Standards Committee T1
Telecommunications

Accredited by the American National Standards Institute

1200 G Street, N.W.
Suite 500
Washington, D.C. 20005
202-434-8845
FAX: 202-347-7125

Gerald H. Peterson
Chairman

E. Raymond Hapeman
Vice Chairman

James Crandall
Director

Susan M. Carioti
Manager

Steven D. Barclay
Manager

A Sponsored Committee of

Alliance for Telecommunications
Industry Solutions

December 13, 1999

To: Members of Accredited Standards Committee T1 – Telecommunications and Members of the T1P1 Technical Subcommittee

Subject: Default of T1 Letter Ballot 800 – Draft Proposed American National Standard – Personal Communications Services PCS 1900 Specifications (Revision and Consolidation of ANSI J-STD-007-1997, ANSI J-STD-007a-1998, ANSI J-STD-023-1996, and ANSI J-STD-024-1997 T1/T1A Joint Standards into a T1 Standard)

Dear Members:

The initial results for the T1 Letter Ballot 800 were 29 approvals (26.96 weighted value), 0 disapprovals, 29 abstentions (25.77 weighted value), and 21 ballots (18.96 weighted value) were not returned.

**The results of this ballot, including the comments submitted are designated Attachment I. The comments have been addressed by T1P1 and the resolution to these comments is designated Attachment II. The revised text of the proposed standard is designated Attachment III.

***This cover letter and Attachments I, II, and III for this default letter ballot have been posted electronically as LB800-D.pdf (See Additional Information below).

Please review the changes made to resolve the comments. If these changes should affect your original vote, please so advise the Secretariat in writing by **January 13, 2000**.

Thank you for your attention to this matter.

Sincerely yours,

[Original signed by S. Carioti]

Susan Carioti
Manager, Committee T1

Enclosure
SC/jdb

cc: G.H. Peterson
E.R. Hapeman
J. Crandall
S. Barclay
A. Chatterjee
M. Younge
Q. Cassen

ADDITIONAL INFORMATION
To obtain a copy of LB800-D.pdf, click on “Current T1 Letter Ballots” from the T1 Homepage, then click on “Default”, or
WWW http://www.t1.org/index/10002.htm
FTP ftp://ftp.t1.org/pub/ballots/default/lb800-d.pdf

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October 6, 1999

Mr. G.H. Peterson
Chairman, Committee T1
Lucent Technologies
101 Crawfords Corner Rd.
Room 4L-338
Holmdel, NJ 07733

Re: T1 LB 800

Dear Jerry:

T1 Letter Ballot LB 800, entitled "Draft Proposed American National Standard - Personal Communications Services PCS1900 Specifications (Revision and Consolidation of ANSI J-STD-007-1997, ANSI J-STD-007a-1998, ANSI J-STD-023-1996, and ANSI J-STD-024-1997 (T1/TIA Joint Standards)," closed on October 1, 1999 with the following results:

Actual	Weighted	
29	**26.96**	Approvals Comments from Lucent Technologies, Pacific Bell Wireless, and SBC Communications, Inc.
0	**0**	Disapprovals
29	**25.77**	Abstentions
21	**18.96**	Ballots not returned
79	**71.69**	Voting members

The members who returned abstentions are as follows: 3Com, ABC Inc., ADC Telecommunications Inc., Advanced Micro Devices, Alcatel USA Inc., Ameritech, Bell Canada, Centillium Technology, Cisco Systems, GCI Communication Corp., General Datacomm Incorporated, Globespan Inc., GSM North America, GTE Telephone Operations, MCI WorldCom, MEGAXESS/ATANET Inc., Next Level Communications, NIST, NTIA/ITS, Orckit Communications, Paradyne Corp., Pirelli TSD, Rural Utilities Service, Symmetricom Inc., Telecommunications Techniques, Tellabs Operations Inc., Texas Instruments, TranSwitch Corp, and Westell Technologies, Inc.

The members who have not returned ballots are as follows: Airspan Communications Corp, AMP Incorporated, ASCOM Enterprise Networks, AT&T Wireless Services Inc., Aware Inc., CDMA Development Group, CIENA Corporation, Covad Communications Co, DISA, Harris Corporation, Hekimian Laboratories, Hewlett-Packard, ICG Communications, Marconi Communications, Microcell Connexions, OKI America Inc, Powertel Inc., Qualcomm Inc, Rhythms, Sprint-Long Distance Division, and ST Microelectronics.

Please find enclosed three sets of comments for your consideration and review.

Sincerely yours,

[Original signed by S. Carioti]

Susan Carioti
Manager, Committee T1

SC/amb

cc: E.R. Hapeman
J. Crandall
S. Barclay
A. Chatterjee
M. Younge
Q. Cassen
E. Ehrlich
T1 Advisory Group

From: "Donovan, Cynthia S (Cynthia)" <csdonovan@lucent.com>
To: "'t1ballot@atis.org'" <t1ballot@atis.org>
Date: Fri, Oct 1, 1999 3:44 PM
Subject: T1 LB 800

Attached is Lucent Technologies vote for T1 LB 800, together with comments. Any questions, please contact Cynthia Donovan at csdonovan@lucent.com <mailto:csdonovan@lucent.com>

<<lb800-vf.txt>> <<commentsLB800.doc>>

ACCREDITED STANDARDS COMMITTEE
T1-TELECOMMUNICATIONS
LETTER BALLOT

-- ACTION REQUESTED --

REPLY TO: ATIS
T1 Secretariat
1200 G St., NW, Suite 500
Washington, DC 20005
FAX: 202.347.7125
EM: t1ballot@atis.org

Letter Ballot Number: LB 800
Document Number: T1P1/99-173R2
Date: 08/20/99
Ballot Period: 6 Weeks
Ballot Closes: 10/01/99

Authorized By: T1P1
Distributed By: T1 Secretariat

Subject: Draft Proposed American National Standard - Personal Communications Services PCS1900 Specifications (Revision and Consolidation of ANSI J-STD-007-1997, ANSI J-STD-007a-1998, ANSI J-STD-023-1996, and ANSI J-STD-024-1997 (T1/TIA Joint Standards) into a T1 Standard

Statement: The T1P1 members at its July 1999 meeting approved this dpANS for letter ballot. Please Note: Due to an interest category imbalance at the time of this letter ballot, weighted voting of a 0.83 value applies to the manufacturing interest group.

Question: Do you approve this draft proposed American National Standard for submittal to ANSI for approval as an American National Standard?

Ballot: YES _____ NO _____ (Comments Required)

Ballot: YES __X_ (w/ comments) ABSTAIN _____ (w/ reasons)

ABSTAIN _____

(IF VOTING "NO, WILL VOTE CHANGE TO "YES" IF THE ATTACHED CHANGES ARE MADE?)

YES _____ NO _____

Signature ___John H. Bobsin_____ Principal_X__ Alternate___

Organization _Lucent Technologies_____ DATE_10/1/99_

Telephone #: _732-949-4140_

See ANSI's PATENT POLICY
(under the Committee T1 Letter Ballots section)

Lucent Technologies comments on T1 LB 800

1. Editorial: Section 2.1.1 (page 2) line 31, it should read: "...02.88 describes Stage 1 Supplementary Service ..." instead of "...02.88 describes Layer 1 Supplementary Service ...".

2. Editorial: Section 2.1.1 (page 2)
a) line 33: remove "02.82" and "03.82"
b) line 38: remove "GSM 02.82 Call Forwarding Supplementary Services-Stage 1", since 02.82 is already mentioned on page 2 line 31 and 03.82 is already mentioned on page 3 line 10.

3. Editorial: Section 2.1.1 (page 3)
a) line 8: remove "GSM 03.82 Call Forwarding Supplementary Services-Stage 2",
c) since 03.82 is already mentioned on page 3 line 10.

4. Editorial: Section 2.1.1 (page 3 line 10), it should read: "...03.88 describes Stage 2 Supplementary Service ..." instead of "...03.88 describes Layer 2 Supplementary Service ...".

5. Editorial: Section 2.1.1 (page 3 line 18), it should read: "... 04.90 describes Stage 3 ..." instead of "...04.90 describes Layer 3 ...".

6. Technical: Section 3.3 (page 9 line 16), I don't recall any harmonization CRs to 03.81. I believe that 03.81 v.6.0.0 (SMG #27) should be sufficient. Why is v.7.0.0 chosen if 02.81 v.6.0.0 has been chosen? Shouldn't the stage 1 and 2 and 3 have the same version meaning both in release 1997 (v.6.x.y)?

7. Technical: Section 3.3 (page 9 line 18), references v.6.0.0, there was an SMG#28 error and the harmonization CR03.82-A005 "Introduction of new subscription option for Call Forwarding Supplementary Service (in SMG#28 P-99-154) was approved for 03.82 v.8.0.0 when it should have been approved for 03.82 v.7.0.0. Perhaps 03.82 v.8.0.0 should be referenced (corresponding to CR02.82-A003 which is already in v.7.0.0).

ETSI SMG3
Sophia Antipolis, France
25th - 29th January 1999

Tdoc SMG3 3B99-039

CHANGE REQUEST No : **A005r2**

Technical Specification GSM / UMTS: 03.82 Version 5.0.0

Submitted to SMG 28
list plenary meeting or STC here ↑

for approval **X**
for information

without presentation ("non-strategic")
with presentation ("strategic")

PT SMG CR cover form. Filename: crf26_3.doc

Proposed change affects: SIM ( ) ME (X) Network (X)
(at least one should be marked with an X)

Work item: Harmonization

Source: SMG3 **Date:** 29.01.99

Subject: Introduction of new subscription option for Call Forwarding supplementary services

Category:
(one category and one release only shall be marked with an X)

F	Correction	
A	Corresponds to a correction in an earlier release	
B	Addition of feature	X
C	Functional modification of feature	
D	Editorial modification	

Release:

Phase 2	
Release 96	
Release 97	
Release 98	X
Release 99	
UMTS	

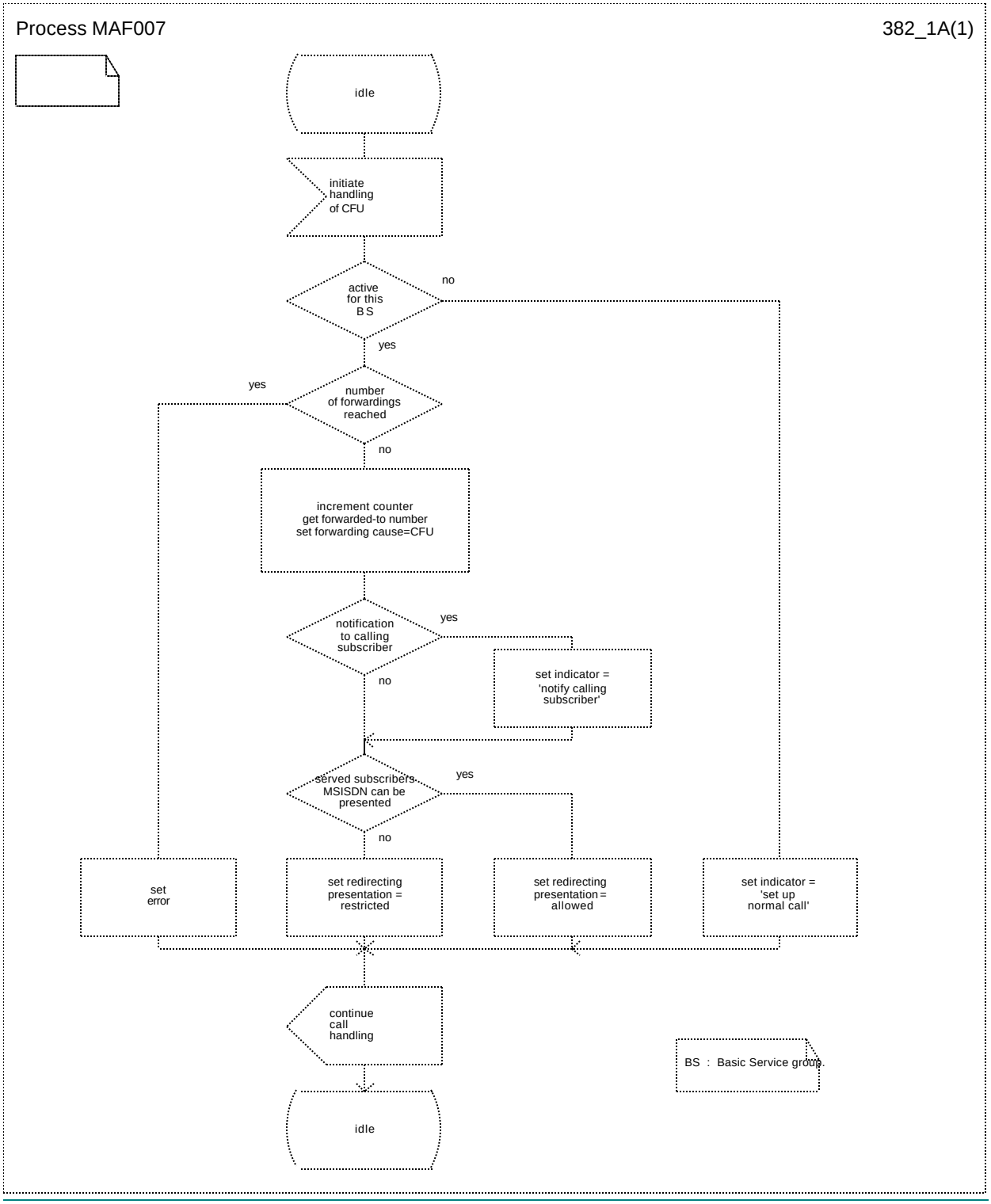
Reason for change: PCS 1900 (North America) specifications support the presentation of the served call forwarding subscribers MSISDN to the forwarded-to subscriber. It is proposed to align GSM specifications. Handling of the new subscription option in HLR and VLR is defined within this specification.

Clauses affected: 1.2 / 1.3 / 2.2 / 2.3 / 3.2 / 3.3 / 4.2/ 4.3

Other specs affected:

Other releases of same spec		→ List of CRs:
Other core specifications		→ List of CRs:
MS test specifications / TBRs		→ List of CRs:
BSS test specifications		→ List of CRs:
O&M specifications		→ List of CRs:

Other comments:


Process MAF007
382_1A(1)
idle
initiate handling of CFU
active for this B S
no
yes
number of forwardings reached
yes
no
increment counter
get forwarded-to number
set forwarding cause=CFU
notification to calling subscriber
yes
no
set indicator = 'notify calling subscriber'
served subscribers MSISDN can be presented
yes
no
set error
set redirecting presentation = restricted
set redirecting presentation = allowed
set indicator = 'set up normal call'
continue call handling
idle
BS : Basic Service group.

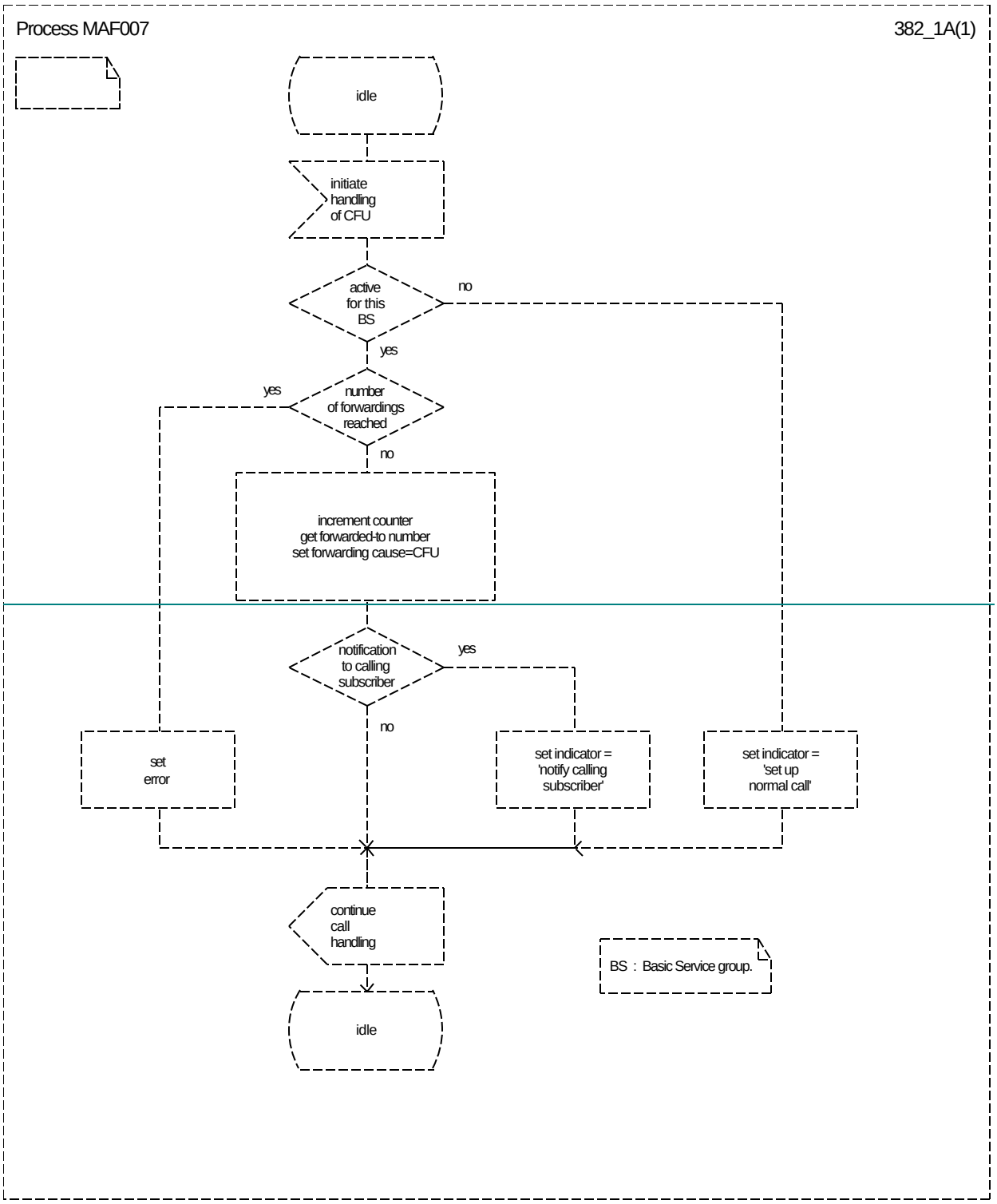


Figure 1.10: MAF007 Call forwarding unconditional authorisations examination (HLR)

1.3 Information stored in the HLR

The following logical states are applicable for CFU (refer to GSM 03.11 for an explanation of the notation):

Provisioning State	Registration State	Activation State	HLR Induction State
(Not Provisioned,	Not Registered,	Not Active,	Not Induced)
(Provisioned,	Not Registered,	Not Active,	Not Induced)
(Provisioned,	Registered,	Not Active,	Not Induced)
(Provisioned,	Registered,	Active and Quiescent,	Not Induced)
(Provisioned,	Registered,	Active and Operative,	Not Induced)

The registration and activation state may be different for each applicable elementary basic service group.

The provisioning state shall be on a per subscriber basis, and hence the same for all basic service groups.

The HLR shall store:

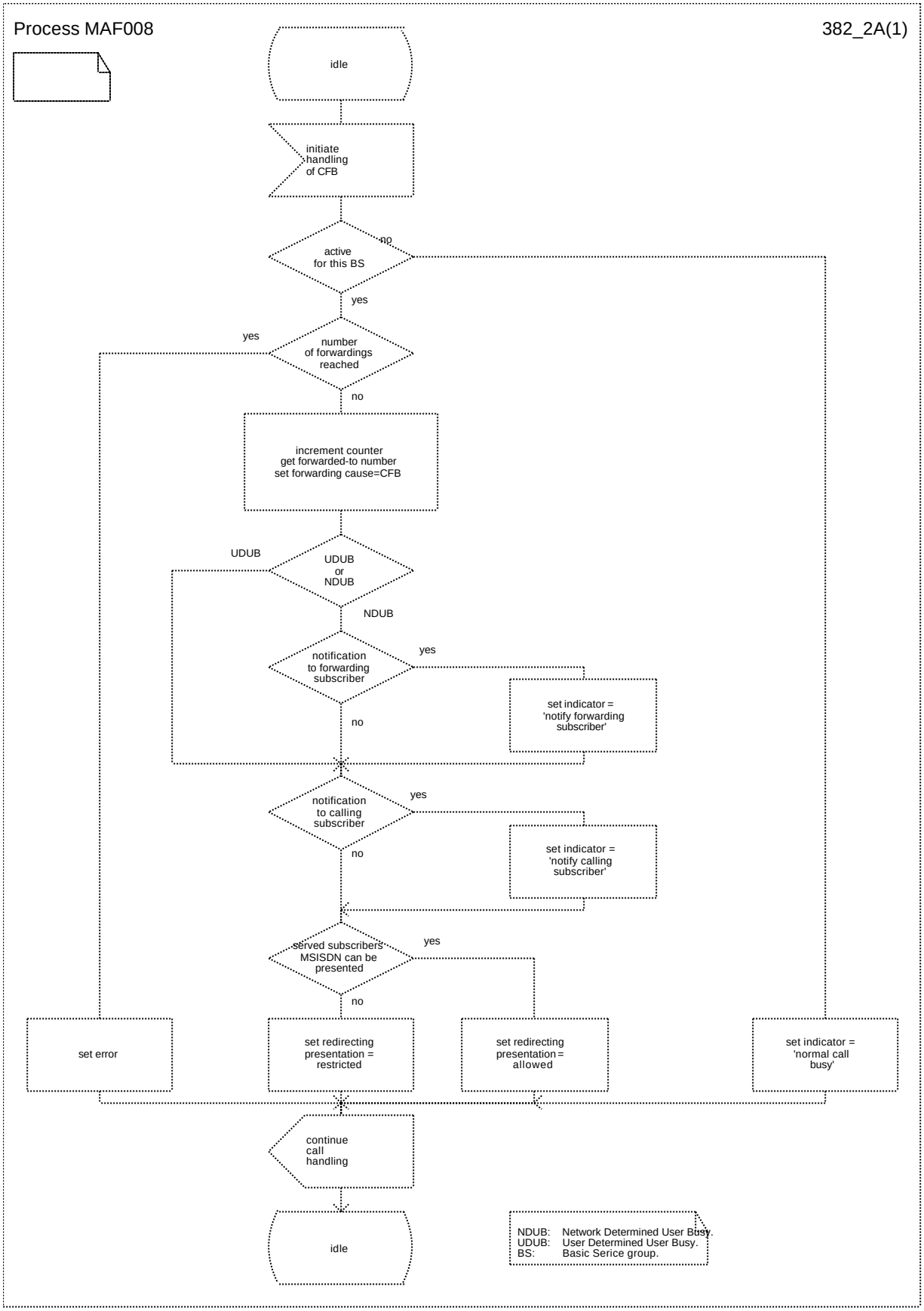
- the state of CFU (which shall be one of the valid states listed above) for each applicable elementary basic service group;

- the subscription option "notification to the calling party" on a per subscriber basis;
  This subscription option takes one of the following values:
  - no notification;
  - notification.

- the subscription option "-MSISDN of the served subscriber can be presented to the forwarded-to subscriber" on a per subscriber basis;
  This subscription option takes one of the following values:
  - presentation restricted;
  - presentation allowed.

- the registration parameter "forwarded-to number" (possibly including a forwarded-to sub-address) for each applicable elementary basic service group.

Note that the value "Active and Quiescent" of the activation state is required in case of interaction with Operator Determined Barring (see GSM 03.15).


Process MAF008
382_2A(1)
idle
initiate handling of CFB
active for this BS
no
yes
number of forwardings reached
yes
no
increment counter
get forwarded-to number
set forwarding cause=CFB
UDUB or NDUB
UDUB
NDUB
notification to forwarding subscriber
yes
set indicator = 'notify forwarding subscriber'
no
notification to calling subscriber
yes
set indicator = 'notify calling subscriber'
no
served subscribers MSISDN can be presented
yes
no
set error
set redirecting presentation = restricted
set redirecting presentation = allowed
set indicator = 'normal call busy'
continue call handling
idle
NDUB: Network Determined User Busy.
UDUB: User Determined User Busy.
BS: Basic Serice group.

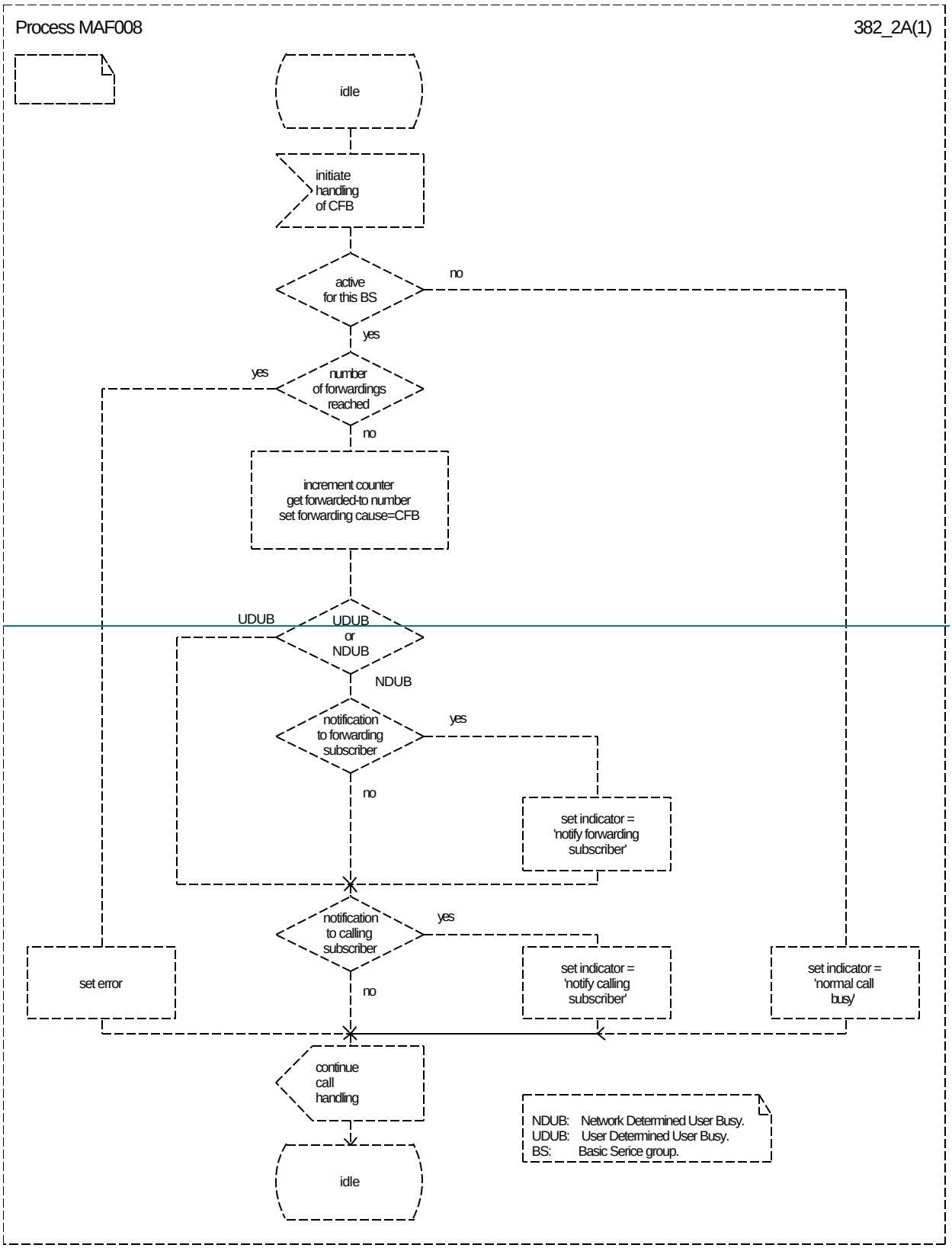


Figure 2.10: MAF008 Call forwarding on mobile subscriber busy authorisations examination (VLR)

2.3 Information stored in the HLR

The following logical states are applicable for CFB (refer to GSM 03.11 for an explanation of the notation):

Provisioning State	**Registration State**	**Activation State**	**HLR Induction State**
(Not Provisioned,	Not Registered,	Not Active,	Not Induced)
(Provisioned,	Not Registered,	Not Active,	Not Induced)
(Provisioned,	Registered,	Not Active,	Not Induced)
(Provisioned,	Registered,	Active and Quiescent,	Not Induced)
(Provisioned,	Registered,	Active and Operative,	Not Induced)

The registration and activation state may be different for each applicable elementary basic service group.

The provisioning state shall be on a per subscriber basis, and hence the same for all basic service groups.

The HLR shall store:

- the state of CFB (which shall be one of the valid states listed above) for each applicable elementary basic service group;

- the subscription option "notification to the calling party" on a per subscriber basis;
  This subscription option takes one of the following values:
  - no notification;
  - notification.

- the subscription option "notification to the forwarding party" on a per subscriber basis;
  This subscription option takes one of the following values:
  - no notification;
  - notification.

- the subscription option " MSISDN of the served subscriber can be presented to the forwarded-to subscriber" on a per subscriber basis;
  This subscription option takes one of the following values:
  - presentation restricted;
  - presentation allowed.

- the registration parameter "forwarded-to number" (possibly including a forwarded-to sub-address) for each applicable elementary basic service group.

2.4 State transition model

The following figure shows the successful cases of transition between the applicable logical states of CFB. The state changes are either caused by actions of the service provider, the mobile user or the network.

Note that error cases are not shown in the diagram as they normally do not cause a state change. Additionally, some successful requests may not cause a state change. Hence, they are not shown in the diagram. The diagram only shows operations on an elementary basic service group.

