**3GPP TSG-SA WG6 Meeting #45-bis-e S6-212383**

**e-meeting, 11th – 19th October 2021 (revision of S6-212255)**

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| *CR-Form-v12.1* |
| **CHANGE REQUEST** |
|  |
|  | **23.280** | **CR** | **0298** | **rev** | 1 | **Current version:** | **17.8.0** |  |
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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:***  | Addition of definitions of terms and introduction related to MC gateway UE function |
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| ***Source to WG:*** | Samsung, Nokia, Nokia Shaghai Bell |
| ***Source to TSG:*** | S6 |
|  |  |
| ***Work item code:*** | MCGWUE |  | ***Date:*** | 2021-10-06 |
|  |  |  |  |  |
| ***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 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:*** | This CR introduces the definitions of terms related to MC gateway UE based on the TR 23.700-79 .Introduction section is modified to reflect the MC gateway UE function |
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| ***Summary of change:*** | Addition of definitions related to MC gateway UE function into Section 3.1. |
|  |  |
| ***Consequences if not approved:*** | Incomplete specification |
|  |  |
| ***Clauses affected:*** | Section 3.1, 4 |
|  |  |
|  | **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 \* \* \* \* \* \* \*

# 3 Definitions, symbols and abbreviations

## 3.1 Definitions

For the purposes of the present document, the terms and definitions given in 3GPP TR 21.905 [1] and the following apply. A term defined in the present document takes precedence over the definition of the same term, if any, in 3GPP TR 21.905 [1].

**Accuracy:** Reflects the uncertainty of the location at the moment of location measurement, e.g. see 3GPP TS 25.305 [30] and 3GPP TS 23.032 [31].

**Active MC service user profile:** The MC service user profile that is currently used by an MC service client of an MC service user while receiving MC service.

**Altitude:** Third dimension for the geographical coordinates at the moment of location measurement, e.g. see 3GPP TS 25.305 [30] and 3GPP TS 23.032 [31].

**Bearing:** Direction at the moment of location measurement, e.g. see 3GPP TS 25.305 [30].

**ECGI:** E-UTRAN Cell Global Identifier, which is used to identify cells globally, where the ECGI is constructed from the Mobile Country Code (MCC), Mobile Network Code (MNC) and the E-UTRAN Cell Identifier (ECI).

**Interconnection:** A means of communication between MC systems whereby MC service users obtaining MC service from one MC system can communicate with MC service users who are obtaining MC service from one or more other MC systems.

**Interconnection group:** An MC service group that is configured to allow inclusion of MC service group members who are MC service users from partner MC system(s).

**LCS network:** The 3GPP network that provides location service as defined in 3GPP TS 23.271 [29].

**Location:** The current physical location of the MC service UE.

**MBMS SAI:** Multimedia Broadcast Multicast Service Area Identity which is mapped to the MBMS service area.

**MC gateway server:** A server providing topology hiding for MC service interconnection with a partner MC system, where that partner MC system is in a different trust domain.

**MC service:** A generic name for any one of the three mission critical services: either MCPTT, or MCVideo, or MCData.

**MC service affiliated group member:** An MC service user who has indicated an interest in a particular MC service group and has been accepted to participate in MC service group communication for that MC service group.

**MC service client:** A generic name for the client application function of a specific MC service. MC service client could be replaced by MCPTT client, or MCVideo client, or MCData client depending on the context.

**MC service group:** A defined set of MC service users with associated communication dispositions (e.g. media restrictions, default priority and commencement directions) configured for the use with one or more MC services.

**MC service group affiliation:** A mechanism by which an MC service user's MC service(s) communication interest in one or more MC service groups is determined.

**MC service group call:** A mechanism by which an MC service user can make a one-to-many MC service(s) transmission to other users that are members of MC service group(s).

**MC service group de-affiliation:** A mechanism by which an MC service user's MC service(s) communication interest in one or more MC service groups is removed.

**MC service group home system:** The MC system where the MC service group is defined.

**MC service group host MC service server:** The MC service server within an MC system which provides centralised support for a particular MC service of an MC service group defined in a MC service group home system.

**MC service group member:** An MC service user, whose MC service ID is listed in a particular MC service group.

**MC service ID:** A generic name for the user ID of a mission critical user within a specific MC service. MC service ID could be replaced by MCPTT ID, or MCVideo ID, or MCData ID depending on the context.

**MC service server:** A generic name for the server application function of a specific MC service. MC service server could be replaced by MCPTT server, MCVideo server, or MCData server depending on the context.

**MC service user:** An authorized user, who can use an MC service UE to participate in one or more MC services.

**MC service user profile:** The set of information associated to an MC service user that allows that user to employ one or more MC services in a given role and from a given MC service UE.

