

Source: TSG CN WG3
Title: CRs to Rel-4 and previous on Work Item “TEI”
Agenda item: 7.11
Document for: APPROVAL

Introduction:

This document contains 6 CRs to Rel-4 and previous on Work Item “TEI” that have been agreed by TSG CN WG3, and are forwarded to TSG CN Plenary for approval.

WG_tdoc	Spec	CR	R	Cat	Title	Rel	C_Ver
N3-040363	27.001	105	1	F	Addition of network initiated in-call modification	R99	3.14.0
N3-040364	27.001	106	1	A	Addition of network initiated in-call modification	Rel-4	4.11.0
N3-040365	27.001	107	1	A	Addition of network initiated in-call modification	Rel-5	5.7.0
N3-040366	29.007	097	1	F	Addition of network initiated in-call modification	R99	3.14.0
N3-040367	29.007	098	1	A	Addition of network initiated in-call modification	Rel-4	4.10.0
N3-040368	29.007	099	1	A	Addition of network initiated in-call modification	Rel-5	5.9.0

CR-Form-v7

CHANGE REQUEST

⌘ **27.001 CR 105** ⌘ rev **1** ⌘ Current version: **3.14.0** ⌘

For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.

Proposed change affects: UICC apps ME Radio Access Network Core Network

Title:	⌘ Addition of network initiated in-call modification		
Source:	⌘ TSG_CN WG3		
Work item code:	⌘ TEI	Date:	⌘ 29.04.2004
Category:	⌘ F	Release:	⌘ R99
	Use <u>one</u> of the following categories:		Use <u>one</u> of the following releases:
	F (correction)	2 (GSM Phase 2)	R96 (Release 1996)
	A (corresponds to a correction in an earlier release)	R97 (Release 1997)	R98 (Release 1998)
	B (addition of feature),	R99 (Release 1999)	Rel-4 (Release 4)
	C (functional modification of feature)	Rel-5 (Release 5)	Rel-6 (Release 6)
	D (editorial modification)		
	Detailed explanations of the above categories can be found in 3GPP TR 21.900 .		

Reason for change:	⌘ In R99 the fallback from an analogue multimedia call to speech was introduced to the standard. This was the first application of the network initiated in-call modification, and it was forgotten to enhance the description of synchronization of the TCH in subclause 8.1 accordingly.
Summary of change:	⌘ The condition when to start the synchronization process during a network initiated in-call modification is added.
Consequences if not approved:	⌘ Incomplete specification. If the procedure is implemented in the MS in a wrong way, the synchronization process and thereby the fallback to speech may fail.

Clauses affected:	⌘ 8.1										
Other specs affected:	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="width: 20px; text-align: center;">Y</td> <td style="width: 20px; text-align: center;">N</td> </tr> <tr> <td style="text-align: center;">X</td> <td style="text-align: center;"></td> </tr> <tr> <td style="text-align: center;"></td> <td style="text-align: center;">X</td> </tr> <tr> <td style="text-align: center;"></td> <td style="text-align: center;">X</td> </tr> </table>	Y	N	X			X		X	Other core specifications	⌘ 24.008-857r1 (N1-040972), 29.007-097r1 (N3-040366)
Y	N										
X											
	X										
	X										
		Test specifications									
		O&M Specifications									
Other comments:	⌘										

How to create CRs using this form:

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downloaded from the 3GPP server under <ftp://ftp.3gpp.org/specs/> For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.

- 3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

8.1 Synchronization of the Traffic Channel

As long as there is no connection between the traffic channel and the interface to the TE this interface must be terminated in the appropriate way.

Prior to exposing the traffic channel of a GSM PLMN connection to transmission of user data, the controlling entities of the connection have to assure of the availability of the traffic channel(s). This is done by the so called synchronization process:

- starting on the indication of "physical connection established" resulting from the PLMN inherent outband signalling procedure. This indication is given: ~~on reception of the message CONNECT in case of MO calls, on reception of the message CONNACK in case of MT calls and on reception of the message MODIFY COMPLETE in case of in-call modification~~
 - for MO calls: on reception of the CONNECT message;
 - for MT calls: on reception of the CONNECT ACKNOWLEDGE message;
 - for mobile initiated in-call modification: on reception of the MODIFY COMPLETE message; and
 - for network initiated in-call modification: on sending the RR/RRC message confirming the reconfiguration of the traffic channel (in GSM: ASSIGNMENT COMPLETE, HANDOVER COMPLETE, or CHANNEL MODE MODIFY ACKNOWLEDGE; in UMTS: RADIO BEARER RECONFIGURATION COMPLETE, TRANSPORT CHANNEL RECONFIGURATION COMPLETE, or PHYSICAL CHANNEL RECONFIGURATION COMPLETE);
- ending by indicating the successful execution of this process to the controlling entity, which then takes care of the further use of the inband information (data, status).

