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SERIES Q: SWITCHING AND SIGNALLING, AND ASSOCIATED MEASUREMENTS AND TESTS

Specifications of Signalling System No. 7 – ISDN supplementary services

Stage 3 description for number identification supplementary services using Signalling System No. 7 – Calling line identification presentation

Recommendation ITU-T Q.731.3

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Recommendation ITU-T Q.731.3

Stage 3 description for number identification supplementary services using Signalling System No. 7 – Calling line identification presentation

Summary

Recommendation ITU-T Q.731.3 provides a signalling procedure for calling line identification presentation (CLIP). The Recommendation specifies service description, operation requirements and coding requirements of CLIP. It also presents the signalling requirements for originating local exchange, transit exchange, international gateway exchange and destination local exchange. Interaction with other supplementary services, interaction with other networks and dynamic description are also considered.

History

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Calling line identification presentation, procedure, Signalling System No. 7.

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Stage 3 description for number identification supplementary services using Signalling System No. 7 – Calling line identification presentation

1 Scope

This Recommendation provides a signalling procedure for calling line identification presentation (CLIP). It specifies service description, operation requirements and coding requirements of CLIP. It also presents the signalling requirements for originating local exchange, transit exchange, international gateway exchange and destination local exchange. Interaction with other supplementary services, interaction with other networks and dynamic description are also considered.

2 References

The following ITU-T Recommendations and other references contain provisions which, through reference in this text, constitute provisions of this Recommendation. At the time of publication, the editions indicated were valid. All Recommendations and other references are subject to revision; users of this Recommendation are therefore encouraged to investigate the possibility of applying the most recent edition of the Recommendations and other references listed below. A list of the currently valid ITU-T Recommendations is regularly published. The references to a document within this Recommendation do not give it, as a stand-alone document, the status of a Recommendation.

[ITU-T E.164] Recommendation ITU-T E.164 (2010), *The international public telecommunication numbering plan.*

[ITU-T I.251.3] Recommendation ITU-T I.251.3 (1992), *Number identification supplementary services: Calling Line Identification Presentation*.

[ITU-T I.251.4] Recommendation ITU-T I.251.4 (1992), *Number identification supplementary services: Calling Line Identification Restriction.*

[ITU-T Q.81.3] Recommendation ITU-T Q.81.3 (1991), *Stage 2 description for number identification supplementary services: Calling line identification presentation (CLIP) and calling line identification restriction (CLIR).*

[ITU-T Q.730] Recommendation ITU-T Q.730 (1999), *ISDN User Part supplementary services.*

[ITU-T Q.731.4] Recommendation ITU-T Q.731.4 (2019), *Stage 3 description for number identification supplementary services using signalling system No. 7 – Calling line identification restriction.*

[ITU-T Q.761] Recommendation ITU-T Q.761 (1999), *Signalling System No. 7 – ISDN User Part functional description.*

[ITU-T Q.762] Recommendation ITU-T Q.762 (1999), *Signalling System No. 7 – ISDN User Part general functions of messages and signals.*

[ITU-T Q.763] Recommendation ITU-T Q.763 (1999), *Signalling System No. 7 – ISDN User Part formats and codes.*

[ITU-T Q.764] Recommendation ITU-T Q.764 (1999), *Signalling System No. 7 – ISDN User Part signalling procedures.*

[ITU-T Q.767] Recommendation ITU-T Q.767 (1991), *Application of the ISDN User Part of CCITT signalling system No. 7 for international ISDN interconnections.*

[ITU-T Q.931] Recommendation ITU-T Q.931 (1998), *ISDN user-network interface layer 3 specification for basic call control.*

[ITU-T Q.951.3] Recommendation ITU-T Q.951.3 (1993), *Stage 3 description for number identification supplementary services using DSS 1: Calling line identification presentation.*

3 Definitions

3.1 Terms defined elsewhere

None.

3.2 Terms defined in this Recommendation

This Recommendation defines the following term:

3.2.1 calling line identification presentation (CLIP): A supplementary service offered to the called user which provides the calling user's number, with additional address information (e.g., calling party sub-address) if any, to the called user.

4 Abbreviations and acronyms

This Recommendation uses the following abbreviations and acronyms:

3PTY Three-Party service

AOC Advice Of Charge

CCBS Completion of Calls to Busy Subscriber

CD Call Deflection

CDIV Call Diversion services

CFB Call Forwarding Busy

CFNR Call Forwarding No Reply

CFU Call Forwarding Unconditional

CLIP Calling Line Identification Presentation

CLIR Calling Line Identification Restriction

COLP Connected Line Identification Presentation

COLR Connected Line Identification Restriction

CONF Conference calling

CPE Customer Premises Equipment

CPE-SS7 CPE Connected Signalling System No. 7

CUG Closed User Group

CW Call Waiting

DDI Direct Dialling-In

DSS1 Digital Subscriber Signalling System No. 1

HOLD call Hold

ISDN Integrated Services Digital Network

ISUP Integrated Services Digital Network User Part

LH	Line Hunting
MCID	Malicious Call Identification
MLPP	Multi-Level Precedence and Pre-Emption
MSN	Multiple Subscriber Number
PNP	Private Numbering Plan
REV	Reverse charging
SS	Signalling System
SUB	Sub-addressing
TP	Terminal Portability
UUS	User-to-User Signalling
UUS1	User-to-User Signalling, service 1
UUS2	User-to-User Signalling, service 2
UUS3	User-to-User Signalling, service 3

5 Conventions

None.

