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**Agenda Item:**

**Source:** Telecom Italia Mobile

**Title:** Security for early IMS Work Item Description.

**Document for:** Discussion and Decision

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## 1. Background

During last SA#25 a LS on interim IMS security was introduced by the SA WG2 Chairman. The LS asked TSG SA for guidance on how interim IMS security solutions are to be taken into account in 3GPP specifications. It was agreed to:

- identify the potential problem of implementations which do not fully implement the security requirements for IMS
- SA WG3 and SA WG2 were asked to study the problem and requested that manufacturers explain the reasons why this is a problem (i.e. why the IMS security features are not implemented).
- SA WG2 were asked to provide more background on the reasons why "early implementations" cannot implement the agreed mechanisms.

In spite of clear direction from SA, during SA WG3#34 meeting (Acapulco, 6<sup>th</sup>-9<sup>th</sup> July 2004) the Work Item Description "Security for early IMS" (TD S3-040637) was approved. It assumes that some "early" IMS implementations may not offer the full set of 3GPP Release 5 security features as defined in TS 33.203 and then it aims to standardize *an interim security solution to provide an adequate level of security and to avoid interoperability problems.*

Although the background idea of the WID might be considered as beneficial in the short term, this paper aims to put forward some remarks and to highlight possible drawbacks to be taken into account.

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## 2. Discussion

Referring to the above mentioned WID, the following remarks/possible drawbacks were identified:

- 1) Although the WID *is intended to specify the interim solution in an informative part of the 3GPP specifications (i.e. in a TR)* it explicitly addresses possible impacts on existing normative specifications (e.g. Cx interface). According to this, the relevant early IMS security aspects would be included in the 3GPP specifications, as "normative" and then, from the 3GPP standard point of view, they would become "legitimate" as the *full 3GPP release 5 solution* is. Moreover, as normal 3GPP working procedure suggest any stage 3 specification activity be justified by a stage 1

work, SA WG1 should be involved in the discussion before proposing any CR activity on TSG CN specifications. Current WID lack any hint at SA WG1 involvement on this subject.

- 2) Although the interim IMS security solution *should not be considered as a long-term replacement for the full 3GPP Release 5 solution*, it is not clear how the migration to the latter could be really mandated in practice. Rather, to legitimate the *interim IMS security solution* might discourage IMS implementations compliant with the *full 3GPP release 5 solution*.
- 3) Although it is acknowledged that *some* (early) IMS implementation will not fully comply with the Rel-5 IMS security Technical Specifications, the availability of fully compliant (early) IMS implementation should not be excluded a priori and, rather, it should be encouraged and supported in a practical way by the Operators.
- 4) The “early implementations” issue is not an IMS-related one only. To take in work around solutions in the 3GPP standard to cope with possible “early implementations” might nullify the “regular” 3GPP standardization work and to obstruct the desired original solution.

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### 3. Proposal

Although the background idea of the WID might be considered as beneficial in the short term, according to the above mentioned remarks it might hinder the 3GPP standardization work and it would not encourage IMS implementations supporting *full 3GPP release 5 solution*.

Moreover, it is perceived as potentially harmful as it offers an insufficient security solution.

Therefore, we propose to postpone the approval of the WI after clarifying the real need for it and after analyzing the concerns expressed at the SA#24 meeting. Any approved WID in this area should then clearly require a stage 1 guidance from SA1 before requesting any stage 2 or stage 3 specification change.