**3GPP TSG-CT WG1 Meeting #124-eC1-20xxxx**

**Electronic meeting, 2-10 June 2020 (was C1-203207)**

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| *CR-Form-v12.0* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
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|  | **24.282** | **CR** | **0161** | **rev** | **-** | **Current version:** | **16.3.0** |  |
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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 |  |

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| ***Title:*** | Functional alias – affiliation procedures in 8.2 | | | | | | | | | |
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| ***Source to WG:*** | FirstNet, Nokia, Nokia Shanghai Bell | | | | | | | | | |
| ***Source to TSG:*** | C1 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | MONASTERY2 | | | | |  | ***Date:*** | | | 2 June 2020 |
|  |  | | | |  | |  | | |  |
| ***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)* | |
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| ***Reason for change:*** | | Procedures to indicate that an MCData user is automatically (de)affiliated with one or more MCData group(s) at an MCData client triggered by a functional alias (de)activation must be added to match Rel-16 stage 2. | | | | | | | | |
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| ***Summary of change:*** | | Procedures to indicate that an MCData user is automatically (de)affiliated with one or more MCData group(s) at an MCData client triggered by a functional alias activation or deactivation are added. They are modelled on equivalent procedures in TS 24.379, | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | Inability to support automatic (de)affiliation with one or more MCData group(s) at an MCData client triggered by a functional alias (de)activation. | | | | | | | | |
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| ***Clauses affected:*** | | 8.2.1, 8.2.2, 8.2.6 (new) | | | | | | | | |
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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 ... | | |
|  | |  | | | | | | | | |
| ***Other comments:*** | |  | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | | Rev 1: Added hard spaces to a reference to TS 24.484. | | | | | | | | |

**\* \* \* \* \* FIRST CHANGE \* \* \* \* \***

### 8.2.1 General

The MCData client procedures consist of:

- an affiliation status change procedure;

- an affiliation status determination procedure;

- a procedure for sending affiliation status change request in negotiated mode to target MCData user;

- a procedure for receiving affiliation status change request in negotiated mode from authorized MCData user; and

- a rules based affiliation status change procedure.

In order to obtain information about success or rejection of changes triggered by the affiliation status change procedure for an MCData user, the MCData client needs to initiate the affiliation status determination procedure for the MCData user before starting the affiliation status change procedure for the MCData user.

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

### 8.2.2 Affiliation status change procedure

In order:

- to indicate that an MCData user is interested in one or more MCData group(s) at an MCData client;

- to indicate that the MCData user is no longer interested in one or more MCData group(s) at the MCData client;

- to refresh indication of an MCData user interest in one or more MCData group(s) at an MCData client due to near expiration of the expiration time of an MCData group with the affiliation status set to the "affiliated" state received in a SIP NOTIFY request in subclause 8.2.3;

- to send an affiliation status change request in mandatory mode to another MCData user;

- to indicate that an MCData user is interested in one or more MCData group(s) at an MCData client triggered by a location or functional alias activation criteria;

- to indicate that the MCData user is no longer interested in one or more MCData group(s) at the MCData client client triggered by location or functional alias deactivation criteria; or

- any combination of the above;

the MCData client shall generate a SIP PUBLISH request according to 3GPP TS 24.229 [5], IETF RFC 3903 [34], and IETF RFC 3856 [39].

When the MCData user indicates that he is no longer interested in one or more MCData group(s) at the MCData client, the MCData client shall first check value of the <manual-de-affiliation-not-allowed-if-location-criteria-met> element if present within the MCData user profile document (see the MCData user profile document specified in 3GPP TS 24.484 [50]). If the affiliation to the group has been activated due to a rule being fulfilled and the <manual-de-affiliation-not-allowed-if-rules are-met> element is present and is set to a value of "true", the MCData client shall suppress the MCData user’s request.

NOTE 1: If the request is suppressed, a notification message can be displayed to the user

In the SIP PUBLISH request, the MCData client:

1) shall set the Request-URI to the public service identity identifying the originating participating MCData function serving the MCData user;

2) shall include an application/vnd.3gpp.mcdata-info+xml MIME body. In the application/vnd.3gpp.mcdata-info+xml MIME body, the MCData client shall include the <mcdata-request-uri> element set to the MCData ID of the MCData user;

3) shall include the ICSI value "urn:urn-7:3gpp-service.ims.icsi.mcdata" (coded as specified in 3GPP TS 24.229 [5]), in a P-Preferred-Service header field according to IETF RFC 6050 [7];

4) if the targeted MCData user is interested in at least one MCData group at the targeted MCData client, shall set the Expires header field according to IETF RFC 3903 [34], to 4294967295;

NOTE 2: 4294967295, which is equal to 232-1, is the highest value defined for Expires header field in IETF RFC 3261 [4].

5) if the targeted MCData user is no longer interested in any MCData group at the targeted MCData client, shall set the Expires header field according to IETF RFC 3903 [34], to zero; and

6) shall include an application/pidf+xml MIME body indicating per-user affiliation information according to subclause 8.4.1. In the MIME body, the MCData client:

a) shall include all MCData groups where the targeted MCData user indicates its interest at the targeted MCData client;

b) shall include the MCData client ID of the targeted MCData client;

c) shall not include the "status" attribute and the "expires" attribute in the <affiliation> element; and

d) shall set the <p-id> child element of the <presence> root element to a globally unique value.

The MCData client shall send the SIP PUBLISH request according to 3GPP TS 24.229 [5].

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

### 8.2.6 Rules based affiliation status change procedure

Rules based affiliation is controlled by the elements <RulesForAffiliation> or <RulesForDeaffiliation> of the MCData user profile document identified by the MCData ID of the MCData user (see the MCData user profile document specified in 3GPP TS 24.484 [50]). The rules can be composed of location criteria (including heading and speed) or functional alias based criteria. A rule is fulfilled if any of the location criteria and any of the functional alias based criteria are met. These rules are evaluated whenever a change of location occurs and whenever a functional alias is activated or deactivated. If, any defined rule is fulfilled, the MCData client shall initiate the affiliation status change procedure as specified in subclause 8.2.2.

NOTE: Hysteresis can be applied to location changes to avoid too frequent affiliation changes. In addition, the definition of area entry and exit criteria can be specified to provide a buffer space to minimize ping-ponging into and out of an area.

**\* \* \* \* \* END CHANGES \* \* \* \* \***