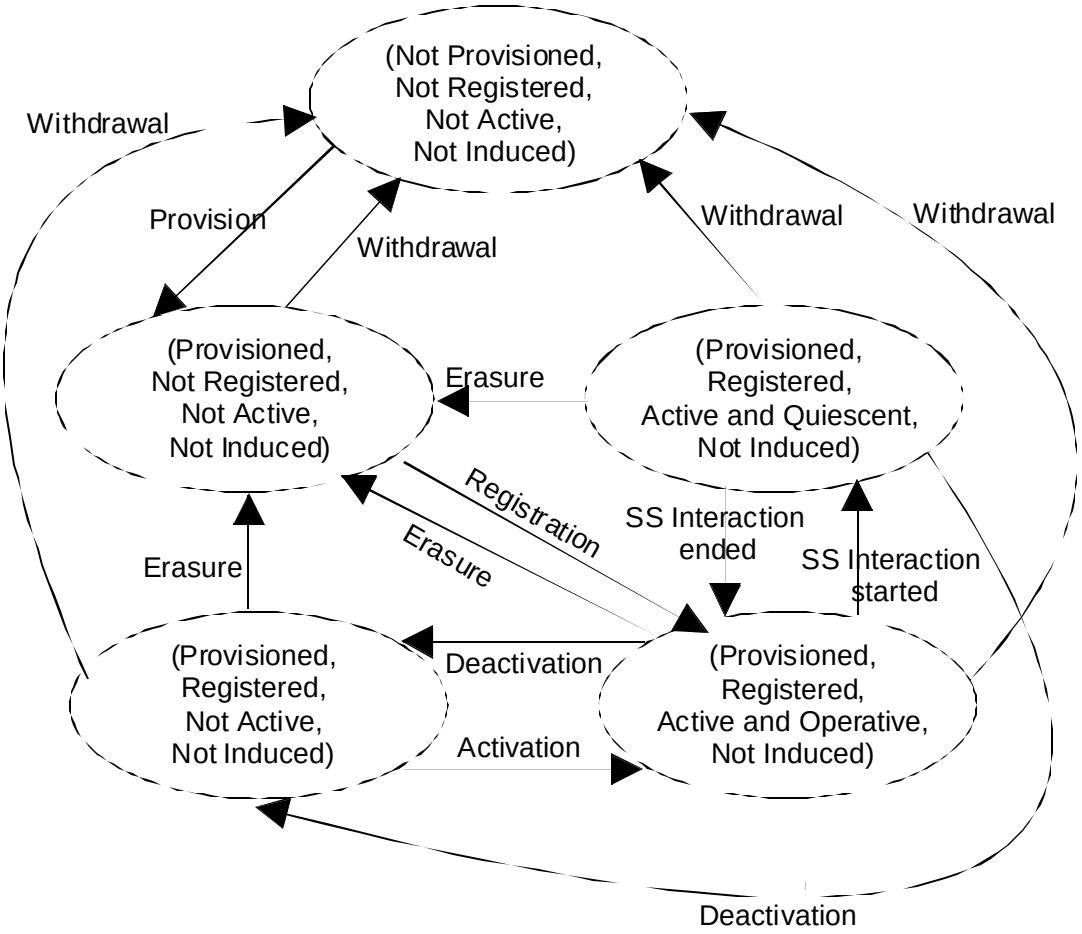


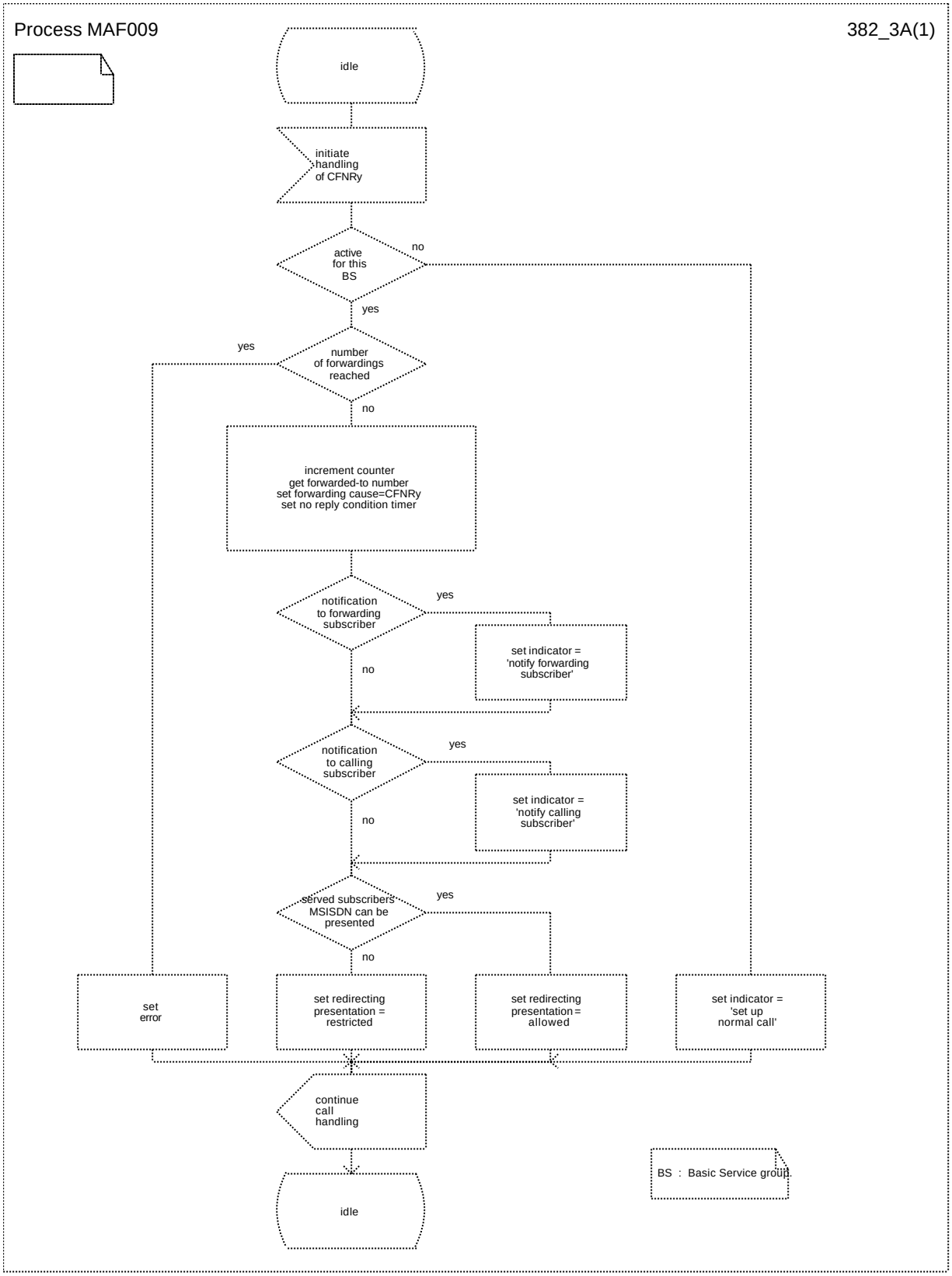
Figure 2.15: State transition model for CFB

2.5 Transfer of information from HLR to VLR

If the provisioning state for CFB is "Provisioned" then, when the subscriber registers on a VLR, the HLR shall send that VLR information about the logical state of CFB for all relevant elementary basic service groups.

If the registration state for CFB is "Registered" then, when the subscriber registers on a VLR, the HLR shall send that VLR the registration parameter "forwarded-to number" for all relevant elementary basic service groups and information about the subscription options "notification to the calling party", ~~and~~ "notification to the forwarding party" and "MSISDN of the served subscriber can be presented to the forwarded-to subscriber".

If the logical state or the registration parameter "forwarded-to number" of CFB is changed while a subscriber is registered on a VLR then for the affected basic service groups, the HLR shall inform the VLR respectively of the new logical state or the new registration parameter of CFB.


Process MAF009
382_3A(1)
idle
initiate handling of CFNRy
active for this BS
no
yes
number of forwardings reached
yes
no
increment counter
get forwarded-to number
set forwarding cause=CFNRy
set no reply condition timer
notification to forwarding subscriber
yes
set indicator = 'notify forwarding subscriber'
no
notification to calling subscriber
yes
set indicator = 'notify calling subscriber'
no
served subscribers MSISDN can be presented
yes
no
set error
set redirecting presentation = restricted
set redirecting presentation = allowed
set indicator = 'set up normal call'
continue call handling
idle
BS : Basic Service group

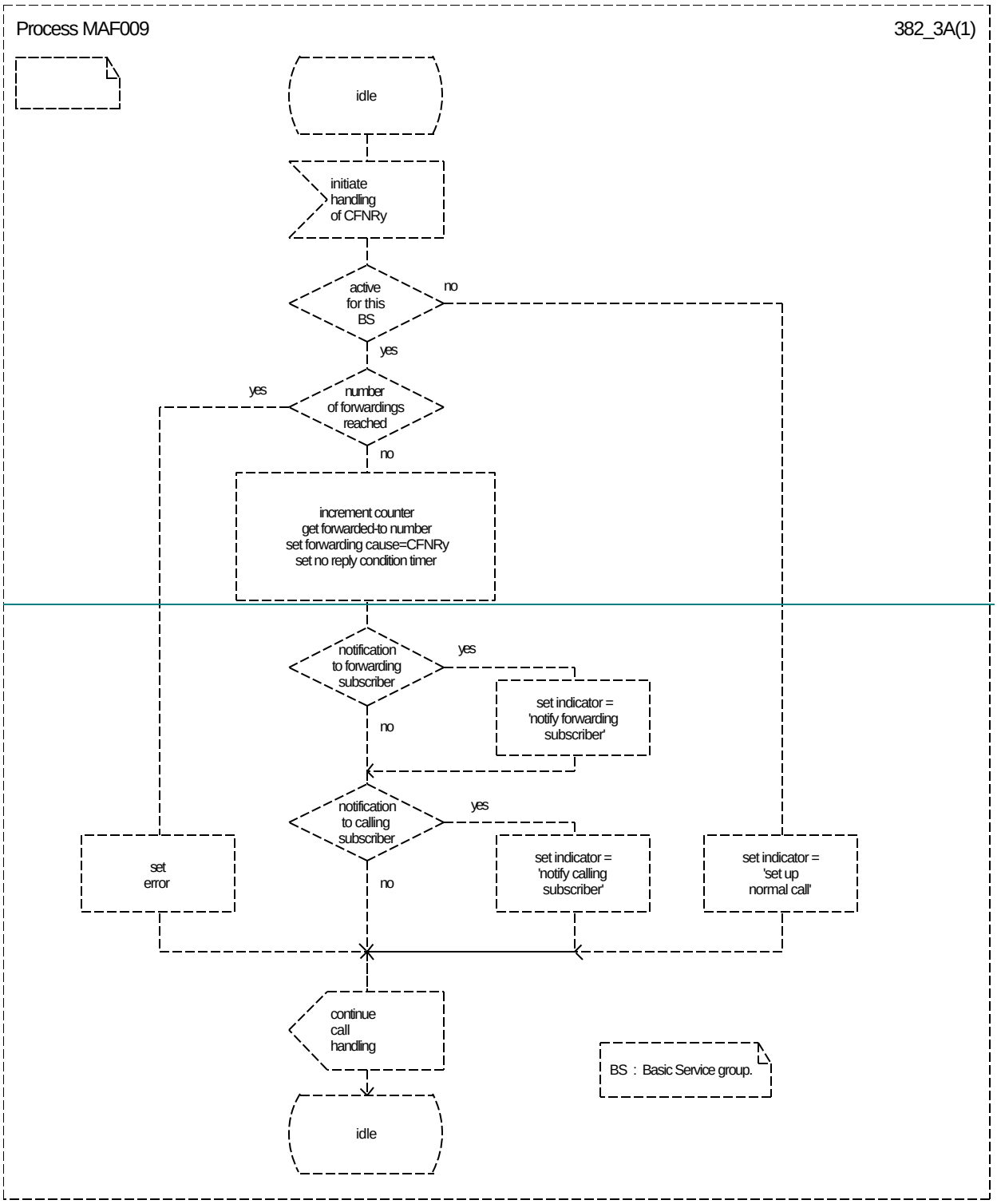


Figure 3.10: MAF0098 Call forwarding on no reply authorisations examination (VLR)

3.3 Information stored in the HLR

The following logical states are applicable for CFNRy (refer to GSM 03.11 for an explanation of the notation):

Provisioning State	Registration State	Activation State	HLR Induction State
(Not Provisioned,	Not Registered,	Not Active,	Not Induced)
(Provisioned,	Not Registered,	Not Active,	Not Induced)
(Provisioned,	Registered,	Not Active,	Not Induced)
(Provisioned,	Registered,	Active and Quiescent,	Not Induced)
(Provisioned,	Registered,	Active and Operative,	Not Induced)

The registration and activation state may be different for each applicable elementary basic service group.

The provisioning state shall be on a per subscriber basis, and hence the same for all basic service groups.

The HLR shall store:

- the state of CFNRy (which shall be one of the valid states listed above) for each applicable elementary basic service group;

- the subscription option "notification to the calling party" on a per subscriber basis;
  This subscription option takes one of the following values:
  - no notification;
  - notification.

- the subscription option "notification to the forwarding party" on a per subscriber basis;
  This subscription option takes one of the following values:
  - no notification;
  - notification.

- the subscription option " MSISDN of the served subscriber can be presented to the forwarded-to subscriber" on a per subscriber basis;
  This subscription option takes one of the following values:
  - presentation restricted;
  - presentation allowed.

- the registration parameter "forwarded-to number" (possibly including a forwarded-to sub-address) for each applicable elementary basic service group;

- the registration parameter "no reply condition timer" for each applicable elementary basic service group.
  This parameter may take values in the range 5 - 30 seconds in steps of 5 seconds.

3.4 State transition model

The following figure shows the successful cases of transition between the applicable logical states of CFNRy. The state changes are either caused by actions of the service provider, the mobile user or the network.

Note that error cases are not shown in the diagram as they normally do not cause a state change. Additionally, some successful requests may not cause a state change. Hence, they are not shown in the diagram. The diagram only shows operations on an elementary basic service group.

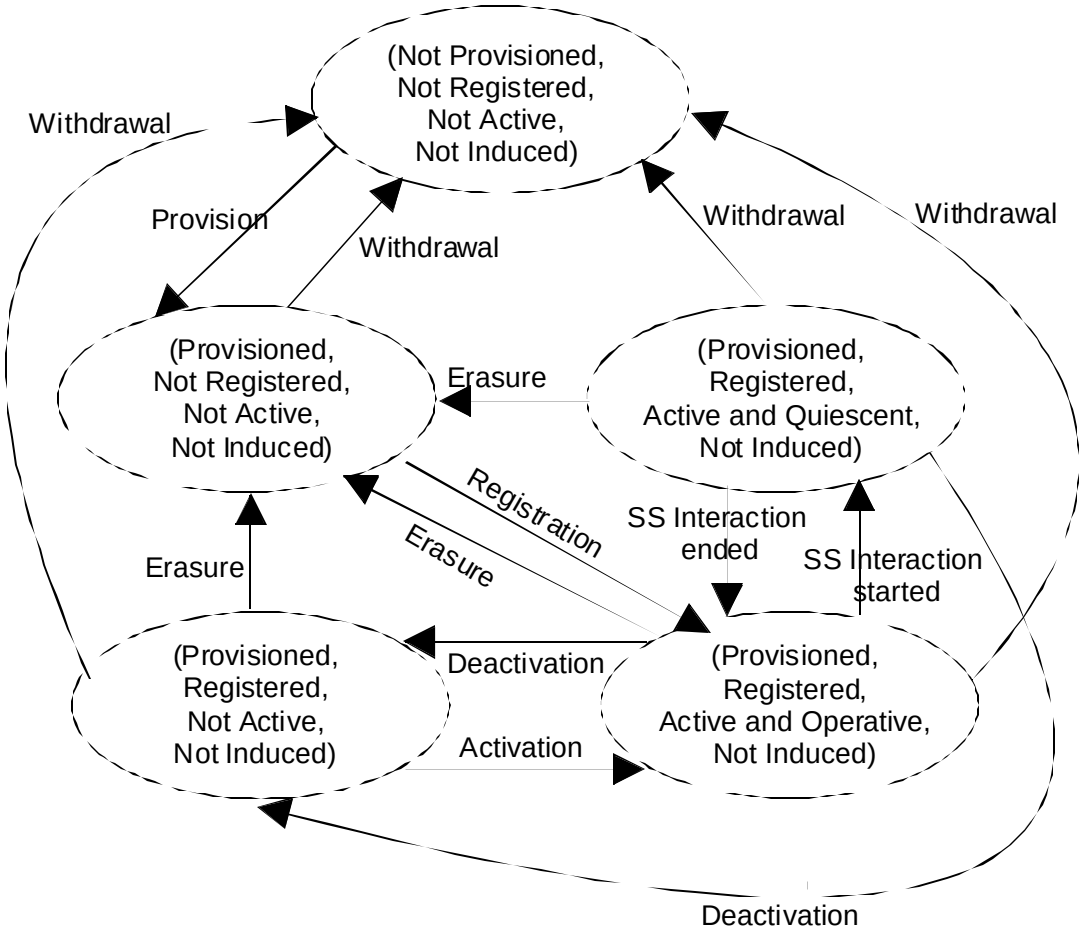


Figure 3.13: State transition model for CFNRy

3.5 Transfer of information from HLR to VLR

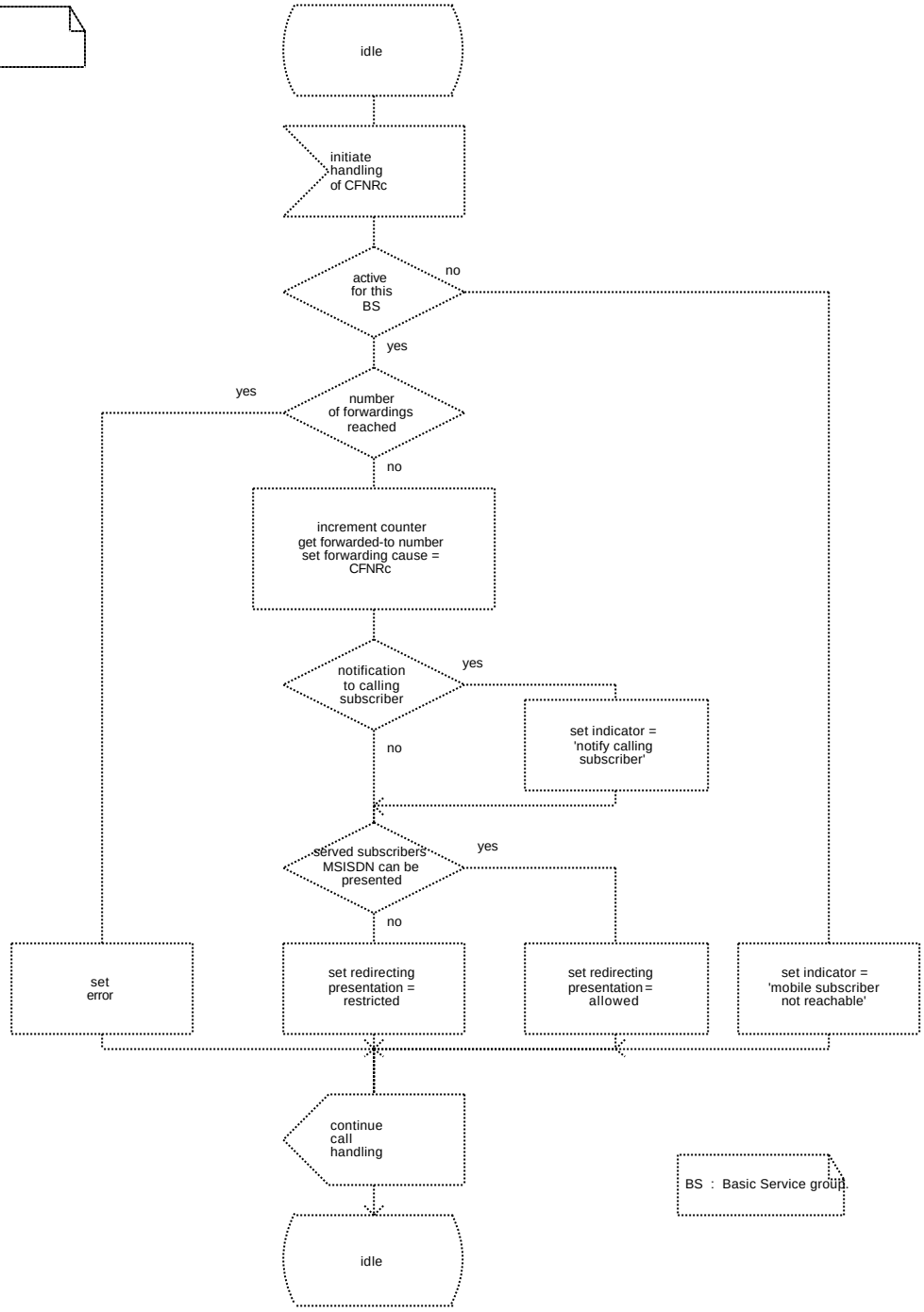
If the provisioning state for CFNRy is "Provisioned" then, when the subscriber registers on a VLR, the HLR shall send that VLR information about the logical state of CFNRy for all relevant elementary basic service groups.

If the registration state for CFNRy is "Registered" then, when the subscriber registers on a VLR, the HLR shall send that VLR the registration parameter "forwarded-to number" and "no reply condition timer" for all relevant elementary basic service groups and information about the subscription options "notification to the calling party", ~~and~~ "notification to the forwarding party" and "MSISDN of the served subscriber can be presented to the forwarded-to subscriber".

If the logical state, the registration parameter "forwarded-to number" or the registration parameter "no reply condition timer" of CFNRy is changed while a subscriber is registered on a VLR then for the affected basic service

groups, the HLR shall inform the VLR respectively of the new logical state or the new registration parameter of CFNRy.

Process MAF010 382_4A(1)



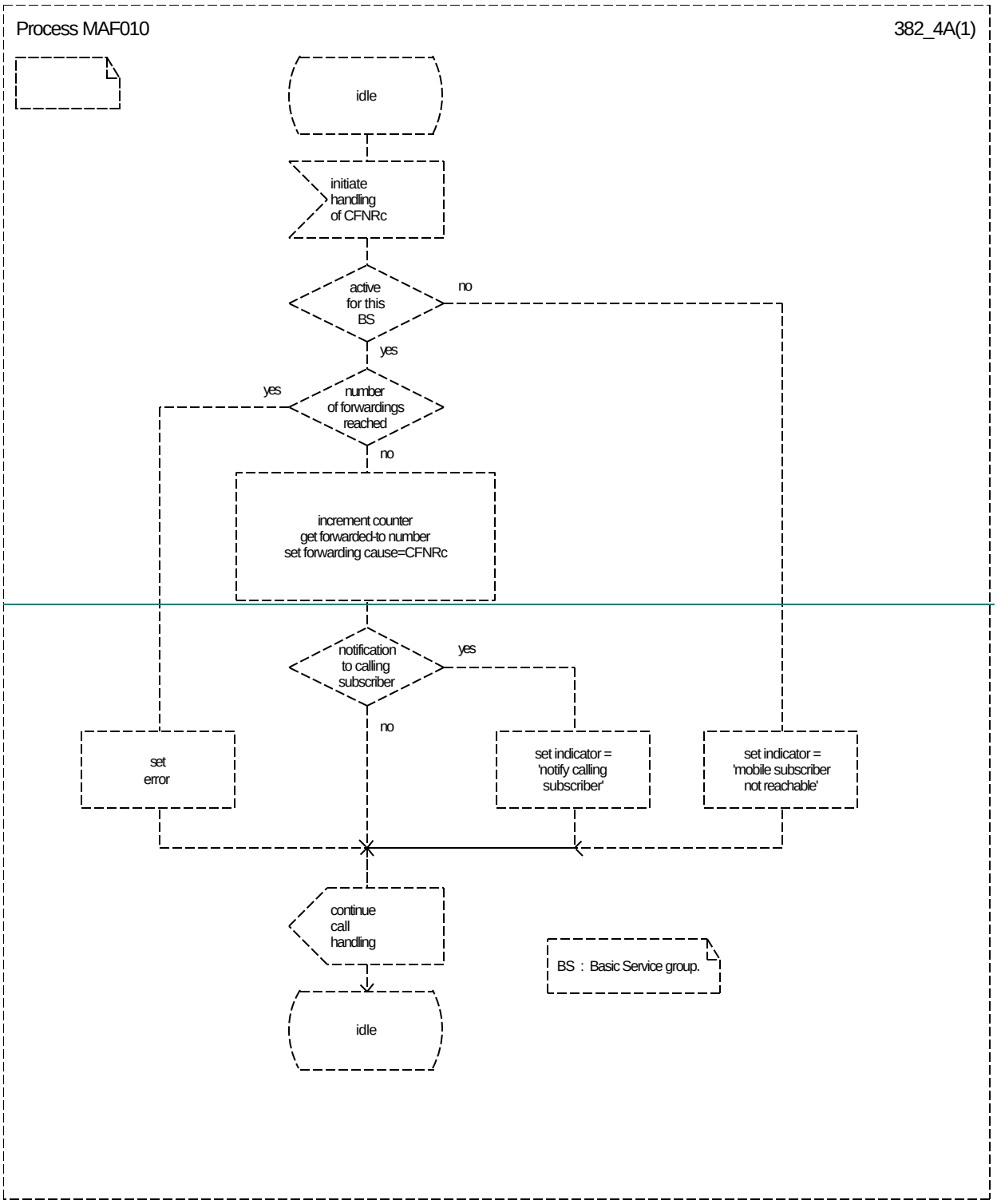


Figure 4.10: MAF010 Call forwarding on mobile subscriber not reachable authorisations examination (VLR and HLR)

4.3 Information stored in the HLR

The following logical states are applicable for CFNRc (refer to GSM 03.11 for an explanation of the notation):

Provisioning State	Registration State	Activation State	HLR Induction State
(Not Provisioned,	Not Registered,	Not Active,	Not Induced)
(Provisioned,	Not Registered,	Not Active,	Not Induced)
(Provisioned,	Registered,	Not Active,	Not Induced)
(Provisioned,	Registered,	Active and Quiescent,	Not Induced)
(Provisioned,	Registered,	Active and Operative,	Not Induced)

The registration and activation state may be different for each applicable elementary basic service group.

The provisioning state shall be on a per subscriber basis, and hence the same for all basic service groups.

The HLR shall store:

- the state of CFNRc (which shall be one of the valid states listed above) for each applicable elementary basic service group;

- the subscription option "notification to the calling party" on a per subscriber basis;
  This subscription option takes one of the following values:
  - no notification;
  - notification.

- the subscription option " MSISDN of the served subscriber can be presented to the forwarded-to subscriber" on a per subscriber basis;
  This subscription option takes one of the following values:
  - presentation restricted;
  - presentation allowed.

- the registration parameter "forwarded-to number" (possibly including a forwarded-to sub-address) for each applicable elementary basic service group;

4.4 State transition model

The following figure shows the successful cases of transition between the applicable logical states of CFNRc. The state changes are either caused by actions of the service provider, the mobile user or the network.

Note that error cases are not shown in the diagram as they normally do not cause a state change. Additionally, some successful requests may not cause a state change. Hence, they are not shown in the diagram.

The diagram only shows operations on an elementary basic service group.

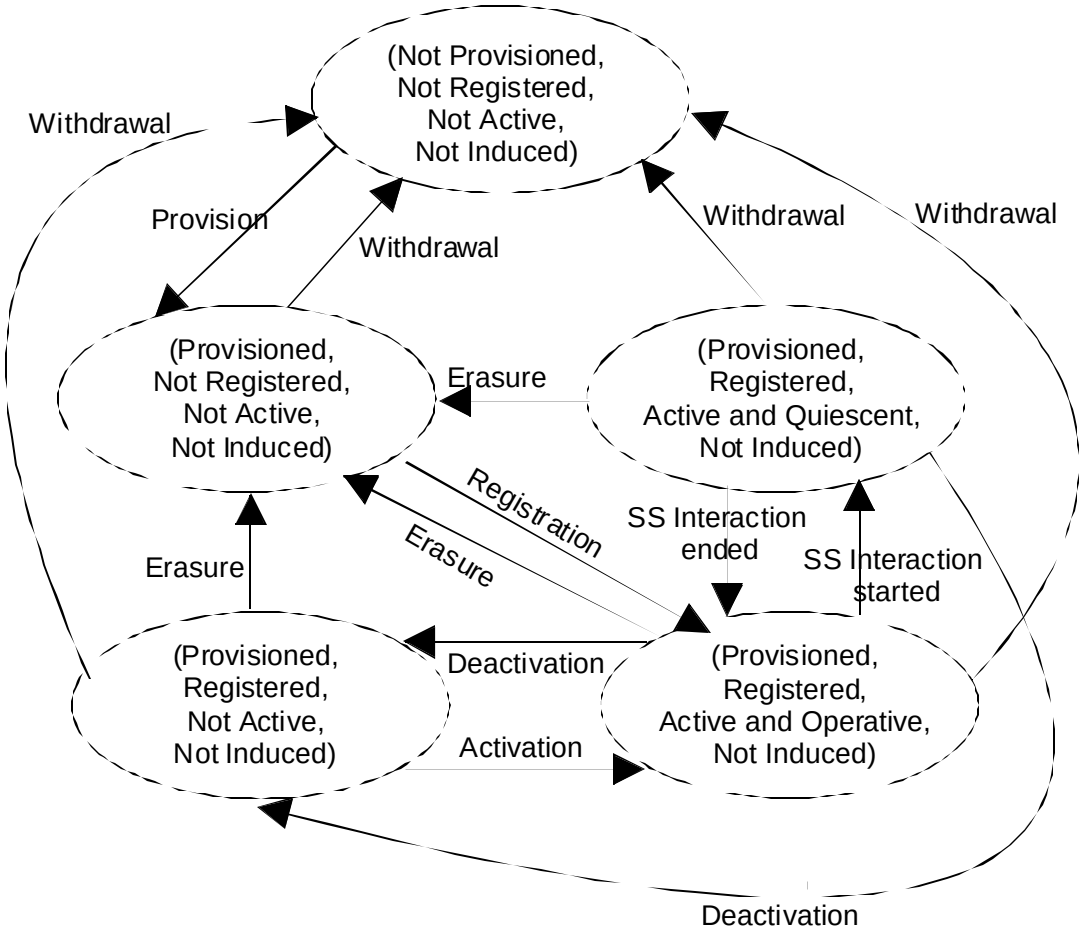


Figure 4.21: State transition model for CFNRc

4.5 Transfer of information from HLR to VLR

If the provisioning state for CFNRc is "Provisioned" then, when the subscriber registers on a VLR, the HLR shall send that VLR information about the logical state of CFNRc for all relevant elementary basic service groups.

If the registration state for CFNRc is "Registered" then, when the subscriber registers on a VLR, the HLR shall send that VLR the registration parameter "forwarded-to number" for all relevant elementary basic service groups and information about the subscription options "notification to the calling party" and "MSISDN of the served subscriber can be presented to the forwarded-to subscriber".

If the logical state or the registration parameter "forwarded-to number" of CFNRc is changed while a subscriber is registered on a VLR then for the affected basic service groups, the HLR shall inform the VLR respectively of the new logical state or the new registration parameter of CFNRc.

