Smart Cloud & Communications

PIC 01

PUBLICAÇÃO DE INTERFACES DE CLIENTE

SFT - Interface Digital

APÊNDICE I

Especificações e Condições Técnicas para a Ativação de Funcionalidades por Keypad (Língua Inglesa)

Versão 1.1 – outubro de 2021

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1. Scope

This document will describe the necessary procedures to activate, deactivate and invoke the supplementary services by keypad.

The invocation procedures make use of the * and # characters with the following meaning:

* Start of invocation/field separator

End of invocation/deactivation

2. Closed User Group – CUG

2.1 Introduction

It is applicable the definition, the description and the operational requirements mentioned in the

document Draft EN 300 138-1 V1.3.3, dated February 1998.

2.1.1 Provision

2.1.2 Subscription options

All the subscription options shown in the following tables shall be available:

Option (NOTE)	Values
1) Preferential CUG	Nominated CUG index, or none designated
2) Outgoing access	Allowed, or not allowed.
3) Incoming access	Allowed, or not allowed.

NOTE: If, for a user with the CUG supplementary service, a basic service, or set of basic services, is not included in at least one closed user group, then:

- preferential CUG shall have the "none designated" option value
- outgoing access shall have the "allowed" option value if normal outgoing calls using that basic service, or set of basic services, are required incoming access shall have the "allowed" option value if incoming calls using that basic service, or set of basic services, are required

OPTIONS AVAILABLE PER ISDN NUMBER

Option	Values
Barring within the closed user group	None, incoming calls, or outgoing calls.

OPTIONS AVAILABLE PER CLOSED USER GROUP

The CUG shall also be associated, ***on a subscription basis***, to the following options:

- a single bearer service or teleservice
- a set of bearer services (e.g. speech and 3,1 kHz audio) or teleservices
- combinations of bearer services with teleservices

2.1.3 Network options

The maximum number of closed user groups of which a user can be member shall be 100. The number of digits for CUG index shall be 2.

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2.2 Procedures

2.2.1 General

The operation of CUG in Keypad Mode makes use of the Keypad facility and Display information elements inserted in appropriate messages of the call basic control.

The service code for the invocation of the CUG service will be 01.READSL2 Anexo L

2.2.2 Invocation

2.2.2.1 Normal procedures

For explicit invocation of CUG service the calling user shall include in the SETUP message the Keypad facility information element with the following coding:

Invocation of CUG	- *<01>*<CUG Index>#
Invocation of preferential CUG	- *<01># or *<01>*#
Invocation of preferential CUG with Explicit Outgoing Access	- *<01>*<0>#
Invocation of CUG with Explicit Outgoing Access	- *<01>*<CUG Index>*<0>#

The code "0" in the appropriate field means explicit invocation of "outgoing access".

2.2.2.2 Alternative procedures

If the calling user of CUG service does not include in the SETUP message the Keypad facility information element with the coding referred in 3.2.1, such a situation shall be interpreted by the network as invocation of preferential CUG.

2.2.3 Notifications

2.2.3.1 To the calling user

In the situation of an incorrect input done by the user, the network shall answer with a DISC message including a DISPLAY information element with the following code:

ENTRADA INCORRETA

When the call is successfully offered to the called user, after the CUG verifications according to tables 5 and 6 of the document referred in 1. In the originating and in the destination network has been made, no specific CUG notification is sent to the calling user.

If, as a result of the verification of the CUG attributes according to the same tables it is not possible to establish the call, the network shall include the appropriate Cause information element (cause #29 or #87) in a DISC message to be sent to the calling user including a DISPLAY information element with the following code:

CHAMADA NÃO ESTABELECIDA

Additionally, if the CUG service is invoked together with the support services ¨3.1kHz ¨, ¨7 kHz ¨ or ¨speech ¨, a recorded announcement shall be sent to the calling user.

The duration of the announcements shall be 30 seconds (according to the value specified for timer T306) and its contents shall be the following:

- "O assinante chamador não é membro do CUG" - (cause #87)
- "O assinante chamado não é membro do CUG" - (cause #87)
- "Grupo fechado de utilizadores inexistente" - (cause #29)
- "Assinante chamado pertence a CUG" - (cause #29)

2.2.3.2 To the called user

The SETUP message sent to the called, as a result of a request of call establishment inside a CUG shall include the Display information element with the following sequence of IA5 characters:

*01*CUG INDEX #

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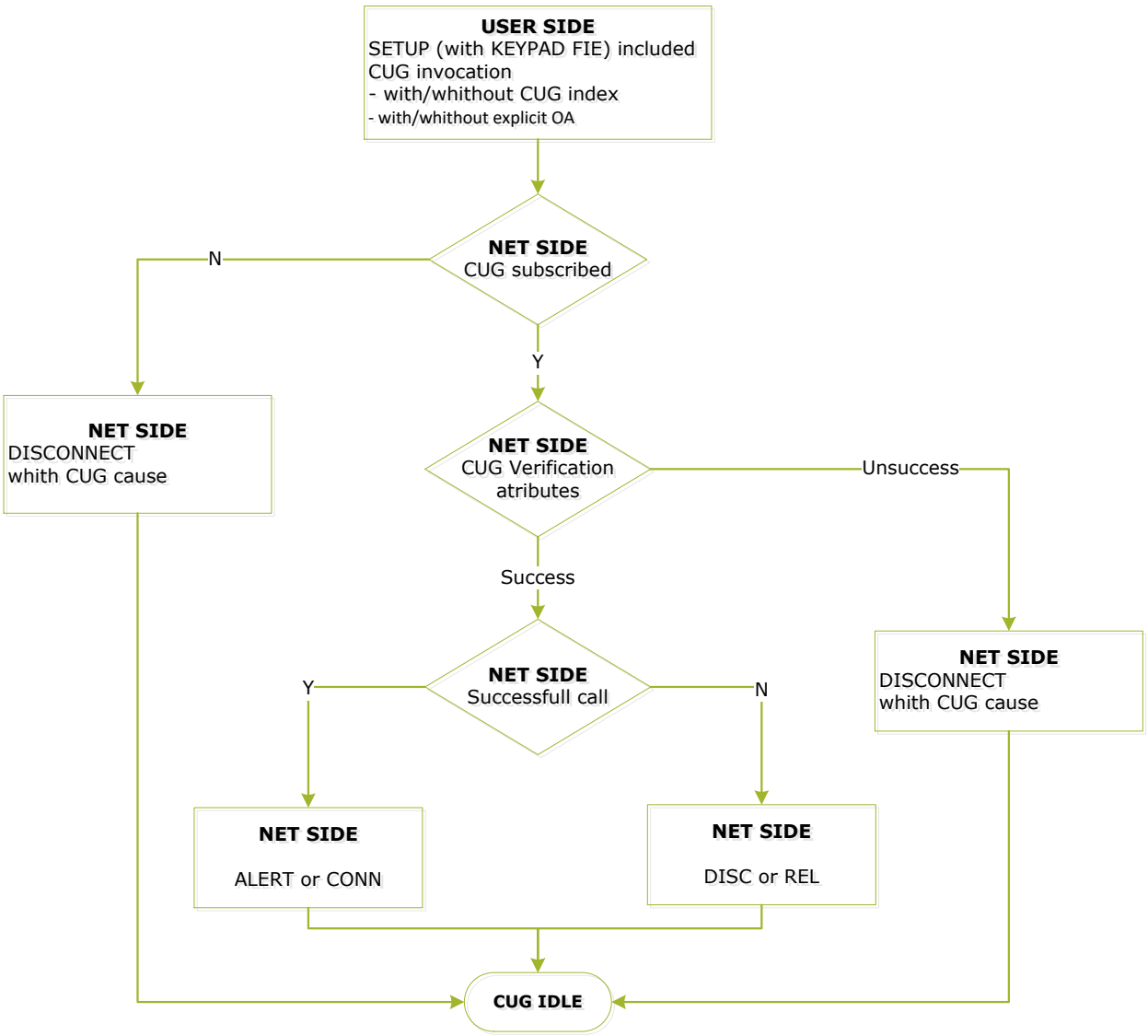
2.3 Flowcharts

The following flowcharts describe the CUG specific procedures.



