

Oracle® Communications

Cloud Native Core, Security Edge Protection Proxy REST Specification Guide



Release 23.4.3

F89923-09

October 2024

ORACLE®

Copyright © 2021, 2024, Oracle and/or its affiliates.

This software and related documentation are provided under a license agreement containing restrictions on use and disclosure and are protected by intellectual property laws. Except as expressly permitted in your license agreement or allowed by law, you may not use, copy, reproduce, translate, broadcast, modify, license, transmit, distribute, exhibit, perform, publish, or display any part, in any form, or by any means. Reverse engineering, disassembly, or decompilation of this software, unless required by law for interoperability, is prohibited.

The information contained herein is subject to change without notice and is not warranted to be error-free. If you find any errors, please report them to us in writing.

If this is software, software documentation, data (as defined in the Federal Acquisition Regulation), or related documentation that is delivered to the U.S. Government or anyone licensing it on behalf of the U.S. Government, then the following notice is applicable:

U.S. GOVERNMENT END USERS: Oracle programs (including any operating system, integrated software, any programs embedded, installed, or activated on delivered hardware, and modifications of such programs) and Oracle computer documentation or other Oracle data delivered to or accessed by U.S. Government end users are "commercial computer software," "commercial computer software documentation," or "limited rights data" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, the use, reproduction, duplication, release, display, disclosure, modification, preparation of derivative works, and/or adaptation of i) Oracle programs (including any operating system, integrated software, any programs embedded, installed, or activated on delivered hardware, and modifications of such programs), ii) Oracle computer documentation and/or iii) other Oracle data, is subject to the rights and limitations specified in the license contained in the applicable contract. The terms governing the U.S. Government's use of Oracle cloud services are defined by the applicable contract for such services. No other rights are granted to the U.S. Government.

This software or hardware is developed for general use in a variety of information management applications. It is not developed or intended for use in any inherently dangerous applications, including applications that may create a risk of personal injury. If you use this software or hardware in dangerous applications, then you shall be responsible to take all appropriate fail-safe, backup, redundancy, and other measures to ensure its safe use. Oracle Corporation and its affiliates disclaim any liability for any damages caused by use of this software or hardware in dangerous applications.

Oracle®, Java, MySQL, and NetSuite are registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners.

Intel and Intel Inside are trademarks or registered trademarks of Intel Corporation. All SPARC trademarks are used under license and are trademarks or registered trademarks of SPARC International, Inc. AMD, Epyc, and the AMD logo are trademarks or registered trademarks of Advanced Micro Devices. UNIX is a registered trademark of The Open Group.

This software or hardware and documentation may provide access to or information about content, products, and services from third parties. Oracle Corporation and its affiliates are not responsible for and expressly disclaim all warranties of any kind with respect to third-party content, products, and services unless otherwise set forth in an applicable agreement between you and Oracle. Oracle Corporation and its affiliates will not be responsible for any loss, costs, or damages incurred due to your access to or use of third-party content, products, or services, except as set forth in an applicable agreement between you and Oracle.

Contents

1	Introduction	
1.1	Overview	1
1.1.1	References	1
2	SEPP REST Specifications	
2.1	Handshake Status	1
2.2	Remote SEPP	3
2.3	Remote SEPP Set	9
2.4	Topology Hiding	30
2.5	Logging	45
2.6	CNCC SEPP Menu and Data Model API	47
2.7	Mediation System Option	50
2.8	Mediation Trigger Rule Configuration	53
2.9	Mediation Rules Configuration	61
2.10	Cat-1 Service API Validation Feature State	68
2.11	Security Countermeasure Service API Allowed List Name	70
2.12	Service APIs	92
2.13	Overload Control	103
2.14	Hosted SEPP	121
2.15	Cat 2–Network ID Validation System Option	122
2.16	Network ID Validation List Configuration	124
2.17	Network ID in Header Validation Configuration	150
2.18	Network ID in Body Validation Configuration	159
2.19	Ingress Rate Limiting System Option	167
2.20	SOR	171
2.21	SOR Config Trigger Rule List	177
2.22	Cat 3 - Previous Location Check System Option	180
2.23	Previous Location Check Trigger List Configuration	182
2.24	Previous Location Check Header Configuration	189
2.24.1	Serving Network ID	189
2.24.2	UE ID	194
2.25	Previous Location Check Body Configuration	200
2.25.1	Serving Network ID	200

2.25.2	UE ID	210
2.26	Cat-0 SBI Message Schema Validation REST APIs	213
2.26.1	Message Validation System Option	213
2.26.2	Message Validation List Configuration	216
2.26.3	Message Validation Services API	238
2.26.4	Message Validation Schema Configuration	246

3 HTTP Response Codes and Error Codes

My Oracle Support

My Oracle Support (<https://support.oracle.com>) is your initial point of contact for all product support and training needs. A representative at Customer Access Support can assist you with My Oracle Support registration.

Call the Customer Access Support main number at 1-800-223-1711 (toll-free in the US), or call the Oracle Support hotline for your local country from the list at <http://www.oracle.com/us/support/contact/index.html>. When calling, make the selections in the sequence shown below on the Support telephone menu:

- For Technical issues such as creating a new Service Request (SR), select **1**.
- For Non-technical issues such as registration or assistance with My Oracle Support, select **2**.
- For Hardware, Networking and Solaris Operating System Support, select **3**.

You are connected to a live agent who can assist you with My Oracle Support registration and opening a support ticket.

My Oracle Support is available 24 hours a day, 7 days a week, 365 days a year.

Acronyms

The following table provides information about the acronyms used in the document.

Table Acronyms

Acronym	Description
Cat-0	Cat-0 SBI Message Schema Validation Feature
Cat-1	Cat-1 Service API Validation Feature
Cat-2	Cat-2 Network ID Validation Feature
Cat-3	Cat 3 - Previous Location Check
CNC Console	Oracle Communications Cloud Native Configuration Console
CRD	Custom Resource Definition
CNE	Oracle Communications Cloud Native Core, Cloud Native Environment
cSEPP/C-SEPP	Consumer Security Edge Protection Proxy
DB	Database
DNS	Domain Name System
DRL	Drools Rule Language
EGW	Egress Gateway
FQDN	Fully Qualified Domain Name
GSMA	Groupe Speciale Mobile Association (GSMA). Represents the interests of mobile operators and the broader mobile industry worldwide.
Hosted SEPP	Hosted SEPP functionality provides selective routing in Roaming Hub Mode
IGW	Ingress Gateway
IPX	Internetwork Packet Exchange
K8s	Kubernetes
Local PLMN	PLMN managed by Local SEPP
Local SEPP	SEPP in Local PLMN
MNO	Mobile Network Operator
NDB	Network Database
NF	Network Function
Network Function	A functional building block within a network infrastructure, which has well defined external interfaces and well defined functional behavior. In practical terms, a network function is often a network node or physical appliance.
NF Consumer	A generic way to refer to an NF which consumes services provided by another NF. Example: An AMF acts as a Consumer NF that consumes AMPolicy services provided by the PCF.
NF Instance	A specific instance of a network function type.
NF Producer or NF Provider	A generic way to refer to an NF which provides services that can be consumed by another NF. Example: A PCF acts as a Producer NF that provides AMPolicy Services to the AMF.

Table (Cont.) Acronyms

Acronym	Description
NRF	Oracle Communications Cloud Native Core, Network Repository Function
OHC	Oracle Help Center
OSDC	Oracle Software Delivery Cloud
PDB	PodDisruptionBudget
PLMN	Public Land Mobile Network
pSEPP/P-SEPP	Producer Security Edge Protection Proxy
Remote PLMN	PLMN managed by Remote SEPP
Remote SEPP	SEPP in Remote PLMN
Remote SEPP Set (RSS)	Set of Remote SEPPs to allow alternate routing across Remote SEPPs
REST API	Representational State Transfer Application Programming Interface
Roaming Hub	Roaming Hub is the deployment mode of SEPP. Roaming Hub is used as an intermediate proxy. Each SEPP connects to the Roaming Hub which further connect to another SEPP. All the Remote SEPPs can communicate with each other through roaming hub.
Scaling	Ability to dynamically extend or reduce resources granted to the Virtual Network Function (VNF) as needed. This includes scaling out and in or scaling up and down.
SCM	Security Countermeasure
SEPP	Oracle Communications Cloud Native Core, Security Edge Protection Proxy
SUPI	Subscription Permanent Identifier
SVC	Service
TLS	Transport Layer Security
TH	Topology Hiding
TUH	Topology Unhiding
TPS	Transactions Per Second
UE	User Equipment
UDR	Oracle Communications Cloud Native Core, Unified Data Repository

What's New in This Guide

This section introduces the documentation updates for Release 23.4.x.

Release 23.4.3- F89923-07, October 2024

There are no updates made to this document in this release

Release 23.4.0 - F89923-06, August 2024

Updated the [Cat-0 SBI Message Schema Validation](#) REST APIs.

Release 23.4.2- F89923-05, July 2024

Updated descriptions of the following parameters in the [Remote SEPP](#) REST API section:

- n32fFQDN
- n32fPort

Release 23.4.1- F89923-04, April 2024

There are no updates made to this document in this release.

Release 23.4.0 - F89923-03, February 2024

- Added REST API configurations of the "Separate port configurations for n32c and n32f on the Egress routes" from the [Remote SEPP](#) REST API section.

Release 23.4.0 - F89923-02, January 2024

- Removed REST API configurations of the "Separate port configurations for n32c and n32f on the Egress routes" from the [Remote SEPP](#) REST API section.

Release 23.4.0 - F89923-01, December 2023

- Added the [Mediation Rules Configuration](#) REST API to support mediation rules configuration using REST API.
- Updated the [Remote SEPP](#) REST API section to support separate port configurations for n32c and n32f on the Egress Routes and Load Sharing among multiple Remote SEPP nodes features.

