

**Source:** SA5 (Telecom Management)  
**Title:** 5 Rel-99/4/5 CR 32104/32.401 (Performance Management;  
 Concept and requirements)  
**Document for:** Approval  
**Agenda Item:** 7.5.3

Doc-1st-	Spec	CR	R	Ph	Subject	Ca	Ver	Doc-2nd-	Workite	Relation
SP-030291	32.104	011	-	R99	<b>Remove ambiguity in NE file generation behaviour in case of multiple granularity periods</b>	F	3.5.0	S5-038238	OAM-PM	Parent
SP-030291	32.401	005	-	Rel-4	<b>Clarification of NE file generation behaviour in case of multiple granularity periods</b>	F	4.2.0	S5-038239	OAM-PM	Mirror
SP-030291	32.401	006	-	Rel-5	<b>Clarification of NE file generation behaviour in case of multiple granularity periods.</b>	F	5.1.0	S5-038240	OAM-PM	Mirror
SP-030291	32.401	007	-	Rel-4	<b>Correction of Measurement Result File Name Definition for alignment with Windows based systems</b>	F	4.2.0	S5-038241	OAM-PM	Parent
SP-030291	32.401	008	-	Rel-5	<b>Correction of Measurement Result File Name Definition for alignment with Windows based systems</b>	F	5.1.0	S5-038242	OAM-PM	Mirror

## CHANGE REQUEST

⌘ **32.104 CR 011** ⌘ rev **-** ⌘ Current version: **3.5.0** ⌘

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  Radio Access Network  Core Network

<b>Title:</b>	⌘	Remove ambiguity in NE file generation behaviour in case of multiple granularity periods	
<b>Source:</b>	⌘	S5	
<b>Work item code:</b>	⌘	OAM-PM	<b>Date:</b> ⌘ 11/04/2003
<b>Category:</b>	⌘	<b>F</b>	<b>Release:</b> ⌘ R99
		Use <u>one</u> of the following categories: <b>F</b> (correction) <b>A</b> (corresponds to a correction in an earlier release) <b>B</b> (addition of feature), <b>C</b> (functional modification of feature) <b>D</b> (editorial modification) Detailed explanations of the above categories can be found in 3GPP <a href="#">TR 21.900</a> .	Use <u>one</u> of the following releases: <b>2</b> (GSM Phase 2) <b>R96</b> (Release 1996) <b>R97</b> (Release 1997) <b>R98</b> (Release 1998) <b>R99</b> (Release 1999) <b>Rel-4</b> (Release 4) <b>Rel-5</b> (Release 5) <b>Rel-6</b> (Release 6)

<b>Reason for change:</b>	⌘	The behaviour of the NE is not clear in event of multiple granularity periods coming to an end at the same time. This CR aims to clarify the behaviour expected by the NE in such a scenario.
<b>Summary of change:</b>	⌘	Add a sentence clarifying the behaviour of the NE in event of multiple granularity periods coming to an end at the same time.
<b>Consequences if not approved:</b>	⌘	Ambiguous interpretation of requirements is possible.

<b>Clauses affected:</b>	⌘	Annex B.1.1.1								
<b>Other specs affected:</b>	⌘	<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;"> </td> <td style="text-align: center;">X</td> </tr> <tr> <td style="text-align: center;"> </td> <td style="text-align: center;">X</td> </tr> <tr> <td style="text-align: center;">X</td> <td style="text-align: center;"> </td> </tr> </table> Other core specifications ⌘ Test specifications ⌘ O&M Specifications ⌘ Rel-4/5 32.401	Y	N		X		X	X	
Y	N									
	X									
	X									
X										
<b>Other comments:</b>	⌘	Rel-4/5 Mirror CR 32.401 attached in S5-038239 (Rel-4) & S5-038240 (Rel-5).								

**How to create CRs using this form:**

**Change in Clause Annex B.1.1.1****B.1.1.1 NE based approach**

The NE shall generate one file immediately at the end of each granularity period. This file shall contain all measurement results produced by the NE within that granularity period. For example, if a NodeB runs 10 measurements with a granularity period of 15 minutes and 5 measurements with a granularity period of 5 minutes, then it shall generate one file containing 10 results every 15 minutes, and one file containing 5 measurement results every ~~five~~5 minutes.

