**3GPP TSG- Meeting # *446***

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| *CR-Form-v12.3* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
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|  |  | **CR** |  | **rev** | **1** | **Current version:** |  |  |
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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 | **x** |

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| ***Title:*** | data session | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Kontron Transportation France, Nokia, UIC | | | | | | | | | |
| ***Source to TSG:*** | SA6 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** |  | | | | |  | ***Date:*** | | |  |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **C** |  | | | | | ***Release:*** | | |  |
|  | *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-17 (Release 17) Rel-18 (Release 18) Rel-19 (Release 19)  Rel-20 (Release 20)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | Some information flows of ad hoc group data communication do not contain all information elements required by FRMCS. In FRMCS the criteria contain for example the type of ad hoc group call and the area in which the call is happening. This Information is essential for railway operation and was also available in the legacy system. This CR adds them to provide the same functionality as available in the legacy system. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | Adding criteria to information flows originating from the MCData server where necessary. Adding text to procedures to further clarify handling of criteria. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | Essential information for FRMCS is missing | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 7.17.2.4, 7.17.2.5, 7.17.2.10, 7.17.2.21a, 7.17.3.1.3, 7.17.3.1.6, 7.17.3.2.3, 7.17.3.2.7, 7.17.6.1.2, 7.17.6.1.4 | | | | | | | | |
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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:*** | |  | | | | | | | | |
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| ***This CR's revision history:*** | |  | | | | | | | | |

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

#### 7.17.2.4 Ad hoc group data session request (MCData server – MCData client)

Table 7.17.2.4-1 describes the information flow ad hoc group data session request from the MCData server to the MCData client.

Table 7.17.2.4-1 Ad hoc group data session request information elements

|  |  |  |
| --- | --- | --- |
| 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 request is sent |
| Functional alias | O | The associated functional alias of the MCData user sending data. |
| MCData ad hoc group ID | M | The MCData group ID associated with the ad hoc group data communication |
| SDP offer | M | Media parameters of MCData server |
| Broadcast indicator  (see NOTE) | O | Indicates that the ad hoc group data communication request is for a broadcast ad hoc group data communication |
| Imminent peril indicator (see NOTE) | O | Indicates that the ad hoc group data communication request is for ad hoc group imminent peril data communication |
| Emergency Indicator (see NOTE) | O | Indicates that the ad hoc group data communication request is for ad hoc group emergency data communication |
| Preconfigured MCData group ID | O | Group identity whose configuration is to be applied for this ad hoc group data communication. |
| Call resulting criteria for determining the participants | O | Carries the details of criteria or meaningful label identifying the criteria or the combination of both that the MCData server used for determining the participants e.g., it can be a location based criteria to invite participants in a particular area |
| NOTE: If used, only one of these information elements is present. | | |

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

#### 7.17.2.5 Ad hoc group data session response (MCData server – MCData client)

Table 7.17.2.5-1 describes the information flow ad hoc group data session response from the MCData server to the MCData client.

Table 7.17.2.5-1 Ad hoc group data session response information elements

|  |  |  |
| --- | --- | --- |
| 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 ad hoc group ID | M | The MCData group ID associated with the ad hoc group data communication |
| SDP answer | O | Media parameters selected and present if the Result is success. |
| Result | M | Result of the group data communication request (success or failure) |
| Call resulting criteria for determining the participants | O | Carries the details of criteria or meaningful label identifying the criteria or the combination of both that the MCData server used for determining the participants e.g., it can be a location based criteria to invite participants in a particular area |

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

#### 7.17.2.10 Ad hoc group data session notify (MCData server – MCData client)

Table 7.17.2.10-1 describes the information flow ad hoc group data session notify from MCData server to MCData client.

