TSG-RAN Meeting #28
Quebec, Canada, 01-03 June 2005

RP-050314
agenda item 8.4

Source: **TSG-RAN WG2.**

Title: **CRs (Rel-6) on MBMS corrections (25.346, 25.304 and 25.306)**

The following CRs are in RP-050314:

Spec	CR	Rev	Phase	Subject	Cat	Version-Current	Version-New	Doc-2nd-Level	Workitem
25.304	0140	-	Rel-6	Addition of idle mode cell selection due to FLD	F	6.5.0	6.6.0	R2-051567	MBMS-RAN
25.304	0141	-	Rel-6	MBMS Frequency Layer Convergence	F	6.5.0	6.6.0	R2-051568	MBMS-RAN
25.304	0142	-	Rel-6	Removal of sentences in brackets in 25.304	D	6.5.0	6.6.0	R2-051205	MBMS-RAN
25.306	0107	-	Rel-6	Introduction of MBMS capability Part A and B	B	6.4.1	6.5.0	R2-051122	MBMS-RAN
25.346	0016	-	Rel-6	FLD scenario clarifications	F	6.4.0	6.5.0	R2-051121	MBMS-RAN
25.346	0018	-	Rel-6	Handling the validity of the MBMS session Id	F	6.4.0	6.5.0	R2-051123	MBMS-RAN

3GPP TSG–RAN2 Meeting #47 **R2-051567**
Athens, Greece, 9th –13rd May 2005

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CHANGE REQUEST

⌘ **25.304** **CR** **0140** ⌘ **rev** **-** ⌘ Current version: **6.5.0** ⌘

*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 [X] Radio Access Network [X] Core Network [ ]

Title:	⌘	Addition of idle mode cell selection due to FLD
Source:	⌘	RAN WG2
Work item code:	⌘	MBMS-RAN
Date:	⌘	13/05/2005
Category:	⌘	**F**
Release:	⌘	Rel-6

Use one of the following categories:
F *(correction)*
A *(corresponds to a correction in an earlier release)*
B *(addition of feature),*
C *(functional modification of feature)*
D *(editorial modification)*
Detailed explanations of the above categories can be found in 3GPP TR 21.900.

Use one of the following releases:

Ph2	*(GSM Phase 2)*
R96	*(Release 1996)*
R97	*(Release 1997)*
R98	*(Release 1998)*
R99	*(Release 1999)*
Rel-4	*(Release 4)*
Rel-5	*(Release 5)*
Rel-6	*(Release 6)*
Rel-7	*(Release 7)*

Reason for change:	⌘	MBMS applies for idle mode and MBMS frequency layer dispersion is used as cell selection. However currently there are only two types of idle mode cell selection covered in 25.304. One is initial cell selection and the other is cell selection when leaving connected mode. Thus the idle mode cell selection for the purpose of frequency layer dispersion should be included. There is misalignment between 25.304 and 25.331.
Summary of change:	⌘	Add idle mode cell selection for MBMS frequency layer dispersion purpose.
Consequences if not approved:	⌘	Misalignment exists between 25.304 and 25.331.

Clauses affected:	⌘	5.2.2

Other specs affected: ⌘	Y	N		⌘
			Other core specifications	
			Test specifications	
			O&M Specifications	

Other comments: ⌘

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5.2.2 States and state transitions in Idle Mode

Figure 2 shows the states and procedures in Idle Mode.