In the event of two or more granularity periods coming to an end at the same time, the NE shall generate one file per granularity period. Hence in the above example, the NodeB shall generate 2 files – one containing 10 results (15min granularity period) and the other containing 5 measurement results (5min granularity period), when the end time of the granularity periods coincide.

The NE and the granularity period shall be identified both in the file name and the file contents. NE identifiers (names) used for the files shall be in accordance with the NE naming conventions defined in 3GPP TS 32.106 [3]. The file shall be available for transfer to or collection by the NM as soon as all applicable results have been assembled.

Each NE is responsible for the generation and maintenance of the files pertaining to its own measurements (i.e. the measurements it executes). In particular, this implies that the RNC is not involved in the generation, provision or transfer of measurement result files of its controlled NodeBs, i.e. for the measurements defined for the NodeB in the present document, no results will be sent via the Iub interface. (Note that NodeB measurement results may be routed across the same physical interface as Iub, see 3GPP TS 25.442 [4] for details).

**End of Change in Annex B.1.1.1  
End of Document**

## CHANGE REQUEST

⌘ **32.401 CR 008** ⌘ rev **-** ⌘ Current version: **5.1.0** ⌘

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

<b>Title:</b>	⌘	Correction of Measurement Result File Name Definition for alignment with Windows based systems	
<b>Source:</b>	⌘	S5	
<b>Work item code:</b>	⌘	OAM-PM	<b>Date:</b> ⌘ 11/04/2003
<b>Category:</b>	⌘	<b>F</b>	<b>Release:</b> ⌘ Rel-5
		Use <u>one</u> of the following categories: <b>F</b> (correction) <b>A</b> (corresponds to a correction in an earlier release) <b>B</b> (addition of feature), <b>C</b> (functional modification of feature) <b>D</b> (editorial modification) Detailed explanations of the above categories can be found in 3GPP TR 21.900.	Use <u>one</u> of the following releases: <b>2</b> (GSM Phase 2) <b>R96</b> (Release 1996) <b>R97</b> (Release 1997) <b>R98</b> (Release 1998) <b>R99</b> (Release 1999) <b>Rel-4</b> (Release 4) <b>Rel-5</b> (Release 5) <b>Rel-6</b> (Release 6)

<b>Reason for change:</b>	⌘	Measurement Result file name is not compatible with some file systems, e.g. Windows based system.
<b>Summary of change:</b>	⌘	Change ':' in the Measurement Result file name to '_-' (an underscore character followed by a minus character followed by an underscore character)
<b>Consequences if not approved:</b>	⌘	Generated Measurement Result files with the RC set, will have to be renamed and be non-compliant in order to be used in commonly available file systems i.e. on a windows based system.

<b>Clauses affected:</b>	⌘	Annex B.1.2								
<b>Other specs affected:</b>	⌘	<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;"> </td> <td style="text-align: center;"><b>X</b></td> </tr> </table> Other core specifications ⌘ <table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="text-align: center;"> </td> <td style="text-align: center;"><b>X</b></td> </tr> </table> Test specifications <table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="text-align: center;"> </td> <td style="text-align: center;"><b>X</b></td> </tr> </table> O&M Specifications	Y	N		<b>X</b>		<b>X</b>		<b>X</b>
Y	N									
	<b>X</b>									
	<b>X</b>									
	<b>X</b>									
<b>Other comments:</b>	⌘	Rel-5 Mirror of Rel-4 CR 32.401 attached in S5-038241								

**How to create CRs using this form:**

## Change in Annex B.1.2

### B.1.2 File naming

The following convention shall be applied for measurement result file naming:

`<Type><Startdate>.<Starttime>-[<Enddate>]<Endtime>_[<UniqueId>][[:_-<RC>]`

- 1) The Type field indicates if the file contains measurement results for single or multiple NEs and/or granularity periods, where:
  - "A" means single NE, single granularity period;
  - "B" indicates multiple NEs, single granularity period;
  - "C" signifies single NE, multiple granularity periods;
  - "D" stands for multiple NEs, multiple granularity periods.

Note that files generated by the NEs will always have the Type field set to "A".

