25 - 28 February 2002

Bristol, UK

Source: MAP Rapporteur

Title: Proposed Text for Cover Sheet for MAPsec Release 5 CR

Document for: Discussion/Decision

Agenda Item:

SA plenary requested that several CRs were created to create the Release-5 version of TS 33.200. At the MAPsec Ad-hoc in Antwerp, the issue of creating several CRs was discussed. The main arguments in favour of several CRs were that this was what SA3 had requested and if one gets rejected, the Release-5 document would still be created by the other CRs. The main argument against this was that it was felt that if not all the CRs got accepted then the functionality of Release 5 would be left incomplete. For this reason, it was proposed to sent only one CR for the TS Release 5 to the SA plenary but include a cover sheet to explain why it is only one CR and the changes made to each section. This contribution proposes text for the cover sheet.

Proposed Text for Cover Sheet

The Release 4 version of TS 33.200 covers the protection of MAP messages by Network Elements (NEs) given some manual method of key management. The aim of the Release 5 version is to provide a mechanism for automatic key management.

The automatic key management is provided by the introduction of a new entity, the Key Administration Centre (KAC). The KAC provide two different functions, automatic negotiation of new security associations and the distribution of these security associations to the NEs that uses them. SA3 believe that having one function without the other would provide a specification of little value. As all of the changes proposed for the Release 5 version of TS 33.200 relate to providing automatic key management, the changes are proposed in one CR. Furthermore SA3 was concerned that if several CRs were presented and one of them got rejected then it could potentially leave the Release 5 version of TS 33.200 either incomplete, inconsistent, confusing or at worst all three.

The following list describes the proposed changes section by section

- Section 1: the proposed change is purely to indicate that automatic key management is part of the specification.
- Section 2: additional reference included.
- Section 3: additional symbols and abbreviations included.
- Section 4: additional text to give an overview of the architecture used to provide automatic key management and to indicate the security provided (this part taken from Release 4, section 5.1). Also a text change to make the KACs negotiate the security associations as opposed to PLMN operators.
- Section 5.1: overview of the security provided was deleted (and moved to section 4, see above). Deleted text replaced with an overview of the functionality of the KAC needed to provide automatic key management.
- Section 5.2: added text to describe how Network Elements interact with KACs.

- Section 5.3: added text to describe a database needed by the KAC to provide automatic key management.
- Section 5.4: minor clarification added.
- Section 5.6.1: change of title only.
- Section 5.6.2: change of title only.
- Section 7: describes how the KACs automatically negotiate new security associations
- Section 8: describes how the KACs automatically update the NEs with security associations and policy.
- Annex A: text deleted as it relates to manual key management.
- Annex B: addition of an Editor's note.