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Telecommunications and information exchange between systems — Future network protocols and mechanisms —

Part 1: Switching and routing

Télécommunications et échange d'informations entre systèmes — Futurs protocoles et mécanismes de réseau —

Partie 1: Commutation et routage

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Foreword

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Introduction

ISO/IEC TR 29181-1 describes the definition, general concept, problems and requirements for the Future Network (FN).

ISO/IEC TR 29181-3 examines the requirements for carrying data over digital networks and identifies those that are not satisfied by the current Internet. It also notes some expected characteristics of new systems that are better able to satisfy the requirements and specifies a model which supports both the existing system and the new systems. This will enable a migration to the new systems; it is also intended to make networks of all sizes easier to manage.

ISO/IEC 21558-1 specifies an architecture which meets the requirements identified in ISO/IEC TR 29181-3.

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Telecommunications and information exchange between systems — Future network protocols and mechanisms —

Part 1: Switching and routing

1 Scope

This document specifies protocols and mechanisms for use within systems conforming to the future network (FN) architecture specified in ISO/IEC 21558-1.

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 29181-1, *Information technology — Future Network — Problem statement and requirements — Part 1: Overall aspects*

ISO/IEC/TR 29181-3, *Information technology — Future Network — Problem statement and requirements — Part 3: Switching and routing*

IEC 62379-5-1, *Common control interface for networked digital audio and video products - Part 5-1: Transmission over networks - General*

IEC 62379-5-2, *Common control interface for networked digital audio and video products – Part 5-2: Transmission over networks – Signalling*

AES51-2006 (s2017), *AES standard for digital audio - Digital input-output interfacing - Transmission of ATM cells over Ethernet physical layer* (Audio Engineering Society, New York, NY, USA)

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO/IEC TR 29181-1 and ISO/IEC TR 29181-3 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
AV flow
flow in which packets are expected to be transmitted at regular intervals, suitable for carrying live audio, video, and other media

3.2
IT flow
flow in which packets are not expected to be transmitted at regular intervals

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