6 Calling line identification presentation

6.1 Description

6.1.1 General description

The CLIP supplementary service is a supplementary service offered to the called user. It presents the calling user's number, with additional address information (e.g., the calling party sub-address) if any, to the called user. When provided, the facility applies to all incoming calls except for when the calling user has activated the calling line identification restriction (CLIR) supplementary service (see [ITU-T Q.731.4]) or the complete number of the calling user is not available at the destination exchange.

The calling party number may be provided by the originating local exchange or by the access signalling system of the calling user. The calling party number may also be provided by transit exchange which is connected to the customer premises equipment (CPE) using Signalling System No. 7.

The calling party sub-address (if provided by the access signalling system) shall be transported transparently by the network in the access transport parameter. The network cannot be responsible for the content of this sub-address.

Information indicating that a subscriber has the CLIP supplementary service facility is available in the exchange to which the subscriber is connected to.

The stage 1 service description is given in [ITU-T I.251.3], and the stage 2 functional capabilities and information flows are given in [ITU-T Q.81.3]. The stage 3 DSS1 description is given in [ITU-T Q.951.3]. This stage 3 description of the CLIP supplementary service uses the integrated services digital network (ISDN) user part protocol as defined in [ITU-T Q.761], [ITU-T Q 764] and [ITU-T Q.730].

6.1.2 Specific terminology

In addition to the term defined in clause 3, this Recommendation uses the following specific terminology:

ISDN number – A number conforming to the numbering plan and structure specified in [ITU-T E.164].

National (ISDN) number; National significant (ISDN) number – See [ITU-T E.164].

International (ISDN) number – See [ITU-T E.164].

Sub-address – See [ITU-T E.164].

Served user – The user of a particular ISDN number who has subscribed to the presentation of the calling line identification information in association with incoming calls. The served user is also known as the called user.

Calling user – The user that initiated an incoming call at the served user. The calling user needs not to have subscribed to the CLIP supplementary service.

Default number – A national significant ISDN number registered within the public ISDN following prior arrangement between the calling user and the public ISDN.

Special connection arrangement – An arrangement between a customer and a public network operator whereby customer supplied calling party numbers are not screened by the public network.

Access signalling system – A part in the local exchange that handles the user-network interface protocol. It also includes the screening functions.

CPE connected signalling system No. 7 – A part in the transit exchange that handles the SS No. 7 protocol used between transit exchange and CPE. It also includes the screening functions.

6.1.3 Provision/withdrawal

See clause 2.3 of [ITU-T I.251.3].

6.1.4 State definitions

No specific state definitions are required.

6.2 Operational requirements

6.2.1 Provision/withdrawal

See clause 3.1 of [ITU-T I.251.3].

6.2.2 Requirements on the originating network side

Not applicable.

6.2.3 Requirements in the network

No specific requirements are needed in the network.

6.2.4 Requirements on the terminating network side

Not applicable.

6.3 Coding requirements

i) Coding requirements if a special connection arrangement does not apply

– Clause 3.10 of [ITU-T Q.763] and clause 3.2 of [ITU-T Q.763] give the coding for the calling party number and the access transport parameter which are required to support this service.

– The purpose of the calling party number parameter is to identify the origin of a call.

– The access transport parameter transports the calling party sub-address information element as defined in clause 4.5.11 of [ITU-T Q.931], which is to identify a sub-address associated with the origin of the call.

ii) Coding requirements if a special connection arrangement applies

– In addition to the coding requirements of i) above, the generic number parameter as specified in clause 3.26c) of [ITU-T Q.763] is required.

– The purpose of the generic number parameter is to transport a calling party number provided by the calling user with a special connection arrangement.

– The generic number parameter is accompanied by the parameter compatibility information parameter as specified in clause 3.41 b) of [ITU-T Q.763]. The procedures for the compatibility are defined in clause 2.9.5 of [ITU-T Q.764].

– The allowed coding for the generic number parameter is as follows:

a) Number qualifier indicator

00000110 additional calling party number

b) Odd/even indicator

See clause 3.9 a) of [ITU-T Q.763]

c) Nature of address indicator

0000001 subscriber number (for national use)

0000010 unknown (for national use)

0000011 national (significant) number

0000100 international number

d) Internal network number indicator/number incomplete indicator (not used)

0

e) Numbering plan indicator

001 ISDN (Telephony) numbering plan [ITU-T E.164]

f) Address presentation restricted (Pres. Restric.) indicator

00 presentation allowed

01 presentation restricted

g) Screening indicator

00 user provided, not verified

10 user provided, verified and failed (for national use)

h) Address signals

0000 digit 0

0001 digit 1

0010 digit 2

0011 digit 3

0100 digit 4

0101 digit 5

0110 digit 6

0111 digit 7

1000 digit 8

1001 digit 9

i) Filler

See clause 3.9 h) of [ITU-T Q.763].

6.4 Signalling requirements

6.4.1 Activation/deactivation/registration

Not applicable.

6.4.2 Invocation and operation

6.4.2.1 Actions at the originating local exchange

6.4.2.1.1 Normal operation

All information pertaining to the CLIP supplementary service shall be inserted in the initial address message sent as part of the basic call procedures according to [ITU-T Q.764].

The calling party sub-address (if provided by the access signalling system) shall be transported transparently by the network in the access transport parameter.

If the numbering plan indicator received from the access signalling system together with a calling party number is coded other than "ISDN (Telephony) numbering plan [ITU-T E.164]" or "unknown", then the calling party number received from the access signalling system shall be discarded and the processing of the call shall continue as if no calling party number was received. If the numbering plan indicator received from the access signalling system is coded "unknown", then the originating local exchange shall treat this value as if the value "ISDN (Telephony) numbering plan [ITU-T E.164]" was received.

