

Source: Lucent Technologies
Title: Text proposal for TS 25.231
Document for: Approval
Agenda item:

1 Introduction

UTRAN assisted GPS (UAG) technology has been proposed for location services provision in 3GPP [1]. This contribution proposes text for TS 25.231 [2] to enable UAG.

2 Text proposal for TS 25.231

It is proposed to add the following paragraph to TS 25.231.

6 Radio link measurements

Relative timing difference between measured and predicted GPS coarse acquisition signals for LCS:

The relative timing difference, measured at the UE, within the serving cell n , between the coarse acquisition signal received by the UE GPS receiver and that predicted is defined as: $\tau_{LCS(n,i)} = \tau_{CA(i)} - \tau_{CAP(n,i)}$, where:

$\tau_{CA(i)}$ is the time at which the UE GPS receiver receives the k^{th} chip of the i^{th} acquisition signal;

$\tau_{CAP(n,i)}$ is the time at which the UE receives the predictor k^{th} chip of the i^{th} acquisition signal; and

$i \in \{0, 1, 2, \dots, 31\}$; $k \in \{1, 2, \dots, 1023\}$.

$\tau_{LCS(n,i)}$ is a signed value. The resolution of τ_{LCS} is 0.5 chip (UTRAN) and the range is [-1023, 1024] chips.

3 References

- [1] Tdoc R1-99a84; 'Location services technologies for WCDMA'; TSG RAN WG1#7; Lucent Technologies.
- [2] TSG RAN WG1; 'TS 25.231 Physical layer – Measurements'.