- 2) The Startdate field indicates the date when the granularity period began if the Type field is set to A or B. If the Type field is either "C" or "D" then Startdate contains the date when the first granularity period of the measurement results contained in the file started. The Startdate field is of the form YYYYMMDD, where:
  - YYYY is the year in four-digit notation;
  - MM is the month in two digit notation (01 - 12);
  - DD is the day in two digit notation (01 - 31).
- 3) The Starttime field indicates the time when the granularity period began if the Type field is set to A or B. If the Type field is either "C" or "D" then Starttime contains the time when the first granularity period of the measurement results contained in the file began. The Starttime field is of the form HHMMshmm, where:
  - HH is the two digit hour of the day (local time), based on 24 hour clock (00 - 23);
  - MM is the two digit minute of the hour (local time), possible values are 00, 05, 10, 15, 20, 25, 30, 35, 40, 45, 50, and 55;
  - s is the sign of the local time differential from UTC (+ or -), in case the time differential to UTC is 0 then the sign may be arbitrarily set to "+" or "-";
  - hh is the two digit number of hours of the local time differential from UTC (00-23);
  - mm is the two digit number of minutes of the local time differential from UTC (00-59).
- 4) The Enddate field shall only be included if the Type field is set to "C" or "D", i.e. measurement results for multiple granularity periods are contained in the file. It identifies the date when the last granularity period of these measurements ended, and its structure corresponds to the Startdate field.
- 5) The Endtime field indicates the time when the granularity period ended if the Type field is set to A or B. If the Type field is either "C" or "D" then Endtime contains the time when the last granularity period of the measurement results contained in the file ended. Its structure corresponds to the Starttime field, however, the allowed values for the minute of the hour are 05, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, and 00.
- 6) UniqueId. This is the name of the NE, EM or domain, as defined in clauses B.1.1.1 and B.1.1.2 (e.g. a distinguishedName). The field may be omitted only if the distinguishedName is not available from the CM applications.
- 7) The RC parameter is a running count, starting with the value of "1", and shall be appended only if the filename is otherwise not unanimous, i.e. more than one file is generated and all other parameters of the file name are identical. Therefore it may only be used by the EM, since the described situation can not occur with NE generated files. Note that the delimiter for this field, - , is an underscore character ( \_ ), followed by a minus character ( - ), followed by an underscore character ( \_ ).

Some examples describing file naming convention:

- 1) file name: A20000626.2315+0200-2330+0200\_NodeBId,  
meaning: file produced by NodeB <NodeBId> on June 26, 2000, granularity period 15 minutes from 23:15 local to 23:30 local, with a time differential of +2 hours against UTC.
- 2) file name: B20021224.1700-1130-1705-1130\_EMId,  
meaning: file containing results for multiple NEs, produced by EM <EMId> on December 24, 2002, granularity period 5 minutes from 17:00 local to 17:05 local, with a time differential of -11:30 hours against UTC.
- 3) file name: D20050907.1030+0000-20050909.1500+0000\_DomainId: \_- 2,  
meaning: file containing results for NEs belonging to domain <DomainId>, start of first granularity period 07 September 2005, 10:30 local, end of last granularity period 09 September 2005, 15:00 local, with a time differential of 0 against UTC. This file is produced by the EM managing the domain, and it is the second file for this domain/granularity periods combination.

<b>End of Change in Annex B.1.2</b> <b>End of Document</b>
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## CHANGE REQUEST

⌘ **32.401 CR 007** ⌘ rev **-** ⌘ Current version: **4.2.0** ⌘

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

<b>Title:</b>	⌘	Correction of Measurement Result File Name Definition for alignment with Windows based systems	
<b>Source:</b>	⌘	S5	
<b>Work item code:</b>	⌘	OAM-PM	<b>Date:</b> ⌘ 11/04/2003
<b>Category:</b>	⌘	<b>F</b>	<b>Release:</b> ⌘ Rel-4
		Use <u>one</u> of the following categories: <b>F</b> (correction) <b>A</b> (corresponds to a correction in an earlier release) <b>B</b> (addition of feature), <b>C</b> (functional modification of feature) <b>D</b> (editorial modification) Detailed explanations of the above categories can be found in 3GPP TR 21.900.	Use <u>one</u> 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)

<b>Reason for change:</b>	⌘	Measurement Result file name is not compatible with a windows based system.
<b>Summary of change:</b>	⌘	Change ':' in the Measurement Result file name to '-_' (an underscore character followed by a minus character followed by an underscore character)
<b>Consequences if not approved:</b>	⌘	Generated Measurement Result files with the RC set, will have to be renamed and be non-compliant in order to be used in commonly available file systems i.e. on a windows based system.

