**3GPP TSG-SA WG6 Meeting #60 S6-231363**

**Changsha, China 15th – 19th April 2024 (revision of S6-231245)**

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| *CR-Form-v12.2* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **23.280** | **CR** | **0559** | **rev** | **1** | **Current version:** | **18.9.0** |  |
|  | | | | | | | | |
| *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:*** | Configuration for MC client on non-3GPP device | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Huawei, Hisilicon | | | | | | | | | |
| ***Source to TSG:*** | SA6 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | MCGWUE | | | | |  | ***Date:*** | | | 2024-04-06 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **F** |  | | | | | ***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 MC client on the non-3GPP device should obtain the configurations from the MC server.  However, in Annex A, those configuration tables are described to be configured to the MC service UE rather than the corresponding MC client in the non-3GPP device where the reference point is terminated.  For the MC client is hosted in the non-3GPP device, such configurations are required to be available for the MC client on the N3GPP device. | | | | | | | | |
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| ***Summary of change:*** | | Introduce a NOTE to clarify the configuration should be delivered to the non--3GPP device host the MC client.  Modify the descriptions in Annex A to capture the configurations are configured to the ‘client’ either on MC service UE or non-3GPP device. | | | | | | | | |
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| ***Consequences if not approved:*** | | The MC client host by the N3GPP device cannot obtain the configurations. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | A.1, or 11.2.0 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

### 11.2.0 General

The MC gateway UE offers access to the MC server for several MC clients as shown in Figure 11.2.0-1. The MC clients can be either located in the MC gateway UE or in non-3GPP devices connected to the MC gateway UE via non-3GPP access. The necessary configuration data defined in Annex A is provided to the MC client and the device that hosting the MC clients, i.e., either non-3GPP device or MC gateway UE, for access the MC service.

For non-3GPP devices which can host an MC client, the MC gateway UE enables connectivity to the MC server. For non-3GPP devices which cannot host the MC client, the MC gateway UE hosts the instantiation of the MC client for the non-3GPP device.



Figure 11.2.0-1: Functional architecture

The MC gateway UE provides MC service capabilities and 3GPP access capabilities using 3GPP network credentials for authorized access with an MC server.

For non-3GPP devices which cannot host MC clients, the MC gateway UE shall control the access and manage the communication between the non-3GPP devices and the MC server. Upon reception of connection authorization request from a non-3GPP device, the MC gateway UE instantiates an MC client, acting on behalf of the non-3GPP device, to provide the requested services (e.g. emergency call, group calls, short data messages services, etc.). The communication interworking and the definition of associated procedures between the MC client (initiated at the MC gateway UE) and the non-3GPP devices is out of scope of this document.

NOTE 1: MC clients residing on a non-3GPP device cannot use UICC credentials to perform authorisation with the 3GPP transport system.

For MC clients getting MC service access via the MC gateway UE, the MC gateway UE forwards (unmodified) signalling and media from the individual MC clients to the MC server and vice versa.

If the MC service user on the non-3GPP device utilizes multiple MC services simultaneously, the MC service access may also be provided by one or multiple MC gateway UEs as shown in figure 11.2.0-2 while restricting each MC service to one MC gateway UE (e.g. MCPTT via MC gateway UE1, MCData via MC gateway UE2).



Figure 11.2.0-2: Simultaneous multiple MC gateway UE use by a single non-3GPP device

NOTE 2: Even not shown in the above figure, the same principle of simultaneous use of multiple MC gateway UEs is applied for non-3GPP devices which cannot host an MC client.

/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* First change \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

Annex A (normative):  
Configuration data for MC services

# A.1 General

This Annex provides information about the static data needed for configuration for MC services, which belong to one of the following categories:

- MC service UE configuration data (see subclause A.2);

- MC service user profile data (see subclause A.3);

- MC service group configuration data (see subclause A.4);

- MC service configuration data (see subclause A.5); and

- Initial MC service UE configuration data (see subclause A.6).

NOTE: For the configuration data in A.3, A.4, A.5, it is provided to the CSC client and MC service client regardless of which device those clients are located in, e.g., MC service UE, or non-3GPP device. For the configuration data in A.2 and A.4, it is provided to the device which hosting the MC service client. For simplicity, only the MC service UE is shown in the tables in this Annex.

For each configuration category, data is split between configuration data that is applicable to both on‑network and off‑network, configuration data that is applicable to on-network only, and configuration data that is applicable to off-network only. The configuration data in each configuration category corresponds to a single instance of the category type i.e. the MC service UE, MC service group, MC service user and MC service configuration data refers to the information that will be stored against each MC service UE, MC service group, MC service user and MC service. This means that the three separate tables (on-network and off-network, on-network only, off-network only) for each configuration category represent the complete set of data for each configuration data category element.

The columns in the tables have the following meanings:

- Reference: the reference of the corresponding requirement in 3GPP TS 22.280 [3] or 3GPP TS 22.281 [4] or 3GPP TS 22.282 [5] or 3GPP TS 22.179 [2] or the corresponding subclause from the present document.

- Parameter description: A short definition of the semantics of the corresponding item of data, including denotation of the level of the parameter in the configuration hierarchy.

- When it is not clear to which functional entities the parameter is configured, then one or more columns indicating this are provided where the following nomenclature is used:

- "Y" to denote "Yes" i.e. the parameter denoted for the row needs to be configured to the functional entity denoted for the column.

- "N" to denote "No" i.e. the parameter denoted for the row does not need to be configured to the functional entity denoted for the column.

Parameters within a set of configuration data have a level within a hierarchy that pertains only to that configuration data. The hierarchy of the configuration data is common across all the three tables of on-network and off‑network, on‑network only and off‑network only. The level of a parameter within the hierarchy of the configuration data is denoted by use of the character ">" in the parameter description field within each table, one per level. Parameters that are at the top‑most level within the hierarchy have no ">" character. Parameters that have one or more ">" characters are child parameters of the first parameter above them that has one less ">" character. Parent parameters are parameters that have one or more child parameters. Parent parameters act solely as a "grouping" of their child parameters and therefore do not contain an actual value themselves i.e. they are just containers for their child parameters.

Each parameter that can be configured online shall only be configured through one online reference point. Each parameter that can be configured offline shall only be configured through one offline reference point. The most recent configuration data made available to the MC service UE shall always overwrite previous configuration data, irrespective of whether the configuration data was provided via the online or offline mechanism.