It should be noted that during the call control phases (set-up and clear), the procedures at the V.-series and X.-series DTE interfaces can be mapped completely to the out-of-band signalling procedure. The state of the S-bits and X-bits during the call control phases are irrelevant to the DTE interface procedures. However, the "ready for data" condition (i.e. CTs 106 and 109, in the case of V.-series interface, and I-circuit, in the case of X.-series interface) is derived from the status bits received by the TAF once synchronization is complete. Since half duplex operation is not supported by a GSM PLMN, status bit SB is not needed to signal the turn around of the connection.

CR-Form-v7

CHANGE REQUEST

⌘ **27.001 CR 106** ⌘ rev **1** ⌘ Current version: **4.11.0** ⌘

For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.

Proposed change affects: UICC apps ME Radio Access Network Core Network

Title:	⌘ Addition of network initiated in-call modification		
Source:	⌘ TSG_CN WG3		
Work item code:	⌘ TEI	Date:	⌘ 29.04.2004
Category:	⌘ A	Release:	⌘ Rel-4
	Use <u>one</u> of the following categories:		Use <u>one</u> of the following releases:
	F (correction)	2	(GSM Phase 2)
	A (corresponds to a correction in an earlier release)	R96	(Release 1996)
	B (addition of feature),	R97	(Release 1997)
	C (functional modification of feature)	R98	(Release 1998)
	D (editorial modification)	R99	(Release 1999)
	Detailed explanations of the above categories can be found in 3GPP TR 21.900 .		Rel-4 (Release 4)
			Rel-5 (Release 5)
			Rel-6 (Release 6)

Reason for change:	⌘ In R99 the fallback from an analogue multimedia call to speech was introduced to the standard. This was the first application of the network initiated in-call modification, and it was forgotten to enhance the description of synchronization of the TCH in subclause 8.1 accordingly.
Summary of change:	⌘ The condition when to start the synchronization process during a network initiated in-call modification is added.
Consequences if not approved:	⌘ Incomplete specification. If the procedure is implemented in the MS in a wrong way, the synchronization process and thereby the fallback to speech may fail.

Clauses affected:	⌘ 8.1						
Other specs affected:	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="width: 20px; text-align: center;">Y</td> <td style="width: 20px; text-align: center;">N</td> </tr> <tr> <td style="text-align: center;">X</td> <td style="text-align: center;"></td> </tr> </table> Other core specifications	Y	N	X		⌘	24.008-858r1 (N1-040973), 29.007-098r1 (N3-040367)
Y	N						
X							
	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="width: 20px; text-align: center;"></td> <td style="width: 20px; text-align: center;">X</td> </tr> <tr> <td style="text-align: center;"></td> <td style="text-align: center;">X</td> </tr> </table> Test specifications O&M Specifications		X		X		
	X						
	X						
Other comments:	⌘						

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- 3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

8.1 Synchronization of the Traffic Channel

As long as there is no connection between the traffic channel and the interface to the TE this interface shall be terminated in the appropriate way.

Prior to exposing the traffic channel of a GSM PLMN connection to transmission of user data, the controlling entities of the connection shall assure the availability of the traffic channel(s). This is done by the so called synchronization process:

- starting on the indication of "physical connection established" resulting from the PLMN inherent outband signalling procedure. This indication is given: ~~on reception of the message CONNECT in case of MO calls, on reception of the message CONNACK in case of MT calls and on reception of the message MODIFY COMPLETE in case of in-call modification~~
 - for MO calls: on reception of the CONNECT message;
 - for MT calls: on reception of the CONNECT ACKNOWLEDGE message;
 - for mobile initiated in-call modification: on reception of the MODIFY COMPLETE message; and
 - for network initiated in-call modification: on sending the RR/RRC message confirming the reconfiguration of the traffic channel (in A/Gb mode: ASSIGNMENT COMPLETE, HANDOVER COMPLETE, or CHANNEL MODE MODIFY ACKNOWLEDGE; in Iu mode: RADIO BEARER RECONFIGURATION COMPLETE, TRANSPORT CHANNEL RECONFIGURATION COMPLETE, or PHYSICAL CHANNEL RECONFIGURATION COMPLETE);
- ending by indicating the successful execution of this process to the controlling entity, which then takes care of the further use of the inband information (data, status).