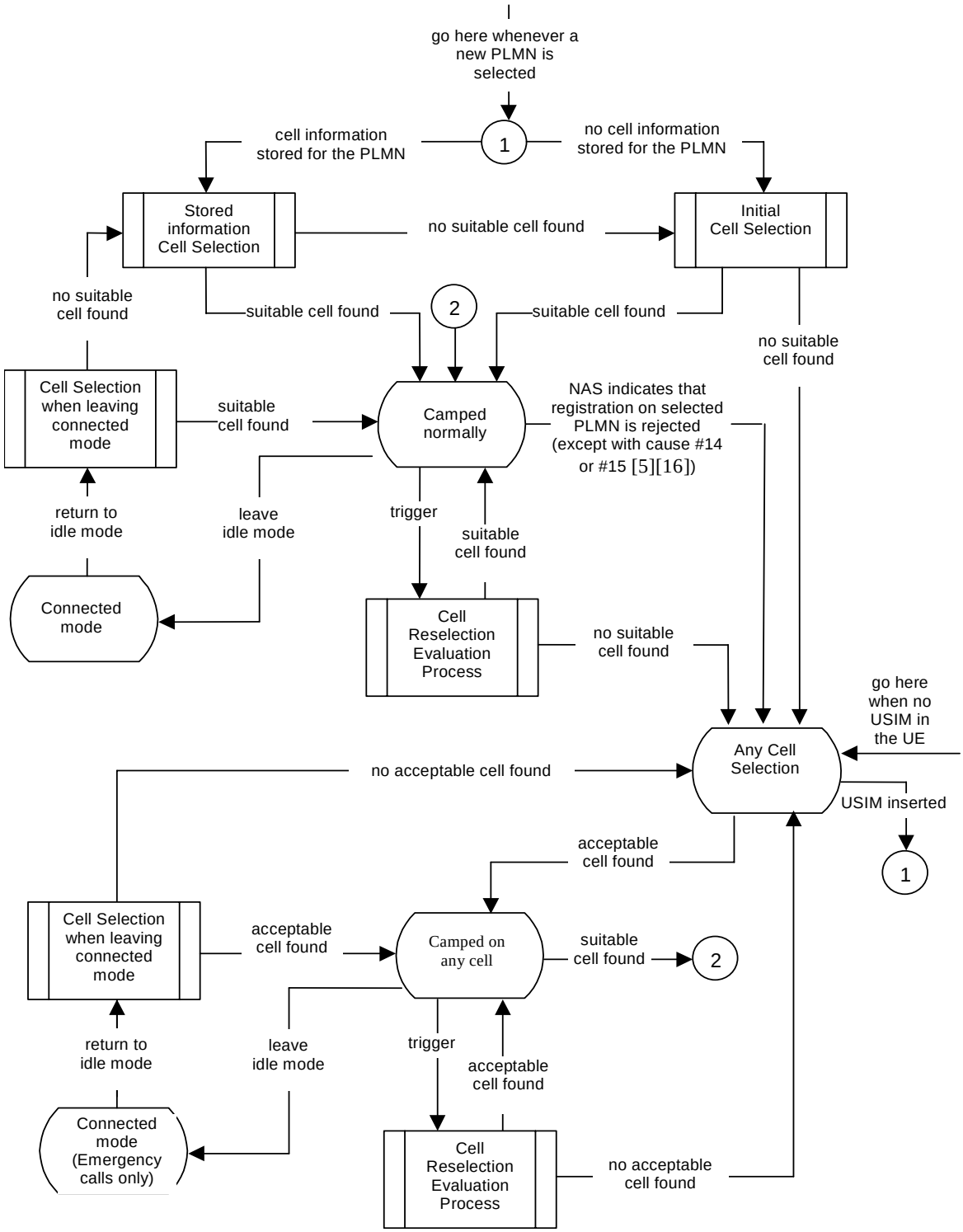

Figure 2: Idle Mode Cell Selection and Reselection
In any state, a new PLMN selection causes an exit to number 1

5.2.2.1 Cell Selection process overview

Whenever a PLMN has been selected by NAS, the UE shall attempt to find a suitable cell to camp on.

The NAS may control the cell selection by:

- providing information on RAT(s) associated with the selected PLMN;
- maintaining lists of forbidden registration areas;
- providing a list of equivalent PLMNs;

One or several RATs may be associated with the selected PLMN. In [5] it is specified which RAT a UE shall select to search for a suitable cell of the selected PLMN.

The AS shall attempt to find a suitable cell to camp on as specified in clause 5.2.3.

When the MBMS frequency layer dispersion is triggered, the UE actions are ~~cell selection procedure is performed as~~ specified in [4].

If a suitable cell is found, the UE shall select this cell to camp on, and report this event to NAS so that the necessary NAS registration procedures can be performed. When the registration is successful, the UE enters in state *Camped normally* in order to obtain normal service.

