**3GPP TSG-CT WG3 Meeting #130 *C3-234xxx***

**Xiamen, China, 9 - 13 October, 2023 was C3-234348**

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| *CR-Form-v12.2* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **29.538** | **CR** | **0036** | **rev** | **1** | **Current version:** | **18.3.0** |  |
|  | | | | | | | | |
| *For* ***[HE](http://www.3gpp.org/3G_Specs/CRs.htm" \l "_blank)******[LP](http://www.3gpp.org/3G_Specs/CRs.htm" \l "_blank)*** *on using this form: comprehensive instructions can be found at  <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:*** | Service Operation for Messaging Topic Subscription | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | China Mobile | | | | | | | | | |
| ***Source to TSG:*** | CT3 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | 5GMARCH\_Ph2 | | | | |  | ***Date:*** | | | 2023-09-28 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **B** |  | | | | | ***Release:*** | | | Rel-18 |
|  | *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-16 (Release 16) Rel-17 (Release 17) Rel-18 (Release 18) Rel-19 (Release 19)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | The MSGS\_TopiclistEvents service was defined in TS 23 554 R18 stage 2, and the stage 2 CR S6-232870 proposed topic unsubscription operations. This CR is proposed to add Messaging Topic subscription to align to the stage 2 definition. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | Add Messaging Topic subscription operation of MSGS\_TopiclistEvents service | | | | | | | | |
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| ***Consequences if not approved:*** | | The functionality of Messaging Topic cannot be implemented. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 5.x.2(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 ... | | |
|  | |  | | | | | | | | |
| ***Other comments:*** | |  | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | |  | | | | | | | | |

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

#### 5.x.2.4 MSGS\_TopiclistEvent\_SubscribeMSGTopic

##### 5.x.2.4.1 General

This service operation is used by MSGin5G Server 1 to subscribe to Messaging Topic on another MSGin5G Server 2, corresponding to clause 9.1.1.6.4 as defined in 3GPP TS 23.554 [2].

##### 5.x.2.4.2 Subscribing to MSGin5G Messaging Topic



Figure 5.x.2.4.2-1:Subscribing to Messaging Topic List

As shown in Figure 5.x.2.4.2-1, to subscribe MSGin5G Messaging Topic on the MSGin5G Server 2, the MSGin5G Server 1 shall send the HTTP POST method. The body of the HTTP POST message shall include TopicSubscription data structure that shall include:

- the Service ID of MSGin5G Server subscribing topic on behalf of MSGin5G Clients or Appliation Servers within the "oriAddr" attribute

- the requested list of Messaging Topic(s) within the "msgTopic" attribute;

- the security credentials within the "secCred" attribute; and

may include:

- the Expiration within the "exprTime" attribute;

Upon receiving the HTTP POST message, the MSGin5G Server 2 shall:

1. make an authorization based on the information received;

2. checks the locally stored Messaging Topic subscription(s):

a. If the requested subscription has already been created, the MSGin5G Server 2 updates the validity time of this subscription;

b. If the requested subscription has not been created, the MSGin5G Server 2 creates new subscription; and

If the subscription request is successfully processed, the MSGin5G Server 2 shall respond with an HTTP "200 OK" status code. The response body containing TopicSubscriptionAck data structure that shall contain:

- the Subscriptoin Status within the "subStat" attribute; and may contain

- the Expireation within the "exprTime" attribute.

If errors occur when processing the HTTP POST request, the MSGin5G Server 2 shall apply error handling procedures as specified in clause 8.3.6.

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

#### 5.x.2.5 MSGS\_TopiclistEvent\_UnsubscribeMSGTopic

##### 5.x.2.5.1 General

This service operation is used by MSGin5G Server to unsubscribe to Messaging Topic(s) on another MSGin5G Server, corresponding to clause 9.1.1.6.4 as defined in 3GPP TS 23.554 [2].

##### 5.x.2.5.2 MSGin5G Server unsubscribing to MSGin5G Messaging Topic List



Figure 5.x.2.5.2-1:Unsubscribing to Messaging Topic(s)

As shown in Figure 5.x.2.5.2-1, to unsubscribe one or more MSGin5G Messaging Topic(s) on the MSGin5G Server 2, the MSGin5G Server 1 shall send HTTP POST message to the MSGin5G Server 2. The body of the HTTP POST message shall include TopicUnsubscription data structure that shall include:

- the Service ID of MSGin5G Server unsubscribing topic on behalf of MSGin5G Clients or Appliation Servers within the "oriAddr" attribute;

- the requested list of Messaging Topic(s) within the "msgTopic" attribute;

- the security credentials within the "secCred" attribute; and

may include:

- the Expiration within the "exprTime" attribute;

Upon receiving the HTTP POST message, the MSGin5G Server 2 shall make an authorization based on the information received. If the authorization is successful, the MSGin5G Server 2 shall remove the corresponding subscription and respond with an HTTP "204 No Content" status code.

If errors occur when processing the HTTP POST request, the MSGin5G Server 2 shall apply error handling procedures as specified in clause 8.3.6.

\* \* \* End of Change \* \* \* \*