<b>Clauses affected:</b>	⌘	Annex B.1.2					
<b>Other specs affected:</b>	⌘	<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;"><input type="checkbox"/></td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> </tr> </table> Other core specifications	Y	N	<input type="checkbox"/>	<input checked="" type="checkbox"/>	⌘
		Y	N				
		<input type="checkbox"/>	<input checked="" type="checkbox"/>				
<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;"><input type="checkbox"/></td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> </tr> </table> Test specifications	Y	N	<input type="checkbox"/>	<input checked="" type="checkbox"/>			
Y	N						
<input type="checkbox"/>	<input checked="" type="checkbox"/>						
<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;"><input checked="" type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> </table> O&M Specifications	Y	N	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Rel-5 32.401		
Y	N						
<input checked="" type="checkbox"/>	<input type="checkbox"/>						
<b>Other comments:</b>	⌘	Rel-5 Mirror CR 32.401 attached in S5-038242.					

**How to create CRs using this form:**

**Change in Annex B.1.2**

## B.1.2 File naming

The following convention shall be applied for measurement result file naming:

`<Type><Startdate>.<Starttime>[-<Enddate>].<Endtime>_<UniqueId>[_-:<RC>]`

- 1) The Type field indicates if the file contains measurement results for single or multiple NEs and/or granularity periods, where:
  - "A" means single NE, single granularity period;
  - "B" indicates multiple NEs, single granularity period;
  - "C" signifies single NE, multiple granularity periods;
  - "D" stands for multiple NEs, multiple granularity periods.

Note that files generated by the NEs will always have the Type field set to "A".

- 2) The Startdate field indicates the date when the granularity period began if the Type field is set to A or B. If the Type field is either "C" or "D" then Startdate contains the date when the first granularity period of the measurement results contained in the file started. The Startdate field is of the form YYYYMMDD, where:
  - YYYY is the year in four-digit notation;
  - MM is the month in two digit notation (01 - 12);
  - DD is the day in two digit notation (01 - 31).
- 3) The Starttime field indicates the time when the granularity period began if the Type field is set to A or B. If the Type field is either "C" or "D" then Starttime contains the time when the first granularity period of the measurement results contained in the file began. The Starttime field is of the form HHMMshhmm, where:
  - HH is the two digit hour of the day (local time), based on 24 hour clock (00 - 23);
  - MM is the two digit minute of the hour (local time), possible values are 00, 05, 10, 15, 20, 25, 30, 35, 40, 45, 50, and 55;
  - s is the sign of the local time differential from UTC (+ or -), in case the time differential to UTC is 0 then the sign may be arbitrarily set to "+" or "-";
  - hh is the two digit number of hours of the local time differential from UTC (00-23);
  - mm is the two digit number of minutes of the local time differential from UTC (00-59).
- 4) The Enddate field shall only be included if the Type field is set to "C" or "D", i.e. measurement results for multiple granularity periods are contained in the file. It identifies the date when the last granularity period of these measurements ended, and its structure corresponds to the Startdate field.
- 5) The Endtime field indicates the time when the granularity period ended if the Type field is set to A or B. If the Type field is either "C" or "D" then Endtime contains the time when the last granularity period of the measurement results contained in the file ended. Its structure corresponds to the Starttime field, however, the allowed values for the minute of the hour are 05, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, and 00.
- 6) UniqueId. This is the name of the NE, EM or domain, as defined in clauses B.1.1.1 and B.1.1.2 (e.g. a distinguishedName). The field may be omitted only if the distinguishedName is not available from the CM applications.



- 7) The RC parameter is a running count, starting with the value of "1", and shall be appended only if the filename is otherwise not unanimous, i.e. more than one file is generated and all other parameters of the file name are identical. Therefore it may only be used by the EM, since the described situation can not occur with NE generated files. Note that the delimiter for this field, - , is an underscore character ( \_ ), followed by a minus character (-), followed by an underscore character ( \_ ).

Some examples describing file naming convention:

- 1) file name: A20000626.2315+0200-2330+0200\_NodeBId,  
meaning: file produced by NodeB <NodeBId> on June 26, 2000, granularity period 15 minutes from 23:15 local to 23:30 local, with a time differential of +2 hours against UTC.
- 2) file name: B20021224.1700-1130-1705-1130\_EMId,  
meaning: file containing results for multiple NEs, produced by EM <EMId> on December 24, 2002, granularity period 5 minutes from 17:00 local to 17:05 local, with a time differential of -11:30 hours against UTC.

