Source: **TSG SA WG2**
Title: **CRs on 23.171 v.3.1.0**
Agenda Item: **7.2.3**

The following Change Requests (CRs) have been approved by TSG SA WG2 and are requested to be approved by TSG SA plenary #10.
Note: the source of all these CRs is now S2, even if the name of the originating company(ies) is still reflected on the cover page of all the attached CRs.

CRs on 23.171 v.3.1.0

Spec	Rel	CR #	Cat	Title	Input	Output	S2 tdoc #
23.171	R99	005	B	Adding a chapter "MT-LR without HLR Query - applicable to North America Emergency Calls only" to TS 23.171	3.1.0	3.2.0	S2-002090

revised S2-1989

CR-Form-v3

CHANGE REQUEST

| ⌘ | **23.171** | | **CR** | **005** | | ⌘ rev | **-** | ⌘ | Current version: | **3.1.0** | ⌘ |

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

Proposed change affects: ⌘   (U)SIM **X**   ME/UE **X**   Radio Access Network ☐   Core Network **X**

Title: ⌘	Adding a chapter "MT-LR without HLR Query - applicable to North America Emergency Calls only" to TS 23.171	
Source: ⌘	Nokia	
Work item code: ⌘		**Date:** ⌘ 10.11.2000
Category: ⌘ **B**		**Release:** ⌘ R99

Use *one* of the following categories:
 F (essential 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.

Use *one* of the following releases:
 2   (GSM Phase 2)
 R96   (Release 1996)
 R97   (Release 1997)
 R98   (Release 1998)
 R99   (Release 1999)
 REL-4 (Release 4)
 REL-5 (Release 5)

Reason for change: ⌘	The chapter "MT-LR without HLR Query - applicable to North America Emergency Calls only" is added to TS 23.271 in order to align TS23.171 with GSM 03.71
Summary of change: ⌘	
Consequences if not approved: ⌘	Missing functionality in 3G-LCS R99.

Clauses affected: ⌘	
Other specs affected: ⌘	☐ Other core specifications ⌘ ☐ Test specifications ☐ O&M Specifications
Other comments: ⌘	This functionality is included in GSM 03.71 R'98 and R'99 and is therefore already included in corresponding stage 3 specifications.

