

**TSG GERAN #1**  
**Seattle, WA, U.S.A**  
**28-1, August/September 2000**

**Source:** Nokia  
**Title:** Work Item Description for Building block: LCS interoperability aspects to GERAN  
**Document for:** Decision

**Work Item Description**

**Title**

LCS interoperability aspects to GERAN

**1 3GPP Work Area**

X	Radio Access
X	Core Network
X	Services

**2 Linked work items**

*LCS work items for R2000 in TSG-SA, TSG-CN, TSG-RAN*

**3 Justification**

LoCation Services provide the mechanisms to support mobile location services for operators, subscribers and third party service providers. In order to provide same services for LCS, it should be a co-ordinated development effort for both GSM LCS Phase 2 and UMTS LCS. The alignment of GSM LCS R'00 with UMTS LCS in Release 2000 is required due to the common Core Network. [3GPP TS 23.171]

**4 Objective**

- Co-ordinated development of GSM LCS Phase 2 and UMTS LCS, S2 and GERAN

**5 Service Aspects**

- Provision of Velocity
- Privacy Control
- Location of All Mobiles in Geographical Area (LAMGA). This means that an LCS application can request locations and possibly identities of all mobiles in a certain geographical area. More exact definition of LAMGA is FFS.
- The Common LCS Stage 1 mentions Defined Geographical Areas (DEGA). For example it may be possible to identify and report when the user's terminal enters or leaves a specified geographic area. Also certain services might be available to mobiles within specified areas. Defined Geographical Areas should be specified in more detail in Stage 1 first. (FFS)
- Event Based Location Request - FFS

**6 MMI-Aspects**

MMI of LCS privacy handling (July S1 meeting)

**7 Charging Aspects**

*None*

**8 Security Aspects**

*None*

**9 Impacts**

<b>Affects:</b>	<b>SIM</b>	<b>ME</b>	<b>AN</b>	<b>CN</b>	<b>Others</b>
<b>Yes</b>		X	X	X	
<b>No</b>	X				
<b>Don't know</b>					

## Expected Output and Time scale (to be updated at each plenary)

**New specifications**

Specification No.	Title	Prime resp. WG	2ndary resp. WG(s)	Presented for information at plenary#	Approved at plenary#	Comments
43.059	Functional Stage 2 Description of Location Services in GERAN	GERAN				This specification describes the LCS support in GERAN for both Circuit Switched and Packet Switched services.
23.271	Functional stage 2 description of LCS [based on 23.171 and System and core network aspects from 03.71 +new features]					This specification describes the system and core network aspects of LCS and is common to GSM and UMTS

**Affected existing specifications**

Specification No.	CR	Subject	Approved at plenary#	Comments
03.41		Short Message Service Call Broadcast		
03.71		GSM 03.71: " Digital cellular telecommunications system (Phase 2+); Location Services (LCS); (Functional description) - Stage 2"		GSM 03.71 exists in Release 97 and release 98. It is replaced by 43.059 and 23.271 in Release 2000.
04.18		Mobile radio interface layer 3 specification, Radio Resource Control Protocol		
04.31		Mobile Station (MS) Serving Mobile Location Centre (SMLC) Radio Resource LCS Protocol (RRLP)		
04.35		Broadcast Network Assistance for Enhanced Observed Time Difference (E-OTD) and Global Positioning System (GPS) Positioning Methods		
04.60		Radio Link Control/ Medium Access Control		
04.64		LLC specification GPRS		
04.71		Mobile radio interface layer 3 Location Services (LCS) specification;		
05.05		Radio transmission and reception		
05.08		Radio subsystem link control		
05.10		Radio subsystem synchronization		
05.50		Background for Radio Frequency (RF) requirements		
08.08		MSC-BSS interface; Layer 3 A i/f		
08.18		BSS GPRS protocol		

09.02		Mobile Application Part (MAP) Specification		
09.31		Base Station System Application Part LCS Extension (BSSAP-LE)		
22.071		3rd Generation Partnership Project; Technical Specification Group Services and System Aspects; Location Services (LCS); Service description, Stage 1		This specification is common to GSM and UMTS (/GERAN and UTRAN)
23.171		3rd Generation Partnership Project; Technical Specification Group Services and System Aspects; Functional stage 2 description of location services in UMTS		23.171 exists only in Release 1999 and is replaced by 23.271 in Release 00
24.008		Mobile Radio Interface Layer 3 Specification		

**11 Work item reporters**

Nokia – Margaret Livingston

**12 Work item leadership**

GERAN

**13 Supporting Companies**

Nokia, Motorola, Ericsson, T-Mobil

**14 Classification of the WI (if known)**

	Feature (go to 14a)
	Building Block (go to 14b)
	Work Task (go to 14c)

14a The WI is a Feature: List of building blocks under this feature

14b The WI is a Building Block: parent Feature

Location Service (UMTS)

14c The WI is a Work Task: parent Building Block

(one Work Item identified as a building block)