3GPP TSG_CN#7   **NP-000064**

ETSI SMG3 Plenary Meeting #7,
Madrid, Spain
13th – 15th March 2000

Agenda item:

Source: **TSG_N WG2**

Title: **CRs to 3G Work Item CAMEL Phase 2**

Introduction:

This document contains **"4"** CRs on **Work Item CAMEL Phase 2,** that have been agreed by **TSG_N WGx,** and are forwarded to **TSG_N Plenary** meeting #7 for approval.

TDoc	SPEC	CR	REV	CAT	Rel	Old vers	New vers	SUBJECT
N2B000164	03.18	A057		F	R97	6.5.0		Correction of CF notification
N2B000165	03.18	A058		A	R98	7.2.0		Correction of CF notification
N2B000167	03.79	A024		F	R97	6.2.0		Correction of CF notification
N2B000168	03.79	A025		A	R98	7.2.0		Correction of CF notification

CHANGE REQUEST

Please see embedded help file at the bottom of this page for instructions on how to fill in this form correctly.

03.18 CR **A057**

Current Version: **6.5.0**

GSM (AA.BB) or 3G (AA.BBB) specification number ↑

↑ CR number as allocated by MCC support team

For submission to: **CN#07**
list expected approval meeting # here ↑

for approval **X**
for information ☐

strategic ☐
non-strategic **X**

(for SMG use only)

Form: CR cover sheet, version 2 for 3GPP and SMG   The latest version of this form is available from: ftp://ftp.3gpp.org/Information/CR-Form-v2.doc

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

(U)SIM ☐   ME ☐   UTRAN / Radio ☐   Core Network **X**

Source:	N2	**Date:** 7 Feb 2000
Subject:	Correction of CF Notification	
Work item:	CAMEL Phase 2	

Category:

(only one category shall be marked with an X)

			Release:	
F	Correction	**X**	Phase 2	☐
A	Corresponds to a correction in an earlier release	☐	Release 96	☐
B	Addition of feature	☐	Release 97	**X**
C	Functional modification of feature	☐	Release 98	☐
D	Editorial modification	☐	Release 99	☐
			Release 00	☐

Reason for change:	See next page for detail.

Clauses affected:

Other specs affected:

Other 3G core specifications	☐	→ List of CRs:	
Other GSM core specifications	**X**	→ List of CRs:	03.78-A151, 03.79-A024
MS test specifications	☐	→ List of CRs:	
BSS test specifications	☐	→ List of CRs:	
O&M specifications	☐	→ List of CRs:	

Other comments:

Assessment: Siemens sees the problem identified in this CR serious and the correction shall be essential for all the manufactures and the operators. Therefore, this CR should fall into the category 1 (C1) as classified at the CN#5 meeting, Kyongju.

Reason for change:

Problem - Endless loop in Obtain_Routing Address (GSM TS 03.18):

The first SRI and SRI ack are done in Obtain_Routing Address. Then CAMEL_MT_GMSC_INIT (GSM TS 03.78) is called.

1. If the terminating service logic sends CONTINUE in CAMEL_MT_GMSC_INIT, the second SRI is sent and SRI ack contains FTN and O-CSI if the subscriber is not reachable. This procedure provides the output as „FTN".
2. Returning to procedure Obtain_Routing_Address, it calls the Procedure CAMEL_MT_GMSC_Notify_CF (GSM TS 03.78)
3. In CAMEL_MT_GMSC_Notify_CF, the terminating service logic is informed about CFNRc by EVENT REPORT BCSM.
4. The gsmSCF may answer with CONNECT.
5. The procedure CAMEL_MT_GMSC_Notify_CF delivers output "Reconnect".
6. Returening to Obtain_Routing Address, it calls the procedure CAMEL_MT_GMSC_INIT again.
7. The procedure CAMEL_MT_GMSC_INIT delivers again output 'FTN".
8. The procedure Obtain_Routing_Address calls again procedure CAMEL_MT_GMSC_Notify_CF.

The CFNRc data are still stored therefore it starts from the beginning

Proposed Correction:
 The proposal is to call procedure CAMEL_MT_GMSC_Notify_CF (in GSM TS 03.78) only for GSM-CF, i.e. gsmSCF shall not be notified about new Called Party Number being received from it in CONNECT.

 Therefore a new outputs 'CAMEL_FTN' and 'GSM_FTN' are defined in Procedure CAMEL_MT_GMSC_INIT (in GSM TS 03.78). This is to be checked in procedure Obtain_Routeing_Address (in GSM TS 03.18). If result = 'CAMEL_FTN' procedure CAMEL_MT_GMSC_Notify_CF (in GSM TS 03.78) shall not be called. CF process shall be started instead.

 Correction on GSM TS 03.78
 Further, a new check on Called Party Number is proposed in CAMEL_MT_GMSC_Notify_CF procedure. If the same number is delivered in CONNECT then CF process shall be started immediately, i.e. there shall be no Reconnect attempt.

 Correction on GSM TS 03.79
 Last issue is the interworking with OR – when terminating logic is informed about ORLCF and sends a new Called Party Number in CONNECT then the connection to VMSC shall be released and RESUME CALL HANDLING shall be sent.

Procedure Obtain_Routeing_Address ORA1(3)

Procedure in a GMSC
to determine the address
to which a call should be routed

Procedure Obtain_Routeing_Address
FPAR IN Input address, Reference address,
Own PLMN
IN/OUT Routeing address,
Destination address, OR, Result

See GSM 03.93 — CCBS_MT_ GMSC_Check_ CCBS_Call

Signals to/from the left
are to/from the originating exchange;
signals to/from the right
are to/from the HLR

