



AUSTRALIAN COMMUNICATIONS INDUSTRY FORUM
INDUSTRY SPECIFICATION

**PART E.6 STAGE 3 SUPPLEMENTARY
DESCRIPTION - CALLING LINE
PRESENTATION/RESTRICTION**

ACIF G500:2000 PART E.6

Industry Specification

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General.....	1
Participants	1
Introduction.....	1
References.....	2
3 Calling line identification presentation (CLIP).....	2
3.1 Definition	2
3.2 Description.....	2
3.2.1 General description.....	2
3.2.2 Specific terminology.....	2
3.2.3 Qualification on the applicability to telecommunication services	3
3.2.4 State definitions	3
3.3 Operational requirements	3
3.3.1 Provision/withdrawal.....	3
3.3.2 Requirements on the originating network side.....	3
3.3.3 Requirements in the network	3
3.3.4 Requirements on the terminating network side.....	3
3.4 Coding requirements	3
3.5 Signalling requirements.....	4
3.5.1 Activation/deactivation/registration.....	4
3.5.2 Invocation and operation	4
3.6 Interaction with other supplementary services	8
3.6.1 Call waiting (CW)	8
3.6.2 Call transfer services	8
3.6.3 Connected line identification presentation (COLP).....	8
3.6.4 Connected line identification restriction (COLR).....	8
3.6.5 Calling line identification presentation (CLIP).....	8
3.6.6 Calling line identification restriction (CLIR).....	8
3.6.7 Closed user group (CUG).....	9
3.6.8 Conference calling (CONF).....	9
3.6.9 Direct dialling-in (DDI).....	9
3.6.10 Call diversion services (CDIV)	9
3.6.11 Line hunting (LH).....	9
3.6.12 Three-party service (3PTY).....	9
3.6.13 User-to-user signalling (UUS).....	10
3.6.14 Multiple subscriber number (MSN).....	10
3.6.15 Call hold (HOLD)	10
3.6.16 Advice of charge (AOC).....	10
3.6.17 Sub-addressing (SUB).....	10
3.6.18 Terminal portability (TP)	10
3.6.19 Completion of calls to busy subscriber (CCBS)	10
3.6.20 Malicious call identification (MCID)	10
3.6.21 Reverse charging (REV).....	10
3.6.22 Multi-level precedence and preemption (MLPP)	11
3.6.23 Private numbering plan (PNP).....	11
3.6.24 International telecommunication charge card	11
3.7 Interactions with other networks	11
3.8 Signalling flows.....	11
3.9 Parameter values (timers).....	11
3.10 Dynamic description	11
4 Calling line identification restriction (CLIR).....	11
4.1 Definition	11
4.2 Description.....	11
4.2.1 General description.....	11
4.2.2 Specific terminology.....	16
4.2.3 Qualification on the applicability to telecommunication services	16
4.2.4 State definitions	16
4.3 Operational requirements	16

4.3.1	Provision/withdrawal.....	16
4.3.2	Requirements on the originating network side.....	16
4.3.3	Requirements in the network	17
4.3.4	Requirements on the terminating network side.....	17
4.4	Coding requirements	17
4.5	Signalling requirements.....	17
4.5.1	Activation/deactivation/registration.....	17
4.5.2	Invocation and operation	17
4.6	Interaction with other supplementary services	18
4.6.1	Call waiting (CW)	18
4.6.2	Call transfer services	18
4.6.3	Connected line identification presentation (COLP).....	18
4.6.4	Connected line identification restriction (COLR).....	18
4.6.5	Calling line identification presentation (CLIP).....	18
4.6.6	Calling line identification restriction (CLIR).....	18
4.6.7	Closed user group (CUG).....	18
4.6.8	Conference calling (CONF).....	18
4.6.10	Call diversion services (CDIV)	18
4.6.11	Line hunting (LH).....	19
4.6.12	Three-party service (3PTY).....	19
4.6.13	User-to-user signalling (UUS).....	19
4.6.14	Multiple subscriber number (MSN).....	19
4.6.15	Call hold (HOLD)	19
4.6.16	Advice of charge (AOC).....	20
4.6.17	Sub-addressing (SUB).....	20
4.6.18	Terminal portability (TP)	20
4.6.19	Completion of calls to busy subscriber (CCBS)	20
4.6.20	Malicious call identification (MCID)	20
4.6.21	Reverse charging (REV).....	20
4.6.22	Multi-level precedence and preemption (MLPP)	20
4.6.23	Private numbering plan (PNP).....	20
4.6.24	International telecommunication charge card	20
4.7	Interactions with other networks	20
4.8	Signalling flows.....	21
4.9	Parameter values (timers).....	21
4.10	Dynamic description	21

Recommendation Q.731 Part E.6

Recommendation Q.731 (03/93)

**~~STAGE 3 SUPPLEMENTARY DESCRIPTION FOR NUMBER IDENTIFICATION
SUPPLEMENTARY SERVICES USING SIGNALLING SYSTEM NO. 7~~****CALLING LINE PRESENTATION/RESTRICTION***(Helsinki, 1993)***General**

This document forms part of the Australian Communications Industry Forum (ACIF) G.500 signalling protocol specification for interconnection services to be used in the Australian domestic network.

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This document is based on ITU-T recommendation Q.731 (Clauses 3 and 4) (1993). This document is a modification of ITU-T recommendation Q.731 (Clauses 3 and 4) which has been customised to suit Australian network requirements.