If the screening indicator received from the access signalling system together with the calling party number is coded "user provided, not verified", then the calling party number shall be entered in the generic number parameter. In this parameter, the number qualifier indicator shall be set to "additional calling party number" and the screening indicator to "user provided, not verified". If the numbering plan indicator received is coded "ISDN (Telephony) numbering plan [ITU-T E.164]" or "unknown", then the nature of address indicator shall be set to "international number" or "national (significant) number" as received from the access signalling system.

NOTE 1 – As a national option, some networks may allow for the screening indicator "user provided, verified and failed". If this screening indicator is supported, then the originating local exchange shall treat this value in the same manner as the value "user provided, not verified".

In addition, the originating local exchange shall enter the default number associated with that access in the calling party number parameter. In this parameter, the screening indicator shall be set to "network provided" and the nature of address indicator to "national (significant) number".

If the screening indicator received from the access signalling system together with the calling party number is coded other than "user provided, not verified", then the originating local exchange shall enter the calling party number as received from the access signalling system in the calling party number parameter. The screening indicator of the calling party number parameter shall be set as received from the access signalling system.

NOTE 2 – In the latter case, allowed values for the screening indicator are "network provided" and "user provided, verified and passed".

If no calling party number is received from the access signalling system, the originating local exchange shall enter the default number associated with that access in the calling party number parameter. The screening indicator shall be set to "network provided" and the nature of address indicator to "national (significant) number".

The calling party number incomplete indicator of the calling party number parameter shall be set to "complete".

The numbering plan indicator of the calling party number parameter shall be set to "ISDN (Telephony) numbering plan [ITU-T E.164]".

The numbering plan indicator of the generic number parameter shall be set to "ISDN (Telephony) numbering plan [ITU-T E.164]" if this value or "unknown" was received from the access signalling system.

The address presentation restricted indicators of the calling party number and the generic number parameter shall both be set to the value "presentation allowed" or "presentation restricted" as received from the access signalling system.

The actions at the originating local exchange and the resulting codepoints are summarized in Table 6-1.

Table 6-1 – Calling party number, codepoints at the original local exchange

Information provided by the access signalling system			**Information transported by the network**			
Calling party number	Numbering plan	Screening indicator	Calling party number	Numbering plan	Nature of address indicator	Screening indicator
			Calling party number parameter			
None			Default number	"[ITU-T E.164]"	"national (significant) number"	"network provided"
			No generic number parameter indicating "additional calling party number" is sent			
			Calling party number parameter			
Any numbera)	Other than "[ITU-T E.164]" or "unknown"		Default number	"[ITU-T E.164]"	"national (significant) number"	"network provided"
			No generic number parameter indicating "additional calling party number" is sent			
			Calling party number parameter			
Any digit sequence conforming to [ITU-T E.164]	"[ITU-T E.164]" or "unknown"	"network provided" or "user provided, verified and passed"	Number provided by the access signalling system	"[ITU-T E.164]"	"national (significant) number" or "international number" as provided by the access signalling system	"network provided" or "user provided, verified and passed"
			No generic number parameter indicating "additional calling party number" is sent			
			Calling party number parameter			
			Default number	"[ITU-T E.164]"	"national (significant) number"	"network provided"
			Generic number parameter for "additional calling party number"			
Any digit sequence conforming to [ITU-T E.164]	"[ITU-T E.164]" or "unknown"	"user provided, not verified"b)	Number provided by the access signalling system	"[ITU-T E.164]"	"national (significant) number" or "international number" as provided by the access signalling system	"user provided, not verified"b)

Table 6-1 – Calling party number, codepoints at the original local exchange

Information provided by the access signalling system	Information transported by the network
a) In this case, the calling party number received from the access signalling system shall be discarded, but the address presentation restricted indicator shall (as in all other cases) be set to the value as received from the access signalling system. b) As a national option, some networks may allow for the screening indicator "user provided, verified and failed". If this screening indicator is supported, then the originating local exchange shall treat this value in the same manner as the value "user provided, not verified".	

6.4.2.1.2 Exceptional procedures

No exceptional procedures are identified.

6.4.2.2 Actions at the transit exchange

6.4.2.2.1 Normal operation

A transit exchange shall transfer all information relating to the CLIP and CLIR supplementary services transparently to the succeeding exchange.

NOTE – In interworking with the mobile network, the mobile telephony exchange may provide the transit exchange with an international calling party number that has a country code other than the country code of the transit exchange.

6.4.2.2.2 Exceptional procedures

When transit exchange connects to a customer premises equipment through SS No. 7, following actions (e.g., ignore the information, use a default value) shall be taken.

If no CLI parameter is received from the CPE connected signalling system No. 7 (CPE-SS7) or number incomplete indicator of the CLI parameter is "incomplete", the transit exchange shall enter the default number associated with the CPE-SS7 in the calling party number parameter. The screening indicator shall be set to "network provided" and the nature of address indicator shall be set to "national (significant) number".

If the numbering plan indicator received from the CPE-SS7 together with a calling party number is coded other than "ISDN (Telephony) numbering plan [ITU-T E.164]" or "unknown", then the calling party number received from the CPE-SS7 shall be discarded and the processing of the call shall continue as if no CLI parameter was received. If the numbering plan indicator received from the CPE-SS7 is coded "unknown", then the transit exchange shall treat this value as if the value "ISDN (Telephony) numbering plan [ITU-T E.164]" was received.