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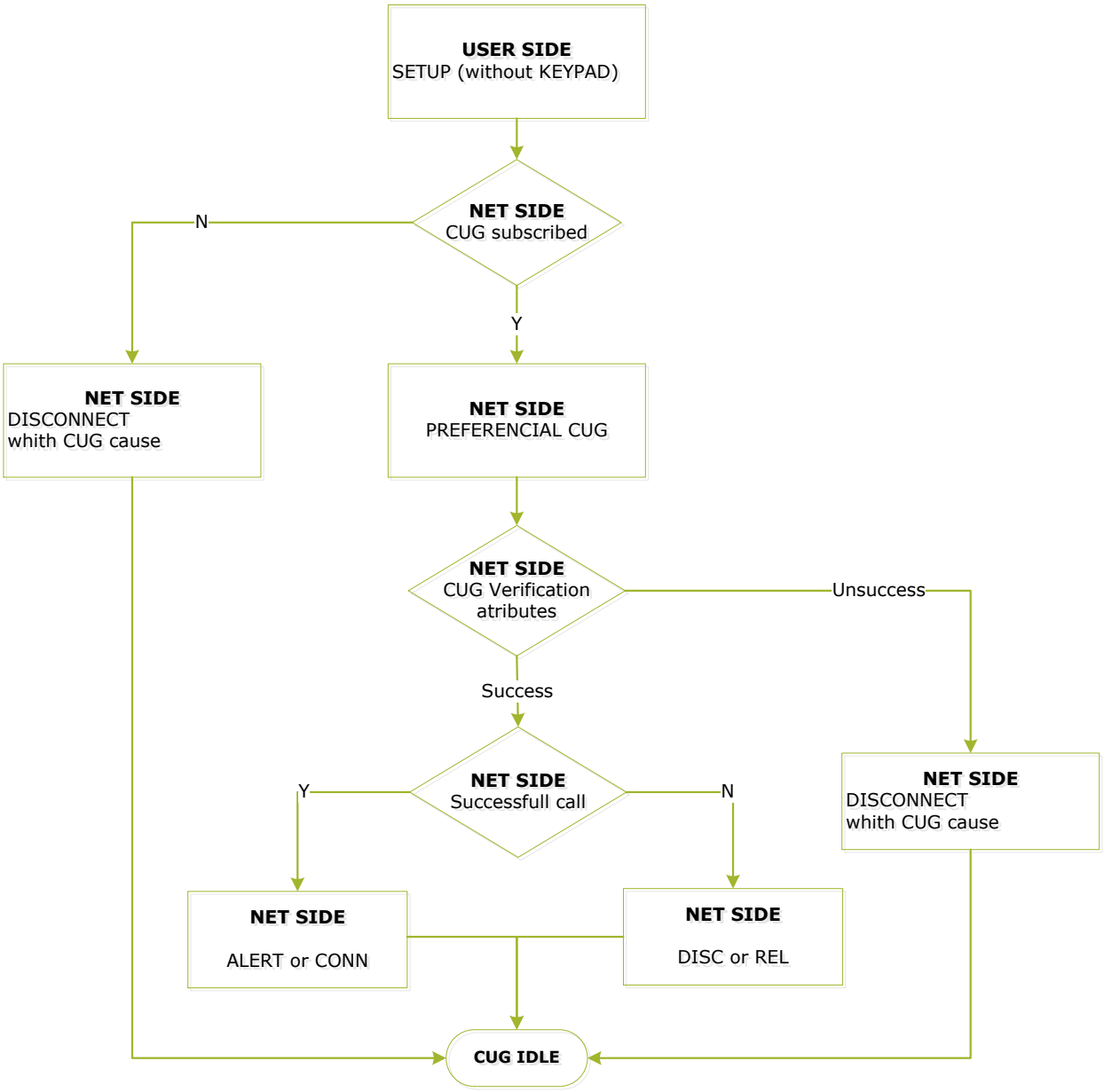

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3. Diversion supplementary services - CFU, CFB, CFNR, CD, SCF

3.1 Introduction

It is applicable the definition, the description and the operational requirements mentioned in the document Draft EN 300 207-1 V1.2.1, dated December 1997.

3.2 Provision

3.2.1 Subscription options

All the subscription options in Table 1 of the EN 300 207 (Subscription options for the diversion supplementary services) shall apply.

The Diversion supplementary service shall also be associated, in terms of a forwarded-to-number as well as a type of call diversion, to the following options:

- a single bearer service or teleservice
- a set of bearer services (e.g. speech and 3,1 kHz audio) or teleservices
- combinations of bearer services with teleservices

3.2.2 Network options

The entire network options summarized in Table 2 of EN 300 207 (Network provider options for diversion supplementary services) shall be supported. The default value of timer T-CFNR shall be 25 seconds. It shall be administrable.

3.3 Procedures

3.3.1 General

The operation of Diversion supplementary services in Keypad Mode makes use of the Keypad facility and Display information elements inserted in appropriate messages of the basic call control.

The invocation of the CF service shall make use of the following codes:

CFU	**21**
CFB	**67**
CFNR	**61**
SCFU	**80**
SCFNR	**81**
SCFB	**82**
CD	**12**

3.3.2 Call Forwarding services - CFU, CFB, CFNR

3.3.2.1 Programming/Activation

For programming/activation of CF service, the user shall send a SETUP message with the Keypad Facility information element with the following coding:

* <Service Code> * <Nº of rerouting> #

Service code= 21, 67 or 61

Only to activate (when the service is already programmed but deactivated), the Keypad facility information element shall have the following code:

* <Service code> #

The following flowchart describes the referred procedures.

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3.3.2.2 Deactivation

For deactivation of the CF service the user shall send a SETUP message with the KEYPAD FACILITY information element with the following code:

<Service code>

The following flowchart describes the referred procedures.

3.3.2.3 Interrogation

To interrogate the network about the CF service the user shall send a SETUP message with the KEYPAD FACILITY information element with the following code:

*# <Service code> #

3.3.2.4 Notifications

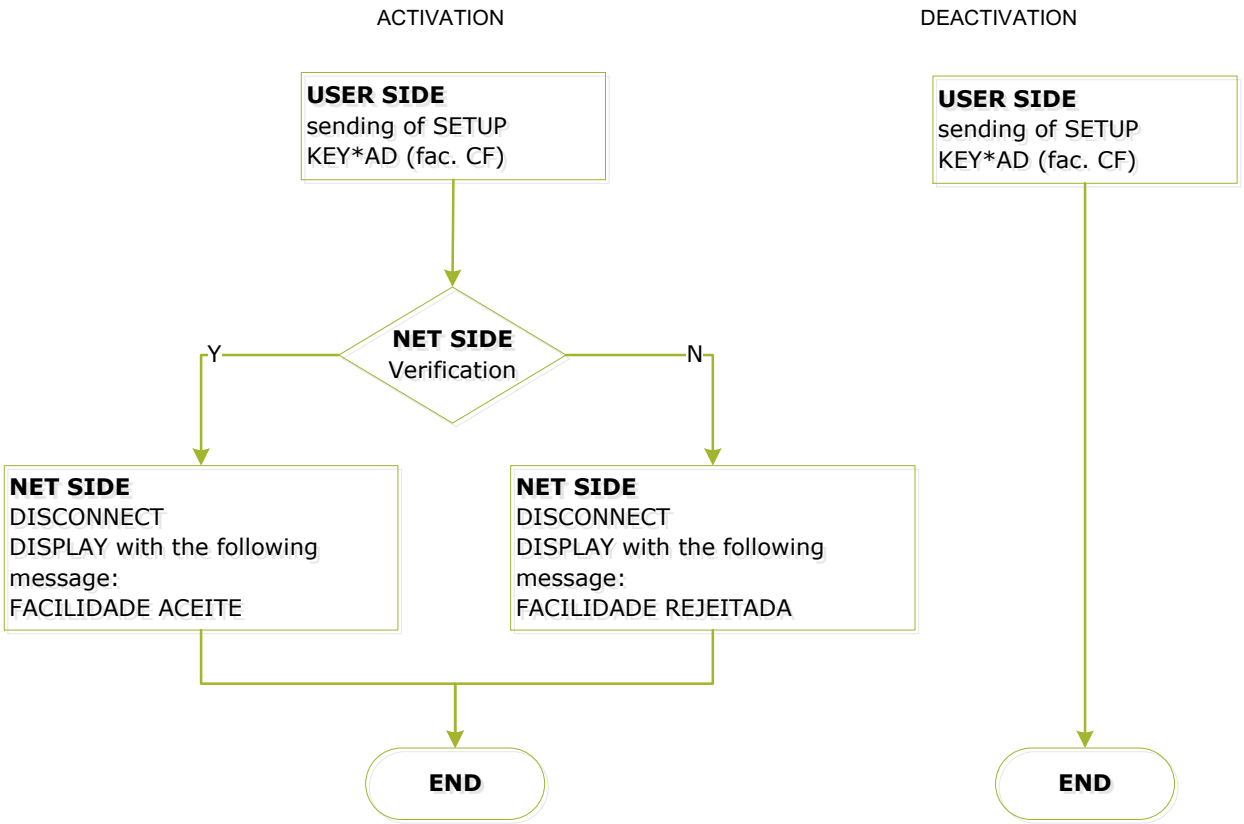
3.3.2.4.1 To the called user

In the situation of an incorrect input done by the user, the network shall answer with a DISC message including a DISPLAY information element with the following code:

ENTRADA INCORRETA

In the situation of programming/activation the CF service the network shall answer with the DISC message which, in case of not successful activation shall include the DISPLAY information element with the following code:

FACILIDADE REJEITADA



If the invocation is successful, the Display information element shall be coded as follows:

FACILIDADE ACEITE

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In deactivation situation of CF service the network shall answer with DISC message, including the Display information element with the following code:

FACILIDADE DESATIVADA

In interrogation situation about the CF service the network shall answer with DISC message, including the Display information element with the following code:

R. ATIVO * <Rerouting address> * or
R. INATIVO

If the CF service is invoked together with the support services ¨3.1 kHz¨, ¨7 kHz audio¨ or ¨speech¨, in addition to the notifications carried by the Display information element, the called user shall also be notified by announcements appropriate to the function and to its success according with the following table:

FUNCTION	ANNOUNCEMENT
Programming/Activation	A1
Activation	A2
Deactivation	A3
Interrogation	A1 or A3

The information to be delivered shall be:

A1 - "reencaminhamento ativo"
A2 - "ativação confirmada"
A3 - "desativação confirmada"

The called user shall be informed every time that receives a call diverted from another call. This will enable him to reject this kind of calls with an ALERT, that include the DISPLAY information element with the following notification:

CHAMADA JÁ REENCAMINHADA

3.3.2.4.2 To the calling user

If the call is successfully rerouted, the calling subscriber shall receive from network an ALERT or CONN message. If the calling user has keypad mode, that message shall include the DISPLAY information element with the following notification:

CHAMADA REENCAMINHADA

This notification it will not be sent if the called user had subscripted the restriction to it. This will allow to preserve the confidentiality of the called user.

3.3.3 Call Deflection – CD

3.3.3.1 Normal procedures

The called user shall invoke the service sending an INFO message with the KEYPAD FACILITY information element with the following coding:

<service code><Nº of rerouting>#

service code=12

The INFO message can be received in the network either:

a) While in the Call Present state (N6) or in the Incoming Call Proceeding state (N9) (CD supplementary service with immediate response) or,
b) While in the Call Received (N7) state (CD supplementary service during waiting for answer).

For case a):

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- if a point-to-point configuration is known to exist the network shall act immediately on the deflection invocation request;
- if a point-to-multipoint configuration is known to exist the network shall invoke call deflection at the expiry of timer T303 while in the network state N6 or at the expiry of timer T310 while in network state N9, provided no other terminal at the called user interface sends an ALERT or CONN message.

For case b), the network will clear the call to the called user.

For both cases a) and b), provided the user has subscribed to the service, the network shall perform the call deflection towards the indicated address.

3.3.3.2 Notifications

3.3.3.2.1 To the called user

In the situation of an incorrect input done by the user, the network shall answer with a DISC message including a DISPLAY information element with the following code:

ENTRADA INCORRETA

If the service is successfully invoked, the network shall answer with the DISC message to the called user, which shall include the DISPLAY information element with the following code:

FACILIDADE ACEITE

3.3.3.2.2 To the calling user

If the call is deflected, the calling user shall receive an ALERT or CONN message sent by the called user's network. If the calling user has Keypad Mode, the message shall include the Display information element with the following notification:

CHAMADA REENCAMINHADA

This notification it will not be sent if the called user had subscripted the restriction to it. This will allow to preserve the confidentiality of the called user.

3.3.3.2.3 Exceptional procedures

If the called user's network cannot accept the call deflection invocation request or if the call cannot be offered to the deflected-to user (for example, network determined user busy or network congestion or the maximum number of call diversions has been reached), the basic call shall be maintained at the called user and the network shall send a notification to him in an INFO message with the Display information element with the following code:

FACILIDADE REJEITADA

3.3.4 Selective call forwarding

3.3.4.1 Programming/Activation

For programming/activation of SCFU, SCFNR, SCFB services, the user shall send a SETUP message with the Keypad Facility information element with the following coding:

* <Service Code> * <number of the screening list> #

Service code= 80, 81 or 82.

3.3.4.2 Deactivation

For deactivation of the SCF service the user shall send a SETUP message with the KEYPAD FACILITY information element with the following code:

<Service code>

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3.3.4.3 Interrogation

To interrogate the network about the SCF service the user shall send a SETUP message with the KEYPAD FACILITY information element with the following code:

*# <Service code> #

3.3.4.4 Notifications

3.3.4.4.1 To the called user

In the situation of an incorrect input done by the user, the network shall answer with a DISC message including a DISPLAY information element with the following code:

ENTRADA INCORRETA

In the situation of programming/activation the SCF service the network shall answer with the DISC message which, in case of not successful activation shall include the DISPLAY information element with the following code:

FACILIDADE REJEITADA

If the invocation is successful, the Display information element shall be coded as follows:

FACILIDADE ACEITE

In deactivation situation of SCF service the network shall answer with DISC message, including the Display information element with the following code:

FACILIDADE DESATIVADA

In interrogation situation about the SCF service the network shall answer with DISC message, including the Display information element with the following code:

R. ATIVO * <number of the screening list> * or
R. INATIVO

If the SCF service is invoked together with the support services ¨3.1 kHz¨, ¨7 kHz audio¨ or ¨speech¨, in addition to the notifications carried by the Display information element, the called user shall also be notified by announcements appropriated to the function and to its success according with the following table:

FUNCTION	ANNOUNCEMENT
Programming/Activation	A1
Activation	A2
Deactivation	A3
Interrogation	A3 or A4

The information to be delivered shall be:

A1 - "reencaminhamento ativo"
A2 - "ativação confirmada"
A3 - "desativação confirmada"
A4 - "lista X ativada" (X will be the number of the screening list activated)

The called user shall be informed every time that receives a call diverted from another call. This will enable him to reject this kind of calls within the ALERT state, that include the DISPLAY information element with the following notification:

CHAMADA JÁ REENCAMINHADA

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4. Explicit Call Transfer

4.1 Introduction

It is applicable the definition, the description and the operational requirements included in the document Draft EN 300 369-1 V1.2.1, dated February 1998.

4.2 Provision

4.2.1 Subscription options

This sevice will be available upon subscription.

4.3 Procedures

4.3.1 General

The ECT supplementary service enables a user (user A) who has two calls, each of which can be an incoming call or an outgoing call, to connect together the other users in the two calls, into one call. One of the two calls shall be answered, the other call can be either answered or, as a network option, in the alerting phase. At the coincident S and T reference point, the two calls shall be controlled using the same data link connection identified by the same CEI value.

4.3.2 Invocation

4.3.2.1 Normal Procedures

The called user shall invoke the service sending an INFO message with the Keypad facility information element during the "active" state of both calls or during the “active” of one and “alerting” of the other.
The Keypad facility information element shall contain the code 13 related to the ECT service, as follows:

* 13 #

4.3.3 Notifications

4.3.3.1 To the user who invoke the ECT

The user who invoked the ECT shall receive in the Display information element with the following information:

TRANSFERÊNCIA EXECUTADA - if the ECT was successful

TRANSFERÊNCIA NÃO EXECUTADA - if the ECT was not successful

4.3.3.2 To the other users

The users that are in “active” states shall receive in the Display information element with the following information:

TRANSFERÊNCIA EXECUTADA

4.3.4 Exceptional Procedures

When the service is invoked in one of the following situations:

- both of the calls are not in the "active" state or are in "Disconnect indication" state
- service not activated
- service not available

the user who invoked the ECT shall receive in the Display information element with the following information:

FACILIDADE REJEITADA

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5. Call Hold

5.1 Introduction

It is applicable the definition, the description and the operational requirements included in the document Draft EN 300 141-1 V1.2.3, dated February 1998.

