Technical Specification Group Services and System Aspects   **TSGS#15(02)0254**
Meeting #16, Marco Island, USA, 10-13 June 2002

Source:	**SA1**
Title:	**Various Rel-6 CRs to 22.071 on Location Services**
Document for:	**Approval**
Agenda Item:	**7.1.3**

SA Doc	Spec	CR	Rev	Phase	Cat	Subject	Old Vers	New Vers	SA1 Doc
SP-020254	22.071	040		Rel-6	C	CR to TS 22.071 Rel-6 Privacy control in HPLMN	5.1.1	6.0.0	S1-020864
SP-020254	22.071	041		Rel-6	C	Enhancement of Codeword Requirements for LCS	5.1.1	6.0.0	S1-020922

CR-Form-v4

CHANGE REQUEST

	⌘	**22.071** CR	**040**	⌘	ev	**-**	⌘	Current version:	**5.1.1**	⌘

Spec Title: Location Services (LCS); Service description, Stage 1   ⌘

*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 ☐   ME/UE ☐   Radio Access Network ☐   Core Network **X**

Title:	⌘	Privacy control in HPLMN
Source:	⌘	SA1
Work item code: ⌘	LCS1	**Date:** ⌘ 27/03/02
Category:	⌘ **C**	**Release:** ⌘ Rel-6

Use one of the following categories:
  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.

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: ⌘		This CR adds a service requirement for Privacy control in HPLMN to ensure that the privacy settings are always up to date and to make it possible for the operator to ensure the privacy of own subscribers.
Summary of change: ⌘		Addition of text in chapter 4.8 clarifying the service requirement for Privacy control in HPLMN.
Consequences if not approved:	⌘	The operator cannot ensure the privacy of own subscribers.

Clauses affected:	⌘	4.8

Other specs affected:	⌘ **X**	Other core specifications	⌘ 23.071
	☐	Test specifications	
	☐	O&M Specifications	

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/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://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.

4.8   Privacy

Specific local, national, and regional privacy regulations must be complied with, and multiple layers of permissions may be required.

Location information must always be available to the network service provider.

Means shall be provided for the UE subscriber to control privacy for value added services.

The user shall be able to change the setting of the Privacy exception list at any time.

Unless required by local regulatory requirements, or overridden by the target UE User, the target UE may be positioned only if allowed in the UE subscription profile. In general, for valued added location services, the target UE being positioned should be afforded the maximum possible privacy, and should not be positioned unless the positioning attempt is explicitly authorized. In the absence of specific permission to position the target UE, the target UE should not be positioned.

It may also be possible for a target UE to authorize positioning attempts after the target UE is notified of a positioning request and the target UE grants permission for positioning This notification condition (notification with privacy verification) shall be specified in the Target UE Subscription Profile. (See the subsequent "target subscriber notification" section of this document for charging and billing aspects.)

The privacy of an inanimate asset for an embedded target UE may be completely defined by the UE subscriber.

Additionally, specific privacy exceptions may exist for compliance with mandated location based services (such as for emergency services or lawful intercept) which are required by national or local regulatory requirements.

For Value Added Services, the following is applicable:

The Target UE Subscriber shall be able to restrict access to the Location Information (permanently or on a per attempt basis). The LCS Client access shall be restricted unless otherwise stated in the Target UE Subscription Profile. The home network shall have the capability of defining the default circumstances in which the Target UE's Location Information is allowed to be provided - as required by various administrations and/or network requirements.

The privacy check shall be performed in the Home Environment of the target UE subscriber. This makes it possible for operators to ensure the privacy of their own subscribers i.e. the privacy settings that are used for privacy checks are always up to date and as specified by the Home Environment of the target UE subscriber. It shall be possible for privacy check to take into account Home Environment specific information such as time of day, subscriber location. It shall be possible to ensure that privacy checks are performed according to the latest information as available in the Home Environment.

It shall be possible for location services to support conditional positioning. Under these conditions, an application that is granted conditional positioning authorization must notify and obtain positioning authorization from the user of the target UE prior to performing the positioning process. Thus the user of the target UE shall be able to accept or reject the positioning attempt.

The default treatment, which is applicable in the absence of a response from the Target UE, shall be specified in the Target UE Subscription Profile. Thus for some location services the default treatment may be to accept the positioning request, whereas for other location services the default treatment may be to reject the positioning attempt.

However, considering that in general, users shall be afforded the maximum possible privacy, and shall not be positioned unless the target subscriber authorizes the requesting location application to perform positioning, the default condition shall normally be to deny the positioning attempt.

For PLMN operator services, the target UE subscriber may be able to restrict access to location information used to enhance or support particular types of service. The LCS client access shall be restricted unless stated otherwise in the Target UE subscription profile. The target UE user shall not be notified of any authorized location attempt.

For Emergency Services (where required by local regulatory requirements) Target UEs making an emergency call may be positioned regardless of the privacy attribute value of the subscriber associated with the Target UE (or ME) making the call.

For Lawful Interception Services (where required by local regulatory requirements), target UEs may be positioned under all circumstances required by local regulatory requirements. The target UE user shall not be notified of any location attempt.

CR-Form-v4

CHANGE REQUEST

⌘ **22.071 CR 041** ⌘ ev **-** ⌘ Current version: **5.1.1** ⌘

Spec Title: Location Services (LCS); Service description, Stage 1 ⌘

*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 ☐ ME/UE ☐ Radio Access Network ☐ Core Network **X**

Title: ⌘	Enhancement of Codeword Requirements for LCS
Source: ⌘	SA1
Work item code: ⌘	LCS1 *Date:* ⌘ 15/05/02
Category: ⌘	**C** *Release:* ⌘ REL-6

Use *one* of the following categories:
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.

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: ⌘	In order to have flexible codeword settings, checking of the codeword should apply to each of the LCS Clients. In case of a specific service provided without codeword checking, e.g. an operator provided service where the operator acts as an LCS Client, codeword checking would not be required for that LCS Client.
Summary of change: ⌘	Settings of the codeword apply to each of the LCS Clients.
Consequences if not approved: ⌘	The codeword functionality will be inflexible.

Clauses affected: ⌘	6.4.2
Other specs affected: ⌘	**X** Other core specifications ⌘ 23.071 ☐ Test specifications ☐ O&M Specifications
Other comments: ⌘	

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6.4.2   Codeword

It shall be possible for a Requestor to request location information by indicating a Codeword associated with the Target UE user. The codeword may be either checked by the Target UE/user or by any entity in the network. In the former case, the codword supplied by the requestor and forwarded by the LCS client with the request shall be forwarded to the TargetUE/user for verification and acceptance. In the latter case, the codeword shall be registered by the Target UE subscriber in advance. A comparision of the codeward sent by the requestor and the registered codeword shall be performed. A location request shall only be accepted if this comparision is successful. In the case where the Target UE/user does not check the codeword, the codeword need not be sent to the Target UE/user. In the case where the codeword is checked by the Target UE/user, the Target UE subscriber need not register the codeword in advance.

The other privacy settings should also be checked even when the codeword has been checked.

The Target UE Subscriber may register multiple codewords for multiple requestors. Once the codeword has been set and properly distributed, the Target UE user would be protected against location requests from third parties, which do not know the appropriate codeword.

It should be possible for a Target UE subscriber to enable and disable codeword checking for each of the LCS Clients.

The codeword is applicable to the value added services only.