If the screening indicator received from the CPE-SS7 together with the calling party number is coded "user provided, not verified" or "user provided, verified and failed", then the transit exchange shall enter the default number associated with the CPE-SS7 in the calling party number parameter. The screening indicator of the calling party number parameter shall be set to "network provided" and the nature of address indicator shall be set to "national (significant) number". The calling party number can be entered in the generic number parameter according to pre-defined policy. In generic number parameter, number qualifier indicator shall be set to "additional calling party number" and screening indicator shall be set as received. In other cases, generic number parameter "number qualifier indicator" set to "additional calling party number" shall not be sent even if it is received from CPE-SS7.

If the screening indicator received from the CPE-SS7 is "network provided" or "user provided, verified and passed", then:

– if the received calling party number is associated with the CPE-SS7, then the transit exchange shall enter the calling party number as received from CPE-SS7 in the calling party number parameter. The screening indicator of the calling party number parameter shall be set as received from the CPE-SS7.

– if the received calling party number is not associated with the CPE-SS7, then the transit exchange shall enter the calling party number as the default number associated with the CPE-SS7 in the calling party number parameter. The screening indicator of the calling party number parameter shall be set to "network provided" and the nature of address indicator shall be set to "national (significant) number".

The calling party number incomplete indicator of the calling party number parameter shall be set to "complete".

The address presentation restricted indicators of the calling party number shall be set to the value associated with the CPE-SS7.

The actions at the transit exchange that connect to CPE-SS7 and the resulting codepoints are summarized in Table 6-2.

Table 6-2 – Calling party number, codepoints at the transit exchange

Information provided by CPE-SS7			**Information transported by the network**			
Calling party number	Numbering plan	Screening indicator	Calling party number	Numbering plan	Nature of address indicator	Screening indicator
			Calling party number parameter			
None or incomplete			Default number	"[ITU-T E.164]"	"national (significant) number"	"network provided"
			No generic number parameter indicating "additional calling party number" is sent			
			Calling party number parameter			
Any number	Other than "[ITU-T E.164]" or "unknown"		Default number	"[ITU-T E.164]"	"national (significant) number"	"network provided"
			No generic number parameter indicating "additional calling party number" is sent			
			Calling party number parameter			
digit sequence conforming to [ITU-T E.164] and associated with the CPE-SS7	"[ITU-T E.164]" or "unknown"	"network provided" or "user provided, verified and passed"	Number provided by that CPE-SS7	"[ITU-T E.164]"	"national (significant) number" or "international number" as provided by the CPE-SS7	"network provided" or "user provided, verified and passed"
			No generic number parameter indicating "additional calling party number" is sent			
			Calling party number parameter			
Any digit sequence conforming to [ITU-T E.164] but not associated with the CPE-SS7	"[ITU-T E.164]" or "unknown"	"network provided" or "user provided, verified and passed"	Default number	"[ITU-T E.164]"	"national (significant) number"	"network provided"
			No generic number parameter indicating "additional calling party number" is sent			
			Calling party number parameter			

Table 6-2 – Calling party number, codepoints at the transit exchange

Information provided by CPE-SS7			Information transported by the network			
			Default number	"[ITU-T E.164]"	"national (significant) number"	"network provided"
			Generic number parameter for "additional calling party number" a)			
Any digit sequence conforming to [ITU-T E.164]	"[ITU-T E.164]" or "unknown"	"user provided, not verified" or user provided, verified and failed	Number provided by the CPE-SS7	"[ITU-T E.164]"	"national (significant) number" or "international number" as provided by the CPE-SS7	"user provided, not verified" or user provided, verified and failed

a) Generic number parameter indicating "additional calling party number" with the screening indicator "user provided, not verified" can be sent under pre-defined policy. In other case, it shall not be sent.

6.4.2.3 Actions at the outgoing international gateway exchange

6.4.2.3.1 Normal operation

If the address presentation restricted indicator of the received calling party number parameter is set to "presentation restricted", the outgoing international gateway exchange shall act according to the bilateral agreement between the two networks (see clauses 2.1 and 5 of [ITU-T I.251.4]). If the address presentation restricted indicator of the received calling party number parameter is set to "address not available", then the calling party number parameter shall be omitted from the initial address message. If the calling party number parameter is not sent across the international section, then the generic number parameter shall be omitted from the initial address message if its number qualifier indicates "additional calling party number".

The exchange shall convert the calling party number conveyed in the calling party number parameter to an international number (if necessary) and set the nature of address indicator to "international number". The address presentation restricted indicator and the screening indicator shall be transferred transparently.

If the generic number parameter is received and its number qualifier indicates "additional calling party number" and the numbering plan indicator is coded "ISDN (Telephony) numbering plan [ITU-T E.164]", then the generic number parameter shall be treated in the same manner as the calling party number parameter.

NOTE 1 – Without bilateral agreement for the transport of "user provided, verified and failed" numbers between networks, the generic number parameter shall be discarded if its number qualifier indicates "additional calling party number" and the screening indicator is coded "user provided, verified and failed".

NOTE 2 – The address presentation restricted indicator in both the calling party number and generic number parameters are set to the same value. They can have the values "presentation allowed" or "presentation restricted" (based on the bilateral agreement).

6.4.2.3.2 Exceptional procedures

If no calling party number parameter is received from the incoming network, then no calling party number parameter shall be sent to the succeeding exchange.

If the calling party number incomplete indicator is set to "incomplete", then no calling party number parameter shall be sent to the succeeding exchange.