1

Introduction

This document provides information about configuring the services and manageable objects in Oracle Communication Security Edge Protection Proxy (OCSEPP) using Representational State Transfer Application Program Interfaces (REST APIs).

1.1 Overview

Security Edge Protection Proxy (SEPP) is a key component of the 5G Service Based Architecture. It is a proxy Network Function (NF) which is used for the secured communication for inter Public Land Mobile Network (PLMN) messages.

For more information about the SEPP architecture, see *Oracle Communications Cloud Native Core, Security Edge Protection Proxy User Guide*.

SEPP can be deployed, upgraded, and rolled back using Continuous Delivery Control Server (CDCS) or Command Line Interface (CLI) procedures as described in *Oracle Communications Cloud Native Core Security Edge Protection Proxy Installation, Upgrade, and Fault Recovery Guide*. CDCS provides continuous delivery functionality for multi site Cloud Native Core (CNC) installations. For more information about CDCS, see *Oracle Communications Cloud Native Core, Continuous Delivery Control Server User Guide*.

The user can install either SEPP or Roaming Hub/Hosted SEPP.

Note

The performance and capacity of the SEPP system may vary based on the call model, Feature/Interface configuration, and underlying CNE and hardware environment.

1.1.1 References

Refer the following documents for more information about Security Edge Protection Proxy (SEPP):

- *Oracle Communications Cloud Native Core, Security Edge Protection Proxy User Guide*
- *Oracle Communications Cloud Native Core, Security Edge Protection Proxy Installation and Upgrade Guide*
- *Oracle Communications Cloud Native Core, Security Edge Protection Proxy Troubleshooting Guide*

2

SEPP REST Specifications

This chapter provides information about REST specifications used in Oracle Communications Security Edge Protection Proxy (SEPP).

2.1 Handshake Status

Handshake Status REST API returns the handshake status corresponding to the SEPP Name.

Table 2-1 Handshake Status REST API

Method	URL	Description	Input	Return	Example
GET	/sepp-configuration/v1/handshakestatus	Returns the handshake status. Empty list [], if no handshake status.		List of HandshakeStatus	curl -v http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/v1/handshakestatus -X GET
GET	/sepp-configuration/v1/handshakestatus/{fqdn}	Returns handshake status of the SEPP FQDN. Returns the error code 404, if not found Exception: Handshake Status not found for the fqdn	SEPP FQDN of the handshake status	HandshakeStatus	curl -v http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/v1/handshakestatus/fqdn/10.75.237.33 -X GET
GET	/sepp-configuration/v1/handshakestatus/{name}	Returns handshake status of the SEPP by name. Returns the error code 404, if not found Exception: Handshake Status not found for the NAME	SEPP Name of the handshake status	HandshakeStatus	curl -v http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/v1/handshakestatus/SEPP-2 -X GET
GET	/sepp-configuration/v1/handshakestatus/name/{name}	Returns handshake status of the SEPP by name. Returns the error code 404, if not found Exception: Handshake Status not found for the NAME	SEPP Name of the handshake status	HandshakeStatus	curl -v http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/v1/handshakestatus/name/SEPP-2 -X GET

Handshake Status: Parameters**Table 2-2 Handshake Status Parameters**

Attribute	Description	Details
domain	This is an optional parameter. Domain of the Remote SEPP.	DataType: String Default Value: NA
n32fContextStateEnum	This is a mandatory parameter. Specifies current state of handshake.	DataType: String Range: CAPABILITY_EXCHNAGE_STATE, N32F_ESTABLISHED_STATE Default Value: NA
securityCapability	This is a mandatory parameter. This parameter decides the security mechanism to use for protecting N32f messages. Values can be "TLS" or "TLS and PRINS".	DataType: String Range: TLS, TLS and PRINS Default Value: TLS
seppFQDN	This is a mandatory parameter. FQDN of remote SEPP.	DataType: String Range: NA Default Value: NA
seppId	This is a mandatory parameter. Parameter to uniquely identify the Remote SEPP Name.	DataType: String Range: NA Default Value: NA
3GppSbiTargetApiRootSupported	Indicates if local SEPP supports 3gppSbiTargetApiRoot header. If it is set to False, it is the responsibility of Remote SEPP to not send 3gpp-sbi-target-apiRoot header in N32F message.	DataType: Boolean Range: False or True Default Value: True
localPlmnIdList	PLMN ID List	DataType: String Range: For SEPP mode: localPlmnIdList is 1 to 30. For IPX mode: localPlmnIdList is 1 to 400 Default Value: NA
reInitN32fContextState	This parameter shows if handshake reinitiation is successful or not. If the value is "CAPABILITY_EXCHANGE_STATE", then the handshake reinitiation is in progress. If the value is blank, the reinitiation did not happen. For SEPP acting as a producer, after successful handshake reInitN32fContextState value will be set to "N32F_ESTABLISHED_STATE".	DataType: string Default Value: blank string/No value
handshakeTimestamp	This parameter displays the time of handshake and time is updated if handshake reinitiation is done.	DataType: timestamp Default Value: blank

Sample Response body structure for GET operations:Resource API: *sepp-configuration/v1/handshakestatus*

Resource Method: GET
Content Type: application/json

Response Body

```
[{
  "securityCapability": "TLS",
  "n32fContextStateEnum": "N32F_ESTABLISHED_STATE",
  "domain": "svc.com",
  "seppId": "RS1",
  "localPlmnIdList": "333222, 444555",
  "reInitN32fContextState": "CAPABILITY_EXCHANGE_STATE",
  "seppFQDN": "rs1.inter.oracle.com",
  "3GppSbiTargetApiRootSupported": false
  "handshakeTimestamp": "2022-11-07T05:10:40.000+00:00"
}]
```

2.2 Remote SEPP

The Remote SEPP REST API returns all the configured Remote SEPP profiles.

The following table describes the resource name to retrieve and update the Remote SEPP profiles.

Table 2-3 Remote SEPP REST API

Method	URL	Description	Input	Return	Example
GET	/sepp-configuration/v1/remotesepp/{name}	Returns configured Remote SEPP. If no Remote SEPP is present, then returns error code as 404.	Name of Remote SEPP as requested in the URL.	Requested Remote SEPP and the parameters with values	curl -v http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/v1/remotesepp/SEPP-3 -X GET
GET	/sepp-configuration/v1/remotesepp	Returns all the configured Remote SEPPs. if no Remote SEPP is configured, an empty list is returned.	None	List of Remote SEPPs	curl -v http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/v1/remotesepp -X GET

Table 2-3 (Cont.) Remote SEPP REST API

Method	URL	Description	Input	Return	Example
POST	/sepp-configuration/v1/remotesepp	Returns configured Remote SEPP	Remote SEPP object	Remote SEPP with details	<pre>curl -v -X POST http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/v1/ remotesepp -H 'Content-Type: application/json' -d '{"name":"abc","plmn IdList": [{"mcc":"111", "mnc":"123" }, {"mcc":"190", "mnc":"128" }], "seppFqdn":"10.75.2 37.33","remoteSepp IpAddress": "10.233.62.145", "virtualHost":"psepp. 5gc.mnc111.mcc34 5.3gppnetwork.org", "securityCapabilityLi st": ["TLS"], "isEnabled":"TRUE", "apiPrefix":"", "apiVersion":"v1", "port":30043, "n32fQDN": "n32f.fqdn", "n32fAddress": "10.233.20.163" , "n32fPort": 8090 }'</pre>
DELETE	/sepp-configuration/v1/remotesepp/{name}	Delete managed object. If no Remote SEPP is present, then returns error code as 404.	Name of Remote SEPP as request parameter	Remote SEPP. Returns 204, if No Content	<pre>curl -v -X DELETE http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/v1/ remotesepp/SEPP-3</pre>

Table 2-3 (Cont.) Remote SEPP REST API

Method	URL	Description	Input	Return	Example
PUT	/sepp-configuration/v1/remotesepp/{name}	Update configured Remote SEPP. Creates the record, if not found	Name of Remote SEPP as request parameter and updated Remote SEPP object	Updated Remote SEPP	curl -v -X PUT http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/v1/remotesepp/abc -H 'Content-Type: application/json' -d '{"name": "abc", "plmnIdList": [{"mcc": "111", "mnc": "123"}, {"mcc": "190", "mnc": "128"}], "domain": "svc.clusters.com", "seppFqdn": "10.75.237.33", "remoteSepplpAddress": "10.233.62.145", "virtualHost": "psepp.5gc.mnc111.mcc345.3gppnetwork.org", "securityCapabilityList": ["TLS"], "isEnabled": "TRUE", "apiPrefix": "", "apiVersion": "v1", "port": 30043, "n32fQDN": "n32f.fqdn", "n32fAddress": "10.233.20.163", "n32fPort": 8090 }'
PATCH	/sepp-configuration/v1/remotesepp/{name}	Used to update only 'isEnabled' field of configured Remote SEPP. If no Remote SEPP is present, then returns error code as 404.	Name of Remote SEPP as request parameter and the fields of Remote SEPP to be updated.	Updated Remote SEPP	curl -v -X PATCH http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/v1/remotesepp/abc -H 'Content-Type: application/json' -d '{ "isEnabled": "FALSE" }'

Remote SEPP Parameters

Table 2-4 Remote SEPP Parameters

Attribute	Data Type	Compliance	Description
name	String	M	Name of the Remote SEPP which is provided in their local profile
plmnIdList	list of Plmn	M	PLMN ID List

Table 2-4 (Cont.) Remote SEPP Parameters

Attribute	Data Type	Compliance	Description
seppfqdn	String	M	FQDN
domain	String	O	Domain of the Remote SEPP
securityCapabilityList	List<SecurityCapability>	O	TLS/PRINS. Default Value: TLS
remoteSepIpAddress	IPv4 Address	O	Remote SEPP IP Address. If Remote SEPP IP is provided, it will be added in authority header while sending HTTP2 headers towards Remote SEPP. If Remote SEPP IP is not provided, FQDN is resolved to the corresponding IP endpoint using DNS. Hence, DNS configuration should be present for the FQDN. In this case, the authority header contains FQDN.
isEnabled	boolean	O	Remote partner is True (enabled) or False (disabled). Default Value: True
port	IPv4 port	O	Valid port number
apiPrefix	String	M	Prefix that can be appended in the URI for route matching. Default Value: ""
apiVersion	String	O	V1 (version 1) is the supported value. Default Value: v1
sanValidationRequired	Boolean	O	SAN validation is enabled for incoming capability-exchange handshake request or not.
n32fFQDN	String	O	This parameter describes the FQDN used for the forwarding plane. This will be configured only if control plane and forwarding plane FQDNs are different.
n32fAddress	IPv4 Address	O	This parameter describes the IP Address used for the forwarding plane. This will be configured only if control plane and forwarding plane configurations are different.
n32fPort	String	O	This parameter describes the port used for the forwarding plane. This will be configured only if control plane and forwarding plane configurations are different.
Virtual Host	String	O	This parameter describes the virtual FQDN used for the load sharing between the Remote SEPPs.

