SLOVENSKI STANDARD
SIST EN 50667:2017/oprA1:2021

01-julij-2021

Informacijska tehnologija - Avtomatizirani sistemi upravljanja infrastrukture (AIM) - Zahteve, izmenjava podatkov in uporaba - Dopolnilo A1

Information technology - Automated infrastructure management (AIM) systems - Requirements, data exchange and applications

Informationstechnik - Systeme für automatisiertes Infrastruktur-Management (AIM) - Anforderungen, Schnittstellen und Anwendungen

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Technologie de l'information - Systèmes de gestion d'infrastructure automatisée (AIM, Automated infrastructure management) - Exigences, échange de données et applications

Ta slovenski standard je istoveten z: **EN 50667:2016/prA1:2021**

ICS:

35.110	Omreževanje	Networking

SIST EN 50667:2017/oprA1:2021   **en,fr**

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

DRAFT
EN 50667:2016

prA1

April 2021

ICS 35.110; 35.240.99

English Version

Information technology - Automated infrastructure management (AIM) systems - Requirements, data exchange and applications

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This draft amendment prA1, if approved, will modify the European Standard EN 50667:2016; it is submitted to CENELEC members for enquiry.
Deadline for CENELEC: 2021-07-16.

It has been drawn up by CLC/TC 215.

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If this draft becomes an amendment, CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this amendment the status of a national standard without any alteration.
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This draft amendment was established by CENELEC in three official versions (English, French, German).
A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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

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CENELEC

European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

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Project: 72645

Ref. No. EN 50667:2016/prA1:2021 E

EN 50667:2016/prA1:2021 (E)

1 European foreword

This document (EN 50667:2016/prA1:2021) has been prepared by CLC/TC 215 "Electrotechnical aspects of telecommunication equipment", based upon the FDIS for Amendment 1 to ISO/IEC 18598:2016 "Information technology – Automated infrastructure management (AIM) systems – Requirements, data exchange and applications".

This document is circulated for CENELEC enquiry.

This amendment adds the following content to EN 50667:2016:

— updates to the data exchange model;

— an Annex E which addresses the optional application of AIM systems to cabling supporting remote powering in accordance with ISO/IEC/IEEE 8802-3 and IEEE 802.3bt-2018;

— an Annex F which addresses formatting of data from field test equipment.

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EN 50667:2016/prA1:2021 (E)

1 Modification to the Scope

12

13 *Add the following new paragraph after bullet d).*

14 For AIM systems providing support functionality for remote powering as an option, this document
15 addresses additional administration requirements and recommendations.

2 Modification to Clause 3, Terms, definitions and abbreviations

16

17 *In definition* 3.1.12, *replace* "EN 50174-1:2009, 3.1.8" *with* "EN 50174-1:2018, 3.1.11".

18 *In definition* 3.1.16, *replace* "connector" *with* "cord".

19 *Replace definition* 3.1.17 *with:*

20 **cord**
21 cable unit or element with a minimum of one termination

22 [SOURCE: EN 50173-1:2018, 3.1.33]

23 *Replace definition* 3.1.28 *with:*

24 **patch panel**
25 panel at a distributor presenting the interface(s) of cabling subsystems to facilitate administrative
26 moves, adds and changes using patch cords or jumpers

27 Note 1 to entry: The panel also enables interfaces to be connected to transmission equipment using interconnect
28 cords.

29 [SOURCE: EN 50173-1:2018, 3.1.66]

30 *Add the following new terms and definitions at the end of 3.1:*

31 **3.1.32**
32 **Power over Ethernet**
33 remote powering in accordance with ISO/IEC/IEEE 8802-3

34 **3.1.33**
35 **remote powering**
36 power delivery from power sources to terminal equipment or powered devices over
37 telecommunications cabling

38 EXAMPLE   Power over Ethernet in accordance with ISO/IEC/IEEE 8802-3

39 *Add the following new abbreviations to 3.2:*

PD	powered device
PSE	power supply equipment

3 Modification to Clause 4, Conformance

40

41 *Add the following new paragraph after bullet c):*

42 AIM systems that provide support functionality for remote powering to conform to this document shall
43 conform with the requirements of Annex E in addition to the conformance requirements above.