From: "Wohlert, Randolph" <wohlert@tri.sbc.com>
To: "'t1ballot@atis.org'" <t1ballot@atis.org>
Date: Wed, Sep 22, 1999 7:53 PM
Subject: Pacific Bell Wireless Vote on T1 Letter Ballot 800

ACCREDITED STANDARDS COMMITTEE
T1-TELECOMMUNICATIONS
LETTER BALLOT

-- ACTION REQUESTED --

REPLY TO: ATIS
T1 Secretariat
1200 G St., NW, Suite 500
Washington, DC 20005
FAX: 202.347.7125
EM: t1ballot@atis.org

Letter Ballot Number: LB 800
Document Number: T1P1/99-173R2
Date: 08/20/99
Ballot Period: 6 Weeks
Ballot Closes: 10/01/99

Authorized By: T1P1
Distributed By: T1 Secretariat

Subject: Draft Proposed American National Standard - Personal Communications Services PCS1900 Specifications (Revision and Consolidation of ANSI J-STD-007-1997, ANSI J-STD-007a-1998, ANSI J-STD-023-1996, and ANSI J-STD-024-1997 (T1/TIA Joint Standards) into a T1 Standard

Statement: The T1P1 members at its July 1999 meeting approved this dpANS for letter ballot. Please Note: Due to an interest category imbalance at the time of this letter ballot, weighted voting of a 0.83 value applies to the manufacturing interest group.

Question: Do you approve this draft proposed American National Standard for submittal to ANSI for approval as an American National Standard?

Ballot: YES ____ NO ____ (Comments Required)

Ballot: YES _X__ (w/ comments) ABSTAIN ____ (w/ reasons)

ABSTAIN ____

(IF VOTING "NO, WILL VOTE CHANGE TO "YES" IF THE ATTACHED CHANGES ARE MADE?)

YES ____ NO ____

Signature __Randolph Wohlert_____ Principal___ Alternate_X_

Organization _Pacific Bell Wireless_____ DATE_9/23/99

Telephone #: __512 372-5838_____

See ANSI's PATENT POLICY
(under the Committee T1 Letter Ballots section)

<<LB 800 Comments.doc>>

CC: "Gratias, Cecilia - C" <gratias@tri.sbc.com>, "'dw...

Pacific Bell Wireless Comments Regarding T1 Letter Ballot No. 800

Pacific Bell Wireless would like to provide the following comments related to our YES with COMMENTS vote on LB 800, North American Specification for PCS 1900.

Regarding section 2.2.4 on Location Services specifications:

Remove

01.04,
10.71, and

Add

03.09,
04.30,
04.31,
04.35,
08.31, and
09.31.

Annex 5 of the SMG#29 plenary meeting report contains a table, which indicates the status of the GSM specifications. That table was compared to the specification list provided in LB 800, North American Specification for PCS 1900, and numerous discrepancies were found. Many specifications were listed in the Annex that were not part of the LB 800, North American Specification for PCS 1900, and many that were listed in the LB 800, North American Specification for PCS 1900 did not have the latest GSM Release 98 version numbers.

It may have been useful to include a table of all GSM specifications, identifying the title of each specification and providing a brief commentary of why those not included in the North American Specification for PCS 1900 were omitted.

Therefore please resolve the following discrepancies:

Item	Comment	Document	Version
1	Document Missing	1.31	7.0.1
2	Document Missing	1.33	7.0.0
3	Document Missing	1.56	7.1.0
4	Document Missing	2.01	7.1.0
5	Document Missing	2.02	7.0.1
6	Document Missing	2.03	7.0.0
7	Document Missing	2.04	7.1.1
8	Document Missing	2.06	7.0.0
9	Document Missing	2.07	7.0.1
10	Document Missing	2.11	7.0.1
11	Document Missing	2.16	7.0.0
12	Document Missing	2.19	7.1.0
13	Document Missing	2.22	7.0.0
14	Document Missing	2.24	7.0.0
15	Document Missing	2.31	7.1.1
16	Document Missing	2.32	7.1.1
17	Document Missing	2.33	7.3.0
18	Document Missing	2.34	7.0.0
19	Document Missing	2.42	7.0.0
20	Document Missing	2.43	7.1.0
21	Document Missing	2.48	7.0.0

22	Document Missing	2.53	7.0.1
23	Document Missing	2.56	7.2.0
24	Document Missing	2.57	7.1.0
25	Document Missing	2.63	7.0.0
26	Document Missing	2.66	7.0.1
27	Document Missing	2.67	7.0.0
28	Document Missing	2.68	7.0.1
29	Document Missing	2.69	7.0.1
30	Document Missing	2.79	7.0.0
31	Document Missing	2.87	7.1.1
32	Document Missing	2.90	7.0.0
33	Document Missing	2.93	7.0.0
34	Document Missing	2.95	7.0.0
35	Document Missing	2.97	7.1.0
36	Document Missing	3.04	7.0.0
37	Document Missing	3.05	7.0.0
38	Document Missing	3.09	7.0.0
39	Document Missing	3.10	7.0.1
40	Document Missing	3.11	7.0.0
41	Document Missing	3.12	7.0.0
42	Document Missing	3.13	7.0.0
43	Document Missing	3.26	7.0.0
44	Document Missing	3.30	7.0.0
45	Document Missing	3.31	7.0.1
46	Document Missing	3.33	7.1.0
47	Document Missing	3.34	7.0.0
48	Document Missing	3.35	7.0.0
49	Document Missing	3.40	7.2.0
50	Document Missing	3.43	7.0.0
51	Document Missing	3.44	7.0.0
52	Document Missing	3.45	7.0.0
53	Document Missing	3.46	7.0.0
54	Document Missing	3.47	7.0.0
55	Document Missing	3.48	7.0.1
56	Document Missing	3.49	7.0.0
57	Document Missing	3.50	7.0.0
58	Document Missing	3.52	7.1.0
59	Document Missing	3.53	7.0.1
60	Document Missing	3.54	7.0.0
61	Document Missing	3.56	7.1.0
62	Document Missing	3.57	7.0.0
63	Document Missing	3.58	7.0.0
64	Document Missing	3.64	7.0.0
65	Document Missing	3.66	7.1.0
66	Document Missing	3.67	7.0.0
67	Document Missing	3.68	7.0.0
68	Document Missing	3.69	7.0.0
69	Document Missing	3.70	7.0.0
70	Document Missing	3.73	7.1.0
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72	Document Missing	3.87	7.0.1
73	Document Missing	3.90	7.0.0
74	Document Missing	3.93	7.0.0
75	Document Missing	3.97	7.1.0

76	Document Missing	4.14	7.0.0
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82	Document Missing	4.65	7.0.0
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84	Document Missing	4.68	7.0.0
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86	Document Missing	4.72	7.0.0
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88	Document Missing	4.91	7.0.0
89	Document Missing	4.93	7.0.0
90	Document Missing	4.96	7.0.0
91	Document Missing	5.09	7.0.1
92	Document Missing	5.50	7.1.0
93	Document Missing	5.56	7.1.0
94	Document Missing	6.06	7.0.0
95	Document Missing	6.07	7.0.0
96	Document Missing	6.08	7.0.0
97	Document Missing	6.20	7.0.0
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115	Document Missing	8.51	7.0.0
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119	Document Missing	8.60	7.0.0
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122	Document Missing	9.01	7.0.0
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124	Document Missing	9.04	7.0.0
125	Document Missing	9.05	7.0.0
126	Document Missing	9.06	7.0.0
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130	Document Missing	9.14	7.0.1
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133	Document Missing	11.18	7.0.1
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135	Document Missing	12.05	7.0.1
136	Document Missing	12.15	7.2.1
137	Incorrect Version	1.02	6.0.0
138	Incorrect Version	2.09	7.0.0
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140	Incorrect Version	2.30	7.1.0
141	Incorrect Version	2.40	7.0.1
142	Incorrect Version	2.41	7.0.0
143	Incorrect Version	2.60	7.2.0
144	Incorrect Version	2.78	7.0.0
145	Incorrect Version	2.81	7.0.0
146	Incorrect Version	2.82	7.0.1
147	Incorrect Version	2.83	7.0.0
148	Incorrect Version	2.84	7.0.0
149	Incorrect Version	2.85	7.0.0
150	Incorrect Version	2.86	7.0.0
151	Incorrect Version	2.88	7.0.0
152	Incorrect Version	2.91	7.0.0
153	Incorrect Version	2.96	7.0.0
154	Incorrect Version	3.02	7.0.0
155	Incorrect Version	3.07	7.0.0
156	Incorrect Version	3.08	7.1.0
157	Incorrect Version	3.14	7.0.1
158	Incorrect Version	3.15	7.0.0
159	Incorrect Version	3.16	7.1.0
160	Incorrect Version	3.18	7.1.0
161	Incorrect Version	3.20	7.1.0
162	Incorrect Version	3.22	7.1.0
163	Incorrect Version	3.32	7.0.0
164	Incorrect Version	3.38	7.2.0
165	Incorrect Version	3.41	7.1.0
166	Incorrect Version	3.60	7.1.0
167	Incorrect Version	3.72	7.0.1
168	Incorrect Version	3.78	7.1.0
169	Incorrect Version	3.81	7.0.1
170	Incorrect Version	3.82	7.0.0
171	Incorrect Version	3.83	7.0.0
172	Incorrect Version	3.84	7.0.0
173	Incorrect Version	3.85	7.0.0
174	Incorrect Version	3.86	7.0.0
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182	Incorrect Version	4.05	7.0.0
183	Incorrect Version	4.06	7.0.0

184	Incorrect Version	4.07	7.1.0
185	Incorrect Version	4.08	7.1.2
186	Incorrect Version	4.10	7.0.1
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192	Incorrect Version	4.80	7.0.1
193	Incorrect Version	4.81	7.0.0
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203	Incorrect Version	5.03	7.1.0
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205	Incorrect Version	5.05	7.1.0
206	Incorrect Version	5.08	7.1.0
207	Incorrect Version	5.10	7.1.0
208	Incorrect Version	6.01	7.0.1
209	Incorrect Version	6.02	7.0.1
210	Incorrect Version	6.10	7.0.1
211	Incorrect Version	6.12	7.0.0
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213	Incorrect Version	6.32	7.0.0
214	Incorrect Version	6.51	7.0.1
215	Incorrect Version	6.60	7.0.1
216	Incorrect Version	6.61	7.0.0
217	Incorrect Version	6.62	7.0.0
218	Incorrect Version	6.81	7.0.0
219	Incorrect Version	6.82	7.0.0
220	Incorrect Version	7.01	7.1.1
221	Incorrect Version	7.02	7.0.1
222	Incorrect Version	7.03	7.0.0
223	Incorrect Version	7.05	7.0.1
224	Incorrect Version	7.07	7.3.0
225	Incorrect Version	8.01	7.0.0
226	Incorrect Version	8.02	7.0.0
227	Incorrect Version	8.04	7.0.1
228	Incorrect Version	8.06	7.0.1
229	Incorrect Version	8.08	7.2.0
230	Incorrect Version	8.16	7.1.0
231	Incorrect Version	8.18	7.0.0
232	Incorrect Version	8.20	7.0.1
233	Incorrect Version	8.58	7.1.0
234	Incorrect Version	9.07	7.1.1
235	Incorrect Version	9.08	7.0.0
236	Incorrect Version	9.16	7.0.1
237	Incorrect Version	9.18	7.1.0

238	Incorrect Version	9.60	7.1.0
239	Incorrect Version	9.61	7.1.0
240	Incorrect Version	9.78	7.0.0
241	Incorrect Version	11.11	7.3.0
242	Incorrect Version	12.03	7.0.1

From: "Hall, Bob" <hall@tri.sbc.com>
To: "'t1ballot@atis.org'" <t1ballot@atis.org>
Date: Mon, Sep 27, 1999 3:06 PM
Subject: RE: T1 Letter Ballot LB 800 - Closes 10/01/99

SBC Ballot with two attachments.

ACCREDITED STANDARDS COMMITTEE
T1-TELECOMMUNICATIONS
LETTER BALLOT

-- ACTION REQUESTED --

REPLY TO: ATIS
T1 Secretariat
1200 G St., NW, Suite 500
Washington, DC 20005
FAX: 202.347.7125
EM: t1ballot@atis.org

Letter Ballot Number: LB 800
Document Number: T1P1/99-173R2
Date: 08/20/99
Ballot Period: 6 Weeks
Ballot Closes: 10/01/99

Authorized By: T1P1
Distributed By: T1 Secretariat

Subject: Draft Proposed American National Standard - Personal Communications Services PCS1900 Specifications (Revision and Consolidation of ANSI J-STD-007-1997, ANSI J-STD-007a-1998, ANSI J-STD-023-1996, and ANSI J-STD-024-1997 (T1/TIA Joint Standards) into a T1 Standard

Statement: The T1P1 members at its July 1999 meeting approved this dpANS for letter ballot. Please Note: Due to an interest category imbalance at the time of this letter ballot, weighted voting of a 0.83 value applies to the manufacturing interest group.

Question: Do you approve this draft proposed American National Standard for submittal to ANSI for approval as an American National Standard?

Ballot: YES ____ NO ____ (Comments Required)

Ballot: YES _XX_ (w/ comments) ABSTAIN ____ (w/ reasons)

ABSTAIN ____

(IF VOTING "NO, WILL VOTE CHANGE TO "YES" IF THE ATTACHED CHANGES ARE MADE?)

YES ____ NO ____

Signature _____Robert J. Hall_____ Principal___ Alternate_X_

Organization __SBC Communications, Inc._____ DATE__9/27/99_

Telephone #: ___512-372-5842_____

See ANSI's PATENT POLICY
(under the Committee T1 Letter Ballots section)

CC: "Bailey, Chuck" <bailey@tri.sbc.com>, "Gratias, Ce...

SBC Communications, Inc.
Comments on T1 LB 800

Technical/Editorial Comments

T1.	Sections 2 and 3, pages 2-13	SBC understands that this standard should be consistent with the Release 98 documents in Annex 5 of the SMG #29 meeting report. In reviewing Annex 5 *Status of SMG specifications after the meeting* of the SMG #29 Report, a number of differences between the documents listed in this ballot and that report surfaced. **Attachment 1** to these comments provides a version of Annex 5 sorted by document number and version. Included in the first column is a status for each document as follows: **OK** - standard and annex agree. **Version** - there is a version difference between the standard and the annex. **NO** - document is not applicable to PCS1900. **Pending** - means work is underway on this document. **?** - Release 98 document not included in standard. **??** - Version prior to Release 98 not included in standard. Grayed out areas indicate documents not considered due to later versions or publication status. The recommendation is that this list be reviewed and the appropriate actions taken by the group.

Editorial Comments

1.	Global change	Replace "Harmonized/Integrated" with "Harmonized".
2.	Foreword line 1	Need to add "(This foreword is not part of American National Standard T1.xxx-1999.)"
3.	Foreword lines 3-4	This is redundant with the title page, delete this sentence.
4.	Foreword line 8	Delete the word "Local" and change "LNP" to "NP"
5.	Foreword lines 7-8	Expand the acronyms in their first usage.
6.	Foreword line 10	Change "and have been modified" to "that have been harmonized".
7.	Foreword lines 12-13	The last sentence does not add anything and should be deleted. The boilerplate to be added will identify the T1P1.5 members.
8.	Page 1 lines 3-6	Change the first sentence as follows: "The purpose of this standard is to provide the North American PCS industry~~,~~ ~~which consists mainly of operators and manufacturers, detailed background~~ with information ~~about~~ on the PCS1900 technology ~~which will~~ to ensure interoperability between equipment ~~which will also be compliant with this set of PCS1900 Standards~~."
9.	Page 1 line 10	Delete the word "Local" and change "LNP" to "NP".
10.	Page 1 lines 12-13	Change the first sentence as follows: "It should also be recognized and noted that this PCS1900 Specification is the ~~culmina-tion of an~~ first in a series of standards resulting from the on-going and extensive work effort by the members of T1P1.5."
11.	Page 1 after line 20	Need to add a paragraph on the use of web links to the GSM specifications rather than publishing the whole document. Also, it should identify that only specific versions of the ETSI documents are being

		approved and not the evolving series. In addition, an explicit definition of "Harmonized" needs to be added.
12.	Page 1 lines 21-28	This paragraph needs to be rewritten to more clearly distinguish between section 2 and 3, and if the sections are renumbered.
13.	Page 2 line 2	Insert "list of" in front of "specification".
14.	Page 2 line 6	Change "the set" to "that set".
15.	Page 2 line 7	Change "(SMG28/SMG29)" to "(as of SMG29)".
16.	Page 2 lines 7-10	Change the last sentence as follows: "The complete list ~~(of PCS1900 Core Specifications & PCS1900 Specifications for Features and Services)~~ of the ~~set of~~ Harmonized~~/Integrated~~ GSM/DCS/PCS Specifications are ~~defined and~~ described below by grouping and contained in a Master Reference List in Section 3 of this document ~~is the Master Reference List of Harmonized/Integrated GSM/DCS/PCS Specifications~~."
17.	Page 2 line 12	Add title for section "3.0 PCS1900 Specifications" with the following introductory paragraph: "This section provides an overview of the PCS1900 Core specifications as well as PCS1900 features and services. These specifications are grouped in this section by functionality. Note that while specific version references are not included in this section for conciseness, only the specific versions listed in the master reference list are part of this standard." Then renumber remaining paragraphs of section 2 to be section 3 and increment all remaining sections by one. Also, adjust all section references impacted in other parts of the document.
18.	Page 2 line 23	Change "(SMG28)" to "(as of SMG29)"
19.	Page 3 line 24	Unless the entire GSM 06 series is intended to be included, the words "GSM 06 Series including" should be deleted. Also, "contains" should be changed to "contain" with this change.
20.	Page 3 line 28	Unless the entire GSM 07 series is intended to be included, the words "GSM 07 Series including" should be deleted. Also, "contains" should be changed to "contain" with this change.
21.	Page 4 line 3	Change "(SMG28)" to "(as of SMG29)"
22.	Page 4 lines 11-14	Change this paragraph as follows: "The PCS1900 MAP (Mobile Application Part) consists of the ANSI SCCP (Signaling Connection Control Part) Specification (ANSI T1.112-1996) and the Preferred Carrier Identity Codes Specification. ~~Refer also to ANSI document T1.112 which is listed as Reference 5 of Section 4 of this document~~. The complete set of Harmonized~~/Integrated~~ GSM/PCS MAP Specifications are defined below." In addition a reference for "Preferred Carrier Identity Codes Specification" is needed in this same paragraph and possibly in the related references section.
23.	Page 4 line 16	Change "(SMG29)" to "(as of SMG29)"
24.	Page 4 line 19	Change "ANSI SCCP" to "ANSI T1.112 SCCP".

25.	Page 4 line 21	Expand "MNC"
26.	Page 4 line 27	Change "(SMG29)" to "(as of SMG29)"
27.	Page 5 lines 9-13	Change the last three sentences of this paragraph as follows: "GPRS services include Point-to-Point (IP, X.25), ~~Point-to-Multipoint (Multicast, Group Calls),~~ and SMS. ~~Potential GPRS applications include Internet Access, Intranet Access, News Service, Fleet Management, Law Enforcement, Point-of-Sale Transaction, Corporate Database Retrieval, Wide Area Remote Control and Telemetry, etc.~~ The ~~complete~~ set of Harmonized~~/Integrated~~ GSM/PCS Specifications for the Phase 1 implementation of GPRS ~~Feature~~ are ~~defined~~ identified below."
28.	Page 5 line 13	Information should be added to specify GPRS Phase 1 is included and Phase 2 is still ongoing work.
29.	Page 5 line 15	Change "(SMG28)" to "(as of SMG29)"
30.	Page 5 line 17	Change "0816" to "08.16". Add the following to this list and to the master list: 07.60, 03.03, 12.15.
31.	Page 5 line 28	Change "SPECIFICATION" to "SPECIFICATIONS".
32.	Page 5 line 30	Change "Specification" to "Specifications".
33.	Page 5 line 33	Delete the word "Local" and change "LNP" to "NP".
34.	Page 6 lines 1-3	Change this paragraph as follows: " ~~**Local**~~ **Number Portability** enables a subscriber to retain the same telephone number when ~~switching~~ changing service providers (within a specified geographical area), service or location. The ETSI Mobile Number Portability (MNP) documents specify number portability that is entirely between wireless service providers. However, in the United States NP currently combines both wireless and wireline. The complete set of Harmonized~~/Integrated~~ GSM/PCS Specifications for the ~~L~~NP Feature are defined below."
35.	Page 6 line 6	Delete the word "Local" and change "LNP" to "NP".
36.	Page 6 line 7	Change "TBD" to "*To Be Determined (TBD)*" and change "(SMG--)" to "(as of SMG ?)"
37.	Page 6 line 8	Add the following text after "TBD.", "This work is currently ongoing. Pending the harmonization work ANSI T1.708 and ANSI T1.711 should be used."
38.	Page 6 lines 10-11	Move the text "(This work is currently ongoing and the specifications listed below are subject to change)" to before line 19 and replace this text at this location with "(To Be Determined)".
39.	Page 6 lines 13-15	This paragraph should not reference a specific tolerance since things have changed recently. This paragraph should also provide more background information to include emergency services and reference phase 1 and phase 2 work.
40.	Page 6 line 17	Change "(SMG--)" to "(SMG ?)".
41.	Page 7 lines 1-3	Change the title to "PCS1900 MASTER LIST OF SPECIFICATIONS (NORMATIVE REFERENCES)"
42.	Page 7 lines 4-9	Change the first paragraph as follows:

		"~~The PCS1900 Standard and Specification consists of the following~~ This Master list of ~~core~~ specifications which are NORMATIVE references for ~~the~~ PCS1900 covers the Air Interface, A-Interface and MAP Specifications~~. This list also contains the NORMATIVE references for specifications for~~ , as well as PCS1900 features and services. Note that only the specific version indicated applies. Each of the reference GSM specifications listed below also has a code ~~which~~ that indicates which portion of the PCS1900 Specifications applies. An abbreviated code is used at the end of each reference and is shown as 8 follows:"
43.	Page 7 line 18	Delete the word "Local", change "LP" to "NP" and change "LNP" to "NP". Also, change to code "LP" to "NP" though out this section.
44.	Page 14 line 5	The references should not be "normative". Each document may or may not be a normative reference in the documents in the master list and that reference should control the status of these documents. This list should be informative unless specified differently by the referencing document. This text should be rewritten.
45.	Page 15 lines 38-41	References to IEC and ISO documents are not normally part of our standards. Are these references needed?
46.	Page 15 line 44	Is this reference to IS-104 appropriate?
47.	Page 15 lines 45-49	TRs are normally not considered normative, are these references appropriate?
48.	Page 15 lines 50-51	Since this standard says it replaces J-STD-007 is a reference to it appropriate?
49.	Page 17 line 1 table	Change "LNP" to "NP".

Ballot Status	GSM No	Version	Phase	ETS/R/GTS	Short Title	Publication notes	ETSI Reference	After SMG #
	1.02	4.0.2	Phase 2	ETR 99	Description of GSM PLMN	Pub Oct 1993	DTR/SMG-010102P	SMG#8
	1.02	5.0.0	Phase 2+	GTS 01.02	Description of GSM PLMN	Pub Mar 1996	DGTS/SMG-010102Q	SMG#17
Version	1.02	6.0.0	R97	TS 101 xxx	Description of GSM PLMN	Pub on Hold	DTS/SMG-010102Q6	SMG#27>
	1.04	4.1.2	Phase 2	ETR 100 Ed3	GSM Abbreviations	Pub Apr 1995	RTR/SMG-010104PR2	SMG#14
	1.04	5.0.1	Phase 2+	ETR 350	GSM Abbreviations	Pub Nov 1996	DTR/SMG-010104Q	SMG#20
	1.04	6.0.0	Phase 2+	GTS 01.04	GSM Abbreviations	Pub on Hold	DGTS/SMG-010104Q	SMG#27>
OK	1.04	7.0.0	R98	TR 101 350	GSM Abbreviations	Pub Aug 1999	DTR/SMG-010104Q7	SMG#29
NO	1.31	7.0.1	R98	TR 101 105	Fraud Info Gat FIGS Stg 0	Unpublished	DTR/SMG-100131Q7	SMG#26
	1.33	5.0.1	Phase 2+	ETR 363	Lawful Intercep reqmts	Unpublished	DTR/SMG-101020Q	SMG#21
NO	1.33	7.0.0	R98	TR 100 xxx	Lawful Intercep reqmts	Unpublished	DTR/SMG-100133Q7	SMG#25
??	1.48	5.0.1	Phase 2+	GTS 01.48	ISDN based DECT/GSM	Pub Nov 1996	RGTS/SMG-010148QR	SMG#20
??	1.48	6.0.0	R97	TS 101 xxx	ISDN based DECT/GSM	Pub on Hold	DTS/SMG-010148Q6	SMG#27>
NO	1.56	7.1.0	R98	TS 101 xxx	CTS Sec algo requirements	Pub	DTS/SMG-100156Q7	SMG#29
??	1.60	6.0.0	R97	TR 101 186	GPRS requirements	Pub Apr 1998	DTR/SMG-010160Q6	SMG#25
??	1.61	6.0.1	R97	TS 101 106	GPRS ciphering algo	Pub July 1998	DTS/SMG-100161Q6	SMG#26
	2.01	4.6.0	Phase 2	ETS 300 500 Ed2	Telecomm Services	Pub Jan 1996	RE/SMG-010201PR2	SMG#15
	2.01	5.5.0	R96	GTS 02.01	Telecomm Services	Pub Aug 1999	RGTS/SMG-010201QR4	SMG#29
	2.01	6.2.0	R97	TS 100 500	Telecomm Services	Pub Aug 1999	RTS/SMG-010201Q6R2	SMG#29
?	2.01	7.1.0	R98	TS 100 500	Telecomm Services	Pub Aug 1999	RTS/SMG-010201Q7	SMG#29
	2.01	8.1.0	R99	TS 100 500	Telecomm Services	Unpublished	DTS/SMG-010201Q8	SMG#29
	2.02	4.2.2	Phase 2	ETS 300 501	Bearer Services in GSM	Pub Sep 1994	DE/SMG-010202P	SMG#8
	2.02	5.3.2	Phase 2+	ETS 300 904 Ed2	Bearer Services in GSM	Pub Dec 1997	RE/SMG-010202QR2	SMG#22
	2.02	6.1.0	R97	EN 300 904	Bearer Services in GSM	OAP version	DEN/SMG-010202Q6	SMG#28
?	2.02	7.0.1	R98	EN 300 904	Bearer Services in GSM	OAP version	REN/SMG-010202Q7	SMG#29
	2.03	4.3.1	Phase 2	ETS 300 502	Tele Services in GSM	Pub Oct 1994	DE/SMG-010203P	SMG#11
	2.03	5.3.2	Phase 2+	ETS 300 905 Ed3	Tele Services in GSM	Pub Jan 1998	RE/SMG-010203QR2	SMG#22
	2.03	6.0.0	R97	TS 100 905	Tele Services in GSM	Pub Jan 1999	DTS/SMG-010203Q6	SMG#27>
?	2.03	7.0.0	R98	TS 100 905	Tele Services in GSM	Pub	RTS/SMG-010203Q7	SMG#29
	2.04	4.9.1	Phase 2	ETS 300 503 Ed3	Supplementary Services	Pub May 1996	RE/SMG-010204PR3	SMG#16
	2.04	5.7.3	Phase 2+	ETS 300 918 Ed5	Supplementary Services	OAP version	RE/SMG-010204QR7	SMG#29
	2.04	6.1.1	R97	TS 100 918	Supplementary Services	Pub Aug 1999	RTS/SMG-010204Q6R2	SMG#29
?	2.04	7.1.1	R98	EN 300 918	Supplementary Services	OAP version	DEN/SMG-010204Q7	SMG#29
	2.06	4.5.2	Phase 2	ETS 300 504 Ed4	Types of MS	Pub Jan 1998	RE/SMG-010206PR3	SMG#22
	2.06	5.2.1	R96	ETS 300 919 Ed3	Types of MS	Pub Aug 1999	RE/SMG-010206QR1	SMG#28
	2.06	6.1.1	R97	EN 300 919	Types of MS	Pub Aug 1999	REN/SMG-010206Q6R1	SMG#28