Reconnect — True / False

Send Routeing Info

Wait_for_ Routeing_ Info

Release

Send Routeing Info negative response

3

Send Routeing Info ack

OR_Handle_SRI_ Negative_Response (Own PLMN) — See GSM 03.79

CAMEL_MT_ GMSC_INIT — See GSM 03.78

Result= Pass? — Yes / No

Result= MSRN? — No / Yes

Result:= Aborted

Result:=Fail

Result:=Pass

CCBS_MT_ GMSC_Check_ CCBS_ Indicators — See GSM 03.93

Store Forwarding Interrogation Required indicator

Routeing address:= MSRN

1

Destination address:= VMSC address

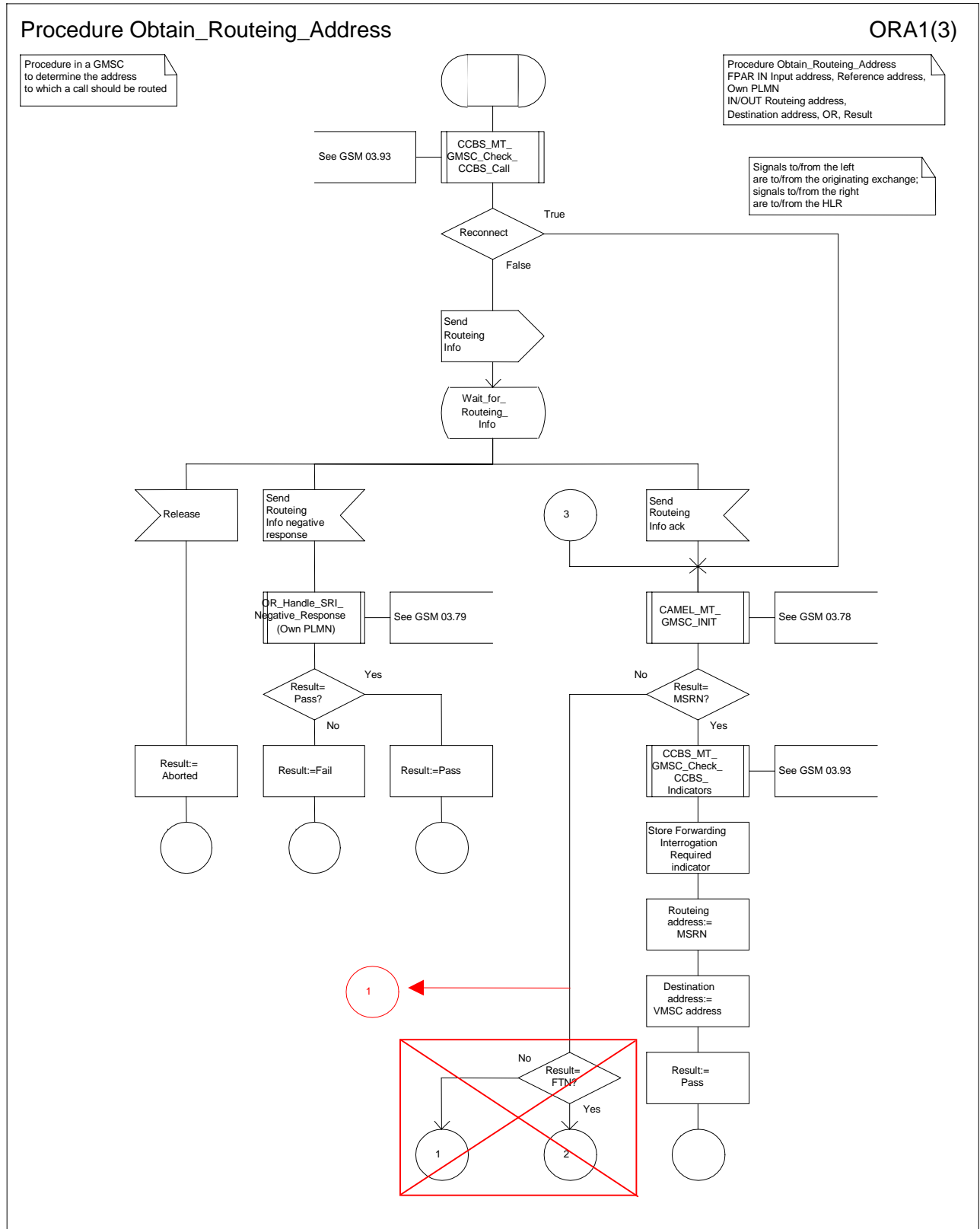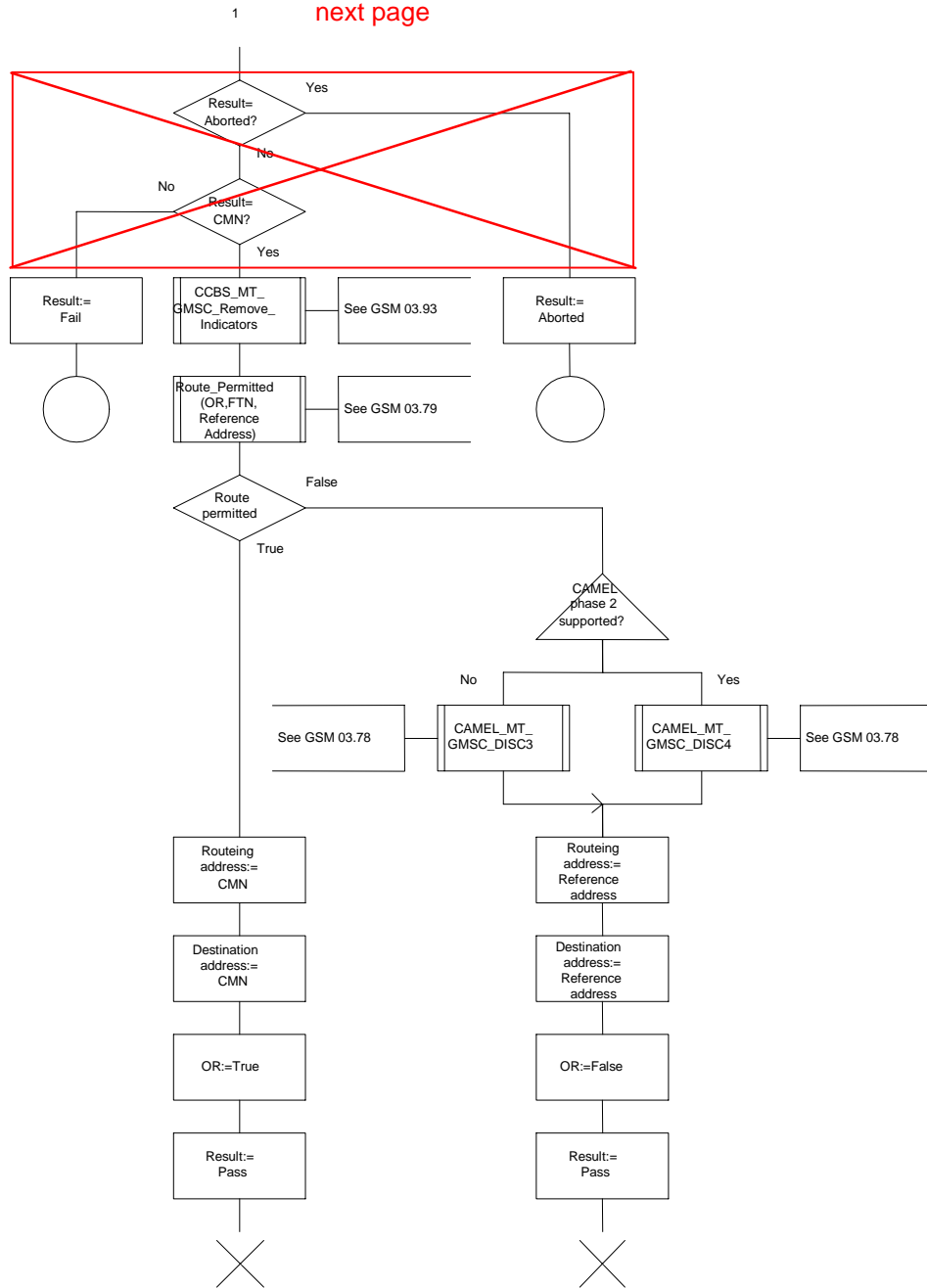Result= FTN? — No / Yes

Result:= Pass

1

2

Figure 36a: Procedure Obtain_Routeing_Address (sheet 1)

Procedure Obtain_Routeing_Address ORA2(3)

Procedure in a GMSC
to determine the address
to which a call should be routed

Replace by the updated
figure as shown on the
next page

1

Result=
Aborted?   Yes

No

No   Result=
CMN?

Yes

Result:=
Fail

CCBS_MT_
GMSC_Remove_
Indicators   See GSM 03.93

Result:=
Aborted

Route_Permitted
(OR,FTN,
Reference
Address)   See GSM 03.79

Route
permitted   False

True

CAMEL
phase 2
supported?

No   Yes

See GSM 03.78   CAMEL_MT_
GMSC_DISC3   CAMEL_MT_
GMSC_DISC4   See GSM 03.78

Routeing
address:=
CMN

Routeing
address:=
Reference
address

Destination
address:=
CMN

Destination
address:=
Reference
address

OR:=True

OR:=False

Result:=
Pass

Result:=
Pass

Procedure Obtain_Routeing_Address ORA2(3)

Procedure in a GMSC
to determine the address
to which a call should be routed

Result?

GSM_FTN fail (other) CMN CAMEL_FTN aborted

2

A

Result:=
Fail

CCBS_MT_
GMSC_Remove_
Indicators

See GSM 03.93

Result:=
Aborted

Route_Permitted
(OR,FTN,
Reference
Address)

See GSM 03.79

Route
permitted

False

True

CAMEL
phase 2
supported?

