
Source: SA1
Title: CR to 22.071 on Inclusion of U-TDOA positioning method (rel-6)
Document for: Approval
Agenda Item: 7.1.3

| Meeting | SA Doc | TS No. | CR No | Rev | Rel | Cat | Subject | Vers. Current | Vers New | SA1 Doc |
|---------|-----------|--------|-------|-----|-------|-----|--|---------------|----------|-----------|
| SP-23 | SP-040090 | 22.071 | 069 | - | Rel-6 | F | Inclusion of U-TDOA positioning method | 6.6.0 | 6.7.0 | S1-040199 |

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| CR-Form-v7 | |
| CHANGE REQUEST | |
| ⌘ 22.071 CR 069 ⌘ rev - ⌘ Current version: 6.6.0 ⌘ | |

For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.

Proposed change affects: UICC apps ME Radio Access Network Core Network

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|------------------------|---|-----------------|---|
| Title: | ⌘ Inclusion of U-TDOA positioning method | | |
| Source: | ⌘ SA1 (TruePosition) | | |
| Work item code: | ⌘ LCS | Date: | ⌘ 12/01/2004 |
| Category: | ⌘ F | Release: | ⌘ Rel-6 |
| | <i>Use one of the following categories:</i> F (correction) A (corresponds to a correction in an earlier release) B (addition of feature), C (functional modification of feature) D (editorial modification) Detailed explanations of the above categories can be found in 3GPP TR 21.900 . | | <i>Use one of the following releases:</i> 2 (GSM Phase 2) R96 (Release 1996) R97 (Release 1997) R98 (Release 1998) R99 (Release 1999) Rel-4 (Release 4) Rel-5 (Release 5) Rel-6 (Release 6) |

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| Reason for change: | ⌘ The list of supported positioning methods in the 3GPP LCS stage 1 specification should include the GERAN standardized uplink time difference of arrival (U-TDOA) positioning method. |
| Summary of change: | ⌘ To align with the GERAN standardized U-TDOA, section 4.1, no. 4 should include "U-TDOA" in the list of supported positioning methods. |
| Consequences if not approved: | ⌘ US GSM operators may not be able to implement a 3GPP standardized location technology quickly enough to be acceptable to the US FCC. |

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|------------------------------|---|---|---|--|---|--|---|--|---|--|--|
| Clauses affected: | ⌘ Section 4.1, number 4 | | | | | | | | | | |
| Other specs affected: | <table border="1" style="display: inline-table; border-collapse: collapse; text-align: center;"> <tr> <td style="width: 20px;">Y</td> <td style="width: 20px;">N</td> </tr> <tr> <td style="width: 20px;"> </td> <td style="width: 20px;">X</td> </tr> <tr> <td style="width: 20px;"> </td> <td style="width: 20px;">X</td> </tr> <tr> <td style="width: 20px;"> </td> <td style="width: 20px;">X</td> </tr> </table> | Y | N | | X | | X | | X | Other core specifications ⌘ Test specifications ⌘ O&M Specifications ⌘ | |
| Y | N | | | | | | | | | | |
| | X | | | | | | | | | | |
| | X | | | | | | | | | | |
| | X | | | | | | | | | | |
| Other comments: | ⌘ | | | | | | | | | | |

How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at <http://www.3gpp.org/specs/CR.htm>. Below is a brief summary:

- 1) Fill out the above form. The symbols above marked ☞ contain pop-up help information about the field that they are closest to.
- 2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under <ftp://ftp.3gpp.org/specs/> For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.
- 3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

<< Modified section >>

4.1 High Level Requirements

The following high level requirements are applicable:

- 1 The supporting mechanisms should incorporate flexible modular components with open interfaces that facilitate equipment interoperability and the evolution of service providing capabilities.
- 2 The network should be sufficiently flexible to accommodate evolving enabling mechanisms and service requirements to provide new and improved services.
- 3 It shall be possible to provide multiple layers of permissions to comply with local, national, and regional privacy requirements.
- 4 Multiple positioning methods should be supported in the different Access Networks, including (but not limited to) ~~UL-TOA~~, U-TDOA, E-OTD, IPDL-OTDOA, Network Assisted GPS and methods using cell site or sector information and Timing Advance or RoundTrip Time measurements.
- 5 The location determining process should be able to combine diverse positioning techniques and local knowledge when considering quality of service parameters to provide an optimal positioning request response.
- 6 It should be possible to provide position information to location services applications existing within the PLMN, external to the PLMN, or in Mobile Equipment;
- 7 Support should be provided for networks based on an Intelligent Network architecture (i.e. with specific support for CAMEL based Location Services).
- 8 Support may optionally be provided to enable the routing of emergency calls based on the geographic coordinates (latitude and longitude) of the calling party.