- 3) file name: D20050907.1030+0000-20050909.1500+0000\_DomainId\_ - \_2,  
meaning: file containing results for NEs belonging to domain <DomainId>, start of first granularity period 07 September 2005, 10:30 local, end of last granularity period 09 September 2005, 15:00 local, with a time differential of 0 against UTC. This file is produced by the EM managing the domain, and it is the second file for this domain/granularity periods combination.

**End of Change in Annex B.1.2**  
**End of Document**

## CHANGE REQUEST

⌘ **32.401 CR 006** ⌘ rev **-** ⌘ Current version: **5.1.0** ⌘

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

<b>Title:</b>	⌘	Clarification of NE file generation behaviour in case of multiple granularity periods.
<b>Source:</b>	⌘	S5
<b>Work item code:</b>	⌘	OAM-PM
		<b>Date:</b> ⌘ 11/04/2003
<b>Category:</b>	⌘	<b>F</b>
		<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p>Use <u>one</u> of the following categories:</p> <p><b>F</b> (correction)</p> <p><b>A</b> (corresponds to a correction in an earlier release)</p> <p><b>B</b> (addition of feature),</p> <p><b>C</b> (functional modification of feature)</p> <p><b>D</b> (editorial modification)</p> <p>Detailed explanations of the above categories can be found in 3GPP <a href="#">TR 21.900</a>.</p> </div> <div style="width: 45%;"> <p>Use <u>one</u> of the following releases:</p> <p>2 (GSM Phase 2)</p> <p>R96 (Release 1996)</p> <p>R97 (Release 1997)</p> <p>R98 (Release 1998)</p> <p>R99 (Release 1999)</p> <p>Rel-4 (Release 4)</p> <p>Rel-5 (Release 5)</p> <p>Rel-6 (Release 6)</p> </div> </div>
<b>Release:</b>	⌘	Rel-5

<b>Reason for change:</b>	⌘	The behaviour of the NE is not clear in event of multiple granularity periods coming to an end at the same time. This CR aims to clarify the behaviour expected by the NE in such a scenario.
<b>Summary of change:</b>	⌘	Add a sentence clarifying the behaviour of the NE in event of multiple granularity periods coming to an end at the same time.
<b>Consequences if not approved:</b>	⌘	Multiple interpretations of requirements.

<b>Clauses affected:</b>	⌘	Annex B.1.1.1								
<b>Other specs affected:</b>	⌘	<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 style="width: 20px;"> </td> <td style="width: 20px;">X</td> </tr> <tr> <td style="width: 20px;"> </td> <td style="width: 20px;">X</td> </tr> <tr> <td style="width: 20px;"> </td> <td style="width: 20px;">X</td> </tr> </table> Other core specifications ⌘ Test specifications ⌘ O&M Specifications ⌘	Y	N		X		X		X
Y	N									
	X									
	X									
	X									
<b>Other comments:</b>	⌘	Rel-5 Mirror of Rel-99 CR 32.104 attached in S5-038238.								

**How to create CRs using this form:**

**Change in Clause Annex B.1.1.1****B.1.1.1 NE based approach**

The NE shall generate one file immediately at the end of each granularity period. This file shall contain all measurement results produced by the NE within that granularity period. For example, if a NodeB runs 10 measurements with a granularity period of 15 minutes and 5 measurements with a granularity period of 5 minutes, then it shall generate one file containing 10 results every 15 minutes, and one file containing 5 measurement results every ~~five~~5 minutes.

In the event of two or more granularity periods coming to an end at the same time, the NE shall generate one file per granularity period. Hence in the above example, the NodeB shall generate 2 files – one containing 10 results (15min granularity period) and the other containing 5 measurement results (5min granularity period), when the end time of the granularity periods coincide.

The NE and the granularity period shall be identified both in the file name and the file contents. NE identifiers (names) used for the files shall be in accordance with the NE naming conventions defined in 3GPP TS 32.300 [10]. The file shall be available for transfer to or collection by the NM as soon as all applicable results have been assembled.

