3GPP TSG-SA WG2 meeting #36 **Tdoc S2-034373**
New York, USA 24th – 28th November 2003

Title: Further development of TR 23.825, IP Flow Based Charging
Response to: -
Release: Rel-6
Work Item: CH

Source: SA2
To: SA, SA5
Cc: -

Contact Person:
Name: Shabnam Sultana
Tel. Number: +1514 806 7419
E-mail Address: shabnam.sultana@ericsson.com

Attachments: None

---

1. Overall Description:

The TR 23.825 is currently being developed within SA2, detailing the basic functional and architectural aspects of IP Flow Based Charging (FBC). Overall, the TR 23.825 is considered not yet sufficiently complete to be proposed for approval. It is expected that the document will reach stable status in March 2004.

However, certain areas are sufficiently stable to initiate development work within SA WG5:

- The function of the interface Gy is closely related to the existing Ro interface, and assessment of the relationship between Gz and Ga is to be examined. Both the Ro and Ga interfaces have been developed within SA WG5. Thus it is proposed that the specification of these interfaces can be started now within SA WG5. It is also recognised that there is ongoing work in the IETF on the Diameter credit control application, which is believed to be closely related to the Gy interface. Initiating work on these interfaces as soon as possible enhances the possibility to influence this development in the IETF, if required.

While SA WG2 will continue to work on TR 23.825 future updates to this document impacting the work that is started within SA WG5 will be duly communicated. However, it is not expected that these will be significant in number or level of impact, and hence the risk introduced to the work in SA WG5 is minimised. Some of the main areas of continued development within SA WG2 are:

- Message flows
- Rx interface, and functions within the Application Function
- Interaction and relationship between IP flow based charging, and existing PDP Context based functions. Further input from SA5 on this item would be appreciated.
- Termination actions
- Application of IP Flow based Charging for WLAN
- Overall architectural impacts of flow-based charging (e.g. IMS)

The TR 23.825 specifies a functionality that provides new charging capabilities within the network. However, it is recognised that the function involves a number of nodes in the network architecture, some of which are basic core network nodes and not primarily charging-related nodes. FBC integrates with many non-charging related functions within the network (for example, the traffic flow through the user data plane) and enhances the overall 3GPP network architecture beyond pure charging aspects. For this reason, the functionality will require updates not only to specifications within SA5's responsibility, but also to specifications within SA2 responsibility. Recommended possibility is to allocate a new TS for

FBC that would be primarily based on TR 23.825 to capture the overall picture, rather than distributing this throughout a set of existing TSs within SA2, and thus losing the overview of the functionality within the network that is currently provided within the TR 23.825. Additionally, SA2 assumes that charging architecture specific aspects will be documented in the respective TS(s) within SA5.

2. Actions:

To SA:

SA WG2 kindly requests SA to endorse the recommendation from SA WG2:

- to allocate a TS to capture the overall high level functionality and architecture impacts of FBC

-to allocate the task under SA2 responsibility.

SA2 will then update the corresponding WI accordingly.

To SA5:

SA WG2 requests SA WG5 to review the TR 23.825, and initiate work to specify the Gy and Gz interfaces. While Gy is closely related to the existing Ro interface, assessment of the relationship between Ga and Gz is needed.

3. Date of Next SA2 meetings:

SA2 #37	12th– 16th January 2004	Innsbruck, Austria
SA2#38	16th – 20th February, 2004	Atlanta, USA