



INTERNATIONAL TELECOMMUNICATION UNION

**ITU-T**

TELECOMMUNICATION  
STANDARDIZATION SECTOR  
OF ITU

**I.231.5**

**INTEGRATED SERVICES DIGITAL NETWORK (ISDN)  
SERVICE CAPABILITIES – BEARER SERVICES  
SUPPORTED BY AN ISDN**

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**CIRCUIT-MODE BEARER SERVICE  
CATEGORIES – CIRCUIT-MODE  $2 \times 64$  kbit/s  
UNRESTRICTED, 8 kHz STRUCTURED  
BEARER SERVICE**

**ITU-T Recommendation I.231.5**

(Extract from the *Blue Book*)

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## NOTES

1 ITU-T Recommendation I.231.5 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.

## Recommendation I.231.5

### CIRCUIT-MODE BEARER SERVICE CATEGORIES – CIRCUIT-MODE $2 \times 64$ kbit/s UNRESTRICTED, 8 kHz STRUCTURED BEARER SERVICE

(Melbourne, 1988)

#### 5 I.231.5 - Circuit-mode $2 \times 64$ kbit/s unrestricted, 8 kHz structured bearer service category

##### 5.1 *Definition*

This bearer service category provides the unrestricted transfer of two 64 kbit/s user information flows over two B-channels at the user network interface.

##### 5.2 *Description*

For further study.

##### 5.3 *Procedures*

For further study.

##### 5.4 *Network capabilities for charging*

This Recommendation does not cover charging principles. Future Recommendations in the D-Series are expected to contain that information.

It shall be possible to charge the subscriber accurately for the service.

##### 5.5 *Interworking requirements*

For further study.

##### 5.6 *Interaction with supplementary services*

For further study.

##### 5.7 *Attributes and values of attributes of the circuit mode $2 \times 64$ kbit/s unrestricted, 8 kHz structured bearer service category*

###### *Information transfer attributes*

- |                                     |   |
|-------------------------------------|---|
| 1. Information transfer mode:       | circuit   |
| 2. Information transfer rate:       | $2 \times 64$ kbit/s  |
| 3. Information transfer capability: | unrestricted (Note)   |
| 4. Structure:                       | 8 kHz integrity with restricted differential time delay (RDTD)  |
| 5. Establishment of communication:  | demand/reserved/permanent                                       |
| 6. Symmetry:                        | bidirectional symmetric/bidirectional asymmetric/unidirectional |
| 7. Communication configuration:     | point-to-point/multipoint                                       |

###### *Access attributes*

- |                     |                                |
|---------------------|--------------------------------|
| 8. Access channel:  | two B(64) for user information |
| 9. Access protocol: | I-Series for D-channel         |

*General attributes*

- |                                      |                     |
|--------------------------------------|---------------------|
| 10. Supplementary services provided  | } for further study |
| 11. Quality of Service               |                     |
| 12. Interworking possibilities       |                     |
| 13. Operation and commercial aspects |                     |

Note - Digit sequence integrity (DSI) is ensured for each elementary 64 kbit/s information.

5.8 *Provision for individual circuit-mode 2 × 64 kbit/s, unrestricted, 8 kHz structured bearer services*

- a) Overall provision<sup>1)</sup> : A
- b) Variations of secondary attributes

<i>Establishment of communication</i>	<i>Symmetry</i>	<i>Communication of configuration</i>	<i>Provision<sup>1)</sup></i>																	
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- c) Access

Signalling and OAM (Note 1)		User information		Provision
Channel rate	Protocols	Channel and rate	Protocols	
D(16)	I.451 (Note 2)	2 × B(64)	User-defined	E
D(64)	I.451 (Note 2)	2 × B(64)	User-defined	E

Note 1 - Definition of protocols for OAM is for further study.

Note 2 - Demand services only. Further study for reserved and permanent services.

5.9 *Dynamic description*

The dynamic description for this service needs further study and is not yet available.

<sup>1)</sup> The definition of E (essential) and A (additional) can be found in Recommendation I.230.