TSGS#7(00)0262
Agenda Item: 6.4.3

Source **TSG-SA WG4**

Title **2 CRs on AMR**

S4 Tdoc.	Spec.	Ver.	CR	Rev.	Cat.	Rel.	Subject
S4-000259	06.93	7.3.0	A008		C	R98	CR to GSM 06.93 A008 on Re-scheduling of stolen SID_UPDATE Frames for AMR (R98)
S4-000260	26.093	3.1.0	002		A	R99	CR to 3G TS 26.093 002 on Re-scheduling of stolen SID_UPDATE Frames for AMR (R99)

ETSI SMG11 Meeting #16
Versailles, France, 5-9 Jun 2000

Document P-00259
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.

GSM 06.93	CR	A008	Current Version:	7.3.0

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

For submission to:	TSG-SA#8	for approval	X	strategic		(for SMG use only)
list expected approval meeting # here ↑		for information		non-strategic		

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	X	UTRAN / Radio	X	Core Network	

Source: TSG-SA WG4 **Date:** 26th June 2000

Subject: Re-scheduling of stolen SID_UPDATE Frames for AMR

Work item: AMR

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

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

Reason for change:
Currently, Every SID_UPDATE frames stolen by a RATSCCH are rescheduled for transmission. Also, SID_UPDATE frames that are stolen by a FACCH are not rescheduled for transmission if they are not the first SID_UPDATE after a SID_FIRST frame.
The proposed change is to reschedule every SID_UPDATE frames stolen by a FACCH as it is the case for SID_UPDATE frames stolen by a RATSCCH.

Clauses affected: 5.1.2.2

Other specs affected:

Other 3G core specifications		→ List of CRs:
Other GSM core specifications		→ List of CRs:
MS test specifications		→ List of CRs:
BSS test specifications		→ List of CRs:
O&M specifications		→ List of CRs:

Other comments:

help.doc

<--------- double-click here for help and instructions on how to create a CR.

5.1.2.2 Functions of the TX Radio Subsystem for TCH/AHS

The TX Radio Subsystem operates in the following way regarding DTX:

- all frames marked with TX_TYPE = " SPEECH_GOOD " are scheduled for normal channel coding and transmission. The frame format for CHE operation shall be SPEECH. However, if the previous frame was of TX_TYPE = “SID_FIRST”, a SID_FIRST_INH frame format followed by SPEECH_GOOD shall be signalled to the CHE. If the previous frame was of TX_TYPE = “SID_UPDATE”, a SID_UPDATE_INH frame format followed by SPEECH_GOOD shall be signalled to the CHE. If the previous frame was of TX_TYPE “NO_DATA”, an ONSET frame format followed by SPEECH_GOOD shall be signalled to the CHE;

- for frames marked with TX_TYPE = “SID_FIRST” a SID_FIRST_P1 frame format is signalled to the CHE. Note: All 4 TDMA frames carrying the bits of this frame shall be transmitted. The Mode Indication received with the frame is stored for potential use in the next frame;

- for frames marked with TX_TYPE = “SID_UPDATE” a SID_UPDATE frame format is signalled to the CHE. All 4 TDMA frames carrying the bits of this frame shall be transmitted;

- for frames marked with TX_TYPE = “NO_DATA”, no processing or transmission is carried out. However, if the preceding frame was marked with TX_TYPE = “SID_FIRST”, a SID_FIRST_P2 frame format is signalled to CHE. Note: The 2 TDMA frames carrying bits of this frame shall be transmitted. If, depending on the current frame number, the Mode Indication is to be transmitted with these TDMA frames, the Mode Indication shall be used that was stored during the processing of the preceding SID_FIRST frame.

If a SID_FIRST frame or a ~~the first~~ SID_UPDATE frame ~~after a SID_FIRST frame,~~ is affected by Fast Associated Control Channel (FACCH) signalling purposes, then the SID_FIRST or SID_UPDATE frame (whichever applies) shall be re-scheduled for transmission immediately after the FACCH signalling. SPEECH frames shall override possible SID_FIRST or SID_UPDATE frames in exceptional cases.
At handover, TX/RX DTX handler synchronisation shall be initiated. At the time instant before the MS starts sending to the new base station, a message shall be sent to the uplink TX DTX handler with the parameter NSYNC = 12.