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Introduction

This document specifies the requirements for the implementation of the ACIF G.500 ISUP specification based on the ITU-T recommendation Q.731 (Clauses 3 and 4).

References

ITU-T Recommendation Q.731 - Clauses 3 and 4 (1993).

3 Calling line identification presentation (CLIP)

3.1 Definition

calling line identification presentation (CLIP) is 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.

3.2 Description

3.2.1 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 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 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 ~~Recommendation I.251.3~~ Part E.5, and the stage 2 functional capabilities and information flows are given in Recommendation Q.81.3. ~~The stage 3 DSS 1 description is given in Recommendation Q.951.3.~~ This stage 3 description of the CLIP supplementary service uses the ISDN user part protocol as defined in ~~Recommendations Q.761-764~~ Parts A to D and Q.730 Part E.

3.2.2 Specific terminology

CLIP Calling line identification presentation
CLIR Calling line identification restriction
ISDN Integrated services digital network
ISUP Integrated services digital network user part
DSS 1 Digital subscriber signalling system No. 1

ISDN number – A number conforming to the numbering plan and structure specified in Recommendation E.164. For the purposes of this specification, this includes PSTN, ISDN and PLMN numbers.

National (ISDN) number; National significant (ISDN) number – See Recommendation E.164.

International (ISDN) number – See Recommendation E.164.

Sub-address – See Recommendation E.164.

Served user – It is 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 – It is the user that initiated an incoming call at the served user. The calling user need not have subscribed to the CLIP supplementary service.

Default number – A national significant ISDN number registered within the public ~~ISDN-network~~ following prior arrangement between the calling user and the public ~~network~~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 which handles the user-network interface protocol. It also includes the screening functions.

3.2.3 Qualification on the applicability to telecommunication services

See 3.2.3/4.254 Part E.5.

3.2.4 State definitions

No specific state definitions are required.

3.3 Operational requirements

3.3.1 Provision/withdrawal

See 3.3.1/4.254 Part E.5.

3.3.2 Requirements on the originating network side

Not applicable.

3.3.3 Requirements in the network

No specific requirements are needed in the network.

3.3.4 Requirements on the terminating network side

Not applicable.

3.4 Coding requirements

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

Subclauses 3.8/Q.763-Part C and 3.2/Q.763 Part C 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 4.5.11/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 3.20 e)/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 3.26 b)/Q.763. The procedures for the compatibility are defined in 2.9.5/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 3.7 a)/Q.763~~

- e) — *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 (Recommendation 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 3.7 h)/Q.763.

3.5 Signalling requirements

3.5.1 Activation/deactivation/registration

Not applicable.

3.5.2 Invocation and operation

3.5.2.1 Actions at the originating local exchange

3.5.2.1.1 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 Recommendation Q.764 Part D.

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 (Recommendation 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 (Recommendation 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 (Recommendation 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.

NOTES

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. Allowed values are “network provided” and “user provided, verified and passed”.

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 (Recommendation E.164)”.

The numbering plan indicator of the generic number parameter shall be set to “ISDN (Telephony) numbering plan (Recommendation 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 3-1.

3.5.2.1.2 Exceptional procedures

No exceptional procedures are identified.

3.5.2.2 Actions at the transit exchange

3.5.2.2.1 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.

3.5.2.2.2 Exceptional procedures

No exceptional procedures are identified.

TABLE 3-1/Q.731-Part E.6

Calling party number, codepoints

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
None			Calling party number parameter			
			Default number	“E.164”	“national (significant) number”	“network provided”
			No generic number parameter indicating “additional calling party number” is sent			
Any number ^{a)}	Other than “E.164” or “unknown”		Calling party number parameter			
			Default number	“E.164”	“national (significant) number”	“network provided”
			No generic number parameter indicating “additional calling party number” is sent			
Any digit sequence conforming to E.164	“E.164” or “unknown”	“network provided” or “user provided, verified and passed”	Calling party number parameter			
			Number provided by the access signalling system	“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			
Any digit sequence conforming to E.164	“E.164” or “unknown”	“user provided, not verified” ^{b)}	Calling party number parameter			
			Default number	“E.164”	“national (significant) number”	“network provided”
			Generic number parameter for “additional calling party number”			
			Number provided by the access signalling system	“E.164”	“national (significant) number” or “international number” as provided by the access signalling system	“user provided, not verified” ^{b)}
^{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”.						

3.5.2.3 Actions at the outgoing international gateway exchange

3.5.2.3.1 Normal operation

If the address presentation restricted indicator of the received calling party number parameter is set to “presentation restricted” or “address not available”, the received calling party number parameter shall be passed transparently. the outgoing international gateway exchange shall act according to the bilateral agreement between the two networks (see 4.2.1/I.251 and 4.5/I.251). 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”. If the address presentation restricted indicator of the received calling party number parameter is set to “presentation allowed”, the outgoing gateway exchange shall act according to the bilateral agreement between the two networks.

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 (Recommendation E.164)”, then the generic number parameter shall be treated in the same manner as the calling party number parameter.

NOTES

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”.

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).

3.5.2.3.2 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. the call shall be failed by sending a release message with cause value 21.

If the calling party number incomplete indicator is set to “incomplete”, then no calling party number parameter shall be sent to the succeeding exchange. the call shall be failed by sending a release message with cause value 21.