If the UE is unable to find any suitable cell of selected PLMN the UE shall enter the *Any cell selection* state.

5.2.2.2 Camped normally state overview

In this state, the UE obtains normal service and performs the tasks specified in 5.2.5.

If after a *Cell reselection evaluation process* a better cell is found, the *Cell reselection procedure* is performed. If no suitable cell is found, the UE shall enter the state *Any cell selection*.

If a necessary NAS registration is rejected, the UE shall enter the *Any cell selection* state, except if the LR is rejected with cause #14 or cause #15. In this case the UE shall behave as specified in [5] and [16].

When UE leaves idle mode in order to enter the state *Connected mode*, the UE shall attempt to access the current serving cell. If the access attempt to the serving cell fails, the UE shall use the *Cell reselection evaluation* procedure.

5.2.2.3 Connected mode State overview

The procedures in *Connected mode* state are specified in [4]

When returning to idle mode, the UE shall use the procedure *Cell selection when leaving connected mode* in order to find a suitable cell to camp on and enter state *Camped normally*. If a suitable cell is found, then the AS reports this event to NAS to be capable to perform necessary NAS registration procedures. If no suitable cell is found, the *Stored information cell selection* procedure shall be used.

If no suitable cell is found in *cell reselection evaluation* process, the UE enters the state *Any cell selection*.

5.2.2.4 Any cell selection State overview

In this state the UE performs the tasks specified in subclause 5.2.8

The state *Any cell selection* is also entered if the NAS indicates that a location registration is rejected except if the LR is rejected with cause #14 or cause #15, see [5], or if there is no USIM in the UE.

If the UE received an LR reject with cause #14 or cause #15 the UE shall behave as specified in [5] and [16].

If an acceptable cell is found, the UE shall inform the NAS and camp on this cell and obtain limited service, state *Camped on any cell*. The subsequent actions of the NAS regarding the PLMN selection are specified in [5].

5.2.2.5 Camped on any cell State overview

In this state the UE obtains limited service and shall behave as specified in subclause 5.2.9. The UE shall regularly attempt to find a suitable cell, trying all RATs that are supported by the UE. If a suitable cell is found, this causes an exit to number 2 in figure 2.

NOTE: The 'PLMN selection' process may select a new PLMN at any time in idle mode, which in Figure 2 causes an exit to number 1.

3GPP TSG-RAN WG2 Meeting #47
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CHANGE REQUEST

⌘ **25.304** **CR** **0141** ⌘ **rev** **-** ⌘ Current version: **6.5.0** ⌘

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Proposed change affects: UICC apps⌘ ☐ ME ☒ Radio Access Network ☒ Core Network ☐

Title:	⌘	MBMS Frequency Layer Convergence
Source:	⌘	RAN WG2
Work item code:	⌘	MBMS-RAN
Date:	⌘	04/05/2005
Category:	⌘	**F**
Release:	⌘	Rel-6

Use one of the following categories:
F *(correction)*
A *(corresponds to a correction in an earlier release)*
B *(addition of feature),*
C *(functional modification of feature)*
D *(editorial modification)*
Detailed explanations of the above categories can be found in 3GPP TR 21.900.

Use one of the following releases:

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R96	*(Release 1996)*
R97	*(Release 1997)*
R98	*(Release 1998)*
R99	*(Release 1999)*
Rel-4	*(Release 4)*
Rel-5	*(Release 5)*
Rel-6	*(Release 6)*
Rel-7	*(Release 7)*

Reason for change:	⌘	— at RAN-27, a 25.304 Rel-6 CR (CR129rev1, "Reselection procedure(1235)") was written on version 6.3.0 when 6.4.0 should have been used. In this CR, the previous changes from CR127 ("Addition of MBMS Frequency Layer Convergence to 25.304") in subclause 5.2.6.1.1 second bullet were not present (although they were in the real version 6.4.0, as approved one plenary before). — In turn, this part previously added (after RAN-26) for this second bullet point in 5.2.6.1.1 from CR127 ("Addition of MBMS Frequency Layer Convergence to 25.304") was mistakenly removed. — As a summary: Now 25.304 version 6.5.0 (latest) is not compliant anymore with CR 127 (MBMS FLC) for the subclause 5.2.6.1.1, second bullet. This CR is intended therefore to rectify this error.
Summary of change:	⌘	Sub-clause 5.2.6.1.1 has the previously agreed text from CR 127, for the second bullet, reinserted
Consequences if not approved:	⌘	Version 6.5.0 will not be compliant with CR 127 which was made in version 6.4.0 of this document. Cell selction in the case of MBMS PL being present will not function as agreed in earlier WG meetings.