PLMN Parameters**Table 2-5 PLMN Parameters**

Attribute	Data Type	Compliance	Description
mcc	String	M	PLMN -Mobile Country code

Table 2-5 (Cont.) PLMN Parameters

Attribute	Data Type	Compliance	Description
mnc	String	M	PLMN- Mobile network code

Sample response body structure for GET operations:Resource API: *sepp-configuration/v1/RemoteSepp/*

Resource Method: GET

Content Type: application/json

Response Body

```
[{"name": "SEPP-5", "plmnIdList": [{"mcc": "333", "mnc": "222"}, {"mcc": "444", "mnc": "666"}], "domain": "multi.svc", "seppFqdn": "multiplmn2.inter.oracle.com", "securityCapabilityList": ["TLS"], "remoteSeppIpAddress": "10.99.164.59", "port": 443, "apiPrefix": "", "isEnabled": "TRUE", "apiVersion": "v1", "priority": 0, "peerSetIds": "RPS-1"}, {"name": "SEPP-6", "plmnIdList": [{"mcc": "335", "mnc": "222"}, {"mcc": "666", "mnc": "789"}], "domain": "multi.svc", "seppFqdn": "sepp7.inter.oracle.com", "securityCapabilityList": ["TLS"], "remoteSeppIpAddress": "10.99.121.678", "port": 443, "apiPrefix": "", "isEnabled": "TRUE", "apiVersion": "v1", "priority": 0, "peerSetIds": "RPS-2"}, {"name": "SEPP-7", "plmnIdList": [{"mcc": "454", "mnc": "565"}, {"mcc": "676", "mnc": "889"}], "domain": "multi.svc", "seppFqdn": "sepp1.inter.oracle.com", "securityCapabilityList": ["TLS"], "remoteSeppIpAddress": "10.99.121.678", "port": 443, "apiPrefix": "", "isEnabled": "TRUE", "apiVersion": "v1", "priority": 0, "peerSetIds": "RPS-3"}, {"name": "SEPP-8", "plmnIdList": [{"mcc": "453", "mnc": "565"}, {"mcc": "696", "mnc": "889"}], "domain": "multi.svc", "seppFqdn": "sepp8.inter.oracle.com", "securityCapabilityList": ["TLS"], "remoteSeppIpAddress": "10.99.121.678", "port": 443, "apiPrefix": "", "isEnabled": "TRUE", "apiVersion": "v1", "priority": 0, "peerSetIds": "RPS-4"}, {"name": "SEPP-9", "plmnIdList": [{"mcc": "696", "mnc": "565"}, {"mcc": "453", "mnc": "555"}], "domain": "multi.svc", "seppFqdn": "sepp9.inter.oracle.com", "securityCapabilityList": ["TLS"], "remoteSeppIpAddress": "10.99.121.678", "port": 443, "apiPrefix": "", "isEnabled": "TRUE", "apiVersion": "v1", "priority": 0}, {"name": "SEPP-67", "plmnIdList": [{"mcc": "696", "mnc": "565"}], "domain": "multi.svc", "seppFqdn": "sepp11.inter.oracle.com", "securityCapabilityList": ["TLS"], "remoteSeppIpAddress": "10.99.121.678", "virtualHost": "psepp.5gc.mnc111.mcc345.3gppnetwork.org", "port": 443, "apiPrefix": "", "isEnabled": "TRUE", "apiVersion": "v1", "priority": 0, "peerSetIds": "RPS-11"}]
```

Resource API: */sepp-configuration/v1/remotesep/{name}*

Resource Method: GET

Content Type: application/json

Response Body

```
{
  "name": "SEPP-5",
  "plmnIdList": [
    { "mcc": "333", "mnc": "222" },
    { "mcc": "444", "mnc": "666" }
  ],
  "domain": "multi.svc",
  "seppFqdn": "multiplmn2.inter.oracle.com",
  "securityCapabilityList": [
    "TLS"
  ],
  "remoteSeppIpAddress": "10.99.164.59",
  "port": 443,
  "apiPrefix": "",
  "isEnabled": "TRUE",
  "apiVersion": "v1",
  "priority": 0,
  "peerSetIds": "RPS-1"
}
```

Sample response body structure for POST operations:

Resource API: *sepp-configuration/v1/RemoteSepp/*

Resource Method: POST

Content Type: application/json

Response Body

```
{
  "name": "SEPP-6",
  "plmnIdList": [
    { "mcc": "333", "mnc": "222" },
    { "mcc": "444", "mnc": "555" }
  ],
  "domain": "chandra.svc",
  "seppFqdn": "sepp8.inter.oracle.com",
  "securityCapabilityList": [
    "TLS"
  ],
  "remoteSeppIpAddress": "abc",
  "virtualHost": "psepp.5gc.mnc111.mcc345.3gppnetwork.org",
  "port": 443,
  "apiPrefix": "",
  "isEnabled": "TRUE",
  "apiVersion": "v1",
  "n32fFQDN": "n32f.fqdn",
  "n32fAddress": "10.233.20.163",
  "n32fPort": 8090
}
```

Sample response body structure for PUT operations:

Resource API: *sepp-configuration/v1/RemoteSepp/*

Resource Method: PUT

Content Type: application/json

Response Body

```
{
  "name": "SEPP-5",
  "plmnIdList": [
    { "mcc": "335", "mnc": "222" },
    { "mcc": "666", "mnc": "789" },
    { "mcc": "444", "mnc": "555" }
  ],
  "domain": "multi.svc",
  "seppFqdn": "sepp1.inter.oracle.com",
  "securityCapabilityList": [
    "TLS"
  ],
  "remoteSeppIpAddress": "10.99.121.202",
  "port": 443,
  "apiPrefix": "",
  "isEnabled": "TRUE",
  "apiVersion": "v1",
  "n32fFQDN": "n32f.fqdn",
  "n32fAddress": "10.233.20.163",
  "remoteSeppIpAddress": "10.233.62.145",
  "n32fPort": 8090
}
```

Sample response body structure for DELETE operations:

Resource API: *sepp-configuration/v1/RemoteSepp/*

Resource Method: DELETE

Content Type: application/json

Response Body

```
{204 No Content}
```

If there is an error, then the response will be error message.

Sample Response body structure for PATCH operations:

Resource API: *sepp-configuration/v1/RemoteSepp/*

Resource Method: PATCH

Content Type: application/json

Response Body:

```
{ "plmnIdList": [{"mcc": "335", "mnc": "222"}, {"mcc": "444", "mnc": "555"}, {"mcc": "666", "mnc": "769"}], "port": 0 }
```

2.3 Remote SEPP Set

Remote SEPP Set REST API returns all the configured Remote SEPP Sets.

Table 2-6 Remote SEPP Set REST API

Method	URL	Description	Input	Return	Example
GET	/sepp-configuration/v1/remotesepset	This API is an existing API, which is used to fetch the complete list of configured RSS.	Not Required	List of RSS configured	curl -X 'GET' \ 'http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/v1/remotesepset' \ -H 'accept: */*'
GET	/sepp-configuration/v1/remotesepset/{name}	This API is an existing API, which is used to fetch a particular Remote partner set which name is given as input.	name	RSS Configuration	curl -X 'GET' \ 'http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/v1/remotesepset/RSS-1' \ -H 'accept: */*'

Table 2-6 (Cont.) Remote SEPP Set REST API

Method	URL	Description	Input	Return	Example
POST	/sepp-configuration/v1/remotesepset	This API is an existing API, which is used to Create Remote partner SET. Some Additional parameters for newly added features have been added to this API.	RoamingPartnerSetDTO		<pre> curl -X 'POST' \ 'http:// <SEPP- Configurati on IP>:<PORT>/ sepp- configurati on/v1/ remotesepset' \ -H 'accept: */*' \ -H 'Content- Type: application /json' \ -d '{ "name": "RSS-1", "primary": "RSS-1", "secondary" : "string", "tertiary": "string", "allowedListName": "Default", "mediationFeatureOptions": { "triggerRuleListName": "Default" }, "plmnIdList ": { </pre>

Table 2-6 (Cont.) Remote SEPP Set REST API

Method	URL	Description	Input	Return	Example
					<pre>"plmnIdList": [{ "mcc": "string", "mnc": "string" }], "allowedProducerRemoteSeppSets": { "allowedProducerRemoteSeppSets": ["string"], "networkIdValidationEnabled": { "networkIdValidationListName": "Default", "messageFilteringOnNetworkIdHeaderValidation": false, "messageFilteringOnNetworkIdBodyValidation": false },</pre>