Table 7.17.2.10-1: Ad hoc group data session notify

|  |  |  |
| --- | --- | --- |
| Information element | Status | Description |
| MCData ID | M | The MCData ID of the ad hoc group data communication participant |
| Functional alias | O | The associated functional alias of the MCData user of the ad hoc group data communication participant |
| MCData ad hoc group ID | M | The MCData group ID associated with the ad hoc group data communication |
| MCData ID list | O | The list of the invited MCData users who did not acknowledged the ad hoc group data communication request within a configured time or the list of the invited MCData users who acknowledged the ad hoc group data communication request and joined or the list of the MCData users who joined or left the ongoing MCData ad hoc group data communication. |
| Call resulting criteria for determining the participants | O | Carries the details of criteria or meaningful label identifying the criteria or the combination of both that the MCData server used for determining the participants e.g., it can be a location based criteria to invite participants in a particular area |

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

#### 7.17.2.21a Modify ad hoc group data session criteria response (MCData server – MCData server)

Table 7.17.2.21a-1 describes the information flow Modify ad hoc group data session criteria response from the MCData server to the MCData server.

Table 7.17.2.21a-1 Modify Ad hoc group data session criteria response information elements

|  |  |  |
| --- | --- | --- |
| Information Element | Status | Description |
| MCData ID | M | The MCData ID of the MCData user who is requesting for modification of ad hoc group data session participants |
| Functional alias | O | The associated functional alias of the MCData user who is requesting for modification of ad hoc group data session participants |
| MCData ad hoc group ID | M | The MCData group ID of ad hoc group data data session whose participants list needs to be modified |
| Result | M | Result of the modify ad hoc group data data session participants request (success or failure) |
| Call resulting criteria for determining the participants | O | Carries the details of criteria or meaningful label identifying the criteria or the combination of both that the MCData server used for determining the participants e.g., it can be a location based criteria to invite participants in a particular area |

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

##### 7.17.3.1.3 Ad hoc group data communication setup with MCData server determining the participants lists

Figure 7.17.3.1.3-1 below illustrates the ad hoc group data communication setup procedure initiated by the MCData user and MCData client 1 wherein the list of participants is determined by the MCData server based on the citeria received from the MCData client.

Pre-conditions:

1. The MCData user at MCData client 1 is authorized to initate ad hoc group data communication.

2. The MCData user at MCData client 1 wants to invite MCData users who are satisying certain criteria for the ad hoc group data communication.



Figure 7.17.3.1.3-1: Ad hoc group data communication participants determined by MCData server

1. User at MCData client 1 would like to initiate an ad hoc group data communication in-order to invite the participants satisfying specific criteria. The MCData client 1 initiates the ad hoc group data communication by sending the ad hoc group data session request containing the details of the criteria to be applied by the MCData server for determining the participants list. If end-to-end encryption is supported, the Encryption supported information element shall be set to true and pre-configured MCData group whose configuration is to be applied is included. An SDP offer containing the MCData client media parameters is included. If the MCData user of MCData client 1 has selected a functional alias, then the ad hoc group data session request contains that functional alias.

If the MCData user at MCData client 1 initiates an MCData emergency ad hoc group data communication or the MCData emergency state is already set for the MCData client 1 (due to a previously triggered MCData emergency alert):

i. the MCData ad hoc group data session request shall contain an emergency indicator;

ii. if the MCData emergency state is not set already, MCData client 1 sets its MCData emergency state. The MCData emergency state of MCData client 1 is retained until explicitly cancelled by the user of MCData client 1.

2. If the ad hoc group data communication is supported, the MCData server verifies whether the user at MCData client 1 is authorized to initiate an ad hoc group data communication. If not authorized, the MCData server rejects the ad hoc group data session request as specified in the step 3. The MCData server accepts the ad hoc group data session request if the ad hoc group data communication is supported and authorized.

If functional alias is present, the MCData server checks whether the provided functional alias is allowed to be used and has been activated for the user.

If location information was included in the ad hoc group data session request, the MCData server checks the privacy policy of the MCData user to decide if the location information of MCData client 1 can be provided to other users on the data communication (refer to Annex A.3 "Authorisation to provide location information to other MCData users on a data communication when talking").

If an emergency indicator is present in the received MCData ad hoc group data session request, the MCData ad hoc group is considered to be in the in-progress emergency state until this ad hoc group data communication is terminated;

If an imminent peril indicator is present in the received MCData ad hoc group data session request, the MCData ad hoc group is considered to be in the in-progress imminent peril state until this ad hoc group data communication is terminated. and

If the information received in the request in step 1 does not contain an ad hoc group ID from an ad hoc group emergency alert, the MCData server forms the ad hoc group by using received information, and determines the preconfigured group to be used for the configuration of the ad hoc group. The MCData server assigns a MCData group ID for the newly formed ad hoc group. Further, the ad hoc group participants are included to ad hoc group once determined as specified in the step 4.