Clauses affected:	⌘	5.2.6.1.1

Y N

Other specs affected:	⌘		X	Other core specifications	⌘
			X	Test specifications	
			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.

First Change

5.2.6 Cell Reselection Evaluation Process

5.2.6.1 UTRA case

The cell reselection process is specified in the following sub-clauses:

5.2.6.1.0 Use of MBMS PL

In the cell reselection process, an MBMS PL shall only be applicable while the UE is receiving an MBMS session from one or more of the ongoing activated MBMS services for which this PL is indicated.

5.2.6.1.1 Measurement rules for cell re-selection when HCS is not used

The measurement rules below apply in Idle, URA_PCH, CELL_PCH states. In CELL_FACH state the UE is required to perform measurements on all intra-frequency, inter-frequency and inter-RAT cells listed in system information according to requirements specified in [10]. In Idle, URA_PCH, CELL_PCH and CELL_FACH states the UE shall only consider those cells the UE is mandated to measure according to the measurement rules below as measured cells in the cell reselection criteria (subclause 5.2.6.1.4).

If the system information broadcast in the serving cell indicates that HCS is not used, then for intra-frequency and inter-frequency measurements and inter-RAT measurements, the UE shall:

- use Squal for FDD cells and Srxlev for TDD for Sx, and apply the following rules.

1. If Sx > $S_{intrasearch}$, UE may choose to not perform intra-frequency measurements.
   If Sx <= $S_{intrasearch}$, perform intra-frequency measurements.
   If $S_{intrasearch}$, is not sent for serving cell, perform intra-frequency measurements.

2. If Sx > $S_{intersearch}$ and MBMS PL has not been indicated, and Srxlev > $S_{searchHCS}$ if $S_{searchHCS}$ is signalled, UE may choose to not perform inter-frequency measurements.
   If Sx > $S_{intersearch}$ and MBMS PL has been indicated and the serving cell belongs to the MBMS PL, UE may choose to not perform inter-frequency measurements.
   If Sx > $S_{intersearch}$, MBMS PL has been indicated and the serving cell does not belong to the MBMS PL, UE shall at least perform inter-frequency measurements on the MBMS PL.
   If Sx > $S_{intersearch}$, or Srxlev <= $S_{searchHCS}$ if $S_{searchHCS}$ is signalled, perform inter-frequency measurements.
   If $S_{intersearch}$, is not sent for serving cell, perform inter-frequency measurements.

3. If Sx > $Ssearch_{RAT\ m}$, and Srxlev > $S_{HCS,RATm}$ if $S_{HCS,RATm}$ is signalled, UE may choose to not perform measurements on cells of RAT "m".
   If Sx <= $Ssearch_{RAT\ m}$, or Srxlev <= $S_{HCS,RATm}$ if $S_{HCS,RATm}$ is signalled, perform measurements on cells of RAT "m".
   If $Ssearch_{RAT\ m}$, is not sent for serving cell, perform measurements on cells of RAT "m".

If HCS is not used and if $S_{limit,SearchRATm}$ is sent for serving cell, UE shall ignore it.

NOTE: The presence of $S_{searchHCS}$ and $S_{HCS,RATm}$ thresholds in system information are used to avoid introducing new parameters to system information and their presence does not imply that HCS is used.