Table 2-6 (Cont.) Remote SEPP Set REST API

Method	URL	Description	Input	Return	Example
					<pre>"sorEnabled": { "sorTriggerRuleListName": "string", "sorRemoteSeppValidation": true }, "ingressRateLimitingOptions": { "ingressRateLimitingEnabled": true, "capacity": 16000, "refillRate": 10000, "duration": 300, "requestTokens": 500, "errorConfiguration": { "action": "REJECT", "title": "Too many requests sent", "statusCode": 400 } }</pre>

Table 2-6 (Cont.) Remote SEPP Set REST API

Method	URL	Description	Input	Return	Example
					<pre>} "messageValidationRemoteSeppSetConfiguration": { "messageValidationOnBodyEnabled": true, "messageValidationOnQueryParametersEnabled": true, "messageValidationListName": "Default" "allowedListName": "Default", "previousLocationCheckValidationEnabled": {"previousLocationTriggerListName": "Default" , "messageFilteringOnPreviousLocationCheckValidation": true } } }'</pre>

Table 2-6 (Cont.) Remote SEPP Set REST API

Method	URL	Description	Input	Return	Example
PUT	/sepp-configuration/v1/ remoteseppset/ {name}	This API is an existing API, which is used to Update Remote partner SET Configuration. Some Additional parameters for for newly added features have been added to this API.	RoamingPartnerSet Detailed Object		<pre> curl -X 'PUT' \ 'http:// <SEPP- Configurati on IP>:<PORT>/ sepp- configurati on/v1/ remotesepps et/RSS-1' \ -H 'accept: */*' \ -H 'Content- Type: application /json' \ -d '{ "name": "RSS-1", "primary": "RSS-1", "secondary" : "string", "tertiary": "string", "allowedLis tName": "Default", "mediationF eatureOptio ns": { "triggerRul eListName": "Default" }, "plmnIdList ": { </pre>

Table 2-6 (Cont.) Remote SEPP Set REST API

Method	URL	Description	Input	Return	Example
					<pre>"plmnIdList": [{ "mcc": "string", "mnc": "string" }], "allowedProducerRemoteSeppSets": { "allowedProducerRemoteSeppSets": ["string"], "networkIdValidationEnabled": { "networkIdValidationListName": "Default", "messageFilteringOnNetworkIdHeaderValidation": true, "messageFilteringOnNetworkIdBodyValidation": true },</pre>

Table 2-6 (Cont.) Remote SEPP Set REST API

Method	URL	Description	Input	Return	Example
					<pre>"sorEnabled": { "sorTriggerRuleListName": "string", "sorRemoteSeppValidation": true }, "ingressRateLimitingOptions": { "ingressRateLimitingEnabled": true, "capacity": 16000, "refillRate": 10000, "duration": 300, "requestTokens": 500, "errorConfiguration": { "action": "REJECT", "title": "Too many request sent", "statusCode": 429 } }</pre>

Table 2-6 (Cont.) Remote SEPP Set REST API

Method	URL	Description	Input	Return	Example
					<pre>} "messageValidationRemoteSeppSetConfiguration": { "messageValidationOnBodyEnabled": true, "messageValidationOnQueryParametersEnabled": true, "messageValidationListName": "Default" "allowedListName": "Default", "previousLocationCheckValidationEnabled": {"previousLocationTriggerListName": "Default" , "messageFilteringOnPreviousLocationCheckValidation": true } } }'</pre>

Table 2-6 (Cont.) Remote SEPP Set REST API

Method	URL	Description	Input	Return	Example
DELETE	/sepp-configuration/v1 / remoteseppset/{name}	This API is used to delete a specific remote partner set.	name	No Content	curl -X 'DELETE' \ 'http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/v1 / remoteseppset/RSS-1' \ -H 'accept: */*'

Remote SEPP Set Parameters

Table 2-7 Remote SEPP Set Parameters

Attribute	Datatype	Mandatory(M)/ Conditional(C)/ Optional(O)	Description
name	String	M	Profile name, unique Identifier of record
primary	String	O	Name of primary Remote SEPP
secondary	String	O	Name of secondary Remote SEPP
tertiary	String	O	Name of tertiary Remote SEPP
allowedListName	String	M	Name of Allowed List with allowed Resource URIs and Method.
triggerRuleListName	String	O	Name of Mediation Trigger Rule List with trigger rules.
allowedProducerRemote SeppSets	List of String	O	List of allowed Producer Remote SEPP Sets that can receive the N32F traffic from the specific consumer.
ingressRateLimitingOptions	Object	O	It contains Ingress Rate Limiting Configuration parameters for this Remote SEPP Set.
ingressRateLimitingEnabled	boolean	O	A Boolean value to enable and disable the Ingress Rate Limiting feature at this RSS level. true indicates Enabled false indicates Disabled

Table 2-7 (Cont.) Remote SEPP Set Parameters

Attribute	Datatype	Mandatory(M)/ Conditional(C)/ Optional(O)	Description
networkIdValidationListName	String	M	Network ID Validation List Name. This is a mandatory parameter, if the parameters "messageFilteringOnNetworkIdHeaderValidation" or "messageFilteringOnNetworkIdBodyValidation" are Enabled.
messageFilteringOnNetworkIdHeaderValidation	boolean	M	Enable Network ID Header Validation feature
messageFilteringOnNetworkIdBodyValidation	boolean	M	Enable Network ID Body Validation feature
sorTriggerRuleListName	String	O	Name of the SOR Trigger Rule List in Remote SEPP Set
SorRemoteSeppValidation	String	O	Check whether SOR is enabled at RSS Level.
messageValidationOnBodyEnabled	boolean	O	To enable message validation on body.
messageValidationOnQueryParametersEnabled	boolean	O	To enable message validation on query parameters.
messageValidationListName	string	O	Message Validation List name

Sample Response body structure for GET operations:

Resource API: sepp-configuration/v1/RemoteSeppSet/

Resource Method: GET

Content Type: application/json

Response Body

```
[
  {
    "name": "RPS-1",
    "primary": "RPS-1",
    "allowedListName": "Default",
    "mediationFeatureOptions": {},
    "plmnIdList": {
      "plmnIdList": [
        {
          "mcc": "900",
          "mnc": "900"
        }
      ]
    }
  }
]
```

```

    ]
  },
  "allowedProducerRemoteSeppSets": {
    "allowedProducerRemoteSeppSets": []
  },
  "networkIdValidationEnabled": {
    "networkIdValidationListName": "Default",
    "messageFilteringOnNetworkIdHeaderValidation": false,
    "messageFilteringOnNetworkIdBodyValidation": false
  },
  "sorEnabled": {
    "sorTriggerRuleListName": "Default",
    "sorRemoteSeppValidation": false
  },
  "ingressRateLimitingOptions": {
    "ingressRateLimitingEnabled": false,
    "capacity": 500,
    "refillRate": 500,
    "duration": 500,
    "requestTokens": 500,
    "errorConfiguration": {
      "action": "REJECT",
      "title": "Too many requests sent3",
      "statusCode": 428
    }
  }
},
{
  "name": "RPSX",
  "primary": "RPSX",
  "allowedListName": "Default",
  "mediationFeatureOptions": {},
  "plmnIdList": {
    "plmnIdList": [
      {
        "mcc": "222",
        "mnc": "110"
      },
      {
        "mcc": "222",
        "mnc": "011"
      },
      {
        "mcc": "222",
        "mnc": "108"
      },
      {
        "mcc": "222",
        "mnc": "109"
      },
      {
        "mcc": "222",
        "mnc": "100"
      },
      {
        "mcc": "222",

```

```
    "mnc": "122"
  },
  {
    "mcc": "222",
    "mnc": "123"
  },
  {
    "mcc": "222",
    "mnc": "102"
  },
  {
    "mcc": "222",
    "mnc": "124"
  },
  {
    "mcc": "222",
    "mnc": "103"
  },
  {
    "mcc": "222",
    "mnc": "125"
  },
  {
    "mcc": "222",
    "mnc": "126"
  },
  {
    "mcc": "222",
    "mnc": "104"
  },
  {
    "mcc": "222",
    "mnc": "127"
  },
  {
    "mcc": "222",
    "mnc": "105"
  },
  {
    "mcc": "222",
    "mnc": "128"
  },
  {
    "mcc": "222",
    "mnc": "106"
  },
  {
    "mcc": "222",
    "mnc": "129"
  },
  {
    "mcc": "222",
    "mnc": "107"
  },
  {
    "mcc": "222",
```

```

        "mnc": "120"
      },
      {
        "mcc": "222",
        "mnc": "121"
      },
      {
        "mcc": "222",
        "mnc": "119"
      },
      {
        "mcc": "222",
        "mnc": "111"
      },
      {
        "mcc": "222",
        "mnc": "112"
      },
      {
        "mcc": "222",
        "mnc": "113"
      },
      {
        "mcc": "222",
        "mnc": "114"
      },
      {
        "mcc": "222",
        "mnc": "115"
      },
      {
        "mcc": "222",
        "mnc": "116"
      },
      {
        "mcc": "222",
        "mnc": "117"
      },
      {
        "mcc": "222",
        "mnc": "118"
      }
    ]
  },
  "allowedProducerRemoteSeppSets": {
    "allowedProducerRemoteSeppSets": []
  },
  "networkIdValidationEnabled": {
    "networkIdValidationListName": "Default",
    "messageFilteringOnNetworkIdHeaderValidation": false,
    "messageFilteringOnNetworkIdBodyValidation": false
  },
  "sorEnabled": {
    "sorTriggerRuleListName": "Default",
    "sorRemoteSeppValidation": false
  },
},

