

Source: TSG SA1

Title: CRs (R99) to 22.071 on Correction to LCS Service Description
Stage 1 for alignment

Document for: Approval

Agenda Item: 7.1.3

Spec	CR	Rev	Phase	Cat	Subject	Vers	New Vers	SA1 Doc. No.
22.071	007		R99	F	Correction to LCS Service Description Stage 1 Document (R'99)	3.2.0	3.3.0	S1-000485
22.071	008		R00	F	Correction to LCS Service Description Stage 1 Document (R'00)	4.0.0	4.1.0	S1-000484

3GPP TSG-SA WG1 Meeting #9
Taastrup, Denmark, 17-21 July 2000

Document S1-000485

e.g. for 3GPP use the format TP-99xxx
or for SMG, use the format P-99-xxx

CHANGE REQUEST

Please see embedded help file at the bottom of this page for instructions on how to fill in this form correctly.

22.071 CR 007

Current Version: **3.2.0**

GSM (AA.BB) or 3G (AA.BBB) specification number ↑

↑ CR number as allocated by MCC support team

For submission to: **TSG-SA#9**
list expected approval meeting # here ↑

for approval **X**
for information

strategic (for SMG use only)
non-strategic

Form: CR cover sheet, version 2 for 3GPP and SMG The latest version of this form is available from: <ftp://ftp.3gpp.org/Information/CR-Form-v2.doc>

Proposed change affects:

(at least one should be marked with an X)

(U)SIM ME UTRAN / Radio Core Network

Source:

SA1

Date: July 12, 2000

Subject:

Correction of MS-Assisted LCS method

Work item:

TEI (LCS)

Category:

(only one category shall be marked with an X)

F Correction
A Corresponds to a correction in an earlier release
B Addition of feature
C Functional modification of feature
D Editorial modification

Release: Phase 2
Release 96
Release 97
Release 98
Release 99
Release 00

Reason for change:

It is proposed to add the MS-Assisted LCS Location Calculation section to describe the MS-Assisted method already present in the stage 2 and stage 3 documents.

Clauses affected:

4.17

Other specs affected:

Other 3G core specifications → List of CRs:
Other GSM core specifications → List of CRs:
MS test specifications → List of CRs:
O&M specifications → List of CRs:

Other comments:



help.doc

<----- double-click here for help and instructions on how to create a CR.

4 Functional Requirements

[...]

4.2.3 Response Time

[...]

For Emergency Services (where required by local regulatory requirements) there may be no requirement to support negotiation of response time. The network shall then provide a response as quickly as possible with minimum delay. Response time supervision ~~may be~~ implementation dependent.

[...]

4.11 MS-Based Location Calculation

MS-Based Location Calculation may be supported on either a per-request basis or autonomously whereby a single request from an MS subscriber enables MS based location calculation over an extended period without further interaction with the PLMN.

For Commercial Services, the following may be applicable for autonomous location:

The network may broadcast location assistance information to mobiles, which enables mobiles to calculate their own location. The network may encrypt the location assistance information. If the location assistance information is encrypted, a single common standardized encryption algorithm shall be used.

The location assistance information may be available to the MS at all times, continuously in idle mode and during a call, without additional point to point signalling. The network may request location information from the MS for operator or for service provider applications. For this purpose a point to point signalling connection must be established.

4.12 MS Assisted LCS Location Calculation

The MS-Assisted Location Calculation is accomplished by network resources based upon radio ranging measurements provided by the MS.

For Commercial Services, the following may be applicable for MS-Assisted location services:

The network may broadcast assistance information to mobiles, which enables mobiles to obtain the appropriate radio ranging measurements. The network may encrypt the assistance information. If the assistance information is encrypted, a single common standardized encryption algorithm shall be used.

The assistance information may be available to the MS at all times, continuously in idle mode and during a call, without additional point to point signalling. The network may request radio ranging measurement data from the MS for operator or for service provider applications. For this purpose a point to point signalling connection must be established. Optionally, this point to point connection can be used to deliver the resulting location to the MS.

~~4.12 Mobile Originating Location~~ 4.13 Mobile Originating Location

Mobile Originating Location is the capability of the mobile station to obtain its own geographical location or have its own geographic location transferred to another LCS client.

For Value Added Services, the following may be applicable:

There are three classes of mobile originating location:

Basic Self Location - The mobile station needs to interact with the network for each separate location request

Autonomous Self Location - The mobile station does not need to interact with the network for each separate location request. One interaction with the network enables the mobile station to obtain multiple location positionings over a predetermined period of time.

Transfer to Third Party – The location of the mobile station is transferred by request of the mobile station to another specified LCS client.

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CHANGE REQUEST

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22.071 CR 008

Current Version: **4.0.0**

GSM (AA.BB) or 3G (AA.BBB) specification number ↑

↑ CR number as allocated by MCC support team

For submission to: **TSG-SA#9**
list expected approval meeting # here ↑

for approval **X**
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ME

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Other specs affected:

- Other 3G core specifications → List of CRs:
Other GSM core specifications → List of CRs:
MS test specifications → List of CRs:
O&M specifications → List of CRs:

Other comments:



help.doc

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4 Functional Requirements

[...]

A general comparison of the specific attributes of various location-based services is provided in Annex B-C of this document.

[...]

4.3.3 Response Time

[...]

For Emergency Services (where required by local regulatory requirements) there may be no requirement to support negotiation of response time. The network shall then provide a response as quickly as possible with minimum delay. Response time supervision may be implementation dependent.

[...]

4.16 MS-Based Location Calculation

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4.17-18 Mobile Originating Location

Mobile Originating Location is the capability of the mobile station to obtain its own geographical location or have its own geographic location transferred to another LCS client.

For Value Added Services, the following may be applicable:

There are three classes of mobile originating location:

- A) Basic Self Location - The mobile station needs to interact with the network for each separate location request
- B) Autonomous Self Location - The mobile station does not need to interact with the network for each separate location request. One interaction with the network enables the mobile station to obtain multiple location positionings over a predetermined period of time.
- C) Transfer to Third Party – The location of the mobile station is transferred by request of the mobile station to another specified LCS client.

4.18-19 Velocity

<< text to be provided >>

<< editor's note: support for a velocity parameter in the position request response needs to be provided to efficiently enable some commercial services (vehicle tracking). Velocity is the combination of Speed and Heading (direction) of a Target UE as described in chapter 4.3.1 Horizontal Accuracy. >>