6.4.2.4 Actions at the incoming international gateway exchange

6.4.2.4.1 Normal operation

The exchange shall check if the country code of the calling party number is the network's own country code. If this is the case, then the country code shall be removed. The nature of address indicator shall be set to "national (significant) number". The address presentation restricted indicator and the screening indicator shall be transferred transparently.

NOTE – As a national option, the incoming international gateway exchange may add a prefix to the calling party number. In this case the nature of address indicator shall be set to "unknown".

If the generic number parameter is received and its number qualifier indicates "additional calling party number" and the numbering plan indicator is coded "ISDN (Telephony) numbering plan [ITU-T E.164]", then the generic number parameter shall be treated in the same manner as the calling party number parameter.

6.4.2.4.2 Exceptional procedures

If no calling party number parameter is received from the preceding exchange, then no calling party number parameter shall be sent to the outgoing network.

If the address presentation restricted indicator of the received calling party number parameter is set to "address not available", then this value shall be passed on transparently. The screening indicator shall be set to "network provided".

NOTE – As a national option, the nature of address indicator in the calling party number parameter can be set to "unknown".

6.4.2.5 Actions at the destination local exchange

6.4.2.5.1 Normal operation

When the destination local exchange receives an initial address message, basic call handling shall occur and the exchange shall send a set-up request to the access signalling system.

It is a function of the user-network interface to check whether the called user has subscribed to the CLIP supplementary service or not and not to present the calling party sub-address, where appropriate, to the user.

If the generic number parameter with a number qualifier set to "additional calling party number" is provided, then the information conveyed in this parameter shall be presented first to the access signalling system. The information conveyed in the calling party number parameter shall be sent to the access signalling system immediately following the information of the generic number parameter.

Where the generic number parameter is not provided but the calling party number parameter is present, then the information conveyed in the calling party number parameter shall be sent to the access signalling system.

All the available information shall be sent to the access signalling system.

6.4.2.5.2 Exceptional procedures

No exceptional procedures are identified.

6.5 Interaction with other supplementary services

6.5.1 Call waiting (CW)

No impact on ISUP.

6.5.2 Call transfer services

No applicable interaction at this time.

6.5.3 Connected line identification presentation (COLP)

No impact on ISUP.

6.5.4 Connected line identification restriction (COLR)

No impact on ISUP.

6.5.5 Calling line identification presentation (CLIP)

Not applicable.

6.5.6 Calling line identification restriction (CLIR)

The CLIR supplementary service (see [ITU-T Q.731.4]) shall take precedence over the CLIP supplementary service.

Depending on bilateral agreement, the originating network may restrict the information conveyed in the generic number and/or calling party number parameter from being sent to the destination network when the CLIR supplementary service is applicable.

6.5.7 Closed user group (CUG)

No impact on ISUP.

6.5.8 Conference calling (CONF)

No impact on ISUP.

6.5.9 Direct dialling-in (DDI)

No impact on ISUP.

6.5.10 Call diversion services (CDIV)

6.5.10.1 Call forwarding busy (CFB)

An exchange forwarding a call shall also forward the generic number parameter (if present).

6.5.10.2 Call forwarding no reply (CFNR)

An exchange forwarding a call shall also forward the generic number parameter (if present).

6.5.10.3 Call forwarding unconditional (CFU)

An exchange forwarding a call shall also forward the generic number parameter (if present).

6.5.10.4 Call deflection (CD)

An exchange deflecting a call shall also deflect the generic number parameter (if present).

6.5.11 Line hunting (LH)

No impact on ISUP.

6.5.12 Three-party service (3PTY)

No impact on ISUP.

6.5.13 User-to-user signalling (UUS)

6.5.13.1 User-to-user signalling, service 1 (UUS1)

No impact on ISUP.

6.5.13.2 User-to-user signalling, service 2 (UUS2)

No impact on ISUP.

6.5.13.3 User-to-user signalling, service 3 (UUS3)

No impact on ISUP.

6.5.14 Multiple subscriber number (MSN)

No impact on ISUP.

6.5.15 Call hold (HOLD)

No impact on ISUP.

6.5.16 Advice of charge (AOC)

No impact on ISUP.

6.5.17 Sub-addressing (SUB)

No impact on ISUP.

6.5.18 Terminal portability (TP)

No impact on ISUP.

6.5.19 Completion of calls to busy subscriber (CCBS)

No applicable interaction at this time.

6.5.20 Malicious call identification (MCID)

No impact on ISUP.

6.5.21 Reverse charging (REV)

No applicable interaction at this time.

6.5.22 Multi-level precedence and preemption (MLPP)

No impact on ISUP.

6.5.23 Private numbering plan (PNP)

No applicable interaction at this time.

6.5.24 International telecommunication charge card

No applicable interaction at this time.

6.6 Interactions with other networks

On calls to or via non-ISDNs or an ISUP as defined in [ITU-T Q.767], where the succeeding signalling section supports only one calling party number to be carried, the information contained in the calling party number parameter shall be forwarded. The generic number parameter shall be discarded.

Interworking exchanges may generate only part of the calling line identity for inclusion in the initial address message (e.g., trunk code). This shall be indicated in the number incomplete indicator in the calling party number parameter.

On calls incoming from some non-ISDNs, the calling party number may be delivered to the destination ISDN without an indication of calling line identity restriction or the calling party number may be incomplete. In the case where there is no indication of presentation allowed or restricted, the interworking exchange shall act according to its rules and regulations. In the case where the number incomplete indicator received together with the calling party number indicates "incomplete", the information conveyed in the calling party number parameter is passed to the access signalling system.