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NO	2.06	7.0.0	R98	EN 300 919	Types of MS	OAP version	REN/SMG-010206Q7	SMG#29
	2.07	4.8.2	Phase 2	ETS 300 505 Ed3	MS features	Pub Jan 1998	RE/SMG-010207PR1	SMG#22
	2.07	5.4.1	Phase 2+	ETS 300 906 Ed3	MS features	Pub June 1998	RE/SMG-010207QR3	SMG#24
	2.07	6.1.0	R97	TS 100 906	MS features	Pub July 1998	DTS/SMG-010207Q6	SMG#26
NO	2.07	7.0.1	R98	TS 100 906	MS features	Pub July 1999	RTS/SMG-010207Q7	SMG#29
	2.07	8.0.0	R99	TS 100 906	MS features	Unpublished	RTS/SMG-010207Q8	SMG#29
	2.09	4.4.1	Phase 2	ETS 300 506 Ed2	Security aspects	Pub Jan 1998	RE/SMG-010209PR1	SMG#22
	2.09	5.1.1	Phase 2+	ETS 300 920 Ed2	Security aspects	Pub Dec 1997	RE/SMG-010209QR1	SMG#22
	2.09	6.0.1	R97	EN 300 920	Security aspects	Pub May 1999	DEN/SMG-010209Q6	SMG#27>
Version	2.09	7.0.0	R98	EN 300 920	Security aspects	OAP	REN/SMG-010209Q7	SMG#29
	2.11	4.9.0	Phase 2	ETS 300 507 Ed4	Service accessibility	Pub Sep 1996	RE/SMG-010211PR3	SMG#17
	2.11	5.0.1	Phase 2/2+	ETS 300 921	Service accessibility	Pub Apr 1997	DE/SMG-010211Q	SMG#20
	2.11	6.0.0	R97	TS 100 921	Service accessibility	Pub July 1998	DTS/SMG-010211Q6	SMG#26
?	2.11	7.0.1	R98	TS 100 921	Service accessibility	Pub July 1999?	RTS/SMG-010211Q7	SMG#29
	2.16	4.5.0	Phase 2	ETS 300 508 Ed2	ME identity	Pub July 1995	RE/SMG-010216P1	SMG#13
	2.16	5.0.0	Phase 2/2+	GTS 02.16	ME identity	Pub Nov 1996	DGTS/SMG-010216Q	SMG#20
	2.16	6.0.0	R97	TS 100 508	ME identity	Pub Jan 1999	DTS/SMG-010216Q6	SMG#27>
?	2.16	7.0.0	R98	TS 100 508	ME identity	Pub	RTS/SMG-010216Q7	SMG#29
	2.17	4.3.3	Phase 2	ETS 300 509	SIM characteristics	Pub Sep 1994	DE/SMG-010217P	SMG#8
	2.17	5.1.1	Phase 2+	ETS 300 922 Ed2	SIM characteristics	Pub Apr 1999	RE/SMG-090217QR1	SMG#27
	2.17	6.0.0	R97	TS 100 922	SIM characteristics	Pub Nov 1998	DTS/SMG-090217Q6	SMG#27
Version	2.17	7.1.1	R98	TS 100 922	SIM characteristics	Pub July 1999?	DTS/SMG-090217Q7	SMG#29
?	2.19	7.1.0	R98	TS 101 413	SIM API	Pub July 1999?	DTS/SMG-090219Q7	SMG#29
	2.22	5.4.0	Phase 2+	GTS 02.22	Personalisation of the ME	Pub July 1998	RGTS/SMG-010222QR3	SMG#26
	2.22	6.0.0	R97	TS 101 624	Personalisation of the ME	Pub Jan 1999	DTS/SMG-010222Q6	SMG#27>
?	2.22	7.0.0	R98	TS 101 624	Personalisation of the ME	Pub	RTS/SMG-010222Q7	SMG#29
	2.24	4.5.0	Phase 2	ETS 300 510 Ed2	Advice of Charge	Pub Jan 1996	RE/SMG-010224P	SMG#15
	2.24	5.0.1	Phase 2/2+	ETS 300 923	Advice of Charge	Pub Apr 1997	DE/SMG-010224Q	SMG#20
	2.24	6.0.1	R97	EN 300 923	Advice of Charge	Pub May 1999	DEN/SMG-010224Q6	SMG#27>
?	2.24	7.0.0	R98	EN 300 923	Advice of Charge	OAP	REN/SMG-010224Q7	SMG#29
	2.30	4.13.0	Phase 2	ETS 300 511 Ed2	Man-Machine Interface	Pub July 1995	RE/SMG-010230P1	SMG#13
	2.30	5.7.1	R96	ETS 300 907 Ed5	Man-Machine Interface	Pub Aug 1999	RE/SMG-010230QR6	SMG#28
	2.30	6.1.0	R97	TS 100 907	Man-Machine Interface	Pub Mar 1999	RTS/SMG-010230Q6R1	SMG#28
Version	2.30	7.1.0	R98	TS 100 907	Man-Machine Interface	Pub Aug 1999	RTS/SMG-010230Q7	SMG#29
NO	2.31	7.1.1	R98	TS 101 107	Fraud Info Gat FIGS Stg 1	Pub	RTS/SMG-100231Q7	SMG#29
?	2.32	7.1.1	R98	TS 101 414	IST Stage 1	Pub	DTS/SMG-100232Q7	SMG#29

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	2.33	5.0.0	Phase 2+	GTS 02.33	Lawful intercept Stage 1	Pub Jan 1997	DGTS/SMG-100233Q	SMG#20
?	2.33	7.3.0	R98	TS 101 xxx	Lawful intercept Stage 1	Pub	DTS/SMG-100233Q7	SMG#29
	2.34	5.2.1	Phase 2+	GTS 02.34	HSCSD	Pub July 1997	RGTS/SMG-010234QR1	SMG#22
	2.34	6.0.0	R97	TS 101 625	HSCSD	Pub Jan 1999	DTS/SMG-010234Q6	SMG#27>
?	2.34	7.0.0	R98	TS 101 625	HSCSD	Pub	RTS/SMG-010234Q7	SMG#29
	2.40	4.5.0	Phase 2	ETS 300 512 Ed2	Call Progress indicators	Pub Jan 1996	RE/SMG-010240P	SMG#15
	2.40	5.0.0	Phase 2/2+	GTS 02.40	Call Progress indicators	Pub Nov 1996	DGTS/SMG-010240Q	SMG#20
	2.40	6.0.0	R97	TS 100 512	Call Progress indicators	Pub Apr 1999	DTS/SMG-010240Q6	SMG#27>
Version	2.40	7.0.1	R98	TS 100 512	Call Progress indicators	Pub July 1999?	RTS/SMG-010240Q7	SMG#29
	2.41	4.5.2	Phase 2	ETS 300 513	ODB Stage 1	Pub Sep 1994	DE/SMG-010241P	SMG#8
	2.41	5.1.1	Phase 2+	GTS 02.41	ODB Stage 1	Pub Jan 1998	RGTS/SMG-010241QR1	SMG#24
	2.41	6.0.0	R97	TS 100 513	ODB Stage 1	Pub Apr 1999	DTS/SMG-010241Q6	SMG#27>
Version	2.41	7.0.0	R98	TS 100 513	ODB Stage 1	Pub	RTS/SMG-010241Q7	SMG#29
	2.42	5.1.0	Phase 2+	GTS 02.42	NITZ	Pub Jan 1998	RGTS/SMG-010242QR1	SMG#24
	2.42	6.0.0	R97	TS 101 626	NITZ	Pub Apr 1999	DTS/SMG-010242Q6	SMG#27>
?	2.42	7.0.0	R98	TS 101 626	NITZ	Pub	RTS/SMG-010242Q7	SMG#29
?	2.43	7.1.0	R98	TS 101 415	SoLSA Stage 1	Pub Aug 1999	RTS/SMG-010243Q7R1	SMG#29
	2.48	6.0.0	R97	TS 101 180	Tool Kit Security Stage1	Pub Apr 1998	DTS/SMG-090248Q6	SMG#25
?	2.48	7.0.0	R98	TS 101 180	Tool Kit Security Stage1	Pub	RTS/SMG-090248Q7	SMG#29
?	2.53	7.0.1	R98	TS 101 108	TFO Stage 1	Pub July 1999?	RTS/SMG-110253Q7	SMG#29
NO	2.56	7.2.0	R98	EN 301 403	CTS Stage 1	Unpublished	DEN/SMG-010256Q7	SMG#29
NO	2.57	7.1.0	R98	TS 101 xxx	MExE Stage 1	Pub Aug 1999	DTS/SMG-010257Q7	SMG#29
	2.60	6.2.1	R97	EN 301 113	GPRS Stage 1	Pub Aug 1999	REN/SMG-010260Q6R1	SMG#28
Version	2.60	7.2.0	R98	TS 101 113	GPRS Stage 1	Pub Aug 1999	DTS/SMG-010260Q7	SMG#29
	2.63	5.0.0	Phase 2+	GTS 02.63	PDS Stage 1	Pub July 1996	DGTS/SMG-010263Q	SMG#19
	2.63	6.0.0	R97	TS 101 628	PDS Stage 1	Pub Apr 1999	DTS/SMG-010263Q6	SMG#27>
?	2.63	7.0.0	R98	TS 101 628	PDS Stage 1	Pub	RTS/SMG-010263Q7	SMG#29
	2.66	5.0.0	Phase 2+	TS 101 xxx	Mobile NP Stage 1	Unpublished	DTS/SMG-010266Q	SMG#24
Pending	2.66	7.0.1	R98	EN 301 715	Mobile NP Stage 1	OAP version	DEN/SMG-010266Q7	SMG#29
	2.67	5.1.0	Phase 2+	ETS 300 924Ed3	eMLPP	OAP version	RE/SMG-010267QR2	SMG#29
	2.67	6.1.0	R97	EN 300 924	eMLPP	OAP version	DEN/SMG-010267Q6R1	SMG#29
NO	2.67	7.0.0	R98	EN 300 924	eMLPP	OAP	REN/SMG-010267Q7	SMG#29
	2.68	5.2.1	Phase 2+	ETS 300 925 Ed3	VGCS	Pub Dec 1998	RE/SMG-010268QR2	SMG#26
	2.68	6.0.0	R97	EN 300 925	VGCS	OAP version	DEN/SMG-010268Q6	SMG#27>

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?	2.68	7.0.1	R98	EN 300 925	VGCS	OAP	REN/SMG-010268Q7	SMG#29
	2.69	5.2.1	Phase 2+	ETS 300 926 Ed3	VBS	Pub Dec 1998	RE/SMG-010269QR2	SMG#26
	2.69	6.0.0	R97	EN 300 926	VBS	OAP version	DEN/SMG-010269Q6	SMG#27>
?	2.69	7.0.1	R98	EN 300 926	VBS	OAP	REN/SMG-010269Q7	SMG#29
OK	2.71	7.0.0	R98	TS 101 723	Location Serv LCS Stage 1	Pub Aug 1999	DTS/SMG-010271Q7	SMG#29
	2.72	5.0.0	Phase 2+	GTS 02.72	Call deflection	Pub July 1996	DGTS/SMG-010272Q	SMG#19
OK	2.72	7.2.1	R98	TS 101 xxx	Call deflection	Pub Aug 1999	DTS/SMG-010272Q7	SMG#29
	2.78	5.6.0	R96	GTS 02.78	CAMEL Stage 1	Pub Mar 1999	RGTS/SMG-010278QR5	SMG#28
	2.78	6.3.0	R97	TS 101 285	CAMEL Ph2 Stage 1	Pub Aug 1999	RTS/SMG-010278Q6R2	SMG#29
Version	2.78	7.0.0	R98	TS 101 285	CAMEL Ph2 Stage 1	Pub	RTS/SMG-010278Q7	SMG#29
	2.79	5.2.0	R96	GTS 02.79	SOR	Pub Mar 1999	RGTS/SMG-010279QR2	SMG#28
	2.79	6.1.0	R97	TS 101 629	SOR	Pub	RTS/SMG-010279Q6R1	SMG#29
?	2.79	7.0.0	R98	TS 101 629	SOR	Pub	RTS/SMG-010279Q7	SMG#29
	2.81	4.6.1	Phase 2	ETS 300 514 Ed3	Line Identity SS	Pub June 1998	RE/SMG-010281PR3	SMG#24
	2.81	5.1.0	Phase 2+	GTS 02.81	Line Identity SS	Pub Jan 1998	RGTS/SMG-010281QR1	SMG#24
	2.81	6.0.0	R97	TS 100 514	Line Identity SS	Pub Jan 1999	DTS/SMG-010281Q6	SMG#27>
Version	2.81	7.0.0	R98	TS 100 514	Line Identity SS	Pub	RTS/SMG-010281Q7	SMG#29
	2.82	4.5.2	Phase 2	ETS 300 515 Ed2	Call Offering SS	Pub May 1996	RE/SMG-010282P	SMG#16
	2.82	5.0.0	Phase 2+	GTS 02.82	Call Offering SS	Pub Jan 1996	DGTS/SMG-010282Q	SMG#16
	2.82	6.0.0	R97	TS 100 515	Call Offering SS	Pub Apr 1999	DTS/SMG-010282Q6	SMG#27>
Version	2.82	7.0.1	R98	TS 100 515	Call Offering SS	Pub July 1999?	RTS/SMG-010282Q7	SMG#29
	2.83	4.6.7	Phase 2	ETS 300 516 Ed2	Call Completion SS	Pub May 1996	RE/SMG-010283P	SMG#16
	2.83	5.0.0	Phase 2/2+	GTS 02.83	Call Completion SS	Pub Nov 1996	DGTS/SMG-010283Q	SMG#20
	2.83	6.0.0	R97	TS 100 516	Call Completion SS	Pub Apr 1999	DTS/SMG-010283Q6	SMG#27>
Version	2.83	7.0.0	R98	TS 100 516	Call Completion SS	Pub	RTS/SMG-010283Q7	SMG#29
	2.84	4.4.7	Phase 2	ETS 300 517 Ed2	MultiParty SS	Pub May 1996	RE/SMG-010284P	SMG#16
	2.84	5.0.0	Phase 2/2+	GTS 02.84	MultiParty SS	Pub Nov 1996	DGTS/SMG-010284Q	SMG#20
	2.84	6.0.0	R97	TS 100 517	MultiParty SS	Pub Apr 1999	DTS/SMG-010284Q6	SMG#27>
Version	2.84	7.0.0	R98	TS 100 517	MultiParty SS	Pub	RTS/SMG-010284Q7	SMG#29
	2.85	4.2.6	Phase 2	ETS 300 518 Ed2	Closed User Group SS	Pub May 1996	RE/SMG-010285P	SMG#16
	2.85	5.0.0	Phase 2/2+	GTS 02.85	Closed User Group SS	Pub Nov 1996	DGTS/SMG-010285Q	SMG#20
	2.85	6.0.0	R97	TS 100 518	Closed User Group SS	Pub Jan 1999	DTS/SMG-010285Q6	SMG#27>
Version	2.85	7.0.0	R98	TS 100 518	Closed User Group SS	Pub	RTS/SMG-010285Q7	SMG#29
	2.86	4.1.5	Phase 2	ETS 300 519 Ed2	Advice of Charge SS	Pub May 1996	RE/SMG-010286P	SMG#16
	2.86	5.0.0	Phase 2/2+	GTS 02.86	Advice of Charge SS	Pub Nov 1996	DGTS/SMG-010286Q	SMG#20
	2.86	6.0.0	R97	TS 100 519	Advice of Charge SS	Pub Jan 1999	DTS/SMG-010286Q6	SMG#27>

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Version	2.86	7.0.0	R98	TS 100 519	Advice of Charge SS	Pub	RTS/SMG-010286Q7	SMG#29
	2.87	5.2.1	Phase 2+	GTS 02.87	User to User Signalling	Pub Nov 1997	RGTS/SMG-010287QR2	SMG#23
?	2.87	7.1.1	R98	EN 301 702	User to User Signalling	OAP version	DEN/SMG-010287Q7	SMG#29
	2.88	4.4.3	Phase 2	ETS 300 520 Ed2	Call Barring SS	Pub May 1996	RE/SMG-010288P	SMG#16
	2.88	5.0.0	Phase 2/2+	GTS 02.88	Call Barring SS	Pub Nov 1996	DGTS/SMG-010288Q	SMG#20
	2.88	6.0.0	R97	TS 100 520	Call Barring SS	Pub Jan 1999	DTS/SMG-010288Q6	SMG#27>
Version	2.88	7.0.0	R98	TS 100 520	Call Barring SS	Pub	RTS/SMG-010288Q7	SMG#29
	2.90	4.1.1	Phase 2	ETS 300 625 Ed2	USSD stage 1	Pub Sep 1997	RE/SMG-010290PR	SMG#21
	2.90	5.1.0	Phase 2/2+	GTS 02.90	USSD stage 1	Pub Mar 1997	RGTS/SMG-010290QR	SMG#21
	2.90	6.0.0	R97	TS 100 625	USSD stage 1	Pub Apr 1999	DTS/SMG-010290Q6	SMG#27>
?	2.90	7.0.0	R98	TS 100 625	USSD stage 1	Pub	RTS/SMG-010290Q7	SMG#29
	2.91	5.1.1	Phase 2+	GTS 02.91	ECT stage 1	Pub Mar 1997	RGTS/SMG-010291QR2	SMG#21
	2.91	6.0.0	R97	TS 101 630	ECT stage 1	Pub Jan 1999	DTS/SMG-010291Q6	SMG#27>
Version	2.91	7.0.0	R98	TS 101 630	ECT stage 1	Pub	RTS/SMG-010291Q7	SMG#29
	2.93	6.0.1	R97	TS 101 282	CCBS stage 1	Pub July 1998	DTS/SMG-010293Q6	SMG#26
?	2.93	7.0.0	R98	TS 101 282	CCBS stage 1	Pub	RTS/SMG-010293Q7	SMG#29
	2.95	5.2.0	Phase 2+	GTS 02.95	SPNP	Pub July 1996	RGTS/SMG-010295QR	SMG#19
	2.95	6.0.0	R97	TS 101 402	SPNP	Pub Apr 1999	DTS/SMG-010295Q6	SMG#27
?	2.95	7.0.0	R98	TS 101 402	SPNP	Pub	RTS/SMG-010295Q7	SMG#29
	2.96	6.0.1	R97	TS 101 394	Calling Nme Delivry CNAP	Pub Oct 1998	DTS/SMG-010296Q6	SMG#27
Version	2.96	7.0.0	R98	TS 101 394	Calling Nme Delivry CNAP	Pub	RTS/SMG-010296Q7	SMG#29
?	2.97	7.1.0	R98	TS 101 xxx	Multiple Sub Profile	Pub Aug 1999	DTS/SMG-010297Q7	SMG#29
	3.01	4.0.4	Phase 2	ETS 300 521	Network Functions	Pub Sep 1994	DE/SMG-030301P	SMG#7
	3.01	5.1.0	Phase 2+	GTS 03.01	Network Functions	Pub May 1996	RGTS/SMG-030301QR	SMG#18
??	3.01	6.1.0	R97	TS 100 521	Network Functions	Pub	DTS/SMG-030301Q6	SMG#28
	3.02	4.2.1	Phase 2	ETS 300 522 Ed3	Network Architecture	Pub Nov 1996	RE/SMG-030302PR2	SMG#18
	3.02	5.3.0	Phase 2+	GTS 03.02	Network Architecture	Unpublished	RGTS/SMG-030302QR1	SMG#24
	3.02	6.1.0	R97	TS 100 522	Network Architecture	Pub July 1998	DTS/SMG-120302Q6	SMG#26
Version	3.02	7.0.0	R98	TS 100 522	Network Architecture	Pub Aug 1999	DTS/SMG-120302Q7	SMG#29
	3.03	4.9.0	Phase 2	ETS 300 523 Ed 2	Numbering Addr & Ident	Pub Mar 1995	RE/SMG-030303P	SMG#12
	3.03	5.2.0	R96	ETS 300 927 Ed3	Numbering Addr & Ident	OAP version	RE/SMG-030303QR2	SMG#29
	3.03	6.3.0	R97	TS 100 927	Numbering Addr & Ident	Pub July 1999?	RTS/SMG-030303Q6R2	SMG#29
OK	3.03	7.1.0	R98	TS 100 927	Numbering Addr & Ident	Pub July 1999?	RTS/SMG-030303Q7	SMG#29
	3.04	4.0.4	Phase 2	ETS 300 524	Sig req of calls to MS	Pub Sep 1994	DE/SMG-030304P	SMG#7
	3.04	5.0.0	Phase 2/2+	GTS 03.04	Sig req of calls to MS	Pub Nov 1996	DGTS/SMG-030304Q	SMG#20

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	3.04	6.0.0	R97	TS 100 524	Sig req of calls to MS	Pub Apr 1999	DTS/SMG-030304Q6	SMG#27>
?	3.04	7.0.0	R98	TS 100 524	Sig req of calls to MS	Pub Hold	RTS/SMG-030304Q7	SMG#29
	3.05	4.1.0	Phase 2	ETR 102 Ed2	Tech perfmce objectives	Pub Aug 1996	RTR/SMG-030305P	SMG#19
	3.05	5.0.0	Phase 2/2+	ETR 351	Tech perfmce objectives	Pub Nov 1996	DTR/SMG-030305Q	SMG#20
	3.05	6.0.0	R97	TR 101 631	Tech perfmce objectives	Pub Apr 1999	DTR/SMG-030305Q6	SMG#27>
?	3.05	7.0.0	R98	TR 101 631	Tech perfmce objectives	Pub	RTR/SMG-030305Q7	SMG#29
	3.07	4.3.1	Phase 2	ETS 300 525	Restoration procedures	Pub Sep 1994	DE/SMG-030307P	SMG#10
	3.07	5.1.0	Phase 2+	GTS 03.07	Restoration procedures	Unpublished	DGTS/SMG-030307Q	SMG#23
	3.07	6.2.0	R97	TS 100 525	Restoration procedures	Pub July 1999?	RTS/SMG-030307Q6R1	SMG#29
Version	3.07	7.0.0	R98	TS 100 525	Restoration procedures	Pub July 1999?	RTS/SMG-030307Q7	SMG#29
	3.08	4.8.0	Phase 2	ETS 300 526 Ed2	Subscriber data	Pub Oct 1996	RE/SMG-030308P	SMG#18
	3.08	5.2.0	Phase 2+	GTS 03.08	Subscriber data	Unpublished	RGTS/SMG-030308QR1	SMG#23
	3.08	6.3.0	R97	TS 100 526	Subscriber data	Pub Mar 1999	RTS/SMG-030308Q6R2	SMG#28
Version	3.08	7.1.0	R98	TS 100 526	Subscriber data	Pub July 1999?	RTS/SMG-030308Q7	SMG#29
	3.09	4.6.0	Phase 2	ETS 300 527 Ed2	Handover procedures	Pub Sep 1996	RE/SMG-030309P	SMG#17
	3.09	5.1.0	Phase 2+	GTS 03.09	Handover procedures	Pub Aug 1997	RGTS/SMG-030309QR1	SMG#22
	3.09	6.0.0	R97	TS 100 527	Handover procedures	Pub Apr 1999	DTS/SMG-030309Q6	SMG#27>
?	3.09	7.0.0	R98	TS 100 527	Handover procedures	Pub	RTS/SMG-030309Q7	SMG#29
	3.10	4.3.1	Phase 2	ETS 300 528	PLMN connection types	Pub Sep 1994	DE/SMG-040310P	SMG#8
	3.10	5.4.0	Phase 2+	GTS 03.10	PLMN connection types	Pub Jan 1998	RGTS/SMG-040310QR3	SMG#24
	3.10	6.0.0	R97	TS 100 528	PLMN connection types	Pub Apr 1999	DTS/SMG-040310Q6	SMG#27>
?	3.10	7.0.1	R98	TS 100 528	PLMN connection types	Pub July 1999?	RTS/SMG-030310Q7	SMG#29
	3.11	4.10.1	Phase 2	ETS 300 529 Ed3	Tech realisation of SS	Pub Nov 1996	RE/SMG-030311PR2	SMG#18
	3.11	5.0.1	Phase 2/2+	ETS 300 928	Tech realisation of SS	Pub May 1997	DE/SMG-030311Q	SMG#20
	3.11	6.0.0	R97	EN 300 928	Tech realisation of SS	OAP version	DEN/SMG-030311Q6	SMG#27>
?	3.11	7.0.0	R98	EN 300 928	Tech realisation of SS	OAP	REN/SMG-030311Q7	SMG#29
	3.12	4.4.2	Phase 2	ETS 300 530	Location reg procedures	Pub Sep 1994	DE/SMG-030312P	SMG#8
	3.12	5.0.0	Phase 2/2+	GTS 03.12	Location reg procedures	Pub Nov 1996	DGTS/SMG-030312Q	SMG#20
	3.12	6.0.0	R97	TS 100 530	Location reg procedures	Pub Apr 1999	DTS/SMG-030312Q6	SMG#27>
?	3.12	7.0.0	R98	TS 100 530	Location reg procedures	Pub	RTS/SMG-030312Q7	SMG#29
	3.13	4.0.4	Phase 2	ETS 300 531	Discontinuous Rx DRX	Pub Sep 1994	DE/SMG-030313P	SMG#7
	3.13	5.0.0	Phase 2+	GTS 03.13	Discontinuous Rx DRX	Pub Mar 1996	DGTS/SMG-030313Q	SMG#17
	3.13	6.0.0	R97	TS 100 531	Discontinuous Rx DRX	Pub Apr 1999	DTS/SMG-030313Q6	SMG#27>
?	3.13	7.0.0	R98	TS 100 531	Discontinuous Rx DRX	Pub	RTS/SMG-030313Q7	SMG#29
	3.14	4.1.1	Phase 2	ETS 300 532	Support of DTMF	Pub Sep 1994	DE/SMG-030314P	SMG#10
	3.14	5.0.0	Phase 2/2+	GTS 03.14	Support of DTMF	Pub Nov 1996	DGTS/SMG-030314Q	SMG#20
	3.14	6.0.0	R97	TS 100 532	Support of DTMF	Pub Mar 1999	DTS/SMG-030314Q6	SMG#27>

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Version	3.14	7.0.1	R98	TS 100 532	Support of DTMF	Pub July 1999?	RTS/SMG-030314Q7	SMG#29
	3.15	4.3.1	Phase 2	ETS 300 533	Tech realisation of ODB	Pub Sep 1994	DE/SMG-030315P	SMG#10
	3.15	5.1.0	Phase 2+	GTS 03.15	Tech realisation of ODB	Pub Apr 1997	RGTS/SMG-030315QR	SMG#21
	3.15	6.1.0	R97	TS 100 533	Tech realisation of ODB	Pub July 1999?	RTS/SMG-030315Q6R1	SMG#29
Version	3.15	7.0.0	R98	TS 100 533	Tech realisation of ODB	Pub	RTS/SMG-030315Q7	SMG#29
	3.16	4.2.1	Phase 2	ETS 300 629 Ed2	Sub data management	Pub Nov 1996	RE/SMG-030316P	SMG#18
	3.16	5.3.0	Phase 2+	GTS 03.16	Sub data management	Pub Aug 1998	RGTS/SMG-030316QR2	SMG#26
	3.16	6.4.0	R97	TS 100 629	Sub data management	Pub Aug 1999	RTS/SMG-030316Q6R3	SMG#29
Version	3.16	7.1.0	R98	TS 100 629	Sub data management	Pub Aug 1999	RTS/SMG-030316Q7	SMG#29
	3.18	5.6.0	Phase 2+	TS 101 043	Basic Call Handling	Pub Nov 1998	RTS/SMG-030318QR4	SMG#27
	3.18	6.4.0	R97	TS 101 043	Basic Call Handling	Pub July 1999?	RTS/SMG-030318Q6R3	SMG#29
Version	3.18	7.1.0	R98	TS 101 043	Basic Call Handling	Pub	RTS/SMG-030318Q7	SMG#29
	3.20	4.4.1	Phase 2	ETS 300 534 Ed3	Security Net Functions	Pub Aug 1997	RE/SMG-030320PR	SMG#21
	3.20	5.3.0	R96	ETS 300 929 Ed4	Security Net Functions	OAP	RE/SMG-030320QR2	SMG#29
	3.20	6.1.0	R97	TS 100 929	Security Net Functions	Pub July 1999	RTS/SMG-030320Q6R1	SMG#29
Version	3.20	7.1.0	R98	TS 100 929	Security Net Functions	Pub	RTS/SMG-030320Q7	SMG#29
	3.22	4.11.0	Phase 2	ETS 300 535 Ed4	MS in idle mode	Pub Sep 1996	RE/SMG-030322PR3	SMG#17
	3.22	5.3.1	Phase 2+	ETS 300 930 Ed4	MS in idle mode	Pub Dec 1998	RE/SMG-030322QR2	SMG#26
	3.22	6.2.0	R97	TS 100 930	MS in idle mode	Pub July 1999?	RTS/SMG-030322Q6R2	SMG#29
Version	3.22	7.1.0	R98	TS 100 930	MS in idle mode	Pub July 1999?	RTS/SMG-030322Q7	SMG#29
	3.26	4.3.0	Phase 2	TR 101 266	Multiband by 1 operator	Pub Apr 1998	DTR/SMG-020326PR2	SMG#23
	3.26	5.2.0	Phase 2+	ETR 366 Ed2	Multiband by 1 operator	Pub	RTR/SMG-020326QR1	SMG#23
	3.26	6.0.0	R97	TR 101 266	Multiband by 1 operator	Pub Apr 1999	RTR/SMG-030326Q6	SMG#27>
?	3.26	7.0.0	R98	TR 101 266	Multiband by 1 operator	Pub	RTR/SMG-030326Q7	SMG#29
	3.30	4.3.0	Phase 2	ETR 103 Ed2	Radio Net Planning Aspts	Pub Feb 1995	RTR/SMG-020330Q-1	SMG#13
	3.30	5.0.0	Phase 2/2+	ETR 364	Radio Net Planning Aspts	Pub Nov 1996	DTR/SMG-020330Q	SMG#20
	3.30	6.0.1	R97	TR 101 362	Radio Net Planning Aspts	Pub July 1998	DTR/SMG-020330Q6	SMG#26
?	3.30	7.0.0	R98	TR 101 362	Radio Net Planning Aspts	Pub July 1999?	RTR/SMG-020330Q7	SMG#29
	3.30	8.0.0	R99	TR 101 362	Radio Net Planning Aspts	Unpublished	DTR/SMG-020330Q8	SMG#29
NO	3.31	7.0.1	R98	TS 101 xxx	Fraud Info Gat FIGS Stg 2	Pub	DTS/SMG-100331Q7	SMG#29
	3.32	5.2.0	Phase 2+	TS 101 109	Geo Area Discription	Pub Oct 1998	RTS/SMG-030332QR2	SMG#27
	3.32	6.0.0	R97	TS 101 109	Geo Area Discription	Pub Apr 1999	DTS/SMG-030332Q6	SMG#27>
Version	3.32	7.0.0	R98	TS 101 109	Geo Area Discription	Pub	RTS/SMG-030332Q7	SMG#29
?	3.33	7.1.0	R98	TS 101 xxx	Lawful intercept Stage 2	Pub	DTS/SMG-100333Q7	SMG#29
	3.34	5.2.0	R96	TS 101 038	HSCSD Stage 2	Pub May 1999	RTS/SMG-030334QR2	SMG#28
	3.34	6.1.0	R97	TS 101 038	HSCSD Stage 2	Pub	RTS/SMG-030334Q6	SMG#29