End of Changes

3GPP TSG-RAN2 Meeting #46bis
Beijing, China, 4-8 April 2005

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CHANGE REQUEST

⌘ **25.304** **CR** **0142** ⌘**rev** **-** ⌘ Current version: **6.5.0** ⌘

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

Title:	⌘	Removal of sentences in brackets in 25.304
Source:	⌘	RAN WG2
Work item code:	⌘	MBMS-RAN
Date:	⌘	21/03/2005
Category:	⌘	**D**
Release:	⌘	Rel-6

Use one of the following categories:
F *(correction)*
A *(corresponds to a correction in an earlier release)*
B *(addition of feature),*
C *(functional modification of feature)*
D *(editorial modification)*
Detailed explanations of the above categories can be found in 3GPP TR 21.900.

Use one of the following releases:

2	*(GSM Phase 2)*
R96	*(Release 1996)*
R97	*(Release 1997)*
R98	*(Release 1998)*
R99	*(Release 1999)*
Rel-4	*(Release 4)*
Rel-5	*(Release 5)*
Rel-6	*(Release 6)*

Reason for change:	⌘	Sentences in brackets containing now-obsolete editorial notes remain in the text from the introduction of MBMS.
Summary of change:	⌘	Bracketed sentences removed.
Consequences if not approved:	⌘	Obsolete notes will remain in spec.

Clauses affected:	⌘	5.2.3.1.2, 5.2.6.1.4			
Other specs affected:	⌘	**Y**	**N**		
			X	Other core specifications	⌘
			X	Test specifications	
			X	O&M Specifications	
Other comments:	⌘				

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5.2.3.1.2 Criteria

~~[This subclause will need material on the MBMS offset, expected as part of the FLC changes.]~~

[…]

5.2.6.1.4 Cell Reselection Criteria

~~[This subclause will need material on the MBMS offset, expected as part of the FLC changes.]~~

3GPP TSG-RAN2 Meeting #46bis
Beijing, China. March 4-8, 2005

Tdoc ⌘R2-051122

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CHANGE REQUEST

⌘ **25.306** **CR** **0107** ⌘**rev** ⌘ Current version: **6.4.1** ⌘

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Proposed change affects: UICC apps⌘ ☐ ME ☒ Radio Access Network ☒ Core Network ☐

Title:	⌘	Introduction of MBMS capability part A and B
Source:	⌘	RAN WG2
Work item code:	⌘	MBMS-RAN
Date:	⌘	04/03/2005
Category:	⌘	**B**
Release:	⌘	Rel-6

Use one of the following categories:
F *(correction)*
A *(corresponds to a correction in an earlier release)*
B *(addition of feature),*
C *(functional modification of feature)*
D *(editorial modification)*
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Use one of the following releases:
Ph2 (GSM Phase 2)
R96 (Release 1996)
R97 (Release 1997)
R98 (Release 1998)
R99 (Release 1999)
Rel-4 (Release 4)
Rel-5 (Release 5)
Rel-6 (Release 6)
Rel-7 (Release 7)

Reason for change:	⌘	UE capability for MBMS reception are not specifed in TS25.306.
Summary of change:	⌘	1- Reference update to other specifications. 2- Addition of a new section “4.X UE minimum capabilities with MBMS” introducing MBMS capability part A and B according to RAN1 agreement (R1-050222).
Consequences if not approved:	⌘	No UE capabilities are defined for MBMS

Clauses affected:	⌘	2, 4.X (new)

Other specs affected: ⌘	Y	N	
		X	Other core specifications
		X	Test specifications
		X	O&M Specifications

⌘

Other comments: ⌘

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2 References

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- References are either specific (identified by date of publication, edition number, version number, etc.) or non-specific.
- For a specific reference, subsequent revisions do not apply.
- For a non-specific reference, the latest version applies. In the case of a reference to a 3GPP document (including a GSM document), a non-specific reference implicitly refers to the latest version of that document *in the same Release as the present document*.

[1] 3GPP TS 25.323: "Packet Data Convergence Protocol (PDCP) specification".

[2] 3GPP TS 34.108: "Common Test Environments for User Equipment (UE) Conformance Testing".

[3] 3GPP TS 34.123-2: "User Equipment (UE) conformance specification; Part 2: Implementation Conformance Statement (ICS) proforma specification".

[4] 3GPP TS 25.101 "UE Radio Transmission and Reception (FDD)".

[5] 3GPP TS 25.102 "UTRA (UE) TDD; Radio transmission and reception".

