; if with modification the “ accepted with modifications; if accepted the ideas but put in different ways, then “ accepted in principle”; if covered by other feedback then “superseded by”; if rejected then “not accepted”; if give comments but no proposed change, then “noticed”; If need to be discussed then “ to be discussed”;	Xiaomi An Jinghua Min Yongchao Gao Yu Dong

Version 7	20190629	Changes made according to recommendations made at e-meeting of WG1 held on June 28, 2019, see meeting notes of June 28, 2019. (1) As a rule, terms adding or deleting should be in consistent with principles built up in IEC TS 63235 EDI Systems Reference Deliverable(SRD)-Methodology for concepts and taxonomies building, thus “ cyberspace”, “data”, “capability”, “service” can be added into the vocabulary, since they are fundamental terms relevant to smart city systems. (2) Links with IEC/ISO/ITU-T white paper and IEC IEV definition can be maintained through note, from generic to specific (3) Delete * for those terms which are the same in IEC/ISO/ITU-T white paper according to recommendations given by Joanna (4) Modify the documents according to “Some high level editorial/terminological comment on CDV 60050-831 from Joanna Goodwin) (5) Delete Annex A, according to comments from Korea and agreement of e-meeting of June 28, 2019 (6) Check and update bibliography.	Xiaomi An Joanna Goodwin Yu Dong
Version 8	20190726	Modifications of contents according to the comments from German and WG1 at the Face to Face meeting held on July 22-23. Checking consistent uses of concepts.	Xiaomi An Xiaoshuang Jia Yu Dong Wanzhong Ma Jinghua Min Dapeng Zhang
Version 9	20191209	Modifications of contents according to the 2nd CD comments and discussions of WG1 at the Face to Face meeting and workshop held on Dec 10.	Xiaomi An Xiaoshuang Jia Wanzhong Ma Jinghua Min Dapeng Zhang

Version 10	20191217	Checking the modifications of contents according to the 2 nd CD comments and dispositions of WG1 at the face to face meeting and workshop held on Dec 10. Checking the comments from DE and the dispositions of WG1 at the face to face meeting and workshop held on Dec 10 as well as checking them against ISO/IEC Directives Supplement-Procedures specific to IEC: 2019, Annex SK. Rules for terminology work.	Xiaomi An Manikandan, K. Xiaoshuang Jia Shuyang Sun Wanzhong Ma Yu Dong Jinghua Min Dapeng Zhang
Version 11	20191219	Updating structure and CDV format according to comments from Joanna from TC1, checking against ISO/IEC Directives: 2019, Annex SK2.3."Content and structure of IEV" from Rules for terminology work, with reference to workshop on "Concept systems built on the smart city system" held on July 11 Washington D.C	Xiaomi An Joanna Goodwin Wei Wei
Version 12	20191220	Updating the contents according to comments from Luca chair of TC1 and Joanna of TC1. Change 'digital system' to 'informational system'. "concept: to 'concepts" in title of Section, change 'integrated system' to 'Fundamental concepts"	Luca Mari Joanna Goodwin Xiaomi An Jinghua Min Wei Wei Manikandan, K

Version 13	2020-03-03	Updated according to discussions and agreement achieved at the WG1 online meeting held on February 28. ● Adopted recommendations from Michal and Joanna, replace 'digital system' back instead of use 'information system' in all the texts after review of consensus achieved at two workshops held in 2018 and 2019. Recommendations from WG1 is to give a note to definition of 'smart city' on 'digital system' to explain its specific meaning in the context of smart city system which is different from public understanding in ordinary dictionary. ● Review definitions of 'data' provided by Dr. Jinghua Min and definitions from IEC and other sources and rewording of the definition in a more easier understanding and accurate way. ● Checking the consistency of meanings of smart city based on [SyCSmCWG1_20191210Guadalajara_RM] IEC SyC Smart Cities approves the following "smart city" definition agreed in the workshop held during the F2F meeting on 10 Dec 2019: "Smart City: city where improvements in quality of life, services, sustainability and resilience are accelerated by the effective integration of physical, digital and social systems and the transformative use of data and technology Note 1 to entry: This is a general definition of a smart city. The IEC looks at these aspects from an electrotechnical perspective."	Xiaomi An Manikandan, K Joanna Goodwin Mulquin Michae Jinghua Min Dapeng Zhang Yongchao Gao Xiaoshuang Jiao Wei Wei
Version 14		Add new definitions of 'digital system', 'physical system', 'social system' and 'digital twin' to the vocabulary based on decisions made at February 28 and March 17 online meetings of WG1. Add note 2 to entry to 'smart city' agreed at March 17 online meetings of WG1. Modify definition of 'data', adopt a most frequently used definition of ISO	Xiaomi An Mulquin Michae Jinghua Min Manikandan, K Joanna Goodwin Dapeng Zhang Wei Wei