**3GPP TSG-CT3 Meeting #130 *C3-234xxx***

**Xiamen, China, 9th Oct 2023 – 13th Oct 2023 revision of C3-234189**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *CR-Form-v12.2* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **29.538** | **CR** | **0032** | **rev** | **1** | **Current version:** | **18.3.0** |  |
|  | | | | | | | | |
| *For* [***HELP***](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 |  | Radio Access Network |  | Core Network | **X** |

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | | | | | | | | |
| ***Title:*** | Corrections to BgMessageDelivery data type. | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Nokia, Nokia Shanghai Bell | | | | | | | | | |
| ***Source to TSG:*** | CT3 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | 5GMARCH\_Ph2 | | | | |  | ***Date:*** | | | 2023-09-29 |
|  |  | | | |  | |  | | |  |
| ***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:*** | | MSGG\_BGDelivery Service operation corresponds to clause 9.2.3.1.2 as defined in TS 23.554:  9.2.3.1.2 Send\_Message operation  API operation name: Create\_MSGin5G\_Message  Description: Send an MSGin5G message to Broadcast Message Gateway.  Known Consumers: M5S.  Inputs: Refer subclause 8.3.3  and as per Table 8.3.3-1: MSGin5G message request from MSGin5G Server,   1. Payload is defined as optional. 2. Broadcast Area ID, Message is segmented, Group Service ID, Messaging Topic, Segmentation Set Identifier, Total number of message segments, Message segment number, Last Segment Flag, Priority type are defined as optional.   In TS 29.538, cl 9.3.5.2.2 Type: BgMessageDelivery,   * Payload is defined mandatory * Broadcast Area ID, Message is segmented, Group Service ID, Messaging Topic, Segmentation Set Identifier, Total number of message segments, Message segment number, Last Segment Flag, Priority type indicated in cl 8.3.3 in TS 23.554 are not defined. * Address data type needs to be included in the re-used data type table. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | In TS 29.538, cl 9.3.5.2.2 Type: BgMessageDelivery,   * Payload data type is changed from mandatory to optional * Editor's Note is added to consider update of all the missing optional attributes indicated in clause 8.3.3 of TS 23.554. * Address data type is included in the re-used data type table.   as per TS 29.501, cl 4.3.1.2: | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | Inconsistent requirements. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 9.3.5.1, 9.3.5.2.2, A.6 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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 introduces backward compatible corrections in the open API MSGG\_BGDelivery API | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | |  | | | | | | | | |

\* \* \* \* Start of changes \* \* \* \*

#### 9.3.5.1 General

This clause specifies the application data model supported by the API. Data types listed in clause 7.2 apply to this API. Table 9.3.5.1-1 specifies the data types defined specifically for the MSGG\_BGDelivery API service.

Table 9.3.5.1-1: MSGG\_BGDelivery API specific Data Types

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | Section defined | Description | Applicability |
| BgMessageDelivery | 9.3.5.2.2 | Information within broadcast message delivery request. |  |

Table 9.3.5.1-2 specifies data types re-used by the MSGG\_N3GDelivery API service.

Table 9.3.5.1-2: Re-used Data Types

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | Reference | Comments | Applicability |
| Address | 9.1.5.2.3 | The data type of the oriAddr and destAddr. |  |

\* \* \* \* Next changes \* \* \* \*

##### 9.3.5.2.2 Type: BgMessageDelivery

Table 9.3.5.2.2-1: Definition of type BgMessageDelivery

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description | Applicability |
| oriAddr | Address | M | 1 | The service identity of the originating MSGin5G Client or the originating Application Server.  This IE is copied from the associated inbound message (NOTE). |  |
| destAddr | Address | M | 1 | The service identity of the Broadcast Service Area where the message needs to be broadcast. |  |
| appId | string | O | 0..1 | Identifies the application(s) for which the payload is intended.  This list of Application IDs IE is required when the message is sent to one or multiple Application Clients served by same MSGin5G Client. |  |
| msgId | string | M | 1 | Unique identifier of this message.  This IE is copied from the associated inbound message request |  |
| delivStReqInd | boolean | O | 0..1 | Indicates if delivery acknowledgement from the recipient is requested.  This IE is copied from the associated inbound message.  Set to "true" if delivery acknowledgement from the recipient is requested. otherwise set to "false". Default value is "false". |  |
| payload | string | O | 1 | Payload of the message.  This IE is copied from the associated inbound message. |  |
| NOTE: The addrType in Address data type shall only include AS or UE to represent the originating of message request. | | | | | |

Editor's Note: Definition of all the attributes in BgMessageDelivery data type as defined in 3GPP TS 23.554 [2] clause 8.3.3 is FFS.

\* \* \* \* Next changes \* \* \* \*

A.6 MSGG\_BGDelivery API

openapi: 3.0.0

info:

title: MSGG\_BGDelivery

version: 1.0.0-alpha.1

description: |

API for Broadcast Message Delivery Service.

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externalDocs:

description: >

3GPP TS 29.538 V18.2.0; Enabling MSGin5G Service; Application Programming Interfaces (API)

specification; Stage 3

url: https://www.3gpp.org/ftp/Specs/archive/29\_series/29.538/

servers:

- url: '{apiRoot}/msgg-bgdelivery/v1'

variables:

apiRoot:

default: https://example.com

description: apiRoot as defined in clause 4.4 of 3GPP TS 29.501

security:

- {}

- oAuth2ClientCredentials:

- msgg-bgdelivery

paths:

/deliver-message:

post:

summary: deliver message to Broadcast Message Gateway

tags:

- Broadcast Message delivery

requestBody:

required: true

content:

application/json:

schema:

$ref: '#/components/schemas/BgMessageDelivery'

responses:

'204':

description: No Content, Message delivery successful

'400':

$ref: 'TS29571\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29571\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29571\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29571\_CommonData.yaml#/components/responses/404'

'411':

$ref: 'TS29571\_CommonData.yaml#/components/responses/411'

'413':

$ref: 'TS29571\_CommonData.yaml#/components/responses/413'

'415':

$ref: 'TS29571\_CommonData.yaml#/components/responses/415'

'429':

$ref: 'TS29571\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29571\_CommonData.yaml#/components/responses/500'

'503':

$ref: 'TS29571\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29571\_CommonData.yaml#/components/responses/default'

components:

securitySchemes:

oAuth2ClientCredentials:

type: oauth2

flows:

clientCredentials:

tokenUrl: '{nrfApiRoot}/oauth2/token'

scopes:

msgg-bgdelivery: Access to the MSGG\_BGDelivery API

schemas:

#

# STRUCTURED DATA TYPES

#

BgMessageDelivery:

description: Broadcast message delivery data

type: object

required:

- oriAddr

- destAddr

- msgId

properties:

oriAddr:

$ref: 'TS29538\_MSGG\_L3GDelivery.yaml#/components/schemas/Address'

destAddr:

$ref: 'TS29538\_MSGG\_L3GDelivery.yaml#/components/schemas/Address'

appId:

type: string

msgId:

type: string

delivStReqInd:

type: boolean

payload:

type: string

\* \* \* \* End of changes \* \* \* \*