During the call control phases (set-up and clear), the procedures at the V.-series DTE interfaces may be mapped completely to the out-of-band signalling procedure. The state of the S-bits and X-bits during the call control phases are in this case irrelevant to the DTE interface procedures. However, the "ready for data" condition (i.e. CTs 106 and 109) is derived from the status bits received by the TAF once synchronization is complete. Since half duplex operation is not supported by a GSM PLMN, status bit SB is not needed to signal the turn around of the connection.

CR-Form-v7

CHANGE REQUEST

⌘ **27.001 CR 107** ⌘ rev **1** ⌘ Current version: **5.7.0** ⌘

For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.

Proposed change affects: UICC apps ME Radio Access Network Core Network

Title:	⌘ Addition of network initiated in-call modification		
Source:	⌘ TSG_CN WG3		
Work item code:	⌘ TEI	Date:	⌘ 29.04.2004
Category:	⌘ A	Release:	⌘ Rel-5
	Use <u>one</u> of the following categories:		Use <u>one</u> of the following releases:
	F (correction)	2	(GSM Phase 2)
	A (corresponds to a correction in an earlier release)	R96	(Release 1996)
	B (addition of feature),	R97	(Release 1997)
	C (functional modification of feature)	R98	(Release 1998)
	D (editorial modification)	R99	(Release 1999)
	Detailed explanations of the above categories can be found in 3GPP TR 21.900 .		Rel-4 (Release 4)
			Rel-5 (Release 5)
			Rel-6 (Release 6)

Reason for change:	⌘ In R99 the fallback from an analogue multimedia call to speech was introduced to the standard. This was the first application of the network initiated in-call modification, and it was forgotten to enhance the description of synchronization of the TCH in subclause 8.1 accordingly.
Summary of change:	⌘ The condition when to start the synchronization process during a network initiated in-call modification is added.
Consequences if not approved:	⌘ Incomplete specification. If the procedure is implemented in the MS in a wrong way, the synchronization process and thereby the fallback to speech may fail.

Clauses affected:	⌘ 8.1										
Other specs affected:	<table border="1" style="display: inline-table; border-collapse: collapse; text-align: center;"> <tr> <td style="width: 20px;">Y</td> <td style="width: 20px;">N</td> </tr> <tr> <td>X</td> <td></td> </tr> <tr> <td></td> <td>X</td> </tr> <tr> <td></td> <td>X</td> </tr> </table>	Y	N	X			X		X	Other core specifications	⌘ 24.008-859r1 (N1-040974), 29.007-099r1 (N3-040368)
Y	N										
X											
	X										
	X										
		Test specifications									
		O&M Specifications									
Other comments:	⌘										

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8.1 Synchronization of the Traffic Channel

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Prior to exposing the traffic channel of a PLMN connection to transmission of user data, the controlling entities of the connection shall assure the availability of the traffic channel(s). This is done by the so called synchronization process:

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 - for MO calls: on reception of the CONNECT message;
 - for MT calls: on reception of the CONNECT ACKNOWLEDGE message;
 - for mobile initiated in-call modification: on reception of the MODIFY COMPLETE message; and
 - for network initiated in-call modification: on sending the RR/RRC message confirming the reconfiguration of the traffic channel (in A/Gb mode: ASSIGNMENT COMPLETE, HANDOVER COMPLETE, or CHANNEL MODE MODIFY ACKNOWLEDGE; in Iu mode: RADIO BEARER RECONFIGURATION COMPLETE, TRANSPORT CHANNEL RECONFIGURATION COMPLETE, or PHYSICAL CHANNEL RECONFIGURATION COMPLETE);
- ending by indicating the successful execution of this process to the controlling entity, which then takes care of the further use of the inband information (data, status).

During the call control phases (set-up and clear), the procedures at the V.-series DTE interfaces may be mapped completely to the out-of-band signalling procedure. The state of the S-bits and X-bits during the call control phases are in this case irrelevant to the DTE interface procedures. However, the "ready for data" condition (i.e. CTs 106 and 109) is derived from the status bits received by the TAF once synchronization is complete. Since half duplex operation is not supported by a PLMN, status bit SB is not needed to signal the turn around of the connection.

CR-Form-v7

CHANGE REQUEST

⌘ **29.007 CR 097** ⌘ rev **1** ⌘ Current version: **3.14.0** ⌘

For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.

