**3GPP TSG CT WG3 Meeting #135 *C3-243461***

**Hyderabad, IN, 27th – 31st May, 2024 (was C3-243102)**

|  |
| --- |
| *CR-Form-v12.3* |
| **CHANGE REQUEST** |
|  |
|  | **29.538** | **CR** | **0052** | **rev** | **1** | **Current version:** | **18.5.0** |  |
|  |
| *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)*.* |
|  |

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

|  |
| --- |
|  |
| ***Title:***  | Correct references and clarify regarding NBI usage. |
|  |  |
| ***Source to WG:*** | Nokia, Ericsson  |
| ***Source to TSG:*** | CT3 |
|  |  |
| ***Work item code:*** | NBI18 |  | ***Date:*** | 2024-05-20 |
|  |  |  |  |  |
| ***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 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-17 (Release 17)Rel-18 (Release 18)Rel-19 (Release 19) Rel-20 (Release 20)* |
|  |  |
| ***Reason for change:*** | This TS is NBI but refers to TS 29.500 at many places, which is updated to refer TS 29.122 as required by NBI specifications.Additionally, some errors related to references are corrected. |
|  |  |
| ***Summary of change:*** | Reference is updated to point to appropriate clauses |
|  |  |
| ***Consequences if not approved:*** | This may lead to misunderstanding and confusion due to incorrect references. |
|  |  |
| ***Clauses affected:*** | 7.1, 7.3, 7.4, 7.5.1, 7.5.2, 7.7, 7.8, 7.9, 7.10, 8.1.2.2.3.1, 8.1.2.3.3.1, 8.2.3.2.2, 8.2.3.4.2, 8.3.2.2.3.1, 8.3.2.3.3.1, 8.3.3.2.2, 8.3.3.3.2, 8.3.4, 8.3.4.2.3.1, 9.1.3.2.2, 9.1.3.3.2, 9.2.3.2.2, 9.2.3.3.2, 9.3.3.2.2, A.2, A.3, A.4, A.5, A.6, A.7 |
|  |  |
|  | **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 provides backward compatible corrections to the open API defined in this specification:1. MSGS\_ASRegistration API
2. MSGS\_MSGDelivery API
3. MSGG\_L3GDelivery API
4. MSGG\_N3Delivery API
5. MSGG\_BGDelivery API
6. MSGG\_TopiclistEvent API
 |
|  |  |
| ***This CR's revision history:*** |  |

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

## 7.1 General

MSGin5G APIs allow secure access to the capabilities provided by the MSGin5G.

This document specifies the procedures triggered at different functional entities as a result of API invocation requests and event notifications. The stage-2 level requirements and signalling flows are defined in 3GPP TS 23.554 [2].

Several design aspects, as mentioned in the following clauses, are specified in 3GPP TS 29.122 [24] and referenced by this specification.

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

## 7.3 Usage of HTTP

For MSGin5G APIs, support of HTTP/1.1 (IETF RFC 9110 [11], IETF RFC 9111 [14] and IETF RFC 9112 [10]) over TLS is mandatory and support of HTTP/2 (IETF RFC 9113 [16]) over TLS is recommended.

A functional entity desiring to use HTTP/2 shall use the HTTP upgrade mechanism to negotiate applicable HTTP version as described in IETF RFC 9113 [16].

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

## 7.4 Content type

JSON, IETF RFC 8259 [17], shall be used as content type of the HTTP bodies specified in the present specification as specified in clause 5.2.3 of 3GPP TS 29.122 [24]. The use of the JSON format shall be signalled by the content type "application/json".

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

### 7.5.1 Resource URI structure

The resource URI structure of all the APIs specified in this document shall be as specified in clause 5.2.4.1 of 3GPP TS 29.122 [24].

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

### 7.5.2 Custom operations URI structure

The URI of a custom operation which is associated with a resource shall be as specified in clause 5.2.4.2 of 3GPP TS 29.122 [24].

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

## 7.7 Error Handling

HTTP error handling shall be supported as specified in clause 5.2.6 of 3GPP TS 29.122 [24].

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

## 7.8 Feature negotiation

The procedures in clause 5.2.7 of 3GPP TS 29.122 [24] shall be applicable for the APIs defined in the present specification. For each of the APIs defined, the applicable list of features is contained in the related API definition.

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

## 7.9 HTTP headers

The MSGin5G API shall support HTTP custom header fields specified in clause 5.2.8 of 3GPP TS 29.122 [24]. No specific custom headers are defined for the MSGin5G API in the present specification.

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

## 7.10 Conventions for Open API specification files

The conventions for Open API specification files as specified in clause 5.2.9 of 3GPP TS 29.122 [24] shall be applicable for all APIs in this document.

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

###### 8.1.2.2.3.1 POST

This method shall support the URI query parameters specified in table 8.1.2.2.3.1-1.

Table 8.1.2.2.3.1-1: URI query parameters supported by the POST method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| n/a |  |  |  |  |

This method shall support the request data structures specified in table 8.1.2.2.3.1-2 and the response data structures and response codes specified in table 8.1.2.2.3.1-3.