```

```

    "ingressRateLimitingOptions": {
      "ingressRateLimitingEnabled": false,
      "capacity": 1,
      "refillRate": 1,
      "duration": 10,
      "requestTokens": 1,
      "errorConfiguration": {
        "action": "REJECT",
        "title": "Too many requests sent2",
        "statusCode": 429
      }
    }
  },
  {
    "name": "RPS2",
    "primary": "RPS2",
    "allowedListName": "Default",
    "mediationFeatureOptions": {},
    "plmnIdList": {
      "plmnIdList": [
        {
          "mcc": "333",
          "mnc": "110"
        },
        {
          "mcc": "333",
          "mnc": "111"
        },
        {
          "mcc": "333",
          "mnc": "109"
        },
        {
          "mcc": "333",
          "mnc": "101"
        },
        {
          "mcc": "333",
          "mnc": "123"
        },
        {
          "mcc": "333",
          "mnc": "102"
        },
        {
          "mcc": "333",
          "mnc": "124"
        },
        {
          "mcc": "333",
          "mnc": "125"
        },
        {
          "mcc": "333",
          "mnc": "103"
        }
      ]
    }
  },

```



```
{
  "mcc": "333",
  "mnc": "126"
},
{
  "mcc": "333",
  "mnc": "104"
},
{
  "mcc": "333",
  "mnc": "105"
},
{
  "mcc": "333",
  "mnc": "127"
},
{
  "mcc": "333",
  "mnc": "128"
},
{
  "mcc": "333",
  "mnc": "106"
},
{
  "mcc": "333",
  "mnc": "107"
},
{
  "mcc": "333",
  "mnc": "129"
},
{
  "mcc": "333",
  "mnc": "108"
},
{
  "mcc": "333",
  "mnc": "120"
},
{
  "mcc": "333",
  "mnc": "121"
},
{
  "mcc": "333",
  "mnc": "100"
},
{
  "mcc": "333",
  "mnc": "122"
},
{
  "mcc": "333",
  "mnc": "112"
},
},
```

```

        {
            "mcc": "333",
            "mnc": "113"
        },
        {
            "mcc": "333",
            "mnc": "114"
        },
        {
            "mcc": "333",
            "mnc": "115"
        },
        {
            "mcc": "333",
            "mnc": "116"
        },
        {
            "mcc": "333",
            "mnc": "117"
        },
        {
            "mcc": "333",
            "mnc": "118"
        },
        {
            "mcc": "333",
            "mnc": "119"
        }
    ]
},
"allowedProducerRemoteSeppSets": {
    "allowedProducerRemoteSeppSets": []
},
"networkIdValidationEnabled": {
    "networkIdValidationListName": "Default",
    "messageFilteringOnNetworkIdHeaderValidation": false,
    "messageFilteringOnNetworkIdBodyValidation": false
},
"sorEnabled": {
    "sorTriggerRuleListName": "Default",
    "sorRemoteSeppValidation": false
},
"ingressRateLimitingOptions": {
    "ingressRateLimitingEnabled": false,
    "capacity": 1,
    "refillRate": 1,
    "duration": 10,
    "requestTokens": 1,
    "errorConfiguration": {
        "action": "REJECT",
        "title": "Too many requests sent2",
        "statusCode": 429
    }
}
},
{

```

```

    "name": "RPS3",
    "primary": "RPS3",
    "allowedListName": "Default",
    "mediationFeatureOptions": {},
    "plmnIdList": {
      "plmnIdList": [
        {
          "mcc": "111",
          "mnc": "112"
        }
      ]
    },
    "allowedProducerRemoteSeppSets": {
      "allowedProducerRemoteSeppSets": []
    },
    "networkIdValidationEnabled": {
      "networkIdValidationListName": "Default",
      "messageFilteringOnNetworkIdHeaderValidation": false,
      "messageFilteringOnNetworkIdBodyValidation": false
    },
    "sorEnabled": {
      "sorTriggerRuleListName": "Default",
      "sorRemoteSeppValidation": false
    },
    "ingressRateLimitingOptions": {
      "ingressRateLimitingEnabled": false,
      "capacity": 2000,
      "refillRate": 2000,
      "duration": 1,
      "requestTokens": 10,
      "errorConfiguration": {
        "action": "REJECT",
        "title": "Too many requests sent",
        "statusCode": 429
      }
    }
  },
  "messageValidationRemoteSeppSetConfiguration": {
    "messageValidationOnQueryParametersEnabled": false,
    "messageValidationOnBodyEnabled": false,
    "messageValidationListName": "Default"
  }
}
]

```

Sample Response body structure for GET operations:

Resource API: /sepp-configuration/v1/remotesepset/{name}

Resource Method: GET

Content Type: application/json

Response Body

```

[ {
  "name": "RPS3",
  "primary": "RPS3",
  "allowedListName": "Default",

```

```

"mediationFeatureOptions": {},
"plmnIdList": {
  "plmnIdList": [
    {
      "mcc": "111",
      "mnc": "112"
    }
  ]
},
"allowedProducerRemoteSeppSets": {
  "allowedProducerRemoteSeppSets": []
},
"networkIdValidationEnabled": {
  "networkIdValidationListName": "Default",
  "messageFilteringOnNetworkIdHeaderValidation": false,
  "messageFilteringOnNetworkIdBodyValidation": false
},
"sorEnabled": {
  "sorTriggerRuleListName": "Default",
  "sorRemoteSeppValidation": false
},
"ingressRateLimitingOptions": {
  "ingressRateLimitingEnabled": false,
  "capacity": 2000,
  "refillRate": 2000,
  "duration": 1,
  "requestTokens": 10,
  "errorConfiguration": {
    "action": "REJECT",
    "title": "Too many requests sent",
    "statusCode": 429
  }
},
"messageValidationRemoteSeppSetConfiguration": {
  "messageValidationOnQueryParametersEnabled": true,
  "messageValidationOnBodyEnabled": true,
  "messageValidationListName": "Default" }
}
]

```

Sample Response body structure for POST operations:

Resource API: sepp-configuration/v1/RemoteSeppSet/

Resource Method: POST

Content Type: application/json

Request Body

```

curl -v http://127.0.0.1:9090/sepp-configuration/v1/remotesepset -d '{
  "name": "RSS-2",
  "primary": "RSS-2",
  "secondary": "string",
  "tertiary": "string",
  "allowedListName": "Default",
  "mediationFeatureOptions": {

```

```

        "triggerRuleListName": "Default"
    },
    "plmnIdList": {
        "plmnIdList": [
            {
                "mcc": "string",
                "mnc": "string"
            }
        ]
    },
    "allowedProducerRemoteSeppSets": {
        "allowedProducerRemoteSeppSets": [
            "string"
        ]
    },
    "networkIdValidationEnabled": {
        "networkIdValidationListName": "Default",
        "messageFilteringOnNetworkIdHeaderValidation": true,
        "messageFilteringOnNetworkIdBodyValidation": true
    },
    "sorEnabled": {
        "sorTriggerRuleListName": "string",
        "sorRemoteSeppValidation": true
    },
    "ingressRateLimitingOptions": {
        "ingressRateLimitingEnabled": true,
        "capacity": 16000,
        "refillRate": 10000,
        "duration": 300,
        "requestTokens": 500,
        "errorConfiguration": {
            "action": "REJECT",
            "title": "Too Many Requests sent",
            "statusCode": 429
        }
    }
}
"messageValidationRemoteSeppSetConfiguration": {
    "messageValidationOnQueryParametersEnabled": true,
    "messageValidationOnBodyEnabled": true,
    "messageValidationListName": "Default"
}'

```

Response Body

HTTP/1.1 200OK

Sample Response body structure for PUT operations:

Resource API: sepp-configuration/v1/RemoteSeppSet/psepp-2

Resource Method: PUT

Content Type: application/json

Request Body

```

curl -X 'PUT' \
  'http://127.0.0.1:9090/sepp-configuration/v1/remotesepset/RSS-2' \
  -H 'accept: */*' \
  -H 'Content-Type: application/json' \
  -d '{
    "name": "RSS-2",
    "primary": "RSS-2",
    "secondary": "string",
    "tertiary": "string",
    "allowedListName": "default",
    "mediationFeatureOptions": {
      "triggerRuleListName": "default"
    },
    "plmnIdList": {
      "plmnIdList": [
        {
          "mcc": "string",
          "mnc": "string"
        }
      ]
    },
    "allowedProducerRemoteSeppSets": {
      "allowedProducerRemoteSeppSets": [
        "string"
      ]
    },
    "networkIdValidationEnabled": {
      "networkIdValidationListName": "default",
      "messageFilteringOnNetworkIdHeaderValidation": true,
      "messageFilteringOnNetworkIdBodyValidation": true
    },
    "sorEnabled": {
      "sorTriggerRuleListName": "string",
      "sorRemoteSeppValidation": true
    },
    "ingressRateLimitingOptions": {
      "ingressRateLimitingEnabled": true,
      "capacity": 16000,
      "refillRate": 10000,
      "duration": 300,
      "requestTokens": 500,
      "errorConfiguration": {
        "action": "REJECT",
        "title": "Too Many Requests sent",
        "statusCode": 429
      }
    }
  }
  "messageValidationRemoteSeppSetConfiguration": {
    "messageValidationOnQueryParametersEnabled": true,
    "messageValidationOnBodyEnabled": true,
    "messageValidationListName": "Default"
  }
}'

```

Response Body

HTTP/1.1 200OK

Sample Response body structure for DELETE operations:

Resource API: sepp-configuration/v1/RemoteSeppSet/{name}

Resource Method: DELETE

Content Type: application/json

Response Body

Resource API: sepp-configuration/v1/remotesepp/{name}

{204 No Content}

If there is error, then the response will be error message.

2.4 Topology Hiding

Topology Hiding REST API enables or disables the Topology Hiding feature. The user can configure the topology header and body configurations.

