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**DIGITAL SUBSCRIBER SIGNALLING
SYSTEM No. 1 (DSS 1)**

**DIGITAL SUBSCRIBER SIGNALLING
SYSTEM No. 1 (DSS 1) – ISDN USER-
NETWORK INTERFACE PROTOCOL
PROFILE FOR MANAGEMENT**

ITU-T Recommendation Q.941

(Previously “CCITT Recommendation”)

FOREWORD

The ITU Telecommunication Standardization Sector (ITU-T) is a permanent organ of the International Telecommunication Union. The ITU-T is responsible for studying technical, operating and tariff questions and issuing Recommendations on them with a view to standardizing telecommunications on a worldwide basis.

The World Telecommunication Standardization Conference (WTSC), which meets every four years, established the topics for study by the ITU-T Study Groups which, in their turn, produce Recommendations on these topics.

ITU-T Recommendation Q.941 was revised by the ITU-T Study Group XI (1988-1993) and was approved by the WTSC (Helsinki, March 1-12, 1993).

NOTES

1 As a consequence of a reform process within the International Telecommunication Union (ITU), the CCITT ceased to exist as of 28 February 1993. In its place, the ITU Telecommunication Standardization Sector (ITU-T) was created as of 1 March 1993. Similarly, in this reform process, the CCIR and the IFRB have been replaced by the Radiocommunication Sector.

In order not to delay publication of this Recommendation, no change has been made in the text to references containing the acronyms "CCITT, CCIR or IFRB" or their associated entities such as Plenary Assembly, Secretariat, etc. Future editions of this Recommendation will contain the proper terminology related to the new ITU structure.

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 Q.941

DIGITAL SUBSCRIBER SIGNALLING SYSTEM No. 1 (DSS 1) – ISDN USER-NETWORK INTERFACE PROTOCOL PROFILE FOR MANAGEMENT

(Melbourne, 1988; modified at Helsinki, 1993)

1 General

This Recommendation is one of a series of Recommendations describing the model, protocol profile and the communications capabilities in support of management and maintenance functions to be provided at the ISDN user-network interface.

This Recommendation describes the protocol profile employed in providing management information transfer capabilities at the ISDN user-network interface. The overall management architecture, communications paths and service requirements are specified in Recommendation Q.940 [1]. These protocols can be used on the D-channel of both the basic and primary rate interface structures and across both reference points S and T, and are based on the DSS 1 messages. Because these messages are transferred between a network node and the directly connected users, these protocols only have local significance at the user-network interface. If management information transfer is end-to-end between a user and a remote OS, mapping in the network node has to be provided.

Other Recommendations in this series specify the procedures and protocol associated with specific management functions that are provided at the ISDN user-network interface.

The protocols and procedures described in these Recommendations provide the means to support management functions at the ISDN user-network interface. In particular, these management functions “provided by the ISDN user-network interface” should “enable the network node or network user” to support the activities of the Telecommunications Management Network (TMN) and support specific requirements such as those expressed in the I.600-Series [2] Recommendations (Subscriber access and installation maintenance). These protocols make the local control of these management functions possible, e.g. the control of loopbacks and diagnostic tests, the initiation and termination of event reports, etc.

NOTE – The means by which file transfer capability is to be provided on the ISDN primary rate access is for further study.

1.1 Scope

This Recommendation specifies the application protocol and the use of the layer 1-3 protocols at the ISDN user-network interface in providing management capabilities. The protocols defined in this Recommendation are suitable for management interactions involving transaction type information exchanges.

NOTE – The means of providing file transfer capabilities at the local access is for further study.

Specifically, this Recommendation defines the following:

- a) the layer services for layers 1-3 and the application layer;
- b) the protocols for layers 1-3 and the application layer;
- c) the convergence function required to allow the application layer to interface directly with layer 3; and
- d) the conformance requirements to be met by a system claiming to implement the management protocol profile for the ISDN user-network interface.

This Recommendation does not:

- a) define the structure or meaning of the management information that is transmitted by means of these protocols;
- b) specify the manner in which management is accomplished as a result of the protocol exchanges;