Table 8.1.2.2.3.1-2: Data structures supported by the POST Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| ASRegistration | M | 1 | AS registration request information. |

Table 8.1.2.2.3.1-3: Data structures supported by the POST Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Responsecodes | Description |
| ASRegistrationAck | M | 1 | 201 Created | AS information is registered successfully at MSGin5G Server. The URI of the created resource shall be returned in the "Location" HTTP header. |
| NOTE: The mandatory HTTP error status codes for the POST method listed in table 5.2.6-1 of 3GPP TS 29.122 [24] shall also apply. |

Table 8.1.2.2.3.1-4: Headers supported by the POST method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| n/a |  |  |  |  |

Table 8.1.2.2.3.1-5: Headers supported by the 201 response code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | String | M | 1 | Contains the URI of the newly created resource, according to the structure: {apiRoot}/msgs-asregistration/<apiVersion>/registrations/{registrationId} |

Table 8.1.2.2.3.1-6: Links supported by the 200 Response Code on this endpoint

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Resource name | HTTP method or custom operation | Link parameter(s) | Description |
| n/a |  |  |  |  |

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

###### 8.1.2.3.3.1 DELETE

This method deregisters an AS registration from the MSGin5G Server. This method shall support the URI query parameters specified in the table 8.1.2.3.3.1-1.

Table 8.1.2.3.3.1-1: URI query parameters supported by the DELETE method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| n/a |  |  |  |  |

This method shall support the request data structures specified in table 8.1.2.3.3.1-2 and the response data structures and response codes specified in table 8.1.2.3.3.1-3.

Table 8.1.2.3.3.1-2: Data structures supported by the DELETE Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| n/a |  |  |  |

Table 8.1.2.3.3.1-3: Data structures supported by the DELETE Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Responsecodes | Description |
| ASRegistrationAck | M | 1 | 200 OK | The AS DeRegistration information matching the registrationId is deleted. |
| n/a |  |  | 204 No Content | Successful response. The individual AS registration matching the registrationId is successfully deleted. |
| NOTE: The mandatory HTTP error status codes for the POST method listed in table 5.2.6-1 of 3GPP TS 29.122 [24] shall also apply. |

Table 8.1.2.3.3.1-4: Headers supported by the DELETE method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| n/a |  |  |  |  |

Table 8.1.2.3.3.1-5: Headers supported by the 204 response code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| n/a |  |  |  |  |

Table 8.1.2.3.3.1-6: Links supported by the 200 Response Code on this endpoint

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Resource name | HTTP method or custom operation | Link parameter(s) | Description |
| n/a |  |  |  |  |

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

##### 8.2.3.2.2 Operation Definition

This operation shall support the response data structures and response codes specified in Table 8.2.3.2.2-1 and Table 8.2.3.2.2-2.

Table 8.2.3.2.2-1: Data structures supported by the POST Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| ASMessageDelivery | M | 1 | Represents the data to be used for AS to deliver message. |

Table 8.2.3.2.2-2: Data structures supported by the POST Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Responsecodes | Description |
| MessageDeliveryAck | M | 1 | 200 OK | AS Message is delivered successfully. |
| NOTE: The mandatory HTTP error status code for the POST method listed in Table 5.2.6-1 of 3GPP TS 29.122 [24] also apply. |

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

##### 8.2.3.4.2 Operation Definition

This operation shall support the response data structures and response codes specified in Table 8.2.3.4.2-1 and Table 8.2.3.4.2-2.

Table 8.2.3.4.2-1: Data structures supported by the POST Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| DeliveryStatusReport | M | 1 | Represents the data to be used for Message Gateway (on behalf of Legacy 3GPP UE or Non-3GPP UE) or the Application Server to deliver status report. |

Table 8.2.3.4.2-2: Data structures supported by the POST Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Responsecodes | Description |
| MessageDeliveryAck | M | 1 | 200 OK | The status report is delivered successfully. |
| NOTE: The mandatory HTTP error status code for the POST method listed in Table 5.2.6-1 of 3GPP TS 29.122 [24] also apply. |

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

###### 8.3.2.2.3.1 POST

This method shall support the URI query parameters specified in table 8.3.2.2.3.1-1.

Table 8.3.2.2.3.1-1: URI query parameters supported by the POST method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| n/a |  |  |  |  |

This method shall support the request data structures specified in table 8.3.2.2.3.1-2 and the response data structures and response codes specified in table 8.3.2.2.3.1-3.

Table 8.3.2.2.3.1-2: Data structures supported by the POST Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| TopicListSubscription | M | 1 | Messaging Topic list subscription request information. |

Table 8.3.2.2.3.1-3: Data structures supported by the POST Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Responsecodes | Description |
| TopicListSubscriptionAck | M | 1 | 201 Created | The creation of an Messaging Topic list subscription resource is confirmed.The URI of the created resource shall be returned in the "Location" HTTP header. |
| NOTE: The mandatory HTTP error status codes for the POST method listed in table 5.2.6-1 of 3GPP TS 29.122 [24] shall also apply. |

Table 8.3.2.2.3.1-4: Headers supported by the POST method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| n/a |  |  |  |  |

Table 8.3.2.2.3.1-5: Headers supported by the 201 response code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | String | M | 1 | Contains the URI of the newly created resource, according to the structure: {apiRoot}/msgs-topiclistevent/<apiVersion>/topiclist-subscriptions/{subscriptionId} |

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

###### 8.3.2.3.3.1 POST

This method shall support the URI query parameters specified in table 8.3.2.3.3.1-1.

