**3GPP TSG-CT WG1 Meeting #134-eC1-22xxxx**

**E-meeting, 17th – 25th February 2022**

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| *CR-Form-v12.1* |
| **CHANGE REQUEST** |
|  |
|  | **24.571** | **CR** | **0010** | **rev** | **-** | **Current version:** | **17.0.0** |  |
|  |
| *For* [***HE******LP***](http://www.3gpp.org/3G_Specs/CRs.htm#_blank)*on using this form: comprehensive instructions can be found at* [*http://www.3gpp.org/Change-Requests*](http://www.3gpp.org/Change-Requests)*.* |
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| ***Proposed change affects:*** | UICC apps |  | ME | **x** | Radio Access Network |  | Core Network | **x** |

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| ***Title:***  | Clarification on Routing information |
|  |  |
| ***Source to WG:*** | vivo |
| ***Source to TSG:*** | C1 |
|  |  |
| ***Work item code:*** | 5G\_eLCS\_ph2 |  | ***Date:*** | 2022-02-07 |
|  |  |  |  |  |
| ***Category:*** | **F** |  | ***Release:*** | Rel-17 |
|  | *Use one of the following categories:****F*** *(correction)****A*** *(mirror corresponding to a change in an earlier release)****B*** *(addition of feature),* ***C*** *(functional modification of feature)****D*** *(editorial modification)*Detailed explanations of the above categories canbe found in 3GPP [TR 21.900](http://www.3gpp.org/ftp/Specs/html-info/21900.htm). | *Use one of the following releases:Rel-8 (Release 8)Rel-9 (Release 9)Rel-10 (Release 10)Rel-11 (Release 11)...Rel-15 (Release 15)Rel-16 (Release 16)Rel-17 (Release 17)Rel-18 (Release 18)* |
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| ***Reason for change:*** | Considering the following statements in subclause 6.7.1 of TS 23.273:*3. If the UE and ng-eNB node both support EDT, the UE sends an RRCEarlyDataRequest message to the ng-eNB node and includes a NAS control plane service request.* *Otherwise, the UE established an RRC connection with the ng-eNB node and sends the NAS control plane service request. The NAS control plane service request includes an event report message which includes the information described in step 25 in clause 6.3.1 (e.g. the type of event being reported and any location measurements or location estimate obtained at step 23 in clause 6.3.1). The control plane service request also includes the deferred routing identifier received in step 16 in clause 6.3.1. The UE also includes a NAS Release Assistance Indication (NAS RAI) in the NAS message. The NAS RAI indicates a single response is expected.*The Routing Information can be included in the CONTROL PLANE SERVICE REQUEST message for event reporting in the LCS procedures.However, quoted from the current TS 24.571,*To enable transfer of Location Services (LCS) signaling messages between the 5G core network (5GCN) and the UE, two Payload container types are defined in the downlink (DL NAS TRANSPORT message) and the uplink (UL NAS TRANSPORT message). The message protocol and procedures are described in 3GPP TS 24.501 [3].*.. *Routing information associated with the LMF is transported as the Additional information IE in UL/DL NAS TRANSPORT message for Location services messages that are transported from/to the LMF (see 3GPP TS 24.501 [3])*the Routing information can be transported as the Additional Information IE in UL/DL NAS TRANSPORT message without CONTROL PLANE SERVICE REQUEST message mentioned. |
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| ***Summary of change:*** | 1. Payload container can be carried in the CONTROL PLANE SERVICE REQUEST message.2. Clarify that Routing information in Additional Information IE can also be transported in a CONTROL PLANE SERVICE REQUEST message.3. Correct LPP spec number. |
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| ***Consequences if not approved:*** | Missing description of Routing Information. |
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| ***Clauses affected:*** | 4.1.1, 4.1.2 |
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|  | **Y** | **N** |  |  |
| ***Other specs*** |  | **X** |  Other core specifications  | TS/TR ... CR ...  |
| ***affected:*** |  | **X** |  Test specifications | TS/TR ... CR ...  |
| ***(show related CRs)*** |  | **X** |  O&M Specifications | TS/TR ... CR ...  |
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| ***Other comments:*** |  |
|  |  |
| ***This CR's revision history:*** |  |

\* \* \* First Change \* \* \* \*

### 4.1.1 NAS aspect

To enable transfer of Location Services (LCS) signaling messages between the 5G core network (5GCN) and the UE, two Payload container types are defined in the downlink (DL NAS TRANSPORT message) and the uplink (UL NAS TRANSPORT message or CONTROL PLANE SERVICE REQUEST message). The message protocol and procedures are described in 3GPP TS 24.501 [3].

\* \* \* Next Change \* \* \* \*

4.1.2 LCS aspect

LCS uses the defined payload container to transfer LCS signalling messages between the UE and the network.

The corresponding LCS signaling messages include:

a) LTE Positioning Protocol (LPP) messages (see 3GPP TS 37.355 [4])

- Both downlink and uplink LPP messages are supported

- Routing information is transported as the Additional information IE in UL/DL NAS TRANSPORT message for LPP messages (see 3GPP TS 24.501 [3])

b) Location services messages

- Messages for MO-LR operations (see 3GPP TS 24.080 [5])

- Messages for LocationNotification operations (see 3GPP TS 24.080 [5])

- Messages for EventReport operations (see 3GPP TS 24.080 [5])

- Messages for PeriodicTriggeredInvoke operations (see 3GPP TS 24.080 [5])

- Messages for CancelDeferredLocation operations (see 3GPP TS 24.080 [5])

- Messages for MSCancelDeferredLocation operations (see 3GPP TS 24.080 [5])

- Messages for LocationPrivacySetting operations (see 3GPP TS 24.080 [5])

- Routing information associated with the LMF is transported as the Additional information IE in UL/DL NAS TRANSPORT message or CONTROL PLANE SERVICE REQUEST message (see clause 5.2.2.6.1) for Location services messages that are transported between the UE and the LMF (see 3GPP TS 24.501 [3])

\* \* \* End of Changes \* \* \* \*