Source:	**SA5 (Telecom Management)**
Title:	**Reply LS to SA2, SA1 (cc: SA) on Charging Implications of 3GPP System – WLAN Interworking**
Document for:	**Information**
Agenda Item:	**7.5.3**

3GPP TSG-SA5 (Telecom Management)   **S5-034155**
Meeting #33, Phoenix, USA, 24-28 February 2003

Title:	Reply LS on 'Charging Implications of 3GPP System – WLAN Interworking'
Response to:	LS (S5-034154/ S2-030286) on '3GPP System – WLAN Interworking' from SA2
Release:	Rel-6
Work Item:	CH-BC

Source:	SA5
To:	SA2, SA1
Cc:	SA

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Attachments: None

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1. Overall Description:

SA5 would like to thank SA2 for their LS on '3GPP System – WLAN Interworking' (S5-034154/ S2-030286) that was received in response to the previous LS exchange:

- LS from SA5 on '3GPP System – WLAN Interworking' (S2-030043/ S5-024593); and
- LS from SA2 on '3GPP System – WLAN Interworking' (S5-024556/ S2-023123).

With regards to TS 23.234, SA5 opinion is that this TS should neither specify charging-specific issues, which are normally specified in SA5 charging documents, nor with stage 1 service requirements which are specified by SA1. This could create unnecessary conflicts between TSs.

SA5 would like to inform SA2 that in Rel-6 it intends to create two TSs, one which specifies the charging architecture for the different domains and subsystems (including WLAN) and another TS which will specify the charging data descriptions (stage 3) for WLAN. In addition, SA5 intends to create a generic on-line charging application based on the Ro interface that will also cover WLAN. Therefore, SA5 encourages SA2 to remove all specific charging issues from TS 23.234 and (if needed) to include them in a TR dedicated to charging implications of the WLAN architecture. This would enable both WGs (SA2 and SA5) to make timely progress with their own work items.

With regards to the specific WLAN architecture, SA5 wishes to inform SA2 that the "scenario 2" interworking (mentioned in the SA2 LS) implies that Credit Control Applications would not work with the limited support to AAA Accounting (600 seconds minimum recommendation in RFC 2869). Therefore, a Wo interface (with a similar functionality to Ro) is not possible. In "scenario 3", SA2 mentioned the use of a Packet Data GW in the operators network to achieve fine granular control of WLAN sessions, similar to a PDP context control. This gives the Packet Data GW a similar functionality as the GGSN.

In Rel-6 SA5 intends to implement on the GGSN similar DIAMETER on-line procedures as utilized by the Ro interface. Hence, SA5 believes that the Wo interface can be applied to the Packet Data GW, in line with the charging evolution of the GGSN. SA5 recommends that Wf is also applied to the Packet Data GW based on the Rf specifications. Such an evolution would enable all the charging mechanisms and credit control procedures to be fully functional for WLAN in Rel-6.

Finally, it is SA5 impression that charging issues are an important driver of the WLAN architecture that is specified in SA2's TS 23.234. The choice of charging mechanisms must take into account other charging solutions, e.g., GPRS and thus strongly impacts the architecture solution. Therefore, it would be useful to have a discussion on the charging issues in a SA2/SA5 Joint Meeting (JM) possibly also with SA1. The JM should last 1 or perhaps 2 days. SA5 could have such a meeting in the second part of April, or at a later time, preferably as part of a regular SA5/SA2/SA1 meeting.

2. Actions:

To SA2 group.

ACTION: SA5 asks SA2 group the following:

- Please remove from TS 23.234 the sections associated with charging and either include them in a dedicated TR or bring them to SA5's attention via an LS or as a contribution to an SA2/SA5 Joint Meeting.

- Please modify the WLAN architecture drawing in TS 23.234 to either remove the Wf and Wo interfaces or show them connected to the Packet Data GW.

- Please schedule a joint meeting (1 or 2 days) between SA5, SA2 and possibly SA1, in late April 2003 or later, to discuss the charging implications of the WLAN architecture. Such a meeting would enable SA2 to handover all charging related concerns of WLAN to SA5.

3. Date of Next SA5 Meetings:

Meeting	Date	Location	Host
SA5#33bis	7-11 April 2003	Berlin, GERMANY	EF
SA5#34	19-23 May 2003	Sophia Antipolis, FRANCE	ETSI
SA5#34bis	14-18 July 2003	Cork, IRELAND	Motorola