Table 2-8 Topology Hiding

Method	URL	Description	Input	Return	Example
POST	/sepp-configuration/v1/topology/configuration	Adds Actual to Pseudo values configuration required for Topology hiding 400 If bad request 409 If Value already exists If success, then 201 status code	Actual value and list of pseudo values to be mapped with the given actual value	Configuration added successfully.	curl -v http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/v1/topology/configuration -H 'Content-Type:application/json' -X POST -d '{ "actualValue": "udm26.5gc.mnc340.mcc313.3gppnetwork.org", "type": "FQDN", "pseudoValues": ["cyc009-cnf.nk.udm-001.5gc.mnc340.mcc313.3gppnetwork.org", "cyc010-cnf.nk.udm-002.5gc.mnc340.mcc313.3gppnetwork.org", "cyc011-cnf.nk.udm-003.5gc.mnc340.mcc313.3gppnetwork.org"]}'
DELETE	/sepp-configuration/v1/topology/configuration/{actualValue}	Delete the actual to pseudo mapping 400 If bad request If success, then 204 status code	Actual Value to be deleted	HTTP Status 204	curl -v http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/v1/topology/configuration/udm25.5gc.mnc340.mcc313.3gppnetwork.org -H 'Content-Type:application/json' -X DELETE

Table 2-8 (Cont.) Topology Hiding

Method	URL	Description	Input	Return	Example
GET	/sepp-configuration/v1/topology/configuration	Get all the actual-pseudo values		List of actual - pseudo values	curl -v http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/v1/topology/configuration -X GET
GET	/sepp-configuration/v1/topology/configuration/{actualValue}	Get pseudo values for particular actual value		Pseudo values corresponding to actual value with type	curl -v http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/v1/topology/configuration/udm1.5gc.mnc340.mcc313.3gpnetwork.org -X GET

Table 2-8 (Cont.) Topology Hiding

Method	URL	Description	Input	Return	Example
PUT	/sepp-configuration/v1/topology/configuration/{actualValue}	Inserts a new record of actual-pseudo value 400 If bad request 409 If Value already exists If success, then 201 status code		Configuration added successfully	<pre>curl -v http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/v1/topology/configuration/udm26.5gc.mnc340.mcc313.3gppnetwork.org -H 'Content-Type:application/json' -X PUT -d '{ "actualValue": "udm26.5gc.mnc340.mcc313.3gppnetwork.org", "type": "FQDN", "pseudoValues": ["cyc009-cnf.nk.udm-001.5gc.mnc340.mcc313.3gppnetwork.org", "cyc010-cnf.nk.udm-002.5gc.mnc340.mcc313.3gppnetwork.org", "cyc011-cnf.nk.udm-003.5gc.mnc340.mcc313.3gppnetwork.org"] }'</pre>

Table 2-8 (Cont.) Topology Hiding

Method	URL	Description	Input	Return	Example
PUT	/sepp-configuration/v1/topology/body/{topologyId}	Insert a new identifier that would be eligible for Topology Hiding/Topology Recovery	TopologyBodyConfig	Configuration added successfully.	curl -v http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/v1/topology/configuration/udm26.5gc.mnc340.mcc313.3gppnetwork.org -H 'Content-Type:application/json' -X PUT -d '{ "topologyId": 0, "triggerPoints": "N32_Ingress_Request", "operation": "TH", "method": "GET", "apiUrl": "string", "identifier": "string", "pattern": "string" }'
GET	/sepp-configuration/v1/topology/body	fetch all the identifiers	NA	List of TopologyBodyConfig	curl -v http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/v1/topology/body' \ -H 'accept: */*'
DELETE	/sepp-configuration/v1/topology/body/{topologyId}	delete the identifier that belongs to id - topologyId	topologyId	HTTP Status 204	curl -v http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/v1/topology/body/4' \ -H 'accept: */*'
GET	/sepp-configuration/v1/topology/header	Fetch all the header configuration available in header table.	NA	List of headers	curl -v http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/v1/topology/header' \ -H 'accept: */*'

Table 2-8 (Cont.) Topology Hiding

Method	URL	Description	Input	Return	Example
PUT	/sepp-configuration/v1/topology/header/{headerId}	Insert a new header that would be eligible for TH/TUH	headerId,HeaderConfiguration	Header created successfully	curl -v http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/v1/topology/header/3' \ -H 'accept: */*' \ -H 'Content-Type: application/json' \ -d '{ "headerId": 0, "headerName": "string", "triggerPoints": "N32_Egress_Request", "operation": "TH", "regExp": "string" }'
DELETE	/sepp-configuration/v1/topology/header/{headerId}	Delete associated header	headerId	HTTP Status 204	curl -X 'DELETE' \ 'http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/v1/topology/header/6' \ -H 'accept: */*'
GET	/sepp-configuration/v1/topology/options	List topology configuration options available	TopologyOptionsDTO	TopologyOptions	curl -X 'GET' \ 'http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/v1/topology/options' \ -H 'accept: */*'

Table 2-8 (Cont.) Topology Hiding

Method	URL	Description	Input	Return	Example
PUT	/sepp-configuration/v1/topology/options	Update options configurations	TopologyOption sDTO	HTTP Status 200	<pre>curl -X 'PUT' \ 'http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/v1/topology/options' \ -H 'accept: */*' \ -H 'Content-Type: application/json' \ -d '{ "optionId": 0, "messageRoute": "FORWARD", "errorCode": "string", "errorDescription": "string", "multiPseudoValueOptionEnable": true, "topologyHiding": true }' q</pre>

Topology Hiding Parameters

Table 2-9 Topology Hiding Parameters

Attribute	Data type	Mandatory(M)/ Conditional(C)/ Optional(O)	Description
pseudoValueConfiguration	Object	M	Actual to Pseudo Value Configuration
actualValueConfiguration	Object	M	Actual Value in the Actual to Pseudo mapping
topologyOptionsDTO	Boolean	O	Options available to configure in the topology. The feature is disabled (set to false) by default.
headerConfigurationDTO	Object	M	Headers configuration to add new header
topologyBodyConfig	Object	M	Identifier configuration to add new

Pseudo Value Configuration

Table 2-10 Pseudo Value Configuration

Attribute	Data type	Compliance	Description
actualValue	String	M	This is used to compare with the individual header value
pseudoValues	List<String>	M	List of all pseudo values for a particular actual value
type	Enum	M	Type of actual value to be updated

Actual Configuration**Table 2-11 Actual Configuration**

Attribute	Data type	Compliance	Description
actualValue	String	M	Actual value

Topology Options**Table 2-12 Topology Options**

Attribute	Data type	Compliance	Description
optionId	Integer	M	primary ID
messageDirection	Enum	M	REJECT/FORWARD
errorCode	String	M	error code
errorDescription	String	M	error description
multiPseudoValueOption Enable	boolean	O	To enable or disable the multiPseudoValueOption Enable. The feature is disabled (set to false) by default.
topologyHiding	boolean	O	To enable or disable topology hiding. The feature is disabled (set to false) by default.

Header Configurations**Table 2-13 Header Configurations**

Attribute	Data type	Compliance	Description
headerId	Integer	M	primary ID
headerName	String	M	Name of the header
regExp	String	M	Regular Expression for the header
triggerPoint	Enum	M	Request Ingress, Response Ingress, Request Egress, Response Egress

Table 2-13 (Cont.) Header Configurations

Attribute	Data type	Compliance	Description
operation	Enum	M	Topology Hiding or Topology Recovery

Topology Body Configurations**Table 2-14 Topology Body Configurations**

Attribute	Data stype	Compliance	Description
topologyId	Integer	M	primary id
apiUrl	String	M	API Resource that comes from default table
identifier	String	M	identifier
pattern	String	M	regularExpression for identifier
triggerPoint	Enum	M	Request Ingress, Response Ingress, Request Egress, Response Egress
operation	Enum	M	Topology Hiding / Topology Recovery
method	Enum	M	GET/PUT/POST/DELETE/PATCH

Resource API : /sepp-configuration/v1/topology/configuration

Resource Method : GET

Content Type: application/json

Response Body

```
[{ "actualValue": "pcf1.inter.oracle.com", "pseudoValues":
[ "value1.inter.oracle.com", "type": "FQDN" }, { "actualValue": "abc.com",
"pseudoValues": [ "pqr.com" ], "type": "FQDN" }, { "actualValue":
"udm26.5gc.mnc340.mcc313.3gppnetwork.org", "pseudoValues": [ "cyc009-
cnf.nk.udm-001.5gc.mnc340.mcc313.3gppnetwork.org", "cyc010-
cnf.nk.udm-002.5gc.mnc340.mcc313.3gppnetwork.org", "cyc011-
cnf.nk.udm-003.5gc.mnc340.mcc313.3gppnetwork.org" ], "type": "FQDN"}]
```

Resource API : /sepp-configuration/v1/topology/configuration/{actualValue}

Resource Method : GET

Content Type: application/json

Response Body

```
{ "actualValue": "pcf1.inter.oracle.com", "pseudoValues":
[ "value1.inter.oracle.com", "type": "FQDN" ] }
```

Resource API : /sepp-configuration/v1/topology/configuration/{actualValue}

Resource Method : PUT

Content Type: application/json

Response Body

Configuration added successfully

Sample Response body structure for POST operations:

Resource API : /sepp-configuration/v1/topology/configuration

Resource Method : POST

Content Type: application/json

Response Body

Configuration added successfully

Sample Response body structure for DELETE operations:

Resource API : /sepp-configuration/v1/topology/configuration/{actualValue}

Resource Method : DELETE

Content Type: application/json

Response Body

Status code 204

If there is an error then the response will be error message.