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?	3.34	7.0.0	R98	TS 101 038	HSCSD Stage 2	Pub May 1999	RTS/SMG-030334Q7	SMG#29
NO	3.35	7.0.0	R98	TS 101 xxx	Immed Ser Term (IST) Stg 2	Draft	DTS/SMG-100335Q7	SMG#27
	3.38	4.0.1	Phase 2	ETS 300 628	Alphabets & Language	Pub Sep 1994	DE/SMG-040338P	SMG#10
	3.38	5.6.1	Phase 2+	ETS 300 900 Ed3	Alphabets & Language	Pub Jan 1998	RE/SMG-040338QR5	SMG#22
	3.38	6.0.1	R97	TS 100 900	Alphabets & Language	Pub July 1998	DTS/SMG-040338Q6	SMG#26
Version	3.38	7.2.0	R98	TS 100 900	Alphabets & Language	Pub July 1999?	RTS/SMG-040338Q7	SMG#29
	3.39	4.0.0	Phase 2	ETR 243	Inter proto SMSCs-SMEs	Pub Nov 1995	DTR/SMG-040339P	SMG#16
	3.39	5.0.0	Phase 2/2+	ETR 365	Inter proto SMSCs-SMEs	Pub Nov 1996	DTR/SMG-040339Q	SMG#20
??	3.39	6.0.0	R97	TR 101 632	Inter proto SMSCs-SMEs	Pub Apr 1999	DTR/SMG-040339Q6	SMG#27>
	3.40	4.13.0	Phase 2	ETS 300 536 Ed4	Tech realisa of SMS PtP	Pub Oct 1996	RE/SMG-040340PR4	SMG#18
	3.40	5.8.1	Phase 2+	ETS 300 901 Ed5	Tech realisa of SMS PtP	Pub Dec 1998	RE/SMG-040340QR7	SMG#26
	3.40	6.1.0	R97	TS 100 901	Tech realisa of SMS PtP	Pub July 1998	DTS/SMG-040340Q6	SMG#26
?	3.40	7.2.0	R98	TS 100 901	Tech realisa of SMS PtP	Pub July 1999?	RTS/SMG-040340Q7	SMG#29
	3.41	4.11.0	Phase 2	ETS 300 537 Ed2	Tech realisa of SMSCB	Pub May 1996	RE/SMG-040341P	SMG#16
	3.41	5.9.1	Phase 2+	ETS 300 902 Ed5	Tech realisa of SMSCB	Pub Feb 1999	RE/SMG-040341QR7	SMG#26
	3.41	6.1.0	R97	TS 100 902	Tech realisa of SMSCB	Pub July 1998	DTS/SMG-040341Q6	SMG#26
Version	3.41	7.1.0	R98	TS 100 902	Tech realisa of SMSCB	Pub July 1999?	RTS/SMG-040341Q7	SMG#29
	3.42	5.2.0	Phase 2+	TS 101 032	Compression algo SMS	Pub Nov 1997	RTS/SMG-040342QR1	SMG#23
	3.42	6.0.0	R97	TS 101 032	Compression algo SMS	Pub Apr 1999	DTS/SMG-040342Q6	SMG#27>
?	3.42	7.1.1	R98	TS 101 032	Compression algo SMS	Pub July 1999?	RTS/SMG-040342Q7	SMG#29
	3.43	4.1.2	Phase 2	ETR 104	Support of videotext	Pub Oct 1993	DTR/SMG-040343P	SMG#7
	3.43	5.0.0	Phase 2/2+	ETR 352	Support of videotext	Pub Nov 1996	DTR/SMG-040343Q	SMG#20
	3.43	6.0.0	R97	TR 101 633	Support of videotext	Pub Apr 1999	DTR/SMG-040343Q6	SMG#27>
?	3.43	7.0.0	R98	TR 101 633	Support of videotext	Pub	RTR/SMG-040343Q7	SMG#29
	3.44	4.0.1	Phase 2	ETR 105	Support of teletext	Pub Oct 1993	DTR/SMG-040344P	SMG#7
	3.44	5.0.0	Phase 2/2+	ETR 353	Support of teletext	Pub Nov 1996	DTR/SMG-040344Q	SMG#20
	3.44	6.0.0	R97	TR 101 634	Support of teletext	Pub Apr 1999	DTR/SMG-040344Q6	SMG#27>
?	3.44	7.0.0	R98	TR 101 634	Support of teletext	Pub	RTR/SMG-040344Q7	SMG#29
	3.45	4.5.0	Phase 2	ETS 300 538 Ed2	Fax Group 3 transparent	Pub Sep 1995	RE/SMG-040345P	SMG#14
	3.45	5.2.1	Phase 2+	ETS 300 931 Ed3	Fax Group 3 transparent	Pub Jan 1998	RE/SMG-040345QR1	SMG#22
	3.45	6.0.0	R97	EN 300 931	Fax Group 3 transparent	OAP version	DEN/SMG-040345Q6	SMG#27>
?	3.45	7.0.0	R98	EN 300 931	Fax Group 3 transparent	OAP	REN/SMG-040345Q7	SMG#29
	3.46	4.1.2	Phase 2	ETS 300 539	Fax Gp 3 non-transparent	Pub Feb 1995	DE/SMG-040346P	SMG#11
	3.46	5.0.0	Phase 2/2+	GTS 03.46	Fax Gp 3 non-transparent	Pub Nov 1996	DGTS/SMG-040346Q	SMG#20
	3.46	6.0.0	R97	TS 100 539	Fax Gp 3 non-transparent	Pub Apr 1999	DTS/SMG-040346Q6	SMG#27>
?	3.46	7.0.0	R98	TS 100 539	Fax Gp 3 non-transparent	Pub	RTS/SMG-040346Q7	SMG#29

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	3.47	4.4.0	Phase 2	ETR 106 Ed 3	Int conn e.g CS & MSC	Pub May 1996	RTR/SMG-040347PR2	SMG#18
	3.47	5.0.0	Phase 2/2+	ETR 354	Int conn e.g CS & MSC	Pub Nov 1996	DTR/SMG-040347Q	SMG#20
	3.47	6.0.0	R97	TR 101 635	Int conn e.g CS & MSC	Pub Apr 1999	DTR/SMG-040347Q6	SMG#27>
?	3.47	7.0.0	R98	TR 101 635	Int conn e.g CS & MSC	Pub	RTR/SMG-040347Q7	SMG#29
	3.48	6.2.0	R97	TS 101 181	Tool Kit Security Stage 2	Pub May 1999	RTS/SMG-090348Q6R2	SMG#28
?	3.48	7.0.1	R98	TS 101 181	Tool Kit Security Stage 2	Pub July 1999?	RTS/SMG-090348Q7	SMG#29
	3.48	8.0.0	R99	TS 101 181	Tool Kit Security Stage 2	Unpublished	RTS/SMG-090348Q8	SMG#29
	3.49	4.6.0	Phase 2	ETR 107 Ed3	Int conn e.g CBC & BSC	Pub Nov 1995	RTR/SMG-040349PR2	SMG#16
	3.49	5.7.0	Phase 2+	GTS 03.49	Int conn e.g CBC & BSC	Pub July 1998	RGTS/SMG-040349QR5	SMG#24
	3.49	6.1.0	R97	TS 101 368	Int conn e.g CBC & BSC	Pub July 1998	DTS/SMG-040349Q6	SMG#26
?	3.49	7.0.0	R98	TS 101 368	Int conn e.g CBC & BSC	Pub	RTS/SMG-040349Q7	SMG#29
	3.50	4.6.1	Phase 2	ETS 300 540 Ed6	Trans planning Aspects	Pub July 1999	RE/SMG-110350PR4	SMG#28
	3.50	5.3.1	R96	ETS 300 903 Ed4	Trans planning Aspects	Pub July 1999	RE/SMG-110350QR3	SMG#28
	3.50	6.1.1	R97	EN 300 903	Trans planning Aspects	Pub July 1999	DEN/SMG-020350Q6	SMG#28
?	3.50	7.0.0	R98	EN 300 903	Trans planning Aspects	Pub	REN/SMG-020350Q7	SMG#29
NO	3.52	7.1.0	R98	EN 301 404	CTS Stage 2 Lower Layer	Unpublished	DEN/SMG-030352Q7	SMG#29
?	3.53	7.0.1	R98	TS 101 xxx	TFO Stage 2	Pub July 1999?	DTS/SMG-030353Q7	SMG#29
	3.54	5.2.0	Phase 2+	TS 101 252	Shared IWF (SIWF)	Pub Jan 1998	RTS/SMG-040354QR1	SMG#24
	3.54	6.0.0	R97	TS 101 252	Shared IWF (SIWF)	Pub Apr 1999	RTS/SMG-040354Q6	SMG#27>
?	3.54	7.0.0	R98	TS 101 252	Shared IWF (SIWF)	Pub	RTS/SMG-040354Q7	SMG#29
NO	3.56	7.1.0	R98	EN 301 405	CTS Stage 2	Unpublished	DEN/SMG-030356Q7	SMG#29
NO	3.57	7.0.0	R98	TS 101 438	MExE Stage 2	Pub July 1999?	DTS/SMG-040357Q7	SMG#29
	3.58	6.0.1	R97	TR 101 110	Handsfree MS test	Pub July 1998	RTR/SMG-110358Q6	SMG#26
NO	3.58	7.0.0	R98	TR 101 110	Handsfree MS test	Pub	RTR/SMG-110358Q7	SMG#29
	3.60	6.4.0	R97	EN 301 344	GPRS Stage 2	OAP version	REN/SMG-030360Q6R1	SMG#29
Version	3.60	7.1.0	R98	EN 301 344	GPRS Stage 2	OAP version	REN/SMG-030360Q7	SMG#29
	3.63	5.1.0	Phase 2+	GTS 03.63	PDS Stage 2	Pub May 1996	RGTS/SMG-030363QR	SMG#18
??	3.63	6.0.0	R97	TS 101 636	PDS Stage 2	Pub Apr 1999	DTS/SMG-030363Q6	SMG#27>
	3.64	6.3.0	R97	TS 101 350	GPRS Radio Int Stage 2	Pub July 1999	RTS/SMG-020364Q6R3	SMG#29
?	3.64	7.0.0	R98	TS 101 350	GPRS Radio Int Stage 2	Pub July 1999	RTS/SMG-020364Q7	SMG#29
	3.64	8.0.0	R99	TS 101 350	GPRS Radio Int Stage 2	Unpublished	RTS/SMG-020364Q8	SMG#29
Pending	3.66	7.1.0	R98	EN 301 716	Mobile NP Stage 2	PE version	DEN/SMG-030366Q7	SMG#29
	3.67	5.1.1	Phase 2+	ETS 300 932	eMLPP Stage 2	Pub May 1997	DE/SMG-030367QR	SMG#20
	3.67	6.0.0	R97	TS 100 932	eMLPP Stage 2	Pub Apr 1999	DTS/SMG-030367Q6	SMG#27>

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NO	3.67	7.0.0	R98	TS 100 932	eMLPP Stage 2	Pub	RTS/SMG-030367Q7	SMG#29
	3.68	5.5.1	Phase 2+	ETS 300 933 Ed5	VGCS Stage 2	Pub Dec 1998	RE/SMG-030368QR4	SMG#26
	3.68	6.1.0	R97	TS 100 933	VGCS Stage 2	Pub July 1998	DTS/SMG-030368Q6	SMG#26
?	3.68	7.0.0	R98	TS 100 933	VGCS Stage 2	Pub	RTS/SMG-030368Q7	SMG#29
	3.69	5.5.1	Phase 2+	ETS 300 934 Ed5	VBS Stage 2	Pub Dec 1998	RE/SMG-030369QR4	SMG#26
	3.69	6.1.0	R97	TS 100 934	VBS Stage 2	Pub July 1998	DTS/SMG-030369Q6	SMG#26
?	3.69	7.0.0	R98	TS 100 934	VBS Stage 2	Pub	RTS/SMG-030369Q7	SMG#29
	3.70	4.0.3	Phase 2	ETS 300 541	Routeing calls via PDN	Pub Sep 1994	DE/SMG-040370P	SMG#8
	3.70	5.0.0	Phase 2/2+	GTS 03.70	Routeing calls via PDN	Pub Nov 1996	DGTS/SMG-040370Q	SMG#20
	3.70	6.0.0	R97	TS 100 541	Routeing calls via PDN	Pub Apr 1999	DTS/SMG-040370Q6	SMG#27>
?	3.70	7.0.0	R98	TS 100 541	Routeing calls via PDN	Pub	RTS/SMG-040370Q7	SMG#29
OK	3.71	7.0.0	R98	TS 101 724	Location Serv LCS Stage 2	Pub Aug 1999	DTS/SMG-030371Q7	SMG#29
Version	3.72	7.0.1	R98	TS 101 739	Call deflection Stage 2	Pub July 1999?	DTS/SMG-030372Q7	SMG#29
?	3.73	7.1.0	R98	TS 101 416	SoLSA Stage 2	Pub Aug 1999	DTS/SMG-120373Q	SMG#29
	3.78	5.8.0	R96	TS 101 044	CAMEL Stage 2	Pub Aug 1999	RTS/SMG-030378QR7	SMG#29
	3.78	6.4.0	R97	TS 101 441	CAMEL phase2, Stage 2	Pub Aug 1999	RTS/SMG-030378Q6R3	SMG#29
Version	3.78	7.1.0	R98	TS 101 441	CAMEL phase2, Stage 2	Pub Aug 1999	RTS/SMG-030378Q7R1	SMG#29
	3.79	5.4.0	Phase 2+	TS 101 045	SOR	Pub Nov 1998	RTS/SMG-030379QR3	SMG#27
	3.79	6.1.0	R97	TS 101 045	SOR	Pub July 1999?	RTS/SMG-030379Q6R1	SMG#29
?	3.79	7.1.0	R98	TS 101 045	SOR	Pub July 1999?	RTS/SMG-030379Q7	SMG#29
	3.81	4.8.1	Phase 2	ETS 300 542 Ed3	Line Identity SS stage 2	Pub Jan 1999	RE/SMG-030381PR1	SMG#26
	3.81	5.2.0	Phase 2+	GTS 03.81	Line Identity SS stage 2	Pub Aug 1998	RGTS/SMG-030381QR2	SMG#26
	3.81	6.0.0	R97	TS 100 542	Line Identity SS stage 2	Pub Apr 1999	DTS/SMG-030381Q6	SMG#27>
Version	3.81	7.0.1	R98	TS 100 542	Line Identity SS stage 2	Pub July 1999?	RTS/SMG-030381Q7	SMG#29
	3.82	4.8.1	Phase 2	ETS 300 543 Ed2	Call Forwarding SS stg 2	Pub Jan 1997	RE/SMG-030382P	SMG#18
	3.82	5.0.0	Phase 2/2+	GTS 03.82	Call Forwarding SS stg 2	Pub Dec 1996	DGTS/SMG-030382Q	SMG#20
	3.82	6.1.0	R97	TS 100 543	Call Forwarding SS stg 2	Pub July 1999?	RTS/SMG-030382Q6R1	SMG#29
Version	3.82	7.0.0	R98	TS 100 543	Call Forwarding SS stg 2	Pub	RTS/SMG-030382Q7	SMG#29
	3.83	4.4.1	Phase 2	ETS 300 544	CW & HOLD SS stg 2	Pub Feb 1995	DE/SMG-030383P	SMG#12
	3.83	5.0.0	Phase 2/2+	GTS 03.83	CW & HOLD SS stg 2	Pub Dec 1996	DGTS/SMG-030383Q	SMG#20
	3.83	6.0.0	R97	TS 100 544	CW & HOLD SS stg 2	Pub Apr 1999	DTS/SMG-030383Q6	SMG#27>
Version	3.83	7.0.0	R98	TS 100 544	CW & HOLD SS stg 2	Pub	RTS/SMG-030383Q7	SMG#29
	3.84	4.4.1	Phase 2	ETS 300 545	MultiParty SS stage 2	Pub Feb 1995	DE/SMG-030384P	SMG#12
	3.84	5.0.0	Phase 2/2+	GTS 03.84	MultiParty SS stage 2	Pub Dec 1996	DGTS/SMG-030384Q	SMG#20
	3.84	6.0.0	R97	TS 100 545	MultiParty SS stage 2	Pub Apr 1999	DTS/SMG-030384Q6	SMG#27>

Ballot Status	GSM No	Version	Phase	ETS/R/GTS	Short Title	Publication notes	ETSI Reference	After SMG #
Version	3.84	7.0.0	R98	TS 100 545	MultiParty SS stage 2	Pub	RTS/SMG-030384Q7	SMG#29
	3.85	4.2.1	Phase 2	ETS 300 546 Ed2	CUG SS stage 2	Unpublished	RE/SMG-030385P	SMG#15
	3.85	5.0.0	Phase 2/2+	GTS 03.85	CUG SS stage 2	Pub Dec 1996	DGTS/SMG-030385Q	SMG#20
	3.85	6.0.0	R97	TS 100 546	CUG SS stage 2	Pub Jan 1999	DTS/SMG-030385Q6	SMG#27>
Version	3.85	7.0.0	R98	TS 100 546	CUG SS stage 2	Pub	RTS/SMG-030385Q7	SMG#29
	3.86	4.6.1	Phase 2	ETS 300 547	Advice of Charge SS stg 2	Pub Feb 1995	DE/SMG-030386P	SMG#12
	3.86	5.0.1	Phase 2/2+	ETS 300 935	Advice of Charge SS stg 2	Pub May 1997	DE/SMG-030386Q	SMG#20
	3.86	6.0.1	R97	EN 300 935	Advice of Charge SS stg 2	Pub Jun 1999	DEN/SMG-030386Q6	SMG#27>
Version	3.86	7.0.0	R98	EN 300 935	Advice of Charge SS stg 2	OAP	REN/SMG-030386Q7	SMG#29
?	3.87	7.0.1	R98	EN 301 710	UUS stage 2	OAP version	DEN/SMG-030387Q7	SMG#29
	3.88	4.6.1	Phase 2	ETS 300 548	Call Barring SS stage 2	Pub Feb 1995	DE/SMG-030388P	SMG#12
	3.88	5.0.0	Phase 2/2+	GTS 03.88	Call Barring SS stage 2	Pub Dec 1996	DGTS/SMG-030388Q	SMG#20
	3.88	6.0.0	R97	TS 100 548	Call Barring SS stage 2	Pub Jan 1999	DTS/SMG-030388Q6	SMG#27>
Version	3.88	7.0.0	R98	TS 100 548	Call Barring SS stage 2	Pub	RTS/SMG-030388Q7	SMG#29
	3.90	4.1.1	Phase 2	ETS 300 549 Ed2	USSD stage 2	Pub Aug 1996	RE/SMG-030390P	SMG#16
	3.90	5.0.0	Phase 2/2+	GTS 03.90	USSD stage 2	Pub Dec 1996	DGTS/SMG-030390Q	SMG#20
	3.90	6.0.0	R97	TS 100 549	USSD stage 2	Pub Jan 1999	DTS/SMG-030390Q6	SMG#27>
?	3.90	7.0.0	R98	TS 100 549	USSD stage 2	Pub	RTS/SMG-030390Q7	SMG#29
	3.91	5.0.2	Phase 2+	GTS 03.91	ECT stage 2	Pub July 1996	RGTS/SMG-030391QR1	SMG#19
	3.91	6.0.0	R97	TS 101 637	ECT stage 2	Pub Apr 1999	DTS/SMG-030391Q6	SMG#27>
Version	3.91	7.0.0	R98	TS 101 637	ECT stage 2	Pub	RTS/SMG-030391Q7	SMG#29
	3.93	6.2.0	R97	TS 101 283	CCBS stage 2	Pub Oct 1998	RTS/SMG-030393Q6R1	SMG#27
?	3.93	7.0.0	R98	TS 101 283	CCBS stage 2	Pub	RTS/SMG-030393Q7	SMG#29
	3.96	6.0.1	R97	TS 101 395	CNAP stage 2	Pub Oct 1998	DTS/SMG-030396Q6	SMG#27
Version	3.96	7.0.0	R98	TS 101 395	CNAP stage 2	Pub	RTS/SMG-030396Q7	SMG#29
?	3.97	7.1.0	R98	TS 101 727	Multi Sub Profile stage 2	Pub aug 1999	DTS/SMG-030397Q	SMG#29
	4.01	4.0.4	Phase 2	ETS 300 550	MS-BSS inter Gen & prcpl	Pub Sep 1994	DE/SMG-030401P	SMG#7
	4.01	5.0.0	Phase 2/2+	GTS 04.01	MS-BSS inter Gen & prcpl	Pub Nov 1996	DGTS/SMG-030401Q	SMG#20
	4.01	6.0.0	R97	TS 100 550	MS-BSS inter Gen & prcpl	Pub Jan 1999	DTS/SMG-030401Q6	SMG#27>
Version	4.01	7.0.0	R98	TS 100 550	MS-BSS inter Gen & prcpl	Pub	RTS/SMG-030401Q7	SMG#29
	4.02	4.0.4	Phase 2	ETS 300 551	PLMN Access ref con	Pub Sep 1994	DE/SMG-030402P	SMG#7
	4.02	5.0.0	Phase 2+	GTS 04.02	PLMN Access ref con	Pub May 1996	DGTS/SMG-030402Q	SMG#18
	4.02	6.0.0	R97	TS 100 551	PLMN Access ref con	Pub Jan 1999	DTS/SMG-030402Q6	SMG#27>
Version	4.02	7.0.0	R98	TS 100 551	PLMN Access ref con	Pub	RTS/SMG-030402Q7	SMG#29
	4.03	4.1.1	Phase 2	ETS 300 552	MS-BSS Interface Ch Acc cap	Pub Sep 1994	DE/SMG-030403P	SMG#10

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	4.03	5.3.0	Phase 2+	GTS 04.03	MS-BSS Interface Ch Acc cap	Unpublished	RGTS/SMG-030403QR1	SMG#24
	4.03	6.0.0	R97	TS 100 552	MS-BSS Interface Ch Acc cap	Pub Aug 1998	DTS/SMG-030403Q6	SMG#25
Version	4.03	7.0.0	R98	TS 100 552	MS-BSS Interface Ch Acc cap	Pub	RTS/SMG-030403Q7	SMG#29
	4.04	4.0.4	Phase 2	ETS 300 553	Layer 1 Gen requirements	Pub Sep 1994	DE/SMG-030404P	SMG#7
	4.04	5.1.0	Phase 2+	ETS 300 936 Ed2	Layer 1 Gen requirements	Unpublished	RE/SMG-030404QR1	SMG#24
	4.04	6.0.0	R97	TS 100 936	Layer 1 Gen requirements	Pub Aug 1998	DTS/SMG-030404Q6	SMG#25
Version	4.04	7.0.0	R98	TS 100 936	Layer 1 Gen requirements	Pub	RTS/SMG-030404Q7	SMG#29
	4.05	4.0.3	Phase 2	ETS 300 554	DL Layer Gen aspects	Pub Sep 1994	DE/SMG-030405P	SMG#7
	4.05	5.0.1	Phase 2/2+	ETS 300 937	DL Layer Gen aspects	Pub Apr 1997	DE/SMG-030405Q	SMG#20
	4.05	6.0.0	R97	EN 300 937	DL Layer Gen aspects	OAP version	DEN/SMG-030405Q6	SMG#27>
Version	4.05	7.0.0	R98	EN 300 937	DL Layer Gen aspects	OAP	REN/SMG-030405Q7	SMG#29
	4.06	4.4.0	Phase 2	ETS 300 555	MS-BSS DL Layer	Pub Sep 1994	DE/SMG-030406P	SMG#11
	4.06	5.3.0	R96	ETS 300 938 Ed4	MS-BSS DL Layer	OAP	RE/SMG-030406QR2	SMG#29
	4.06	6.1.0	R97	EN 300 938	MS-BSS DL Layer	OAP version	REN/SMG-030406Q6R1	SMG#29
Version	4.06	7.0.0	R98	EN 300 938	MS-BSS DL Layer	OAP version	REN/SMG-030406Q7	SMG#29
	4.07	4.3.1	Phase 2	ETS 300 556	Mob Radio int sig L3 Gen	Pub Feb 1995	DE/SMG-030407P	SMG#12
	4.07	5.3.0	Phase 2+	ETS 300 939 Ed3	Mob Radio int sig L3 Gen	Unpublished	RE/SMG-030407QR1	SMG#24
	4.07	6.4.0	R97	TS 100 939	Mob Radio int sig L3 Gen	Pub Aug 1999	RTS/SMG-030407Q6R3	SMG#29
Version	4.07	7.1.0	R98	TS 100 939	Mob Radio int sig L3 Gen	Pub Aug 1999	RTS/SMG-030407Q7	SMG#29
	4.08	3.14.0	Phase 1	I-ETS 300 022-1	Mob Radio Interface L3	Pub Mar 1998	DI/SMG-030408-1R1	SMG#21
	4.08	4.23.0	Phase 2	ETS 300 557 Ed12	Mob Radio Interface L3	OAP version	RE/SMG-030408PRB	SMG#28
	4.08	5.13.0	R96	ETS 300 940 Ed7	Mob Radio Interface L3	OAP version	RE/SMG-030408QR9	SMG#29
	4.08	6.4.2	R97	EN 300 940	Mob Radio Interface L3	OAP version	REN/SMG-030408Q6R2	SMG#29
Version	4.08	7.1.2	R98	EN 300 940	Mob Radio Interface L3	OAP version	REN/SMG-030408Q7	SMG#29
	4.10	4.10.1	Phase 2	ETS 300 558 Ed2	Mob Radio Interface L3 SS	Pub Aug 1996	RE/SMG-030410PR2	SMG#17
	4.10	5.0.1	Phase 2/2+	ETS 300 941	Mob Radio Interface L3 SS	Pub May 1997	DE/SMG-030410Q	SMG#20
	4.10	6.0.1	R97	TS 100 941	Mob Radio Interface L3 SS	Pub July 1998	DTS/SMG-030410Q6	SMG#26
Version	4.10	7.0.1	R98	TS 100 941	Mob Radio Interface L3 SS	Pub July 1999?	RTS/SMG-030410Q7	SMG#29
	4.11	4.10.1	Phase 2	ETS 300 559 Ed4	Mob Radio Int SMS PtP	Pub Sep 1996	RE/SMG-030411PR3	SMG#17
	4.11	5.2.1	Phase 2+	ETS 300 942 Ed2	Mob Radio Int SMS PtP	Pub Sep 1997	RE/SMG-030411QR1	SMG#21
	4.11	6.0.1	R97	TS 100 942	Mob Radio Int SMS PtP	Pub Aug 1998	DTS/SMG-030411Q6	SMG#26
Version	4.11	7.0.0	R98	TS 100 942	Mob Radio Int SMS PtP	Pub	RTS/SMG-030411Q7	SMG#29
	4.12	4.6.0	Phase 2	ETS 300 560 Ed3	Mob Radio Int SMSCB	Pub May 1996	RE/SMG-030412PR2	SMG#16
	4.12	5.0.2	Phase 2+	ETS 300 943	Mob Radio Int SMSCB	Pub Apr 1997	DE/SMG-030412Q	SMG#20
	4.12	6.0.0	R97	EN 300 943	Mob Radio Int SMSCB	OAP version	DEN/SMG-030412Q6	SMG#27>
Version	4.12	7.0.0	R98	EN 300 943	Mob Radio Int SMSCB	OAP	REN/SMG-030412Q7	SMG#29
	4.13	4.2.0	Phase 2	ETS 300 561 Ed3	Perf req on Mob rad inter	Pub May 1996	RE/SMG-030413PR2	SMG#16

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	4.13	5.1.1	Phase 2+	ETS 300 944 Ed2	Perf req on Mob rad inter	Pub Sep 1997	RE/SMG-030413QR	SMG#21
	4.13	6.0.1	R97	EN 300 944	Perf req on Mob rad inter	Pub Jun 1999	DEN/SMG-030413Q6	SMG#27>
Version	4.13	7.0.0	R98	EN 300 944	Perf req on Mob rad inter	OAP	REN/SMG-030413Q7	SMG#29
	4.14	5.1.0	Phase 2+	TS 101 293	Individual MS Test Req	Pub Oct 1998	RTS/SMG-020414QR1	SMG#27
	4.14	6.0.0	Phase 2+	TS 101 293	Individual MS Test Req	Pub Apr 1999	RTS/SMG-020414Q6	SMG#27
NO	4.14	7.0.0	R98	TS 101 293	Individual MS Test Req	Pub	RTS/SMG-020414Q7	SMG#29
	4.18	8.0.0	R99	EN 300 940	Mob Radio i/f L3 RR part	Unpublished	REN/SMG-030408Q8	SMG#29
	4.21	4.6.0	Phase 2	ETS 300 562 Ed3	Rate Adpt MS-BSS	Pub Sep 1995	RE/SMG-040421PR2	SMG#14
	4.21	5.6.1	Phase 2+	ETS 300 945 Ed7	Rate Adpt MS-BSS	Pub Mar 1999	RE/SMG-040421QR5	SMG#27
	4.21	6.0.0	R97	EN 300 945	Rate Adpt MS-BSS	OAP version	DEN/SMG-040421Q6	SMG#27>
Version	4.21	7.0.2	R98	EN 300 945	Rate Adpt MS-BSS	OAP version	REN/SMG-030421Q7	SMG#29
	4.21	8.0.0	R99	EN 300 945	Rate Adpt MS-BSS	Unpublished	REN/SMG-030421Q8	SMG#29
	4.22	4.5.1	Phase 2	ETS 300 563 Ed2	RLP for Data on MS-BSS	Pub Oct 1998	RE/SMG-040422PR1	SMG#25
	4.22	5.5.1	Phase 2+	ETS 300 946 Ed6	RLP for Data on MS-BSS	Pub Mar 1999?	RE/SMG-040422QR5	SMG#25
	4.22	6.1.0	R97	TS 100 946	RLP for Data on MS-BSS	Pub Nov 1998	RTS/SMG-040422Q6R1	SMG#27
Version	4.22	7.0.1	R98	TS 100 946	RLP for Data on MS-BSS	Pub July 1999?	RTS/SMG-030422Q7	SMG#29
NO	4.56	7.1.0	R98	EN 301 406	CTS Radio int Layer 3	Unpublished	DEN/SMG-030456Q7	SMG#29
NO	4.57	7.0.1	R98	EN 301 407	CTS superv sys Layer 3	PE version	DEN/SMG-030457Q7	SMG#28
	4.60	6.4.0	R97	EN 301 349	GPRS RLC/MAC	OAP version	REN/SMG-020460Q6R1	SMG#29
?	4.60	7.0.0	R98	EN 301 349	GPRS RLC/MAC	OAP version	DEN/SMG-020460Q7	SMG#29
	4.60	8.0.0	R99	EN 301 349	GPRS RLC/MAC	Unpublished	DEN/SMG-020460Q8	SMG#29
	4.63	5.0.0	Phase 2+	GTS 04.63	PDS Stage 3	Pub May 1996	DGTS/SMG-030463Q	SMG#18
	4.63	6.0.0	R97	TS 101 638	PDS Stage 3	Pub Apr 1999	DTS/SMG-030463Q6	SMG#27>
?	4.63	7.0.0	R98	TS 101 638	PDS Stage 3	Pub	RTS/SMG-030463Q7	SMG#29
	4.64	5.1.0	Phase 2+	EN 301 xxx	GPRS MS-SGSN LLC	Unpublished	DEN/SMG-030464Q6	SMG#24
	4.64	6.4.0	R97	TS 101 351	GPRS MS-SGSN LLC	Pub Aug 1999	RTS/SMG-030464Q6R3	SMG#29
?	4.64	7.0.0	R98	TS 101 351	GPRS MS-SGSN LLC	Pub Aug 1999	RTS/SMG-030464Q7	SMG#29
	4.64	8.0.0	R99	TS 101 351	GPRS MS-SGSN LLC	Unpublished	RTS/SMG-030464Q8	SMG#29
	4.65	6.4.0	R97	TS 101 297	GPRS MS-SGSN SNDCP	Pub	RTS/SMG-030465Q6R3	SMG#29
?	4.65	7.0.0	R98	TS 101 297	GPRS MS-SGSN SNDCP	Pub	RTS/SMG-030465Q7	SMG#29
	4.67	5.0.1	Phase 2+	ETS 300 947	eMLPP Stage 3	Pub May 1997	DE/SMG-030467Q	SMG#20
	4.67	6.0.0	R97	EN 300 947	eMLPP Stage 3	OAP version	DEN/SMG-030467Q6	SMG#27>
NO	4.67	7.0.0	R98	EN 300 947	eMLPP Stage 3	OAP	REN/SMG-030467Q7	SMG#29
	4.68	5.3.0	R96	ETS 300 948 Ed4	VGCS GCC	OAP version	RE/SMG-030468QR3	SMG#29
	4.68	6.1.0	R97	TS 100 948	VGCS GCC	Pub Aug 1999	RTS/SMG-030468Q6R1	SMG#29

