
PROJECT:	T1P1 Activity on Lawful Intercept for UMTS
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TITLE:	Deficiency in IP Multimedia Core Network Subsystem (IMS) interception solution for Start of Interception with an active SIP call/session event
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ABSTRACT:	This contribution identifies a deficiency in the current IP Multimedia Core Network Subsystem (IMS) interception solution for Start of Interception with an active SIP call/session event.
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DISTRIBUTION:	T1P1.SAH
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NOTICE

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1 **A. Problem Definition**

2 IP Multimedia Core Network Subsystem (IMS) interception, according to 3GPP TS 33.108 is based
3 upon the interception of SIP signaling messages and delivery of those messages to the LEMF.
4 Specifically, an event is defined for the detection of a SIP signaling message and the reporting of that
5 message.

6 This approach does not assume state-full knowledge at the SIP server. That is, the SIP server may
7 remember state for the handled calls/sessions or it may not remember such state. One case that is not
8 adequately addressed in the current specification is the reporting of the start of interception with an
9 active SIP call/session. That is, there are a series of SIP messages that would have been sent to LE
10 had interception been active, however, these messages were not sent.

11 The network does not necessarily have a SIP message to send to the LEA in this case. However, the
12 network would need to inform the LEA of the active state of these calls. The following questions
13 need to be addressed to ensure the IMS interception solution is valid:

- 14 1. How is this reported to the LEA?
- 15 2. Is a new event needed for this case?
- 16 3. What information should be included in this event?
- 17 4. Does this depend upon whether the server has knowledge of the state of the call/session?
- 18 5. Do we need the network to store information relative to state in case of surveillance
19 activation which can be purged later?

20 In addition, correlation of SIP session to media/PDP context needs clarification. There are still
21 unanswered questions related to how the correlation is to be done.

22 The above questions and issues are some issues to consider relative to the notification of the
23 activation of surveillances in the context of IMS.

24 **B. Recommendations**

- 25 1. T1P1.SAH should ensure through thorough analysis that the IMS interception solution is valid.
- 26 2. Discuss questions and issues raised in this contribution.
- 27 3. Develop appropriate recommendations if possible or identify these issues to 3GPP SA3 LI for
28 further analysis and discussion.