**MC service UE:** A UE that can be used to participate in one or more MC services.

**MC service UE label:** A generic name for identification of a specific MC service UE.

**MC system:** The collection of applications, services, and enabling capabilities required to provide a single mission critical service or multiple mission critical services to one or more mission critical organizations.

**MC user:** A user, identified by an MC ID, who, after authorization, obtains mission critical service(s).

**Migration:** A means for an MC Service user to obtain MC service directly from a partner MC system.

**Partner MC system:** Allied MC system that provides MC services to an MC service user based on the MC service user profiles that are defined in the primary MC system of that MC service user.

**Preconfigured MC service group:** an MC service group used only for regrouping that has been configured in advance of a group or user regrouping operation to serve as the source of regroup group configuration.

**Pre-selected MC service user profile:** The MC service user profile that is to be selected as the active MC service user profile through configuration, and applicable for an authenticated MC service user upon MC service authorization.

**Primary MC system:** MC system where the MC service user profiles of an MC service user are defined.

**Requested Priority:** A value for use in a MC service group or MC private communication that, if accepted, is used by the MCX service server to temporarily replace the priority level that is predefined in the MC service group or MC service user profile. This value is used in combination with other factors to determine the application priority for the requested communication.

**Selected MC service user profile:** The MC service user profile that is to be selected as the active MC service user profile for an MC service upon request by an MC service user.

**Serving MC service server:** The MC service server which is providing MC service to an MC service client.

NOTE 1: There is one serving MC service server for each MC service, which can be the primary MC service server of the MC service user of the MC service client, or can be a partner MC service server to which the MC service user has migrated.

**Serving MC system:** The MC system which is providing MC service to an MC user.

NOTE 2: The MC system can be the primary MC system of the MC service user, or can be a partner MC system to which the MC service user has migrated.

**Speed:** Movement at the moment of location measurement, e.g. see 3GPP TS 25.305 [X] and 3GPP TS 23.032 [Y].

**Time of measurement:** Date and time expressed with a certain precision to reflect the moment of the location measurement.

For the purposes of the present document, the following terms given in 3GPP TS 22.280 [3] apply

**Mission Critical**

**Mission Critical Applications**

**Mission Critical Organization**

**Mission Critical Service**

**Functional alias**

For the purposes of the present document, the following terms given in 3GPP TS 22.179 [2] apply

**Multi-talker control**

For the purposes of the present document, the following terms related to a MC gateway UE function apply

**MC gateway UE:** A functional entity that enables simultaneous access to the MC system for multiple MC clients.

**MC client:** Aggregates a set of clients (i.e. Group management client, Configuration management client, Identity management client, Key management client, Location management client and MC service client) operated on a non-3GPP device.

**Non-3GPP device:** A device that enables connectivity towards an MC gateway UE using an access method not specified by 3GPP. A subset of these devices can host an MC client specified by 3GPP.

**MC gateway client:** A client that enables the authorized binding with one or more MC GW UEs in order to be able to handle MC services (only one MC gateway UE per MC service).

**MC gateway UE server:** A server on an MC gateway UE that controls authorized binding with multiple MC gateway clients.

\* \* \* \* \* \* \* SECOND CHANGE \* \* \* \* \* \* \*

# 4 Introduction

A common functional architecture to support MC services (i.e., MCPTT defined in 3GPP TS 23.379 [16], MCVideo defined in 3GPP TS 23.281 [12], MCData defined in 3GPP TS 23.282 [13]) including common application plane and signalling plane entities is specified in this document. It also deals with the functional architecture of the MC gateway UE to enable access to the MC service system from MC clients residing on non-3GPP devices. A subset of these devices can host an MC client specified by 3GPP.

Each MC service supports several types of communications amongst the users (e.g. group call, private call). There are several common functions and entities (e.g. group, configuration, identity) which are used by the MC services.

The common functional architecture to support MC services utilises aspects of the IMS architecture defined in 3GPP TS 23.228 [9], the Proximity-based Services (ProSe) architecture defined in 3GPP TS 23.303 [14], the Group Communication System Enablers for LTE (GCSE\_LTE) architecture defined in 3GPP TS 23.468 [18] and the PS-PS access transfer procedures defined in 3GPP TS 23.237 [10].

The MC service UE primarily obtains access to a MC service via E-UTRAN, using the EPS architecture defined in 3GPP TS 23.401 [17]. Certain MC service functions such as dispatch and administrative functions can be supported using either MC service UEs in E-UTRAN or using MC service UEs via non-3GPP access networks. External applications usage of MC services can be enabled via E-UTRAN or non-3GPP access networks.

NOTE: Dispatch consoles and devices used by MC service administrators are considered MC service UEs in the common functional architecture to support MC services.

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