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?	4.68	7.0.0	R98	TS 100 948	VGCS GCC	Pub Aug 1999	RTS/SMG-030468Q7	SMG#29
	4.69	5.3.0	R96	ETS 300 949 Ed4	VBS BCC	OAP version	RE/SMG-030469QR3	SMG#29
	4.69	6.1.0	R97	EN 300 949	VBS BCC	OAP version	REN/SMG-030469Q6R1	SMG#29
?	4.69	7.0.0	R98	EN 300 949	VBS BCC	OAP version	REN/SMG-030469Q7	SMG#29
OK	4.71	7.0.0	R98	TS 101 725	Location Serv LCS Stage 3	Pub Aug 1999	DTS/SMG-030471Q7	SMG#29
?	4.72	7.0.0	R98	TS 101 xxx	Call Deflection Stage 3	Unpublished	DTS/SMG-030472Q	SMG#28
	4.80	4.11.1	Phase 2	ETS 300 564 Ed3	MRI L3 Formats & coding	Pub Aug 1996	RE/SMG-030480PR2	SMG#17
	4.80	5.3.1	R96	ETS 300 950 Ed4	MRI L3 Formats & coding	Pub July 1999	RE/SMG-030480QR3	SMG#28
	4.80	6.1.1	R97	TS 100 950	MRI L3 Formats & coding	Pub Mar 1999	RTS/SMG-030480Q6R1	SMG#28
Version	4.80	7.0.1	R98	TS 100 950	MRI L3 Formats & coding	Pub July 1999?	RTS/SMG-030480Q7	SMG#29
	4.81	4.4.1	Phase 2	ETS 300 565	Line Identity SS stage 3	Pub Feb 1995	DE/SMG-030481P	SMG#12
	4.81	5.0.1	Phase 2/2+	ETS 300 951	Line Identity SS stage 3	Pub May 1997	DE/SMG-030481Q	SMG#20
	4.81	6.0.0	R97	EN 300 951	Line Identity SS stage 3	OAP version	DEN/SMG-030481Q6	SMG#27>
Version	4.81	7.0.0	R98	EN 300 951	Line Identity SS stage 3	OAP	REN/SMG-030481Q7	SMG#29
	4.82	4.9.1	Phase 2	ETS 300 566 Ed2	Call Forwarding SS stg 3	Pub Aug 1996	RE/SMG-030482P	SMG#17
	4.82	5.0.1	Phase 2/2+	ETS 300 952	Call Forwarding SS stg 3	Pub May 1997	DE/SMG-030482Q	SMG#20
	4.82	6.0.0	R97	EN 300 952	Call Forwarding SS stg 3	OAP version	DEN/SMG-030482Q6	SMG#27>
Version	4.82	7.0.1	R98	EN 300 952	Call Forwarding SS stg 3	OAP version	REN/SMG-030482Q7	SMG#29
	4.83	4.6.1	Phase 2	ETS 300 567 Ed2	CW & HOLD SS stg 3	Pub Aug 1996	RE/SMG-030483P	SMG#17
	4.83	5.0.1	Phase 2/2+	ETS 300 953	CW & HOLD SS stg 3	Pub May 1997	DE/SMG-030483Q	SMG#20
	4.83	6.0.0	R97	EN 300 953	CW & HOLD SS stg 3	OAP version	DEN/SMG-030483Q6	SMG#27>
Version	4.83	7.0.0	R98	EN 300 953	CW & HOLD SS stg 3	OAP	REN/SMG-030483Q7	SMG#29
	4.84	4.3.2	Phase 2	ETS 300 568	MultiParty SS stage 3	Pub Feb 1995	DE/SMG-030484P	SMG#9
	4.84	5.0.1	Phase 2/2+	ETS 300 954	MultiParty SS stage 3	Pub May 1997	DE/SMG-030484Q	SMG#20
	4.84	6.0.0	R97	EN 300 954	MultiParty SS stage 3	OAP version	DEN/SMG-030484Q6	SMG#27>
Version	4.84	7.0.0	R98	EN 300 954	MultiParty SS stage 3	OAP	REN/SMG-030484Q7	SMG#29
	4.85	4.1.1	Phase 2	ETS 300 569 Ed2	CUG SS stage 3	Pub Nov 1996	RE/SMG-030485P	SMG#18
	4.85	5.0.0	Phase 2/2+	GTS 04.85	CUG SS stage 3	Pub Dec 1996	DGTS/SMG-030485Q	SMG#20
	4.85	6.0.0	R97	TS 100 569	CUG SS stage 3	Pub Apr 1999	DTS/SMG-030485Q6	SMG#27>
Version	4.85	7.0.0	R98	TS 100 569	CUG SS stage 3	Pub	RTS/SMG-030485Q7	SMG#29
	4.86	4.5.2	Phase 2	ETS 300 570	Advice of Charge SS stg 3	Pub Feb 1995	DE/SMG-030486P	SMG#11
	4.86	5.0.1	Phase 2/2+	ETS 300 955	Advice of Charge SS stg 3	Pub May 1997	DE/SMG-030486Q	SMG#20
	4.86	6.0.0	R97	EN 300 955	Advice of Charge SS stg 3	OAP version	DEN/SMG-030486Q6	SMG#27>
Version	4.86	7.0.0	R98	EN 300 955	Advice of Charge SS stg 3	OAP	REN/SMG-030486Q7	SMG#29
?	4.87	7.0.1	R98	EN 301 711	UUS stage 3	OAP version	DEN/SMG-030487Q7	SMG#29

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	4.88	4.7.1	Phase 2	ETS 300 571 Ed2	Call Barring SS stage 3	Pub Aug 1996	RE/SMG-030488P	SMG#17
	4.88	5.1.1	Phase 2+	ETS 300 956 Ed2	Call Barring SS stage 3	Pub July 1998	RE/SMG-030488QR1	SMG#24
	4.88	6.0.1	R97	TS 100 956	Call Barring SS stage 3	Pub July 1998	DTS/SMG-030488Q6	SMG#26
Version	4.88	7.0.0	R98	TS 100 956	Call Barring SS stage 3	Pub	RTS/SMG-030488Q7	SMG#29
	4.90	4.1.1	Phase 2	ETS 300 572	USSD stage 3	Pub Feb 1995	DE/SMG-030490P	SMG#12
	4.90	5.0.1	Phase 2/2+	ETS 300 957	USSD stage 3	Pub May 1997	DE/SMG-030490Q	SMG#20
	4.90	6.0.0	R97	EN 300 957	USSD stage 3	OAP version	DEN/SMG-030490Q6	SMG#27>
Version	4.90	7.0.0	R98	EN 300 957	USSD stage 3	OAP	REN/SMG-030490Q7	SMG#29
	4.91	5.1.2	Phase 2+	ETS 300 958	ECT stage 3	Pub May 1997	DE/SMG-030491QR	SMG#20
	4.91	6.0.0	R97	EN 300 958	ECT stage 3	OAP version	DEN/SMG-030491Q6	SMG#27>
?	4.91	7.0.0	R98	EN 300 958	ECT stage 3	OAP	REN/SMG-030491Q7	SMG#29
	4.93	6.1.1	R97	TS 101 284	CCBS stage 3	Pub Mar 1999	RTS/SMG-030493Q6R1	SMG#28
?	4.93	7.0.0	R98	TS 101 284	CCBS stage 3	Pub	RTS/SMG-030493Q7	SMG#29
	4.96	6.0.1	R97	TS 101 396	CNAP stage 3	Pub Oct 1998	DTS/SMG-030496Q6	SMG#27
?	4.96	7.0.0	R98	TS 101 396	CNAP stage 3	Pub	RTS/SMG-030496Q7	SMG#29
	5.01	4.6.0	Phase 2	ETS 300 573 Ed4	Physical layer on radio	Pub May 1996	RE/SMG-020501PR3	SMG#16
	5.01	5.4.0	Phase 2+	GTS 05.01	Physical layer on radio	Pub Apr 1998	RGTS/SMG-020501QR3	SMG#25
	5.01	6.1.1	R97	TS 100 573	Physical layer on radio	Pub July 1998	DTS/SMG-020501Q6	SMG#26
Version	5.01	7.0.1	R98	TS 100 573	Physical layer on radio	Pub July 1999?	RTS/SMG-020501Q7	SMG#29
	5.01	8.0.0	R99	TS 100 573	Physical layer on radio	Unpublished	RTS/SMG-020501Q8	SMG#29
	5.02	4.10.1	Phase 2	ETS 300 574 Ed7	Multiplex & Multiplea Acc	Pub Aug 1999	RE/SMG-020502PR6	SMG#28
	5.02	5.8.1	R96	ETS 300 908 Ed6	Multiplex & Multiplea Acc	Pub Aug 1999	RE/SMG-020502QR6	SMG#28
	5.02	6.5.0	R97	EN 300 908	Multiplex & Multiplea Acc	OAP version	REN/SMG-020502Q6R3	SMG#29
Version	5.02	7.1.0	R98	EN 300 908	Multiplex & Multiplea Acc	OAP version	REN/SMG-020502Q7	SMG#29
	5.02	8.0.1	R99	EN 300 908	Multiplex & Multiplea Acc	Unpublished	REN/SMG-020502Q8	SMG#29
	5.03	4.5.1	Phase 2	ETS 300 575 Ed4	Channel Coding	Pub Dec 1997	RE/SMG-020503PR4	SMG#22
	5.03	5.5.1	Phase 2+	ETS 300 909 Ed3	Channel Coding	Pub Oct 1998	RE/SMG-020503QR3	SMG#25
	5.03	6.2.1	R97	EN 300 909	Channel Coding	Pub Aug 1999	REN/SMG-020503Q6R1	SMG#28
Version	5.03	7.1.0	R98	EN 300 909	Channel Coding	OAP version	REN/SMG-020503Q7	SMG#29
	5.03	8.0.0	R99	EN 300 909	Channel Coding	Unpublished	REN/SMG-020503Q8	SMG#29
	5.04	4.0.3	Phase 2	ETS 300 576	Modulation	Pub Sep 1994	DE/SMG-020504P	SMG#7
	5.04	5.0.1	Phase 2/2+	ETS 300 959	Modulation	Pub May 1997	DE/SMG-020504Q	SMG#20
	5.04	6.0.1	R97	EN 300 959	Modulation	Pub Mar 1999?	DEN/SMG-020504Q6	SMG#27
Version	5.04	7.0.0	R98	EN 300 959	Modulation	OAP	REN/SMG-020504Q7	SMG#29
	5.04	8.0.0	R99	EN 300 959	Modulation	Unpublished	REN/SMG-020504Q8	SMG#28
	5.05	4.23.0	Phase 2	ETS 300 577 Ed15	Radio Tx and RX	OAP version	RE/SMG-020505PRE	SMG#29
	5.05	5.11.0	R96	ETS 300 910 Ed8	Radio Tx and RX	OAP version	RE/SMG-020505QR9	SMG#29

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	5.05	6.5.0	R97	EN 300 910	Radio Tx and RX	OAP version	REN/SMG-020505Q6R3	SMG#29
Version	5.05	7.1.0	R98	EN 300 910	Radio Tx and RX	OAP version	REN/SMG-020505Q7	SMG#29
	5.05	8.0.0	R99	EN 300 910	Radio Tx and RX	Unpublished	REN/SMG-020505Q8	SMG#29
	5.08	4.22.1	Phase 2	ETS 300 578 Ed13	Radio subsystem link Cntrl	Pub Mar 1999?	RE/SMG-020508PRC	SMG#27
	5.08	5.9.1	Phase 2+	ETS 300 911 Ed7	Radio subsystem link Cntrl	Pub Mar 1999?	RE/SMG-020508QR7	SMG#27
	5.08	6.5.0	R97	EN 300 911	Radio subsystem link Cntrl	OAP version	REN/SMG-020508Q6R4	SMG#29
Version	5.08	7.1.0	R98	EN 300 911	Radio subsystem link Cntrl	OAP version	REN/SMG-020508Q7	SMG#29
	5.08	8.0.0	R99	EN 300 911	Radio subsystem link Cntrl	Unpublished	REN/SMG-020508Q8	SMG#29
?	5.09	7.0.1	R98	EN 301 709	Link adaptation	OAP version	DEN/SMG-020509Q7	SMG#29
	5.10	4.9.0	Phase 2	ETS 300 579 Ed6	Radio subsystem sync	Pub Nov 1996	RE/SMG-020510PR5	SMG#18
	5.10	5.2.2	R96	ETS 300 912 Ed2	Radio subsystem sync	Pub Aug 1999	RE/SMG-020510QR1	SMG#28
	5.10	6.5.0	R97	EN 300 912	Radio subsystem sync	OAP version	REN/SMG-020510Q6R3	SMG#29
Version	5.10	7.1.0	R98	EN 300 912	Radio subsystem sync	OAP version	REN/SMG-020510Q7	SMG#29
	5.22	4.0.0	Phase 2	ETR 284	RL man in hierarch Nets	Pub May 1996	DTR/SMG-020522P	SMG#18
??	5.22	5.0.0	Phase 2/2+	ETR 355	RL man in hierarch Nets	Pub Nov 1996	DTR/SMG-020522Q	SMG#20
	5.50	4.2.0	Phase 2	TR	Background RF	Unpublished	DTR/SMG	SMG#17
	5.50	5.1.1	Phase 2+	TR 101 115	Background RF	Pub Nov 1997	DTR/SMG-020550Q	SMG#23
	5.50	6.0.2	R97	TR 101 115	Background RF	Pub July 1998	RTR/SMG-020550Q6	SMG#26
?	5.50	7.1.0	R98	TR 101 115	Background RF	Pub July 1999?	RTR/SMG-020550Q7	SMG#29
NO	5.56	7.1.0	R98	EN 301 408	CTS-FP Radio Sub system	Unpublished	DEN/SMG-020556Q7	SMG#29
	5.90	4.3.0	Phase 2	ETR 108 Am 1	EMC Considerations	Pub Aug 1995	RTR/SMG-000590P	SMG#15
??	5.90	5.0.0	Phase 2/2+	ETR 357	EMC Considerations	Unpublished	DTR/SMG-000590Q	SMG#20
	6.01	4.0.7	Phase 2	ETS 300 580-1 Ed2	FR speech proc descript	Pub Mar 1998	RE/SMG-110601PR1	SMG#23
	6.01	5.1.1	Phase 2+	ETS 300 960 Ed2	FR speech proc descript	Pub Mar 1998	RE/SMG-110601QR1	SMG#23
	6.01	6.0.1	R97	EN 300 960	FR speech proc descript	Pub Jun 1999	DEN/SMG-110601Q6	SMG#27>
Version	6.01	7.0.1	R98	EN 300 960	FR speech proc descript	OAP version	REN/SMG-110601Q7	SMG#29
	6.02	4.0.2	Phase 2	ETS 300 581-1	HR speech proc descript	Pub Nov 1995	DE/SMG-020602	SMG#13
	6.02	5.0.1	Phase 2/2+	ETS 300 966	HR speech proc descript	Pub May 1997	DE/SMG-110602Q	SMG#20
	6.02	6.0.1	R97	EN 300 966	HR speech proc descript	Pub Jun 1999	DEN/SMG-110602Q6	SMG#27>
Version	6.02	7.0.1	R98	EN 300 966	HR speech proc descript	OAP version	REN/SMG-110602Q7	SMG#29
	6.06	4.2.1	Phase 2	ETS 300 581-7 Ed2	HR C-source code	Pub Mar 1998	RE/SMG-110606PR1	SMG#23
	6.06	5.1.1	Phase 2+	ETS 300 967 Ed2	HR C-source code	Pub Mar 1998	RE/SMG-110606QR1	SMG#23
	6.06	6.0.1	R97	EN 300 967	HR C-source code	Pub Jun 1999	DEN/SMG-110606Q6	SMG#27>
?	6.06	7.0.0	R98	EN 300 967	HR C-source code	OAP	REN/SMG-110606Q7	SMG#29
	6.07	4.2.1	Phase 2	ETS 300 581-8 Ed2	HR Test sequences	Pub Apr 1998	RE/SMG-110607PR1	SMG#23
	6.07	5.2.1	Phase 2+	ETS 300 968 Ed2	HR Test sequences	Pub Apr 1998	RE/SMG-110607QR1	SMG#23

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	6.07	6.0.1	R97	EN 300 968	HR Test sequences	Pub Jun 1999	DEN/SMG-110607Q6	SMG#27>
NO	6.07	7.0.0	R98	EN 300 968	HR Test sequences	OAP	REN/SMG-110607Q7	SMG#29
	6.08	4.0.0	Phase 2	ETR 229	HR performan character	Pub Oct 1995	DTR/SMG-020608P	SMG#16
	6.08	5.0.0	Phase 2/2+	ETR 358	HR performan character	Pub Dec 1996	DTR/SMG-110608Q	SMG#20
	6.08	6.0.0	R97	TR 101 641	HR performan character	Pub Jan 1999	DTR/SMG-110608Q6	SMG#27>
?	6.08	7.0.0	R98	TR 101 641	HR performan character	Pub	RTR/SMG-110608Q7	SMG#29
	6.10	4.1.1	Phase 2	ETS 300 580-2 Ed2	FR speech transcoding	Pub Mar 1998	RE/SMG-110610PR1	SMG#23
	6.10	5.1.1	Phase 2+	ETS 300 961 Ed2	FR speech transcoding	Pub May 1998	RE/SMG-110610QR1	SMG#23
	6.10	6.0.1	R97	EN 300 961	FR speech transcoding	Pub Jun 1999	DEN/SMG-110610Q6	SMG#27>
Version	6.10	7.0.1	R98	EN 300 961	FR speech transcoding	OAP version	REN/SMG-110610Q7	SMG#29
	6.11	4.0.6	Phase 2	ETS 300 580-3 Ed2	FR substitution & muting	Pub Mar 1998	RE/SMG-110611PR1	SMG#23
	6.11	5.0.1	Phase 2/2+	ETS 300 962	FR substitution & muting	Pub May 1997	DE/SMG-110611Q	SMG#20
	6.11	6.0.1	R97	EN 300 962	FR substitution & muting	Pub Jun 1999	DEN/SMG-110611Q6	SMG#27>
OK	6.11	7.0.0	R98	EN 300 962	FR substitution & muting	OAP version	REN/SMG-110611Q7	SMG#29
	6.12	4.0.4	Phase 2	ETS 300 580-4	FR comfort noise	Pub Sep 1994	DE/SMG-020612P	SMG#7
	6.12	5.0.1	Phase 2/2+	ETS 300 963	FR comfort noise	Pub May 1997	DE/SMG-110612Q	SMG#20
	6.12	6.0.1	R97	EN 300 963	FR comfort noise	Pub Jun 1999	DEN/SMG-110612Q6	SMG#27>
Version	6.12	7.0.0	R98	EN 300 963	FR comfort noise	OAP	REN/SMG-110612Q6	SMG#29
	6.20	4.3.1	Phase 2	ETS 300 581-2 Ed2	HR speech transcoding	Pub May 1998	RE/SMG-110620PR1	SMG#17
	6.20	5.1.1	Phase 2+	ETS 300 969 Ed2	HR speech transcoding	Pub May 1998	RE/SMG-110620QR1	SMG#22
	6.20	6.0.1	R97	EN 300 969	HR speech transcoding	Pub Jun 1999	DEN/SMG-110620Q6	SMG#27>
?	6.20	7.0.0	R98	EN 300 969	HR speech transcoding	OAP	REN/SMG-110620Q7	SMG#29
	6.21	4.0.2	Phase 2	ETS 300 581-3	HR substitution & muting	Pub Nov 1995	DE/SMG-020621	SMG#15
	6.21	5.0.1	Phase 2/2+	ETS 300 970	HR substitution & muting	Pub May 1997	DE/SMG-110621Q	SMG#20
	6.21	6.0.1	R97	EN 300 970	HR substitution & muting	Pub Jun 1999	DEN/SMG-110621Q6	SMG#27>
?	6.21	7.0.0	R98	EN 300 970	HR substitution & muting	OAP	REN/SMG-110621Q7	SMG#29
	6.22	4.1.1	Phase 2	ETS 300 581-4	HR comfort noise	Pub Nov 1995	DE/SMG-020622	SMG#15
	6.22	5.1.0	Phase 2/2+	ETS 300 971	HR comfort noise	Pub May 1997	DE/SMG-110622Q	SMG#20
	6.22	6.0.1	R97	EN 300 971	HR comfort noise	Pub Jun 1999	DEN/SMG-110622Q6	SMG#27>
?	6.22	7.0.0	R98	EN 300 971	HR comfort noise	OAP	REN/SMG-110622Q7	SMG#29
	6.31	4.0.5	Phase 2	ETS 300 580-5	FR DTX	Unpublished	DE/SMG-020631P	SMG#7
	6.31	5.0.1	Phase 2/2+	ETS 300 964	FR DTX	Pub May 1997	DE/SMG-110631Q	SMG#20
	6.31	6.0.1	R97	EN 300 964	FR DTX	Pub Jun 1999	DEN/SMG-110631Q6	SMG#27>
Version	6.31	7.0.0	R98	EN 300 964	FR DTX	OAP	REN/SMG-110631Q7	SMG#29
	6.32	4.3.1	Phase 2	ETS 300 580-6 Ed4	Voice Activity Detector	Pub Apr 1998	RE/SMG-110632PR3	SMG#23
	6.32	5.0.3	Phase 2+	ETS 300 965 Ed2	Voice Activity Detector	Pub Apr 1998	RE/SMG-110632QR1	SMG#23
	6.32	6.0.1	R97	EN 300 965	Voice Activity Detector	Pub Jun 1999	DEN/SMG-110632Q6	SMG#27>

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Version	6.32	7.0.0	R98	EN 300 965	Voice Activity Detector	OAP	REN/SMG-110632Q7	SMG#29
	6.41	4.0.2	Phase 2	ETS 300 581-5	HR DTX	Pub Nov 1995	DE/SMG-020641	SMG#13
	6.41	5.1.1	Phase 2+	ETS 300 972 Ed 2	HR DTX	Pub Mar 1998	RE/SMG-110641QR1	SMG#23
	6.41	6.0.1	R97	EN 300 972	HR DTX	Pub Jun 1999	DEN/SMG-110641Q6	SMG#27>
?	6.41	7.0.0	R98	EN 300 972	HR DTX	OAP	REN/SMG-110641Q7	SMG#29
	6.42	4.1.1	Phase 2	ETS 300 581-6	HR Voice Activity Detector	Pub Nov 1995	DE/SMG-020642	SMG#15
	6.42	5.0.1	Phase 2/2+	ETS 300 973	HR Voice Activity Detector	Pub May 1997	DE/SMG-110642Q	SMG#20
	6.42	6.0.1	R97	EN 300 973	HR Voice Activity Detector	Pub Jun 1999	DEN/SMG-110642Q6	SMG#27>
?	6.42	7.0.0	R98	EN 300 973	HR Voice Activity Detector	OAP	REN/SMG-110642Q7	SMG#29
	6.51	4.0.1	Phase 2	EN 301 243	EFR speech proc descript	Pub Dec 1997	DEN/SMG-110651P	SMG#22
	6.51	5.1.2	Phase 2/2+	ETS 300 723	EFR speech proc descript	Pub Mar 1997	DE/SMG-020651	SMG#20
	6.51	6.0.1	R97	EN 300 723	EFR speech proc descript	Pub Jun 1999	DEN/SMG-020651Q6	SMG#27>
Version	6.51	7.0.1	R98	EN 300 723	EFR speech proc descript	OAP version	REN/SMG-020651Q7	SMG#29
	6.53	4.0.1	Phase 2	EN 301 244	EFR C-source code	Pub Jan 1998	DEN/SMG-110653P	SMG#23
	6.53	5.1.3	Phase 2+	ETS 300 724	EFR C-source code	Unpublished	RE/SMG-020653QR1	SMG#20
	6.53	6.0.1	R97	EN 300 724	EFR C-source code	Pub Jun 1999	DEN/SMG-020653Q6	SMG#27>
?	6.53	7.0.0	R98	EN 300 724	EFR C-source code	OAP	REN/SMG-020653Q7	SMG#29
	6.54	4.0.1	Phase 2	EN 301 250	EFR Test sequences	Pub Sep 1998	DEN/SMG-110654P	SMG#23
	6.54	5.1.1	Phase 2+	ETS 300 725	EFR Test sequences	Pub Feb 1998	DE/SMG-110654Q	SMG#23
	6.54	6.0.0	R97	EN 300 725	EFR Test sequences	OAP version	DEN/SMG-110654Q6	SMG#27>
NO	6.54	7.0.0	R98	EN 300 725	EFR Test sequences	OAP	REN/SMG-110654Q7	SMG#29
	6.55	4.0.0	Phase 2	TR 101 085	EFR performan character	Pub July 1997	DTR/SMG-110655P	SMG#22
	6.55	5.0.0	Phase 2/2+	ETR 305	EFR performan character	Pub Aug 1996	DTR/SMG-020655	SMG#19
	6.55	6.0.0	R97	TR 101 085	EFR performan character	Pub Jan 1999	DTR/SMG-020655Q6	SMG#27>
?	6.55	7.0.0	R98	TR 101 085	EFR performan character	Pub	RTR/SMG-020655Q7	SMG#29
	6.60	4.1.0	Phase 2	EN 301 245	EFR speech transcoding	OAP version	REN/SMG-110660PR1	SMG#25
	6.60	5.2.1	Phase 2+	ETS 300 726 Ed2	EFR speech transcoding	Pub July 1999	RE/SMG-110660QR1	SMG#25
Version	6.60	7.0.1	R98	EN 300 726	EFR speech transcoding	OAP version	REN/SMG-020660Q7	SMG#29
	6.61	4.0.1	Phase 2	EN 301 246	EFR substitute & muting	Pub Dec 1997	DEN/SMG-110661P	SMG#22
	6.61	5.1.2	Phase 2/2+	ETS 300 727	EFR substitute & muting	Pub Apr 1997	DE/SMG-020661	SMG#20
	6.61	6.0.1	R97	EN 300 727	EFR substitute & muting	Pub Jun 1999	DEN/SMG-020661Q6	SMG#27>
Version	6.61	7.0.0	R98	EN 300 727	EFR substitute & muting	OAP	REN/SMG-020661Q7	SMG#29
	6.62	4.0.1	Phase 2	EN 301 247	EFR comfort noise	Pub Dec 1997	DEN/SMG-110662P	SMG#22
	6.62	5.1.3	Phase 2/2+	ETS 300 728	EFR comfort noise	Unpublished	DE/SMG-020662	SMG#23
	6.62	6.0.1	R97	EN 300 728	EFR comfort noise	Pub Jun 1999	DEN/SMG-020662Q6	SMG#27>
Version	6.62	7.0.0	R98	EN 300 728	EFR comfort noise	OAP	REN/SMG-020662Q7	SMG#29

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?	6.71	7.0.1	R98	EN 301 703	AMR speech proc descript	OAP version	DEN/SMG-110671Q7	SMG#29
?	6.73	7.1.0	R98	EN 301 712	AMR C-source code	OAP version	DEN/SMG-110673Q7	SMG#29
	6.81	4.0.1	Phase 2	EN 301 248	EFR DTX	Pub Dec 1997	DEN/SMG-110681P	SMG#22
	6.81	5.1.2	Phase 2/2+	ETS 300 729	EFR DTX	Pub Mar 1997	DE/SMG-020681	SMG#20
	6.81	6.0.1	R97	EN 300 729	EFR DTX	Pub Jun 1999	DEN/SMG-020681Q6	SMG#27>
Version	6.81	7.0.0	R98	EN 300 729	EFR DTX	OAP	REN/SMG-020681Q7	SMG#29
	6.82	4.0.1	Phase 2	EN 301 249	EFR Voice Activity Detector	Pub Dec 1997	DEN/SMG-110682P	SMG#22
	6.82	5.0.3	Phase 2/2+	ETS 300 730	EFR Voice Activity Detector	Pub Mar 1997	DE/SMG-020682	SMG#20
	6.82	6.0.1	R97	EN 300 730	EFR Voice Activity Detector	Pub Jun 1999	DEN/SMG-020682Q6	SMG#27>
Version	6.82	7.0.0	R98	EN 300 730	EFR Voice Activity Detector	OAP	REN/SMG-020682Q7	SMG#29
	6.85	5.0.0	Phase 2+	TR 101 294	FR/HR/EFR speech interop	Pub July 1998	DTR/SMG-110685Q	SMG#26
	6.85	6.0.0	R97	TR 101 294	FR/HR/EFR speech interop	Pub Jan 1999	DTR/SMG-110685Q6	SMG#27
?	6.85	7.0.0	R98	TR 101 294	FR/HR/EFR speech interop	OAP	RTR/SMG-110685Q7	SMG#29
?	6.90	7.1.0	R98	EN 301 704	AMR speech transcoding	OAP version	DEN/SMG-110690Q7	SMG#29
?	6.91	7.0.1	R98	EN 301 705	AMR substitute & muting	OAP version	DEN/SMG-110691Q7	SMG#29
?	6.92	7.1.0	R98	EN 301 706	AMR comfort noise	OAP version	DEN/SMG-110692Q7	SMG#29
?	6.93	7.1.0	R98	EN 301 707	AMR DTX	OAP version	DEN/SMG-110693Q7	SMG#29
?	6.94	7.1.0	R98	EN 301 708	AMR Voice Activity Detector	OAP version	DEN/SMG-110694Q7	SMG#29
	7.01	4.10.0	Phase 2	ETS 300 582 Ed4	TAF for MSs	Pub May 1996	RE/SMG-040701PR3	SMG#16
	7.01	5.9.1	R96	ETS 300 913 Ed7	TAF for MSs	Pub July 1999	RE/SMG-040701QR9	SMG#28
	7.01	6.1.0	R97	TS 100 913	TAF for MSs	Pub Aug 1999	RTS/SMG-030701Q6R1	SMG#29
Version	7.01	7.1.1	R98	TS 100 913	TAF for MSs	Pub July 1999?	RTS/SMG-030701Q7	SMG#29
	7.02	4.5.1	Phase 2	ETS 300 583	TAF using Async	Pub Oct 1994	DE/SMG-040702P	SMG#11
	7.02	5.5.1	Phase 2+	ETS 300 914 Ed5	TAF using Async	Pub July 1998	RE/SMG-040702QR4	SMG#24
	7.02	6.0.0	R97	TS 100 914	TAF using Async	Pub July 1998	DTS/SMG-040702Q6	SMG#26
Version	7.02	7.0.1	R98	TS 100 914	TAF using Async	Pub July 1999?	RTS/SMG-030702Q7	SMG#29
	7.03	4.5.1	Phase 2	ETS 300 584	TAF using sync	Pub Sep 1994	DE/SMG-040703P	SMG#9
	7.03	5.4.1	Phase 2+	ETS 300 915 Ed5	TAF using sync	Pub July 1998	RE/SMG-040703QR4	SMG#24
	7.03	6.0.0	R97	TS 100 915	TAF using sync	Pub July 1998	DTS/SMG-040703Q6	SMG#26
Version	7.03	7.0.0	R98	TS 100 915	TAF using sync	Pub	RTS/SMG-030703Q7	SMG#29
	7.05	4.8.1	Phase 2	ETS 300 585 Ed5	DTE-DCE Interface for SMS	Pub Apr 1997	RE/SMG-040705PR5	SMG#20
	7.05	5.5.0	Phase 2+	GTS 07.05	DTE-DCE Interface for SMS	Pub Jan 1998	RGTS/SMG-040705QR3	SMG#24
	7.05	6.0.0	R97	TS 100 585	DTE-DCE Interface for SMS	Pub Apr 1999	DTS/SMG-040705Q6	SMG#27>
Version	7.05	7.0.1	R98	TS 100 585	DTE-DCE Interface for SMS	Pub July 1999?	RTS/SMG-030705Q7	SMG#29

