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Information technology — Telecommunications and information exchange between systems — Enterprise Communication in Next Generation Corporate Networks (NGCN) involving Public Next Generation Networks (NGN)

*Technologies de l'information — Télécommunications et échange
d'information entre systèmes — Communication d'entreprise en
réseaux d'entreprise de prochaine génération (NGCN) impliquant les
réseaux de prochaine génération publics (NGN)*

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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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of the joint technical committee is to prepare International Standards. Draft International Standards adopted by the joint technical committee are circulated to national bodies for voting. Publication as an International Standard requires approval by at least 75 % of the national bodies casting a vote.

In exceptional circumstances, the joint technical committee may propose the publication of a Technical Report of one of the following types:

- type 1, when the required support cannot be obtained for the publication of an International Standard, despite repeated efforts;
- type 2, when the subject is still under technical development or where for any other reason there is the future but not immediate possibility of an agreement on an International Standard;
- type 3, when the joint technical committee has collected data of a different kind from that which is normally published as an International Standard ("state of the art", for example).

Technical Reports of types 1 and 2 are subject to review within three years of publication, to decide whether they can be transformed into International Standards. Technical Reports of type 3 do not necessarily have to be reviewed until the data they provide are considered to be no longer valid or useful.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO and IEC shall not be held responsible for identifying any or all such patent rights.

ISO/IEC TR 26905 was prepared by Ecma International (as ECMA TR/91) and was adopted, under a special "fast-track procedure", by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, in parallel with its approval by national bodies of ISO and IEC.

Introduction

This Technical Report provides an overview of IP-based enterprise communication from/to Corporate telecommunication Networks (CNs) (also known as enterprise networks) including aspects of privately used home networks accessing public next generation networks (NGN).

This Technical Report is based upon the practical experience of Ecma member companies and the results of their active and continuous participation in the work of ISO/IEC JTC 1, ITU-T, ETSI, IETF and other international and national standardization bodies. It represents a pragmatic and widely based consensus.

Information technology — Telecommunications and information exchange between systems — Enterprise Communication in Next Generation Corporate Networks (NGCN) involving Public Next Generation Networks (NGN)

1 Scope

This Technical Report identifies key use cases for communication with or between IP-based Next Generation Corporate Networks (NGCN) involving public next generation networks (NGN), analyses these use cases in terms of available or planned standardized technology, and identifies requirements that will have to be met.

This Technical Report investigates configurations involving NGCNs and NGNs and their interoperating requirements. Non-IP-based interoperation, i.e. using circuit-switched technology, between NGCNs and NGNs is outside the scope of this Technical Report.

This Technical Report does not discriminate between wireless and wired access technology. The Terminal Equipment (TE) interface within an NGCN is outside the scope of this Technical Report.

All mobility aspects are outside the scope of this Technical Report. They are covered by a companion Technical Report, ISO/IEC TR 26927.

Application considerations such as IP Centrex and CSTA (Computer Supported Telecommunications Applications) are outside the scope of this Technical Report.

2 Normative references

The following referenced documents are indispensable for the application 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.

- [1] ISO/IEC 21409:2001, Information technology — Telecommunications and information exchange between systems — Corporate telecommunication networks — Signalling interworking between QSIG and H.323 — Generic functional protocol for the support of supplementary services
- [2] ISO/IEC TR 26927:2006, Information technology — Telecommunications and information exchange between systems — Corporate Telecommunication Networks — Mobility for Enterprise Communications
- [3] ITU-T Rec. H.323, Packet-based multimedia communications systems
- [4] IETF RFC 3261, SIP: Session Initiation Protocol
- [5] IETF RFC 3489, Simple Traversal of User Datagram Protocol (UDP) Through Network Address Translators (NATs) (STUN)
- [6] IETF RFC 3711, The Secure Real-time Transport Protocol (SRTP)
- [7] IETF RFC 3761, The E.164 to Uniform Resource Identifiers (URI) Dynamic Delegation Discovery System (DDDS) Application (ENUM)

- [8] IETF RFC 3966, The tel URI for Telephone Numbers
- [9] IETF RFC 2401, Security Architecture for the Internet Protocol (IPSEC)