5.2 Provision

5.2.1 Subscription options

This service will be available upon subscription.

5.3 Procedures

5.3.1 General

When the Call HOLD (CH) supplementary service is invoked, communication on a B- channel shall be interrupted, the B-channel shall be released, a B-channel shall be reserved by the network for subsequent reuse by user A.

5.3.2 Invocation

The called user shall invoke the service sending an INFO message with the Keypad facility information element during the "active" state of the call.

The Keypad facility information element shall contain the service code related to the CH service, like in the following example:

* 14 #

5.3.3 Deactivation

For deactivation of CH service the user shall send a setup message with the Keypad facility information element with the following code:

#14#

5.3.4 Notifications

5.3.4.1 To the user that invoked the CH

The user who invoked the CH shall receive in the Display information element with the following information:

CHAMADA SUSPENSA	- if the CH was successful
FACILIDADE NÃO EXECUTADA	- if the CH was not successful

5.3.4.2 To the other user

The user which call was hold shall received in the Display information element with the following information:

CHAMADA SUSPENSA

5.3.5 Exceptional Procedures

When the service is invoked in one of the following situations:

- No call established
- service not activated
- service not available

The user who invoked the CH shall receive in the Display information element with the following information:

FACILIDADE REJEITADA

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6. Call Wait

6.1 Introduction

It is applicable the definition, the description and the operational requirements included in the document Draft EN 300 058-1 V1.2.3, dated February 1998.

6.2 Provision

6.2.1 Subscription options

This sevice will be available upon subscription.
It is possible to have this feature activated by default or by the user action.

6.3 Procedures

6.3.1 General

The CW supplementary service allows notification to subscriber B of the incoming call.

The CW supplementary service shall operate when all appropriate B-channels of the access to the terminals of subscriber B are busy. When at least one B-channel is free, any user B who is compatible and busy can respond to an incoming call according to the procedures of EN 300 403-1 [4], subclause 5.2.

6.3.2 Invocation

6.3.2.1 Activation

The user shall activate the service sending an INFO message with the Keypad facility information element.

The Keypad facility information element shall contain the service code related to the CW service, like in the following example:

* 15 #

6.3.2.2 Deactivation

In order to deactivate the CW the user shall send an INFO message with the Keypad facility information element.

The Keypad facility information element shall contain the code 15 related to the CW service, as follows:

#15 #

6.3.3 Notifications

6.3.3.1 To the served user

Every time that the user activates the CW shall receive in the Display information element with the following information:

FACILIDADE ATIVA	- if successful
FACILIDADE NÃO ATIVA	- if not successful

6.3.3.2 When the called user has a Call Waiting

In this case the called user shall received in the Display information element with the following information:

CHAMADA EM ESPERA

The message shall be received together with an audible tone. This tone shall be repeated every 10 seconds until the call is accepted.

6.3.3.3 To the calling user

In this case the calling user shall receive in the Display information element with the following information:

CHAMADA EM ESPERA

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6.3.4 Exceptional Procedures

When the service is invoked in one of the following situations:

- service not activated
- service not available

The user who invoked the CW shall receive in the Display information element with the following information:

FACILIDADE REJEITADA

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7. Waking Service

7.1 Introduction

This service will allow the subscriber to use the telephone as a waking device.

7.2 Provision

7.2.1 Subscription options

This service will be available on a general basis.
The client shall be charged for every time that uses the service.

7.3 Procedures

7.3.1 General

The WS service can be invoked directly by the user, using the Keypad or by the operator. The user must define the hour and minutes that wants to be waked up.

The hours will be on a 24 hours base. As an example, if the user wants to be waked up at 2:15 p.m. he must dial 14 15.

7.3.2 Invocation

7.3.2.1 Activation

The user shall activate the service sending a SETUP message with the Keypad facility information element.

The Keypad facility information element shall contain the service code related to the WS service, like in the following example:

* 16 * hh * mm#

7.3.2.2 Deactivation

In order to deactivate the WS the user shall send a SETUP message with the Keypad facility information element.

The Keypad facility information element shall contain the code 15 related to the WS service, as follows:

#16#

The service will be automatically deactivated after its execution. This means if the user wants to be wakening every day at a certain hour shall have to invoke the service every day.

7.3.2.3 Interrogation

To interrogate the network about the WS service the user shall send a SETUP
message with the KEYPAD FACILITY information element with the following code:

*# <Service code> #

7.3.3 Notifications

7.3.3.1 To the served user after activation

Every time that the user activates the WS shall receive a DISC including the Display information element with the following information:

FACILIDADE ATIVA	- if successful
FACILIDADE NÃO ATIVA	- if not successful

In interrogation situation the network shall answer with DISC message, including the Display information element with the following code:

DESPERTAR HH:MM or

INATIVO

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7.3.3.2 To the served user at the execution of WS

In this case the user shall received a Display information element with the following information:

DESPERTAR HH:MM

Together with the message a call will be made and an announcement will be inserted.

7.3.4 Exceptional Procedures

When the service is invoked in one of the following situations:

- service not activated
- service not available

The user who invoked the WS shall receive in the Display information element with the following information:

FACILIDADE REJEITADA

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8. Completion of Calls to Busy Subscriber

8.1 Introduction

It is applicable the definition, the description and the operational requirements included in the document Draft EN 300 359-1 V1.2.3, dated February 1998.

8.2 Provision

8.2.1 Subscription options

CCBS may be provided to subscribers by the service provider on a subscription basis or may be generally available. Withdrawal may happen on subscriber's request or for administrative reasons.

As a service provider option, the CCBS supplementary service can be offered with a subscription option, which shall apply to the whole access of user A.

Table 1: Subscription option

Subscription option	Value	Meaning
Recall mode	Global recall	CCBS recall offered to all compatible terminals
	Specific recall	CCBS recall offered to the terminal which has activated the CCBS supplementary service

Table 1 summarizes the subscription options for the CCBS supplementary service.

8.2.2 Network options

If the subscription option is not offered, the CCBS will be activated in the following way:

Table 2: Network options

Network option	Value	Meaning
Check for identical calls	Yes	The network checks if CCBS is requested for a call identical to a call which CCBS is already activated.
CCBS request retention	Yes	User A's CCBS request is continued if user B is busy again.

Table 2 summarizes the network options, which apply to the CCBS supplementary service.

8.3 Procedures

8.3.1 General

The CCBS supplementary service enables user A, encountering a busy destination B, to have the call completed without having to make a new call attempt when the destination B becomes not busy.

When user A requests the CCBS supplementary service, the network B will monitor destination B for idle condition.

When the destination B becomes not busy (i.e. access resources e.g. one B-channel are not busy), then the network will wait a short time in order to allow the resources to be reused for originating a call. If the resources are not reused within this time by destination B, then the network B will automatically recall user A.

When user A accepts the CCBS recall, then network A will automatically generate a CCBS call to destination B.

8.3.2 Invocation

8.3.2.1 Activation

The user shall activate the service sending an INFO message with the Keypad facility information element.

The Keypad facility information element shall contain the service code related to the CCBS service, like in the following example:

* 17 #

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8.3.2.2 Deactivation

In order to deactivate the CCBS the user shall send an INFO message with the Keypad facility information element.

The Keypad facility information element shall contain the service code related to the CCBS service, like in the following example:

#17 #

When the user deactivates the CCBS he deactivates the last invocation of CCBS. The user can repeat this procedure as many times as the entries on its CCBS queue.

8.3.3 Notifications

8.3.3.1 To the served user – Activation

Every time that the user activates the CCBS shall receive in the Display information element with the following information:

FACILIDADE ATIVA	- if successful
FACILIDADE NÃO ATIVA	- if not successful
LISTA DE ESPERA CHEIA	- if the waiting queue is full

8.3.3.2 To the served user – Deactivation

In this case the served user shall received in the Display information element with the following information:

ENTRADA APAGADA DA LISTA DE ESPERA	- if deactivation successful
LISTA DE ESPERA VAZIA	- if no more entries on the queue

8.3.4 Exceptional Procedures

When the service is invoked in one of the following situations:

- service not subscripted
- service not available
- full queue
- No entries on the queue

The user who invoked the CCBS shall receive in the Display information element with the following information:

FACILIDADE REJEITADA

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9. Completion of Calls on No Reply

9.1 Introduction

It is applicable the definition, the description and the operational requirements included in the document Draft EN 301 065-1 V1.1.1, dated December 1997.

