**3GPP TSG-CT WG1 Meeting #124-eC1-203365**

**Electronic meeting, 2-10 June 2020**

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| *CR-Form-v12.0* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
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|  | **24.571** | **CR** | **0002** | **rev** | **1** | **Current version:** | **16.0.1** |  |
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| *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:*** | UE initiated Event Reporting Procedure for Low Power Event Reporting | | | | | | | | | |
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| ***Source to WG:*** | Qualcomm Incorporated | | | | | | | | | |
| ***Source to TSG:*** | C1 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | 5G\_eLCS | | | | |  | ***Date:*** | | | 2020-06-02 |
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| ***Category:*** | **B** |  | | | | | ***Release:*** | | | Rel-16 |
|  | *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 can be 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-12 (Release 12)* *Rel-13 (Release 13) Rel-14 (Release 14) Rel-15 (Release 15) Rel-16 (Release 16)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | Clause 6.7.1 of TS 23.273 defines event reporting for Low Power Periodic and Triggered 5GC-MT-LR Procedures. This procedure differs from event reporting for normal Periodic and Triggered 5GC-MT-LR Procedures as described in clause 6.3.1 of TS 23.273 due to using Control Plane CIoT 5GS Optimisation. Normal event reporting was added to TS 24.571 in clause 5.2.2.4. However, event reporting using using Control Plane CIoT 5GS Optimisation is still missing.  Due to protocol impact, CT1 ageed that Service Accept message shall not carry any data. Instead, AMF sends DL NAS TRANSPORT including the event reporting ACK to the UE. | | | | | | | | |
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| ***Summary of change:*** | | Add description for event reporting for Low Power Periodic and Triggered 5GC-MT-LR Procedures using Control Plane CIoT 5GS Optimisation as defined in clause 6.7.1 of TS 23.273, with difference that the AMF sends DL NAS TRANSPORT including the event report Ack to the UE. | | | | | | | | |
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| ***Consequences if not approved:*** | | Low Power Periodic and Triggered 5GC-MT-LR Procedures using Control Plane CIoT 5GS Optimisation as defined in clause 6.7.1 of TS 23.273 will not be supported. | | | | | | | | |
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| ***Clauses affected:*** | | 5.2.2.x (new) | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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:*** | | A CR to TS 23.273 in SA2 will be needed to align with the CR here.  Related LS out C1-20xxxx | | | | | | | | |
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| ***This CR's revision history:*** | |  | | | | | | | | |

\*\*\*\*\*\*\*\* NEXT CHANGE \*\*\*\*\*\*\*\*

#### 5.2.2.x UE initiated Event Reporting Procedure for Low Power Event Reporting and Triggered 5GC-MT-LR

##### 5.2.2.x.1 General

The supplementary services EventReport operation enables the UE to report the periodic or triggered location event invoked by the LMF via LCS PeriodicTriggered Invoke operation as described in clause 6.7.1 of 3GPP TS 23.273 [2] when certain events are detected in the UE and when the UE supports and the LMF allows the use of Control Plane CIoT 5GS Optimisation. The supplementary services EventReport message is transferred to the LMF via the serving AMF in a CONTROL PLANE SERVICE REQUEST message defined in 3GPP TS 24.501 [3]. A response from the LMF may be returned to the UE via the serving AMF and be transferred to the UE in a DL NAS TRANSPORT message defined in 3GPP TS 24.501 [3].

Figure 5.2.2.x.1-1 illustrates an example of the NAS signalling transport for EventReport messages,



Figure 5.2.2.x.1-1: NAS signalling transport for EventReport messages using Low Power Event Reporting and Triggered 5GC-MT-LR

NOTE 1: The UE can instead send the Event Report message as described in clause 5.2.2.4.1. The conditions for using the procedure in clause 5.2.2.4.1 are defined in 3GPP TS 23.273 [2] clause 6.7.1.

Editor’s Note: It is FFS to be aligned with TS 23.273 regarding signalling optimization that AMF waits the response from the LMF without sending SERVICE ACCEPT, and sends DL NAS TRANSPORT with the event report ack which can be considered as SERVICE ACCEPT to the UE.

##### 5.2.2.x.2 Normal operation

Normal operation is as described for the UE initiated Event Reporting Procedure in clause 5.2.2.4.2.