

Standard ECMA-266

B-PISN - Inter-Exchange Signalling Protocol - Basic Call/Connection Control (B-QSIG-BC)

(September 1997)

This Standard defines the signalling protocol for the purpose of basic call/connection control at the Q-reference point between Private Integrated Services Network Exchanges (PINXs) connected together within a Broadband Private Integrated Services Network (B-PISN) employing Asynchronous Transfer Mode (ATM). This Standard is part of the B-QSIG signalling system.

The Q reference point is defined in ISO/IEC 11579-1.

This Standard is an application of the signalling protocol that forms part of the ATM Forum's PNNI 1.0 specification, which in turn is based on ITU-T Recommendation Q.2931, including the provisions for symmetrical operation described in annex H of recommendation Q.2931. Technical differences compared with the signalling protocol specified in PNNI 1.0 are summarised in annex J. Guidelines for interworking between a network employing the signalling protocol specified in this Standard and a network employing the ATM Forum's PNNI 1.0 specification are given in annex L.

This Standard is applicable to PINXs which interconnect to form a B-PISN using static hop-by-hop routing. It therefore complements the ATM Forum's PNNI 1.0 specification, which is applicable to networks that employ dynamic source routing.

The basic capabilities supported by the protocol specified in this Standard are listed below and described in more detail in annex F:

- demand (switched) virtual channel and virtual path connections;
- point-to-point switched virtual channel and virtual path connections;
- point-to-multipoint virtual channel connections;
- connections with symmetric or asymmetric bandwidth requirements;
- single-connection (point-to-point) calls;
- basic signalling functions via protocol messages, information elements, and procedures;
- CBR, VBR (realtime and non-realtime), UBR and ABR service categories;
- negotiation of certain signalling parameters;
- inter-PINX virtual channel identifier (IPVCI) negotiation;
- out-of-band signalling for all signalling messages;
- error recovery;
- B-PISN addressing formats;
- end-to-end compatibility parameter identification;
- signalling interworking with N-PISN and provision of N-PISN services;
- forward compatibility;
- call/connection handling at different types of PINX, including Transit PINX, Originating PINX, Terminating PINX, Incoming Gateway PINX, Outgoing Gateway PINX and Interworking PINX;
- Signalling of individual QoS parameters
- ATM anycast addresses
- Negotiation of ATM traffic descriptors

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- Soft PVPC and PVCC support
- Generic Identifier Transport

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

File name	Size (Bytes)	Content
ECMA-266.PDF	606'939	Acrobat PDF file
ECMA-266.PSC	2'820'754	Corresponding PostScript file

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