No Yes

See GSM 03.78

CAMEL_MT_
GMSC_DISC3

CAMEL_MT_
GMSC_DISC4

See GSM 03.78

Routeing
address:=
CMN

Routeing
address:=
Reference
address

Destination
address:=
CMN

Destination
address:=
Reference
address

OR:=True

OR:=False

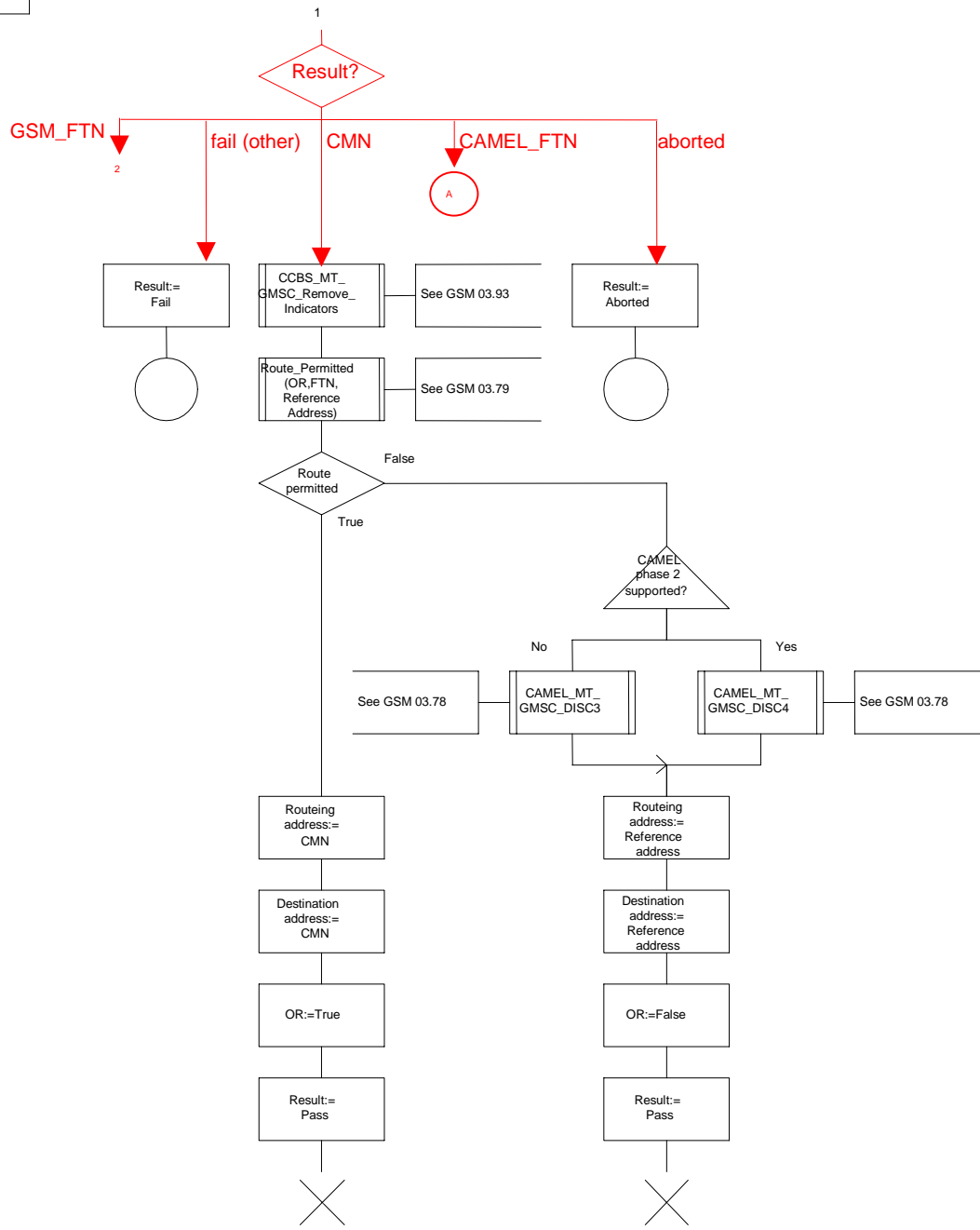Result:=
Pass

Result:=
Pass

Figure 36b: Procedure Obtain_Routeing_Address (sheet 2)

Procedure Obtain_Routeing_Address ORA3(3)

Procedure in a GMSC
to determine the address
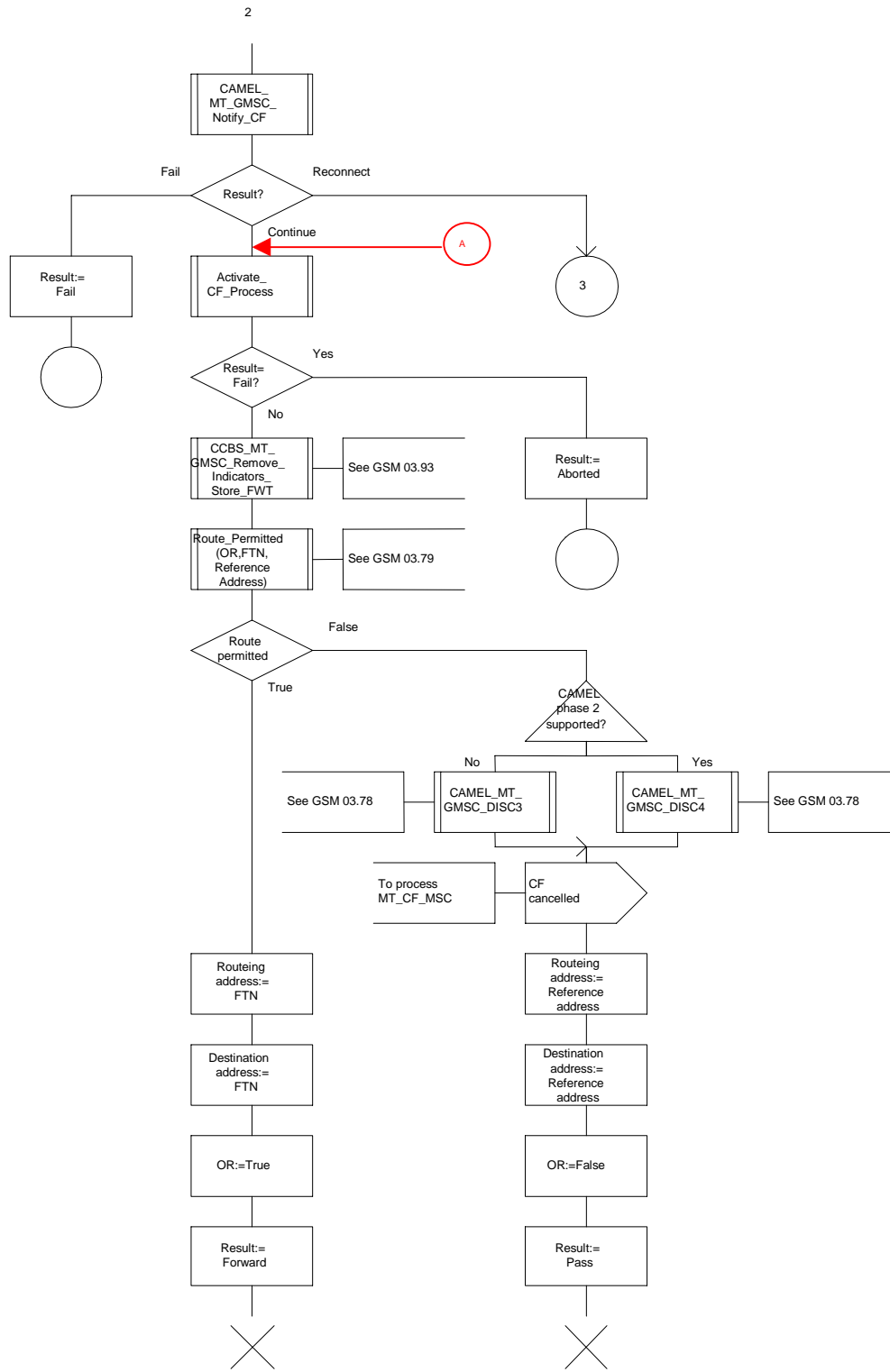to which a call should be routed

2

CAMEL_
MT_GMSC_
Notify_CF

Fail — Result? — Reconnect

Continue

Result:=
Fail

Activate_
CF_Process

A

3

Result=
Fail? — Yes

No

CCBS_MT_
GMSC_Remove_
Indicators_
Store_FWT — See GSM 03.93

Result:=
Aborted

Route_Permitted
(OR,FTN,
Reference
Address) — See GSM 03.79

Route
permitted — False

True

CAMEL
phase 2
supported?

No — Yes

See GSM 03.78 — CAMEL_MT_
GMSC_DISC3 — CAMEL_MT_
GMSC_DISC4 — See GSM 03.78

To process
MT_CF_MSC — CF
cancelled

Routeing
address:=
FTN

Routeing
address:=
Reference
address

Destination
address:=
FTN

Destination
address:=
Reference
address

OR:=True

OR:=False

Result:=
Forward

Result:=
Pass

Figure 36c: Procedure Obtain_Routeing_Address (sheet 3)

CHANGE REQUEST

Please see embedded help file at the bottom of this page for instructions on how to fill in this form correctly.

| **03.18** | CR | **A058** | Current Version: | **7.2.0** |

GSM (AA.BB) or 3G (AA.BBB) specification number ↑   *↑ CR number as allocated by MCC support team*

For submission to: **CN#07**   for approval **X**   strategic ☐ *(for SMG*
list expected approval meeting # here ↑   for information ☐   non-strategic **X** *use only)*

Form: CR cover sheet, version 2 for 3GPP and SMG   The latest version of this form is available from: ftp://ftp.3gpp.org/Information/CR-Form-v2.doc

Proposed change affects: (U)SIM ☐   ME ☐   UTRAN / Radio ☐   Core Network **X**
(at least one should be marked with an X)

Source: N2   **Date:**   7 Feb 2000

Subject: Correction of CF Notification

Work item: CAMEL Phase 2

Category:	F	Correction		**Release:**	Phase 2	
	A	Corresponds to a correction in an earlier release	**X**		Release 96	
(only one category	B	Addition of feature			Release 97	
shall be marked	C	Functional modification of feature			Release 98	**X**
with an X)	D	Editorial modification			Release 99	
					Release 00	

Reason for change: See next page for detail.

Clauses affected:

Other specs affected:	Other 3G core specifications	☐	→ List of CRs:	
	Other GSM core specifications	**X**	→ List of CRs:	03.78-A152, 03.79-A025
	MS test specifications	☐	→ List of CRs:	
	BSS test specifications	☐	→ List of CRs:	
	O&M specifications	☐	→ List of CRs:	

Other comments: Assessment: Siemens sees the problem identified in this CR serious and the correction shall be essential for all the manufactures and the operators. Therefore, this CR should fall into the category 1 (C1) as classified at the CN#5 meeting, Kyongju.

