ETSI TR 135 936 V18.0.0 (2024-05)

Universal Mobile Telecommunications System (UMTS);
LTE;
Specification of the TUAK algorithm set: A second example algorithm set for the 3GPP authentication and key generation functions f1, f1*, f2 ,f3, f4, f5 and f5*;
Document 6: Security assessment
(3GPP TR 35.936 version 18.0.0 Release 18)

Reference
RTR/TSGS-0335936vi00

Keywords
LTE,SECURITY,UMTS

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Contents

Foreword

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1 Scope

The present document provides a reference to an independent security assessment of the Tuak algorithm set carried out by the University of Waterloo, Canada.

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.
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[1] 3GPP TS 35. 231: "Specification of the Tuak algorithm set: A second example algorithm set for the 3GPP authentication and key generation functions f1, f1*, f2, f3, f4, f5 and f5*; Document 1: Algorithm specification ".

[2] "Security Assessment of TUAK Algorithm Set"; Guang Gong, Kalikinkar Mandal, Yin Tan, TengWu; Department of Electrical and Computer Engineering University of Waterloo, Canada (available at http://www.3gpp.org/ftp/Specs/archive/35_series/35.935/SAGE_report/Secassesment.zip)

3 Definitions, symbols and abbreviations

3.1 Definitions

For the purposes of the present document, the terms and definitions given in TS 35.231 apply. A term defined in the present document takes precedence over the definition of the same term, if any, in TS 35.231 [1].

4 Security assessment of the Tuak algorithm set

The security assessment of the Tuak algorithm set [1] can be found here: [2].

Annex A:
Change history

Change history							
Date	**TSG #**	**TSG Doc.**	**CR**	**Rev**	**Subject/Comment**	**Old**	**New**
Nov 2014					First TR version		0.1.0
Dec 2014	SA#66	SP-140818			Version for information and approval	0.1.0	1.0.0
					Version after approval	1.0.0	12.0.0
Jun 2015	SA#68	SP-150302	001	-	Correction of clause title and text referring to wrong subject	12.0.0	12.1.0
Jan 2016	SA#70				Upgrade to Rel-13 (MCC)	12.1.0	13.0.0

Change history							
Date	**Meeting**	**TDoc**	**CR**	**Rev**	**Cat**	**Subject/Comment**	**New version**
2017-03	SA#75					Promotion to Release 14 without technical change	14.0.0
2018-06	-	-	-	-	-	Update to Rel-15 version (MCC)	**15.0.0**
2020-07	-	-	-	-	-	Update to Rel-16 version (MCC)	**16.0.0**
2022-03	-	-	-	-	-	Update to Rel-17 version (MCC)	**17.0.0**
2024-03	-	-	-	-	-	Update to Rel-18 version (MCC)	**18.0.0**

History

Document history		
V18.0.0	May 2024	Publication