

# 3GPP TR ab.cde Vx.y.z (yyyy-mm)

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*Technical Report*

**3rd Generation Partnership Project;  
Technical Specification Group Radio Access Networks;  
<WI name> Work Item Technical Report  
(Release 11 | 10 | 9 | 8 | 7 | 6 | 5 | 4 | 1999)**

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*MCC selects keywords from stock list.*

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Keywords

<keyword[, keyword]>

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## Foreword

This Technical Report has been produced by the 3<sup>rd</sup> Generation Partnership Project (3GPP).

The contents of the present document are subject to continuing work within the TSG and may change following formal TSG approval. Should the TSG modify the contents of the present document, it will be re-released by the TSG with an identifying change of release date and an increase in version number as follows:

Version x.y.z

where:

- x the first digit:
  - 1 presented to TSG for information;
  - 2 presented to TSG for approval;
  - 3 or greater indicates TSG approved document under change control.
- y the second digit is incremented for all changes of substance, i.e. technical enhancements, corrections, updates, etc.
- z the third digit is incremented when editorial only changes have been incorporated in the document.

---

# 1 Scope

The present document a technical report for the <Work item name> work item.

*The Scope of the TR should be kept short. Details of the Work Item objective should be given in the Background section (Clause 4).*

---

# 2 References

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

- 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 TR 21.905: "Vocabulary for 3GPP Specifications".

[2] 3GPP TR 30.007: "Guideline on WI/SI for new Operating Bands"

[3] ...

*Reference to relevant background documents for the frequency arrangement and regulation should be given.*

---

# 3 Definitions, symbols and abbreviations

*Delete from the above heading those words which are not applicable.*

*Clause numbering depends on applicability and should be renumbered accordingly.*

## 3.1 Definitions

For the purposes of the present document, the terms and definitions given in TR 21.905 [x] and the following apply. A term defined in the present document takes precedence over the definition of the same term, if any, in TR 21.905 [x].

*Definition format (Normal)*

*<defined term>: <definition>.*

**example:** text used to clarify abstract rules by applying them literally.

## 3.2 Symbols

For the purposes of the present document, the following symbols apply:

*Symbol format (EW)*

<symbol>      <Explanation>

### 3.3 Abbreviations

For the purposes of the present document, the abbreviations given in TR 21.905 [x] and the following apply. An abbreviation defined in the present document takes precedence over the definition of the same abbreviation, if any, in TR 21.905 [x].

*Abbreviation format (EW)*

<ACRONYM> <Explanation>

---

## 4 Background

*The WI justification and objective should be included here, including which technology will be supported in the new operating band.*

---

## 5 Frequency band arrangements and regulatory background

*This clause should contain the following:*

- *A frequency arrangement chart*
- *Adjacent services to the new operating band*
- *Regulatory requirements that affect the new operating band (e.g. FCC requirements)*

---

## 6 List of band specific issues for <Work item name>

- *<General issues>*
  - *<Issue 1>*
  - ...
- *<UTRA issues>*
  - *<Issue 2>*
  - ...
- *<E-UTRA issues>*
  - *<Issue 3>*
  - ...
- *<MSR issues>*
  - *<Issue 4>*
  - ...

*List of general issues, UTRA, E-UTRA and/or MSR issues (if there is not any issue for a specific requirement, the same requirement as for the existing bands in the current 3GPP specifications will apply to the new band). The list serves as*

*a summary of issues and should not contain any discussion of the solution to the issues. Further details, analysis, solutions and resulting requirements should be documented in the respective clause (7, 8, 9 and/or 10).*

*This chapter should consider for example co-existence studies with other 3GPP bands and other adjacent services, UE REFSENS and A-MPR.*

*This chapter should be filled in first place in order to have a clear picture of all issues which need further study and should be updated when new issues are found*

---

## 7 General issues

*This chapter is needed if there is any general issue to solve (e.g. co-existence). Otherwise, it can be omitted. BS and UE issues should be treated separately.*

*General issues refer to common issues between E-UTRA, UTRA and/or MSR.*

7.1 <Issue 1>

7.2 ...

---

## 8 Study of UTRA specific issues

*This chapter is needed if there is any UTRA issue in the list of issues (e.g. UE REFSENS). Every issue on the list should be a sub-chapter. BS and UE issues should be treated separately.*

8.1 <Issue 2>

8.2 ...