Reason for change:

Problem - Endless loop in Obtain_Routing Address (GSM TS 03.18):

The first SRI and SRI ack are done in Obtain_Routing Address. Then CAMEL_MT_GMSC_INIT (GSM TS 03.78) is called.
1. If the terminating service logic sends CONTINUE in CAMEL_MT_GMSC_INIT, the second SRI is sent and SRI ack contains FTN and O-CSI if the subscriber is not reachable. This procedure provides the output as „FTN".
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3. In CAMEL_MT_GMSC_Notify_CF, the terminating service logic is informed about CFNRc by EVENT REPORT BCSM.
4. The gsmSCF may answer with CONNECT.
5. The procedure CAMEL_MT_GMSC_Notify_CF delivers output "Reconnect".
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7. The procedure CAMEL_MT_GMSC_INIT delivers again output 'FTN".
8. The procedure Obtain_Routing_Address calls again procedure CAMEL_MT_GMSC_Notify_CF.

The CFNRc data are still stored therefore it starts from the beginning

Proposed Correction:
   The proposal is to call procedure CAMEL_MT_GMSC_Notify_CF (in GSM TS 03.78) only for GSM-CF, i.e. gsmSCF shall not be notified about new Called Party Number being received from it in CONNECT.

   Therefore a new outputs 'CAMEL_FTN' and 'GSM_FTN' are defined in Procedure CAMEL_MT_GMSC_INIT (in GSM TS 03.78). This is to be checked in procedure Obtain_Routeing_Address (in GSM TS 03.18). If result = 'CAMEL_FTN' procedure CAMEL_MT_GMSC_Notify_CF (in GSM TS 03.78) shall not be called. CF process shall be started instead.

   Correction on GSM TS 03.78
   Further, a new check on Called Party Number is proposed in CAMEL_MT_GMSC_Notify_CF procedure. If the same number is delivered in CONNECT then CF process shall be started immediately, i.e. there shall be no Reconnect attempt.
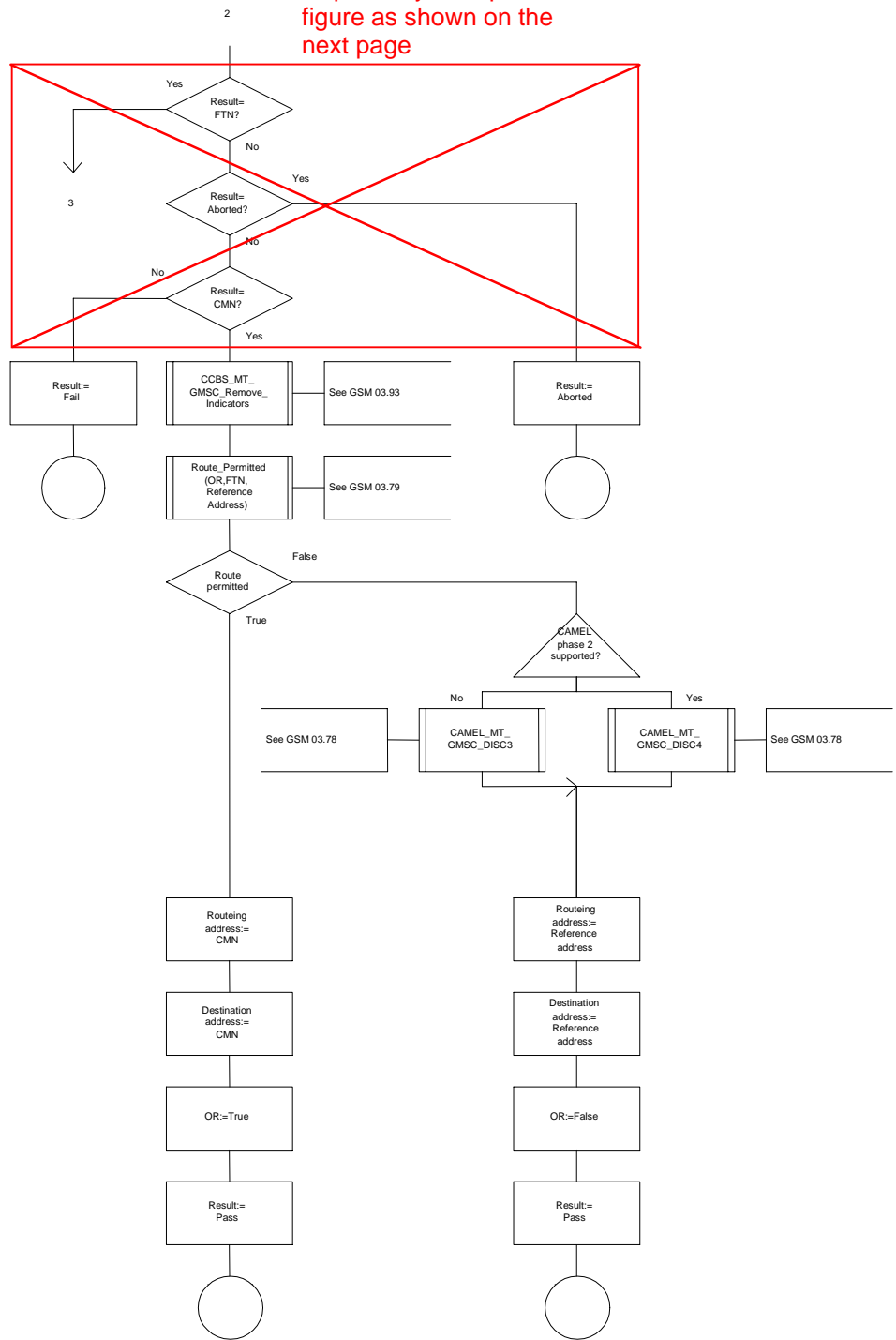
   Correction on GSM TS 03.79
   Last issue is the interworking with OR – when terminating logic is informed about ORLCF and sends a new Called Party Number in CONNECT then the connection to VMSC shall be released and RESUME CALL HANDLING shall be sent.

Procedure Obtain_Routeing_Address   ORA3(4)

Procedure in a GMSC
to determine the address
to which a call should be

Replace by the updated figure as shown on the next page

2

Yes ← Result=
FTN?

No

3

Result=
Aborted? → Yes

No

No ← Result=
CMN?

Yes

Result:=
Fail

CCBS_MT_
GMSC_Remove_
Indicators — See GSM 03.93

Result:=
Aborted

Route_Permitted
(OR,FTN,
Reference
Address) — See GSM 03.79

Route
permitted → False

True

CAMEL
phase 2
supported?

No   Yes

See GSM 03.78 — CAMEL_MT_
GMSC_DISC3

CAMEL_MT_
GMSC_DISC4 — See GSM 03.78

Routeing
address:=
CMN

Routeing
address:=
Reference
address

Destination
address:=
CMN

Destination
address:=
Reference
address

OR:=True

OR:=False

Result:=
Pass

Result:=
Pass

Procedure Obtain_Routeing_Address   ORA3(4)

Procedure in a GMSC
to determine the address
to which a call should be

2

Result?

GSM_FTN   Fail (other)   CMN   CAMEL_FTN   aborted

3

A

Result:=
Fail

CCBS_MT_
GMSC_Remove_
Indicators   See GSM 03.93

Result:=
Aborted

Route_Permitted
(OR,FTN,
Reference
Address)   See GSM 03.79

Route
permitted   False

True

CAMEL
phase 2
supported?