Table 8.3.2.3.3.1-1: URI query parameters supported by the POST method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| n/a |  |  |  |  |

This method shall support the request data structures specified in table 8.3.2.3.3.1-2 and the response data structures and response codes specified in table 8.3.2.3.3.1-3.

Table 8.3.2.3.3.1-2: Data structures supported by the POST Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| TopicListUnsubscription | M | 1 | Messaging Topic list unsubscription request information. |

Table 8.3.2.3.3.1-3: Data structures supported by the POST Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Responsecodes | Description |
| n/a |  |  | 204 No Content | Successful response. The individual MSGin5G Server Messaging Topic list subscription matching the subscriptionId is successfully deleted. |
| TopicListUnsubcriptionAck | M | 1 | 200 OK | Response of successfully handled Topic list unsubscription request with status information if subscription is not deleted. |
| NOTE: The mandatory HTTP error status codes for the POST method listed in table 5.2.6-1 of 3GPP TS 29.122 [24] shall also apply. |

Table 8.3.2.3.3.1-4: Headers supported by the POST method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| n/a |  |  |  |  |

Table 8.3.2.3.3.1-5: Headers supported by the 204 response code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| n/a |  |  |  |  |

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

##### 8.3.3.2.2 Operation Definition

This operation shall support the request data structures shown in Table 8.3.3.2.2-1 and the response data structures and error codes specified in Tables 8.3.3.2.2-2.

Table 8.3.3.2.2-1: Data structures supported by the POST Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| TopicSubscription | M | 1 | Information about the Messaging Topic subscription that the MSGin5G Server shall create. |

Table 8.3.3.2.2-2: Data structures supported by the POST Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Responsecodes | Description |
| TopicSubscriptionAck | M | 1 | 200 OK | Successful request to trigger the creation of a subscription for Messaging Topic at the MSGin5G Server. |
| NOTE: The mandatory HTTP error status code for the POST method listed in Table 5.2.6-1 of 3GPP TS 29.122 [24] also apply. |

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

##### 8.3.3.3.2 Operation Definition

This operation shall support the request data structures shown in Table 8.3.3.3.2-1 and the response data structures and error codes specified in Tables 8.3.3.3.2-2.

Table 8.3.3.3.2-1: Data structures supported by the POST Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| TopicUnsubscription | M | 1 | Reference used to identify the Messaging Topic subscription that the MSGin5G Server shall remove. |

Table 8.3.3.3.2-2: Data structures supported by the POST Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Responsecodes | Description |
| n/a |  |  | 204 No Content | Successful request to trigger the removal of a subscription for Messaging Topic(s) on the MSGin5G Server. |
| NOTE: The mandatory HTTP error status code for the POST method listed in Table 5.2.6-1 of 3GPP TS 29.122 [24] also apply. |

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

### 8.3.4 Notifications

Notifications shall comply to clause 5.2.5 of 3GPP TS 29.122 [24].

Table 8.3.4.1-1: Notifications overview

|  |  |  |  |
| --- | --- | --- | --- |
| Notification | Callback URI | HTTP method or custom operation | Description(service operation) |
| TopicList Notification | {notificationURI} | POST | Notify about Messaging Topic list changes from MSGin5G Server. |

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

###### 8.3.4.2.3.1 POST

This method shall support the request data structures specified in table 8.3.4.2.3.1-1 and the response data structures and response codes specified in table 8.3.4.2.3.1-2.

Table 8.3.4.2.3.1-1: Data structures supported by the POST Request Body

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| TopicListNotification | M | 1 | Provides information about subscribed Messaging Topic list. |

Table 8.3.4.2.3.1-2: Data structures supported by the POST Response Body

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response codes | Description |
| n/a |  |  | 204 No Content | The receipt of the Notification is acknowledged.  |
| NOTE 1: The mandatory HTTP error status codes for the POST method listed in Table 5.2.6-1 of 3GPP TS 29.122 [24] also apply. |

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

##### 9.1.3.2.2 Operation Definition

This operation shall support the response data structures and response codes specified in table 9.1.3.2.2-1 and table 9.1.3.2.2-2.

Table 9.1.3.2.2-1: Data structures supported by the POST Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| L3gMessageDelivery | M | 1 | Represents the data to be used for MSGin5G Server to deliver message. |

Table 9.1.3.2.2-2: Data structures supported by the POST Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Responsecodes | Description |
| n/a |  |  | 204 No Content | The Message is Delivered successfully. |
| NOTE: The mandatory HTTP error status code for the POST method listed in Table 5.2.6-1 of 3GPP TS 29.122 [24] also apply. |

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

##### 9.1.3.3.2 Operation Definition

This operation shall support the response data structures and response codes specified in Table 9.1.3.3.2-1 and Table 9.1.3.3.2-2.

Table 9.1.3.3.2-1: Data structures supported by the POST Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| DeliveryStatusReport | M | 1 | Represents the data to be used for MSGin5G Server to deliver status report. |

Table 9.1.3.3.2-2: Data structures supported by the POST Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Responsecodes | Description |
| n/a |  |  | 204 No Content | The status report is Delivered successfully. |
| NOTE: The mandatory HTTP error status code for the POST method listed in Table 5.2.6-1 of 3GPP TS 29.122 [24] also apply. |

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

##### 9.2.3.2.2 Operation Definition

This operation shall support the response data structures and response codes specified in table 9.2.3.2.2-1 and table 9.2.3.2.2-2.

