

Agenda item: 9.4.3
Source: Rapporteur
Title: Status Report of Work Item "Open SMLC-SRNC Interface within the UTRAN to support A-GPS Positioning"
Document for: Information

Executive Summary:

This contribution provides a status report of the work item 'Open SMLC-SRNC Interface within the UTRAN to support A-GPS Positioning'.

The following Iupc related CRs agreed in WG2 are being provided to RAN #12 for approval:

Doc (1st-Level)	Status (1st-Level)	Spec	CR	Rev	Phase	Subject	Cat	Version (Current)	Version (New)	Workitem
R2-011182	agreed	25.305	054		Rel-5	Iupc architectural aspects modifications	F	5.0.0	5.1.0	LCS-INTF
R2-011183	agreed	25.305	055		Rel-5	Removal of RAN3 dependency w.r.t. PCAP signalling flows	F	5.0.0	5.1.0	LCS-INTF
R2-011506	agreed	25.305	056	2	Rel-5	PCAP message flows	C	5.0.0	5.1.0	LCS-INTF

The following Iupc related CR agreed in WG3 is being provided to RAN #12 for approval:

Doc (1st-Level)	Status (1st-Level)	Spec	CR	Rev	Phase	Subject	Cat	Version (Current)	Version (New)	Workitem
R3-011796	agreed	25.401	030	1	Rel-5	Showing the A-GPS SMLC	B	4.0.0	5.0.0	LCS-INTF

The following Iupc related TSs agreed in WG3 are being provided to RAN #12 for approval:

Doc (1st-Level)	Status (1st-Level)	Spec	Phase	Subject	Version (Current)	Version (New)	Workitem
R3-011878	agreed	25.450	Rel-5	UTRAN Iupc Interface General Aspects and Principles	-	2.0.0	LCS-INTF
R3-011800	agreed	25.451	Rel-5	UTRAN Iupc Interface Layer 1	-	2.0.0	LCS-INTF
R3-011879	agreed	25.453	Rel-5	UTRAN Iupc Interface PCAP Signalling	-	2.0.0	LCS-INTF

The proposed 'UTRAN Iupc Interface Signalling Support' specification (25.452) could not be agreed due to IP-related issues that overlap with the general discussion of 'IP Transport in UTRAN' issues.

The Iupc-related activities that have occurred since RAN #11 in WG2 and WG3 are summarized below.

RAN WG2 and WG3 Activities:

RAN WG3 #20 (Beijing, China, 2-5 April):

Proposals for the family of Iupc specifications (25.4xy) and a CR to 25.401 were provided by Qualcomm.

Upon initial review of several Iupc related issues, some concerns were raised about the architectural principles, the efficiency of the elementary procedures, and the basic RNC-SAS message flows. Unfortunately, consensus could not be reached on these issues. In order to facilitate the targeted June completion date for Iupc, RAN WG3 proposed a joint PCAP Ad Hoc meeting between RAN WG2 and RAN WG3 to discuss the principles in 25.305 and the finalisation of the stage-2. It was also proposed that this meeting would be followed by a RAN WG3 PCAP Ad Hoc to facilitate the finalization of stage-3 (Iupc) specifications for June. The meetings were proposed to occur during 2-4 May in London.

The proposed 'UTRAN Iupc Interface General Aspects and Principles' specification (25.4x0) was discussed and some changes were suggested

The following proposals were delayed due to the need for the PCAP Ad Hoc meetings in London.

- UTRAN Iupc Interface Layer 1 (25.4x1)
- UTRAN Iupc Interface Signalling Support (25.4x2)
- UTRAN Iupc Interface PCAP Signalling (25.4x3)
- CR to UTRAN Overall Description [Rel-5] (25.401)

RAN WG2 #20 (Hayama, Japan, 9-13 April):

The liaison from RAN WG3 #20 (2-5 Apr) proposing the WG2/WG3 and WG3-only PCAP Ad Hoc meetings for 2-4 May in London was noted. It was agreed to support these proposed meetings.

RAN WG2/WG3 PCAP Joint Ad Hoc (London, UK, 2-3 May):

Several companies provided contributions proposing modifications to 25.305 v5.0.0 concerning the scope of the Standalone A-GPS SMLC (SAS) and its corresponding call flow interaction with the RNC. As a result, it was decided to modify some of the Iupc-related architectural aspects (scope, etc.) described in the stage-2 specification. It was also decided to remove the existing call flows from the stage-2 specification. Ericsson agreed to provide the required CRs to 25.305 v5.0.0 to RAN WG2 #21 to facilitate making the necessary changes.

Going forward into the WG3-only PCAP Ad Hoc, it was also agreed to merge the 'Implicit', 'Explicit', and 'Broadcast' assistance procedures into a single more generic 'Information Exchange' procedure common to Iub and Iur specifications. In addition, it was agreed to merge the 'Position Estimate' and 'Measurement Data' procedures into a single procedure.

RAN WG3 PCAP Ad Hoc (London, UK, 3-4 May):

Proposals for the family of Iupc specifications (25.4xy) and a CR to 25.401 were provided by Qualcomm.

The following proposals were agreed in principle with no technical exceptions:

- UTRAN Iupc Interface General Aspects and Principles (25.4x0)
- UTRAN Iupc Interface Layer 1 (25.4x1)
- UTRAN Iupc Interface Signalling Support (25.4x2)

The CR to 25.401 was agreed in principle with two minor technical corrections noted.

The stage-3 PCAP proposal (25.4x3) was agreed with several editorial and technical corrections noted. In addition, an update to the PCAP ASN.1 code was required due to changes in the elementary procedure descriptions and to several agreed changes in the tabular.

RAN WG2 #21 (Busan, South Korea, 21-25 May):

As a follow-up action to the RAN2/RAN3 PCAP Joint Ad Hoc meeting in London, a CR to 25.305 v5.0.0 from Ericsson concerning Iupc architectural aspects (scope, etc.) was agreed. In addition, another CR to 25.305 v5.0.0 from Ericsson proposing to remove the existing PCAP signalling flows was agreed.

Subsequently, the UE Positioning Ad Hoc group developed a CR to 25.305 v5.0.0 to propose the addition of two generic call flows that were aligned with the PCAP stage-3 proposals that were being treated during RAN WG3 #21. This CR was agreed by the RAN WG2 plenary conditional upon review by WG3. This CR was ultimately agreed after incorporating several comments received during an e-mail approval process that directly followed the WG2/WG3 meetings in Busan.

RAN WG3 #21 (Busan, South Korea, 21-25 May):

Proposals for the family of Iupc specifications (25.4xy) and a CR to 25.401 were provided by Qualcomm.

The proposed 'UTRAN Iupc Interface Layer 1' specification (25.451) was agreed and raised to v2.0.0.

The proposed 'UTRAN Iupc Interface Signalling Support' specification (25.452) could not be agreed due to IP-related issues that overlap with the general discussion of 'IP Transport in UTRAN' issues.

The following proposals were discussed, modified, and then provided via e-mail reflector for RAN3 approval:

- UTRAN Iupc Interface General Aspects and Principles (25.450)
- UTRAN Iupc Interface PCAP Signalling (25.453)
- CR to UTRAN Overall Description (25.401)

The proposals for 25.450 and 25.453 were ultimately agreed and raised to v2.0.0 after incorporating comments received during an e-mail approval process that directly followed the meeting in Busan. The proposed CR to 25.401 was also agreed via this same e-mail approval process.