No   Yes

See GSM 03.78   CAMEL_MT_
GMSC_DISC3   CAMEL_MT_
GMSC_DISC4   See GSM 03.78

Routeing
address:=
CMN

Routeing
address:=
Reference
address

Destination
address:=
CMN

Destination
address:=
Reference
address

OR:=True   OR:=False
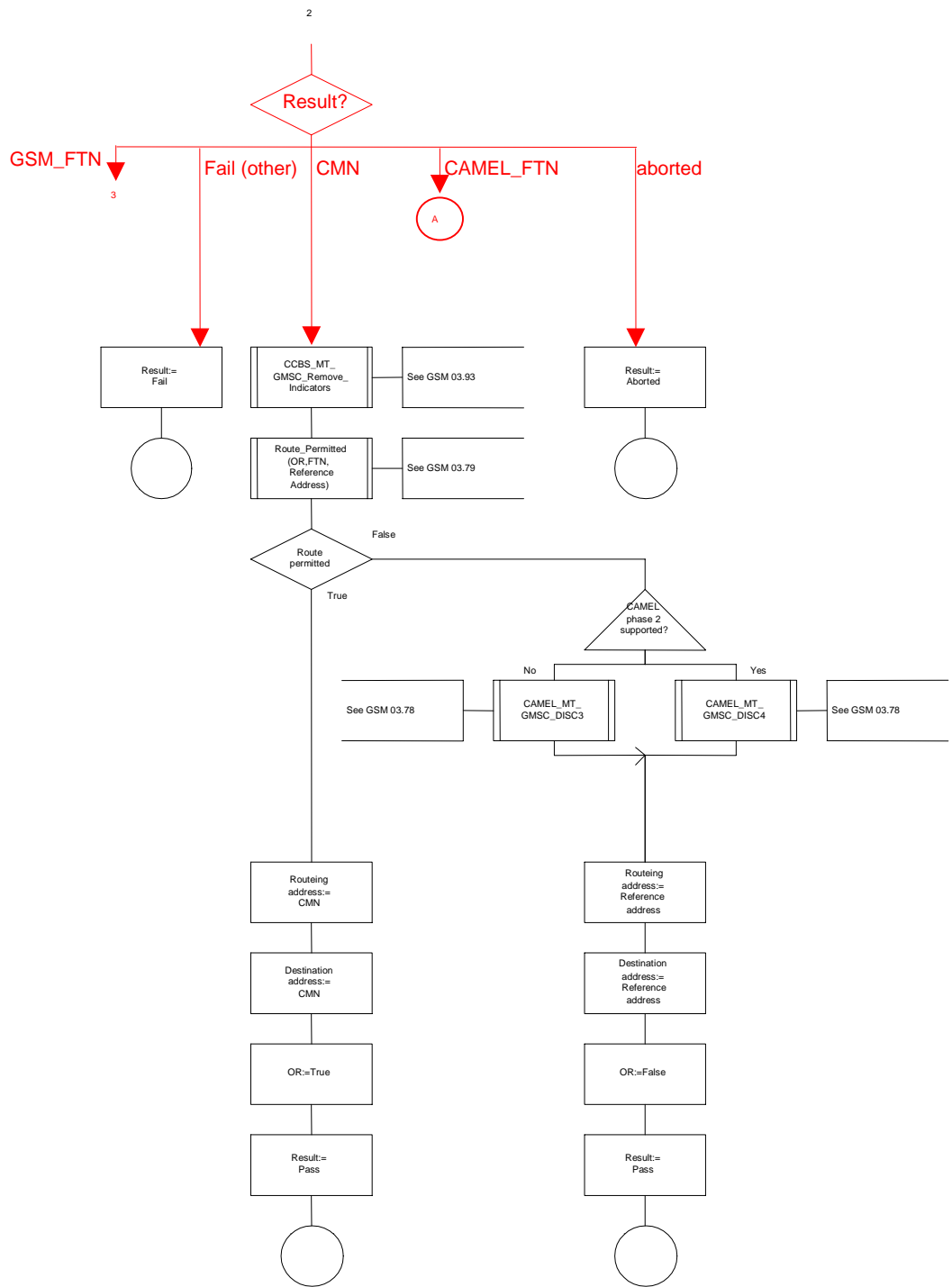
Result:=
Pass   Result:=
Pass

Figure 36c: Procedure Obtain_Routeing_Address (sheet 3)

Procedure Obtain_Routeing_Address ORA4(4)

Procedure in a GMSC
to determine the address
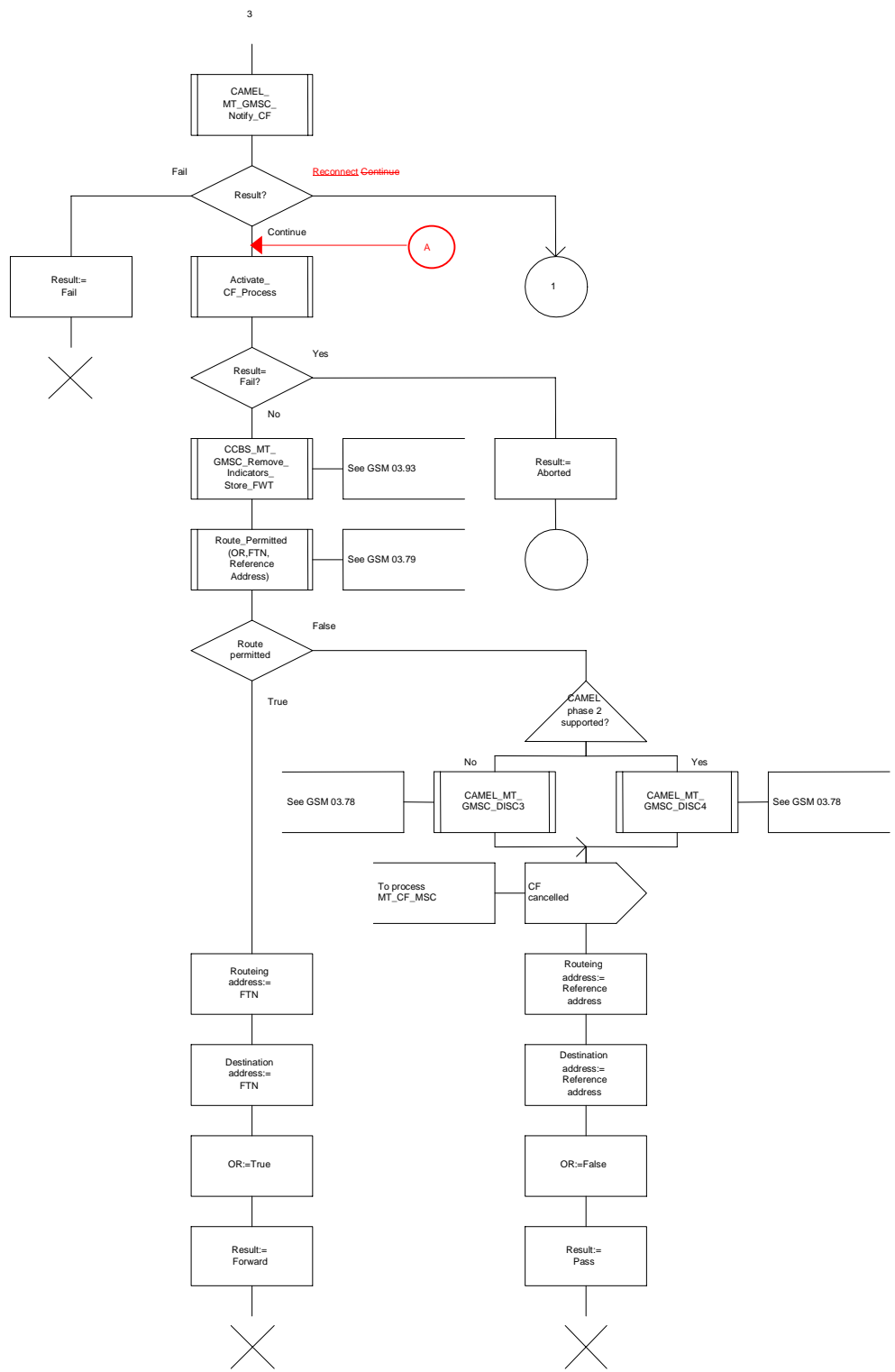to which a call should be

3

CAMEL_
MT_GMSC_
Notify_CF

Fail — Result? — Reconnect ~~Continue~~

Continue

A

Result:=
Fail

Activate_
CF_Process

1

Result=
Fail? — Yes

No

CCBS_MT_
GMSC_Remove_
Indicators_
Store_FWT — See GSM 03.93

Result:=
Aborted

Route_Permitted
(OR,FTN,
Reference
Address) — See GSM 03.79

Route
permitted — False

True

CAMEL
phase 2
supported?

No — Yes

See GSM 03.78 — CAMEL_MT_
GMSC_DISC3

CAMEL_MT_
GMSC_DISC4 — See GSM 03.78

To process
MT_CF_MSC — CF
cancelled

Routeing
address:=
FTN

Routeing
address:=
Reference
address

Destination
address:=
FTN

Destination
address:=
Reference
address

OR:=True

OR:=False

Result:=
Forward

Result:=
Pass

Figure 36d: Procedure Obtain_Routeing_Address (sheet 4)

3GPP N2B Meeting
Milan, Italy, 14-16 Feb 2000

Document **N2B000167**
e.g. for 3GPP use the format TP-99xxx
or for SMG, use the format P-99-xxx

CHANGE REQUEST

Please see embedded help file at the bottom of this page for instructions on how to fill in this form correctly.