3.5.2.4 Actions at the incoming international gateway exchange

3.5.2.4.1 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 (Recommendation E.164)”, then the generic number parameter shall be treated in the same manner as the calling party number parameter.

3.5.2.4.2 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. the call shall be failed by sending a release message with an appropriate cause value.

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”.

In the case where the Address Presentation restricted (Pres. Restrict.) indicator is set to 10 “address not available” the incoming gateway exchange may take one of the following actions:-

- i) transit the Calling Party Number Parameter unaltered or;
- ii) map the information contained in the Redirecting Number to the Calling Party Number with the Address presentation restricted indicator set to restrict.

In both these cases CPC 239 will be passed unchanged.

~~NOTE—As a national option, the nature of address indicator in the calling party number parameter can be set to “unknown”.~~

3.5.2.5 Actions at the destination local exchange

3.5.2.5.1 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.

3.5.2.5.2 Exceptional procedures

No exceptional procedures are identified.

3.6 Interaction with other supplementary services

3.6.1 Call waiting (CW)

This section is not applicable to this specification.

No impact on ISUP.

3.6.2 Call transfer services

This section is not applicable to this specification.

No applicable interaction at this time.

3.6.3 Connected line identification presentation (COLP)

This section is not applicable to this specification.

No impact on ISUP.

3.6.4 Connected line identification restriction (COLR)

This section is not applicable to this specification.

No impact on ISUP.

3.6.5 Calling line identification presentation (CLIP)

Not applicable.

3.6.6 Calling line identification restriction (CLIR)

The CLIR supplementary service (see [clause 4](#)) shall take precedence over the CLIP supplementary service.

Depending on bilateral agreement, the originating network may set the Address Presentation Restricted indicator in the Calling Party Number parameter to “presentation restricted”. ~~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.~~

3.6.7 Closed user group (CUG)

This section is not applicable to this specification.

~~No impact on ISUP.~~

3.6.8 Conference calling (CONF)

This section is not applicable to this specification.

~~No impact on ISUP.~~

3.6.9 Direct dialling-in (DDI)

~~No impact on ISUP.~~

3.6.10 Call diversion services (CDIV)

3.6.10.1 Call forwarding busy (CFB)

The address not available codepoint shall only be used when a forwarded call has been routed over a signalling system incapable of carrying both redirecting and calling party number information. The mapping between the signalling system and ISUP will result in the codepoint “address not available”. This codepoint will be used until all signalling systems are capable of mapping both the redirecting and calling party number information.

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

3.6.10.2 Call forwarding no reply (CFNR)

The address not available codepoint shall only be used when a forwarded call has been routed over a signalling system incapable of carrying both redirecting and calling party number information. The mapping between the signalling system and ISUP will result in the codepoint “address not available”. This codepoint will be used until all signalling systems are capable of mapping both the redirecting and calling party number information.

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

3.6.10.3 Call forwarding unconditional (CFU)

The address not available codepoint shall only be used when a forwarded call has been routed over a signalling system incapable of carrying both redirecting and calling party number information. The mapping between the signalling system and ISUP will result in the codepoint “address not available”. This codepoint will be used until all signalling systems are capable of mapping both the redirecting and calling party number information.

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

3.6.10.3a Call forwarding not reachable (CFNRc)

The address not available codepoint shall only be used when a forwarded call has been routed over a signalling system incapable of carrying both redirecting and calling party number information. The mapping between the signalling system and ISUP will result in the codepoint “address not available”. This codepoint will be used until all signalling systems are capable of mapping both the redirecting and calling party number information.

3.6.10.4 Call deflection (CD)

This section is not applicable to this specification.

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

3.6.11 Line hunting (LH)

This section is not applicable to this specification.

~~No impact on ISUP.~~

3.6.12 Three-party service (3PTY)

This section is not applicable to this specification.

~~No impact on ISUP.~~

3.6.13 User-to-user signalling (UUS)

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

No impact on ISUP.

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

This section is not applicable to this specification.

~~No impact on ISUP.~~

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

This section is not applicable to this specification.

~~No impact on ISUP.~~

3.6.14 Multiple subscriber number (MSN)

This section is not applicable to this specification.

~~No impact on ISUP.~~

3.6.15 Call hold (HOLD)

This section is not applicable to this specification.

~~No impact on ISUP.~~

3.6.16 Advice of charge (AOC)

This section is not applicable to this specification.

~~No impact on ISUP.~~

3.6.17 Sub-addressing (SUB)

No impact on ISUP.

3.6.18 Terminal portability (TP)

No impact on ISUP.

3.6.19 Completion of calls to busy subscriber (CCBS)

This section is not applicable to this specification.

~~No applicable interaction at this time.~~

3.6.20 Malicious call identification (MCID)

This section is not applicable to this specification.

~~No impact on ISUP.~~

3.6.21 Reverse charging (REV)

This section is not applicable to this specification.

~~No applicable interaction at this time.~~

3.6.22 Multi-level precedence and preemption (MLPP)

This section is not applicable to this specification.

No impact on ISUP.

3.6.23 Private numbering plan (PNP)

This section is not applicable to this specification.

No applicable interaction at this time.

3.6.24 International telecommunication charge card

This section is not applicable to this specification.

No applicable interaction at this time.

3.7 Interactions with other networks

On calls to or via non-ISDNs or an ISUP as defined in Recommendation 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.~~

3.8 Signalling flows

No CLIP supplementary service specific signalling flow is necessary in addition to the basic call control according to Recommendation Q.764 Part D.