3GPP TSG SA WG4 Meeting #11
Versailles, France, 5-9 Jun 2000

***Document* TP-00260**
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.

3G 26.093	CR	002	Current Version:	3.1.0

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

For submission to:	TSG-SA#8	for approval	X	strategic		(for SMG use only)
list expected approval meeting # here ↑		for information		non-strategic		

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	X	UTRAN / Radio	X	Core Network	

Source: TSG-SA WG4 **Date:** 26th June 2000

Subject: Re-scheduling of stolen SID_UPDATE Frames for AMR

Work item: AMR

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

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

Reason for change:
Currently, Every SID_UPDATE frames stolen by a RATSCCH are rescheduled for transmission. Also, SID_UPDATE frames that are stolen by a FACCH are not rescheduled for transmission if they are not the first SID_UPDATE after a SID_FIRST frame.
The proposed change is to reschedule every SID_UPDATE frames stolen by a FACCH as it is the case for SID_UPDATE frames stolen by a RATSCCH.

Clauses affected: A.5.1.2.1

Other specs affected:

Other 3G core specifications		→ List of CRs:
Other GSM core specifications		→ List of CRs:
MS test specifications		→ List of CRs:
BSS test specifications		→ List of CRs:
O&M specifications		→ List of CRs:

Other comments:

help.doc

<--------- double-click here for help and instructions on how to create a CR.

A.5.1.2 Functions of the TX Radio Subsystem

The TX Radio Subsystem has the following overall functionality. The radio transmission is cut after the transmission of a SID_FIRST frame when the speaker stops talking. During speech pauses the transmission is resumed at regular intervals for transmission of one SID_UPDATE frame, in order to update the generated comfort noise on the RX side (and to improve the measurement of the link quality by the RSS). Note that the transcoder knows what frames to send. In the case when nothing is to be transmitted it outputs frames marked with TX_TYPE = ”NO_DATA”.
Within the TX Radio Subsystem the TX_TYPE Monitoring unit controls the operation of the Channel Encoder (as specified in 3G TS 25.003) and the Transmission of the frame. Control input to the TX_TYPE Monitoring unit is the TX_TYPE. Control output and input to the Channel Encoder are indicators specifying the frame format. These frame format indicators are defined in 3G TS 25.003, they are different for TCH/AFS and TCH/AHS.

A.5.1.2.1 Functions of the TX Radio Subsystem for TCH/AFS

The TX Radio Subsystem operates in the following way regarding DTX (without TFO):

all frames marked with TX_TYPE = " SPEECH_GOOD " are scheduled for normal channel coding and transmission. The frame format for CHE operation shall be SPEECH. If, however, the previous frame was not of TX_TYPE = “SPEECH_GOOD”, an ONSET frame format followed by SPEECH_GOOD shall be signalled to the CHE;

for frames marked with TX_TYPE = “SID_FIRST” a SID_FIRST frame format is signalled to the CHE;

frames marked with TX_TYPE = “SID_UPDATE” are scheduled for SID_UPDATE frame channel coding and transmission. The frame format signalled to CHE is SID_UPDATE;

for frames marked with TX_TYPE = “NO_DATA” no processing or transmission is carried out.

If a SID_FIRST frame or ~~the first~~ a SID_UPDATE frame ~~after a SID_FIRST frame,~~ is stolen for Fast Associated Control Channel (FACCH) signalling purposes, then the subsequent frame shall be scheduled for transmission of the SID_FIRST or SID_UPDATE frame (whichever applies) instead.
SPEECH frames shall override possible SID_FIRST or SID_UPDATE frames in exceptional cases.
At handover, TX/RX DTX handler synchronisation shall be initiated. At the time instant before the MS starts sending to the new base station, a message shall be sent to the uplink TX DTX handler with the parameter NSYNC = 12.