TSGS#13(01)0502

Technical Specification Group Services and System Aspects Meeting #13, Beijing, China, 24-27 September 2001

Source: SA WG3

Title: 1 CR to 33.200: MIA key length unspecified (Rel-4)

Document for: Approval

Agenda Item: 7.3.3

Spec	CR	Rev	Phase	Cat	Subject	Version- Current	Version -New	Doc-2nd- Level
33.200	010		Rel-4	F	MIA key length unspecified	4.0.0	4.1.0	S3z010091

3GPP TSG SA WG3 Security — MAP Security ad-hoc

S3z010091

13 September, 2001, Sophia Antipolis, France

CHANGE REQUEST								
*	33.200 CR 010 * ev - * Current version: 4.0.0 *							
For <u>HELP</u> on using this form, see bottom of this page or look at the pop-up text over the % symbols.								
Proposed change affects: \$\mathbb{K}\$ (U)SIM ME/UE Radio Access Network Core Network								
Title:	MIA key length unspecified							
Source: #	SA WG3 (MAP ad-hoc)							
Work item code: ₩	MAPsec							
Category:	Release: ₩ Rel-4 Use one of the following categories: Use one of the following releases: F (correction) 2 (GSM Phase 2) A (corresponds to a correction in an earlier release) R96 (Release 1996) B (addition of feature), R97 (Release 1997) C (functional modification of feature) R98 (Release 1998) D (editorial modification) R99 (Release 1999) Detailed explanations of the above categories can be found in 3GPP TR 21.900. REL-4 (Release 4)							
Reason for change	* The MIA algorithm identifiers has to include the key length							
Summary of chang	2: # 128-bit key is intended for Rel-4							
Consequences if not approved:	Specification is left incomplete, implementers can only assume that a 128-bit key was intended too be used. Removal of editors note is not possible.							
Clauses affected:	¥ 5.6.2							
Other specs affected:	# Other core specifications Test specifications O&M Specifications							
Other comments:	x							

5.6.2 Mapping of MAP-SA encryption algorithm identifiers

The MIA algorithm indication fields in the MAP-SA are used to identify the integrity algorithm and algorithm mode to be used. The mapping of algorithm identifiers is defined below.

Table 2: MAP integrity algorithm identifiers

MAP Integrity Algorithm identifier	Description
0	Null
1	AES in a CBC MAC mode with a 128-bit key (MANDATORY)
:	-not yet assigned-
15	-not yet assigned-

5.6.21.1 Description of MIA-1

The MIA-1 algorithm is the ISO/IEC 9797 Part 1: padding method 2, MAC algorithm 1 (initial transformation=1, output transformation=1). No IV used. The MAC-length m is 32-bits (See clause 5.6.1). See ISO/IEC 9797 [6] for more information.

Editor's Note: More specification on the mode of operation for MIA-1 may be required.