

3GPP TS 21.101 V16.1.0 (2023-03)

Technical Specification

3rd Generation Partnership Project;

Technical Specification Group Services and System Aspects;

Technical Specifications and Technical Reports for a   
UTRAN-based 3GPP system

(Release 16)

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Keywords

UMTS, architecture

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# Foreword

This Technical Specification (TS) has been produced by the 3rd 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 identifies the 3GPP system specifications for Release 16. The specifications and reports of this Release have a major version number 16 (i.e. 16.x.y). The listed Specifications are required to build a system based on UTRAN radio technology.

# 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 21.900: "Technical Specification Group working methods".

# 3 Abbreviations

For the purposes of the present document, the terms and definitions given in 3GPP TS 21.905 [1] apply.

# 4 General

The numbering scheme for specifications is described in 3GPP TR 21.900 [2].

# 5 Specifications and Reports

The list of Technical Specifications and Technical Reports can be found at <https://portal.3gpp.org/Specifications.aspx?q=1&tbid=All&releases=191&draft=False&underCC=True&withACC=False&withBCC=False&tech=2&numberNYA=False>

NOTE 1: The padlock icon on the right of each row indicates whether or not the documents are intended for adoption by the partner Standards Development Organizations as their own publications. Those with a padlock icon are internal working documents of the 3GPP TSGs.

NOTE 2: Some of the algorithm specifications in the 35.‑series are available only under licence.

NOTE 3: "Type" indicates Technical Specification (TS) or Technical Report (TR).

