**3GPP TSG-SA WG6 Meeting #61 S6-242350**

**Jeju Island, South Korea, 20th – 24th May 2024 (revision of S6-242079)**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *CR-Form-v12.2* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  |  | **CR** |  | **rev** |  | **Current version:** |  |  |
|  | | | | | | | | |
| *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)*.* | | | | | | | | |
|  | | | | | | | | |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***Proposed change affects:*** | UICC apps |  | ME | **X** | Radio Access Network |  | Core Network | **X** |

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | | | | | | | | |
| ***Title:*** | Ambiguity on routing request message | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | at&t | | | | | | | | | |
| ***Source to TSG:*** | SA6 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | enh4MCPTT | | | | |  | ***Date:*** | | | May 9, 2024 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | A |  | | | | | ***Release:*** | | | Rel-19 |
|  | *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:*** | | How to route a data communication request to its recipient is not clear | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | Both a target MCData ID and the Functional alias can be used to route a data communication request to the target party. To ne able to route a request message to the target party, at least one of them needs to be included in the data communication request message. If both of them are included in a request message, only the target MCData ID will be used as the called party and the Functional alias is used for information only.  Clarify this architectural requirement in the correcponding data communnication request information flows are clarified. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | There is no stage 3 guidance and the stage 3 procedure might not align with the stage 2 architectural requirement. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 7.4.2.1.1, 7.4.2.1.3, 7.4.2.1.5, 7.5.2.1.1, 7.5.2.1.5, 7.5.2.1.8, 7.14.2.1.1, 7.14.2.1.3 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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 \* \* \* \*

##### 7.4.2.1.1 MCData standalone data request

Table 7.4.2.1.1-1 describes the information flow for the MCData standalone data request sent from the MCData client to the MCData server and from the MCData server to another MCData client.

Table 7.4.2.1.1-1: MCData standalone data request (MCData client to MCData server)

|  |  |  |
| --- | --- | --- |
| Information element | Status | Description |
| MCData ID | M | The identity of the MCData user sending data |
| Functional alias | O | The associated functional alias of the MCData user sending data. |
| MCData ID (see NOTE 1) | O | The identity of the MCData user towards which the data is sent |
| Functional alias (see NOTE 1) | O | The associated functional alias of the MCData user identity towards which the data is sent. |
| Conversation Identifier | M | Identifies the conversation |
| Transaction Identifier | M | Identifies the MCData transaction |
| Reply Identifier | O | Identifies the original MCData transaction to which the current transaction is a reply to |
| Emergency indicator | O | Indicates that the data request is for MCData emergency communication |
| Disposition Type | O | Indicates the disposition type expected from the receiver (i.e., delivered or read or both) |
| Payload Destination Type | M | Indicates whether the payload is for application consumption or MCData user consumption |
| Location | O | Location of the Originating MCData user sending the SDS message |
| Application identifier (see NOTE 2) | O | Identifies the application for which the payload is intended (e.g. text string, port address, URI) |
| Application metadata container | O | Implementation specific information that is communicated to the recipient |
| Payload | M | SDS content |
| NOTE 1: At least one identity shall be present. If both are present the MCData ID shall be used to route the request and the functional alias is just for information.  NOTE 2: The application identifier shall be included only if the payload destination type indicates that the payload is for application consumption. | | |

Table 7.4.2.1.1-2: MCData standalone data request (MCData server to MCData client)

|  |  |  |
| --- | --- | --- |
| Information element | Status | Description |
| MCData ID | M | The identity of the MCData user sending data |
| MCData ID | M | The identity of the MCData user towards which the data is sent |
| Conversation Identifier | M | Identifies the conversation |
| Transaction Identifier | M | Identifies the MCData transaction |
| Reply Identifier | O | Identifies the original MCData transaction to which the current transaction is a reply to |
| Emergency indicator | O | Indicates that the data request is for MCData emergency communication |
| Disposition Type | O | Indicates the disposition type expected from the receiver (i.e., delivered or read or both) |
| Payload Destination Type | M | Indicates whether the payload is for application consumption or MCData client consumption |
| Location | O | Location of the Originating MCData user sending the SDS message |
| Application identifier (see NOTE) | O | Identifies the application for which the payload is intended (e.g. text string, port address, URI) |
| Application metadata container | O | Implementation specific information that is communicated to the recipient |
| Payload | M | SDS content |
| NOTE: The application identifier shall be included only if the payload destination type indicates that the payload is for application consumption. | | |

\* \* \* \* Next change \* \* \* \*

##### 7.4.2.1.3 MCData standalone session data request

Table 7.4.2.1.3-1 describes the information flow for the MCData standalone session data request sent from the MCData client to the MCData server and from the MCData server to another MCData client.