3.9 Parameter values (timers)

No specific timers are required.

3.10 Dynamic description

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

4 Calling line identification restriction (CLIR)

This clause 4 has to be read together with the CLIP supplementary service as defined in 3. Only the procedures which can clearly be separated from the CLIP supplementary service are contained in this clause.

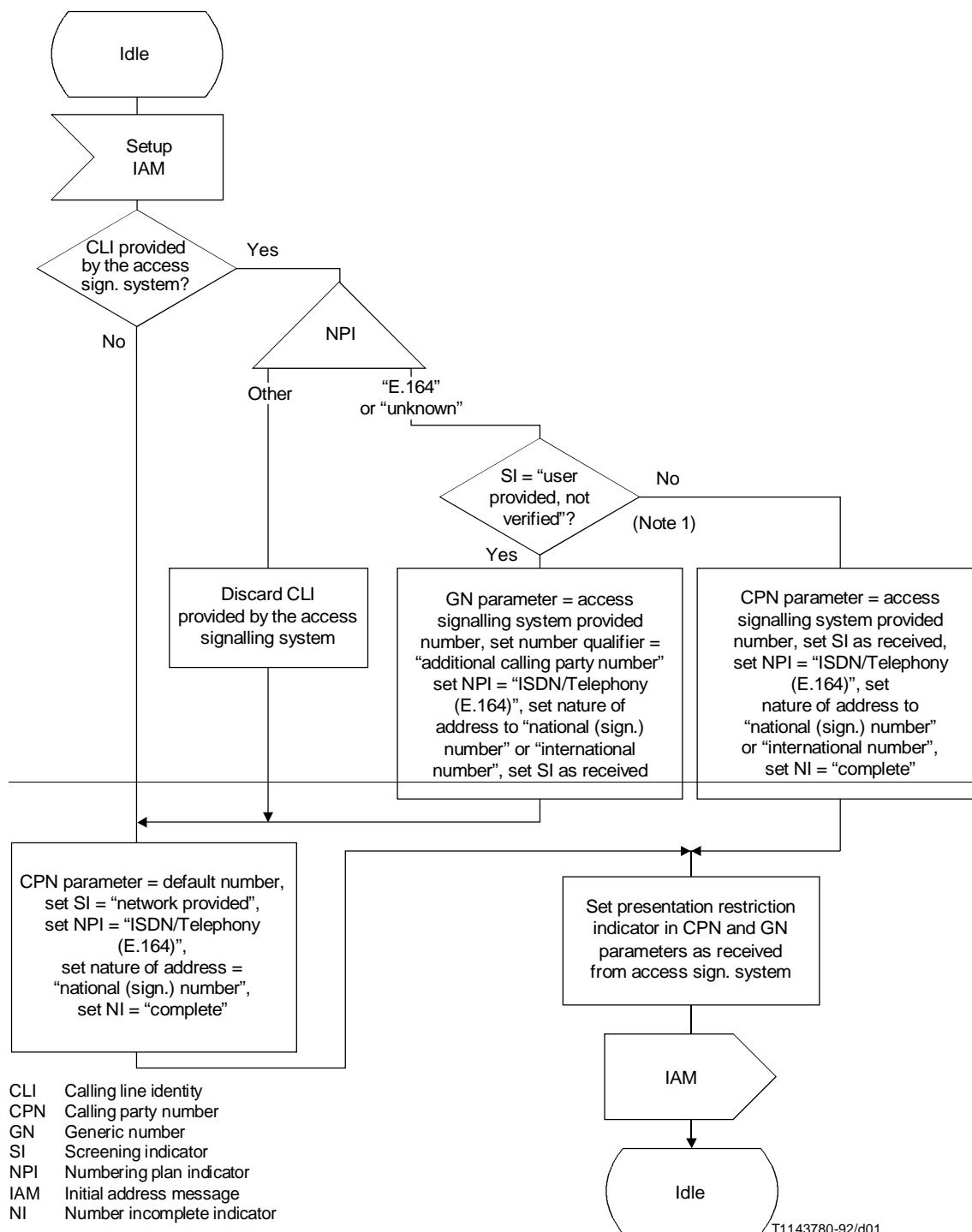
4.1 Definition

calling line identification restriction (CLIR) is a supplementary service offered to the calling user to restrict presentation of the calling user's number, with additional address information (e.g. calling party sub-address) if any, to the called user.

4.2 Description

4.2.1 General description

The CLIR supplementary service is a supplementary service offered to the calling user to prevent presentation of the calling user's number, and additional address information (e.g. calling party sub-address) if any, to the called user.



