INTERNATIONAL TELECOMMUNICATION UNION

CCITT

THE INTERNATIONAL
TELEGRAPH AND TELEPHONE
CONSULTATIVE COMMITTEE

Q.731.8

(02/92)

SPECIFICATIONS OF SIGNALLING SYSTEM No. 7

STAGE 3 DESCRIPTION FOR NUMBER IDENTIFICATION SUPPLEMENTARY SERVICES USING SIGNALLING SYSTEM No. 7

SECTION 8 – SUB-ADDRESSING (SUB)

Recommendation Q.731.8

Geneva, 1992

FOREWORD

The CCITT (the International Telegraph and Telephone Consultative Committee) is a permanent organ of the International Telecommunication Union (ITU). CCITT 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 Plenary Assembly of CCITT which meets every four years, establishes the topics for study and approves Recommendations prepared by its Study Groups. The approval of Recommendations by the members of CCITT between Plenary Assemblies is covered by the procedure laid down in CCITT Resolution No. 2 (Melbourne, 1988).

Recommendation Q.731, § 8 was prepared by Study Group XI and was approved under the Resolution No. 2 procedure on the 4th of February 1992.

CCITT NOTE

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

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STAGE 3 DESCRIPTION FOR NUMBER IDENTIFICATION SUPPLEMENTARY SERVICES USING SIGNALLING SYSTEM No. 7 – SUB-ADDRESSING (SUB)

8 Sub-addressing (SUB)

8.1 *Definition*

The Sub-address supplementary service allows the called (served) user to expand his addressing capacity beyond the one given by the ISDN number.

The stage 1 service description is given in Recommendation I.251.8 and the stage 2 functional capabilities and information flows are given in Recommendation Q.81, § 8. The stage 3 description of the sub-address supplementary service uses the ISDN user part protocol as defined in Recommendations Q.761 to Q.764 and Q.767.

8.2 *Description*

8.2.1 *General description*

The sub-address information is access significant information which is transported transparent through the network in the access transport parameter in the initial address message (IAM).

8.2.2 *Specific terminology*

None.

8.2.3 *Qualification on the applicability to telecommunication services*

This supplementary service is applicable to all telecommunication services.

8.2.4 *State definitions*

No specific state definitions are required.

8.3 *Operational requirements*

8.3.1 *Provision/withdrawal*

Not applicable.

8.3.2 *Requirements on the originating network side*

Not applicable.

8.3.3 *Requirements in the network*

No specific requirements are needed in the network.

8.3.4 *Requirements on the terminating network side*

Not applicable.

8.4 *Coding requirements*

The sub-address is an information element in the access transport parameter. The coding of the information element is according to Recommendation Q.931, § 4.5.9.

The maximum length of the sub-address information element is 23 octets, allowing for the transport of 20 octets sub-address information.

8.5 *Signalling requirements*

8.5.1 *Activation/deactivation/registration*

Not applicable.

8.5.2 *Invocation and operation*

8.5.2.1 *Actions at the originating local exchange*

8.5.2.1.1 *Normal operations*

The basic call control procedures as described in Recommendation Q.764 are applicable.

The sub-address information is transported in the access transport parameter of the initial address message (even in the case when the overlap sending procedure is used).

8.5.2.1.2 *Exceptional procedures*

No exceptional procedures are identified.

8.5.2.2 *Actions at the transit exchange*

8.5.2.2.1 *Normal operation*

The sub-address information contained in the access transport parameter, is passed on transparently to the succeeding exchange.

8.5.2.2.2 *Exceptional procedures*

No exceptional procedures are identified.

8.5.2.3 *Actions at the outgoing international gateway exchange*

8.5.2.3.1 *Normal operation*

The sub-address information contained in the access transport parameter, is passed on transparently in the international network.

8.5.2.3.2 *Exceptional procedures*

No exceptional procedures are identified.

8.5.2.4 *Actions at the incoming international gateway exchange*

8.5.2.4.1 *Normal operation*

The sub-address information, contained in the access transport parameter, is passed on transparently in the national network.

8.5.2.4.2 *Exceptional procedures*

No exceptional procedures are identified.

8.5.2.5 *Actions at the destination local exchange*

8.5.2.5.1 *Normal operation*

The sub-address information is passed on to the user network interface.

8.5.2.5.2 *Exceptional procedures*

No exceptional procedures are identified.

8.6 *Interaction with other supplementary services*

8.6.1 *Call Waiting (CW)*

No impact on ISUP.

8.6.2 *Call Transfer (CT)*

No applicable interaction at this time.

8.6.3 *Connected Line Identification Presentation (COLP)*

No impact on ISUP.

8.6.4 *Connected Line Identification Restriction (COLR)*

No impact on ISUP.

8.6.5 *Calling Line Identification Presentation (CLIP)*

No impact on ISUP.

8.6.6 *Calling Line Identification Restriction (CLIR)*

No impact on ISUP.

8.6.7 *Closed User Group (CUG)*

No impact on ISUP.

8.6.8 *Conference Calling (CONF)*

No impact on ISUP.

8.6.9 *Direct-Dialling-In (DDI)*

No impact on ISUP.

8.6.10 *Call diversion services (CDIV)*

8.6.10.1 *Call Forwarding Busy (CFB)*

No impact on ISUP.

8.6.10.2 *Call Forwarding No Reply (CFNR)*

No impact on ISUP.

8.6.10.3 *Call Forwarding Unconditional (CFU)*

No impact on ISUP.

8.6.10.4 *Call Deflection (CD)*

No impact on ISUP.

8.6.11 *Line Hunting (LH)*

No impact on ISUP.

8.6.12 *Three-Party-Service (3PTY)*

No impact on ISUP.

8.6.13 *User-to-User Signalling (UUS)*

8.6.13.1 *User-to-User Signalling, service 1 (UUS1)*

No impact on ISUP.

8.6.13.2 *User-to-User Signalling, service 2 (UUS2)*

No impact on ISUP.

8.6.13.3 *User to User Signalling, service 3 (UUS3)*

No impact on ISUP.

8.6.14 *Multiple Subscriber Number (MSN)*

No impact on ISUP.

8.6.15 *Call Hold (CH)*

No impact on ISUP.

8.6.16 *Advice of Charge (AOC)*

No applicable interaction at this time.

8.6.17 *Sub-addressing (SUB)*

Not applicable.

8.6.18 *Terminal Portability (TP)*

No impact on ISUP.

8.6.19 *Completion of Call to Busy Subscriber (CCBS)*

No applicable interaction at this time.

8.6.20 *Malicious Call Identification (MCID)*

No impact on ISUP.

8.6.21 *Reverse Charging (REV)*

No impact on ISUP.

8.6.22 *Multi-Level Precedence and Pre-emption (MLPP)*

No impact on ISUP.

8.6.23 *Private Numbering Plan (PNP)*

No applicable interaction at this time.

8.6.24 *Charge Card*

No applicable interaction at this time.

8.7 *Interaction with other networks*

In the case of interaction with a network which does not support the Sub-address supplementary service or which cannot support the sub-address length supplied, the network shall discard the sub-address information and continue the call establishment procedures without notification to the originating exchange.

8.8 *Signalling flows*

The signalling flows of the basic call procedures are applicable.

8.9 *Parameter values (timers)*

No specific timers are required.

8.10 *Dynamic description*

The specification and description languages (SDLs) of the basic call procedures are applicable as described in Recommendation Q.764.