Each NE is responsible for the generation and maintenance of the files pertaining to its own measurements (i.e. the measurements it executes). In particular, this implies that the RNC is not involved in the generation, provision or transfer of measurement result files of its controlled NodeBs, i.e. for the measurements defined for the NodeB in the present document, no results will be sent via the Iub interface. (Note that NodeB measurement results may be routed across the same physical interface as Iub, see 3GPP TS 25.442 [4] for details).

**End of Change in Annex B.1.1.1  
End of Document**

## CHANGE REQUEST

⌘ **32.401 CR 005** ⌘ rev **-** ⌘ Current version: **4.2.0** ⌘

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

<b>Title:</b>	⌘ Clarification of NE file generation behaviour in case of multiple granularity periods		
<b>Source:</b>	⌘ S5		
<b>Work item code:</b>	⌘ OAM-PM	<b>Date:</b>	⌘ 11/04/2003
<b>Category:</b>	⌘ <b>F</b>	<b>Release:</b>	⌘ Rel-4
	Use <u>one</u> of the following categories:		Use <u>one</u> of the following releases:
	<b>F</b> (correction)		2 (GSM Phase 2)
	<b>A</b> (corresponds to a correction in an earlier release)		R96 (Release 1996)
	<b>B</b> (addition of feature),		R97 (Release 1997)
	<b>C</b> (functional modification of feature)		R98 (Release 1998)
	<b>D</b> (editorial modification)		R99 (Release 1999)
	Detailed explanations of the above categories can be found in 3GPP <a href="#">TR 21.900</a> .		Rel-4 (Release 4)
			Rel-5 (Release 5)
			Rel-6 (Release 6)

<b>Reason for change:</b>	⌘ The behaviour of the NE is not clear in event of multiple granularity periods coming to an end at the same time. This CR aims to clarify the behaviour expected by the NE in such a scenario.
<b>Summary of change:</b>	⌘ Add a sentence clarifying the behaviour of the NE in event of multiple granularity periods coming to an end at the same time.
<b>Consequences if not approved:</b>	⌘ Multiple interpretations of requirements.

<b>Clauses affected:</b>	⌘ Annex B.1.1.1										
<b>Other specs affected:</b>	<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;"> </td> <td style="text-align: center;">X</td> </tr> <tr> <td style="text-align: center;"> </td> <td style="text-align: center;">X</td> </tr> <tr> <td style="text-align: center;">X</td> <td style="text-align: center;"> </td> </tr> </table>	Y	N		X		X	X		Other core specifications	⌘
Y	N										
	X										
	X										
X											
		Test specifications									
		O&M Specifications	Rel-5 32.401								
<b>Other comments:</b>	⌘ Rel-4 Mirror of Rel-99 CR 32.104 attached in S5-038238.										
	Rel-5 Mirror CR 32.401 attached in S5-038240.										

**How to create CRs using this form:**

**Change in Clause Annex B.1.1.1****B.1.1.1 NE based approach**

The NE shall generate one file immediately at the end of each granularity period. This file shall contain all measurement results produced by the NE within that granularity period. For example, if a NodeB runs 10 measurements with a granularity period of 15 minutes and 5 measurements with a granularity period of 5 minutes, then it shall generate one file containing 10 results every 15 minutes, and one file containing 5 measurement results every 5 ~~five~~ minutes.

In the event of two or more granularity periods coming to an end at the same time, the NE shall generate one file per granularity period. Hence in the above example, the NodeB shall generate 2 files – one containing 10 results (15min granularity period) and the other containing 5 measurement results (5min granularity period), when the end time of the granularity periods coincide.

The NE and the granularity period shall be identified both in the file name and the file contents. NE identifiers (names) used for the files shall be in accordance with the NE naming conventions defined in 3GPP TS 32.300 [10]. The file shall be available for transfer to or collection by the NM as soon as all applicable results have been assembled.

Each NE is responsible for the generation and maintenance of the files pertaining to its own measurements (i.e. the measurements it executes). In particular, this implies that the RNC is not involved in the generation, provision or transfer of measurement result files of its controlled NodeBs, i.e. for the measurements defined for the NodeB in the present document, no results will be sent via the Iub interface. (Note that NodeB measurement results may be routed across the same physical interface as Iub, see 3GPP TS 25.442 [4] for details).

**End of Change in Annex B.1.1.1  
End of Document**