How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at:
http://www.3gpp.org/3G_Specs/CRs.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://www.3gpp.org/specs/ For the latest version, look for the directory name with the latest date e.g. 2000-09 contains the specifications resulting from the September 2000 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..
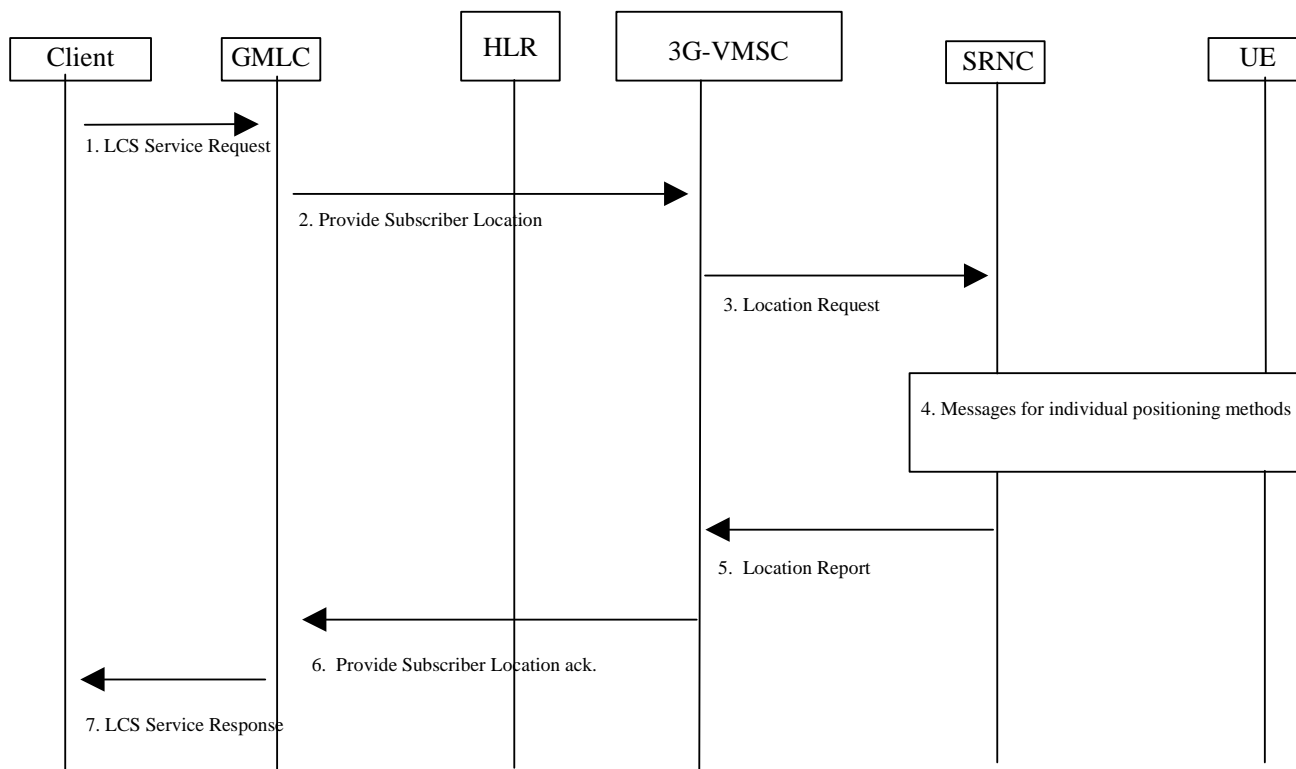
8.7   Mobile Terminating Location Request

. . .

<< New chapter 8.7.2 >>

8.7.2 MT-LR without HLR Query - applicable to North America Emergency Calls only

Figure 9.2 illustrates location for a North American Emergency Services call, where an emergency services client identifies the target UE using an IMSI, MSISDN or NA-ESRK plus, possibly IMEI, that were previously provided to it by the VMSC. The emergency services client also identifies the VMSC to the GMLC by providing an NA-ESRD or NA-ESRK or by referring to information for the target UE already stored in the GMLC. This allows the GMLC to request location from the VMSC without first querying the home HLR of the target UE. This is necessary when the home HLR either cannot be identified (e.g. client provides an NA-ESRK but not IMSI or MSISDN) or does not support the LCS query procedure.

Figure 8.5: Positioning for a Emergency Services MT-LR without HLR Query

1) Same as step 1 in figure 8.4 but with the LCS client identifying first the target UE by an IMSI, MSISDN or NA-ESRK and possibly IMEI and, second, the VMSC by an NA-ESRK or NA-ESRD.

2) If the GMLC already has stored information for the target UE (e.g. from a prior location estimate delivery to the LCS client), the GMLC may determine the VMSC from this information. Otherwise, the GMLC determines the VMSC using the NA-ESRK or NA-ESRD – with use of the NA-ESRK taking priority over that of the NA-ESRD. The MAP_PROVIDE_SUBSCRIBER_LOCATION message sent to the VMSC carries the IMSI, MSISDN or NA-ESRK and, if provided, the IMEI for the target UE, as well as the

required QoS and an indication of a location request from an emergency services client. The VMSC identifies the target UE using the IMSI, MSISDN or NA-ESRK and, if provided, the IMEI.

3) The MSC verifies that UE privacy is overridden by the emergency services provider and that positioning is not prevented for other reasons (e.g. unreachable UE, inapplicable call type to the UE). The VMSC then sends a Location Request to the RAN, as for a normal MT-LR.

4) RAN performs positioning as for a normal MT-LR.

5) RAN returns a location estimate to the VMSC as for a normal MT-LR.

6) Same as steps 15 for a normal MT-LR.

7) Same as steps 16 for a normal MT-LR.