TSGS#22(04) 0085

Source: **SA1**

Title: **CRs to 22.071 on Routing of Emergency Calls based on Geographic Coordinates (R99, Rel-4, Rel-5)**

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-040085	22.071	066	-	R99	F	Routing of Emergency Calls based on Geographic Coordinates	3.4.0	3.5.0	S1-040126
SP-23	SP-040085	22.071	067	-	Rel-4	A	Routing of Emergency Calls based on Geographic Coordinates	4.5.0	4.6.0	S1-040127
SP-23	SP-040085	22.071	068	-	Rel-5	A	Routing of Emergency Calls based on Geographic Coordinates	5.3.0	5.4.0	S1-040128

3GPP TSG-SA1#23
Innsbruck, Austria, 12-16 January 2004

Tdoc ⌘S1-040126

CR-Form-v7

CHANGE REQUEST

⌘ **22.071** **CR** **066** ⌘ **rev** ⌘ Current version: **3.4.0** ⌘

*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 ☒

Title:	⌘	Routing of Emergency Calls based on Geographic Coordinates
Source:	⌘	SA1 (Nortel Networks, AWS)
Work item code:	⌘	LCS
Date:	⌘	1/2/2004
Category:	⌘	**F**
Release:	⌘	R99

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)*
Rel-6	*(Release 6)*

Reason for change:	⌘	Accurate routing of emergency calls to the correct Emergency Service Provider is required. Enabling routing based on the geographical coordinates of the calling party will increase the probability of more accurate routing. At SA#22 it was decided that the functionality agreed for R6 should be provided as far back as possible to R97 (as originally requested by T1P1). Hence, this is a R99 CR for the change that has been already approved for R6.
Summary of change:	⌘	A high level requirement is added to enable the optional capability to route Emergency calls to Emergency Service Providers based on the geographical coordinates (latitude and longitude) of the calling party.
Consequences if not approved:	⌘	The probability of routing Emergency Calls to the correct Emergency Service Provider may be reduced, timeliness and availability of emergency services may be adversely impacted.

Clauses affected:	⌘	4.1.1			
Other specs affected:	⌘	**Y** / **N**	Other core specifications	⌘	*TS 29.002, TS 23.171*
		X /	Other core specifications		
		/ **X**	Test specifications		
		/ **X**	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/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.

4.1 Location Information

4.1.1 Geographic Location

Provision of the geographic location of a target MS is applicable to all LCS services.

Support may optionally be provided to enable the routing of emergency calls based on the geographic coordinates (latitude and longitude) of the calling party.

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CR-Form-v7

CHANGE REQUEST

⌘ **22.071** **CR** **067** ⌘**rev** ⌘ Current version: **4.5.0** ⌘

*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 ☒

Title:	⌘	Routing of Emergency Calls based on Geographic Coordinates
Source:	⌘	SA1 (Nortel Networks, AWS)
Work item code:	⌘	LCS
Date:	⌘	1/2/2004
Category:	⌘	**A**
Release:	⌘	Rel-4

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)*
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Use one of the following releases:

2	*(GSM Phase 2)*
R96	*(Release 1996)*
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R98	*(Release 1998)*
R99	*(Release 1999)*
Rel-4	*(Release 4)*
Rel-5	*(Release 5)*
Rel-6	*(Release 6)*

Reason for change:	⌘	Accurate routing of emergency calls to the correct Emergency Service Provider is required. Enabling routing based on the geographical coordinates of the calling party will increase the probability of more accurate routing. At SA#22 it was decided that the functionality agreed for R6 should be provided as far back as possible to R97 (as originally requested by T1P1). Hence, this is a R4 CR for the change that has been already approved for R6.
Summary of change:	⌘	A high level requirement is added to enable the optional capability to route Emergency calls to Emergency Service Providers based on the geographical coordinates (latitude and longitude) of the calling party.
Consequences if not approved:	⌘	The probability of routing Emergency Calls to the correct Emergency Service Provider may be reduced, timeliness and availability of emergency services may be adversely impacted.

Clauses affected:	⌘	4.1			
Other specs affected:	⌘	**Y** / **N**	Other core specifications	⌘	*TS 29.002, TS 23.271*
		X /	Other core specifications		
		/ **X**	Test specifications		
		/ **X**	O&M Specifications		
Other comments:	⌘				

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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.

4.1 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, 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.

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Innsbruck, Austria, 12-16 January 2004

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CHANGE REQUEST

⌘ **22.071** **CR** **068** ⌘**rev** ⌘ Current version: **5.3.0** ⌘

*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 ☒

Title:	⌘	Routing of Emergency Calls based on Geographic Coordinates
Source:	⌘	SA1 (Nortel Networks, AWS)
Work item code:	⌘	LCS
Date:	⌘	1/2/2004
Category:	⌘	**A**
Release:	⌘	Rel-5

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Summary of change:	⌘	A high level requirement is added to enable the optional capability to route Emergency calls to Emergency Service Providers based on the geographical coordinates (latitude and longitude) of the calling party.
Consequences if not approved:	⌘	The probability of routing Emergency Calls to the correct Emergency Service Provider may be reduced, timeliness and availability of emergency services may be adversely impacted.

Clauses affected:	⌘	4.1			
Other specs affected:	⌘	**Y** / **N**	Other core specifications	⌘	*TS 29.002, TS 23.271*
		X /	Test specifications		
		/ **X**	O&M Specifications		
Other comments:	⌘				

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