Agenda Item: 5.1

Source: Motorola

Title: Iu Iur and Iub Work Items

Document for: Work Items

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Title: I_U I_{UR} **and** I_{UB} **Work Items**

Date: **February 2nd-5th, 1999**

Source: (M) **MOTOROLA**

Agenda Item: Work Items and Documentation in TSG RAN

1.   Introduction

This contribution proposes a document structure for standards related to the key interfaces (or part thereof) being defined by TSG RAN.

2.   Discussion

Transport technologies continue to evolve, and it is very difficult to predict what the most appropriate transport technology will be a few years from now. It is important to design UMTS networks to be future-proof and facilitate evolution of UMTS networks as new transport technologies are introduced. The important concept, from a System Architecture perspective, is to maintain independence between Network and Transport. Given the advantages of designing protocol stacks that are independent of the underlying transport technologies, it should be important to consider the same design principles for other Radio Access Network interfaces, such as the I_{UR}.

A recent Liaison Statement from SMG12 to SMG2 and SMG2-ARC (ref 1) indicated the following principles regarding the I_U reference point:

- The specifications, for the Control and User planes, of the I_U reference point, shall be such that the Radio Network Layer and the Transport Layer are independent, allowing either layer to change without impacting the other layer.

- The Transport Layer Protocols and the Radio Network Layer Protocols, for the Control and User planes, of the I_U reference point, shall be specified in separate documents, allowing for either document to change without impacting the other document.

3.   Proposal

Based on the discussion in chapter 2 and the Liaison statement from SMG12, this contribution proposes that in order to maintain the desired independence between the protocol layers, for each of the Iu, Iur and Iub interfaces separate set of specifications be specified for

- The Transport Layer Protocols and

- The Application Layer Protocols that use the services of the transport layer (for instance the Radio Network Layer Protocols at the Iu reference point)

for both the user plane and the control plane.

4. References

1. SMG12 to SMG2 Liaison statement, Tdoc C-99-243, I_U Specifications, LS from SMG12