Table 7.4.2.1.3-1: MCData standalone session data request (MCData client to MCData server)

|  |  |  |
| --- | --- | --- |
| Information element | Status | Description |
| MCData ID | M | The identity of the MCData user sending data |
| Functional alias | O | The associated functional alias of the MCData user sending data. |
| MCData ID (see NOTE 1) | O | The identity of the MCData user towards which the data is sent |
| Functional alias (see NOTE 1) | O | The associated functional alias of the MCData user identity towards which the data is sent. |
| Conversation Identifier | M | Identifies the conversation |
| Transaction Identifier | M | Identifies the MCData transaction |
| Reply Identifier | O | Identifies the original MCData transaction to which the current transaction is a reply to |
| Transaction type | M | Standalone transaction |
| Emergency indicator | O | Indicates that the data request is for MCData emergency communication |
| Disposition Type | O | Indicates the disposition type expected from the receiver (i.e., delivered or read or both) |
| Payload Destination Type | M | Indicates whether the SDS payload is for application consumption or MCData user consumption |
| Location | O | Location of the Originating MCData user sending the SDS message |
| Application identifier (see NOTE 2) | O | Identifies the application for which the payload is intended (e.g. text string, port address, URI) |
| Requested Priority | O | Application priority level requested for this communication. |
| Application metadata container | O | Implementation specific information that is communicated to the recipient |
| SDP offer | M | Media parameters offered |
| NOTE 1: At least one identity shall be present. If both are present the MCData ID shall be used to route the request and the functional alias is just for information.  NOTE 2: The application identifier shall be included only if the payload destination type indicates that the SDS message is for application consumption. | | |

Table 7.4.2.1.3-2: MCData standalone session data request (MCData server to MCData client)

|  |  |  |
| --- | --- | --- |
| Information element | Status | Description |
| MCData ID | M | The identity of the MCData user sending data |
| MCData ID | M | The identity of the MCData user towards which the data is sent |
| Conversation Identifier | M | Identifies the conversation |
| Transaction Identifier | M | Identifies the MCData transaction |
| Reply Identifier | O | Identifies the original MCData transaction to which the current transaction is a reply to |
| Emergency indicator | O | Indicates that the data request is for MCData emergency communication |
| Transaction type | M | Standalone transaction |
| Disposition Type | O | Indicates the disposition type expected from the receiver (i.e., delivered or read or both) |
| Payload Destination Type | M | Indicates whether the SDS payload is for application consumption or MCData user consumption |
| Location | O | Location of the Originating MCData user sending the SDS message |
| Application identifier (see NOTE) | O | Identifies the application for which the payload is intended (e.g. text string, port address, URI) |
| Application metadata container | O | Implementation specific information that is communicated to the recipient |
| SDP offer | M | Media parameters offered |
| NOTE: The application identifier shall be included only if the payload destination type indicates that the SDS message is for application consumption. | | |

\* \* \* \* Next change \* \* \* \*

##### 7.4.2.1.5 MCData session data request

Table 7.4.2.1.5-1 describes the information flow for the MCData session data request sent from the MCData client to the MCData server and from the MCData server to another MCData client.

Table 7.4.2.1.5-1: MCData session data request (MCData client to MCData server)

|  |  |  |
| --- | --- | --- |
| Information element | Status | Description |
| MCData ID | M | The identity of the MCData user sending data |
| Functional alias | O | The associated functional alias of the MCData user sending data. |
| MCData ID (see NOTE 1) | O | The identity of the MCData user towards which the data is sent |
| Functional alias (see NOTE 1) | O | The associated functional alias of the MCData user identity towards which the data is sent. |
| Conversation Identifier | M | Identifies the conversation |
| Transaction Identifier | M | Identifies the MCData transaction |
| Reply Identifier | O | Identifies the original MCData transaction to which the current transaction is a reply to |
| Transaction type | M | Session based transactions |
| Emergency indicator | O | Indicates that the data request is for MCData emergency communication |
| Disposition Type | O | Indicates the disposition type expected from the receiver (i.e., delivered or read or both) |
| Payload Destination Type | M | Indicates whether the SDS payload is for application consumption or MCData user consumption |
| Location | O | Location of the Originating MCData user sending the SDS message |
| Application identifier (see NOTE 2) | O | Identifies the application for which the payload is intended (e.g. text string, port address, URI) |
| Application metadata container | O | Implementation specific information that is communicated to the recipient |
| SDP offer | M | Media parameters offered |
| Requested priority | O | Application priority level requested for this communication session |
| NOTE 1: At least one identity shall be present. If both are present the MCData ID shall be used to route the request and the functional alias is just for information.  NOTE 2: The application identifier shall be included only if the payload destination type indicates that the SDS message is for application consumption. | | |