Table 9.2.3.2.2-1: Data structures supported by the POST Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| N3gMessageDelivery | M | 1 | Represents the data to be used for MSGin5G Server to deliver message. |

Table 9.2.3.2.2-2: Data structures supported by the POST Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Responsecodes | Description |
| n/a |  |  | 204 No Content | The Message is Delivered successfully. |
| NOTE: The mandatory HTTP error status code for the POST method listed in Table 5.2.6-1 of 3GPP TS 29.122 [24] also apply. |

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

##### 9.2.3.3.2 Operation Definition

This operation shall support the response data structures and response codes specified in table 9.2.3.3.2-1 and table 9.2.3.3.2-2.

Table 9.2.3.3.2-1: Data structures supported by the POST Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| DeliveryStatusReport | M | 1 | Represents the data to be used for MSGin5G Server to deliver status report. |

Table 9.2.3.3.2-2: Data structures supported by the POST Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Responsecodes | Description |
| n/a |  |  | 204 No Content | The status report is Delivered successfully. |
| NOTE: The mandatory HTTP error status code for the POST method listed in Table 5.2.6-1 of 3GPP TS 29.122 [24] also apply. |

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

##### 9.3.3.2.2 Operation Definition

This operation shall support the response data structures and response codes specified in table 9.3.3.2.2-1 and table 9.3.3.2.2-2.

Table 9.3.3.2.2-1: Data structures supported by the POST Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| BgMessageDelivery | M | 1 | Represents the data to be used for MSGin5G Server to deliver message. |

Table 9.3.3.2.2-2: Data structures supported by the POST Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Responsecodes | Description |
| n/a |  |  | 204 No Content | The Message is delivered successfully. |
| NOTE: The mandatory HTTP error status code for the POST method listed in Table 5.2.6-1 of 3GPP TS 29.122 [24] also apply. |

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

# A.2 MSGS\_ASRegistration API

openapi: 3.0.0

info:

 title: MSGS\_ASRegistration

 version: 1.1.0-alpha.2

 description: |

 API for MSGS AS Registration Service.

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externalDocs:

 description: >

 3GPP TS 29.538 V18.4.0; 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}/msgs-asregistration/v1'

 variables:

 apiRoot:

 default: https://example.com

 description: apiRoot as defined in clause 5.2.4 of 3GPP TS 29.122

security:

 - {}

 - oAuth2ClientCredentials: []

paths:

 /registrations:

 post:

 summary: Registers a new AS at a MSGin5G Server

 tags:

 - AS registration

 requestBody:

 required: true

 content:

 application/json:

 schema:

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

 responses:

 '201':

 description: AS information is registered successfully at MSGin5G Server

 content:

 application/json:

 schema:

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

 headers:

 Location:

 description: 'Contains the URI of the newly created resource'

 required: true

 schema:

 type: string

 '400':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/400'

 '401':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/401'

 '403':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/403'

 '404':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/404'

 '411':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/411'

 '413':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/413'

 '415':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/415'

 '429':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/429'

 '500':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/500'

 '503':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/503'

 default:

 $ref: 'TS29122\_CommonData.yaml#/components/responses/default'

 /registrations/{registrationId}:

 delete:

 summary: Delete an existing AS registration at MSGin5G Server

 tags:

 - AS DeRegistration

 parameters:

 - name: registrationId

 in: path

 description: AS registration Id

 required: true

 schema:

 type: string

 responses:

 '200':

 description: The individual AS registration is deleted successfully.

 content:

 application/json:

 schema:

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

 '204':

 description: >

 No Content. The individual AS registration resource is deleted successfully.

 '400':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/400'

 '401':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/401'

 '403':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/403'

 '404':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/404'

 '429':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/429'

 '500':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/500'

 '503':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/503'

 default:

 $ref: 'TS29122\_CommonData.yaml#/components/responses/default'

components:

 securitySchemes:

 oAuth2ClientCredentials:

 type: oauth2

 flows:

 clientCredentials:

 tokenUrl: '{tokenUrl}'

 scopes: {}

 schemas:

#

# STRUCTURED DATA TYPES

#

 ASRegistration:

 description: AS registration data

 type: object

 required:

 - asSvcId

 properties:

 asSvcId:

 type: string

 appId:

 type: string

 targetUri:

 $ref: 'TS29122\_CommonData.yaml#/components/schemas/Uri'

 asProf:

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

 ASRegistrationAck:

 description: AS registration response data

 type: object

 required:

 - asSvcId

 - result

 properties:

 asSvcId:

 type: string

 result:

 $ref: 'TS29122\_CommonData.yaml#/components/schemas/ProblemDetails'

 ASProfile:

 description: AS profile information

 type: object

 properties:

 appName:

 type: string

 appProviders:

 type: array

 items:

 type: string

 minItems: 1

 description: The provider of the AS.

 appSenarios:

 type: array

 items:

 type: string

 minItems: 1

 description: The application scenario.

 appCategory:

 type: string

 asStatus:

 type: string

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

# A.3 MSGS\_MSGDelivery API

openapi: 3.0.0

info:

 title: MSGS\_MSGDelivery

 version: 1.1.0-alpha.3

 description: |

 API for MSGG MSGin5G Server Message Delivery Service.