---

## 9 Study of E-UTRA specific issues

*This chapter is needed if there is any E-UTRA issue in the list of issues (e.g. UE REFSENS, A-MPR). Otherwise, it can be omitted. Every issue on the list should be a sub-chapter. BS and UE issues should be treated separately.*

9.1 <Issue 3>

9.2 ...

---

## 10 Study of MSR specific issues

*This chapter is needed if there is any MSR issue in the list of issue. Otherwise, it can be omitted. Every issue on the list should be a sub-chapter*

10.1 <Issue 4>

10.2 ...

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## 11 Channel numbering for <E-UTRA, UTRA, MSR>

*(Modify title as applicable.)*

*The channel numbers for UTRA (UARFCN) and E-UTRA (EARFCN) should be tabulated. As well as MSR operating band and category.*

*Channel numbers should be added in square brackets in the TR. The brackets can be removed once the final CRs are presented for approval.*

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## 12 Required changes to <E-UTRA, UTRA and MSR> specifications

*(Modify title as applicable.)*

*This chapter should in general not contain any detailed description of changes or draft specification text. It is sufficient to identify the relevant specifications that need update and have a reference to clause 8 of TR 30.007 [2].*

*If there are band specific issues that are identified above and that need a specification update not listed in clause 8 of the present document, the change should be described in more detail.*

*A table 12-1 is given in this skeleton to be used as an overview of all specs that have required changes. If a specification has changes in addition to those defined in TR 30.007, a reference to a new subclause 12.X should be given in the third column and further details be given in clause 12.X. Rows in the table for specifications that are not affected by the new band should be deleted.*

The required changes to the 3GPP specifications for the new band are summarised in a Table 12-1.



Table 12-1: Overview of 3GPP specifications with required changes

3GPP specification	Clause in TR 30.007 where the required changes are given	Clause in the present document identifying additional changes
TS 36.101	8.2.1.1	
TS 36.104	8.2.1.2	
TS 36.106	8.2.1.3	
TS 36.113	8.2.1.4	
TS 36.124	8.2.1.5	
TS 36.133	8.2.1.6	
TS 36.141	8.2.1.7	
TS 36.143	8.2.1.8	
TS 36.307	8.2.1.9	
TS 25.101	8.2.2.1	
TS 25.102	8.2.2.2	
TS 25.104	8.2.2.3	
TS 25.105	8.2.2.4	
TS 25.106	8.2.2.5	
TS 25.113	8.2.2.6	
TS 25.123	8.2.2.7	
TS 34.124	8.2.2.8	
TS 25.133	8.2.2.9	
TS 25.141	8.2.2.10	
TS 25.142	8.2.2.11	
TS 25.143	8.2.2.12	
TS 25.307	8.2.2.13	
TS 25.331	8.2.2.14	
TS 25.461	8.2.2.15	
TS 25.466	8.2.2.16	
TS 37.104	8.2.3.1	
TS 37.113	8.2.2.2	
TS 37.141	8.2.2.3	

## <12.X Additional changes in TS XX.YYY>

*(Modify title as applicable.)*

In order to implement the new band into the <TS XX.YYY>, the required changes in addition to those identified in TR 30.007 are shown in Table 12.1-1.

Table 12.1-1: Required additional changes for &lt;TS XX.YYY&gt;

Section	Requirement	Description of changes in TS XX.YYY

*If the additional change identified is related to any study of General, UTRA, E-UTRA and/or MSR specific issues, a reference should be given to the corresponding subclause(s) in clause 7 to 12.*

## X Examples for Styles

*(This chapter provides guidance only and should be deleted.)*

*The following styles and editing techniques are aimed to help in the formatting of the document using the 3GPP Template: 3GPP\_70.dot, available from the 3GPP FTP site (<ftp://ftp.3gpp.org/Information>).*

## X.1 Heading Styles

Heading styles are included in the 3GPP Template and are used as follows:

*Do not use any built-in automatic numbering for 3GPP documents. Although this is sometimes useful in the early drafting stages of a document, once the document has been placed under change control, the clause numbering needs to be fixed in order to keep cross-reference consistency as the 3GPP specification set develops.*