3. The MCData server shall send the ad hoc group data session request return message to MCData client 1 containing the below:

i. The MCData ad hoc group ID, either generated by the MCData server, if not included in the ad hoc group call request of step 1, or if the provided MCData ad hoc group ID is not accepted by the MCData server, or provided by the MCData client 1 if the ad hoc group ID is from an ad hoc group emergency alert;

ii. The group ID of the pre-configured group to be used for the ad hoc group communication (only included when the ad hoc group data session is authorized); and

iii. Result of whether the ad hoc group data session request is authorized or not

If the ad hoc group data session request is not authorized, the MCData server and MCData client 1 shall not proceed with the rest of the steps.

4. The MCData server determines the list of participants to be invited for the ad hoc group data communication based on the information present in the information element Criteria for determining the participants. This information element could carry either criteria or indicator identifying pre-defined criteria or a combination of both. Depending on the criteria provided and based on local policy, the MCData server may modify the content of the criteria received in step 1 to determine the list of participants.

NOTE 1: The content of the Criteria information element, the details of the pre-defined criteria, and the way how their MCData server determines the list of participants are left to implementation.

5. The MCData server sends the ad hoc group data session requests towards the MCData clients 2 and 3. While sending the ad hoc group data session requests, the MCData server shall remove the information elements that are not required to be conveyed to the target MCData clients. This request carries the pre-configured group ID whose configuration is to be applied for this ad hoc group data communication if end-to-end encryption is requested. The MCData server considers the ad hoc group data communication participants as implicitly affiliated to the ad hoc group.

6. The receiving MCData clients notify their corresponding MCData user about the incoming ad hoc group data communication.

7. The receiving MCData clients may accept or reject the ad hoc group data session requests and send ad hoc group data session responses to the MCData server. The response may also contain a functional alias of the responding MCData user, which is verified (valid and activated for the user) by the MCData server.

8. The MCData server sends the ad hoc group data session response to MCData client 1 through the signalling path to inform about successful data communication establishment. The ad hoc group data session response contains the call resulting criteria used by the MCData server to determine the list of participants to be invited.

9. The MCData server may notify the initiating MCData user of all MCData users who acknowledged the ad hoc group data session request and joined the ad hoc group data communication. This notification may be sent to the initiating MCData user by the MCData server more than once during the data communication when MCData users join or leave the MCData ad hoc group data communication. If the authorized users (not shown in figure) are configured to receive the participants information of ad hoc group data communication, the MCData server provides ad hoc group data session notify about all MCData users who acknowledged the ad hoc group data session request and joined the ad hoc group data communication, and when MCData users joins or leaves the MCData ad hoc group data communication. All ad hoc group data session notify messages contain the call resulting criteria used by the MCData server to determine the list of participants to be invited.

NOTE 2: The authorized user can learn who is currently affiliated to the current adhoc group data communication.

10. MCData client 1, MCData client 2 and MCData client 3 establish media plane resources.

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

##### 7.17.3.1.6 Modification of ad hoc group data communication criteria by an authorized user

Figure 7.17.3.1.6-1 below illustrates the modification of ad hoc group data communication criteria procedure by an authorized user.

Pre-conditions:

1. The MCData user 1 at the MCData client 1 is authorized to modify the criteria.

2. Both the MCData server and the MCData client 1 are aware of the criteria related to the ongoing ad hoc group data communication.



Figure 7.17.3.1.6-1: Modification of ad hoc group data communication criteria by an authorized user

1. The MCData user at the MCData client 1 is authorized and requests to modify the criteria for determining the list of participants. The MCData client 1 sends the modify ad hoc group data session criteria request to the MCData server which contains an updated criteria to determine the list of participants.

2. The MCData server verifies whether the MCData client 1 is authorized to modify the criteria which determines the list of participants during on-going ad hoc group data communication. The MCData server determines the list of ad hoc group call participants based on the criteria provided and identifies that MCData client 3 is to be removed from and MCData client 2 is to be added to the group. Depending on the criteria provided and based on local policy, the MCData server may modify the content of the criteria received in step 1 to determine the list of participants.

