Technical Specification Group Services and System Aspects
Meeting #12, Stockholm, Sweden, 18-21 June 2001

TSGS#12(01)0394

Source: **GSM-Association SERG**

Title: **Hand over scenario's between 2G and 3G networks**

Document for: **Discussion**

Agenda Item: **6.2**

Meeting Number **SERG #43**

SERG Doc 113/01

Meeting Date **5th to 7th June, 2001**
Meeting Location **Bristol, UK**

Title **Hand over scenario's between 2G and 3G networks**
Source **GSMA SerG**
Date **6/6/01**

Security Classification Category*:		**Please mark with "X" where applicable**
Restricted - Members		**X**
Restricted - Associate Members		**X**
Restricted - Group Members		

Status

Please mark with "X" one of the following actions relating to this document:

For Approval ☐ **For Information** ☒

Associated Knowledge Basis	Enter if applicable

Document History		
Revision	**Date**	**Brief Description**
1.0	25/5/01	2G to 3G hand over scenarios

Summary

The document contains details of different 2G to 3G hand over scenarios. SerG has forwarded this request from the Chair of 3GWP of BARG who would like input on defining these scenarios.

Liaison Statement

From: **GSMA SerG**

To: 3GPP TSG-SA
Cc:

Subject: Hand over scenarios between 2G and 3G networks

The 3GWP of BARG has asked SerG the questions detailed below. These have been asked to help BARG understand the impact of these scenarios on the charging for services. SerG feels that it would be more appropriate if this information were provided by 3GPP TSG-SA. SerG therefore asks that TSG SA provide answers to the following questions to both and SerG and also the 3GWP of BARG.

As a general principle SerG believes that charging should be based upon the service delivered rather than the technology used to deliver those services.

BARG 3GWP Questions:

The questions relate to the following three handover scenarios:
1. CS between two networks
2. PS between two networks using HGGSN
3. PS between two networks using VGGSN

1. CS between two networks

The call can be handed over to another network, provided arrangements are in place between the two networks. The anchor MSC will record the whole call, and charge it according to the rate of the original network where the call started. The mobile is not registered in the new network (VLR), so after the call, it will do a new registration. The handover can even be done to a network with whom the HPMN does not have a roaming relation to.
Question: how will the network selection be done?

2. PS between two networks using HGGSN

The session will be handed over from one network (SGSN) to another network (another SGSN). Both networks will create partial records of the same PDP context. Registration to the new network will be performed before continuing the session that is in place; this prevents the mobile from ending up in a PMN that has not a roaming agreement with the HPMN.
Question: will this always work as long as both networks have a roaming agreement?
Question: who will do the network selection?

3. PS between two networks using VGGSN

Question: will it be possible to connect to a GGSN of a third network (nor form the HPMN, nor the VPMN)?