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externalDocs:

 description: >

 3GPP TS 29.538 V18.4.0; 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}/msgs-msgdelivery/v1'

 variables:

 apiRoot:

 default: https://example.com

 description: apiRoot as defined in clause 5.2.4 of 3GPP TS 29.122

security:

 - {}

 - oAuth2ClientCredentials: []

paths:

 /deliver-as-message:

 post:

 summary: AS deliver message to MSGin5G Server

 tags:

 - AS Message delivery

 requestBody:

 required: true

 content:

 application/json:

 schema:

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

 responses:

 '200':

 description: OK, AS Message delivery successful

 content:

 application/json:

 schema:

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

 '400':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/400'

 '401':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/401'

 '403':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/403'

 '404':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/404'

 '411':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/411'

 '413':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/413'

 '415':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/415'

 '429':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/429'

 '500':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/500'

 '503':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/503'

 default:

 $ref: 'TS29122\_CommonData.yaml#/components/responses/default'

 /deliver-ue-message:

 post:

 summary: UE deliver message to MSGin5G Server

 tags:

 - UE Message delivery

 requestBody:

 required: true

 content:

 application/json:

 schema:

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

 responses:

 '200':

 description: OK, UE Message delivery successful

 content:

 application/json:

 schema:

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

 '400':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/400'

 '401':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/401'

 '403':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/403'

 '404':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/404'

 '411':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/411'

 '413':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/413'

 '415':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/415'

 '429':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/429'

 '500':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/500'

 '503':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/503'

 default:

 $ref: 'TS29122\_CommonData.yaml#/components/responses/default'

 /deliver-report:

 post:

 summary: AS or UE deliver status report to MSGin5G Server

 tags:

 - AS/UE status report delivery

 requestBody:

 required: true

 content:

 application/json:

 schema:

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

 responses:

 '200':

 description: OK, status report delivery successfully

 content:

 application/json:

 schema:

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

 '400':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/400'

 '401':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/401'

 '403':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/403'

 '404':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/404'

 '411':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/411'

 '413':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/413'

 '415':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/415'

 '429':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/429'

 '500':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/500'

 '503':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/503'

 default:

 $ref: 'TS29122\_CommonData.yaml#/components/responses/default'

components:

 securitySchemes:

 oAuth2ClientCredentials:

 type: oauth2

 flows:

 clientCredentials:

 tokenUrl: '{tokenUrl}'

 scopes: {}

 schemas:

#

# STRUCTURED DATA TYPES

#

 ASMessageDelivery:

 description: Contains the AS message delivery data

 type: object

 required:

 - oriAddr

 - destAddr

 - msgId

 - stoAndFwInd

 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

 priority:

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

 segInd:

 type: boolean

 segParams:

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

 stoAndFwInd:

 type: boolean

 stoAndFwParams:

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

 latency:

 type: integer

 UEMessageDelivery:

 description: Contains the UE message delivery data

 type: object

 required:

 - oriAddr

 - destAddr

 - msgId

 - stoAndFwInd

 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

 segInd:

 type: boolean

 segParams:

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

 stoAndFwInd:

 type: boolean

 stoAndFwParams:

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

 MessageDeliveryAck:

 description: Contains the message delivery ack data

 type: object

 required:

 - oriAddr

 - msgId

 properties:

 oriAddr:

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

 msgId:

 type: string

 status:

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

 failureCause:

 type: string

 MessageSegmentParameters:

 description: Contains the message segment parameters data

 type: object

 properties:

 segId:

 type: string

 totalSegCount:

 type: integer

 segNumb:

 type: integer

 lastSegFlag:

 type: boolean

 StoreAndForwardParameters:

 description: Contains the store and forward parameters data

 type: object

 properties:

 exprTime:

 $ref: 'TS29122\_CommonData.yaml#/components/schemas/DateTime'

 DeliveryStatusReport:

 description: Contains the delivery status report data

 type: object

 required:

 - oriAddr

 - destAddr

 - msgId

 - delivSt

 properties:

 oriAddr:

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

 destAddr:

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

 msgId:

 type: string

 failureCause:

 type: string

 delivSt:

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

#

# SIMPLE DATA TYPES

#

#

# ENUMERATIONS

#

 DeliveryStatus:

 anyOf:

 - type: string

 enum:

 - DELY\_FAILED

 - DELY\_STORED

 - type: string

 description: >

 This string provides forward-compatibility with future

 extensions to the enumeration but is not used to encode

 content defined in the present version of this API.

 description: |

 Indicates if delivery is a failure, or if the message is stored for deferred delivery.

 Possible values are:

 - DELY\_FAILED: Indicates that the message delivery is failed.

 - DELY\_STORED: Indicates that the message is stored for deferred delivery.

 ReportDeliveryStatus:

 anyOf:

 - type: string

 enum:

 - REPT\_DELY\_SUCCESS

 - REPT\_DELY\_FAILED

 - type: string

 description: >

 This string provides forward-compatibility with future

 extensions to the enumeration but is not used to encode

 content defined in the present version of this API.

 description: |

 The delivery status description, including success or failure in delivery.