9.2 Provision

9.2.1 Subscription options

CCNR may be provided to subscribers by the network provider on a subscription basis or may be generally available.

Withdrawal may happen on subscriber's request or for administrative reasons.

As a network option, the CCNR supplementary service can be offered with a subscription option, which shall apply to the whole access of user A.

Table 1: Subscription option

Subscription option	Value	Meaning
Recall mode	Global recall	CCNR recall offered to all compatible terminals
	Specific recall	CCNR recall offered to the terminal which has activated the CCNR supplementary service

Table 1 summarizes the subscription options for the CCNR supplementary service.

9.2.2 Network options

The following network options shall apply to the CCNR:

Table 2: Network options

Network option	Value	Meaning
Check for identical calls	Yes	The network checks if CCNR is requested for a call identical to a call for which CCNR is already activated.
	No	The network does not check if CCNR is requested for a call identical to a call for which CCNR is already activated.
CCBS request retention	Yes	User A's CCNR request is continued if user B does not answer the CCNR call or user B is busy.
	No	User A's CCNR request does not continue if user A receives an ALERTING message or user B is busy. User A can activate CCNR again after having received the ALERTING message.

Table 2 summarizes the network options, which apply to the CCBS supplementary service.

9.3 Procedures

9.3.1 General

The CCNR supplementary service enables user A, encountering a destination B, which does not answer the call, to have the call completed without having to make a new call attempt when the destination B becomes not busy after having initiated an activity. User A can request the CCNR supplementary service when the call is in the alerting phase and after call clearing during the alerting phase before the retention timer is expired.

When user A requests the CCNR supplementary service, the network B will monitor destination B for becoming not busy after having initiated an activity.

When the destination B becomes not busy, (i.e. access resources e.g. one B-channel are not busy) after having initiated an activity, then the network will wait a short time in order to allow the resources to be reused for originating a call. If the resources are not reused within this time by destination B, then the network B will automatically recall user A.

When user A accepts the CCNR recall, then network A will automatically generate a CCNR call to destination B.

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NOTE: The procedures for the CCNR supplementary service are similar to the procedures specified in the CCBS standard. Therefore, where possible, the terms (e.g. CCBS Reference parameter) as defined for the CCBS supplementary service are used and in some cases a reference to the subclauses in ETS 300 359-1 [15] is made.

9.3.2 Invocation

9.3.2.1 Activation

The user shall activate the service sending an INFO message with the Keypad facility information element.

The Keypad facility information element shall contain the service code related to the CCNR service, as in the following example:

* 18 #

9.3.2.2 Deactivation

In order to deactivate the CCBS the user shall send an INFO message with the Keypad facility information element.

The Keypad facility information element shall contain the service code related to the CCNR service, as in the following example:

#18 #

When the user deactivates the CCNR he deactivates the last invocation of CCNR. The user can repeat this procedure as many times as the entries on its CCNR queue.

9.3.3 Notifications

9.3.3.1 To the served user – Activation

Every time that the user activates the CCNR shall receive in the Display information element with the following information:

FACILIDADE ATIVA	- if successful
FACILIDADE NÃO ATIVA	- if not successful
LISTA DE ESPERA CHEIA	- if the waiting queue is full

9.3.3.2 To the served user - Deactivation

In this case the served user shall received in the Display information element with the following information:

ENTRADA APAGADA DA LISTA DE ESPERA	- if deactivation successful
LISTA DE ESPERA VAZIA	- if no more entries on the queue

9.3.4 Exceptional Procedures

When the service is invoked in one of the following situations:

- service not subscripted
- service not available
- full queue
- No entries on the queue

The user who invoked the CCNR shall receive in the Display information element with the following information:

FACILIDADE REJEITADA

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10. Abbreviated Dialling

10.1 Introduction

This service will allow the user to have a list of abbreviated numbers store on the exchange.

10.2 Provision

10.2.1 Subscription options

This service shall be available on a subscription basis.

10.3 Procedures

10.3.1 General

The AB service shall be invoked by Keypad.

The user can create a list of abbreviated numbers, can also update and delete entries of the AB list.

In terms of billing is possible to charge for every access to the AB list or a fixed value on a periodic basis.

10.3.2 Invocation

For each one of the following actions the user shall send an INFO message with a Keypad facility information element.

10.3.2.1 Enter an entry on the AB list

The Keypad facility information element shall contain the servicec code related to the AB service, as in the following example:

*19*y*x#

y- Abbreviated number
x- Full directory number

10.3.2.2 Delete an entry on the AB list

The Keypad facility information element shall contain the service code related to the AB service, as in the following example:

#19*y*x#

y- Abbreviated number
x- Full directory number

10.3.2.3 Check the existence of an directory number on the AB list

The Keypad facility information element shall contain the service code related to the AB service, as in the following example:

*#19*0*x#

x- Full directory number

Note: the zero (0) is a reserved value that can not be used as abbreviated number.

10.3.2.4 Check whether abbreviated and full directory numbers are allocated to each other

The Keypad facility information element shall contain the code 19 related to the AB service as follows:

*#19*y*x#

y- Abbreviated number
x- Full directory number

10.3.2.5 Dial using an abbreviated number

The Keypad facility information element shall contain the code 19 related to the AB service as follows:

*19*y#

y- Abbreviated number

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10.3.3 Notifications

10.3.3.1 Confirmation of a new entry

Every time that the user inserts a new entry on the AB list shall receive in the Display information element with the following information:

LISTA ATUALIZADA	- if successful
LISTA NÃO ATUALIZADA	- if not successful
LISTA CHEIA	- if list is full

10.3.3.2 Confirmation on delete

In this case the served user shall received in the Display information element with the following information:

LISTA ATUALIZADA	- if successful
LISTA NÃO ATUALIZADA	- if not successful
LISTA VAZIA	- if no more entries on the list

10.3.3.3 Result of the check of a Directory number

In this case the served user shall received in the Display information element with the following information:

NÚMERO EXISTENTE, YY	- if successful, yy is the AB number
NÚMERO NÃO EXISTENTE	- if not on the AB list
PESQUISA NÃO EFETUADA	- if unsuccessful

10.3.3.4 Result of the relation between AB number e Directory number

In this case the served user shall received in the Display information element with the following information:

RELAÇÃO EXISTENTE	- if successful
NÚMERO NÃO EXISTENTE	- if neither directory number nor AB number on the AB list
PESQUISA NÃO EFECTUADA	- if unsuccessful

10.3.4 Exceptional Procedures

When the service is invoked in one of the following situations:

- service not subscripted
- service not available
- full list
- No entries on the list

The user who invoked the AB service shall receive in the Display information element with the following information:

FACILIDADE REJEITADA

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11. Ougoing Call Barring

It is applicable the definition, the description and the operational requirements included in the document Final draft EN 301 001-1 V1.2.1, dated May 1998.

11.1 Introduction

This service will allow the user to customise, in terms of access, its terminal.
The different kinds of barring must be in compliance with the chapter 8.4 – Facilidades of "Condições Técnicas para Comutadores da Banda Estreita". The supplier must describe in detail the several types of call barring programs available.

The call barring must be divided in two kinds: user oriented and operator oriented.
The user oriented shall be divided in two sub-types, the ones that are activated/deactivated by the user and the ones that are manipulated by operator on request by the user.

Unauthorized control of the OCB-UC supplementary service by the served user is protected by the use of a Personal Identification Number (PIN).

This document will describe the way to activate and deactivate the user oriented and administrable call barrings.

11.2 Provision

11.2.1 Subscription options

The different kinds of barring will be available upon subscription.

11.3 Procedures

11.3.1 General

The CB as referred previously on this document can invoke by the user or by the operator.

When the user invokes them, he must follow the procedures described further on and refer the correspondent CB code.

The CB activation/deactivation can not be done on any active state, if that happens the network shall ignore it.

If the user activates a CB that is already active the network shall ignore it, but shall display the message like a normal activation.

11.3.2 Invocation

11.3.2.1 Activation

The user shall activate the service sending a SETUP message with the Keypad facility information element.