3. The MCData server sends modify ad hoc group data session criteria response containing the call resulting criteria used by the MCData server to determine the list of participants to be invited to the MCData client 1.

4. The MCData server sends the ad hoc group data session leave request to the MCData client 3 in order to remove it from the on-going ad hoc group data communication.

5. The MCData client 3 notifies the user of the ad hoc group data session leave request.

6. The MCData client 3 sends the ad hoc group data session leave response to the MCData server.

7. The MCData server sends the ad hoc group data session request towards MCData client 2.

NOTE 1: Steps 7 to 9 can occur at any time following step 3.

8. The receiving MCData client 2 notifies the user about the incoming ad hoc group data communication. The MCData server considers the MCData user as implicitly affiliated to the ad hoc group.

9. The MCData client 2 accepts the ad hoc group data session request and send ad hoc group data session responses to the MCData server. The response may also contain a functional alias of the responding MCData user, which is verified (valid and activated for the user) by the MCData server.

10. The MCData server may notify the initiating MCData user of all the users who are added to the on-going ad hoc group data communication. This notification may be sent to the initiating MCData user by the MCData server more than once during the data communication when MCData users join or leave the ad hoc group data communication. All ad hoc group data session notify messages contain the call resulting criteria used by the MCData server to determine the list of participants to be invited.

11. The MCData server may notify the authorized participants about the change in the participants list of on-going ad hoc group data communication. All ad hoc group data session notify messages contain the call resulting criteria used by the MCData server to determine the list of participants to be invited.

The MCData server continuously checks whether other MCData clients meet or if participating MCData clients no longer meet the criteria for the ad hoc group emergency call.

NOTE 2: If the ad hoc group call is associated with an ad hoc group emergency alert and the change of criteria caused the modification of ad hoc group call participant list then the ongoing ad hoc group emergency alert is modified accordingly.

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

##### 7.17.3.2.3 Ad hoc group data communication setup – Participants list determined by the MCData server

Figure 7.17.3.2.3-1 below illustrates the ad hoc group data communication setup procedure initiated by an authorized user wherein the list of participants is determined by the MCData server based on the citeria received from the MCData client and determined MCData users are from multiple MCData systems.

Pre-conditions:

1. The security aspects of sharing the user information between primary and partner MC systems shall be governed as per the service provider agreement between them. In this case, it is considered that the partner MC system share their users' information to the primary MC system.

2. The authorized MCData user/dispatcher belongs to the primary MC system.

3. The MCData server 1 of the primary MC system is where the authorized MCData user/dispatcher creates the ad hoc group.

4. Some users of the ad hoc group may belong to MCData server 2 of the partner MC systems.

5. The pre-configured group identity and pre-configured group configuration to be used for an ad hoc group have been preconfigured in MCData client and other participants of ad hoc group have also received the relevant security related information to allow them to communicate in an ad hoc group communication.



Figure 7.17.3.2.3-1: Ad hoc group data communication setup involving multiple MCData systems

1-3. Same as described in subclause 7.17.3.1.1.

4. The MCData server 1 determines the list of participants from the primary MC system and determines the partner MC system to be involved in the ad hoc group data communication based on the information present in the information element Criteria for determining the participants. This information element carries the criteria, indicator identifying pre-defined criteria, or a combination of both. Depending on the criteria provided and based on local policy, the MCData server may modify the content of the criteria received in step 1 to determine the list of participants.

NOTE 1: The content of the Criteria information element, the details of the pre-defined criteria, and the way how the MCData server determines the list of participants are left to implementation.

5. The MCData server 1 needs to involve the partner MC system based on the agreement and based on the criteria for determining the participants list, it sends the ad hoc group data session get userlist request to the MCData server 2. This request carries the call resulting criteria to be used by the partner MC system as determined in step 4.

6. MCData server 2 evaluates the criteria and determines the participants satisfying the criteria (i.e. MCData client 3 and MCData client 4) and sends the response containing the list of MCData users satisfying the criteria. The MCData server 2 may apply local policies if any while determining the participants satisfying the criteria.

7. The MCData server 1 compiles the list of participants to be invited for the ad hoc group data communication including the participants from both primary and partner MC system.

