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Universal Mobile Telecommunications System (UMTS); LTE;

Performance evaluation of the Tuak algorithm set (3GPP TR 35.935 version 12.0.0 Release 12)



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# 1 Scope

The present document provides a reference to an independent performance evaluation report of the Tuak algorithm set carried out by the ISG Smart Card Centre of the Royal Holloway University of London.

## 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 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] "Performance Evaluation of the TUAK algorithm in support of the ETSI Sage standardisation group"; Keith Mayes; ISG Smart Card Centre, Royal Holloway University of London; (available at http://www.3gpp.org/ftp/Specs/archive/35\_series/35.936/SAGE\_report/Perfevaluation.zip)
- [3] "Performance Evaluation of the TUAK algorithm in support of the GSMA and ETSI SAGE standardisation group""; Keith Mayes; ISG Smart Card Centre, Royal Holloway University of London; Crisp Telecom Limited; (available at <a href="http://www.3gpp.org/ftp/Specs/archive/35\_series/35.936/SAGE\_report/Perfevaluationext.zip">http://www.3gpp.org/ftp/Specs/archive/35\_series/35.936/SAGE\_report/Perfevaluationext.zip</a>)

# 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 Performance evaluation of the Tuak algorithm set

The performance evaluation report of the Tuak algorithm set [1] can be found here: [2].

An extension to the performance evaluation report can be found here: [3].