[6] 3GPP TS 25.215 "Physical layer; Measurements (FDD)".

[7] RFC 2507: "IP Header Compression".

[8] RFC 3095: "RObust Header Compression (ROHC): Framework and four profiles".

[9] 3GPP TS 25.321 "Medium Access Control (MAC) protocol specification".

[10] 3GPP TS 25.322 "Radio Link Control (RLC) protocol specification".

[11] 3GPP TS 25.211 " Physical channels and mapping of transport channels onto physical channels (FDD)".

[12] 3GPP TS 25.331 “Radio Resource Control (RRC); Protocol Specification”

4.X UE minimum capabilities with MBMS

For FDD, the minimum UE capability for MBMS reception consists of 2 separate and independent parts (“MBMS capability part A" and "MBMS capability part B").

MBMS capability part A parameters defined in Table 4.X-1 are the same as the 64kbps UE reference class for DL described in section 5.2 and provides capability to enable reception of the logical channels other than the MTCHs when MBMS PTM is received simultaneously.

Table 4.X-1: MBMS capability part A (FDD)

Capability for reception of DL DPCH or S-CCPCH carrying logical channels other than MTCH during MTCH reception	64 kbps Class
Transport channel parameters	**Value**
Maximum sum of number of bits of all transport blocks being received at an arbitrary time instant	3840
Maximum sum of number of bits of all convolutionally coded transport blocks being received at an arbitrary time instant	640
Maximum sum of number of bits of all turbo coded transport blocks being received at an arbitrary time instant	3840
Maximum number of simultaneous transport channels	8
Maximum number of simultaneous CCTrCH (FDD)	1
Maximum total number of transport blocks received within TTIs that end at the same time	8
Maximum number of TFC	48
Maximum number of TF	64
Support for turbo decoding	Yes
Physical channel parameters (FDD)	
Number of DPCH or S-CCPCH codes (Note 1)	1
Maximum number of physical channel bits received in any 10 ms interval (DPCH or S-CCPCH).	2400
Support of PDSCH	No

Note 1) Capability for reception of DPCH is applicable only if UE supports MBMS PTM reception in CELL_DCH state.

MBMS capability part B enables reception of the S-CCPCHs onto which MTCH and MSCH can be multiplexed. MBMS capability part B supports selection combining and soft combining of S-CCPCHs on different cells but not simultaneously.

MBMS capability part B is defined in the following Table 4.X-2. The exhaustive lists of supported configurations (slot formats, TTI and combining parameters) for capability part B is given in Tables 4.X-3.

Table 4.X-2: MBMS capability part B (FDD)

Combination of UE Radio Access capability parameters in DL for all S-CCPCHs that carry at least MTCH	
Transport channel parameters	**Value**
Maximum sum of number of bits of all transport blocks being received at an arbitrary time instant	21504
Maximum sum of number of bits of all convolutionally coded transport blocks being received at an arbitrary time instant	640
Maximum sum of number of bits of all turbo coded transport blocks being received at an arbitrary time instant	21504
Maximum number of transport channels for the configuration	12
Maximum total number of transport blocks received within TTIs that end at the same time	32
Maximum number of TFC per S-CCPCH	32
Maximum number of TF	64
Support for turbo decoding	Yes
Number of CRC bits	16
Support for slot formats that do not contain TFCI	No
Supported slot formats and TTI combinations	See table 4.X-3
Physical channel parameters	
Maximum number of S-CCPCH codes	3

Table 4.X-3: Supported slot formats and TTI combinations for MBMS capability part B (FDD)

S-CCPCH slot format (see [11])	TTI (ms)	Maximum Number of S-CCPCH for Selection combining (Note 1)	Maximum Number of S-CCPCH for Soft Combining (Note 1)	Maximum Number of Simultaneous Transport Channels per S-CCPCH
14 (SF=8)	40	2	None	1
14 (SF=8)	40	None	3	1
12 (SF=16)	40	3	None	1
12 (SF=16)	80	2	None	1
12 (SF=16)	80	None	3	1
10 (SF=32)	80	3	None	4
10(SF=32)	80	None	3	1
8 (SF=64)	80	3	None	4
8 (SF=64)	80	None	3	1
6 (SF=128)	80	3	None	4
6 (SF=128)	80	None	3	1
2 (SF=256)	80	3	None	4
2 (SF=256)	80	None	3	1

Note 1) 'None' indicates selection combining or soft combining is not used. UE is required to receive one S-CCPCH carrying MTCH/MSCH per cell.