Proposed change affects: UICC apps ME Radio Access Network Core Network

Title:	⌘ Addition of network initiated in-call modification		
Source:	⌘ TSG_CN WG3		
Work item code:	⌘ TEI	Date:	⌘ 29.04.2004
Category:	⌘ F	Release:	⌘ R99
	Use <u>one</u> of the following categories:		Use <u>one</u> of the following releases:
	F (correction)	2 (GSM Phase 2)	
	A (corresponds to a correction in an earlier release)	R96 (Release 1996)	
	B (addition of feature),	R97 (Release 1997)	
	C (functional modification of feature)	R98 (Release 1998)	
	D (editorial modification)	R99 (Release 1999)	
	Detailed explanations of the above categories can be found in 3GPP TR 21.900 .		Rel-4 (Release 4)
			Rel-5 (Release 5)
			Rel-6 (Release 6)

Reason for change:	⌘ In R99 the fallback from an analogue multimedia call to speech was introduced to the standard. This was the first application of the network initiated in-call modification, and it was forgotten to enhance the description of synchronization of the TCH accordingly.
Summary of change:	⌘ The condition when to start the synchronization process during a network initiated in-call modification is added.
Consequences if not approved:	⌘ Incomplete specification. If the procedure is implemented in the network in a wrong way, the synchronization process and thereby the fallback to speech may fail.

Clauses affected:	⌘ 9.2.3.4, 9.2.4.10, 10.2.3.4, 10.2.4.10.4						
Other specs	<table border="1" style="display: inline-table; border-collapse: collapse; text-align: center;"> <tr> <td style="width: 20px;">Y</td> <td style="width: 20px;">N</td> </tr> <tr> <td>X</td> <td></td> </tr> </table>	Y	N	X		Other core specifications	⌘ 24.008-857r1 (N1-040972), 27.001-105r1 (N3-040363)
Y	N						
X							
Affected:	<table border="1" style="display: inline-table; border-collapse: collapse; text-align: center;"> <tr> <td style="width: 20px;"></td> <td style="width: 20px;">X</td> </tr> <tr> <td></td> <td>X</td> </tr> </table>		X		X	Test specifications	
	X						
	X						
		O&M Specifications					
Other comments:	⌘						

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- 3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

9.2.3.4 Establishment of end-to-end terminal synchronizations

Prior to exposing the traffic channel of a PLMN connection to transmission of user data, the controlling entities of the connection shall assure of the availability of the traffic channel. This is done by a so called synchronizations process:

- starting on the indication of "physical connection established" resulting from the PLMN-inherent outband signalling procedure. This indication is given: ~~on sending the message CONNECT in case of MOC, CONNECT ACKNOWLEDGEMENT in case of MTC and MODIFY COMPLETE (which is sent after reception of the ASSIGN COMPLETE message) in case of in-call modification~~
 - for MOC: on sending the CONNECT message;
 - for MTC: on sending the CONNECT ACKNOWLEDGE message;
 - for mobile initiated in-call modification: on sending the MODIFY COMPLETE message (which is sent after reception of the ASSIGNMENT COMPLETE or RAB ASSIGNMENT RESPONSE message); and
 - for network initiated in-call modification: on reception of the ASSIGNMENT COMPLETE or RAB ASSIGNMENT RESPONSE message;
- ending by indicating the successful execution of this process to the controlling entity, which then takes care of the further use of the inband information (data, status).

Network interworking within an MSC/IWF is concerned with the terminating side (to the MS / UE) and the transit side (to the fixed network) of a connection. Both sides have to be treated individually related to the synchronizations process.

***** NEXT MODIFIED SECTION *****

9.2.4.10 Establishment of end-to-end terminal synchronizations

Prior to exposing the traffic channel of a PLMN connection to transmission of user data, the controlling entities of the connection shall assure of the availability of the traffic channel. This is done by a so called synchronization process:

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 - for MOC: on sending the CONNECT message;
 - for MTC: on sending the CONNECT ACKNOWLEDGE message;
 - for mobile initiated in-call modification: on sending the MODIFY COMPLETE message (which is sent after reception of the ASSIGNMENT COMPLETE or RAB ASSIGNMENT RESPONSE message); and
 - for network initiated in-call modification: on reception of the ASSIGNMENT COMPLETE or RAB ASSIGNMENT RESPONSE message;
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Network interworking within an MSC/IWF is concerned with the terminating side (to the MS) and the transit side (to the fixed network) of a connection. Both sides shall be treated individually related to the synchronization process.

***** NEXT MODIFIED SECTION *****

10.2.3.4 Establishment of end-to-end terminal synchronizations

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 - for MOC: on sending the CONNECT message;
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Network interworking within an MSC/IWF is concerned with the terminating side (to the MS / UE) and the transit side (to the fixed network) of a connection. Both sides shall be treated individually related to the synchronizations process.

