

1 Introduction

This contribution proposes discusses the addressing schemes to be used for SCCP over the Iu and Iur interfaces.

2 Discussion

The addressing scheme selected for the Iu and Iur interfaces would have to be one of the available SCCP addressing schemes. Presently the available SCCP addressing schemes are in principle:

1. SPC – Signalling Point Code
2. SSN – Subsystem Number
3. GT – Global Title

All of the above addressing schemes may be useful in different cases. The SPC addressing scheme is the addressing scheme presently being in use for the A-interface in GSM. This addressing scheme may be useful for backwards compatibility reasons, e.g. if deploying an inter-working function between RANAP and BSSMAP for the CS domain. The SSN addressing may be useful if the signalling network consists of two peer nodes (per SSN) being connected, e.g. one MSC connected to one RNC or two RNCs being connected to each other. The GT addressing scheme is the addressing scheme that complies with the requirement on separation of the Radio Network Layer and the Transport Layer.

Presently there are no reasons to limit the addressing schemes to one or the other.

However, the GT addressing scheme can take various variants. It may be useful to limit the number of different global titles in use in UMTS, e.g. use the same GT format (GT format 4) as for the MAP specification.

3 Conclusions

From the discussion above it is obvious that there are no reasons to limit the addressing scheme other than possibly selecting one out of the four possible global titles (GTs) described in ref. 1.

It is also concluded that the addressing schemes should be the same for both the Iu and Iur interfaces.

4 Proposal

4.1 Proposals for the WG3 Plenary

It is proposed that:

- WG3 endorse the usage of any of the available addressing schemes for the SCCP, i.e. SSN, SPC, and/or GT.
- Which of the available GT formats to be used is FFS.

It is further more proposed that the Iu and Iur/Iub SWGs are given the task to conclude on the actual text proposals below.

4.2 Proposals for the Iu SWG

The following modifications to ref. 2 are proposed:

1. Add the following text to chapter 4.5.1.1:

RANAP may use SSN, SPC, and/or GT and any combination of them as addressing schemes for the SCCP. Which of the available addressing scheme to use for the SCCP is an operator matter.

Which out of the possible GT formats to be used is FFS. One option is to use the same format as for the MAP specification, i.e. GT format 4.

2. Modify chapter 4.5.1.2 according to the following:

~~Note: Which addressing scheme for SCCP to be used over Iu is TBD.~~

4.3 Proposals for the Iur/Iub SWG

Given that ref. 4 has been discussed and agreed previously the following modifications to ref. 3 it are proposed:

1. Add the following text to chapter 4.x.1.1:

RNSAP may use SSN, SPC, and/or GT and any combination of them as addressing schemes for the SCCP. Which of the available addressing scheme to use for the SCCP is an operator matter.

Which out of the possible GT formats to be used is FFS. One option is to use the same format as for the MAP specification, i.e. GT format 4.

2. Modify chapter 4.x.1.2 according to the following:

~~Note: Which addressing scheme for SCCP to be used over Iu is TBD.~~

5 References

1. Q.713, Signalling Connection Control Part Formats and Codes
2. UMTS 25.410, UTRAN Iu Interface General Aspects and Principles
3. UMTS 25.420, UTRAN Iur Interface General Aspects and Principles
4. TSGR3#6(99)930, Description of usage of SCCP as signalling bearer for RNSAP, Source: Ericsson