8a-8b. The MCData server 1 sends the ad hoc group data session request towards the MCData client 3 and MCData client 4. While sending the ad hoc group data session request, the MCData server shall remove the information elements that are not required to be conveyed to the target MCData clients. This request carries the pre-configured group ID whose configuration is to be applied for this ad hoc group data communication if end-to-end encryption is requested. The MCData server 1 considers the ad hoc group communication participants as implicitly affiliated to the ad hoc group.

9. The MCData server 1 sends the ad hoc group data session request towards the MCData client 2. While sending the ad hoc group data session request, the MCData server shall remove the information elements that are not required to be conveyed to the target MCData clients. This request carries the pre-configured group ID whose configuration is to be applied for this ad hoc group data communication if end-to-end encryption is requested.

10a-10c. The MCData clients receive incoming ad hoc group data communication and further notify their corresponding MCData users.

11. The MCData client 2 accepts the ad hoc group data session request, and sends ad hoc group data session response to the MCData server 1.

12. The MCData client 3 accepts the ad hoc group data session request, and sends ad hoc group data session response to the MCData server 1.

13. The MCData client 4 accepts the ad hoc group data session request, and sends ad hoc group data session response to the MCData server 1.

14. The MCData server 1 sends the ad hoc group data session response to MCData client 1 through the signalling path to inform about result of the participants responses. The ad hoc group data session response contains the call resulting criteria used by the MCData server to determine the list of participants to be invited.

15. The MCData server 1 may notify the initiating MCData user of all MCData users who acknowledged the ad hoc group data session request and joined the ad hoc group data communication. The MCData server 1 more than once during the data communication may send this notification to the initiating MCData user whenever an MCData user joins or leaves the MCData ad hoc group data communication. If the authorized users (not shown in figure) are configured to receive the participants information of ad hoc group data communication, the MCData server provides ad hoc group data session notify about all MCData users who acknowledged the ad hoc group data session request and joined the ad hoc group data communication, and when MCData users joins or leaves the MCData ad hoc group data communication. All ad hoc group data session notify messages contain the call resulting criteria used by the MCData server to determine the list of participants to be invited

16. The MCData client 1, MCData client 2, MCData client 3 and MCData client 4 establish media plane resources for data communication.

NOTE 2: The ad hoc group data session request and response exchanged between MCData server 1 of primary MC system and MCData client 3/MCData client 4 will always traversal through the MCData server 2.

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

##### 7.17.3.2.7 Modification of ad hoc group data session criteria by an authorized user

Figure 7.17.3.2.7-1 illustrates the modification of ad hoc group data session criteria procedure by the initiator of the ad hoc group data session between multiple MC systems.

Preconditions:

- The MCData user at the MCData client 1 is authorized to modify the criteria.

- The MCData server A and MCData server B are aware of the criteria related to the ongoing ad hoc group data session.

- MC system A and MC system B are interconnected.



Figure 7.17.3.2.7-1: Modifying the criteria for determining the participants during an ongoing ad hoc group data session between multiple MC systems

1. An ad hoc group data session has been established based on criteria sent by an authorized MCData client upon initiating the ad hoc group data session.

2. The MCData user at the MCData client 1 is authorized and wishes to modify the criteria for determining the list of ad hoc group data session participants.

3a. MCData client 1 sends a modify ad hoc group data session criteria request to MCData server A.

3b. MCData server A determines that the modify ad hoc group data session criteria request received in step 3a has impact on users in MCData server B. Depending on the criteria provided and based on local policy, the MCData server may modify the content of the criteria received in step 3a to determine the list of participants before sending it to MCData server B.

3c. MCData server A sends a modify ad hoc group data session criteria request to MCData server B containing the call resulting criteria to be used by MCData server B.

NOTE 1: If MCData server A identifies that the criteria require to add participants from another MC system then MCData server A sends an ad hoc group data session request to the MCData server in that MC system.

4a/b. The MCData server A receives the ad hoc group data session criteria modify response and forwards the response to MCData client 1 in MC system A

5. MCData server B detects that MCData client 3 meets the criteria for the ongoing ad hoc group data session initiated at MC system A.

5a. MCData server B sends an ad hoc group data session add user notification message towards MCData server A.

5b. MCData server A sends an ad hoc group data session request towards MCData client 3.

5c. The MCData user 3 is notified of entering an ongoing ad hoc group data session.

