

Standard ECMA-226

PISN - Mapping Functions for the Employment of Dedicated Circuit Mode Connections as Inter-PTNX Connections (MAPPING-CM-STATIC)

(June 1995)

This Standard defines the mapping functions in exchanges of Private Integrated Services Networks (PISNs) required for the utilization of intervening network (IVN) scenarios which provide dedicated circuit mode connections for carrying inter-PINX signalling and user information.

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 time-slots at the C reference point.

The C and Q reference points are defined in ISO/IEC 11579-1.

The types of interfaces at the C reference point covered by this Standard are:

1. 2048 kbit/s Primary Rate User-Network Layer 1 Interface, in accordance with ETS_300 011 including the requirements for the "Application of the ETS_300 011 for PTNX interconnections" as contained in ETS_300 011 Annex A

ECMA - Standardizing Information and Communication Systems

2. Basic User-Network Layer 1 Interface, in accordance with ETS_300 012, excluding the point-to-multi-point mode of operation
3. 2048 kbit/s Digital Structured Leased Line (D2048S); Terminal Equipment Interface, in accordance with ETS 300 420
4. 2048 kbit/s Digital Unstructured Leased Line (D2048U); Terminal Equipment Interface, in accordance with ETS_300 248
5. 64 kbit/s Unrestricted Digital Leased Line (D64U); Terminal Equipment Interface, in accordance with ETS_300 290

The IVN can be a dedicated transmission system or a cross connect system. IVNs which include inverse multiplexer techniques (e.g. channel aggregation in accordance with ISO/IEC 13871) are covered by this Standard as far as they support one of the interfaces listed above.

At the Q reference point the mappings provide a 64 kbit/s service for user channels and a packet mode service for the signalling channel. Bearer conditioning is outside the scope of this Standard, except for deriving 64 kbit/s channels and for providing the services of layer 2 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 timeslots of the interface at the C reference point; any changes are subject to administrative actions.

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

ECMA - Standardizing Information and Communication Systems

ECMA - Standardizing Information and Communication Systems

This Standard is applicable to PINXs which can be interconnected to form a Private Integrated Services Network (PISN) and which 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-226.PDF	69'639	Acrobat PDF file
ECMA-226.PSC	204'658	Corresponding PostScript file

Printed copies of this Standard can be ordered, free of charge, from document@ecma.ch .
