INTERNATIONAL STANDARD

ISO/IEC 21558-3

First edition
2022-03

Telecommunications and information exchange between systems — Future network architecture —

Part 3: Networking of everything

Télécommunications et échange d'informations entre systèmes — Architecture du réseau du futur —

Partie 3: Réseautique universelle

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Reference number
ISO/IEC 21558-3:2022(E)

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Published in Switzerland

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Foreword

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The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives or www.iec.ch/members_experts/refdocs).

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This document was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 6, *Telecommunications and information exchange between systems*.

A list of all parts in the ISO 21558 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html and www.iec.ch/national-committees.

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Introduction

This document specifies the Future Network – Networking of everything (FN-NoE) architecture, which is designed to provide further advanced NoE services identified in ISO/IEC TR 29181-9.

ISO/IEC TR 29181-9 is part of the ISO/IEC TR 29181 series of standards on Future Network (FN). ISO/IEC TR 29181-9, which addresses networking issues raised in ISO/IEC TR 29181-1, covers networking of everything.

The scope of this document focuses on the FN-NoE architecture, consisting of access and core networks, thing social networks, and proximity defined networks, in which smart devices participate.

This document provides the general characteristics of NoE which can be applied to future networks such as RINA as shown in Annex B, especially from an Internet of Things (IoT) perspective, through a conceptual model of NoE.

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1 Scope

This document focuses on networking issues for integrating various networking technologies for integrating various networking techniques to provide the thing-user centric communication service.

This document specifies:

— the architectural model of the Future Network – Networking of Everything (FN-NoE);

— the functional procedure for providing advanced FN-NoE services that integrate various networks.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO/IEC/TR 29181-9:2017, *Information technology — Future Network — Problem statement and requirements — Part 9: Networking of everything*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO/IEC TR 29181-9 and the following apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at https://www.electropedia.org/

3.1
object
intrinsic representation of an entity that is described at an appropriate level of abstraction in terms of its attributes and functions

[SOURCE: ISO/IEC TR 29181-9:2017, 3.12]

3.2
context
information that can be used to characterize the environment of a user

[SOURCE: ISO/IEC TR 29181-9:2017, 3.4]

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