 Possible values are:

 - REPT\_DELY\_SUCCESS: Indicates that the report delivery is successful.

 - REPT\_DELY\_FAILED: Indicates that the report delivery is failed.

 Priority:

 anyOf:

 - type: string

 enum:

 - HIGH

 - MIDDLE

 - LOW

 - type: string

 description: >

 This string provides forward-compatibility with future

 extensions to the enumeration but is not used to encode

 content defined in the present version of this API.

 description: |

 Application priority level requested for this message.

 Possible values are:

 - HIGH: Indicates the messages should be sent in high priority.

 - MIDDLE: Indicates the messages should be sent in middle priority.

 - LOW: Indicates the messages should be sent in low priority.

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

# A.4 MSGG\_L3GDelivery API

openapi: 3.0.0

info:

 title: MSGG\_L3GDelivery

 version: 1.1.0-alpha.2

 description: |

 API for MSGG L3G Message Delivery Service.

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externalDocs:

 description: >

 3GPP TS 29.538 V18.4.0; 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-l3gdelivery/v1'

 variables:

 apiRoot:

 default: https://example.com

 description: apiRoot as defined in clause 5.2.4 of 3GPP TS 29.122

security:

 - {}

 - oAuth2ClientCredentials: []

paths:

 /deliver-message:

 post:

 summary: deliver message to Legacy 3GPP Message Gateway

 tags:

 - L3G Message delivery

 requestBody:

 required: true

 content:

 application/json:

 schema:

 $ref: '#/components/schemas/L3gMessageDelivery'

 responses:

 '204':

 description: No Content, Message delivery successful

 '400':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/400'

 '401':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/401'

 '403':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/403'

 '404':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/404'

 '411':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/411'

 '413':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/413'

 '415':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/415'

 '429':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/429'

 '500':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/500'

 '503':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/503'

 default:

 $ref: 'TS29122\_CommonData.yaml#/components/responses/default'

 /deliver-report:

 post:

 summary: deliver status report to Legacy 3GPP Message Gateway

 tags:

 - L3G status report delivery

 requestBody:

 required: true

 content:

 application/json:

 schema:

 $ref: 'TS29538\_MSGS\_MSGDelivery.yaml#/components/schemas/DeliveryStatusReport'

 responses:

 '204':

 description: No Content, status report delivery successfully

 '400':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/400'

 '401':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/401'

 '403':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/403'

 '404':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/404'

 '411':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/411'

 '413':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/413'

 '415':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/415'

 '429':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/429'

 '500':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/500'

 '503':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/503'

 default:

 $ref: 'TS29122\_CommonData.yaml#/components/responses/default'

components:

 securitySchemes:

 oAuth2ClientCredentials:

 type: oauth2

 flows:

 clientCredentials:

 tokenUrl: '{tokenUrl}'

 scopes: {}

 schemas:

#

# STRUCTURED DATA TYPES

#

 L3gMessageDelivery:

 description: Contains the L3G message delivery data

 type: object

 required:

 - oriAddr

 - destAddr

 - msgId

 properties:

 oriAddr:

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

 destAddr:

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

 appId:

 type: string

 msgId:

 type: string

 delivStReqInd:

 type: boolean

 payload:

 type: string

 segInd:

 type: boolean

 segParams:

 $ref: 'TS29538\_MSGS\_MSGDelivery.yaml#/components/schemas/MessageSegmentParameters'

 Address:

 description: Contains the Message type data

 type: object

 required:

 - addrType

 - addr

 properties:

 addrType:

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

 addr:

 type: string

#

# SIMPLE DATA TYPES

#

#

# ENUMERATIONS

#

 AddressType:

 anyOf:

 - type: string

 enum:

 - UE

 - AS

 - GROUP

 - BC

 - TOPIC

 - type: string

 description: >

 This string provides forward-compatibility with future

 extensions to the enumeration but is not used to encode

 content defined in the present version of this API.

 description: |

 Represent the type of message request.

 Possible values are:

 - UE: The address type is UE.

 - AS: The address type is AS.

 - GROUP: The address type is GROUP.

 - BC: The address type is BC.

 - TOPIC: The address type is TOPIC.

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

# A.5 MSGG\_N3GDelivery API

openapi: 3.0.0

info:

 title: MSGG\_N3GDelivery

 version: 1.1.0-alpha.1

 description: |

 API for MSGG N3G Message Delivery Service.

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externalDocs:

 description: >

 3GPP TS 29.538 V18.4.0; 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-n3gdelivery/v1'

 variables:

 apiRoot:

 default: https://example.com

 description: apiRoot as defined in clause 5.2.4 of 3GPP TS 29.122

security:

 - {}

 - oAuth2ClientCredentials: []

paths:

 /deliver-message:

 post:

 summary: deliver message to NON-3GPP Message Gateway

 tags:

 - N3G Message delivery

 requestBody:

 required: true

 content:

 application/json:

 schema:

 $ref: '#/components/schemas/N3gMessageDelivery'

 responses:

 '204':

 description: No Content,Message delivery successful

 '400':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/400'

 '401':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/401'

 '403':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/403'

 '404':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/404'

 '411':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/411'

 '413':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/413'

 '415':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/415'

 '429':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/429'

 '500':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/500'

 '503':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/503'

 default:

 $ref: 'TS29122\_CommonData.yaml#/components/responses/default'

 /deliver-report:

 post:

 summary: deliver status report to NON-3GPP Message Gateway

 tags:

 - N3G status report delivery

 requestBody:

 required: true

 content:

 application/json:

 schema:

 $ref: 'TS29538\_MSGS\_MSGDelivery.yaml#/components/schemas/DeliveryStatusReport'

 responses:

 '204':

 description: No Content, status report delivery successfully

 '400':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/400'

 '401':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/401'

 '403':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/403'

 '404':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/404'

 '411':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/411'

 '413':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/413'

 '415':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/415'

 '429':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/429'

 '500':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/500'

 '503':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/503'

 default:

 $ref: 'TS29122\_CommonData.yaml#/components/responses/default'

components:

 securitySchemes:

 oAuth2ClientCredentials:

 type: oauth2

 flows:

 clientCredentials:

 tokenUrl: '{tokenUrl}'

 scopes: {}

 schemas:

#

# STRUCTURED DATA TYPES

#

 N3gMessageDelivery:

 description: N3G 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

 segInd:

 type: boolean

 segParams:

 $ref: 'TS29538\_MSGS\_MSGDelivery.yaml#/components/schemas/MessageSegmentParameters'

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

A.6 MSGG\_BGDelivery API

openapi: 3.0.0

info:

 title: MSGG\_BGDelivery

 version: 1.0.0-alpha.3

 description: |

 API for Broadcast Message Delivery Service.

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externalDocs:

 description: >

 3GPP TS 29.538 V18.5.0; 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 5.2.4 of 3GPP TS 29.122

security:

 - {}

 - oAuth2ClientCredentials: []

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: 'TS29122\_CommonData.yaml#/components/responses/400'

 '401':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/401'

 '403':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/403'

 '404':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/404'

 '411':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/411'

 '413':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/413'

 '415':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/415'

 '429':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/429'

 '500':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/500'

 '503':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/503'

 default:

 $ref: 'TS29122\_CommonData.yaml#/components/responses/default'

components:

 securitySchemes:

 oAuth2ClientCredentials:

 type: oauth2

 flows:

 clientCredentials:

 tokenUrl: '{tokenUrl}'

 scopes: {}

 schemas:

#

# STRUCTURED DATA TYPES

#

 BgMessageDelivery:

 description: Broadcast message delivery data

 type: object

 required:

 - oriAddr

 - 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

 segInd:

 type: boolean

 segParams:

 $ref: 'TS29538\_MSGS\_MSGDelivery.yaml#/components/schemas/MessageSegmentParameters'

 priority:

 $ref: 'TS29538\_MSGS\_MSGDelivery.yaml#/components/schemas/Priority'

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

A.7 MSGS\_TopiclistEvent API

openapi: 3.0.0

info:

 title: MSGS\_TopiclistEvent

 version: 1.0.0-alpha.1

 description: |

 API for Topic Messaging Event Service.

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externalDocs:

 description: >

 3GPP TS 29.538 V18.4.0; 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}/msgs-topiclistevent/v1'

 variables:

 apiRoot:

 default: https://example.com

 description: apiRoot as defined in clause 5.2.4 of 3GPP TS 29.122

security:

 - {}

 - oAuth2ClientCredentials:

 - msgs-topiclistevent

paths:

 /topiclist-subscriptions:

 post:

 summary: subscribe to Messaging Topic list on a MSGin5G Server

 tags:

 - Topic List Subscription

 requestBody:

 required: true

 content:

 application/json:

 schema:

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

 callbacks:

 MessagingTopicListNotification:

 '{request.body#/notificationURI}':

 post:

 requestBody:

 required: true

 content:

 application/json:

 schema:

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

 responses:

 '204':

 description: No Content (successful notification)

 '307':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/307'

 '308':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/308'

 '400':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/400'

 '401':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/401'

 '403':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/403'

 '404':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/404'

 '411':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/411'

 '413':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/413'

 '415':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/415'

 '429':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/429'

 '500':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/500'

 '503':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/503'

 default:

 $ref: 'TS29122\_CommonData.yaml#/components/responses/default'

 responses:

 '201':

 description: Topic list on the MSGin5G Server is successfully subscribed

 content:

 application/json:

 schema:

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

 headers:

 Location:

 description: 'Contains the URI of the newly created resource'

 required: true

 schema:

 type: string

 '400':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/400'

 '401':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/401'

 '403':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/403'

 '404':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/404'

 '411':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/411'

 '413':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/413'

 '415':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/415'

 '429':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/429'

 '500':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/500'

 '503':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/503'

 default:

 $ref: 'TS29122\_CommonData.yaml#/components/responses/default'

 /topiclist-subscriptions/{subscriptionId}:

 post:

 summary: Unsubscribe to Messaging Topic list on a MSGin5G Server

 tags:

 - Topic List Unsubscriptionn

 parameters:

 - name: subscriptionId

 in: path

 description: Topic list subscription Id

 required: true

 schema:

 type: string

 requestBody:

 required: true

 content:

 application/json:

 schema:

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

 responses:

 '200':

 description: The individual Topic list unsubscription is successfully handled with the subscription not deleted.

 content:

 application/json:

 schema:

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

 '204':

 description: >

 No Content. The individual MSGin5G Server Messaging Topic list subscription matching the subscription Id is successfully deleted.