Since MBMS capability part A and B are independent, the maximum number of S-CCPCH codes that the UE is required to receive is 4.

MBMS Capability part B may be used to receive MCCH in the following cases:

- When the UE is in CELL_FACH state, and the MCCH is on a different S-CCPCH than the S-CCPCH that the UE is required to monitor by section 8.5.19 of [12]. In case MBMS PTM reception is ongoing, the UE may soft or selectively combine 1 less S-CCPCH than shown in table 4.X-3 while receiving the S-CCPCH carrying the MCCH.
- When the UE is in CELL_DCH, if the UE supports MBMS PTM reception in CELL_DCH.

Table 4.X-3a applies when UE does support MBMS PTM reception in CELL_DCH, while Table 4.X-3b applies when UE does not support MBMS PTM reception in CELL_DCH.

Table 4.X-3a: Alternate supported slot formats and TTI for MBMS capability part B (FDD)

S-CCPCH slot format (see [11])	TTI (ms)	Maximum Number of Simultaneous Transport Channels
10 (SF=32)	20,10	4
8 (SF=64)	20,10	4
6 (SF=128)	20,10	4
2 (SF=256)	20,10	4

Table 4.X-3b: Alternate supported slot formats and TTI for MBMS capability part B (FDD)

S-CCPCH slot format (see [11])	TTI (ms)	Maximum Number of Simultaneous Transport Channels
8 (SF=64)	10	1
6 (SF=128)	10	1
2 (SF=256)	10	1

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Beijing, China, 4th-8th April, 2005

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CHANGE REQUEST

⌘ **25.346** **CR** **0016** ⌘ **rev** **-** ⌘ Current version: **6.4.0** ⌘

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Proposed change affects: UICC apps⌘ ☐ ME ☒ Radio Access Network ☐ Core Network ☐

Title:	⌘	FLD scenario clarifications
Source:	⌘	RAN WG2
Work item code:	⌘	MBMS-RAN
Date:	⌘	04/04/2005
Category:	⌘	**F**
Release:	⌘	REL-6

Use one of the following categories:
F *(correction)*
A *(corresponds to a correction in an earlier release)*
B *(addition of feature),*
C *(functional modification of feature)*
D *(editorial modification)*
Detailed explanations of the above categories can be found in 3GPP TR 21.900.

Use one of the following releases:
Ph2 *(GSM Phase 2)*
R96 *(Release 1996)*
R97 *(Release 1997)*
R98 *(Release 1998)*
R99 *(Release 1999)*
Rel-4 *(Release 4)*
Rel-5 *(Release 5)*
Rel-6 *(Release 6)*
Rel-7 *(Release 7)*

Reason for change:	⌘	In the current specification for FLD, 1. The frequency selection process is unclear when UTRAN indicates FLD. 2. FLD only refers to a single service. In fact UE may join multiple MBMS services provided within one cell. .
Summary of change:	⌘	In section 11.3, add the sentences of "*When FLC is applied, the UE stores the frequency where it was camped previously. Upon session stop, the UE attempts to return to that frequency.* *If the UE does not find a suitable cell on the target frequency, the UE attempts to select a cell on a randomly chosen frequency.* *Dispersion does not apply in the case where the UE decides to receive another service for which FLC is applied*." and delete the sentences of "The UE shall ignore Sintersearch parameter for re-selecting frequency layer when FLD is signalled. On the re-selected layer the UE shall apply the Sintersearch parameter." and "The need for a pseudo-random function to determine the re-selected frequency is FFS. If a pseudo-random function is needed, it shall be left to the UE implementation."
Consequences if not approved:	⌘	There exists some ambiguities when multiple MBMS services appear simultaneously in the cell when FLD is signalled.

