ECMA - Standardizing Information and Communication Systems

Standard ECMA-253

PISN - Mapping Functions for the Employment of 64 kbit/s Circuit Mode Connections with 16 kbit/s Sub-Multiplexing (Mapping/16)

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This Standard defines the mapping functions in exchanges of Private Integrated Services Networks (PISNs) required for the utilization of scenarios in which 64 kbit/s circuit mode connections are sub-multiplexed into 4 x 16 kbit/s channels for carrying inter-PINX signalling and user information.

NOTE

This Standard has been prepared to meet the specific needs of an application for a particular user organisation. However, it may also be applicable elsewhere. The requirements contained in this Standard will be incorporated in any future standard specifying a more generic approach to bearer conditioning.

In order to connect a Private Integrated Services Network Exchange (PINX) to another PINX, mapping functions are required to adapt the specific interfaces at the C reference point to the application at the Q reference point. As such, mapping functions provide for physical adaptation to the interface at the C reference point. Mapping functions also provide for the mapping of user channels and signalling information at the Q reference point to the appropriate channels or timeslots at the C reference point.

The C and Q reference points are defined in **ECMA-133**.

ECMA - Standardizing Information and Communication Systems

The type of interface at the C reference point covered by this Standard is the 64 kbit/s Unrestricted Digital Leased Line (D64U) Terminal Equipment Interface, in accordance with ITU-T Rec. G.703.

At the Q reference point the mapping provides a 16 kbit/s service for user channels to support the transfer of unrestricted digital information and to support the transfer of speech, and a packet mode service for the signalling channel. The applied mapping is a static mapping, i.e. there is a fixed relationship between user and signalling channels at the Q reference point and the interface at the C reference point.

Management functions relating to failure management are outside the scope of this Standard.

This Standard is applicable to PINXs that can be interconnected to form a Private Integrated Services Network (PISN) and that support signalling protocols at the Q reference point.

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

| File name | Size (Bytes) | Content |
|--------------|--------------|-------------------------------|
| ECMA-253.PDF | 88'736 | Acrobat PDF file |
| ECMA-253.PSC | 177'307 | Corresponding PostScript file |

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