- Heading 1: Used for Main clauses (1, 2, 3, etc.). Also used for Annex clauses (A.1, A.2, etc.).
- Heading 2: Used for Main clauses (4.1, 4.2, 5.1, 5.2, etc.). Also used for Annex clauses (A.1.1, A.1.2, etc.).
- Heading 3: Used for 2nd level clauses (4.1.1, 4.1.2, 5.1.1, 5.1.2, etc.). Also used for Annex clauses (A.2.1.1, A.2.1.2, etc.).
- Heading 4 & 5: Used for 3rd and 4th level clauses and Annex clauses.
- Heading 6 & 7: Not used, instead use style "H6" so that the title appears in the document, but does not appear in the Table of Contents.
- Heading 8: Used for Main Annex titles in Specifications (3G TS) (e.g. Annex A (normative):).
- Heading 9: Used for Main Annex titles in Reports (3G TR) (e.g. Annex A:).

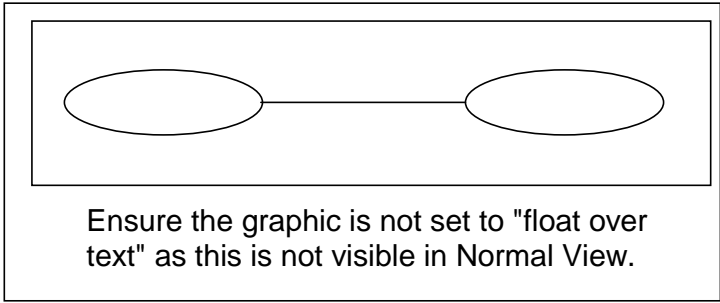
## X.2 Other common styles

- Normal: Used for main document text.
- NO: Used for Notes in the text (Allows Tab and Indent). See example below.
- NW: Same as NO, but Without line space after. Used when there are many notes in sequence.
- NOTE 1: This is an example of a note formatted in style NW. The style is designed to allow space for note numbering and line wrap with a hanging indent. There is no line space after.
- NOTE 2: This is an example of a note formatted in style NO. The style is designed to allow space for note numbering and line wrap with a hanging indent. There is a line space after.
- Bullet styles: The following bullet styles are provided.
  - B1: Bullet level 1 for main bullet points.
  - B2: Bullet level 2 for sub bullets.
  - B3-B5: for further sub bullets.
- NOTE: Bullets are usually formatted manually, using a hyphen (-) or alphanumeric identifiers: a), b), or 1), 2) etc. followed by a tab character. **Automatic bullet features should not be used** as they may be lost if template styles are re-applied later.
- Table styles: **TAH**, **TAL**, **TAC**, **TAR**, **TAN**, for **T**able **H**eaders, **L**eft justified, **C**entred, **R**ight justified and **N**otes in tables: Style **TH** is used for the **T**able **H**eading (title or caption). See example below.

**Table 1: Example of Table styles**

Col 1 Header (TAH)	Col 2 Header (TAH)	Col 3 Header (TAH)
Left Justified (TAL)	Centred (TAC)	Right Justified (TAR)
NOTE: A special style is provided for notes within a table (TAN).		

- Figure Styles: Figures and graphics are formatted with style "**TH**" which keeps the figure with the following paragraph, usually the figure title. Figure titles (captions) are formatted with style "**TF**". See example below.



**Figure 1: Example figure layout. To remove "float over text" select the graphic and "Form at Object ..." - De-select "float over text" in the Position Tab**

*Annexes are only to be used where appropriate:*

---

## Annex <A>: <Annex title>

*Annexes are labelled A, B, C, etc. and are "informative" (3GPP TRs are informative documents by nature).*

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### A.1 Heading levels in an annex

Heading levels within an annex are used as in the main document, but for Heading level selection, the "A.", "B.", etc. are ignored. e.g. **A.1.2** is formatted using *Heading 2* style.

*Bibliography*

*The Bibliography is optional. If it exists, it shall follow the last annex in the document.*

The following material, though not specifically referenced in the body of the present document (or not publicly available), gives supporting information.

*Bibliography format*

- <Publication>: "<Title>".

OR

<Publication>: "<Title>".

---

## Annex <X>: Change history

*It is usual to include an annex (usually the final annex of the document) for reports under TSG change control which details the change history of the report using a table as follows:*

Change history							
Date	TSG #	TSG Doc.	CR	Rev	Subject/Comment	Old	New