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OK	7.06	4.2.0	Phase 2	ETS 300 586 Ed2	DTE-DCE Int MS for MT config	Pub July 1995	RE/SMG-040706P	SMG#13
	7.07	4.4.1	Phase 2	ETS 300 642 Ed4	AT command set for Mes	Pub Mar 1999?	RE/SMG-040707PR3	SMG#27
	7.07	5.9.0	R96	ETS 300 916 Ed8	AT command set for Mes	OAP version	RE/SMG-040707QR7	SMG#29
	7.07	6.3.0	R97	TS 100 916	AT command set for Mes	Pub July 1999?	RTS/SMG-040707Q6R2	SMG#29
Version	7.07	7.3.0	R98	TS 100 916	AT command set for Mes	Pub July 1999?	RTS/SMG-040707Q7	SMG#29
??	7.08	5.2.1	Phase 2+	ETS 300 917	GSM API	Pub May 1998	DE/SMG-040708Q	SMG#24
	7.10	6.3.0	R97	TS 101 369	Multiplexing protocol	Pub Mar 1999	RTS/SMG-040710Q6R2	SMG#28
?	7.10	7.0.0	R98	TS 101 369	Multiplexing protocol	Pub July 1999?	RTS/SMG-040710Q7	SMG#29
	7.60	5.1.0	Phase 2+	TS 101 356	GPRS MS	Unpublished	DTS/SMG-040760Q6	SMG#24
	7.60	6.3.0	R97	TS 101 356	GPRS MS	Pub July 1999?	RTS/SMG-030760Q6R2	SMG#29
?	7.60	7.0.0	R98	TS 101 356	GPRS MS	Pub July 1999?	RTS/SMG-030760Q7	SMG#29
	8.01	4.0.3	Phase 2	ETS 300 587-1	BSS-MSC Inter General	Pub Sep 1994	DE/SMG-030801P	SMG#7
	8.01	5.0.0	Phase 2/2+	GTS 08.01	BSS-MSC Inter General	Pub Nov 1996	DGTS/SMG-030801Q	SMG#20
	8.01	6.0.0	R97	TS 100 587	BSS-MSC Inter General	Pub Apr 1999	DTS/SMG-030801Q6	SMG#27>
Version	8.01	7.0.0	R98	TS 100 587	BSS-MSC Inter General	Pub	RTS/SMG-030801Q7	SMG#29
	8.02	4.2.0	Phase 2	ETS 300 587-2 Ed2	BSS-MSC Iner Principles	Pub July 1995	RE/SMG-030802P	SMG#13
	8.02	5.1.0	Phase 2+	GTS 08.02	BSS-MSC Iner Principles	Pub Apr 1997	RGTS/SMG-030802QR1	SMG#21
	8.02	6.0.0	R97	TS 101 642	BSS-MSC Iner Principles	Pub Apr 1999	DTS/SMG-030802Q6	SMG#27>
Version	8.02	7.0.0	R98	TS 101 642	BSS-MSC Iner Principles	Pub	RTS/SMG-030802Q7	SMG#29
	8.04	4.0.3	Phase 2	ETS 300 588	BSS-MSC Interface L1	Pub Sep 1994	DE/SMG-030804P	SMG#7
	8.04	5.0.0	Phase 2/2+	GTS 08.04	BSS-MSC Interface L1	Pub Dec 1996	DGTS/SMG-030804Q	SMG#20
	8.04	6.0.0	R97	TS 100 588	BSS-MSC Interface L1	Pub Apr 1999	DTS/SMG-030804Q6	SMG#27>
Version	8.04	7.0.1	R98	TS 100 588	BSS-MSC Interface L1	Pub July 1999?	RTS/SMG-030804Q7	SMG#29
	8.06	4.5.0	Phase 2	ETS 300 589 Ed2	Sig trans BSS-MSC Inter	Pub July 1995	RE/SMG-030806P	SMG#13
	8.06	5.3.0	R96	GTS 08.06	Sig trans BSS-MSC Inter	Pub Feb 1999	RGTS/SMG-030806QR2	SMG#28
	8.06	6.1.0	R97	TS 100 589	Sig trans BSS-MSC Inter	Pub	RTS/SMG-030806Q6R1	SMG#29
Version	8.06	7.0.1	R98	TS 100 589	Sig trans BSS-MSC Inter	Pub July 1999?	RTS/SMG-030806Q7	SMG#29
	8.08	4.12.1	Phase 2	ETS 300 590 Ed6	MSC-BSS Interface L3	Pub Oct 1998	RE/SMG-030808PR5	SMG#23
	8.08	5.11.0	R96	GTS 08.08	MSC-BSS Interface L3	Pub July 1999?	RGTS/SMG-030808QR8	SMG#29
	8.08	6.4.0	R97	TS 100 590	MSC-BSS Interface L3	Pub July 1999?	RTS/SMG-030808Q6R3	SMG#29
Version	8.08	7.2.0	R98	TS 100 590	MSC-BSS Interface L3	Pub July 1999?	RTS/SMG-030808Q7	SMG#29
	8.08	8.0.0	R99	TS 100 590	MSC-BSS Interface L3	Unpublished	RTS/SMG-030808Q8	SMG#29
	8.14	6.0.0	R97	TS 101 298	GPRS BSSGP L1	Pub July 1998	DTS/SMG-020814Q6	SMG#26
OK	8.14	7.0.1	R98	TS 101 298	GPRS BSSGP L1	Pub aug 1999	RTS/SMG-020814Q7	SMG#29
	8.16	6.3.0	R97	TS 101 299	GPRS BSSGP L2	Pub July 1999	RTS/SMG-020816Q6R2	SMG#29
Version	8.16	7.1.0	R98	TS 101 299	GPRS BSSGP L2	Pub July 1999	RTS/SMG-020816Q7	SMG#29

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	8.18	6.4.0	R97	TS 101 343	GPRS BSSGP L3	Pub July 1999	RTS/SMG-020818Q6R3	SMG#29
Version	8.18	7.0.0	R98	TS 101 343	GPRS BSSGP L3	Pub July 1999	RTS/SMG-020818Q7	SMG#29
	8.20	4.2.3	Phase 2	ETS 300 591 Ed2	Rate Adpt BSS-MSC Int	Pub July 1995	RE/SMG-040820P	SMG#13
	8.20	5.3.0	Phase 2+	GTS 08.20	Rate Adpt BSS-MSC Int	Pub Jan 1998	RGTS/SMG-030820QR2	SMG#24
	8.20	6.0.0	R97	TS 100 591	Rate Adpt BSS-MSC Int	Pub Apr 1999	DTS/SMG-030820Q6	SMG#27>
Version	8.20	7.0.1	R98	TS 100 591	Rate Adpt BSS-MSC Int	Pub July 1999?	RTS/SMG-030820Q7	SMG#29
	8.51	4.1.0	Phase 2	ETS 300 592 Ed2	BSC-BTS Inter General	Pub July 1995	RE/SMG-030851P	SMG#13
	8.51	5.0.0	Phase 2/2+	GTS 08.51	BSC-BTS Inter General	Pub Dec 1996	DGTS/SMG-030851Q	SMG#20
	8.51	6.0.0	R97	TS 100 592	BSC-BTS Inter General	Pub Apr 1999	DTS/SMG-030851Q6	SMG#27>
?	8.51	7.0.0	R98	TS 100 592	BSC-BTS Inter General	Pub	RTS/SMG-030851Q7	SMG#29
	8.52	4.2.0	Phase 2	ETS 300 593 Ed3	BSC-BTS Inter Principles	Pub Jan 1996	RE/SMG-030852PR2	SMG#15
	8.52	5.0.0	Phase 2/2+	GTS 08.52	BSC-BTS Inter Principles	Pub Dec 1996	DGTS/SMG-030852Q	SMG#20
	8.52	6.0.0	R97	TS 100 593	BSC-BTS Inter Principles	Pub Apr 1999	DTS/SMG-030852Q6	SMG#27>
?	8.52	7.0.0	R98	TS 100 593	BSC-BTS Inter Principles	Pub	RTS/SMG-030852Q7	SMG#29
	8.54	4.1.0	Phase 2	ETS 300 594 Ed2	BSC-BTS Interface L1	Pub July 1995	RE/SMG-030854P	SMG#13
	8.54	5.0.0	Phase 2+	GTS 08.54	BSC-BTS Interface L1	Pub Jan 1996	DGTS/SMG-030854Q	SMG#16
	8.54	6.0.0	R97	TS 100 594	BSC-BTS Interface L1	Pub Apr 1999	DTS/SMG-030854Q6	SMG#27>
?	8.54	7.0.0	R98	TS 100 594	BSC-BTS Interface L1	Pub	RTS/SMG-030854Q7	SMG#29
	8.56	4.0.2	Phase 2	ETS 300 595	BSC-BTS Interface L2	Pub Sep 1994	DE/SMG-030856P	SMG#8
	8.56	5.0.0	Phase 2/2+	GTS 08.56	BSC-BTS Interface L2	Pub Dec 1996	DGTS/SMG-030856Q	SMG#20
	8.56	6.0.0	R97	TS 100 595	BSC-BTS Interface L2	Pub Apr 1999	DTS/SMG-030856Q6	SMG#27>
?	8.56	7.0.0	R98	TS 100 595	BSC-BTS Interface L2	Pub	RTS/SMG-030856Q7	SMG#29
	8.58	4.9.0	Phase 2	ETS 300 596 Ed4	BSC-BTS Interface L3	Pub May 1996	RE/SMG-030858PR3	SMG#16
	8.58	5.9.0	R96	GTS 08.58	BSC-BTS Interface L3	Pub July 1999?	RGTS/SMG-030858QR6	SMG#29
	8.58	6.2.0	R97	TS 100 596	BSC-BTS Interface L3	Pub July 1999?	RTS/SMG-030858Q6R2	SMG#29
Version	8.58	7.1.0	R98	TS 100 596	BSC-BTS Interface L3	Pub July 1999?	RTS/SMG-030858Q7	SMG#29
	8.58	8.0.0	R99	TS 100 596	BSC-BTS Interface L3	Unpublished	RTS/SMG-030858Q8	SMG#29
	8.60	4.4.1	Phase 2	ETS 300 597 Ed3	Inbnd cntl Tcoder & RA	Pub Mar 1998	RE/SMG-020860PR1	SMG#23
	8.60	5.1.1	Phase 2+	ETS 300 737 Ed2	Inbnd cntl Tcoder & RA	Pub Feb 1998	RE/SMG-020860QR1	SMG#22
	8.60	6.0.0	R97	EN 300 737	Inbnd cntl Tcoder & RA	OAP version	DEN/SMG-020860Q6	SMG#27>
?	8.60	7.0.0	R98	EN 300 737	Inbnd cntl Tcoder & RA	OAP	REN/SMG-020860Q7	SMG#29
	8.61	4.0.2	Phase 2	ETS 300 598	HR lbd cntl Tcoder & RA	Pub Nov 1995	DE/SMG-030861P	SMG#13
	8.61	5.0.1	Phase 2/2+	ETS 300 979	HR lbd cntl Tcoder & RA	Pub May 1997	DE/SMG-020861Q	SMG#20
	8.61	6.0.0	R97	EN 300 979	HR lbd cntl Tcoder & RA	OAP version	DEN/SMG-020861Q6	SMG#27>
?	8.61	7.0.0	R98	EN 300 979	HR lbd cntl Tcoder & RA	OAP	REN/SMG-020861Q7	SMG#29
?	8.62	7.0.1	R98	TS 101 xxx	Inband TFO Stage 3	Pub	DTS/SMG-110862Q7	SMG#29

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OK	8.71	7.0.0	R98	TS 101 xxx	LCS SMLC-BSS intface L 3	Pub Aug 1999	DTS/SMG-030871Q7	SMG#29
	9.01	4.0.0	Phase 2	ETR 109	Gen Net IW scenarios	Pub Oct 1993	DTR/SMG-030901P	SMG#9
	9.01	5.0.0	Phase 2/2+	ETR 359	Gen Net IW scenarios	Pub Dec 1996	DTR/SMG-030901Q	SMG#20
	9.01	6.0.0	R97	TR 101 643	Gen Net IW scenarios	Pub Apr 1999	DTR/SMG-030901Q6	SMG#27>
?	9.01	7.0.0	R98	TR 101 643	Gen Net IW scenarios	Pub	RTR/SMG-030901Q7	SMG#29
	9.02	4.18.0	Phase 2	ETS 300 599 Ed8	MAP	Unpublished	RE/SMG-030902PR8	SMG#23
	9.02	5.13.0	R96	ETS 300 974 Ed9	MAP	OAP version	RE/SMG-030902QR8	SMG#29
	9.02	6.4.0	R97	TS 100 974	MAP	Pub Aug 1999	RTS/SMG-030902Q6R3	SMG#29
OK	9.02	7.1.0	R98	TS 100 974	MAP	Pub Aug 1999	RTS/SMG-030902Q7	SMG#29
	9.03	4.0.3	Phase 2	ETS 300 600	Sig IW-ISDN,PSTN,PLMN	Pub Feb 1995	DE/SMG-030903P	SMG#9
	9.03	5.0.0	Phase 2/2+	GTS 09.03	Sig IW-ISDN,PSTN,PLMN	Pub Dec 1996	DGTS/SMG-030903Q	SMG#20
	9.03	6.0.0	R97	TS 100 600	Sig IW-ISDN,PSTN,PLMN	Pub Apr 1999	DTS/SMG-030903Q6	SMG#27>
?	9.03	7.0.0	R98	TS 100 600	Sig IW-ISDN,PSTN,PLMN	Pub	RTS/SMG-030903Q7	SMG#29
	9.04	4.0.2	Phase 2	ETS 300 601	IW PLMN-CSPDN	Pub Sep 1994	DE/SMG-040904P	SMG#9
	9.04	5.0.0	Phase 2/2+	GTS 09.04	IW PLMN-CSPDN	Pub Dec 1996	DGTS/SMG-040904Q	SMG#20
	9.04	6.0.0	R97	TS 100 601	IW PLMN-CSPDN	Pub Apr 1999	DTS/SMG-040904Q6	SMG#27>
?	9.04	7.0.0	R98	TS 100 601	IW PLMN-CSPDN	Pub	RTS/SMG-040904Q7	SMG#29
	9.05	4.4.2	Phase 2	ETS 300 602	IW PLMN-PSPDN, PAD	Pub Sep 1994	DE/SMG-040905P	SMG#9
	9.05	5.0.0	Phase 2/2+	GTS 09.05	IW PLMN-PSPDN, PAD	Pub Dec 1996	DGTS/SMG-040905Q	SMG#20
	9.05	6.0.0	R97	TS 100 602	IW PLMN-PSPDN, PAD	Pub Apr 1999	DTS/SMG-040905Q6	SMG#27>
?	9.05	7.0.0	R98	TS 100 602	IW PLMN-PSPDN, PAD	Pub	RTS/SMG-040905Q7	SMG#29
	9.06	4.5.0	Phase 2	ETS 300 603 Am1	IW PLMN-PSPDN/ISDN	Pub Mar 1995	RE/SMG-040906P	SMG#12
	9.06	5.0.2	Phase 2+	ETS 300 975	IW PLMN-PSPDN/ISDN	Pub May 1997	DE/SMG-040906Q	SMG#20
	9.06	6.0.0	R97	TS 100 975	IW PLMN-PSPDN/ISDN	Pub Apr 1999	DTS/SMG-040906Q6	SMG#27>
?	9.06	7.0.0	R98	TS 100 975	IW PLMN-PSPDN/ISDN	Pub	RTS/SMG-040906Q7	SMG#29
	9.07	4.13.1	Phase 2	ETS 300 604 Ed7	IW PLMN-ISDN or PSTN,	Pub Mar 1999?	RE/SMG-040907PR6	SMG#27
	9.07	5.9.0	R96	ETS 300 976 Ed8	IW PLMN-ISDN or PSTN,	OAP version	RE/SMG-040907QR9	SMG#28
	9.07	6.1.0	R97	TS 100 976	IW PLMN-ISDN or PSTN,	Pub Aug 1999	DTS/SMG-030907Q6	SMG#29
Version	9.07	7.1.1	R98	TS 100 976	IW PLMN-ISDN or PSTN,	Pub July 1999?	RTS/SMG-030907Q7	SMG#29
	9.08	4.1.1	Phase 2	ETS 300 626	BSSAP on E-Interface	Pub July 1995	DE/SMG-030908P	SMG#13
	9.08	5.1.0	Phase 2+	GTS 09.08	BSSAP on E-Interface	Pub Apr 1997	RGTS/SMG-030908QR	SMG#21
	9.08	6.0.0	R97	TS 100 626	BSSAP on E-Interface	Pub Apr 1999	DTS/SMG-030908Q6	SMG#27>
Version	9.08	7.0.0	R98	TS 100 626	BSSAP on E-Interface	Pub July 1999?	RTS/SMG-030908Q7	SMG#29
	9.10	4.4.1	Phase 2	ETS 300 605 Ed3	mapping MS-BSS BSS-MSC	Pub May 1998	RE/SMG-030910PR1	SMG#23
	9.10	5.2.0	Phase 2+	GTS 09.10	mapping MS-BSS BSS-MSC	Pub Nov 1997	RGTS/SMG-030910QR1	SMG#23
	9.10	6.1.0	R97	TS 100 605	mapping MS-BSS BSS-MSC	Pub July 1999?	RTS/SMG-030910Q6R1	SMG#29
?	9.10	7.0.0	R98	TS 100 605	mapping MS-BSS BSS-MSC	Pub Aug 1999	RTS/SMG-030910Q7	SMG#29

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	9.11	4.6.1	Phase 2	ETS 300 606 Ed2	Signalling IW for SS	Pub Dec 1996	RE/SMG-030911PR2	SMG#19
	9.11	5.1.0	Phase 2+	GTS 09.11	Signalling IW for SS	Pub July 1996	RGTS/SMG-030911QR1	SMG#19
	9.11	6.0.0	R97	TS 100 606	Signalling IW for SS	Pub July 1998	DTS/SMG-030911Q6	SMG#26
?	9.11	7.0.1	R98	TS 100 606	Signalling IW for SS	Pub July 1999?	RTS/SMG-030911Q7	SMG#29
NO	9.12	4.2.2	Phase 2	EN 300 646-1 Ed2	ISUP v2 for ISDN-PLMN	Pub May 1999	REN/SPS-01070	SMG#22
	9.13	6.0.0	R97	TS 101 392	Sig I/W ASE and MAP	Pub Oct 1998	DTS/SMG-030913Q6	SMG#27
?	9.13	7.0.0	R98	TS 101 392	Sig I/W ASE and MAP	Pub	RTS/SMG-030913Q7	SMG#29
NO	9.14	7.0.1	R98	EN 302 646-1	ISUP v3 for ISDN-PLMN	PE version	REN/SPS-01047-1	SMG#27
	9.16	6.1.0	R97	TS 101 345	GPRS Gs inter lower layer	Pub Apr 1999	RTS/SMG-030916Q6R1	SMG#28
Version	9.16	7.0.1	R98	TS 101 345	GPRS Gs inter lower layer	Pub July 1999?	RTS/SMG-030916Q7	SMG#29
	9.18	6.4.0	R97	TS 101 346	GPRS Gs inter app layer	Pub July 1999	RTS/SMG-030918Q6R3	SMG#29
Version	9.18	7.1.0	R98	TS 101 346	GPRS Gs inter app layer	Pub Aug 1999	RTS/SMG-030918Q7	SMG#29
	9.60	6.4.0	R97	EN 301 347	IW PLMN GPRS-PDN	Vote version	DEN/SMG-030960Q6	SMG#29
Version	9.60	7.1.0	R98	EN 301 347	IW PLMN GPRS-PDN	OAP version	REN/SMG-030960Q7	SMG#29
	9.61	6.3.0	R97	TS 101 348	GPRS PDN	Pub Oct 1998	RTS/SMG-040961Q6R1	SMG#27
Version	9.61	7.1.0	R98	TS 101 348	GPRS PDN	Pub July 1999?	RTS/SMG-030961Q7	SMG#29
	9.78	5.7.0	R96	TS 101 046	CAMEL CAP	Pub Aug 1999	RTS/SMG-030978QR7	SMG#29
	9.78	6.4.0	R97	TS 101 046	CAMEL CAP	Pub Aug 1999	RTS/SMG-030978Q6R3	SMG#29
Version	9.78	7.0.0	R98	TS 101 046	CAMEL CAP	Pub Aug 1999	RTS/SMG-030978Q7	SMG#29
	9.90	4.9.0	Phase 2	ETR 111 Ed7	IW Ph1 infastr & Ph2 MS	Pub Oct 1997	RTR/SMG-000990PR	SMG#23
	9.90	5.1.0	Phase 2+	GTS 09.90	IW Ph1 infastr & Ph2 MS	Unpublished	RGTS/SMG-000990QR1	SMG#22
??	9.90	6.0.0	R97	TS 101 xxx	IW Ph1 infastr & Ph2 MS	Pub on Hold	DTS/SMG-000990Q6	SMG#27>
	9.91	4.0.1	Phase 2	ETR 174	IW SIM/ME Int Ph1 & Ph2	Pub Apr 1995	DTR/SMG-090991P	SMG#10
	9.91	5.0.0	Phase 2/2+	ETR xxx	IW SIM/ME Int Ph1 & Ph2	Unpublished	DTR/SMG-090991Q	SMG#20
??	9.91	6.0.0	R97	TR 101 xxx	IW SIM/ME Int Ph1 & Ph2	Pub on Hold	DTR/SMG-090991Q6	SMG#27>
	9.94	4.4.0	Phase 2	ETR 200 Ed4	Phase 1 MS faults	Unpublished	RTR/SMG-000994PR3	SMG#23
NO	9.94	5.0.0	Phase 2/2+	ETR 361	Phase 1 MS faults	Pub Dec 1996	DTR/SMG-030994Q	SMG#20
??	10.20	5.0.1	Phase 2/2+	ETR 363	Lawful Intercept reqmts	Pub Jan 1997	DTR/SMG-101020Q	SMG#20
	11.10-1	4.26.0	Phase 2	ETS 300 607-1Ed13	MS Conformance	OAP version	RE/SMG-071110PRB-1	SMG#29
	11.10-1	5.9.0	R96	EN 301 607-1	MS Conformance	OAP version	REN/SMG-071110QR7-1	SMG#29
	11.10-1	6.1.0	R97	EN 300 607-1	MS Conformance (GPRS)	OAP version	REN/SMG-071110Q6R1-1	SMG#29
?	11.10-1	7.0.0	R98	EN 300 607-1	MS Conformance (CTS)	OAP version	REN/SMG-071110Q7-1	SMG#29
	11.10-2	4.15.0	Phase 2	ETS 300 607-2	MS Conformance PICS	Pub Oct 1996	DE/SMG-071110P-2	SMG#18

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	11.10-3	4.26.0	Phase 2	ETS 300 607-3Ed12	MS Conformance TTCN	OAP version	RE/SMG-071110PRA-3	SMG#29
	11.11	4.21.0	Phase 2	ETS 300 608 Ed9	SIM ME interface	OAP version	RE/SMG-091111PR9	SMG#29
	11.11	5.10.1	Phase 2+	ETS 300 977 Ed5	SIM ME interface	Pub Dec 1998	RE/SMG-091111QR6	SMG#26
	11.11	6.2.0	R97	TS 100 977	SIM ME interface	Pub May 1999	RTS/SMG-091111Q6R1	SMG#28
Version	11.11	7.3.0	R98	TS 100 977	SIM ME interface	Pub July 1999?	RTS/SMG-091111Q7	SMG#29
	11.11	8.0.0	R99	TS 100 977	SIM ME interface	Unpublished	RTS/SMG-091111Q8	SMG#29
OK	11.12	4.3.1	Phase 2	ETS 300 641 Ed3	3V SIM-ME	Pub Mar 1998	RE/SMG-091112QR1	SMG#23
	11.14	5.9.0	R96	GTS 11.14	Phase 2+ SIM app Tool kit	Pub Nov 1998	RGTS/SMG-091114QR5	SMG#27
	11.14	6.3.0	R97	TS 101 267	Phase 2+ SIM app Tool kit	Pub	RTS/SMG-091114Q6R3	SMG#28
?	11.14	7.3.1	R98	TS 101 267	Phase 2+ SIM app Tool kit	Pub July 1999?	DTS/SMG-091114Q7	SMG#29
	11.14	8.0.1	R99	TS 101 267	Phase 2+ SIM app Tool kit	Unpublished	RTS/SMG-091114Q8	SMG#29
?	11.17	7.0.1	R98	EN 301 086	SIM test	OAP version	DEN/SMG-091117P	SMG#29
?	11.18	7.0.1	R98	TS 101 116	1.8V SIM-ME	Pub July 1999?	DTS/SMG-091118Q7	SMG#29
NO	11.19	7.0.1	R98	EN 301 409	CTS SIM Fixed Part	PE version	DEN/SMG-091119Q7	SMG#28
	11.21	4.14.0	Phase 2	I-ETS 300 609-1Ed9	BSS Radio aspects	OAP version	RI/SMG-021121PR7	SMG#29
	11.21	5.4.1	Phase 2/2+	EN 301 087	BSS Radio aspects	Pub Apr 1999	REN/SMG-081121QR1	SMG#26
??	11.21	7.1.0	Phase 2/2+	EN 301 087	BSS Radio aspects	OAP version	REN/SMG-021121Q7	SMG#29
??	11.22	4.1.4	Phase 2	TR 101 075	BTS Ancillary Equip	Pub June 1997	DTR/SMG-081122P	SMG#21
??	11.23	4.9.1	Phase 2	ETS 300 609-2 Ed3	BTS Sig Aspects	Pub Oct 1998	RE/SMG-081123PR2	SMG#25
??	11.24	4.3.1	Phase 2	ETS 300 609-3	BSS Full-rate speech	Pub Jan 1999	DE/SMG-081124P	SMG#27
??	11.26	5.2.1	Phase 2/2+	ETS 300 609-4 Ed4	GSM Repeaters	Pub Mar 1999	RE/SMG-081126PQR2	SMG#26
	12.00	4.6.0	Phase 2	ETS 300 612-1	Objctves & struct of NM	Unpublished	DE/SMG-061200P	SMG#23
??	12.01	4.4.1	Phase 2	ETS 300 612-2	NM aspts GSM/DCS 1800	Pub Aug 1996	DE/SMG-061201P	SMG#17
	12.02	4.6.1	Phase 2	ETS 300 613	Sub, ME & ser data admin	Pub June 1996	DE/SMG-061202P	SMG#17
NO	12.02	5.0.1	Phase 2+	TS 100 613	Sub, ME & ser data admin	Pub July 1998	DTS/SMG-061202Q	SMG#23
	12.03	4.2.1	Phase 2	ETS 300 614	Security management	Pub June 1996	DE/SMG-061203P	SMG#17
Version	12.03	7.0.1	R98	TS 100 614	Security management	Pub July 1999?	RTS/SMG-061203Q7	SMG#29
NO	12.04	4.3.1	Phase 2	ETS 300 615	Perf data measurements	Pub Aug 1996	DE/SMG-061204P	SMG#17
	12.05	4.3.1	Phase 2	ETS 300 616 Ed2	Event & call data	Pub Feb 1998	RE/SMG-061205PR1	SMG#22
	12.05	5.0.1	Phase 2+	TS 100 616	Event & call data	Pub Aug 1998	DTS/SMG-061205Q	SMG#23
	12.05	6.1.0	R97	TS 100 616	Event & call data	Pub May 1999	RTS/SMG-061205Q6R1	SMG#28
?	12.05	7.0.1	R98	TS 100 616	Event & call data	Pub July 1999?	RTS/SMG-061205Q7	SMG#29

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??	12.06	4.1.1	Phase 2	ETS 300 617	GSM Net config & manage	Pub June 1996	DE/SMG-061206P	SMG#17
	12.08	4.6.0	Phase 2	ETS 300 627 Ed3	Sub and equip trace	Unpublished	RE/SMG-061208PR2	SMG#23
NO	12.08	5.1.1	Phase 2+	TS 101 627	Sub and equip trace	Pub July 1998	DTS/SMG-061208Q	SMG#25
	12.11	4.2.1	Phase 2	EN 301 251	Fault management of BSS	Pub Dec 1998	REN/SMG-061211PR1	SMG#26
??	12.11	6.3.0	R97	TS 101 251	Fault management of BSS	Pub July 1999?	RTS/SMG-061211Q6R3	SMG#29
	12.15	6.2.0	R97	TS 101 393	GPRS charging	Pub May 1999	RTS/SMG-061215Q6R1	SMG#28
?	12.15	7.2.1	R98	TS 101 393	GPRS charging	Pub July 1999?	RTS/SMG-061215Q7	SMG#29
??	12.20	4.2.1	Phase 2	ETS 300 622	BSS Management Info	Pub June 1996	DE/SMG-061220P	SMG#17
	12.21	4.6.0	Phase 2	ETS 300 623 Ed2	NM proc & A-bis Interface	Unpublished	RE/SMG-061221PR	SMG#21
	12.21	5.0.0	Phase 2+	TS 100 623	NM proc & A-bis Interface	Unpublished	DTS/SMG-061221Q	SMG#21
	12.21	6.0.0	R97	TS 100 623	NM proc & A-bis Interface	Pub on Hold	RTS/SMG-061221Q6	SMG#27>
??	12.22	4.1.4	Phase 2	ETS 300 624	IW of NM proc & BSC	Pub Aug 1996	DE/SMG-061222P	SMG#17
??	12.30	4.2.0	Phase 2	ETR 128 Ed2	GDMO registration	Pub July 1995	RTR/SMG-061230P	SMG#18
??	13.01	4.0.0	Phase 2	EN 301 419-1	Attach reqs, Access	OAP version	DEN/SMG-071301P	SMG#29
??	13.02	4.0.0	Phase 2	EN 301 420	Attach reqs, Telephony	OAP version	DEN/SMG-071302P	SMG#29
??	13.34	5.0.3	Phase 2+	EN 301 419-2	HSCSD TBR module Accsss	Pub Mar 1999	DEN/SMG-071334Q	SMG#26
??	13.67	5.0.0	Phase 2+	EN 301 419-7	R-GSM TBR module Accs		DEN/SMG-071367Q	SMG#27
??	13.68	5.0.0	Phase 2+	EN 301 419-3	ASCI TBR module Access		DEN/SMG-071368Q	SMG#27

KEY to Ballot Status	
OK	Reference is correct
Version	Version number is not correct
NO	Not applicable to PCS 1900
Pending	Work in progress
?	R98 document not referenced
??	Version prior to R98 not referenced

Ballot Status	GSM No	Version	Phase	ETS/R/GTS	Short Title	Publication notes ETSI Reference	After SMG #

Acronyms

AMR	Adaptive Multi-Rate (AMR)
API	GSM Application Programming Interface (GSM-API)
ASE	Application Service Element (ASE)
BCC	Broadcast Call Control (BCC)
CCBS	Completion of Calls to Busy Subscriber (CCBS)
CTS	GSM Cordless Telephony System (CTS)
CUG	Closed User Group (CUG)
DTX	Discontinuous Transmission (DTX)
ECT	Explicit Call Transfer (ECT)
eMLPP	enhanced Multi-Level Precedence and Pre-emption service (eMLPP)
FR	Full Rate
GCC	Group Call Control (GCC)
HR	Half Rate
HSCSD	High Speed Circuit Switched Data (HSCSD)
IST	Immediate Service Termination (IST)
MExE	Mobile Station Application Execution Environment (MExE)
MRI	Mobile radio interface
NITZ	Network Identity and Timezone (NITZ)
PDS	Packet Data on Signalling channels Service (PDS)
PICS	Protocol Implementation Conformance Statement (PICS)
SIWF	Shared Inter Working Function (SIWF)
SOR	Support of Optimal Routeing (SOR)
SPNP	Support of Private Numbering Plan (SPNP)
TAF	Terminal Adaptation Functions (TAF)
TFO	Tandem Free Operation (TFO)
USSD	Unstructured Supplementary Service Data (USSD)
UUS	User-to-User Signalling (UUS)
VBS	Voice Broadcast Service (VBS)
VGCS	Voice Group Call Service (VGCS)

LB800 COMMENT RESOLUTION REPORT

There were comments received for LB800 from Lucent Technologies, SBC Communications and Pacific Bell Wireless. Pacific Bell Wireless agreed to withdraw their comments after discussing their comments with SWG. The following is the status of the comments from Lucent Technologies and SBC Communications.

