3GPP TSG SA WG3 Security — S3#34 Acapulco, Mexico, 6-9 July, 2004

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| CR-Form-v7 CHANGE REQUEST | | | | | | | | | | | |
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| * | TS 33 | 3 <mark>.210</mark> | CR C | RNum | жrev | × | Current vers | ion: 6. | 5.0 | * | |
| 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: UICC apps# ME Radio Access Network Core Network X | | | | | | | | | | | |
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| Title: | ₩ SI | SIP Privacy mechanism when IMS interworking with non-IMS (foreign) network | | | | | | | | | |
| Source: | ₩ <mark>N</mark> o | ₩ Nokia | | | | | | | | | |
| Work item code | £₩ <mark>IM</mark> | IS-ASE | | | | | Date: ♯ | 28/6/20 | 04 | | |
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START OF CHANGE

Annex C (normative): Security protection of IMS protocols

This section details how NDS/IP shall be used to protect IMS protocols and interfaces.

C.1 The need for security protection

The security architecture of the IP multimedia Core Network Subsystem (IMS) is specified in 3GPP TS 33.203 [10]. 3GPP TS 33.203 [10] defines that the confidentiality and integrity protection for SIP signalling are provided in a hop-by-hop fashion.

The first hop i.e. between the UE and the P CSCF through the IMS access network (i.e. Gm reference point) is protected by security mechanisms specified in 3GPP TS 33.203 [10].

The other hops, within the IMS core network including interfaces within the same security domain or between different security domains are protected by NDS/IP security mechanisms as specified by this Technical Specification.

3GPP TS 23.002 [3] specifies the different reference points defined for IMS.

C.2 Protection of IMS protocols and interfaces

IMS control plane traffic within the IMS core network shall be routed via a SEG when it takes place between different security domains (in particular over those interfaces that may exist between different IMS operator domains). In order to do so, IMS operators shall operate NDS/IP Za interface between SEGs.

IPSec ESP shall be used with both encryption and integrity protection for all SIP signalling traversing inter security domain boundaries.

It will be for the IMS operator to decide whether and where to deploy Zb interfaces in order to protect the IMS control plane traffic over those IMS interfaces within the same security domain.

Diameter messages over the Cx interface shall make use of SCTP. Additional guidelines on how to apply IPSec in SCTP are specified in [26]. This RFC shall also apply to NDS/IP if IMS operator chooses to deploy Zb interface at Cx interface.

*** END OF CHANGE ***