ECMA - Standardizing Information and Communication Systems

ECMA TR/81

Interoperation of PISNs with IP Networks

(September 2000)

The purpose of this Technical Report is to investigate the interoperability of Private Integrated Services Networks (PISNs) and Internet Protocol (IP) networks, with a view to identifying possible scenarios for interoperation, problems that will have to be solved if particular scenarios are to be pursued further, and possible future standardization activities in this area. In particular, the following aspects of interoperability are investigated:

- the interworking of PISNs and IP networks via a gateway;
- the connection of PISN components via IP networks.

For each of the above, aspects considered include architecture, addressing (including use of IP addressing), services, protocols, security, quality of service and mobility. This is conducted within the context of leading standards for voice and multimedia communication over IP networks, including ITU-T recommendation H.323, IETF Session Initiation Protocol (SIP) and ITU-T recommendation H.248.

Possible future standardization activities resulting from this Technical Report can include work items relating to IP networks and work items relating to PISNs, as well as work items concerned specifically with interoperability.

ECMA - Standardizing Information and Communication Systems

The dominant traffic in PISNs is voice, and therefore this Technical Report focuses on interoperability considerations for voice traffic. However, many of the standards that support voice in an IP network are also applicable to multi-media traffic (e.g., voice, video and data). Although in many respects similar to voice, fax traffic has slightly different requirements and is not explicitly considered in this Technical Report. It could be the subject of further study.

The following files are provided in this set of CD-ROMs:

File name	Size (Bytes)	Content
TR-081.PDF	326'485	Acrobat PDF file
TR-081.PSC	2'652'755	Corresponding PostScript file

Printed copies of this technical report can be ordered, free of charge, from documents@ecma.ch.