Clauses affected:	⌘	11.3			
Other specs affected:	⌘	**Y**	**N**	Other core specifications	⌘
			X	Test specifications	
			X	O&M Specifications	
Other comments:	⌘				

How to create CRs using this form:

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1) Fill out the above form. The symbols above marked ⌘ contain pop-up help information about the field that they are closest to.

2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be 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.

<Cut until the next modified section>

11.3 Frequency layer Dispersion

Frequency Layer Dispersion (FLD) denotes the process where the UTRAN redistributes UEs across the frequencies. UTRAN can use FLD per MBMS session.

The request to perform dispersion can be signalled to UEs by the CRNC after the session stop is received over Iu interface. The UEs shall take into account this request whenever it is signalled on the MCCH.

For FDD, the FLD is applicable in Idle mode, URA_PCH, CELL_PCH and CELL_FACH states.

For TDD, the FLD is applicable in Idle mode, URA_PCH and CELL_PCH states.

~~The UE shall ignore Sintersearch parameter for re-selecting frequency layer when FLD is signalled. On the re-selected layer the UE shall apply the Sintersearch parameter.~~

When FLC is applied, the UE stores the frequency where it was camped previously. Upon session stop, the UE attempts to return to that frequency.

If the UE does not find a suitable cell on the target frequency, the UE attempts to select a cell on a randomly chosen frequency.

Dispersion does not apply in the case where the UE decides to receive another service for which FLC is applied.

~~The need for a pseudo-random function to determine the re-selected frequency is FFS. If a pseudo-random function is needed, it shall be left to the UE implementation.~~

The details of the mechanism are defined in the stage 3.

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Beijing, China, 4th – 8th of April 2005

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CR-Form-v7.1

CHANGE REQUEST

⌘ **25.346** **CR** **0018** ⌘ **rev** **-** ⌘ Current version: **6.4.0** ⌘

*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 [X] Radio Access Network [X] Core Network [ ]

Title:	⌘	Handling the validity of the MBMS session Id
Source:	⌘	RAN WG2
Work item code:	⌘	MBMS-RAN
Date:	⌘	05/04/2005
Category:	⌘	**F**
Release:	⌘	Rel-6

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R99 (Release 1999)
Rel-4 (Release 4)
Rel-5 (Release 5)
Rel-6 (Release 6)
Rel-7 (Release 7)

Reason for change:	⌘	The validity of the session Id is handled on the application layer, i.e. between the BM-SC and the UE. Thus the UTRAN cannot distinguish from the session id if two separate MBMS bearer establishments are done for same the session or for the different ones even though the session id is the same.
Summary of change:	⌘	It is defined that session validity is handled on the application layer
Consequences if not approved:	⌘	The handling of the validity of the session id is not defined in the TS25.346.

Clauses affected:	⌘	5.2.7

Other specs affected: ⌘	Y	N		⌘
		X	Other core specifications	
		X	Test specifications	
		X	O&M Specifications	

Other comments: ⌘

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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.

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5.2.7 MBMS Session Repetition

In the case that the BM-SC repeats MBMS sessions (send multiple time identical content), the MBMS service Id and MBMS session Id is used to identify specific MBMS service and session and the validity of the session Id is handled on the MBMS application layer between the BM-SC and the UE. If UTRAN receives the MBMS session ID in session start, the UTRAN should:

- include MBMS session Id in critical and non critical information send on MCCH
  Note: The non-critical information may contain index referring to critical information, avoiding repetition of MBMS service and session Id in non-critical information.

If the UE has already received correctly the data of the MBMS session, which is being indicated on MCCH, the UE may:

- ignore FLC by not applying the Layer Convergence Information
- ignore counting procedure in Idle, URA_PCH, CELL_PCH, and CELL_FACH state
- ignore p-t-m MBMS RB setup signalled on MCCH
- ignore p-t-p MBMS RB indication signalled on MCCH
- reject the p-t-p RB setup for MBMS service, signalled on DCCH

In the case that UTRAN receives reject from the UE to the p-t-p RB setup for MBMS service on DCCH, the UTRAN should not try to re-establish p-t-p RB setup for that MBMS service and session.

In the case that the UE has accepted the p-t-p RB for repeated MBMS session the UE shall receive the complete session.