03.79	**CR**	**A024**	Current Version:	**6.2.0**

GSM (AA.BB) or 3G (AA.BBB) specification number ↑   *↑ CR number as allocated by MCC support team*

For submission to:	**CN#07**	for approval	**X**		strategic		*(for SMG*
list expected approval meeting # here ↑		for information			non-strategic	**X**	*use only)*

Form: CR cover sheet, version 2 for 3GPP and SMG   The latest version of this form is available from: ftp://ftp.3gpp.org/Information/CR-Form-v2.doc

Proposed change affects: (U)SIM ☐   ME ☐   UTRAN / Radio ☐   Core Network **X**
(at least one should be marked with an X)

Source:	N2		**Date:**	7 Feb 2000

Subject:	Correction of CF Notification

Work item:	CAMEL Phase 2

Category:

				Release:		
	F	Correction	**X**		Phase 2	
	A	Corresponds to a correction in an earlier release			Release 96	
(only one category	B	Addition of feature			Release 97	**X**
shall be marked	C	Functional modification of feature			Release 98	
with an X)	D	Editorial modification			Release 99	
					Release 00	

Reason for change:	See next page for detail.

Clauses affected:	

Other specs affected:

Other 3G core specifications	☐	→ List of CRs:		
Other GSM core specifications	**X**	→ List of CRs:	03.18-A057, 03.78-A151	
MS test specifications	☐	→ List of CRs:		
BSS test specifications	☐	→ List of CRs:		
O&M specifications	☐	→ List of CRs:		

Other comments:	Assessment: Siemens sees the problem identified in this CR serious and the correction shall be essential for all the manufactures and the operators. Therefore, this CR should fall into the category 1 (C1) as classified at the CN#5 meeting, Kyongju.

Reason for change:

Problem - Endless loop in Obtain_Routing Address (GSM TS 03.18):

The first SRI and SRI ack are done in Obtain_Routing Address. Then CAMEL_MT_GMSC_INIT (GSM TS 03.78) is called.
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7. The procedure CAMEL_MT_GMSC_INIT delivers again output 'FTN".
8. The procedure Obtain_Routing_Address calls again procedure CAMEL_MT_GMSC_Notify_CF.

The CFNRc data are still stored therefore it starts from the beginning

Proposed Correction:
   The proposal is to call procedure CAMEL_MT_GMSC_Notify_CF (in GSM TS 03.78) only for GSM-CF, i.e. gsmSCF shall not be notified about new Called Party Number being received from it in CONNECT.

   Therefore a new outputs 'CAMEL_FTN' and 'GSM_FTN' are defined in Procedure CAMEL_MT_GMSC_INIT (in GSM TS 03.78). This is to be checked in procedure Obtain_Routeing_Address (in GSM TS 03.18). If result = 'CAMEL_FTN' procedure CAMEL_MT_GMSC_Notify_CF (in GSM TS 03.78) shall not be called. CF process shall be started instead.

   Correction on GSM TS 03.78
   Further, a new check on Called Party Number is proposed in CAMEL_MT_GMSC_Notify_CF procedure. If the same number is delivered in CONNECT then CF process shall be started immediately, i.e. there shall be no Reconnect attempt.

   Correction on GSM TS 03.79
   Last issue is the interworking with OR – when terminating logic is informed about ORLCF and sends a new Called Party Number in CONNECT then the connection to VMSC shall be released and RESUME CALL HANDLING shall be sent.

Procedure OR_Handle_RCH   H_RCH1(2)

Procedure in the GMSC to
handle a Resume Call Handling
request

Signals to/from the left are
to/from the originating exchange;
signals to/from the right are
to/from the destination exchange
unless indicated otherwise

O-CSI included?

GMSC supports CAMEL?

Forwarding interrogation required?

Set negative response: OR not allowed

Forwarding reason= Call deflection?

Resume Call Handling negative response

Send Routeing Info (Forwarding Info)

Result:= Refused

Wait_For_ Forwarding_ Info

To HLR

Send Routeing Info ack

From HLR

Send Routeing Info negative response

From HLR

Release

Release

Set negative response: Forwarding failed

CAMEL_ MT_GMSC_ Notify_CF

See GSM 03.78

Resume Call Handling negative response

Result?

Reconnect   Fail

Continue

Resume Call Handling ack

Release

Release

Release call resources

Release

Release call resources

Result:= Reconnect

1

Result:= Fail

Result:= Fail

Figure 7a: Procedure OR_Handle_RCH (sheet 1)

Procedure OR_Handle_RCH   H_RCH2(2)

Procedure in the GMSC to handle a Resume Call Handling request

Signals to/from the left are to/from the originating exchange; signals to/from the right are to/from the destination exchange unless indicated otherwise
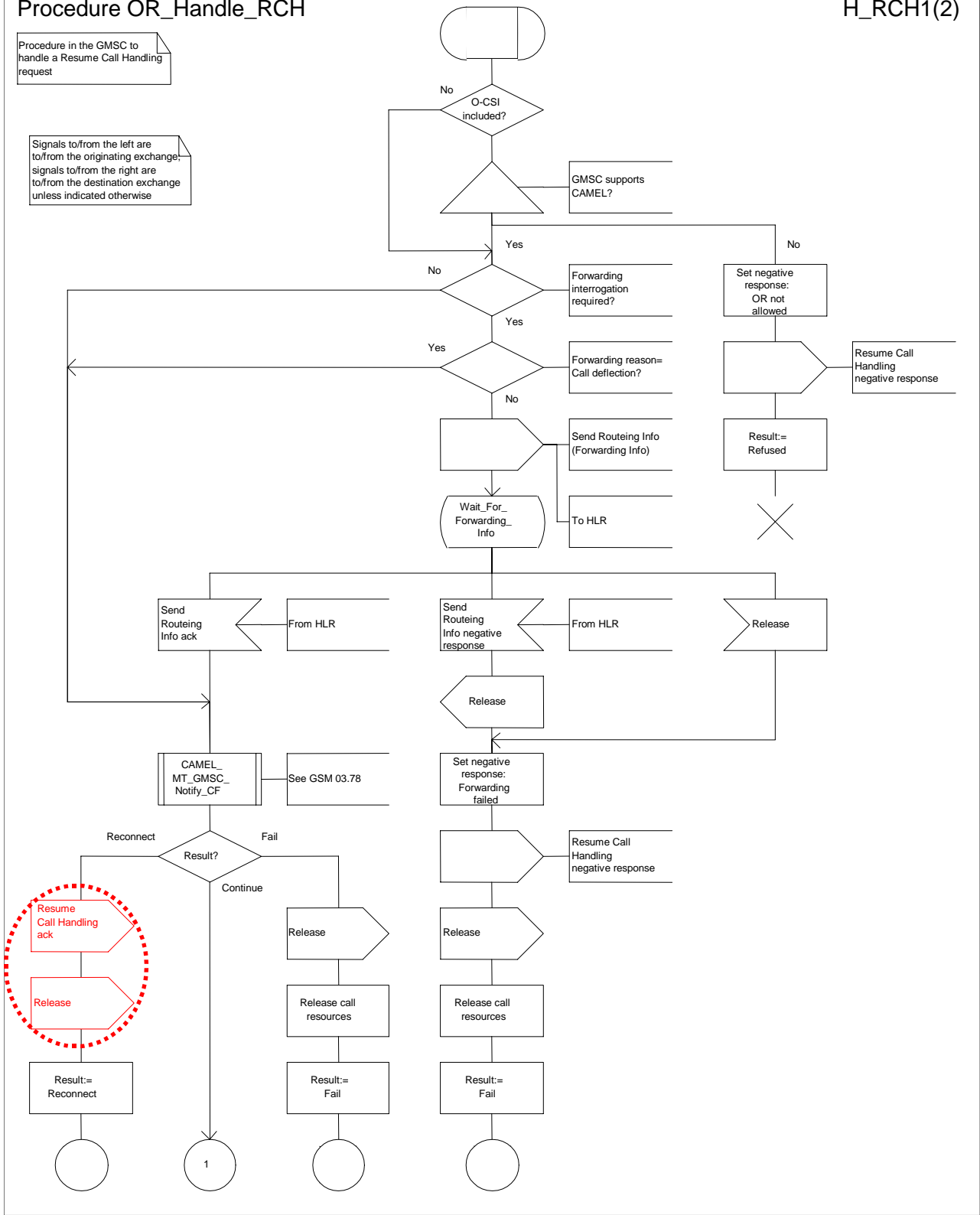
1

Activate_CF_Process - See GSM 03.18

Result=Fail? —— Yes

No

Release

Release call resources

Result:=Fail

OR

True   False

Reference address:= Routeing address

OR:=True

Destination address:= FTN

Route_Permitted (OR,FTN, Reference Address)

