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**Digital cellular telecommunications system (Phase 2+);  
Universal Mobile Telecommunications System (UMTS);  
LTE;  
Specification of the 3GPP Confidentiality and  
Integrity Algorithms UEA2 & UIA2;  
Document 4: Design conformance test data  
(3GPP TS 35.218 version 12.0.0 Release 12)**



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## Modal verbs terminology

In the present document "**shall**", "**shall not**", "**should**", "**should not**", "**may**", "**may not**", "**need**", "**need not**", "**will**", "**will not**", "**can**" and "**cannot**" are to be interpreted as described in clause 3.2 of the [ETSI Drafting Rules](#) (Verbal forms for the expression of provisions).

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## Foreword

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

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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.

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# 1 Scope

The present document specifies the 3GPP confidentiality and integrity algorithms known as UEA2 and UIA2.

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## 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] ETSI TC SAGE Specification: "Specification of the 3GPP Confidentiality and Integrity Algorithms UEA2 & UIA2; Document 4: Design conformance test data" version 1.0, 2006-01-10

Note: Reference [2] is available via <http://www.etsi.org/WebSite/OurServices/Algorithms/3gppalgorithms.aspx> and is subject to licensing conditions described at this site.

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## 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] and in the SAGE Specification [2] apply. A term defined in the present document takes precedence over the definition of the same term, if any, in TR 21.905 [1].

### 3.2 Symbols

For the purposes of the present document, the symbols defined in the SAGE Specification [2] apply.

### 3.3 Abbreviations

For the purposes of the present document, the abbreviations given in TR 21.905 [2] and in the SAGE Specification [2] apply. An abbreviation defined in the present document takes precedence over the definition of the same abbreviation, if any, in TR 21.905 [1].

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## 4 Technical provisions

The technical provisions of the current document are contained in the SAGE Specification [2].

## Annex A (informative): Change history

Change history							
Date	TSG #	TSG Doc.	CR	Rev	Subject/Comment	Old	New
2006-10					Draft document from ETSI SAGE		0.1.0
2006-03	SP-31				For information to TSG SA. Document not provided due to limitations arising from export controls.	0.1.0	1.0.0
2006-03					3GPP Support Team recast of document to refer to SAGE Specification	1.0.0	1.1.0
2006-06	SP-32	SP-060422	-	-	Approved at SA #32	1.1.0	7.0.0
2008-12	SP-42	-	-	-	Upgrade to Release 8	7.0.0	8.0.0
2009-12	-	-	-	-	Update to Rel-9 version (MCC)	8.0.0	9.0.0
2011-03	-	-	-	-	Update to Rel-10 version (MCC)	9.0.0	10.0.0
2012-09	-	-	-	-	Update to Rel-11 version (MCC)	10.0.0	<b>11.0.0</b>
2012-12	SP-58	SP-120855	005	--	Update of URL to 3GPP algorithms page	11.0.0	<b>11.1.0</b>
2014-10	-	-	-	-	Update to Rel-12 version (MCC) (this does not include CR006)	11.1.0	<b>12.0.0</b>

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# History

<b>Document history</b>		
V12.0.0	October 2014	Publication