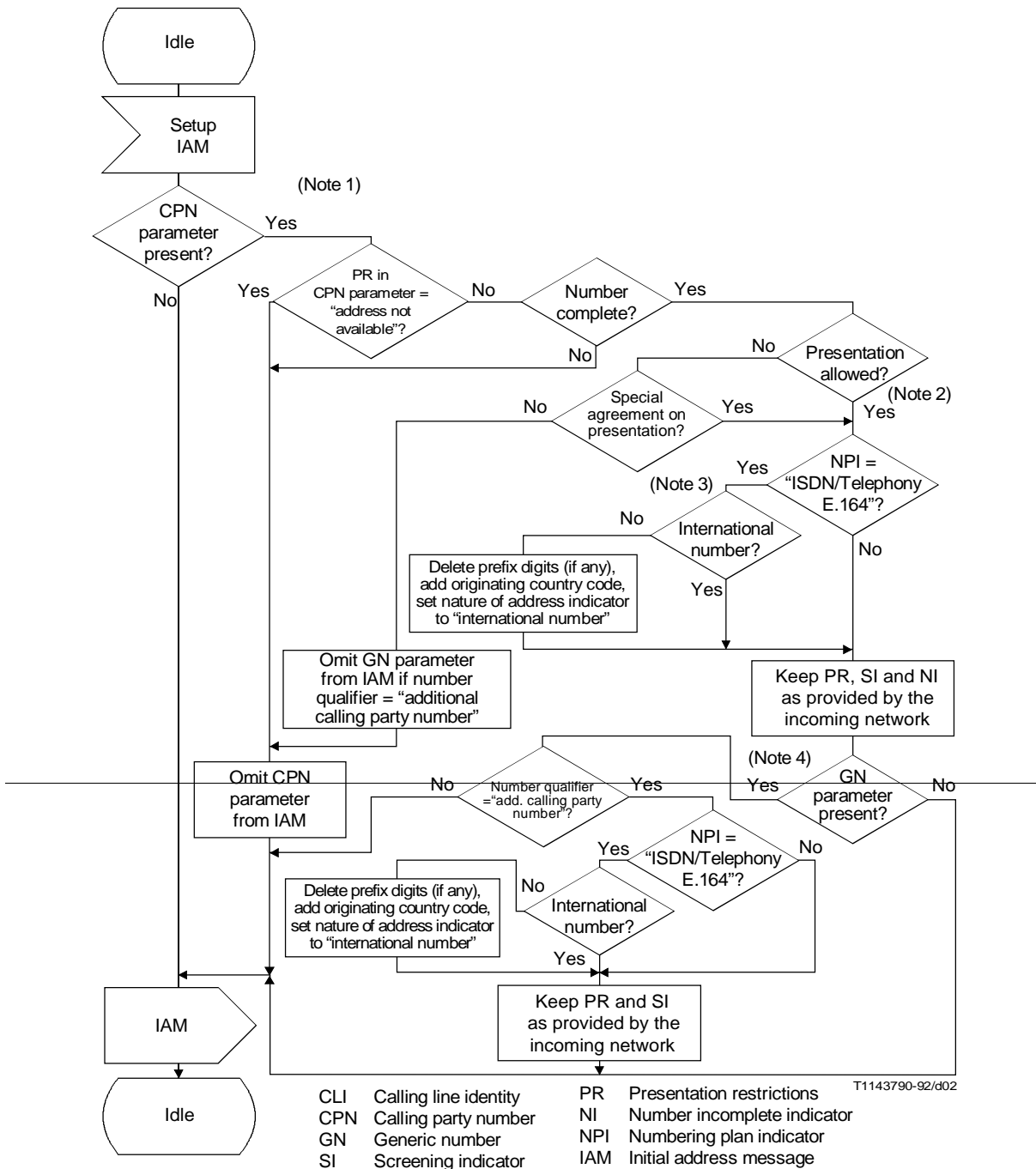
NOTES

- 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 same manner as the value "user provided, not verified".
- 2 This procedure operates independently from any CLIP subscription by the calling user and is provided as part of the basic service.
- 3 This transition specifies additional processing to that described in Q.764. Annex H.

