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Technical Specification

3rd Generation Partnership Project;

Technical Specification Group Services and System Aspects;

Technical Specifications and Technical Reports for an   
Evolved Packet System (EPS) based 3GPP system

(Release 16)

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Keywords

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# Foreword

This Technical Specification 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 the Evolved Packet System.

The high-level architecture of such a system is defined in 3GPP TS 23.002 [2] (figure 1b).

# 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 TS 23.002: "Network architecture".

[3] 3GPP TS 21.900: "Technical Specification Group working methods".

# 3 Definitions, symbols and abbreviations

## 3.1 Definitions

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

## 3.2 Symbols

(Void)

## 3.3 Abbreviations

For the purposes of the present document, the abbreviations given in TR 21.905 [1] apply.

# 4 General

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

# 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=3&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 1: The "for publication?" column of the table below indicates whether or not the documents are intended for adoption by the partner Standards Development Organizations as their own publications. Those marked "no" 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** | | | | | | | |
| **Date** | **TSG #** | **TSG Doc.** | **CR** | **Rev** | **Subject/Comment** | **Old** | **New** |
| 2008-03 |  |  |  |  | First draft based on SA1 request to SP-38, refined at SP-39. Spec list based on Specification Manager's whim. |  | 0.0.0 |
| 2008-05 |  |  |  |  | Rapporter’s revision | 0.0.0 | 0.1.0 |
| 2008-12 | SP-42 | SP-080723 |  |  | Rapporter’s revision prior to upgrading of specs to Rel-8 following Release freeze. | 0.1.0 | 0.2.0 |
| 2009-01 |  |  |  |  | Further rapporteur revision in the light of feedback | 0.2.0 | 0.3.0 |
| 2009-03 | CP-43 RP-43 | CP-080927 RP-081048 |  |  | Submission for review | 0.3.0 | 1.0.0 |
| 2009-03 | SP-43 | SP-090034 |  |  | Clean up of §3. To SA for information. | 1.0.0 | 1.0.1 |
| 2009-03 | SP-43 | SP-090224 |  |  | Major revision following clarification of scope, restricting the TS to a list of normative elements specific to EPS. | 1.0.1 | 2.0.0 |
| 2009-03 | SP-43 |  |  |  | Approved | 2.0.0 | 8.0.0 |
| 2009-06 | SP-45 | SP-090495 | 1 | 2 | Update list of Specs | 8.0.0 | 8.1.0 |
| 2 | 2 | Clarification of scope |
| 2009-12 | SP-46 | SP-090695 | 3 | 1 | Correction to list of specifications | 8.1.0 | 8.2.0 |
| 2010-03 | SP-47 | SP-100012 | 4 | - | Update list of specs | 8.2.0 | 8.3.0 |
| 2010-03 | SP-47 | SP-100012 | 5 | - | Update list of specs | 8.3.0 | 9.0.0 |
| 2011-03 | SP-51 |  |  |  | Automatic upgrade on Release freeze | 9.0.0 | 10.0.0 |
| 2011-06 | SP-52 | SP-110298 | 8 | - | Correction to list of specifications | 10.0.0 | 10.1.0 |
| 2012-03 | SP-55 | SP-120114 | 11 | 1 | Changes to list of Specs: LTE systems | 10.1.0 | 10.2.0 |
| 2013-03 | SP-59 | SP-130155 | 12 |  | Update to list of specs | 10.2.0 | 10.3.0 |
| 2013-03 | SP-59 | SP-130155 | 13 |  | Update to list of specs | 10.3.0 | 11.0.0 |
| 2014-06 | SP-64 | SP-140200 | 15 |  | Update to list of specs | 11.0.0 | 11.1.0 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Change history** | | | | | | | |
| **Date** | **Meeting** | **TDoc** | **CR** | **Rev** | **Cat** | **Subject/Comment** | **New version** |
| 2016-03 | SA#71 | SP-160126 | 0017 |  | F | Update to list of Specs | 12.0.0 |
| 2013-12 | SA#74 | SP-150974 | 0018 | 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-170460 | 0019 |  | 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 freeze of Rel-15 | 15.0.0 |
| 2020-07 | SA#88-e |  |  |  |  | Upgrade on freeze of Rel-16 | 16.0.0 |
| 2023-03 | SA#99 | SP-230324 | 0022 |  | A | Correction of specs list URL | 16.1.0 |