Sample Response body structure for PUT operations:

Resource API : /sepp-configuration/v1/topology/options (PUT)

Resource Method : PUT

Content Type: application/json

Response Body

Request:

```
curl -X 'PUT' \
  'http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/v1/topology/
options' \
  -H 'accept: */*' \
  -H 'Content-Type: application/json' \
  -d '{
    "multiPseudoValueOptionEnable": true,
    "messageRoute": "FORWARD",
    "errorCode": "500",
    "errorDescription": "Internal Server",
    "topologyHiding": true
  }'
```


Response:
Saved

Sample Response body structure for GET operations:

Resource API : /sepp-configuration/v1/topology/options (GET)

Resource Method : GET

Content Type: application/json

Response Body

Request:
curl -X 'GET' \
'http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/v1/topology/
options' \
-H 'accept: */*'

```
Response: {
  "optionId": 1,
  "multiPseudoValueOptionEnable": true,
  "messageRoute": "REJECT",
  "errorCode": "500",
  "errorDescription": "Internal Server",
  "topologyHiding": true }
```

Sample Response body structure for GET operations:

Resource API : /sepp-configuration/v1/topology/body (GET)

Resource Method : GET

Content Type: application/json

Response Body

```
[
  {
    "topologyId": 73,
    "triggerPoints": "N32_Egress_Request",
    "operation": "TH",
    "method": "POST",
    "apiUrl": "/nudm-sdm/v2/{supi}/sdm-subscriptions",
    "identifier": "nfInstanceId",
    "pattern": "^([0-9A-Fa-f]{8})-([0-9A-Fa-f]{4})-4([0-9A-Fa-f]{3})-([0-9A-Fa-f]{4})-([0-9A-Fa-f]{12})$"
  },
  {
    "topologyId": 113,
    "triggerPoints": "N32_Egress_Response",
    "operation": "TH",
    "method": "GET",
    "apiUrl": "/nudm-sdm/v2/{supi}/ue-context-in-smf-data",
    "identifier": "smfInstanceId",
    "pattern": "^([0-9A-Fa-f]{8})-([0-9A-Fa-f]{4})-4([0-9A-Fa-f]{3})-([0-9A-Fa-f]{4})-([0-9A-Fa-f]{12})$"
  }
]
```

```

{4}-[0-9A-Fa-f]{12}$"
},
{
  "topologyId": 149,
  "triggerPoints": "N32_Egress_Request",
  "operation": "TH",
  "method": "PUT",
  "apiUrl": "/nudm-uecm/v1/{ueId}/registrations/amf-3gpp-access",
  "identifier": "pcscfRestorationCallbackUri",
  "pattern": "(?<=http://|https://)[^:/?]+"
},
{
  "topologyId": 177,
  "triggerPoints": "N32_Ingress_Response",
  "operation": "TUH",
  "method": "GET",
  "apiUrl": "/nudm-uecm/v1/{ueId}/registrations/amf-3gpp-access",
  "identifier": "deregCallbackUri",
  "pattern": "(?<=http://|https://)[^:/?]+"
},
{
  "topologyId": 265,
  "triggerPoints": "N32_Egress_Request",
  "operation": "TH",
  "method": "PUT",
  "apiUrl": "/nudm-uecm/v1/{ueId}/registrations/smf-registrations/
{pduSessionId}",
  "identifier": "pgwFqdn",
  "pattern": "^(!:/)(?=. {1,255}$)((. {1,63}. ) {1,127}(?! [0-9]*$)[a-z0-9- ]?)"
},
{
  "topologyId": 289,
  "triggerPoints": "N32_Ingress_Response",
  "operation": "TUH",
  "method": "PUT",
  "apiUrl": "/nudm-uecm/v1/{ueId}/registrations/smf-3gpp-access",
  "identifier": "smfInstanceId",
  "pattern": "^[0-9A-Fa-f]{8}-[0-9A-Fa-f]{4}-4[0-9A-Fa-f]{3}-[0-9A-Fa-f]
{4}-[0-9A-Fa-f]{12}$"
},
{
  "topologyId": 117,
  "triggerPoints": "N32_Egress_Response",
  "operation": "TH",
  "method": "GET",
  "apiUrl": "/nudm-sdm/v2/{supi}/ue-context-in-smf-data",
  "identifier": "pgwFqdn",
  "pattern": "^(!:/)(?=. {1,255}$)((. {1,63}. ) {1,127}(?! [0-9]*$)[a-z0-9- ]?)"
}
]

```

Sample Response body structure for PUT operations:

Resource API : /sepp-configuration/v1/topology/body (PUT)

Resource Method : PUT

Content Type: application/json

Response Body

Request:

```
curl -X 'PUT' \
  'http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/v1/topology/body' \
  -H 'accept: */*' \
  -H 'Content-Type: application/json' \
  -d '{
    "triggerPoints": "N32_Egress_Request",
    "operation": "TH",
    "method": "GET",
    "apiUrl": "/nnrf-disc/v1/nf-instances",
    "identifier": "nfInstanceId",
    "pattern": "ALL"
  }'
```

Response:

Configuration updated successfully.

Sample Response body structure for DELETE operations:

Resource API : /sepp-configuration/v1/topology/body (DELETE)

Resource Method : DELETE

Content Type: application/json

Response Body

```
Request: curl -X 'GET' \ curl -X 'DELETE' \
  'http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/v1/topology/body/1' \
  -H 'accept: */*'
```

Response:

204 No Content

Sample Response body structure for GET operations:

Resource API : /sepp-configuration/v1/topology/header (GET)

Resource Method : GET

Content Type: application/json

Response Body

```
Request: curl -X 'GET' \
  'http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/v1/topology/header' \
  -H 'accept: */*'
```

Response: [[

```
{
  "headerId": 1,
```

```

    "headerName": "via",
    "regExp": "(?<=SCP-).*|(?<=http://|https://)[^:/?]+",
    "triggerPoints": "N32_Egress_Request",
    "operation": "TH"
  },
  {
    "headerId": 2,
    "headerName": "via",
    "regExp": "(?<=SCP-).*",
    "triggerPoints": "N32_Egress_Response",
    "operation": "TH"
  },
  {
    "headerId": 3,
    "headerName": "location",
    "regExp": "(?<=http://|https://)[^:/?]+",
    "triggerPoints": "N32_Egress_Response",
    "operation": "TUH"
  },
  {
    "headerId": 4,
    "headerName": "server",
    "regExp": "(?<=http://|https://)[^:/?]+",
    "triggerPoints": "N32_Egress_Response",
    "operation": "TH"
  },
  {
    "headerId": 5,
    "headerName": "3gpp-sbi-target-apiroot",
    "regExp": "(?<=http://|https://)[^:/?]+",
    "triggerPoints": "N32_Ingress_Request",
    "operation": "TUH"
  },
  {
    "headerId": 6,
    "headerName": "3gpp-sbi-routing-binding",
    "regExp": "(?<=http://|https://)[^:/?]+",
    "triggerPoints": "N32_Egress_Response",
    "operation": "TH"
  },
  {
    "headerId": 7,
    "headerName": "3gpp-sbi-binding",
    "regExp": "(?<=http://|https://)[^:/?]+",
    "triggerPoints": "N32_Ingress_Request",
    "operation": "TUH"
  }
] ]

```

Sample Response body structure for PUT operations:

Resource API : /sepp-configuration/v1/topology/header (PUT)

Resource Method : PUT

Content Type: application/json

Response Body

Request:

```
curl -X 'PUT' \
  'http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/v1/topology/
header' \
  -H 'accept: */*' \
  -H 'Content-Type: application/json' \
  -d '{
    "headerName": "via",
    "triggerPoints": "N32_Egress_Response",
    "operation": "TH",
    "regExp": "(?<=SCP-).*"
  }'
```

Response:

Header created successfully

Sample Response body structure for DELETE operations:

Resource API : /sepp-configuration/v1/topology/header (DELETE)

Resource Method : DELETE

Content Type: application/json

Response Body

Request: curl -X 'DELETE' \

```
'http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/v1/topology/
header/7' \
  -H 'accept: */*'
```

Response:

204 No Content

Sample Response body structure for GET operations:

Resource API : /sepp-configuration/v1/topology/body/{topologyId} (GET)

Resource Method : GET

Content Type: application/json

Response Body

Request:

```
curl -X 'GET' \
  'http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/v1/topology/
body/59' \
  -H 'accept: */*'
```

Response: {

```
"topologyId": 59,
"operation": "TH",
"method": "GET",
"apiUrl": "/nnrf-disc/v1/nf-instances",
```

```

    "identifier": "requester-nf-instance-id",
    "pattern": "(?<=SCP-).*(?<=http://|https://)[^:/?]+"
  }

```

2.5 Logging

Logging Rest API returns the application based log level and package based log level.

Table 2-15 Logging Rest API

Method	URL	Description	Input	Return	Example
GET All	/sepp-configuration/sepp/nf-common-component/v1/all/logging	Retrieve log level details for all common and SEPP modules	NA	Log Level Options	curl -X GET http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/sepp/nf-common-component/v1/all/logging
GET	/sepp-configuration/sepp/nf-common-component/v1/{name}/logging	Retrieve log level details by name for SEPP modules other than Gateway.	Name of module	App and package log level	curl -X GET http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/sepp/nf-common-component/v1/cn32/logging
PUT	/sepp-configuration/sepp/nf-common-component/v1/{name}/logging	Update log level details by name for SEPP modules other than Gateway.	Path Parameter name of module and json app and package log level	App and package log level	curl -X PUT -H 'Content-Type: application/json' -d '{"appLogLevel": "DEBUG", "packageLogLevel": [{"packageName": "root", "logLevelForPackage": "DEBUG"}]' http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/sepp/nf-common-component/v1/cn32c/logging
GET (Common Service)	/sepp/nf-common-component/v1/{serviceName}/{instanceId}/logging	Retrieve the log level details for common services such as IGW and EGW	NA	Log Level Options	curl -X GET http://<SEPP-Configuration IP>:<PORT>/sepp/nf-common-component/v1/egw/n32/logging

Table 2-15 (Cont.) Logging Rest API

Method	URL	Description	Input	Return	Example
PUT (Common Service)	/sepp/nf-common-component/v1/{serviceName}/{instanceId}/logging	Update log level for common services such as IGW and EGW	Log Level Options	Log Level Options	curl -X PUT -H 'Content-Type: application/json' -d '{"appLogLevel": "DEBUG", "packageLogLevel": [{"packageName": "root", "logLevelForPackage": "DEBUG"}], {"packageName": "oauth", "logLevelForPackage": "DEBUG"}}' http://<SEPP-Configuration IP>:<PORT>/sepp/nf-common-component/v1/egw/n32/logging

Logging Parameters

Table 2-16 Logging Parameters

Attribute	Data Type	Compliance	Default Value	Description
appLogLevel	String	M	NA	Application based Log Level
packageName	String	M	NA	Package Name
logLevelForPackage	String	M	NA	Log level of each corresponding packages. Example: For Package root, the loglevel can be ERROR.