Table 7.4.2.1.5-2: MCData session data request (MCData server to MCData client)

|  |  |  |
| --- | --- | --- |
| Information element | Status | Description |
| MCData ID | M | The identity of the MCData user sending data |
| MCData ID | O | The identity of the MCData user towards which the data is sent |
| Conversation Identifier | M | Identifies the conversation |
| Transaction Identifier | M | Identifies the MCData transaction |
| Reply Identifier | O | Identifies the original MCData transaction to which the current transaction is a reply to |
| Transaction type | M | Session based transactions |
| Emergency indicator | O | Indicates that the data request is for MCData emergency communication |
| Disposition Type | O | Indicates the disposition type expected from the receiver (i.e., delivered or read or both) |
| Location | O | Location of the Originating MCData user sending the SDS message |
| Payload Destination Type | M | Indicates whether the SDS payload is for application consumption or MCData user consumption |
| Application identifier (see NOTE) | O | Identifies the application for which the payload is intended (e.g. text string, port address, URI) |
| Application metadata container | O | Implementation specific information that is communicated to the recipient |
| SDP offer | M | Media parameters offered |
| Requested priority | O | Application priority level requested for this communication session |
| NOTE: The application identifier shall be included only if the payload destination type indicates that the SDS message is for application consumption. | | |

\* \* \* \* Next change \* \* \* \*

#### 7.5.2.1 Information flows for file distribution

##### 7.5.2.1.1 MCData upload data request

Table 7.5.2.1.1-1 describes the information flow for the MCData upload data request sent from the media storage client to the MCData content server.

Table 7.5.2.1.1-1: MCData upload data request

|  |  |  |
| --- | --- | --- |
| Information element | Status | Description |
| MCData ID | M | The identity of the MCData user uploading data |
| Content (see NOTE) | O | Content to upload |
| Content reference (see NOTE) | O | URL reference of the content stored in the MCData message store account of the MCData user |
| Emergency indicator | O | Indicates that the data request is for MCData emergency communication |
| NOTE: Either the Content or the Content reference shall be present but not both. | | |

\* \* \* \* Next change \* \* \* \*

##### 7.5.2.1.5 MCData FD request (using HTTP)

Table 7.5.2.1.5-1 describes the information flow for the MCData FD request (in subclause 7.5.2.4.2) sent from the MCData client to the MCData server.

Table 7.5.2.1.5-1: MCData FD request (using HTTP) from MCData client to MCData server

|  |  |  |
| --- | --- | --- |
| Information element | Status | Description |
| MCData ID | M | The identity of the MCData user sending the file |
| Functional alias | O | The functional alias associated with MCData user sending the file |
| MCData ID (see NOTE) | O | The identity of the MCData user receiving the file |
| Functional alias (see NOTE) | O | The associated functional alias of the MCData user identity towards which the data is sent. |
| Conversation Identifier | M | Identifies the conversation |
| Transaction Identifier | M | Identifies the MCData transaction |
| Reply Identifier | O | Identifies the original MCData transaction to which the current transaction is a reply to |
| Disposition indication | O | Indicates whether file download completed report is expected or not |
| Download indication | O | Indicates mandatory download |
| Application metadata container | O | Implementation specific information that is communicated to the recipient |
| Content reference | M | URL reference to the content and file metadata information |
| Emergency indicator | O | Indicates that the data request is for MCData emergency communication |
| Deposit file indication | O | Indicates whether the file to be stored into the MCData message store account of the MCData user |
| Location Information | O | Location Information of the Originating MCData user sending the FD message |
| NOTE: At least one identity shall be present. If both are present the MCData ID shall be used to route the request and the functional alias is just for information. | | |

Table 7.5.2.1.5-2 describes the information flow for the MCData FD request (in clause 7.5.2.4.2) sent from an MCData server to a partner MCData server.

