

TSG-RAN Working Group 2 (Radio L2 and Radio L3)

Source: Rapporteur
Title: Status Report of Work Item "UE Positioning Enhancements for 1.28 Mcps TDD"
Document for: Information

This document provides a status report of the work item "UE Positioning Enhancements for 1.28 Mcps TDD".

The status of each involved WG is summarized below:

RAN WG2:

WG2 is the leading group of this Work Item. The Technical Report "UE positioning Enhancements for 1.28 Mcps TDD" was created during RAN WG2#22 meeting in Berlin. The proposed structure was agreed.

Several contributions were presented in RAN WG2#22 meeting, describing the UTRAN UE positioning architecture and the use of Cell ID based positioning, OTDOA based positioning and network-assisted GPS for 1.28 Mcps TDD. Furthermore, angle of arrival enhanced positioning was introduced.

All proposed text sections were included in the technical report.

An LS was sent to RAN1, RAN3 and RAN4 in order to inform them about the status of the work item.

In RAN2#23 meeting, an updated version of the technical report was presented and a sentence was added in order to say that "Activities are ongoing in TSG-RAN WG1 on IPDL".

RAN WG1:

Several contributions were presented in RAN WG1#21 meeting, presenting simulation results for OTDOA measurements on the DwPCH. The simulation results show, that OTDOA measurements are feasible on the DwPCH and that under realistic assumptions, IPDLs are necessary and useful. A proposal for OTDOA without IPDL was discussed and is for further study. Furthermore the feasibility of the AOA measurement has been checked by WG1 based on simulations and a new definition for the AOA measurement has been proposed to WG2 in answer to the LS from WG2. An LS now asks for support by WG3 and WG4 for such a measurement.

RAN WG3

The WG3 internal Technical Report “UE positioning Enhancements for 1.28 Mcps TDD(Iub/Iur aspect)” was created during RAN WG3#21 meeting in Busan. The proposed structure was agreed.

Two contributions were presented in RAN WG3#22 meeting, describing the general use of OTDOA IPDL method in 1.28 Mcps TDD and a requirement for this internal TR.

Several contributions were presented in RAN WG3#23 meeting in Helsinki, describing the UTRAN UE positioning architecture and the use of Cell ID based positioning, OTDOA based positioning and network-assisted GPS for 1.28 Mcps TDD. Furthermore, angle of arrival enhanced positioning was introduced. These documents have been approved by the RAN WG3 meeting #23. Two other available Tdocs about the impacts on UTRAN interfaces and the implementation proposal for IPDLs on DwPCH have not yet been presented due to lack of time.

All approved text sections were included in the technical report.

An LS will be sent to RAN2 and in copy to RAN1 and RAN4 in order to inform them about the status of the work item in RAN3 and to confirm the feasibility of the AOA measurement support on Iub and Iur.

The current version of this WG3 internal TR is v 0.2.2.

RAN WG4:

Contributions on accuracy for AOA have been presented in RAN4 #19. Work is ongoing and further information will be provided.