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OF ITU

E.330

TELEPHONE NETWORK AND ISDN

**OPERATION, NUMBERING, ROUTING
AND MOBILE SERVICE**

**USER CONTROL OF ISDN-SUPPORTED
SERVICES**

ITU-T Recommendation E.330

(Extract from the *Blue Book*)

NOTES

1 ITU-T Recommendation E.330 was published in Fascicle II.2 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 E.330

USER CONTROL OF ISDN-SUPPORTED SERVICES

Introduction

1 This Recommendation describes the general aspects of user control of ISDN-supported services. In particular, access to the services and handling of communication sessions are treated.

A service is defined as in Recommendation I.112, § 2.2.

A communication session is a session between two or more telecommunication parties in which unidirectional or bidirectional communication takes place. This Recommendation primarily concerns sessions where one or more people are involved.

2 This Recommendation does not describe how to proceed in the services themselves; in fact, this Recommendation has been set up to be as service-independent as possible.

2 In stating and recommending user procedures it is important to have global information about terminal capabilities. This Recommendation, however, is drafted as terminal-independent as possible. It contains fundamental principles of user interfaces as far as these are relevant to user access to the ISDN, and does not specify terminal requirements.

The CCITT,

considering

- (a) that the ISDN will make available new services for customers and Administrations;
- (b) that the changeover from the present networks to the ISDN will be gradual;
- (c) that, from a user's point of view, private networks and public networks offer some similar services and also services that one or the other does not provide;
- (d) that certain services have specific user procedures and their own methods of presenting information to the user;
- (e) that users may benefit from uniformity in user procedures for selecting a service and for starting, switching between, and ending communications;
- (f) that information from the telecommunication system to the user can be sent in the form of tones, verbal announcements, or visual indications on a display;
- (g) that the use of terminals containing a visual display is becoming more and more common in telecommunication applications;
- (h) that the ISDN offer users the possibility of handling two or more connections simultaneously;
- (i) that handling connections simultaneously may be difficult for the user;
- (j) that information presentation to the user should be based on human factors considerations;
- (k) that terminals may be distinguishable into dedicated (service-specific) terminals and terminals with which several teleservices can be offered,

recommends

- (1) that the methods with which communication sessions are selected, started, switched between each other and ended, should, where appropriate, make allowance for different levels of user experience;
- (2) that, when a similar capability using similar terminals is offered through a private network and a public network, user procedures should be similar;

(3) that, where a terminal supports “higher level”¹⁾ procedures and has the same function keys used for lower-level procedures in other terminals, then these lower-level procedures should still be operable, to achieve the functionality reached by higher-level procedures.

(4) that, on more advanced telecommunication terminals, however, other input mechanisms, having similar functions to those controlled by the function keys mentioned in (3), may replace these function keys;

(5) that, for voice and non-voice services, procedures should be similar for analogous supplementary services when terminals with similar capabilities are used;

(6) that tones, verbal announcements and visual indications, which are used in the existing networks should not be changed in the ISDN as long as their functions remain the same;²⁾.

(7) that ending a communication session can be accomplished from either end, except for emergency services;

(8) that it is preferred to give information to users at either end of a communication path by means of an auditory or visual indication when the communication is on hold;³⁾

(9) that in those cases where starting or switching between communication sessions is not possible or may result in a deterioration of the existing communication session(s), appropriate auditory or visual indication should be given to the user;

(10) that when two or more communication sessions are handled at the same time on the same telecommunication terminal and the user uses a stop procedure valid for all communication sessions, it is preferred to give the user the opportunity to select which session or sessions are to be terminated.

1) “Higher level” and “lower level” refer here to the degree to which the capabilities of a terminal facilitate its use. For example, a terminal with only digits and a star and a square (see Recommendation E.161) may be able to achieve the same functions through lower-level procedures as a better equipped terminal with, for example, dedicated function buttons, in addition to its dial, where higher-level, more convenient procedures could be used.

2) See Recommendation E.184.

3) Further study is required to determine whether or not a communication session which was put on hold becomes active as soon as the present communication session is ended by the user and, if so, whether this is the communication session which was put on hold first or last. This subject should also be dealt with in the next study period.