The Keypad facility information element shall contain the service code related to the CB, as in the following example:

34 <PIN (4digits) + program number> #

11.3.2.2 Deactivation

In order to deactivated the CB the user shall send a SETUP message with the Keypad facility information element.

The Keypad facility information element shall contain the CB code, as follows:

#34* <PIN (4digits)>#

11.3.3 Notifications

11.3.3.1 Activation

Every time that the user activates any CB shall receive a DISC message including the
Display information element with the following information:

BARRAMENTO ATIVO - if successful

BARRAMENTO NÃO ATIVO - if unsuccessful

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11.3.3.2 Deactivation

In this case the user shall receive a DISC message including a Display information element with the following information:

BARRAMENTO CANCELADO - if successful

FACILIDADE REJEITADA - if unsuccessful

BARRAMENTO NÃO ATIVO - if the CB is not active

11.3.4 Exceptional Procedures

When the service is invoked in one of the following situations:

- Service not activated
- Service not available
- Service not subscripted
- Incorrect input

The user who invoked the CB shall receive in the Display information element with the following information:

FACILIDADE REJEITADA

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12. Malicious Call IDentification – MCID

12.1 Introduction

It is applicable the definition, the description and the operational requirements included in the document Draft EN 300 130-1 V1.2.3 dated February 1998.

12.2 Provision

12.2.1 Provision

Depending on the request made by the user, information shall be delivered either for a specific call and/or for all calls not answered by the subscriber.

12.3 Procedures

12.3.1 General

The MCID supplementary service enables an incoming call to be identified and registered. The following call information shall be printed and registered on the Destination Exchange:

- called party number;
- calling party number;
- local time and date of the invocation in the network serving the called user; and
- calling party subaddress (if provided by the calling user).

The information request for a specific call will take place during the "active" state (N10) or the "Disconnect indication" state (N12).

The activation/deactivation/registration shall be under Administration control.

12.3.2 Invocation

12.3.2.1 Normal Procedures

The called user shall invoke the service sending an INFO message with the Keypad facility information element during the "active" state (N10) or the "Disconnect indication" state (N12).

The Keypad facility information element shall contain the code related to the MCID service, like in the following example:

* 39 #

12.3.3 Notifications

12.3.3.1 To the called user

In the situation of an incorrect input done by the user, the network shall answer with a DISC message including a DISPLAY information element with the following code:

ENTRADA INCORRETA

The called user shall receive in the Display information element included in the INFO, DISC, REL or REL COMP message, the following information:

MCID COM SUCESSO	- if the MCID was successful
MCID SEM SUCESSO	- if the MCID was not successful

12.3.3.2 To the calling user

The calling user shall not be informed about any request of his identification, so no notification shall be sent to him.

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12.3.4 Exceptional Procedures

When the service is invoked in one of the following situations:

- the call is not in the "active" state or "Disconnect indication" state
- service not activated
- service not available

The served user shall receive in the Display information element included in the INFO, DISC, REL or REL COMP message, the following information:

FACILIDADE REJEITADA

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13. Three Party - 3PTY

13.1 Introduction

It is applicable the definition, the description and the operational requirements mentioned in the document Draft EN 300 188-1 V1.2.3, dated February 1998.

13.2 Provision

13.2.1 Subscription options

The 3PTY supplementary service is subscribed to by prior arrangements with the service provider.

13.3 Procedures

13.3.1 General

The 3PTY supplementary service enables a user to establish, participate in and control a three-way conversation.

The 3PTY supplementary service can be invoked by the served user who is involved in at least two calls (one active call and at least one held call), each of which may be an incoming or outgoing call.

The connections shall be established on each of the two calls prior to the invocation of the 3PTY supplementary service.

13.3.2 Normal operation

13.3.2.1 Invocation

To request the 3PTY supplementary service, the served user selects the call reference of one held call and sends to the network an INFO message with this call reference and the Keypad facility information element.

The Keypad facility information element shall contain the corresponding code, like in the following example:

*71#

The network receiving this request checks if:

- the 3PTY supplementary service is allowed to this user;
- the received request relates to the call reference of an Active-Held connection;
- for the CEI value on which the request is received, a single Active-Idle connection exists;
- that a three-way bridge is available for use;
- no three-way bridge that is controlled by the served user is already included in the Active-Idle connection or in the Active-Held connection; and
- the requirements of EN 300 195-1 are met for the other supplementary service interactions.

If these requirements are met, the network allocates a three-way bridge, attach the identified connections to this three-way bridge using the B-channel of the Active-Idle connection to support user information transfer with the served user;

The network shall also send INFO messages to the served user and remote users containing a Display information element coded as follows:

CONFERÊNCIA ATIVA

After this sequence, the three-way connection has been established and the auxiliary states of the two calls are not changed. Then, if the served user wants to establish the 3 way conversation, shall invoke Call Hold supplementary service with the call reference of the held call used to request the 3PTY supplementary service.

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13.3.2.2 Managing an active three way conversation

During an active three way conversation, the served user can request the network to:

a) disconnect one call
b) disconnect the two calls
c) create a private communication with one of the remote users

Either of the remote parties can request the network to:

d) disconnect the call

Note: We assume hereafter that the served user is A, A - B is the active-held connection to the remote user B (call reference x), and A - C is the active-idle connection to the remote user C (call reference y).

13.3.2.2.1 Served User requests

a) Disconnect one of the parties

If user A wants to disconnect one of the parties, user A shall send a DISC message to the network, containing the appropriate call reference:

i) disconnection of the active-held call (CRx)

On receipt of a DISC message containing CRx (the call that was active-held), the network shall return a REL message to the user B, release the three-way connection and all resources associated to this call (A - B), according to basic control procedures.

This results in a simple active-idle call between users A and C.

In addition, the network shall send to user C an INFO message with the Display information element coded as follows:

CONFERÊNCIA DESLIGADA

ii) disconnection of the active-idle call (CRy)

On receipt of a DISC message containing CRy (the call that was active-idle), the network shall return a REL message to the user, release the three-way connection and all resources associated to this call A - C, according to the basic control procedures.

If this procedure results in a simple active-held call between users A and B, the network shall send to user B an INFO message with the Display information element coded as follows:

CHAMADA SUSPENSA

Furthermore, in order to retrieve the held call between A and B, user A shall send a RETRIEVE message containing CRx to the network. The network shall then follow the corresponding call hold supplementary service procedures.

If the RETRIEVE is successful, this results in a simple active-idle call between users A and B. In this case de network shall send to user B an INFO message with the Display information element coded as follows:

CONFERÊNCIA DESLIGADA

b) Disconnect the two calls

User A sends to the network two DISC messages:

- For the first DISC message see the procedures described in i).
- For the second DISC message see the procedures described in ii) without the RETRIEVE procedure and notifications.

c) Create a private communication with one remote user

If user A wants to create a private communication with one of the other users, it shall send an INFO message to the network, containing the call reference of one of the two calls and the Keypad facility information element, with the following code:

#71#

The remote user, for which a private communication is required, will be the one in Active-idle state, and will receive an INFO message with its call reference and a Display information element with the following code:

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CONFERÊNCIA DESLIGADA

The remote user, for which a private communication is not required, will be the one in Active-held state, and will receive an INFO message with its call reference and a Display information element with the following code:

CHAMADA SUSPENSA

13.3.2.2.2 Remote user disconnects its call

If a remote user wants to be released from the 3 way conversation, it shall send a DISC message to the network; then:

- Â· at this remote user-network interface, normal call clearing procedures apply.
- Â· at the other remote user-network interface (that will become the Active-idle user), an INFO message shall be sent by the network, containing the Display information element coded as follows:

  CONFERÊNCIA DESLIGADA
- Â· at the served user interface the 3 way connection is released and the network shall send a DISC message to the served user with the appropriate call reference (e.g. CRx if user B is released) and then applies for that call, the normal clearing procedures.

a) if the active-held call is released

After this sequence, only one call is active and in the idle auxiliary state.

b) if the active-idle call is released

After this sequence, only one call is active and in the held auxiliary state. Then, the served user if it wants to continue to communicate, shall invoke Call Hold supplementary service.