FIGURE 3-1/Q.731

Originating local exchange dynamic description of the ISUP protocol

FIGURE 3-1/Q.731...[D01] = **PLEINE PAGE**



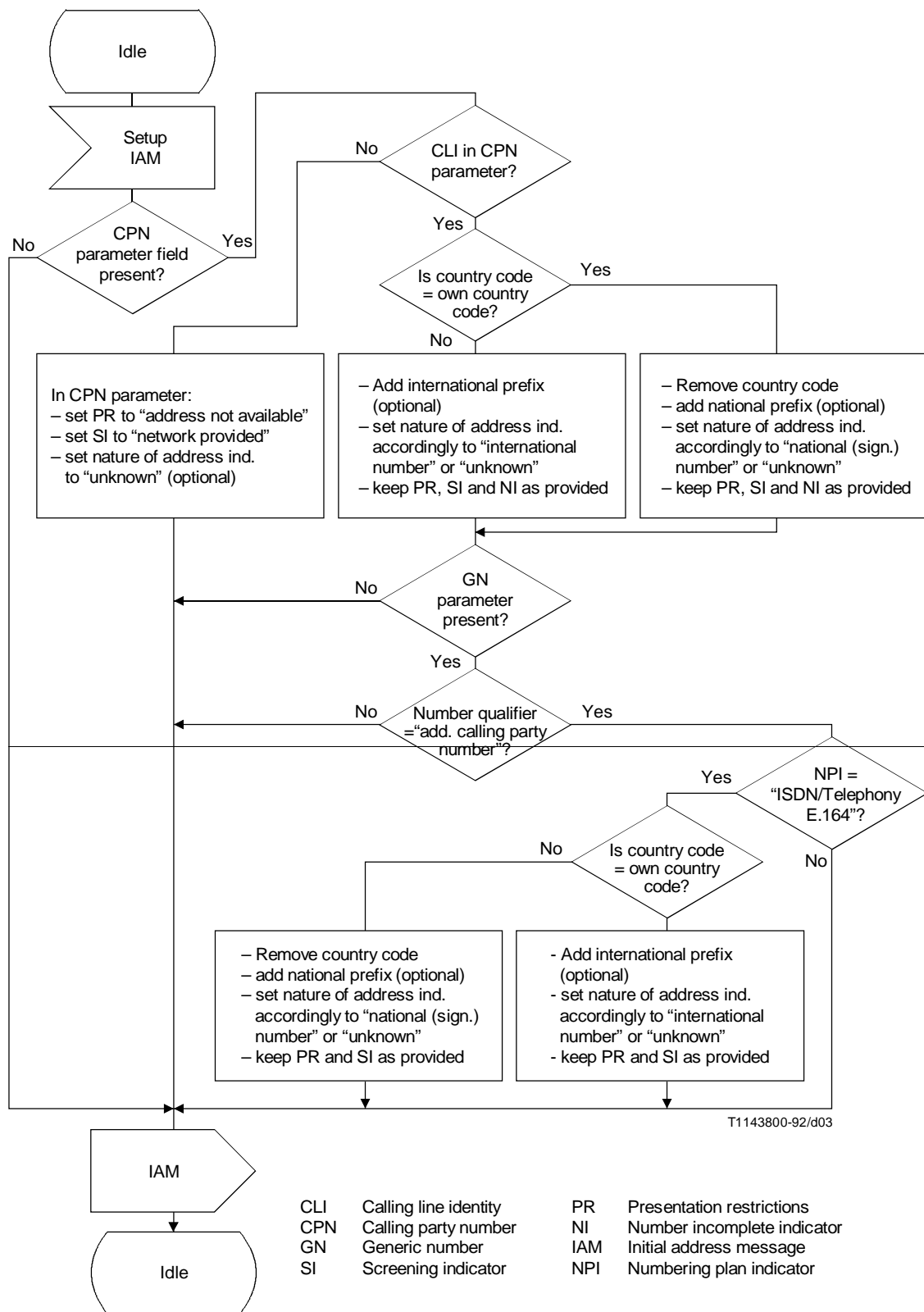
NOTES

- 1 This flow assumes that there is no restriction on passing non-restricted CLIs across the international boundary. If no such agreement exists then any CLI in the CPN and GN parameter of the incoming IAM will be removed.
- 2 Presentation may be restricted due to national regulations or presentation indicator. The presentation indicators shall have the value in both the CPN and GN parameter.
- 3 Based on bilateral agreement. See 4.2.1/I.251 and 4.5/I.251.
- 4 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".
- 5 This transition specifies additional processing to that described in Annex H/Q.764.

FIGURE 3-2/Q.731

Outgoing international gateway exchange dynamic description

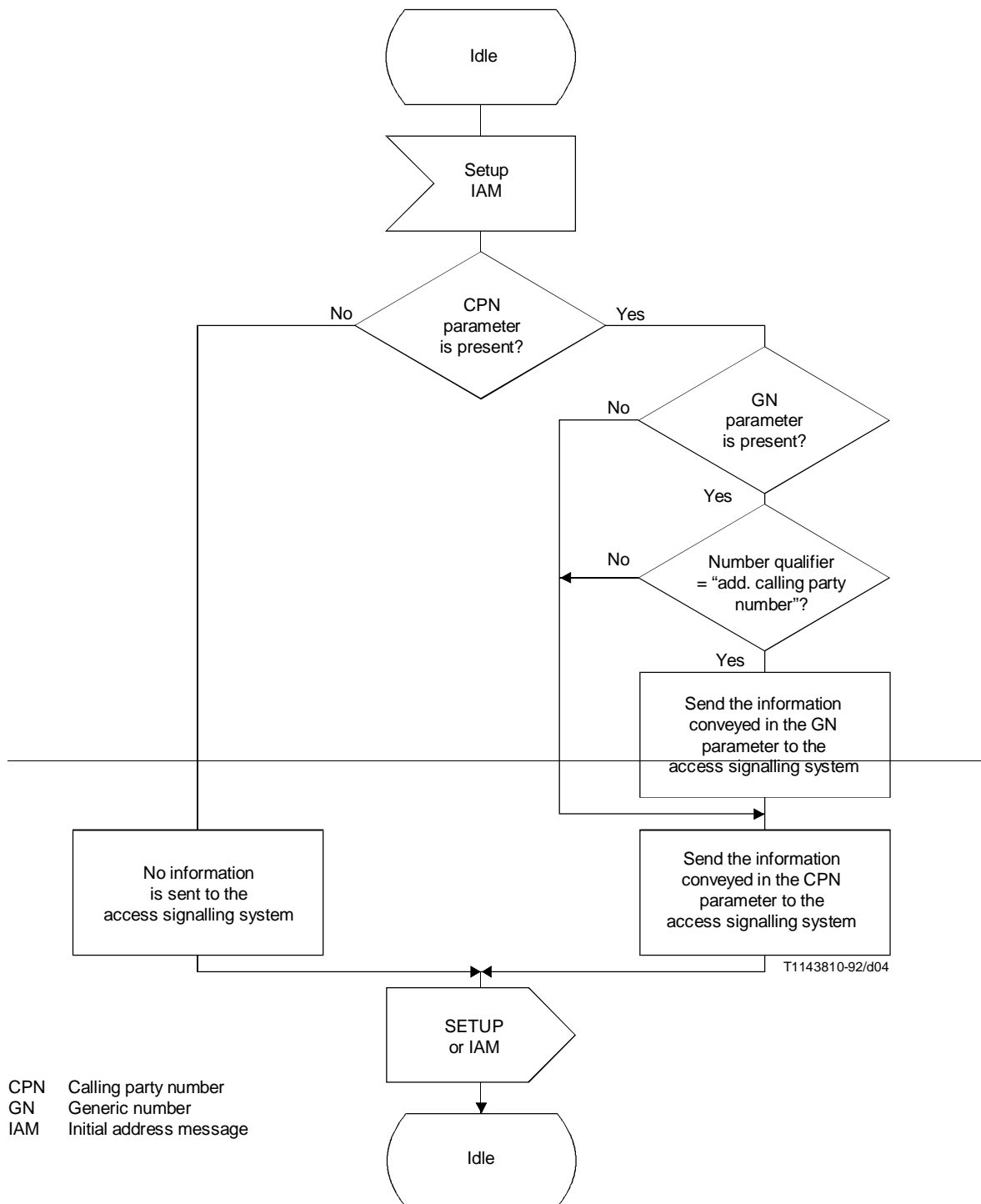
FIGURE 3-2/Q.731...[D02] = ~~PLAIN PAGE~~