6.7 Signalling flows

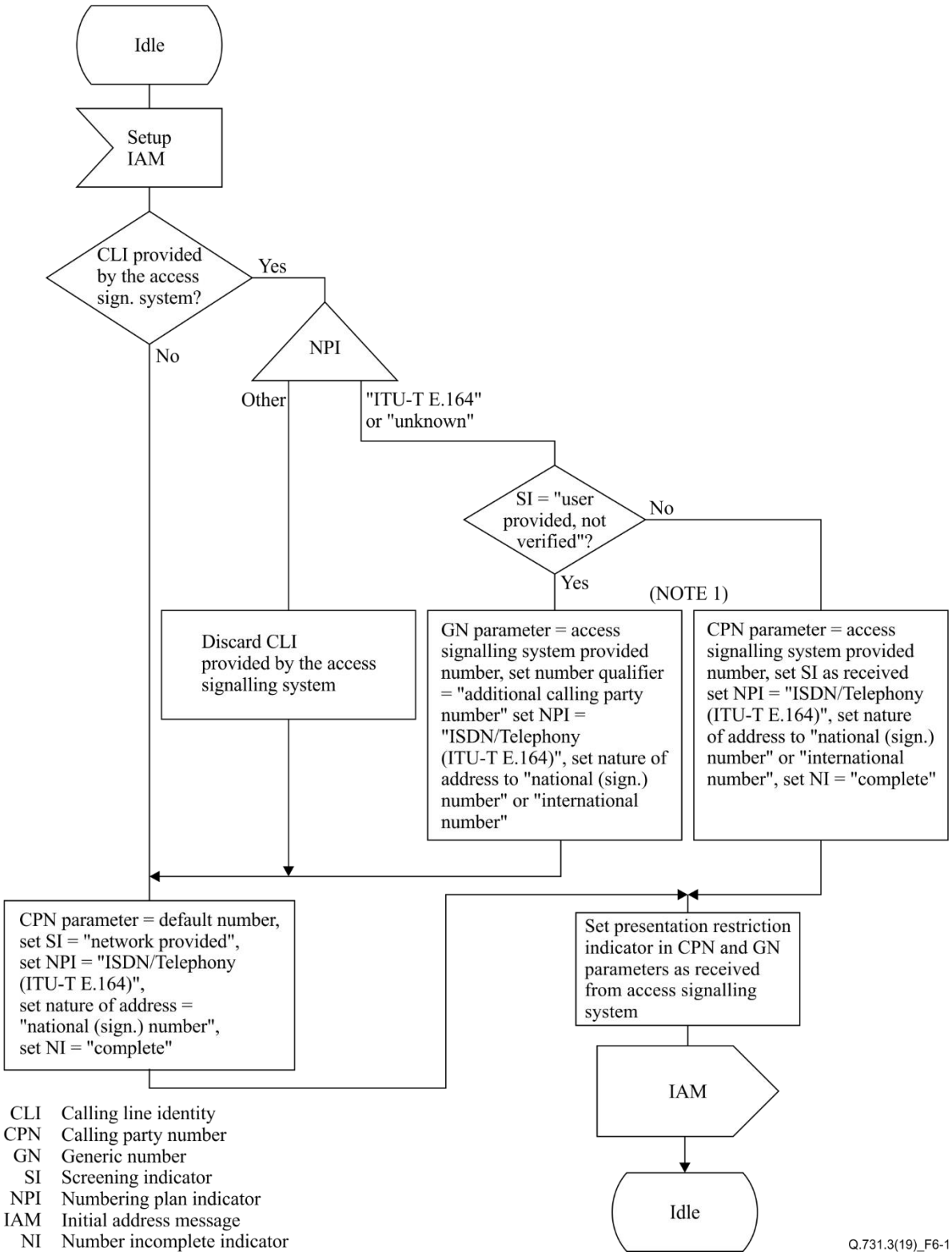
No CLIP supplementary service specific signalling flow is necessary in addition to the basic call control according to [ITU-T Q.764].

6.8 Parameter values (timers)

No specific timers are required.

6.9 Dynamic description

The dynamic description is specified in Figure 3-1 o Figure 3-4.



NOTE 1 – As a national option, some networks may allow for the screening indicator "user provided and failed". If this screening indicator is supported, then the originating local exchange shall treat this value in the samemanner as the value "user provided, not verified".

NOTE 2 – This procedure operates independently from any CLIP subscription by the calling user and is provided as part of the basic service.

NOTE 3 – This transition specifies additional processing to that described in Annex H of [ITU-TQ.764].

