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I.231.1

INTEGRATED SERVICES DIGITAL NETWORK (ISDN)

**SERVICE CAPABILITIES – BEARER SERVICES
SUPPORTED BY AN ISDN**

**CIRCUIT-MODE BEARER SERVICE
CATEGORIES – CIRCUIT-MODE 64 kbit/s
UNRESTRICTED, 8 kHz STRUCTURED
BEARER SERVICE**

ITU-T Recommendation I.231.1

(Extract from the *Blue Book*)

NOTES

1 ITU-T Recommendation I.231.1 was published in Fascicle III.7 of the *Blue Book*. This file is an extract from the *Blue Book*. While the presentation and layout of the text might be slightly different from the *Blue Book* version, the contents of the file are identical to the *Blue Book* version and copyright conditions remain unchanged (see below).

2 In this Recommendation, the expression “Administration” is used for conciseness to indicate both a telecommunication administration and a recognized operating agency.

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Recommendation I.231.1

CIRCUIT-MODE BEARER SERVICE CATEGORIES – CIRCUIT-MODE 64 kbit/s UNRESTRICTED, 8 kHz STRUCTURED BEARER SERVICE

(Melbourne, 1988)

1 I.231.1 - Circuit-mode 64 kbit/s unrestricted, 8 kHz structured bearer service category (Note 1)

1.1 Definition

This bearer service category provides unrestricted information transfer between S/T reference points, it may, therefore, be used to support various user applications. Examples include:

- speech (Note 2);
- 3.1 kHz audio (Note 2);
- multiple subrate information streams multiplexed into 64 kbit/s by the user;
- transparent access to an X.25 public network [Recommendation I.462 case a)].

User information is transferred over a B-channel, signalling is provided over a D-channel.

Note 1 - During an interim period some networks may only support restricted 64 kbit/s digital information transfer capability, i.e. information transfer capability solely restricted by the requirement that the all-zero octet is not allowed. For interworking the rules given in Appendix I of Recommendation I.520 should apply. The interworking functions have to be provided in the network with restricted 64 kbit/s capability. The ISDN with 64 kbit/s transfer capabilities will not be affected by this interworking other than by conveying the appropriate signalling message to and from the ISDN terminal.

Note 2 - Whilst speech and 3.1 kHz audio have been given as applications for this bearer service category, it is recognized that it is the responsibility of the customers to ensure that a compatible encoding scheme is in operation. Customers should also recognize that no network provision can be made for the control of such items as echo and loss, as the network is unaware of the application in use. Furthermore, the Quality of Service attribute value for information transfer delay will indicate the suitability of a particular version of this bearer service for speech.

1.2 Description

1.2.1 General description

This circuit-mode bearer service category allows:

- two users (e.g. terminals, PABXs) in a point-to-point configuration to communicate via the ISDN using 64 kbit/s digital signals over the B-channel, in both directions continuously and simultaneously for the duration of call;
- three or more users in a multipoint configuration (refer to Recommendation I.254 for the supplementary service description on Three-Party Service and Conference Calling).

1.2.2 Specific terminology

Retention timer: this timer specifies the amount of time that the network retains the call information of the original call upon encountering busy or being released. It is a network provider option. The value for this timer is greater than 15 seconds.

1.3 Procedures

1.3.1 Provision/withdrawal

1.3.1.1 Provision of this service will be by pre-arrangement with the Administration.