
**Telecommunications and information
exchange between systems — Future
network architecture —**

**Part 2:
Proxy model-based quality of service**

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

Partie 2: Qualité de service basée sur un modèle de proxy

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Contents

Page

Foreword	iv
Introduction	v
1 Scope	1
2 Normative references	1
3 Terms, definitions and abbreviated terms	1
3.1 FNQoS Composition	1
3.2 Abbreviated terms	2
4 Concept of FNQoS	3
4.1 Description of FNProxy	3
4.2 Type of FNProxy	3
4.3 FNProxy interaction	4
4.3.1 General	4
4.3.2 Bi-S based operator	4
4.3.3 Interaction meaning more than communication	4
4.3.4 FNProxy harmony in collaborations	5
4.4 Composition of FNQoS system	5
4.4.1 General	5
4.4.2 Relationships of FNProxies and domains	5
4.4.3 Engines in FNProxy	6
4.4.4 FNQoS system	6
4.4.5 Users of FNQoS system	7
5 Architectural model of FNQoS systems	7
5.1 Reference model of FNQoS system	7
5.2 Usage of FNQoS system	9
5.2.1 Human-centric usage	9
5.2.2 Interaction between FNQoS systems	10
5.2.3 Inter-working with legacy networks	11
Annex A (informative) Tracking concerns of stakeholders to FNQoS system	13
Annex B (informative) Evolution of FNQoS architecture	15
Bibliography	16

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.

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For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see www.iso.org/iso/foreword.html. In the IEC, see www.iec.ch/understanding-standards.

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A list of all parts in the ISO/IEC 21558 series can be found on the ISO and IEC websites.

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.

Introduction

This document and ISO/IEC 21559-2 both pertain to the Future Network (FN).

This document analyses and specifies how to define the Future Network Quality of Service (FNQoS) based on AI-proxy, and how to express the architecture of FNQoS information system based on FNProxy. The goal of the FNQoS is directly related to ISO/IEC TR 29181-8.

FNQoS architecture not only defines the FNProxy contents of FNQoS, but also describes the necessary functional support required for the operation of FNQoS system. Further, FNQoS architecture itself is the basis for the normal operation of the protocol mechanism supporting FNProxy interaction specified in ISO/IEC 21559-2.

The function of Bidirectional Service (Bi-S) for interaction among FNProxies is the basic element of the FNQoS system. This document is based on the basic elements of Bi-S using ISO/IEC 19501 and ISO/IEC/IEEE 42010 to analyse and stipulate the reusable pervasive reference architecture technology of FNQoS.

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Telecommunications and information exchange between systems — Future network architecture —

Part 2: Proxy model-based quality of service

1 Scope

This document describes the architectural aspects of Future Network (FN) Quality of Service (QoS) based on an FNProxy model, taking into account the requirements described on ISO/IEC TR 29181-8. It describes:

- the concept of future network QoS (FNQoS),
- the architectural model of FNQoS system,
- the usage of FNQoS system.

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 21559-2, *Telecommunications and information exchange between systems — Future network protocols and mechanisms — Part 2: Proxy model-based quality of service*

3 Terms, definitions and abbreviated terms

For the purposes of this document, the following terms and definitions 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 FNQoS Composition

3.1.1

Future Network Proxy

FNProxy

element or device to improve *Future Network Quality of Service (FNQoS)* (3.1.2) in the Future Network environment

3.1.2

Future Network Quality of Service

FNQoS

set of the comprehensive behaviour effects of services based on interactions among/between two or more FNProxies to meet the requirements of a Future Network