44 **4 Modification to Clause 6, AIM solutions: business benefits**

45 *Insert the following new subclause after 6.2.5:*

46 **6.2.6 Documentation, monitoring and management of remote powering**

47 AIM systems offering remote powering support provide users with ability to automatically track remote
48 powering usage in an installation to facilitate ease of assessing whether a given cable or cable bundle
49 is capable of supporting specific remote powering types.

50 Due to the dynamic nature of the remote powering status of cables within a cable bundle
51 (i.e. connections/disconnections from power supply equipment (PSE) ports and
52 connections/disconnections of powered devices (PDs)), the above functionality can be achieved
53 through a combination of

54 a) AIM system hardware capability for automatically detecting connection changes,

55 b) AIM system software ability to extract end device and remote powering information from PSE
56   using standardized networking protocols, e.g. SNMP, and

57 c) AIM system documentation of the electrical characteristics of the cables.

58 **5 Modification to 7.4.3, Element and attribute definitions**

59 *In Table 5, replace the description of key "O" with the following:*

60 This field and/or attributes to this field need not be present in all AIM systems, but system
61 interoperability shall be provided.

62 *In Table 9, replace the attributes for "Cord (O)" with the following:*

63 ID
64 Name (O)
65 Part Number (O)
66 Colour (O)
67 Vendor (O)
68 Length
69 Connector A
70 Connector B
71 Cable
72 Catalogue image (O)

73 *Replace the attributes for "Connector (O)" with the following:*

74 ID
75 Name (O)
76 Connector Type
77 Catalogue image (O)

78 **6 Modification to Annex B, Field descriptions**

79 *In Table B.1, replace the description of "Cable" with the following:*

80 A physical cable containing either fibre or copper elements

81 **7 Modification to Annex D, Optional lower level data exchange framework**

82 *In Table D.1, replace column* Description *with the following:*

83 Obtains port and cord information

84 *Replace column* Response *with the following:*

85 Port status,

86 Cord Data (optional)

8 Addition of annexes

Insert the following new annexes:

Annex E
(normative)

AIM systems providing remote powering support

E.1 General

Type 4 remote powering in accordance with IEEE 802.3bt:2018 using Ethernet transmission channels will support delivery of up to 90 W per cable.

Due to the dynamic nature of the connectivity changes in a premise, there are many factors which determine remote powering capacity of a cable bundle and cables within that bundle (i.e. conductor and cable diameter, ambient temperature, installation conditions). For example, the number of remote powering cables in a bundle can change with time and monitoring of the number of these cables per bundle can provide the required information.

Cable management software and spreadsheets are not equipped with a mechanism to detect these changes in real time. AIM solutions offering support for remote powering are capable of automatically tracking information relevant to ensure appropriate remote powering delivery.

AIM systems providing support for remote powering shall provide the functionality described in E.2.

E.2 Documentation and maintenance of information within AIM software

Once configured, an AIM system providing support for remote powering shall be able to:

a) define and assign a bundle ID to a single cable or a group of cables;

b) track the cable bundle size for each bundle from a distributor;

c) track number of cables in a bundle connected to PSE ports (powered or not);

d) track number of cables in a bundle delivering PoE (powered);

e) track PoE Type and Class for every delivering cable in a bundle;

f) track PoE consumption for every PoE delivering cable in a bundle;

g) track PoE allocated power for every PoE delivering cable in a bundle;

h) automatically detect, document and monitor the presence and the remote powering functionality of PoE equipment connected to the network including:

   1) PoE type of each PoE capable switch (PSE), including number of PoE pairs (in accordance with ISO/IEC/IEEE 8802-3) ;

   2) PoE class of each PD;

   3) PoE consumption on each switch (PSE) port;

   4) allocated PoE level on each PSE port.