***** NEXT MODIFIED SECTION *****

10.2.4.10.4 Establishment of end-to-end terminal synchronizations

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Network interworking within an MSC/IWF is concerned with the terminating side (to the MS) and the transit side (to the fixed network) of a connection. Both sides shall be treated individually related to the synchronization process.

CR-Form-v7

CHANGE REQUEST

⌘ **29.007 CR 098** ⌘ rev **1** ⌘ Current version: **4.10.0** ⌘

For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.

Proposed change affects: UICC apps ME Radio Access Network Core Network

Title:	⌘ Addition of network initiated in-call modification		
Source:	⌘ TSG_CN WG3		
Work item code:	⌘ TEI	Date:	⌘ 29.04.2004
Category:	⌘ A	Release:	⌘ Rel-4
	Use <u>one</u> of the following categories:		Use <u>one</u> of the following releases:
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			Rel-6 (Release 6)

Reason for change:	⌘ In R99 the fallback from an analogue multimedia call to speech was introduced to the standard. This was the first application of the network initiated in-call modification, and it was forgotten to enhance the description of synchronization of the TCH accordingly.
Summary of change:	⌘ The condition when to start the synchronization process during a network initiated in-call modification is added.
Consequences if not approved:	⌘ Incomplete specification. If the procedure is implemented in the network in a wrong way, the synchronization process and thereby the fallback to speech may fail.

Clauses affected:	⌘ 9.2.3.4, 9.2.4.10, 10.2.3.4, 10.2.4.10.4										
Other specs affected:	<table border="1" style="display: inline-table; border-collapse: collapse; text-align: center;"> <tr> <td style="width: 20px;">Y</td> <td style="width: 20px;">N</td> </tr> <tr> <td>X</td> <td></td> </tr> <tr> <td></td> <td>X</td> </tr> <tr> <td></td> <td>X</td> </tr> </table>	Y	N	X			X		X	Other core specifications	⌘ 24.008-858r1 (N1-040973), 27.001-106r1 (N3-040364)
Y	N										
X											
	X										
	X										
		Test specifications									
		O&M Specifications									
Other comments:	⌘										

How to create CRs using this form:

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CR-Form-v7

CHANGE REQUEST

⌘ **29.007 CR 099** ⌘ rev **1** ⌘ Current version: **5.9.0** ⌘

For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.

Proposed change affects: UICC apps ME Radio Access Network Core Network

Title:	⌘ Addition of network initiated in-call modification		
Source:	⌘ TSG_CN WG3		
Work item code:	⌘ TEI	Date:	⌘ 29.04.2004
Category:	⌘ A	Release:	⌘ Rel-5
	Use <u>one</u> of the following categories:		Use <u>one</u> of the following releases:
	F (correction)	2	(GSM Phase 2)
	A (corresponds to a correction in an earlier release)	R96	(Release 1996)
	B (addition of feature),	R97	(Release 1997)
	C (functional modification of feature)	R98	(Release 1998)
	D (editorial modification)	R99	(Release 1999)
	Detailed explanations of the above categories can be found in 3GPP TR 21.900 .		Rel-4 (Release 4)
			Rel-5 (Release 5)
			Rel-6 (Release 6)

Reason for change:	⌘ In R99 the fallback from an analogue multimedia call to speech was introduced to the standard. This was the first application of the network initiated in-call modification, and it was forgotten to enhance the description of synchronization of the TCH accordingly.
Summary of change:	⌘ The condition when to start the synchronization process during a network initiated in-call modification is added.
Consequences if not approved:	⌘ Incomplete specification. If the procedure is implemented in the network in a wrong way, the synchronization process and thereby the fallback to speech may fail.

Clauses affected:	⌘ 9.2.3.4, 9.2.4.10, 10.2.3.4, 10.2.4.10.4										
Other specs affected:	<table border="1" style="display: inline-table; border-collapse: collapse; text-align: center;"> <tr> <td style="width: 20px;">Y</td> <td style="width: 20px;">N</td> </tr> <tr> <td>X</td> <td></td> </tr> <tr> <td></td> <td>X</td> </tr> <tr> <td></td> <td>X</td> </tr> </table>	Y	N	X			X		X	Other core specifications	⌘ 24.008-859r1 (N1-040974), 27.001-107r1 (N3-040365)
Y	N										
X											
	X										
	X										
		Test specifications									
		O&M Specifications									
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