1.) Lucent Technologies submitted a total of 7 comments with 5 editorial comments (1-5) and 2 technical comments (6,7). See below for details.

EDITORIAL COMMENTS:
Comments 1 through 5 were editorial changes which were accepted.
TECHNICAL COMMENTS:
In concept Comment 6 which was a technical change was accepted with Version 7 being used as the reference version.
WITHDRAWN COMMENTS:
After discussing their comments with the SWG Lucent agreed to withdraw Comment 7 which was a technical comment.

2.) SBC Communications submitted a total of 50 comments with 49 editorial comments (1-49) and 1 technical comment (50). See below for details.

EDITORIAL COMMENTS:
Comments 1 through 49 were editorial changes and all were accepted except for comment 11, 13, 45, 46 and 47.
TECHNICAL COMMENTS:
The sole technical comment pertained to the versions of the referenced GSM Specifications and in concept this was accepted and approved with these changes to the versions of the referenced GSM Specifications reflected in the Default Letter Ballot 800. It was agreed that version 7's would be used where a new version 7 was recently published and now available from ETSI. In some cases a draft version 7 is referenced. Where a draft is referenced ETSI will be requested by T1P1 to publish these documents.
WITHDRAWN COMMENTS:
After discussing their comments with the SWG SBC Communications agreed to withdraw editorial comments 11, 13, 45, 46 and 47.

PERSONAL COMMUNICATIONS SERVICES

PCS1900

SPECIFICATIONS

FOREWORD

This Foreword is not part of American National Standard T1.XXX-1999.

This standard is a reference document of GSM specifications for North American PCS1900 Standards which include the Air-Interface, A-Interface (BSC to MSC) and the MAP (Mobile Application Part) Specifications and other features and services (General Packet Radio Service, Location Services, Number Portability & Customized Application for Mobile Network Enhanced Logic) for PCS1900. The referenced GSM specifications are based on the European Telecommunication Standards Institute Specifications for "Global System for Mobile Communications" (GSM) and that have been harmonized to include PCS1900 for the North American environment. This standard is suited for anticipated needs and applications within North American PCS1900 networks.

This new version of PCS1900 Specifications supercedes the series of J-STD's which consists of the J-STD-007 (PCS1900 Air Interface Standard), J-STD-024 (PCS1900 SS7 Based A-Interface Standard) and the J-STD-023 (PCN to PCN Intersystem Operations based on PCS1900 or MAP Specification).

Suggestions for improvement of this standard are welcome. They should be sent to the Alliance for Telecommunications Industry Solutions, 1200 G Street, NW, Suite 500, Washington, DC 20005.

This standard was processed and approved for submittal to ANSI by T1 which is an Accredited Standards Committee on Telecommunications.

TABLE OF CONTENTS

1 INTRODUCTION

The purpose of this standard is to provide the North American PCS industry with information on the PCS1900 technology to ensure interoperability between equipment. This standard includes the core standards for PCS1900 which are the Air Interface, A-Interface and MAP Specifications and these specifications also provide support for the 3-digit MNC and the Enhanced Full Rate (EFR) Vocoder. This standard also supports features for GPRS (General Packet Radio Service), Number Portability (NP), Customized Application for Mobile Network Enhanced Logic (CAMEL) and Location Services (LCS).

It should also be recognized and noted that this PCS1900 Specification is the first in a series of standards resulting from the on-going and extensive work effort by members of T1P1.5. This PCS1900 Specification was created as a result of a collaborative working relationship between ETSI and T1P1 who jointly agreed to create a common set of baseline text for a Harmonized/Integrated set of GSM/DCS/PCS Specifications. The members of T1P1.5 generated numerous CR's (Change Requests) which were approved by ETSI and implemented against this common set of GSM/DCS Specifications to create a set of Harmonized GSM/DCS/PCS Specifications which are the normative references listed in Section 3 of this document. It should also be noted that specific versions of these GSM Specifications are referenced.

A brief description of this document is as follows: Section 2 of this document describes the Scope while Section 3 contains a description of the PCS1900 Core Specifications and additional specifications for PCS1900 features and services. Section 4 contains the **MASTER LIST of PCS1900 SPECIFICATIONS** for the Core Specifications and Specifications for PCS1900 features and services. This Master List consists of **NORMATIVE REFERENCES to SPECIFIC VERSIONS of GSM SPECIFICATIONS** which now also contains the specifications for PCS1900 for North America. Section 5 contains a listing of the additional references and publications which are not GSM Specifications.

2 SCOPE

This Standard describes in detail a complete specification suitable for Personal Communication Services (PCS) operating in the licensed North American PCS bands (1850-1910 MHz paired with 1930-1990 MHz). Since this technology is related to GSM/DCS, which has been standardized in Europe by the European Telecommunications Standards Institute (ETSI), these PCS1900 standards have now been integrated and harmonized with that set of GSM/DCS Specifications resulting in a specification for GSM/DCS/PCS based on the Release 98 (as of SMG29) Series of GSM Specifications. The complete list of the Harmonized GSM/DCS/PCS Specifications are described below by grouping and contained in a Master Reference List in Section 4 of this document.

3 PCS1900 SPECIFICATIONS

This section provides an overview of the PCS1900 Core Specifications as well as PCS1900 features and services. These specifications are grouped in this section by functionality. Note that while specific version references are not included in this section for conciseness**, only the specific versions listed in the Master Reference List of Section 4 are part of this standard.**

3.1 PCS1900 CORE SPECIFICATIONS

3.1.1 PCS1900 AIR INTERFACE SPECIFICATION

GENERAL DESCRIPTION:

The PCS1900 Air Interface is a specification which consists of the Radio Interface Specification (Layer 1) and other required signaling (for registration, supplementary services, etc.) between a PCS1900 mobile station (MS) and a terrestrial based wireless radio system consisting primarily of a BTS (Base Transceiver System) and BSC (Base Station Controller). The PCS1900 Air Interface Specification also provides support for an Enhanced Full Rate Vocoder (EFR) and the use of a 3-digit MNC. The complete set of Harmonized GSM/PCS Air Interface Specifications are defined below.

GSM REFERENCE SPECIFICATIONS:

The PCS1900 Air Interface Specification consists of the following set of Release 98 (as of SMG29) GSM/PCS Harmonized Specifications:

GSM 01.02 and GSM 01.04 which gives an informative general description of a network. It contains a definition and a summarized description of the elements comprised in the network, and their functions and the associated performance objectives. The services and facilities that the network can offer to its users are also described as well as the general lines of signaling procedures, operation and maintenance.

GSM 02.09, 02.17, 02.30, 03.20 and 11.11 jointly describes the Man Machine Interface (MMI) and all security/encryption aspects including the SIM of the PCS1900 Air Interface Specification.

GSM 02.81, 02.82, 02.83, 02.84, 02.85, 02.86 and 02.88 describes Stage 1 Supplementary Service signaling aspects of the PCS1900 Air Interface Specification.

GSM 02.40, 02.41, 02.72, 02.96, 03.14, 03.15, 03.22, 03.38, 03.41, 03.72 and 03.96 describes the following portions of the PCS1900 Air Interface Specification:

GSM 02.40: Procedure for Call Progress Indications

GSM 02.41: Operator Determined Call Barring

GSM 02.72: Call Deflection Supplementary Services-Stage

GSM 02.96: Calling Name Presentation (CNAP)-Stage 1

GSM 03.14: Support of Dual Tone Multi-Frequency Signaling (DTMF)

GSM 03.15: Technical Realization of Operator Determined Barring

GSM 03.22: Functions Related to Mobile Station (MS) in Idle mode

GSM 03.38: Alphabet and Language-specific Information

GSM 03.41: Technical Realization of Short Message Service Cell Broadcast (SMSCB)

GSM 03.72: Call Deflection (CD) Supplementary Service-Stage 2

GSM 03.96: Name Identification Supplementary Services-Stage 2

GSM 03.81, 03.82, 03.83, 03.84, 03.85, 03.86 and 03.88 describes Stage 2 Supplementary Service signaling aspects of the PCS1900 Air Interface Specification.

The following GSM Specifications jointly describe all aspects of the PCS1900 Air Interface Signaling and are based on the GSM 04 series and GSM 08.20:

GSM 04.01, 04.02, 04.03, 04.04, 04.05 and 04.06 describes Layer 1 and Layer 2 signaling which affects the RF physical and media access aspects of the PCS1900 Air Interface Specification.

GSM 04.07 and 04.08 describes Layer 3 signaling aspects of the PCS1900 Air Interface Specification.

GSM 04.10, 04.80, 04.81, 04.82, 04.83, 04.84, 04.85, 04.86, 04.88 and 04.90 describes Stage 3 Supplementary Service signaling aspects of the PCS1900 Air Interface Specification.

GSM 04.11, 04.12, 04.13, 04.21, 04.22 and 08.20 describes other signaling aspects of the PCS1900 Air Interface Specification not covered elsewhere.

GSM 05.01, 05.02, 05.03, 05.04, 05.05, 05.08 and 05.10 contains a detailed description of the RF Physical Layer (Layer 1) of the PCS1900 Air Interface Specification.

GSM 06.01, 06.02, 06.10, 06.31, 06.32, 06.51 and 06.60 contain a detailed description of the Enhanced Full Rate Vocoder for the Speech Coding aspects of the air interface and transmission planning aspects of the speech service. No half-rate vocoder is actually specified for PCS1900, although a few essential signaling mechanisms are defined.

GSM 07.01, 07.02, 07.03, 07.05, 07.06 and 07.07 contain a detailed description of terminal adapters for the mobile stations of the PCS1900 Air Interface Specification.

GSM 12.03 contains the OAM&P aspects which fall within the Scope of the PCS1900 Air Interface Specification.

3.1.2 PCS1900 A-INTERFACE SPECIFICATION

GENERAL DESCRIPTION:

The PCS1900 A-Interface is a specification which consists of the Interface Specification for the required signaling between a terrestrial based PCS1900 wireless BSC (Base Station Controller) and MSC (Mobile Switching Center). The complete set of Harmonized GSM/PCS A-Interface Specifications are defined below.

GSM REFERENCE SPECIFICATIONS:

The PCS1900 A-Interface Specification consists of the following set of Release 98 (as of SMG29) GSM/PCS Harmonized Specifications:

GSM 08.01, 08.02, 08.04, 08.06 and 08.08 which contains a description and specification for Layer 1 and Layer 3 of the BSS (Base Station System) to MSC (Mobile Switching Center) interface signaling transport mechanism.

3.1.3 PCS1900 MAP SPECIFICATION

GENERAL DESCRIPTION:

The PCS1900 MAP (Mobile Application Part) consists of the ANSI SCCP (Signaling Connection Control Part) Specification (ANSI T1.112-1996) which include the Preferred Carrier Identity Codes. The complete set of Harmonized GSM/PCS MAP Specifications are defined below.

GSM REFERENCE SPECIFICATIONS:

The PCS1900 MAP (Mobile Application Part) Specification consists of the following Release 98 (as of SMG29) GSM/PCS Harmonized Specifications:

GSM 03.03 and 09.02 which contains a description and specification for general numbering, addressing, identification and ANSI T1.112 SCCP.

3.1.4 PCS1900 3-DIGIT MOBILE NETWORK CODE (MNC) SPECIFICATION

GENERAL DESCRIPTION:

The PCS1900 Air Interface Specification provides support for a 3-digit MNC. The complete set of Harmonized GSM/PCS 3-digit MNC Specifications are defined below.

GSM REFERENCE SPECIFICATION:

The PCS1900 3-Digit MNC (Mobile Country Code) Specification consists of the following Release 98 (as of SMG29) GSM/PCS Harmonized Specifications:

GSM 03.03, 04.08, 08.08 and 09.02 provides support and use of the 3-digit MNC in North America for PCS1900.

3.2 PCS1900 SPECIFICATION for FEATURES & SERVICES

3.2.1 GPRS SPECIFICATION

GENERAL DESCRIPTION:

GPRS (General Packet Radio Service) is a packet radio service standard designed for GSM900, DCS1800, and PCS1900. GPRS provides a set of new GSM bearer services that allow packet mode transmission within the PLMN and interworks with external networks. GPRS enables the 2nd generation cellular networks to handle high-speed multimedia traffic. GPRS services include Point-to-Point (IP, X.25), and SMS. The set of Harmonized GSM/PCS Specifications for the Phase 1 implementation of GPRS are identified below. The Phase 2 implementation of GPRS is currently on-going.

GSM REFERENCE SPECIFICATIONS:

The PCS1900 Specifications for GPRS consists of the following Release 98 (as of SMG29) GSM/PCS Harmonized Specifications:

GSM 02.60, 03.03, 03.60, 08.14, 08.16, 08.18, 09.16, 09.18, 09.60, 09.61 and 12.15.

3.2.2 CAMEL(CUSTOMIZED APPLICATION for MOBILE network ENHANCED LOGIC) SPECIFICATION

GENERAL DESCRIPTION:

The **CAMEL** feature provides the mechanisms to support services consistently independent of the serving network. This feature is a network feature (not a supplementary service) and also facilitates service control of operator specific services external from the serving PLMN (Public Land Mobile Network). This feature will help the network operator to provide their own subscribers with the operator specific services while roaming outside the Home PLMN. The Harmonized GSM/PCS Specification for the CAMEL Feature is defined below.

GSM REFERENCE SPECIFICATIONS:

The PCS1900 Specifications for CAMEL supports CAMEL Phase II and consists of the following Release 98 (SMG29) GSM/PCS Harmonized Specifications:

GSM 02.78, 03.78 and 09.78.

3.2.3 NP (NUMBER PORTABILITY) SPECIFICATION

GENERAL DESCRIPTION:

Number Portability enables a subscriber to retain the same telephone number when changing service providers within a specified geographical area. The ETSI Mobile Number Portability (MNP) documents specifiy number portability that is entirely between wireless service providers. However, in the United States NP currently combines both wireless and wireline. The complete set of planned Harmonized GSM/PCS Specifications for the NP Feature are defined below.

GSM and ANSI REFERENCE SPECIFICATIONS:

ANSI T1.708 and ANSI T1.711.

GSM 02.66 (Pending), GSM 03.18 (Pending), GSM 03.66 (Pending).

Pending the harmonization of GSM 02.66, 03.18 and 03.66 for NP, the ANSI T1.708 and ANSI T1.711 should be used. For implementations prior to harmonization involving core INAP and MAP SRI Number Portability refer to ANSI T1.708 section 6.1 for the North American Call Processing Procedures.

3.2.4 LCS (LOCATION SERVICES) SPECIFICATION (To Be Determined)

GENERAL DESCRIPTION:

The **Location Services** feature allows for the tracking of the location of a mobile station within a specified tolerance. The complete set of Harmonized GSM/PCS Specifications for the Location Services Feature are defined below.

GSM REFERENCE SPECIFICATIONS:

The PCS1900 Specification for LCS (LOCATION SERVICES) consists of the following Release TBD (SMG ?) GSM/PCS Harmonized Specifications:

This work is currently ongoing as this work will be completed in phases and the specifications listed below are subject to change.

GSM 01.04, 02.71, 03.02, 03.03, 03.07, 03.08, 03.16, 03.18, 03.32, 03.71, 04.07, 04.08, 04.71, 05.02, 05.05, 05.08, 05.10, 08.08, 08.58, 08.71, 09.02, 09.08 and 10.71.

4 PCS1900 MASTER LIST OF SPECIFICATIONS (NORMATIVE REFERENCES)

This Master list of specifications which are NORMATIVE references for PCS1900 covers the Air Interface, A-Interface and MAP Specifications, as well as PCS1900 features and services. Note that only the specific version indicated applies. In order to insure interoperability between equipment provided by different manufacturers and to ensure that service delivery is maintained when subscribers 'roam' between different service providers' networks, to the extent the services and capabilities provided by the home network are supported by the visited network, the requirements in the normative references shall be met. Each of the reference GSM specifications listed below also has a code that indicates which portion of the PCS1900 Specifications applies. An abbreviated code is used at the end of each reference and is shown as follows:

CODES for PCS1900 CORE SPECIFICATIONS:

1.) AR - PCS1900 Air Interface Specification

2.) A - PCS1900 A-Interface Specification

3.) MP - PCS1900 MAP Specification

4.) 3D – PCS1900 3 Digit Mobile Network Code (MNC) Specification

CODES for PCS1900 FEATURES & SERVICES:

1.) GS - General Packet Radio Service (GPRS) Specification

2.) NP - Number Portability (NP) Specification

3.) LS - Location Services (LCS) Specification

4.) CL - Customized Application for Mobile network Enhanced Logic (CAMEL) Specification

4.1 GSM 01 SERIES:

1.) GSM 01.02: "European digital cellular telecommunication system (Phase 2+); General Description of a GSM Public Land Mobile Network (PLMN)", Version 5.0.0, SMG17. (AR)
2.) GSM 01.04: "European digital cellular telecommunication system (Phase 2+); Abbreviations and acronyms", Version 7.0.0, SMG29. (AR,LS)

4.2 GSM 02 SERIES:

3.) GSM 02.09: "European digital cellular telecommunication system (Phase 2+); Security aspects", Version 6.0.1, SMG27. (AR)
4.) GSM 02.17: "European digital cellular telecommunication system (Phase 2+); Subscriber identity modules Functional characteristics", Version 7.1.1, SMG29. (AR)
5.) GSM 02.30: "European digital cellular telecommunication system (Phase 2+); Man-Machine Interface (MMI) of the Mobile Station (MS)", Version 7.1.0, SMG29. (AR)
6.) GSM 02.40: "European digital cellular telecommunication system (Phase2+); Procedures for call progress indications", Version 7.0.1, SMG29. (AR)
7.) GSM 02.41: "European digital cellular telecommunication system (Phase 2+); Operator Determined Call Barring", Version 7.0.0, SMG29. (AR)

8.) GSM 02.60: "European digital cellular telecommunication system (Phase 2+); General Packet Radio Service (GPRS); Service description; Stage 1", Version 7.2.0, SMG29. (GS)
9.) GSM 02.66: "European digital cellular telecommunication system (Phase 2+); Support of Mobile Number Portability (MNP); Service description; Stage 1", Version 7.0.1, SMG29. (NP)
10.) GSM 02.71: "European digital cellular telecommunication system (Phase 2+); Location Services (LCS); Service description, Stage 1", Version 7.0.0, SMG29. (LS)
11.) GSM 02.72: "European digital cellular telecommunication system (Phase 2+); Call Deflection Service description, Stage 1", Version 7.2.1, SMG29. (AR)
12.) GSM 02.78: "European digital cellular telecommunication system (Phase 2+); CAMEL; Stage 1", Version 7.0.0, SMG29. (CL)
13.) GSM 02.81: "European digital cellular telecommunication system (Phase 2+); Line identification supplementary services - Stage 1", Version 7.0.0, SMG29. (AR)
14.) GSM 02.82: "European digital cellular telecommunication system (Phase 2+); Call Forwarding (CF) supplementary services - Stage 1", Version 7.0.1, SMG29. (AR)
15.) GSM 02.83: "European digital cellular telecommunication system (Phase 2+); Call Waiting (CW) and Call Hold (HOLD) supplementary services - Stage 1", Version 7.0.0, SMG29. (AR)
16.) GSM 02.84: "European digital cellular telecommunication system (Phase 2+); MultiParty (MPTY) supplementary services - Stage 1", Version 7.0.0, SMG29. (AR)
17.) GSM 02.85: "European digital cellular telecommunication system (Phase 2+); Closed User Group (CUG) supplementary services - Stage 1", Version 7.0.0, SMG29. (AR)
18.) GSM 02.86: "European digital cellular telecommunication system (Phase 2+); Advice of Charge (AoC) supplementary services - Stage 1", Version 7.0.0, SMG29. (AR)
19.) GSM 02.88: "European digital cellular telecommunication system (Phase 2+); Call Barring (CB) supplementary services - Stage 1", Version 7.0.0, SMG29. (AR)
20.) GSM 02.91: "European digital cellular telecommunication system (Phase 2+); Explicit Call Transfer (ECT) Supplementary Service - Stage 1", Version 7.0.0, SMG29. (AR)
21.) GSM 02.96: "European digital cellular telecommunication system (Phase 2+); Calling Name Presentation - Stage 1", Version 6.0.1, SMG27. (AR)

4.3 GSM 03 SERIES:

22.) GSM 03.02: "European digital cellular telecommunication system (Phase 2+); Network architecture", Version 7.0.0, SMG29. (LS)
23.) GSM 03.03: "European digital cellular telecommunication system (Phase 2+); Numbering, addressing and identification", Version 7.1.0, SMG29. (MP,3D,LS)
24.) GSM 03.07: "European digital cellular telecommunication system (Phase 2+); Restoration procedures", Version 7.0.0, SMG29. (LS)
25.) GSM 03.08: "European digital cellular telecommunication system (Phase 2+); Organization of subscriber data", Version 7.0.0, SMG29. (LS)
26.) GSM 03.14: "European digital cellular telecommunication system (Phase 2+); Support of Dual Tone Multi-Frequency signaling (DTMF) via the GSM system", Version 7.0.1, SMG29. (AR)
27.) GSM 03.15: "European digital cellular telecommunication system (Phase 2+); Technical Realization of Operator Determined Barring", Version 7.0.0, SMG29. (AR)
28.) GSM 03.16: "European digital cellular telecommunication system (Phase 2+); Subscriber data management", Version 7.1.0, SMG29. (LS)
29.) GSM 03.18: "European digital cellular telecommunication system (Phase 2+); Basic call handling; Technical realization", Version 7.1.0, SMG29. (LS,NP)
30.) GSM 03.20: "European digital cellular telecommunication system (Phase 2+); Security related network functions", Version 7.1.0, SMG29. (AR)
31.) GSM 03.22: "European digital cellular telecommunication system (Phase 2+); Functions related to Mobile Station (MS) in idle mode", Version 7.1.0, SMG29. (AR)
32.) GSM 03.32: "European digital cellular telecommunication system (Phase 2+); Universal Geographical Area Description (GAD)", Version 7.0.0, SMG29. (LS)
33.) GSM 03.38: "European digital cellular telecommunication system (Phase 2+); Alphabet and Language-specific Information", Version 7.2.0, SMG29. (AR)
34.) GSM 03.40: "European digital cellular telecommunication system (Phase 2+); Technical realization of the Short Message Service (SMS) Point-to-point (PP)", Version 7.2.0, SMG29. (AR)

35.) GSM 03.41: "European digital cellular telecommunication system (Phase 2+); Technical realization of Short Message Service Cell Broadcast (SMSCB)", Version 7.1.0, SMG29. (AR)
36.) GSM 03.60: "European digital cellular telecommunication system (Phase 2+); Stage 2 Service Description of the General Packet Radio Service (GPRS)", d-Version 7.1.0, SMG29. (GS)
37.) GSM 03.66: "European digital cellular telecommunication system (Phase 2+); Support of Mobile Number Portability (MNP)", Version 7.1.0, SMG29. (NP)
38.) GSM 03.71: "European digital cellular telecommunication system (Phase 2+); Location Services (LCS); (Functional description) – Stage 2", Version 7.0.0, SMG29. (LS)
39.) GSM 03.72: "European digital cellular telecommunication system (Phase 2+); Call Deflection supplementary services - Stage 2", Version 7.0.1, SMG29. (AR)
40.) GSM 03.78: "European digital cellular telecommunication system (Phase 2+); CAMEL - Stage 2", Version 7.1.0, SMG29. (CL)
41.) GSM 03.81: "European digital cellular telecommunication system (Phase 2+); Line identification supplementary services - Stage 2", Version 7.0.1, SMG29. (AR)
42.) GSM 03.82: "European digital cellular telecommunication system (Phase 2+); Call Forwarding (CF) supplementary services - Stage 2", Version 7.0.0, SMG29. (AR)
43.) GSM 03.83: "European digital cellular telecommunication system (Phase 2+); Call Waiting (CW) and Call Hold (HOLD) supplementary services - Stage 2", Version 7.0.0, SMG29. (AR)
44.) GSM 03.84: "European digital cellular telecommunication system (Phase 2+); MultiParty (MPTY) supplementary services - Stage 2", Version 7.0.0, SMG29. (AR)
45.) GSM 03.85: "European digital cellular telecommunication system (Phase 2+); Closed User Group (CUG) supplementary services - Stage 2", Version 7.0.0, SMG29. (AR)
46.) GSM 03.86: "European digital cellular telecommunication system (Phase 2+); Advice of Charge (AoC) supplementary services - Stage 2", d-Version 7.0.0, SMG29. (AR)
47.) GSM 03.88: "European digital cellular telecommunication system (Phase 2+); Call Barring (CB) supplementary services - Stage 2", Version 7.0.0, SMG29. (AR)
48.) GSM 03.91: "European digital cellular telecommunication system (Phase 2+); Explicit Call Transfer (ECT) Supplementary Service - Stage 2", Version 7.0.0, SMG29. (AR)
49.) GSM 03.96: "European digital cellular telecommunication system (Phase 2+); Name Identification supplementary service - Stage 2", Version 7.0.1, SMG29. (AR)

4.4 GSM 04 SERIES:

50.) GSM 04.01: "European digital cellular telecommunication system (Phase 2+); Mobile Station - Base Station System (MS - BSS) interface General aspects and principles", Version 7.0.0, SMG29. (AR)
51.) GSM 04.02: "European digital cellular telecommunication system (Phase 2+); GSM Public Land Mobile Network (PLMN) access reference configuration", Version 7.0.0, SMG29. (AR)
52.) GSM 04.03: "European digital cellular telecommunication system (Phase 2+); Mobile Station - Base Station System (MS - BSS) interface Channel structures and access capabilities", Version 7.0.0, SMG29. (AR)
53.) GSM 04.04: "European digital cellular telecommunication system (Phase 2+); layer 1 General requirements", Version 7.0.0, SMG29. (AR)
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60.) GSM 04.12: "European digital cellular telecommunication system (Phase 2+); Short Message Service Cell Broadcast (SMSCB) support on the mobile radio interface", d-Version 7.0.0, SMG29. (AR)
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84.) GSM 06.11: "European digital cellular telecommunication system (Phase 2+); Substitution and muting of lost frames for full rate speech channels", d-Version 7.0.0, SMG29. (AR)
85.) GSM 06.12: "European digital cellular telecommunication system (Phase 2+); Comfort noise aspect for full rate speech traffic channels", d-Version 7.0.0, SMG29. (AR)
86.) GSM 06.31: "European digital cellular telecommunication system (Phase 2+); Discontinuous Transmission (DTX) for full rate speech traffic channel", d-Version 7.0.0, SMG29. (AR)
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6 History

Revision	Ballot Complete	Comment
Initial version	XXXX 1999	Core, GPRS,CAMEL,(LCS & NP-TBD)