Annex A (informative):  
Change history

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Change history | | | | | |
| TSG SA# | Version | CR | Tdoc SA | New Version | Subject/Comment |
| SP-12 | 3GPP TS 21.103 version 0.0.0 | - | SP-010275 | 3GPP TS 21.103 version 0.1.0 | First draft |
| 0.1.0 |  | SP-010382 | 1.0.0 | table of specs revised |
| SP-13 | 1.0.0 |  | SP-010418 | 1.1.0 | table of specs revised |
| SP-15 | 1.1.0 |  | SP-020095 | 1.2.0 | table of specs revised; columns to show freeze status added |
| SP-15 | 1.2.0 |  | SP-020202 | 2.0.0 | table of specs revised |
| SP-16 | 2.0.0 |  | SP-020271 | 2.1.0 | table of specs revised |
| 2.1.0 |  | SP-020398 | 2.2.0 | table of specs revised |
| 2.2.0 |  | SP-020410 | 5.0.0 | table of specs revised; unknown freeze target dates blanked |
|  |  |  | approved |
| SP-17 | 5.0.0 | 001 r1 | SP-020628 | 5.1.0 | updates lists of specs, editorial corrections to titles of specs |
| SP-18 | 5.1.0 | 002 r1 | SP-020831 | 5.2.0 | Correction to list of specs, editorial corrections to titles of specs |
| SP-19 | 5.2.0 | 003 r1 | SP-030077 | 5.3.0 | Correction to list of specs, editorial corrections to titles of specs |
| SP-20 | 3GPP TS 21.103 version 5.3.0 | 004 | SP-030229 | 3GPP TS 21.101 version 5.4.0 | Correction to list of specs |
|  | SP-030235 | Renumber from 21.103 to 21.101 |
| SP-22 | 5.4.0 | 017 | SP-030574 | 5.5.0 | Correction to list of specs, editorial corrections to spec titles |
| SP-23 | 5.5.0 | 020 r2 | SP-040221 | 5.6.0 | Corrections to list of specifications |
| SP-24 | 5.6.0 | 021 r1 | SP-040358 | 5.7.0 | Corrections to list of specifications |
| SP-26 | 5.7.0 | 025 r1 | SP-040880 | 6.0.0 | Corrections to list of specifications |
| SP-27 | 6.0.0 | 029 | SP-050126 | 6.1.0 | Corrections to list of specifications |
| SP-28 | 6.1.0 | 031 r1 | SP-050356 | 6.2.0 | Corrections to list of specifications |
| SP-29 | 6.2.0 | 032 | SP-050470 | 6.3.0 | Change instances of Release 5 to Release 6 |
| 033 | SP-050462 | Corrections to list of specifications |
| SP-30 | 6.3.0 | 034 r1 | SP-050845 | 6.4.0 | Corrections to list of specifications |
| post SP‑31 | 6.4.0 |  |  | 6.4.1 | Correction to title of reference to 21.900. Correction to spec list table entries for 23.125 and 32.251 to show that the *are* intended for SDO publication. |
| post SP‑31 | 6.4.1 |  |  | 6.4.2 | Corrects cover date. |
| SP-34 | 6.4.2 | 038 | SP-060901 | 6.5.0 | Correction to list of Specs and minor editorials |
| SP-35 | 6.5.0 | 038 | SP-070188 | 6.6.0 | Corrections to list of specifications |
| SP-36 | 6.6.0 | 041 | SP-070344 | 6.7.0 | Corrections to list of specifications |
| SP-37 | 6.7.0 | 042 | SP-070519 | 7.0.0 | Upgrade to Rel-7 |
| SP-38 | 7.0.0 | 047 | SP-070770 | 7.1.0 | Corrections to list of specifications |
| 052 | Update of informative text |
| SP-40 | 7.1.0 | 053 | SP-080435 | 7.2.0 | Corrections to list of specifications |
| SP-42 | 7.2.0 | 054 r1 | SP-080722 | 7.3.0 | Corrections to list of specifications |
| SP-43 | 7.3.0 | 057 r1 | SP-090033 | 8.0.0 | List of Rel-8 specifications |
| SP-44 | 8.0.0 | 058 r1 | SP-090382 | 8.1.0 | Corrections to list of specifications |
| SP-46 | 8.1.0 | 064 r1 | SP-090695 | 8.2.0 | Corrections to list of specifications |
| SP-47 | 8.2.0 | 065 | SP-100012 | 9.0.0 | Update list of specs |
| SP-51 | 9.0.0 |  |  | 10.0.0 | Automatic upgrade on freezing Release |
| SP-52 | 10.0.0 | 068 | SP-110298 | 10.1.0 | Corrections to list of specifications |
| SP-55 | 10.1.0 | 071 r1 | SP-120114 | 10.2.0 | Changes to list of Specs: UTRAN systems |
| SP-59 | 10.2.0 | 072 | SP-130155 | 10.3.0 | Update list of specs |
| SP-59 | 10.3.0 | 073 | SP-130155 | 11.0.0 | Update list of specs |
| SP-64 | 11.0.0 | 075 | SP-140200 | 11.1.0 | Update to list of specs |

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| --- | --- | --- | --- | --- | --- | --- | --- |
| **Date** | **Meeting** | **TDoc** | **CR** | **Rev** | **Cat** | **Subject/Comment** | **New version** |
| 2016-03 | SA#71 | SP-160124 | 0077 |  | F | Update to list of specs | 12.0.0 |
| 2016-05 |  |  |  |  |  | Empty table in clause 5 removed | 12.0.1 |
| 2016-12 | SA#74 | SP-160973 | 0078 | 1 | F | Update to list of specs | 13.0.0 |
| 2017-03 | SA#75 |  |  |  |  | Promotion to Release 14 without technical change | 14.0.0 |
| 2017-06 | SA#76 | SP-170459 | 0079 |  | F | Replace list of specs with pointer to web page showing up to date list | 14.1.0 |
| 2018-06 | SA#80 |  |  |  |  | Upgrade unchanged on Rel-15 freeze | 15.0.0 |
| 2020-07 | SA#88-e |  |  |  |  | Upgrade on Rel-16 change | 16.0.0 |
| 2023-03 | SA#99 | SP-230320 | 0082 |  | A | Correction of specs list URL | 16.1.0 |