Route permitted

True   False

Resume Call Handling ack

Release

Initial Address (FTN) - To Process MT_CF_MSC

Result:=Pass

Set negative response: OR not allowed

Resume Call Handling negative response

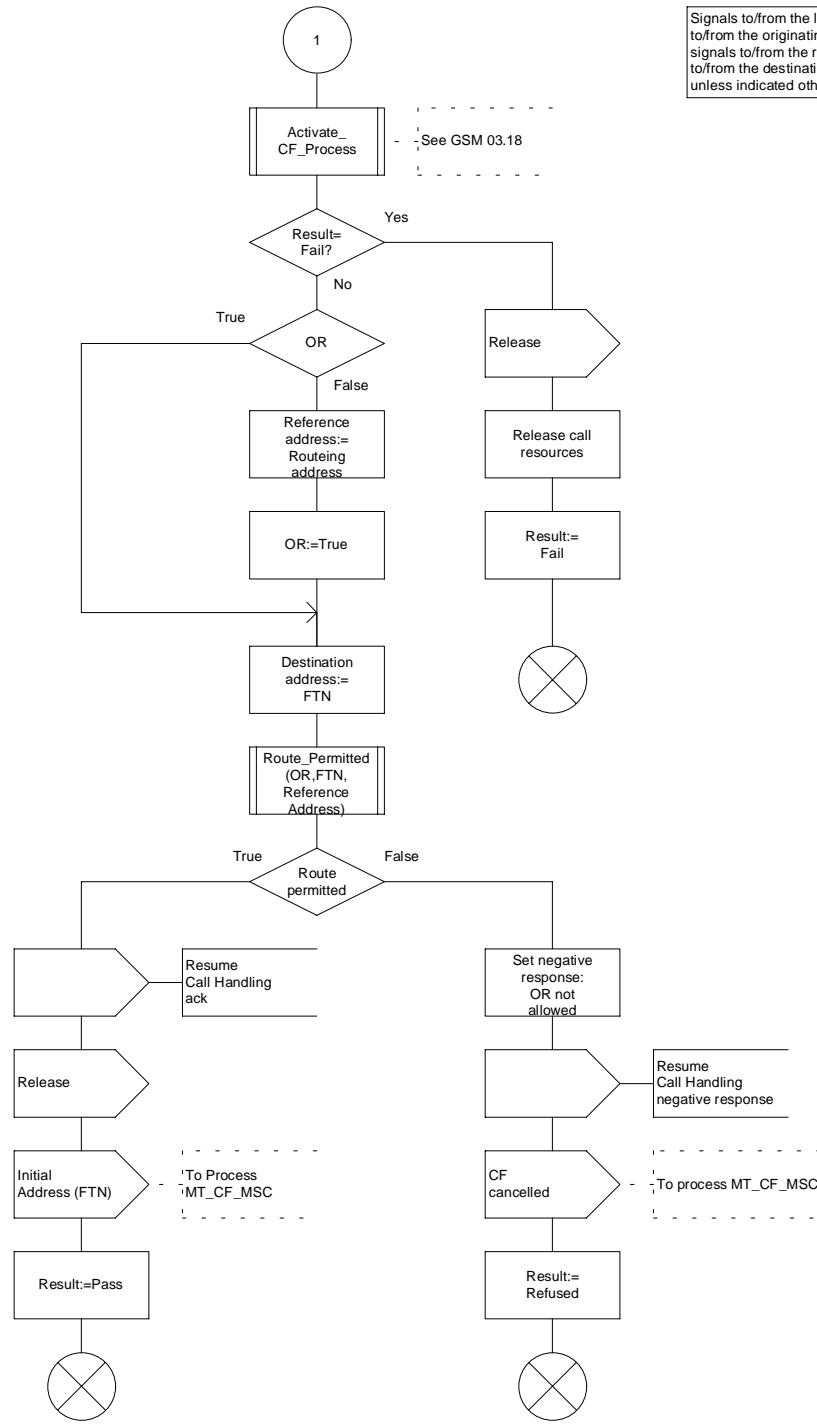CF cancelled - To process MT_CF_MSC

Result:= Refused

Figure 7b: Procedure OR_Handle_RCH (sheet 2)

CHANGE REQUEST

Please see embedded help file at the bottom of this page for instructions on how to fill in this form correctly.

03.79 CR **A025**   Current Version: **7.2.0**

GSM (AA.BB) or 3G (AA.BBB) specification number ↑   *↑ CR number as allocated by MCC support team*

For submission to:	**CN#07**	for approval	**X**	strategic		*(for SMG*
list expected approval meeting # here ↑		for information		non-strategic	**X**	*use only)*

Form: CR cover sheet, version 2 for 3GPP and SMG   The latest version of this form is available from: ftp://ftp.3gpp.org/Information/CR-Form-v2.doc

Proposed change affects: (U)SIM ☐   ME ☐   UTRAN / Radio ☐   Core Network **X**
(at least one should be marked with an X)

Source:	N2		**Date:**	7 Feb 2000

Subject:	Correction of CF Notification

Work item:	CAMEL Phase 2

Category: F   Correction
                       A   Corresponds to a correction in an earlier release   **X**
(only one category   B   Addition of feature
shall be marked   C   Functional modification of feature
with an X)   D   Editorial modification

Release:	Phase 2	
	Release 96	
	Release 97	
	Release 98	**X**
	Release 99	
	Release 00	

Reason for change:	See next page for detail.

Clauses affected:	

Other specs affected:	Other 3G core specifications		→ List of CRs:	
	Other GSM core specifications	**X**	→ List of CRs:	03.18-A058, 03.78-A152
	MS test specifications		→ List of CRs:	
	BSS test specifications		→ List of CRs:	
	O&M specifications		→ List of CRs:	

Other comments:	Assessment: Siemens sees the problem identified in this CR serious and the correction shall be essential for all the manufactures and the operators. Therefore, this CR should fall into the category 1 (C1) as classified at the CN#5 meeting, Kyongju.

Reason for change:

Problem - Endless loop in Obtain_Routing Address (GSM TS 03.18):

The first SRI and SRI ack are done in Obtain_Routing Address. Then CAMEL_MT_GMSC_INIT (GSM TS 03.78) is called.
1. If the terminating service logic sends CONTINUE in CAMEL_MT_GMSC_INIT, the second SRI is sent and SRI ack contains FTN and O-CSI if the subscriber is not reachable. This procedure provides the output as „FTN".
2. Returning to procedure Obtain_Routing_Address, it calls the Procedure CAMEL_MT_GMSC_Notify_CF (GSM TS 03.78)
3. In CAMEL_MT_GMSC_Notify_CF, the terminating service logic is informed about CFNRc by EVENT REPORT BCSM.
4. The gsmSCF may answer with CONNECT.
5. The procedure CAMEL_MT_GMSC_Notify_CF delivers output "Reconnect".
6. Returening to Obtain_Routing Address, it calls the procedure CAMEL_MT_GMSC_INIT again.
7. The procedure CAMEL_MT_GMSC_INIT delivers again output 'FTN".
8. The procedure Obtain_Routing_Address calls again procedure CAMEL_MT_GMSC_Notify_CF.

The CFNRc data are still stored therefore it starts from the beginning

Proposed Correction:
   The proposal is to call procedure CAMEL_MT_GMSC_Notify_CF (in GSM TS 03.78) only for GSM-CF, i.e. gsmSCF shall not be notified about new Called Party Number being received from it in CONNECT.

   Therefore a new outputs 'CAMEL_FTN' and 'GSM_FTN' are defined in Procedure CAMEL_MT_GMSC_INIT (in GSM TS 03.78). This is to be checked in procedure Obtain_Routeing_Address (in GSM TS 03.18). If result = 'CAMEL_FTN' procedure CAMEL_MT_GMSC_Notify_CF (in GSM TS 03.78) shall not be called. CF process shall be started instead.

   Correction on GSM TS 03.78
   Further, a new check on Called Party Number is proposed in CAMEL_MT_GMSC_Notify_CF procedure. If the same number is delivered in CONNECT then CF process shall be started immediately, i.e. there shall be no Reconnect attempt.

   Correction on GSM TS 03.79
   Last issue is the interworking with OR – when terminating logic is informed about ORLCF and sends a new Called Party Number in CONNECT then the connection to VMSC shall be released and RESUME CALL HANDLING shall be sent.

Procedure OR_Handle_RCH   H_RCH1(2)

Procedure in the GMSC to
handle a Resume Call Handling
request

Signals to/from the left are
to/from the originating exchange;
signals to/from the right are
to/from the destination exchange
unless indicated otherwise

O-CSI included?

GMSC supports CAMEL?

Forwarding interrogation required?

Set negative response: OR not allowed

Resume Call Handling negative response

Forwarding reason= Call deflection?