 '400':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/400'

 '401':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/401'

 '403':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/403'

 '404':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/404'

 '429':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/429'

 '500':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/500'

 '503':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/503'

 default:

 $ref: 'TS29122\_CommonData.yaml#/components/responses/default'

 /request-topic-subscription:

 post:

 summary: subscribe to Messaging Topic on a MSGin5G Server

 tags:

 - Messaging Topic Subscription

 requestBody:

 required: true

 content:

 application/json:

 schema:

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

 responses:

 '200':

 description: The Messaging Topic subscription is created successfully.

 content:

 application/json:

 schema:

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

 '400':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/400'

 '401':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/401'

 '403':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/403'

 '404':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/404'

 '411':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/411'

 '413':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/413'

 '415':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/415'

 '429':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/429'

 '500':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/500'

 '503':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/503'

 default:

 $ref: 'TS29122\_CommonData.yaml#/components/responses/default'

 /request-topic-unsubscription:

 post:

 summary: unsubscribe to Messaging Topic on a MSGin5G Server

 tags:

 - Messaging Topic Unsubscription

 requestBody:

 required: true

 content:

 application/json:

 schema:

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

 responses:

 '204':

 description: >

 No Content. The Messaging Topic subscription is removed successfully.

 '400':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/400'

 '401':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/401'

 '403':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/403'

 '404':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/404'

 '411':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/411'

 '413':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/413'

 '415':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/415'

 '429':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/429'

 '500':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/500'

 '503':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/503'

 default:

 $ref: 'TS29122\_CommonData.yaml#/components/responses/default'

components:

 securitySchemes:

 oAuth2ClientCredentials:

 type: oauth2

 flows:

 clientCredentials:

 tokenUrl: '{tokenUrl}'

 scopes: {}

 schemas:

#

# STRUCTURED DATA TYPES

#

 TopicListSubscription:

 description: Messaging Topic list subscription data

 type: object

 required:

 - oriAddr

 - destAddr

 - notificationURI

 properties:

 oriAddr:

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

 destAddr:

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

 notificationURI:

 $ref: 'TS29122\_CommonData.yaml#/components/schemas/Uri'

 secCred:

 type: string

 exprTime:

 $ref: 'TS29122\_CommonData.yaml#/components/schemas/DateTime'

 suppFeat:

 $ref: 'TS29122\_CommonData.yaml#/components/schemas/SupportedFeatures'

 TopicListUnsubscription:

 description: Messaging Topic list unsubscription data

 type: object

 required:

 - oriAddr

 - destAddr

 properties:

 oriAddr:

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

 destAddr:

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

 secCred:

 type: string

 TopicListSubscriptionAck:

 description: Response of Messaging Topic list subscription

 type: object

 required:

 - subStat

 properties:

 subStat:

 type: string

 exprTime:

 $ref: 'TS29122\_CommonData.yaml#/components/schemas/DateTime'

 suppFeat:

 $ref: 'TS29122\_CommonData.yaml#/components/schemas/SupportedFeatures'

 TopicListUnsubscriptionAck:

 description: Response of Messaging Topic list unsubscription

 type: object

 required:

 - subStat

 properties:

 subStat:

 type: string

 TopicSubscription:

 description: Messaging Topic subscription data

 type: object

 required:

 - oriAddr

 - msgTopics

 properties:

 oriAddr:

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

 msgTopics:

 type: array

 items:

 type: string

 minItems: 1

 description: A list of Messaging Topics to be subscribed.

 secCred:

 type: string

 exprTime:

 $ref: 'TS29122\_CommonData.yaml#/components/schemas/DateTime'

 TopicSubscriptionAck:

 description: Response of Messaging Topic subscription

 type: object

 required:

 - subStat

 properties:

 subStat:

 type: string

 exprTime:

 $ref: 'TS29122\_CommonData.yaml#/components/schemas/DateTime'

 TopicUnsubscription:

 description: Messaging Topic unsubscription data

 type: object

 required:

 - oriAddr

 - msgTopics

 properties:

 oriAddr:

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

 secCred:

 type: string

 msgTopics:

 type: array

 items:

 type: string

 minItems: 1

 description: A list of Messaging Topics to be unsubscribed.

 TopicListNotification:

 description: Messaging Topic list changes notification data

 type: object

 required:

 - msgTopics

 properties:

 exprTime:

 $ref: 'TS29122\_CommonData.yaml#/components/schemas/DateTime'

 msgTopics:

 type: array

 items:

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

 minItems: 1

 description: list of Messaging Topics for notification.

 MessagingTopic:

 description: Represent Messaging Topic information

 type: object

 required:

 - msgTopic

 - updateStat

 properties:

 msgTopic:

 type: string

 updateStat:

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

#

# ENUMERATIONS DATA TYPES

#

 UpdateStatus:

 anyOf:

 - type: string

 enum:

 - CREATED

 - DELETED

 - type: string

 description: >

 This string provides forward-compatibility with future extensions to the enumeration

 and is not used to encode content defined in the present version of this API.

 description: |

 Represents the Messaging Topic Update status.

 Possible values are:

 - CREATED: Indicates Topic newly created.

 - DELETED: Indicates Topic newly deleted.

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