13.4 Exceptional procedures

In the situation of an incorrect input done by the user, the network shall answer with a DISC message including a DISPLAY information element with the following code:

ENTRADA INCORRETA

The following exceptional procedures are also applied at the network side:

- **In the 3PTY idle state**

If the network receives a 3PTY invocation according to the procedures of 3.2.1 that it cannot accept, it shall return to the served user an INFO message with the Display information element coded as follows:

FACILIDADE REJEITADA

- **In the 3PTY active state**

If the network receives a 3PTY invocation according to the procedures of 3.2.1 that it cannot accept, it shall return to the served user an INFO message with the Display information element coded as follows:

FACILIDADE REJEITADA

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14. Terminal Portability

14.1 Introduction

It is applicable the definition, the description and the operational requirements mentioned in the document Draft EN 300 055-1 V1.2.3, dated February 1998.

14.2 Provision

14.2.1 Subscription options

This facility will be available on a general basis.

14.3 Procedures

14.3.1 General

This is a service shall be activated every time that the user wants to move its terminal to a different one.

This service implies two actions from the user.

For each time that the user wants to move its terminal has to define a call identifier.

This identifier must be unique.

The user must not remove its terminal until receives a confirmation from the network.

14.3.2 Invocation

14.3.2.1 Activation

The user shall activate the service sending an INFO message with the Keypad facility information element.

The Keypad facility information element shall contain the code 22 related to the TP service, as follows:

*22*xx#

xx- call identifier defined by the user

14.3.2.2 Deactivation / Call re-establishment

In order to re-establish the call the user shall re-connect the terminal and shall send an INFO message with the Keypad facility information element.

The Keypad facility information element shall contain the code 22 related to the TP, as follows:

#22*xx#

xx- call identifier defined by the user

14.3.3 Notifications

14.3.3.1 Activation

Every time that the user activates the TP shall receive in the Display information element with the following information:

FACILIDADE ATIVA - if successful

FACILIDADE REJEITADA - if unsuccessful

14.3.3.2 Call re-establisment

In case os call re-establisment, the user shall receive in the Dsipaly information element with the following information:

CHAMADA REESTABELECIDA

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14.3.4 Exceptional Procedures

When the service is invoked in one of the foolowing situations:

- Service not available

  The user who invoked the TP shall receive in the Display information element with the following information:

  FACILIDADE REJEITADA

- Call identifier already exists

  The user who invoked the TP shall receive in the Display information element with the following information:

  CALL ID INVÁLIDO

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15. Conference Call – CONF

15.1 Introduction

It is applicable the definition, the description and the operational requirements included in the document Draft EN 300 185-1 V1.2.3, dated February 1998.

15.2 Provision

15.2.1 Subscription options

The CONF supplementary service is subscribed to by prior arrangements with the service provider.

15.3 Procedures

15.3.1 General

The CONF supplementary service enables a user to participate in and control a simultaneous communication involving a number of users. The CONF supplementary service can be invoked from the idle state. As a network option, the CONF supplementary service can be invoked from an existing active call.

When the CONF supplementary service is invoked, conference resources are allocated to the served user. In the case of invocation from an active call, this call will be connected to the conference resources.

15.3.2 Invocation

15.3.2.1 Normal Procedures

The CONF supplementary service can be invoked from the idle state and from an existing call.

The number of parties required in the conference can be indicated in the request. If the number of parties is not indicated, a maximum value of 8 shall be used.

15.3.2.1.1 Beginning the conference from the Null call state

The served user can request the CONF supplementary service sending to the network a SETUP message with all the information necessary to establish the connection to the conference bridge, including the Keypad Facility information element. The SETUP ACKNOWLEDGE message shall not be used.

The Keypad facility information element shall contain the corresponding invocation code, like in the following example:

*28# (the network will assume 8 conferees)

Or

28<number of conferees>#

The network shall respond to the SETUP with a CONNECT message with the following Display information element:

CONFERÊNCIA*X*ESTABELECIDA (X will correspond to the conference ID)

15.3.2.1.2 Beginning the conference from the Active call state

In this case, to request a conference, the served user shall send a INFO message to the network with the call reference of the existing call and including a Keypad Facility information element with the corresponding invocation code, like in the following example:

*28# (the network will assume 8 conferees)

Or

28<number of conferees>#

The network shall send an INFO message to the served user in a Display information element, with the following information:

CONFERÊNCIA*X*ESTABELECIDA COM#Y#

(X will correspond to the conference ID)

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(Y will correspond to the remote Party ID)

A Party ID used to identify a remote user shall not be used again until the remote user identified by this Party ID has been dropped from the conference.

The network shall send an INFO message to the remote user with a Display indicator information element with the following information:

CONFERÊNCIA ESTABELECIDA

15.3.2.1.3 Adding a remote user

When necessary, the served user can place in hold or retrieve the connection in order for communication to take place. This procedure is part of the call hold supplementary service.

To add a new remote user, the connection to the conference bridge can be either in the (Active, Idle) state or in the (Active, Call Held) state. The connection to the remote user to be added shall be either in the (Active, Idle) state or (Active, Call Held) state.

The served user shall send an INFO message to the network with the call reference of the call to be added and including a Keypad Facility information element with the corresponding invocation code, like in the following example:

29<conference ID>#

The network shall send an INFO message (or a DISCONNECT in case of a second remote user) to the served user containing a Display information element with the following information:

CONFERÊNCIA*X*ESTABELECIDA COM#Y#

(X will correspond to the conference ID)

(Y will correspond to the remote Party ID)

This Party ID shall be used in subsequent operations to identify the added remote user.
A Party ID used to identify a remote user shall not be used again until the remote user identified by this Party ID has been dropped from the conference, i.e. a Party ID shall be unique within the context of a single conference.

The network shall send an INFO message to the added remote user with a Display information element with the following information:

CONFERÊNCIA ESTABELECIDA

The network shall send an INFO message to all other remote users (if any) with a Display information element with the following information:

OUTRO CONFERENTE ADICIONADO

15.3.2.1.4 Isolate a remote user

To isolate a remote user, the served user shall send an INFO message to the network including a Keypad facility information element with the corresponding invocation code, like in the following example:

#30*<Party ID>#

To indicate a successful operation, the network shall send an INFO message to the served user including a Display information element with:

ISOLAMENTO BEM SUCEDIDO

After this, the remote user remains connected to the conference but communication is not possible.
The network shall send an INFO message to the remote user isolated including a Display information element with:

ISOLADO

The network shall send an INFO message to all other remote users including a Display information element with:

OUTRO CONFERENTE ISOLADO

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15.3.2.1.5 Reattach a remote user

To reattach an isolated remote user, the served user shall send an INFO message to the network including a Keypad Facility information element with the corresponding invocation code, like in the following example:

30<Party ID>#

To indicate a successful operation, the network shall connect the reattached remote user to the conference and send an INFO message to the served user including a Display information element with:

CONFERENTE LIGADO DE NOVO

The network shall send an INFO message to the remote user including a Display information element with:

LIGADO DE NOVO

The network shall send an INFO message to all other remote users including a Display information element with the following information:

OUTRO CONFERENTE DE VOLTA

15.3.2.1.6 Splitting a remote user

To split a remote user that may be isolated, the served user shall send a SETUP message to the network including a Keypad Facility information element and a Bearer capability information element. The Keypad Facility information element shall contain the corresponding invocation code, like in the following example:

31<conference ID>*<Party ID>#

The Bearer capability information element shall indicate an appropriate bearer capability with regard to the applicability of the CONF supplementary service. The Called Party Number and Called Party Subaddress information element shall be omitted by the user.

To indicate a successful operation, the network shall send an CONNECT message to the served user including a Display information element with:

SEPARAÇÃO EFETUADA

On sending the CONNECT message, the network shall release the Party ID; the Party ID may be used to identify future remote users.

After execution of the split operation the served user has a separate call with the indicated remote user. All other remote users are still involved in the conference.

The network shall send an INFO message to the remote user including a Display information element with:

CONFERÊNCIA DESLIGADA

The network shall send an INFO message to all other remote users including a Display information element with:

OUTRO CONFERENTE SEPARADO

15.3.2.1.7 Disconnect a remote user

To disconnect a remote user, the served user shall send an INFO message to the network including a Keypad Facility information element with the corresponding invocation code, like in the following example:

#29*<Party ID>#

To indicate that the identified remote user has been removed from the conference and that the clearing procedures according to subclause 5.3.4 of EN 300 403-1 [4] are in progress at the remote user, the network shall send an INFO message to the served user including a Display information element with:

CONFERENTE DESLIGADO

The Party ID shall be released by the user and the network and can be used to identify future remote users.