Table 7.5.2.1.5-2: MCData FD request (using HTTP) from an MCData server to MCData server

|  |  |  |
| --- | --- | --- |
| Information element | Status | Description |
| MCData ID | M | The identity of the MCData user sending the file |
| Functional alias | O | The associated functional alias of the MCData user identity sending the file |
| MCData ID | M | The identity of the MCData user receiving the file |
| Functional alias | O | The associated functional alias of the MCData user identity towards which the data is sent. |
| Conversation Identifier | M | Identifies the conversation |
| Transaction Identifier | M | Identifies the MCData transaction |
| Reply Identifier | O | Identifies the original MCData transaction to which the current transaction is a reply to |
| Disposition indication | O | Indicates whether file download completed report is expected or not |
| Download indication | O | Indicates mandatory download |
| Application metadata container | O | Implementation specific information that is communicated to the recipient |
| Content reference | M | URL reference to the content and file metadata information |
| Emergency indicator | O | Indicates that the data request is for MCData emergency communication |
| Location Information | O | Location information of the Originating MCData user sending the FD message |

Table 7.5.2.1.5-3 describes the information flow for the MCData FD request (in clause 7.5.2.4.2) sent from the MCData server to the MCData client.

Table 7.5.2.1.5-3: MCData FD request (using HTTP) from MCData server to MCData client

|  |  |  |
| --- | --- | --- |
| Information element | Status | Description |
| MCData ID | M | The identity of the MCData user sending the file |
| Functional alias | O | The associated functional alias of the MCData user sending the file |
| MCData ID | M | The identity of the MCData user receiving the file |
| Conversation Identifier | M | Identifies the conversation |
| Transaction Identifier | M | Identifies the MCData transaction |
| Reply Identifier | O | Identifies the original MCData transaction to which the current transaction is a reply to |
| Disposition indication | O | Indicates whether file download completed report is expected or not |
| Download indication | O | Indicates mandatory download |
| Application metadata container | O | Implementation specific information that is communicated to the recipient |
| Content reference | M | URL reference to the content and file metadata information |
| Emergency indicator | O | Indicates that the data request is for MCData emergency communication |
| Location Information | O | Location information of the Originating MCData user sending the FD message |

\* \* \* \* Next change \* \* \* \*

##### 7.5.2.1.8 MCData FD request (using media plane)

Table 7.5.2.1.8-1 describes the information flow for the MCData FD request (in subclause 7.5.2.5.2) sent from the MCData client to the MCData server and from the MCData server to another MCData client.

Table 7.5.2.1.8-1: MCData FD request (using media plane/MCData client to MCData server)

|  |  |  |
| --- | --- | --- |
| Information element | Status | Description |
| MCData ID | M | The identity of the MCData user sending the file |
| Functional alias | O | The functional alias associated with MCData user sending the file |
| MCData ID (see NOTE 1) | O | The identity of the MCData user receiving the file |
| Functional alias (see NOTE 1) | O | The associated functional alias of the MCData user identity towards which the data is sent. |
| Conversation Identifier | M | Identifies the conversation |
| Transaction Identifier | M | Identifies the MCData transaction |
| Reply Identifier | O | Identifies the original MCData transaction to which the current transaction is a reply to |
| Disposition indication | O | Indicates whether file download completed report is expected or not |
| Download indication | O | Indicates mandatory download (i.e. auto accept this media plane setup request) |
| Application metadata container | O | Implementation specific information that is communicated to the recipient |
| SDP offer (see NOTE 2) | M | Media parameters offered |
| Requested priority | O | Application priority level requested for this communication session |
| Emergency indicator | O | Indicates that the data request is for MCData emergency communication |
| NOTE 1: At least one identity shall be present. If both are present the MCData ID shall be used to route the request and the functional alias is just for information.  NOTE 2: Includes file metadata. | | |

Table 7.5.2.1.8-2: MCData FD request (using media plane/MCData server to MCData server)

|  |  |  |
| --- | --- | --- |
| Information element | Status | Description |
| MCData ID | M | The identity of the MCData user sending the file |
| Functional alias | O | The associated functional alias of the MCData user identity sending the file |
| MCData ID | M | The identity of the MCData user receiving the file |
| Functional alias | O | The associated functional alias of the MCData user identity towards which the data is sent. |
| Conversation Identifier | M | Identifies the conversation |
| Transaction Identifier | M | Identifies the MCData transaction |
| Reply Identifier | O | Identifies the original MCData transaction to which the current transaction is a reply to |
| Disposition indication | O | Indicates whether file download completed report is expected or not |
| Download indication | O | Indicates mandatory download (i.e. auto accept this media plane setup request) |
| Application metadata container | O | Implementation specific information that is communicated to the recipient |
| SDP offer (see NOTE) | M | Media parameters offered |
| Requested priority | O | Application priority level requested for this communication session |
| Emergency indicator | O | Indicates that the data request is for MCData emergency communication |
| NOTE: Includes file metadata. | | |