Figure 6-1 – Originating local exchange dynamic description of the ISUP protocol

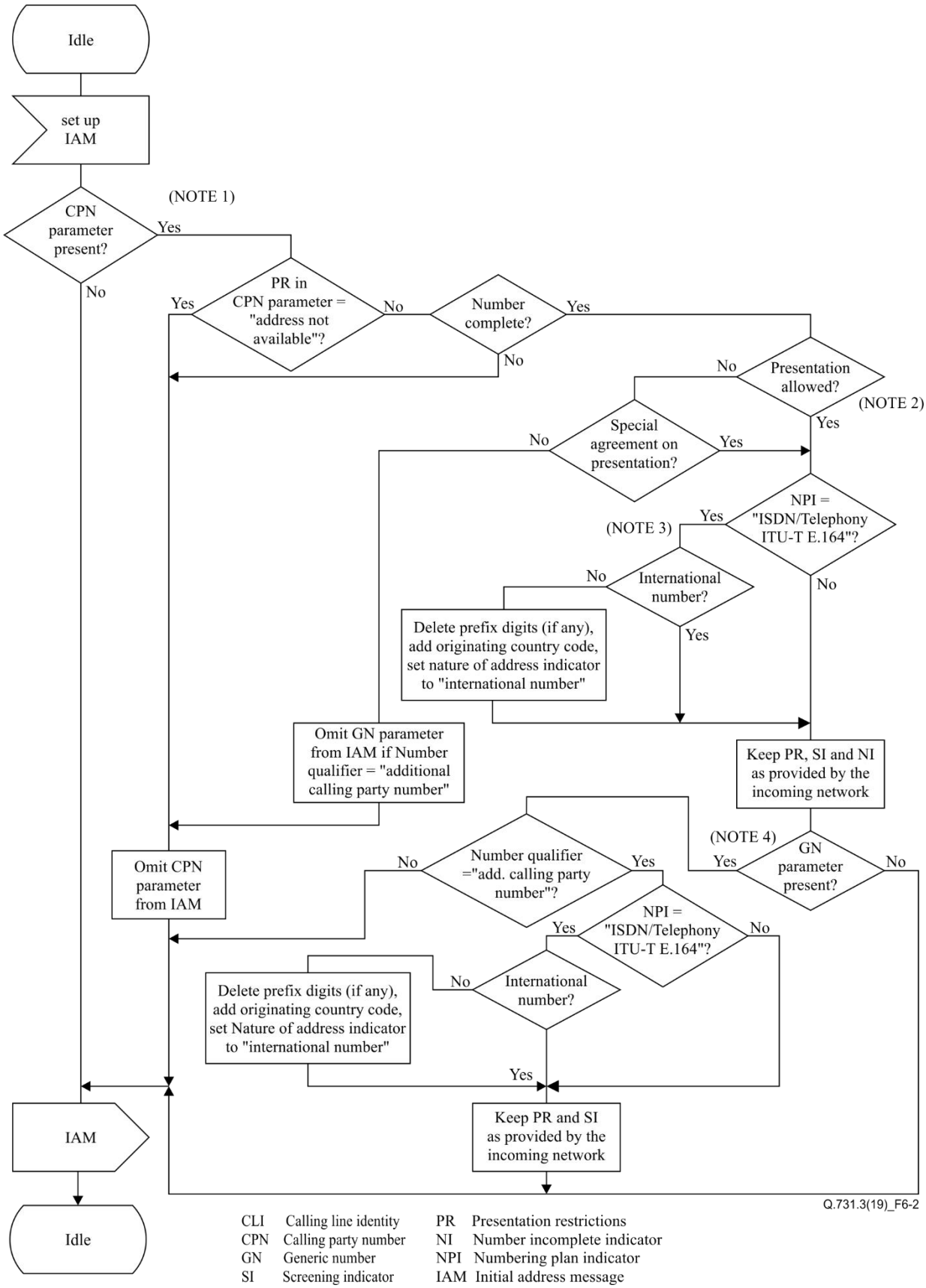
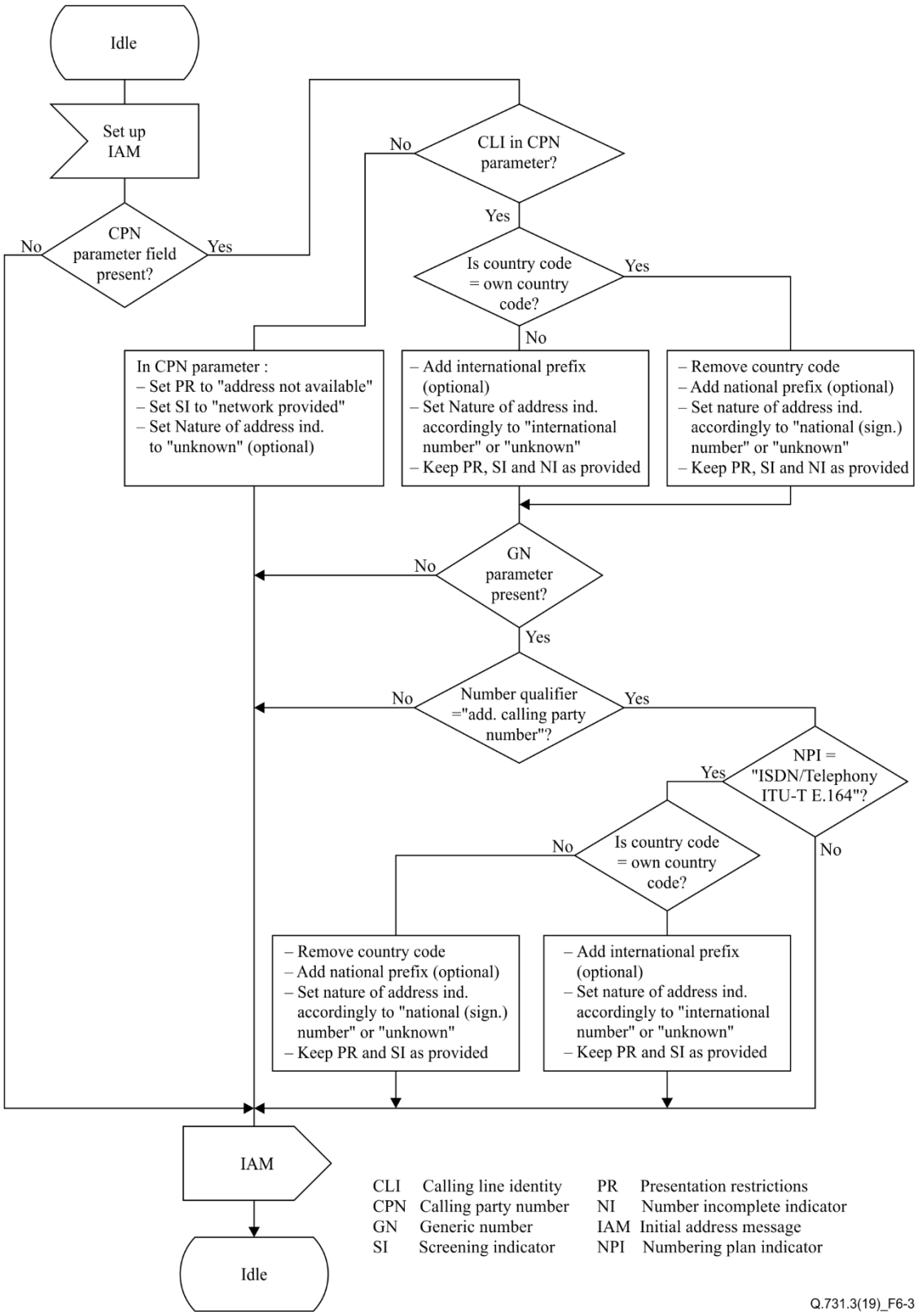
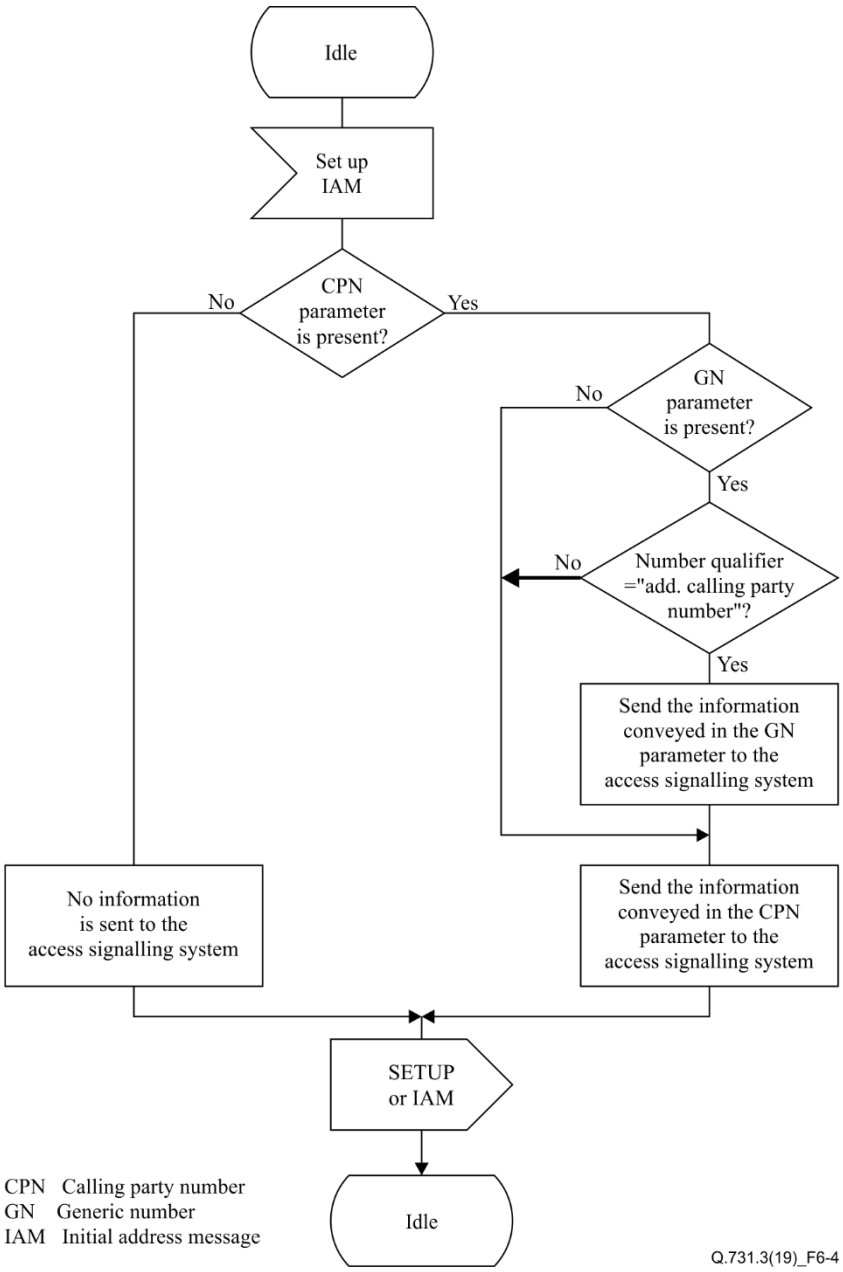


Figure 6-2 – Outgoing international gateway exchange dynamic description



NOTE – This transition specifies additional processing to that described in Annex H of [ITU-T Q.764].

Figure 6-3 – Incoming international gateway exchange dynamic description



NOTES 1 – It is a function of the access signalling system to check if the CLIP supplementary service is applicable and not to present presentation restricted numbers to the called user.
NOTES 2 – The request option is not supported by private networks (identity always included). The request procedure can only be used to obtain the calling line identity in case of the malicious call identification supplementary service.
NOTES 3 – This transition specifies additional processing to that described in Annex H of [ITU-T Q.764].

Figure 6-4 – Destination local exchange dynamic description of the ISUP protocol

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