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The network shall send an INFO message to all other remote users including a Display information element with:

OUTRO CONFERENTE DESLIGADO

15.3.2.1.8 Disconnection by a remote user

At any time a remote user can disconnect from the conference by using the call clearing procedures according to subclause 5.3.3 of EN 300 403-1 [4]. To indicate the served user that such a remote user has been removed from the conference, the network shall send an INFO message including a Display information element with:

CONFERENTE#Y#DESLIGADO

(Y will correspond to the remote Party ID)

On sending the INFO message, the network shall release the Party ID; the Party ID can be used to identify the future remote users. The network shall send an INFO message to all other remote users with a Display information element with:

OUTRO CONFERENTE DESLIGADO

15.3.2.1.9 Terminate the conference

To terminate the conference, the served user shall clear the connection to the network by using the basic call clearing procedures according to subclause 5.3.3 of EN 300 403-1 [4].

On receiving the DISCONNECT message, the network shall make the conference unavailable, i.e. all subsequent operations invoked for this conference by the user shall be responded to with the appropriate return error Display information element, as specified previously.

On sending or receiving the RELEASE COMPLETE message associated with clearing the connection, the network shall release the Party ID associated with each remote user, and shall release the Conference ID associated with the clearing of the connection.

The Conference ID shall be available for re-use on other conferences.

15.3.3 Exceptional Procedures

15.3.3.1 Beginning the conference from the Null call state

If the user is not subscribed to the CONF supplementary service, the network shall start the basic call clearing procedures. One of the messages sent by the network to the served user shall contain a Display information element with:

FACILIDADE REJEITADA

Furthermore, this message shall contain a Cause information element indicating cause #31 "Normal, unspecified" and a location of "public network serving the local user".

15.3.3.2 Beginning the conference from the Active call state

If the served user is not subscribed to the CONF supplementary service, the network shall send an INFO message to the served user containing a Display information element with:

FACILIDADE REJEITADA

If the network cannot accept the operation because the conference size as requested by the user exceeds the size supported by the network, the network shall send, to the served user, an INFO message containing a Display information element with:

EXCESSO DE PARTICIPANTES

If the network cannot accept this operation because of lack of a conference bridge or other resources, the network shall send, to the served user, an INFO message containing a Display information element with:

FALTA DE RECURSOS

If the network receives a CONF request for a call reference value that is not in the Active call state (N10) and not in the Null call state (N0), the network shall send, to the served user, an INFO message containing a Display information element with:

ESTADO INVÁLIDO

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If the user indicates an in-appropriate bearer capability, the network shall send, to the served user, an INFO message containing a Display information element with:

FALTA DE SUPORTE

15.3.3.3 Adding a remote user

If the Conference ID used is not associated with a conference known to the network, the network shall send, to the served user, an INFO message containing a Display information element with:

CONFERÊNCIA INEXISTENTE

If the network cannot accept this operation because the maximum number of parties has been reached, the network shall send an INFO message to the served user containing a Display information element with:

PARTICIPANTES EM EXCESSO

If the network cannot accept this operation because addition of the call would result in violation of Closed User Group rules, the network shall send an INFO message to the served user containing a Display information element with:

INTERAÇÃO NÃO PERMITIDA

If the network receives an INFO message (containing a Keypad Facility information element) for a call reference value that is not in the Active call state (N10) and not in the Null call state (N0), the network shall send an INFO message containing a Display information element with:

ESTADO INVÁLIDO

If the network cannot accept this operation for any other reason, the network shall send an INFO message to the served user containing a Display information element with:

NÃO PERMITIDO

15.3.3.4 Isolate a remote user

If the Party ID used is not associated with a remote user, the network shall send, to the served user, an INFO message containing a Display information element with:

CONFERENTE INEXISTENTE

If the network cannot accept this operation because the conference has not successfully been established, the network shall send, to the served user, an INFO message containing a Display information element with:

FACILIDADE INACTIVA

If the remote user indicated in the Keypad Facility information element is already isolated, then the network shall not treat this as an error but shall return, to the served user, an INFO message containing a Display information element with:

ISOLAMENTO BEM SUCEDIDO

15.3.3.5 Reattach a remote user

If the Party ID used is not associated with a remote user, the network shall send an INFO message to the served user containing a Display information element with:

CONFERENTE INEXISTENTE

If the network cannot accept this operation because the conference has not successfully been established, the network shall send an INFO message to the served user containing a Display information element with:

FACILIDADE INATIVA

If the remote user indicated in the Keypad Facility information element is already reattached, then the network shall not treat this as an error but return an INFO message to the served user containing a Display information element with:

CONFERENTE LIGADO

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15.3.3.6 Splitting a remote user

If the Conference ID used is not associated with a conference, the network shall start the basic call clearing procedures according to subclause 5.3 of EN 300 403-1 [4]. One of the messages sent to the served user shall contain a Display information element with:

CONFERÊNCIA INEXISTENTE

Furthermore, this message shall contain a Cause information element indicating cause #31 "Normal, unspecified" and a location of "public network serving the local user".

If the Party ID used is not associated with a remote user, the network shall start the basic call clearing procedures according to subclause 5.3 of EN 300 403-1 [4]. One of the messages sent to the served user shall contain a Display information element with:

CONFERENTE INEXISTENTE

Furthermore, this message shall contain a Cause information element indicating cause #31 "Normal, unspecified" and a location of "public network serving the local user".

15.3.3.7 Disconnect a remote user

If the Party ID used is not associated with a remote user, the network shall send an INFO message to the served user containing a Display information element with:

CONFERENTE INEXISTENTE

If the network cannot accept this operation because the conference has not successfully been established, the network shall send, to the served user, an INFO message containing a Display information element with:

FACILIDADE INATIVA

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16. Incoming Call Barring

16.1 Introduction

This service shall allow the user to customise the access restrictions, in terms of incoming calls redirected from other users.

The supplier must describe in detail the several types of call barring programs available. One program including the barring of call forwardind calls, shall be available.

The call barring must be divided in two kinds: user oriented and operator oriented.
The user oriented shall be divided in two sub-types, the ones that are activated/deactivated by the user and the ones that are manipulated by operator on request by the user.

Unauthorized control of the ICB supplementary service by the served user is protected by the use of a Personal Identification Number (PIN).

This document will describe the way to activate and deactivate the user oriented and administrable Incoming call barrings.

16.2 Provision

16.2.1 Subscription options

The different kinds of Incoming call barring programs will be available upon subscription.

16.3 Procedures

16.3.1 General

The ICB, as referred previously on this document, can be invoked by the user or by the operator.
When invoked by the user, it must follow the procedures described in this document.

The ICB activation/deactivation can not be done on any active state, if that happens the network shall reject the request.

If the user activates a ICB that is already active the network shall ignore it, but shall apply the same display as in normal activation.

16.3.2 Invocation

16.3.2.1 Activation

The user shall activate the service sending a SETUP message with the Keypad facility information element.

The Keypad facility information element shall contain the service code related to the ICB, as in the following example:

35 <PIN (4digits) + program number> #

16.3.2.2 Deactivation

In order to deactivated the ICB the user shall send a SETUP message with the Keypad facility information element.

The Keypad facility information element shall contain the CB code, as follows:

#35* <PIN (4digits)>#

16.3.3 Notifications

16.3.3.1 Activation

Every time that the user activates any CB shall receive a DISC message including the Display information element with the following information:

BARRAMENTO ATIVO - if successful

BARRAMENTO NÃO ATIVO - if unsuccessful

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16.3.3.2 Deactivation

In this case the user shall receive a DISC message including a Display information element with the following information:

BARRAMENTO CANCELADO	- if successful
FACILIDADE REJEITADA	- if unsuccessful
BARRAMENTO NÃO ATIVO	- if the CB is not active

16.3.4 Exceptional Procedures

When the service is invoked in one of the following situations:

- Service not activated
- Service not available
- Service not subscripted
- Incorrect input

The user who invoked the ICB shall receive in the Display information element with the following information:

FACILIDADE REJEITADA

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17. History

Version	Data	Division/Department	Notes
V1.0	outubro 2001	DER/ERV	
V1.1	outubro 2021		Adaptation of the documentation for the new Oni image

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