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Abstract

This contribution makes some proposals regarding the handling of the contributions on WLAN trust models.

1. Introduction

A discussion on WLAN trust issues was held on the SA3 mailing list, and the result is reflected in TD S3-030346 “WLAN – Implications of the trust relation between the Cellular Operator and the WLAN Access Provider ” by Ericsson. TD S3-030332 “Alternative WLAN Inter-working Trust Model” by BT proposes a revision of this trust model, on the grounds that considerations on architecture and services are outside the remit of SA3, and that a proper trust model should take into account more dimensions, in particular the charging model and the transaction type.

2. Remarks on the contributions on trust models

Neither of the two contributions says what the consequences of the trust model for 3G specs, in particular for draft TS 33.234, the only one under the control of SA3, should be. It is unclear who should benefit from this trust model in which way. Is it to motivate the selection of certain security mechanisms, specified in the main body of TS 33.234? Or is it to give guidelines to operators? (But is a TS the right place for such guidelines?) There probably is no harm in including text on trust models in an informative annex of TS 33.234, but if doing so, the purpose of including this annex should be clear.

TD S3-030332, section 5, proposes to elaborate a detailed list of recommendations to network operators and end users, based on a fine grained assurance (trust) level indication. Examples of possible list entries are given. Such a list may be quite useful for operators and users, in particular as it is more detailed than the trust model in TD S3-030346, but for one thing, it may be overly ambitious for SA3 to complete such a list, on the other hand, it may rather be the job of GSMA.

TD S3-030346, section 5, contains a table summarising the conclusions from the trust model. The first row on access to services provided by the WLAN Access Provider has no implications for security mechanisms to be specified by SA3. The second row on access to services provided by the cellular operator speaks about tunnelling mechanisms between the UE and a PLMN. It is indeed the task of SA3 to define the security of such a tunnel.

3. Proposal

- Clarify the purpose of the inclusion of a trust model in TS 33.234. One purpose could be to motivate the selection of security mechanisms in the main body.
- If the purpose of the trust model is to motivate the selection of security mechanisms in the main body then restrict the trust model to those aspects impacting security mechanisms specified in TS 33.234. This implies to

remove the considerations on access to services provided by the WLAN Access Provider. (This is mostly about charging which is not in the responsibility of SA3. The charging related aspects could be communicated to SA4 in an LS.)

- Make the consequences from the trust model explicit. The proposed consequence is that
 - SA3 needs to specify the confidentiality, integrity and key management for a tunnel between UE and PLMN (home or visited), and that
 - the security for the tunnel is optional as it may not be needed in cases of high trust.