NOTE – This transition specifies additional processing to that described in Annex H/Q.764.

FIGURE 3-3/Q.731
Incoming international gateway exchange dynamic description

FIGURE 3-3/Q.731...[D03]= PLEINE PAGE



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.
- 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 Malicious call identification supplementary service.
- 3 This transition specifies additional processing to that described in Annex H/Q.764.

FIGURE 3-4/Q.731

Destination local exchange dynamic description of the ISUP protocolFIGURE 3-4/Q.731...[D04] = **PLEINE PAGE**

When the CLIR supplementary service is applicable and activated, the originating network shall provide the destination network with a notification that the calling party number is not allowed to be presented to the called user. In this case, the calling line identity shall be marked as presentation restricted, in the address presentation restricted indicator(s) of the calling party number parameter ~~and generic number parameter (if present)~~, when it is passed across the network. In the case of the CLIR supplementary service the calling party's number, and sub-address (if any), shall not be included in the call offered to the called user's installation. It is a function of the user-network interface not to present the identification of the calling user to the called user if the information is marked "presentation restricted" or to override the presentation restricted indication if the called user has an override category (e.g. police).

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

The stage 1 service description is given in ~~Recommendations I.251.3 and I.251.4~~ Part E.5 and the stage 2 functional capabilities and information flows are given in Recommendation Q.81.3. The stage 3 DSS 1 description is given in Recommendation Q.951.4. This stage 3 description of the CLIR supplementary service uses the ISDN user part protocol as defined in ~~Recommendations Q.761-764~~ Parts A to D and Q.730 Part E.

4.2.2 Specific terminology

CLIP	Calling line identification presentation
CLIR	Calling line identification restriction
ISDN	Integrated services digital network
ISUP	Integrated services digital network user part
DSS 1	Digital subscriber signalling system No. 1

ISDN number – A number conforming to the numbering plan and structure specified in Recommendation E.164. For the purposes of this specification, this includes PSTN, ISDN and PLMN numbers.

National (ISDN) number; National significant (ISDN) number – See Recommendation E.164.

International (ISDN) number – See Recommendation E.164.

Sub-address – See Recommendation E.164.

Served user – It is the user of a particular ISDN number who has subscribed to the restriction of the calling line identification information (on a permanent or on a per-call basis) in association with outgoing calls. The served user is also known as the calling user.

Called user – It is the receiver of a call, initiated by the served user, on which the CLIR supplementary service has been activated.

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

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

4.2.3 Qualification on the applicability to telecommunication services

See 4.2.3/~~I.251~~ Part E.5.

4.2.4 State definitions

No specific state definitions are required.

4.3 Operational requirements

4.3.1 Provision/withdrawal

See 4.3.1/~~I.251~~ Part E.5

4.3.2 Requirements on the originating network side

Not applicable.

4.3.3 Requirements in the network

No specific requirements are needed in the network.

4.3.4 Requirements on the terminating network side

Not applicable.

4.4 Coding requirements

See 3.4.

4.5 Signalling requirements

4.5.1 Activation/deactivation/registration

Not applicable.

4.5.2 Invocation and operation

4.5.2.1 Actions at the originating local exchange

4.5.2.1.1 Normal operation

The originating local exchange shall set the address presentation restricted indicator of the calling party number parameter and of the generic number parameter (if applicable) to the value as asked for by the access signalling system of the calling user.

4.5.2.1.2 Exceptional procedures

No exceptional procedures are identified.

4.5.2.2 Actions at the transit exchange

4.5.2.2.1 Normal operation

See 3.5.2.2.1.

4.5.2.2.2 Exceptional procedures

See 3.5.2.2.2.

4.5.2.3 Actions at the outgoing international gateway exchange

4.5.2.3.1 Normal operation

See 3.5.2.3.1.

4.5.2.3.2 Exceptional procedures

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

4.5.2.4 Actions at the incoming international gateway exchange

4.5.2.4.1 Normal operation

See 3.5.2.4.1.

4.5.2.4.2 Exceptional procedures

See 3.5.2.4.2.

4.5.2.5 Actions at the destination local exchange

4.5.2.5.1 Normal operation

See 3.5.2.5.1.

4.5.2.5.2 Exceptional procedures

See 3.5.2.5.2.

4.6 Interaction with other supplementary services

4.6.1 Call waiting (CW)

This section is not applicable to this specification.