Result:= Refused

Send Routeing Info (Forwarding Info)

Wait_For_ Forwarding_ Info

To HLR

Send Routeing Info ack   From HLR

Send Routeing Info negative response   From HLR

Release

Release

CAMEL_ MT_GMSC_ Notify_CF   See GSM 03.78

Set negative response: Forwarding failed

Resume Call Handling negative response

Result?   Reconnect   Fail   Continue

Resume Call Handling ack

Release

Release   Release

Release call resources   Release call resources

Result:= Reconnect

Result:= Fail   Result:= Fail

1

Figure 7a: Procedure OR_Handle_RCH (sheet 1)

Procedure OR_Handle_RCH   H_RCH2(2)

Procedure in the GMSC to
handle a Resume Call Handling
request

(1)

Signals to/from the left are
to/from the originating exchange;
signals to/from the right are
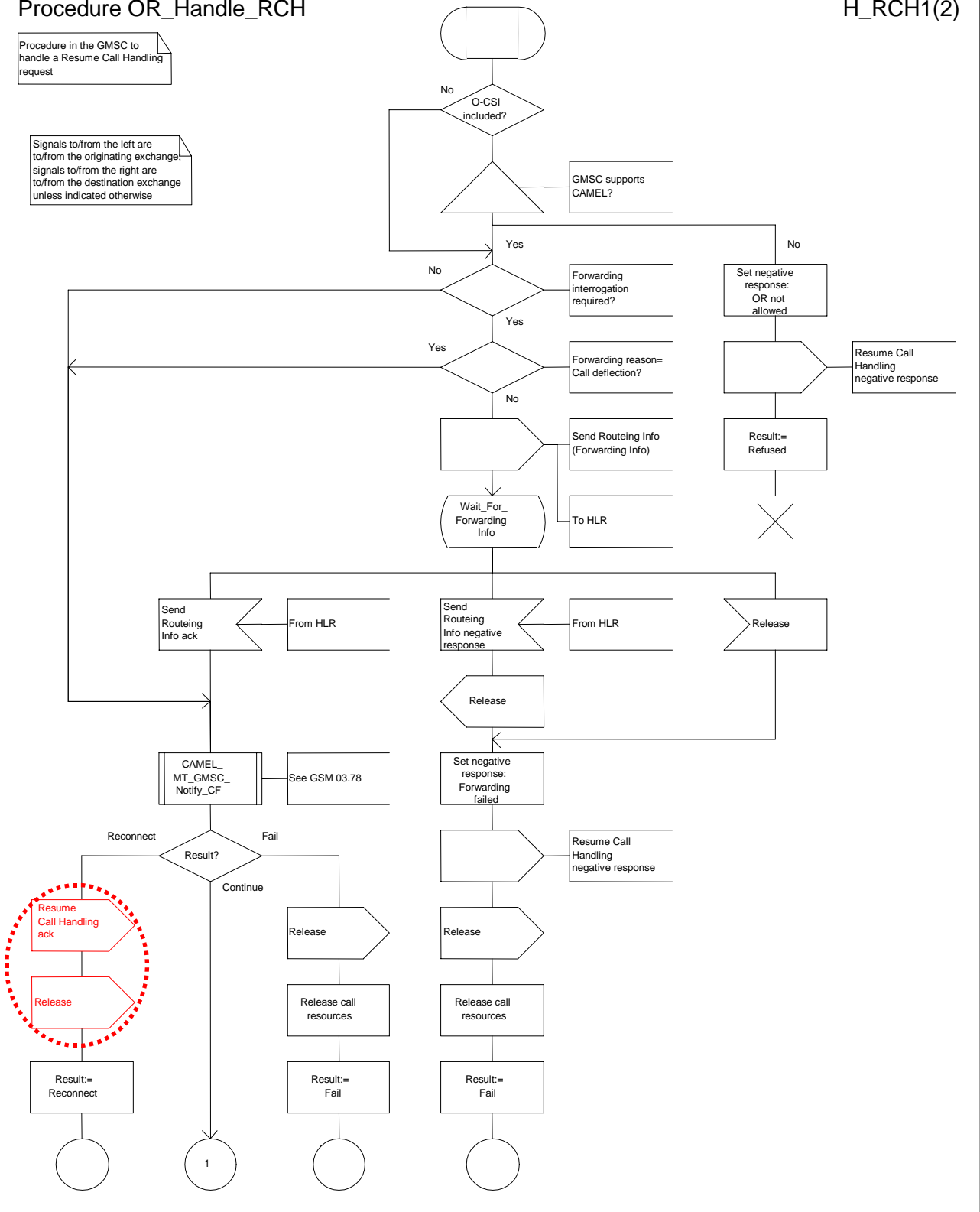to/from the destination exchange
unless indicated otherwise

Activate_
CF_Process   - See GSM 03.18

Result=
Fail?

No   Yes

True   OR   Set negative
                      response:
            False   Forwarding
                      failed

Reference
address:=   Resume Call
Routeing   Handling
address   negative response

OR:=True   Release

Destination   Release call
address:=   resources
FTN

Route_Permitted   Result:=
(OR,FTN,   Fail
Reference
Address)   ⊗

True   Route   False
        permitted

Resume   Set negative
Call Handling   response:
ack   OR not
                    allowed

Release   Resume
                    Call Handling
                    negative response

UUS_GMSC_
Check_   - See GSM 03.87
Forwarding

Initial   To Process   CF   To process MT_CF_MSC
Address (FTN)   MT_CF_MSC   cancelled

Result:=Pass   Result:=
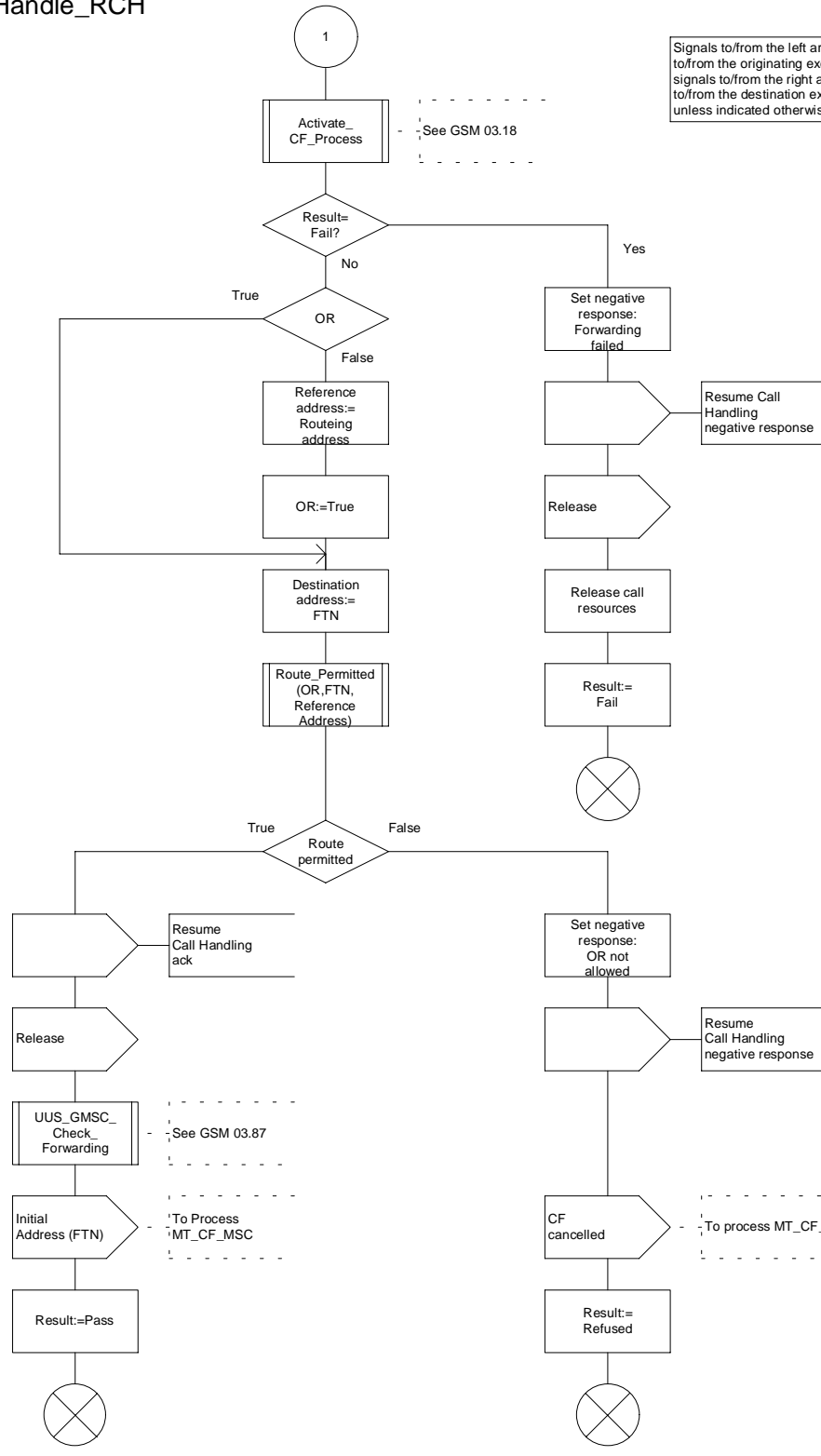   Refused

⊗   ⊗

Figure 7b: Procedure OR_Handle_RCH (sheet 2)