Table 7.5.2.1.8-3: MCData FD request (using media plane/MCData server to MCData client)

|  |  |  |
| --- | --- | --- |
| Information element | Status | Description |
| MCData ID | M | The identity of the MCData user sending the file |
| Functional alias | O | The associated functional alias of the MCData user identity sending the file |
| MCData ID | M | The identity of the MCData user receiving the file |
| Conversation Identifier | M | Identifies the conversation |
| Transaction Identifier | M | Identifies the MCData transaction |
| Reply Identifier | O | Identifies the original MCData transaction to which the current transaction is a reply to |
| Disposition indication | O | Indicates whether file download completed report is expected or not |
| Download indication | O | Indicates mandatory download (i.e. auto accept this media plane setup request) |
| Application metadata container | O | Implementation specific information that is communicated to the recipient |
| SDP offer (see NOTE) | M | Media parameters offered |
| Requested priority | O | Application priority level requested for this communication session |
| Emergency indicator | O | Indicates that the data request is for MCData emergency communication |
| NOTE: Includes file metadata. | | |

\* \* \* \* Next change \* \* \* \*

##### 7.14.2.1.1 MCData IPcon point-to-point request

Table 7.14.2.1.1-1 describes the information flow of the MCData IPcon point-to-point request sent from the MCData client to the MCData server.

Table 7.14.2.1.1-1: MCData IPcon point-to-point request (MCData client to MCData server)

|  |  |  |
| --- | --- | --- |
| Information element | Status | Description |
| MCData ID | M | The MCData identity of the originator MCData user; |
| Functional alias | O | The associated functional alias of the originator MCData user; |
| MCData ID | O  (NOTE 2) | The MCData identity of the target MCData client IP connectivity is requested. |
| Functional alias | O (NOTE 2) | The functional alias of the target MCData client. |
| Requested Priority  (NOTE 3) | O | Application priority level requested for this communication. |
| Location Information | O  (NOTE 1) | Actual location information of the originating MCData user; |
| Time Limit | O | Proposed time limit of the requested IP connectivity (1min- infinite); |
| Establishment reason | O | IP connectivity establishment reason |
| NOTE 1: This information contains the latest available location information of the requesting MCData user that may be different to the latest available location information in the MC system.  NOTE 2: At least one identity shall be present. If both are present the MCData ID shall be used to route the request and the functional alias is just for information.  NOTE 3: The predefined priority of the MC service user is applied by the MCData server if the requested priority is not present or not accepted by the MCData server. | | |

Table 7.14.2.1.1-2: MCData IPcon point-to-point request (MCData server to MCData client)

|  |  |  |
| --- | --- | --- |
| Information element | Status | Description |
| MCData ID | M | The MCData identity of the originator MCData user; |
| MCData ID | M | The MCData identity of the target MCData client IP connectivity is requested. |
| Location Information | O  (NOTE 1) | Actual location information of the originating MCData user; |
| Time Limit | O | Proposed time limit of the requested IP connectivity (1min- infinite); |
| Establishment reason | O | IP connectivity establishment reason |
| NOTE 1: This information contains the latest available location information of the requesting MCData user. | | |

\* \* \* \* Next change \* \* \* \*

##### 7.14.2.1.3 MCData remote IPcon point-to-point request

Table 7.14.2.1.3-1 describes the information flow of the MCData remote IPcon point-to-point request sent from the remote MCData client to the MCData server and from the MCData server to the asked MCData client.

Table 7.14.2.1.3-1: MCData remote IPcon point-to-point request

|  |  |  |
| --- | --- | --- |
| Information element | Status | Description |
| MCData ID remote | M | The MCData identity of the remote MCData client that requests another MCData user to establish an IP connectivity point-to-point session. |
| Functional alias remote | O | The associated functional alias of the remote MCData user. |
| MCData ID asked | M | The MCData identity of the MCData client that is required to establish an IP connectivity point-to-point session. |
| Functional alias asked | O | The functional alias associated with the MCData identity of the MCData client that is required to establish an IP connectivity point-to-point session. |
| MCData ID targeted (NOTE 1) | O | The MCData identity of the MCData client that is the target of the requested IP connectivity point-to-point session. |
| Functional alias targeted (NOTE 1) | O | The functional alias associated with the MC MCData identity of the MCData client that is the target of the requested IP connectivity point-to-point session. |
| Requested Priority  (NOTE 2) | O | Application priority level requested for this call. |
| Time Limit | O | Proposed time limit of the requested IP connectivity (1min- infinite). |
| Establishment reason | O | IP connectivity establishment reason |
| NOTE 1: At least one identity shall be present. If both are present the MCData ID shall be used to route the request and the functional alias is just for information.  NOTE 2: The predefined priority of the MC service user is applied by the MCData server if the requested priority is not present or not accepted by the MCData server. | | |