
**Information technology — Future
Network — Problem statement and
requirements —**

Part 9:
Networking of everything

*Technologies de l'information — Réseaux du futur — Énoncé du
problème et exigences —*

Partie 9: Réseautique universelle





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Foreword

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental and non-governmental, in liaison with ISO and IEC, also take part in the work. In the field of information technology, ISO and IEC have established a joint technical committee, ISO/IEC JTC 1.

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Introduction

This document defines the problem statement and requirements for the future network in the networking of everything, which would be the Internet of Things (IoT) network aspects.

Considering that many standards-development organizations, including ITU-T, already produced their own IoT-related standards or recommendations (such as ITU-T Y.2060, Y.2061, and Y.2069), this document has a clear scope, with new terms and definitions that are consistent with those already in existence. This document focuses on providing the solutions to other standards-development organizations' requirements; discussing how various networking technologies should be integrated for users.

This document focuses on networking issues, excluding how virtual things can be associated with physical things or devices. The problems of current networks and requirements for Future Networks are discussed in other parts of ISO/IEC 29181. This document only discusses the problems of current networking technologies and policies, and the requirements for the networking of Future Networks, especially considering future super realistic services like IoT.

Use cases in the Network of Everything are provided in [Annexes A](#) and [B](#).

Information technology — Future Network — Problem statement and requirements —

Part 9: Networking of everything

1 Scope

This document describes the general characteristics of Networking of Everything (NoE), which can be applied to Future Networks, especially from an Internet of Things (IoT) perspective. This document specifies:

- a conceptual model of NoE and its definition;
- problem statements in conventional networking;
- standardization activities of other standards-development organizations;
- requirements for NoE from an IoT perspective;
- technical aspects.

NOTE Since networking issues are an integral part of IoT and Future Networks, while standards of IoT or Future Networks are under development in other standards-development organizations, this document focuses on networking issues to integrate diverse networking techniques to provide users' service and/or things requirement.

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.

There are no normative references in this document.