No impact on ISUP.

4.6.2 Call transfer services

This section is not applicable to this specification.

No applicable interaction at this time.

4.6.3 Connected line identification presentation (COLP)

This section is not applicable to this specification.

No impact on ISUP.

4.6.4 Connected line identification restriction (COLR)

This section is not applicable to this specification.

No impact on ISUP.

4.6.5 Calling line identification presentation (CLIP)

The CLIR supplementary service shall take precedence over the CLIP supplementary service.

Depending on bilateral agreement, the originating network may set the Address Presentation Restriction indicator in the Calling Party Number parameter to “presentation restricted”, ~~restrict the information conveyed in the generic number and/or calling party number parameter(s) from being sent to the destination network when the CLIR supplementary service is applicable.~~

4.6.6 Calling line identification restriction (CLIR)

Not applicable.

4.6.7 Closed user group (CUG)

This section is not applicable to this specification.

No impact on ISUP.

4.6.8 Conference calling (CONF)

This section is not applicable to this specification.

No impact on ISUP.

4.6.9 Direct-dialling-in (DDI)

No impact on ISUP.

4.6.10 Call diversion services (CDIV)

4.6.10.1 Call forwarding busy (CFB)

The address not available codepoint shall only be used when a forwarded call has been routed over a signalling system incapable of carrying both redirecting and calling party number information. The mapping between the signalling system and ISUP will result in the codepoint “address not available”. This codepoint will be used until all signalling systems are capable of mapping both the redirecting and calling party number information.

No impact on ISUP.

4.6.10.2 Call forwarding no reply (CFNR)

The address not available codepoint shall only be used when a forwarded call has been routed over a signalling system incapable of carrying both redirecting and calling party number information. The mapping between the signalling system and ISUP will result in the codepoint “address not available”. This codepoint will be used until all signalling systems are capable of mapping both the redirecting and calling party number information.

No impact on ISUP.

4.6.10.3 Call forwarding unconditional (CFU)

The address not available codepoint shall only be used when a forwarded call has been routed over a signalling system incapable of carrying both redirecting and calling party number information. The mapping between the signalling system and ISUP will result in the codepoint “address not available”. This codepoint will be used until all signalling systems are capable of mapping both the redirecting and calling party number information.

No impact on ISUP.

4.6.10.3a Call forwarding not reachable (CFNRc)

The address not available codepoint shall only be used when a forwarded call has been routed over a signalling system incapable of carrying both redirecting and calling party number information. The mapping between the signalling system and ISUP will result in the codepoint “address not available”. This codepoint will only be used until all such signalling systems are removed from the Australian network.

4.6.10.4 Call deflection (CD)

This section is not applicable to this specification.

No impact on ISUP.

4.6.11 Line hunting (LH)

This section is not applicable to this specification.

No impact on ISUP.

4.6.12 Three-party service (3PTY)

This section is not applicable to this specification.

No impact on ISUP.

4.6.13 User-to-user signalling (UUS)**4.6.13.1 User-to-user signalling, service 1 (UUS1)**

No impact on ISUP.

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

This section is not applicable to this specification.

No impact on ISUP.

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

This section is not applicable to this specification.

No impact on ISUP.

4.6.14 Multiple subscriber number (MSN)

No impact on ISUP.

4.6.15 Call hold (HOLD)

This section is not applicable to this specification.

No impact on ISUP.

4.6.16 Advice of charge (AOC)

This section is not applicable to this specification.

~~No impact on ISUP.~~

4.6.17 Sub-addressing (SUB)

No impact on ISUP.

4.6.18 Terminal portability (TP)

No impact on ISUP.

4.6.19 Completion of calls to busy subscriber (CCBS)

This section is not applicable to this specification.

~~No applicable interaction at this time.~~

4.6.20 Malicious call identification (MCID)

This section is not applicable to this specification.

~~When the malicious call identification supplementary service is invoked, the information conveyed in an incoming call is registered in the network regardless of whether the calling user has activated the CLIR supplementary service or not.~~

4.6.21 Reverse charging (REV)

This section is not applicable to this specification.

~~No applicable interaction at this time.~~

4.6.22 Multi-level precedence and preemption (MLPP)

This section is not applicable to this specification.

No impact on ISUP.

4.6.23 Private numbering plan (PNP)

This section is not applicable to this specification.

~~No applicable interaction at this time.~~

4.6.24 International telecommunication charge card

This section is not applicable to this specification.

~~No applicable interaction at this time.~~

4.7 Interactions with other networks

When a call originates in one ISDN public network and terminates in another ISDN public network and the CLIR supplementary service is applied, the rules and regulations of the destination network shall apply.

~~NOTE—When the CLIR supplementary service is invoked, some network providers may not send the number(s) of the calling user to other network providers.~~

On calls to or via non-ISDNs, it cannot be assured that the address presentation restriction indication can be carried to the destination network. As a national option the originating network shall ~~may~~ restrict information identifying the calling

user from being forwarded to the destination network when the CLIR supplementary service is applicable. For further information see 3.7.

4.8 Signalling flows

No CLIR supplementary service specific signalling flow is necessary in addition to the basic call control according to Recommendation Q.764 Part D.

4.9 Parameter values (timers)

No specific timers are required.

4.10 Dynamic description

~~The dynamic description of the ISUP protocol relevant to the CLIR supplementary service is contained in the dynamic description of the CLIP supplementary service. For further information see 3.10.~~

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