

Agenda Item: 6.4
Source: SAMSUNG Electronics(TTA, Korea)
Title: Working Items for interworking with IS-41 Networks
Document for: Discussion, Decision

Source: SAMSUNG Electronics(TTA,KOREA))
To: TSG-SA
Title: WI for Interworking with IS-41 networks

x Interworking with IS-41 networks

In Tdoc 73, TTA of Korea submitted the document about the general requirements for interworking with IS-41 networks. This document contains working item for interworking with IS-41 networks.

x.1 TSG Project

| | |
|---|--------------|
| | Terminal |
| | Radio |
| X | Core Network |
| | Systems |

x.2 Linked work items

None

x.3 Justification

According to the ITU-T Q.1701, NNI Interworking function with other IMT-2000 family shall be recommended.

In Korea, there are only IS-41 Networks. In this environment, the interworking function with IS-41 networks is necessary in order to introduce the 3GPP system in Korea.

In order to lead IMT-2000 systems, the general requirements for 3GPP service and system aspects must support functions and structures for interworking with another networks.

Accordingly, 3GPP core network must support the interworking function with 3G IS-41 network.

Objective

By the above point of view, we suggest that the requirements for the roaming, the hand-over, and the interoperability of VHE in both 3G networks have to be reflected onto the 3GPP baseline documents for service requirements with the following priorities:

- *Roaming (mandatory)*
- *Hand-over (optional)*
- *VHE Interoperability (optional)*
- *And so on(For Further Study)*

x.4 Service Aspects

The interworking Function must support the following service features with the following priorities:

- *Roaming (mandatory)*
- *Hand-over (optional)*
- *VHE Interoperability (optional)*
- *And so on(For Further Study)*

Inter-workable Services :

- *Voice(mandatory)*
- *Circuit and Packet data service(mandatory)*
128kbps(circuit data) and 144kbps(packet data) , 384kbps , 2Mbps
- *Supplementary service (optional)*
- *And so on(For Further Study)*

The network architecture and the signaling protocols of Interworking Function may be investigated for the implementation of interworking function.

x.5 MMI-Aspects

For the roaming , we may consider the dual supporting terminal by MMI.
For details, FFS(For Further Study)

x.6 Charging Aspects

When the roaming can be performed by interworking function from GSM networks to IS-41 networks and vice versa, the charging information of one call must be considered in GSM and Is-41 networks.

For details, FFS(For Further Study)

x.7 Security Aspects

It is necessary to authenticate and conserve the privacy of the service and subscriber information in different networks.

For details, FFS(For Further Study)

x.8 Impacts

| Affects: | Terminal | Radio | CN | Others |
|-------------------|-----------------|--------------|-----------|---------------|
| Yes | X | | X | |
| No | | X | | |
| Don't know | | | | |

x.9 Expected Output and Timescales

| | |
|--------------------------------|---------------------|
| Approval of WI: | TSG # (March 99) |
| Start of Report | TSG # (April 99) |
| Scope and first draft | TSG # (December 99) |
| Approval of deliverable by TSG | TSG # (2000) |

x.10 Work item rapporteurs

x.11 Supporting companies

members of TTA

x.12 Responsible STC(s)

Prime: TSG-SA
Secondary: TSG-CN, TSG ?

x.13 Others