5d. MCData client 3 sends an ad hoc group data session response towards MCData server A.

5e. MCData server B sends an ad hoc group data session remove user notification message towards MCData server A.

5f. MCData server A sends an ad hoc group data session leave request towards MCData client 4.

5g. The MCData user 4 is notified of leaving an ongoing ad hoc group data session.

5h. MCData client 4 sends an ad hoc group data session leave response towards MCData server A.

6. The MCData server A may notify the authorised MCData user of all the users who are added to the on-going ad hoc group data session. This notification may be sent to the authorised MCData user by the MCData server A more than once during the data session when MCData users join or leave the ad hoc group data session. All ad hoc group data session notify messages contain the call resulting criteria used by the MCData server to determine the list of participants to be invited.

7. The MCData server Aadds MCData client 3 to the ad hoc group data session and removes MCData client 4 from the ad hoc group data session.

The MCData servers continuously check whether other MCData clients meet or if participating MCData clients no longer meet the criteria for the ad hoc group data session.

NOTE 2: If the ad hoc group data session is associated with an ad hoc group emergency alert and the change of criteria caused the modification of the ad hoc group data session participant list then the ongoing ad hoc group emergency alert is modified accordingly.

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

##### 7.17.6.1.2 Determine ad hoc group response (MCData server – MCData client)

Table 7.17.6.1.2-1 describes the information flow Determine ad hoc group response from the MCData server to the MCData client. This response to provide the server assigned MCData ad hoc group ID and preconfigured group identity of preconfigured group from which the configurations to be used (e.g. security related information).

Table 7.17.6.1.2-1 Determine ad hoc group response information elements

|  |  |  |
| --- | --- | --- |
| Information Element | Status | Description |
| MCData ID | M | The identity of the MCData user sending the request` |
| MCData ad hoc group ID (see NOTE 1) | O | The MCData group ID to be associated with the ad hoc group standalone short data service which is generated and assigned by the MCData server. |
| Preconfigured MCData group ID (see NOTE 2) | O | Group identity whose configuration is to be applied for ad hoc group standalone short data service. |
| Result | M | Result of the Determine ad hoc group request (success or failure) |
| Call resulting criteria for determining the participants (see NOTE 3) | O | Carries the details of criteria or meaningful label identifying the criteria or the combination of both that the MCData server used for determining the participants e.g., it can be a location based criteria to invite participants in a particular area |
| NOTE 1: If the result is success then this IE shall be included  NOTE 2: If the result is success and the end-to-end encryption is required, then this IE shall be included.  NOTE 3: This IE shall be present if the ad hoc group data communication is based on criteria. | | |

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

##### 7.17.6.1.4 Ad hoc group standalone data request (MCData server – MCData client)

Table 7.17.6.1.4-1 describes the information flow for the Ad hoc group standalone data request sent from the MCData server to the MCData client.

Table 7.17.6.1.4-1: Ad hoc group standalone data request (MCData server – MCData client)

|  |  |  |
| --- | --- | --- |
| 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 ad hoc group ID | M | The MCData group ID associated with ad hoc group standalone short data service |
| Preconfigured MCData group ID (see NOTE 1) | O | Group identity whose configuration is to be applied for this ad hoc group standalone short data service. |
| 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 |
| Emergency indicator (see NOTE 2) | O | Indicates that the data request is for emergency ad hoc group standalone short data service |
| Imminent peril indicator (see NOTE 2) | O | Indicates that the data request is for imminent peril ad hoc group standalone short data service |
| 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 |
| Application identifier (see NOTE 3) | 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 |
| Time to live | O | Indicates how long the ad hoc group is persisted and members can respond to the data transfer. |
| Call resulting criteria for determining the participants (see NOTE 4 | O | Carries the details of criteria or meaningful label identifying the criteria or the combination of both that the MCData server used for determining the participants e.g., it can be a location based criteria to invite participants in a particular area |
| NOTE 1: If end-to-end encryption is required, then this element is included.  NOTE 2: If used, only one of these information elements shall be present.  NOTE 3: The application identifier shall be included only if the payload destination type indicates that the payload is for application consumption.  NOTE 4: This IE shall be present if the ad hoc group data communication is based on criteria. | | |

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