Sample Response body structure for GET operations:

Resource API : /sepp-configuration/sepp/nf-common-component/v1/all/logging

Resource Method : GET All

Content Type: application/json

Response Body

```
{
  "n32-ingress-gateway": {
    "appLogLevel": "DEBUG",
    "packageLogLevel": [
      {
        "packageName": "root",
        "logLevelForPackage": "ERROR"
      },
      {
        "packageName": "oauth",
        "logLevelForPackage": "WARN"
      }
    ],
    "n32-egress-gateway": {
      "appLogLevel": "INFO",
      "packageLogLevel": [
        {
          "packageName": "root",
          "logLevelForPackage": "DEBUG"
        },
        {
          "packageName": "oauth",
          "logLevelForPackage": "DEBUG"
        }
      ]
    },
    "plmn-ingress-gateway": {
      "appLogLevel": "DEBUG",
      "packageLogLevel": [
        {
          "packageName": "root",
          "logLevelForPackage": "ERROR"
        },
        {
          "packageName": "oauth",
          "logLevelForPackage": "WARN"
        }
      ]
    }
  }
}
```

```
[{"packageName":"root","logLevelForPackage":"WARN"},
{"packageName":"oauth","logLevelForPackage":"ERROR"}], "plmn-egress-
gateway":{"appLogLevel":"DEBUG","packageLogLevel":
[{"packageName":"root","logLevelForPackage":"DEBUG"},
{"packageName":"oauth","logLevelForPackage":"DEBUG"}], "config-mgr-
svc":{"appLogLevel":"DEBUG","packageLogLevel":
[{"packageName":"root","logLevelForPackage":"DEBUG"}], "cn32c-
svc":{"appLogLevel":"DEBUG","packageLogLevel":
[{"packageName":"root","logLevelForPackage":"DEBUG"}], "pn32c-
svc":{"appLogLevel":"DEBUG","packageLogLevel":
[{"packageName":"root","logLevelForPackage":"DEBUG"}], "cn32f-
svc":{"appLogLevel":"DEBUG","packageLogLevel":
[{"packageName":"root","logLevelForPackage":"DEBUG"}], "pn32f-
svc":{"appLogLevel":"DEBUG","packageLogLevel":
[{"packageName":"root","logLevelForPackage":"DEBUG"}]}]
```

Resource API : /sepp-configuration/sepp/nf-common-component/v1/{name}/logging

Resource Method : GET

Content Type: application/json

Response Body

```
{"appLogLevel":"DEBUG","packageLogLevel":
[{"packageName":"root","logLevelForPackage":"DEBUG"}]}
```

Sample Response body structure for PUT operations:

Resource API : /sepp-configuration/sepp/nf-common-component/v1/{name}/logging

Resource Method : PUT

Content Type: application/json

Response Body

```
{"appLogLevel":"DEBUG","packageLogLevel":
[{"packageName":"root","logLevelForPackage":"DEBUG"}]}
```

2.6 CNCC SEPP Menu and Data Model API

This API is integrated with Console. Invoking this API returns menuCncc.json and SEPP json data models.

Method	URL	Description	Input	Return	Example
GET	/sepp-configuration/v1/cncc/datamodel/{configType}	This API is integrated with Console. Invoking this API returns menuCncc.json and SEPP json data models.. 404 Error if configType not found.	Input configType : Value can be SEPP menu (menuCncc) or SEPP JSON data model file name (handshake.json, roamingProfile.json etc)	Response menuCncc.json file or any other SEPP cncc configuration json file for which request is received.	curl -v http://<SEPPConfiguration IP>:<PORT> /sepp-configuration/v1/cncc/datamodel/ menuCncc-X GET

CNCC Data Model: Parameters

Table 2-17 CNCC Data Model Parameters

Attribute	Description	Details
configType	This is mandatory parameter. Name of cncc configuration json file	DataType: String Range: Default Value:

Sample Response body structure for GET operations:

Resource API: /sepp-configuration/v1/cncc/datamodel/{configType}

Resource Method: GET

Content Type: application/json

Response Body

```
{
  "menu": {
    "routeConfig": {
      "home": {
        "label": "Home",
        "value": "home",
        "isDefault": true
      },
      "commonServices": {
        "label": "Common Services",
        "value": "commonServices",
        "isDefault": true
      },
      "services/{nf}/{service}": {
        "label": "Services",
        "value": "services"
      },
      "configurations/{nf}/{configType}": {
        "label": "Configurations",
        "value": "configurations"
      }
    }
  }
}
```

```

    },
    "provisioning/{nf}/{provisioningType}": {
      "label": "Provisioning",
      "value": "provisioning"
    }
  },
  "menuItems": [
    {
      "attr": {
        "id": "home",
        "name": "Home"
      }
    },
    {
      "attr": {
        "id": "commonServices/cs",
        "name": "Common Services"
      }
    },
    {
      "attr": {
        "id": "nf-sepp",
        "name": "SEPP",
        "sequence": 1
      }
    },
    "children": [
      {
        "attr": {
          "id": "configurations/sepp/handshake",
          "name": "Handshake Status",
          "sequence": 10
        }
      },
      {
        "attr": {
          "id": "services/sepp/conLoggingLevel",
          "name": "Logging Config",
          "sequence": 20
        }
      },
      {
        "attr": {
          "id": "configurations/sepp/roamingProfile",
          "name": "Remote SEPP",
          "sequence": 30
        }
      },
      {
        "attr": {
          "id": "configurations/sepp/roamingProfileSet",
          "name": "Remote SEPP Set",
          "sequence": 40
        }
      },
      {
        "attr": {

```

```
      "id": "services/sepp/feature",
      "name": "System Options",
      "sequence": 50
    },
    {
      "attr": {
        "id": "TOPOLOGY HIDING",
        "name": "Topology Hiding",
        "sequence": 60
      },
      "children": [
        {
          "attr": {
            "id": "configurations/sepp/configuration",
            "name": "Pseudo Values",
            "sequence": 10
          }
        }
      ]
    }
  ]
}
```

2.7 Mediation System Option

Mediation System Option REST API enables or disables the mediation feature.

Table 2-18 Mediation System Option

Method	URL	Description	Input	Return	Example
GET	sepp-configuration/v1/mediation/feature	Fetch mediation feature option details and Error Configuration Data	MediationTriggerRulesSystemOptions Object containing Mediation Feature Option value and Error Configuration Data	MediationTriggerRulesSystemOptions	curl -v http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/v1/mediation/feature -X GET

Table 2-18 (Cont.) Mediation System Option

Method	URL	Description	Input	Return	Example
PUT	sepp-configuration/v1/mediation/feature	Edit mediation feature option details and Error Configuration Data	MediationTriggerRulesSystemOptions Object containing Mediation Feature Option value and Error Configuration Data	MediationTriggerRulesSystemOptions	<pre>curl -X 'PUT' \ 'http://<SEPP-Configuration IP>:<PORT>/ sepp-configuration/v1 /mediation/ feature' \ -H 'accept: */* ' \ -H 'Content-Type: application/json' \ -d ' { "enabled": true, "errorConfigu ration": { "title": "Mediation Service error", "statusCode": 406, "action": "REJECT" } }</pre>

Mediation System Option Parameters

Table 2-19 Mediation System Option Parameters

Attribute	Data Type	Mandatory(M)/ Conditional(C)/ Optional(O)	Description
enabled	Boolean	O	Specifies the whether to enable or disable the mediation feature. The feature is disabled (set to false) by default.
errorConfiguration	MediationErrorResponseConfigurationDTO	C Optional, if feature is disabled. Mandatory, if feature is enabled.	Error Configuration Data
title	String	M	Title and details of Error

Table 2-19 (Cont.) Mediation System Option Parameters

Attribute	Data Type	Mandatory(M)/ Conditional(C)/ Optional(O)	Description
statusCode	Integer	M	Status Code of error of configured
action	String	M	Action need to be taken when mediation filtering condition reaches an error state. Range: REJECT or CONTINUE

Sample Response body structure for GET operations:

Resource API : sepp-configuration/v1/mediation/feature

Resource Method : GET

Content Type: application/json

Response Body

```
{
  "enabled": true,
  "errorConfiguration": {
    "title": "string",
    "statusCode": 0,
    "action": "string"
  }
}
```

Sample Response body structure for PUT operations:

Resource API : sepp-configuration/v1/mediation/feature

Resource Method : PUT

Content Type: application/json

Response Body

```
{
  "enabled": true,
  "errorConfiguration": {
    "title": "string",
    "statusCode": 0,
    "action": "string"
  }
}
```

2.8 Mediation Trigger Rule Configuration

Mediation Trigger Rule REST API allows the user to configure a set of trigger rules which act as a filtering criteria for SEPP to send a particular request for mediation.

Method	URL	Description	Input	Return	Example
GET	/sepp-configuration/{version}/sepp-mediation-trigger-rule-list	Retrieves all Mediation trigger point configurations.		List<MediationTriggerRulesDTO> List of Trigger Rules.	curl -v http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/{version}/sepp-mediation-trigger-rule-list -X GET
GET	/sepp-configuration/{version}/sepp-mediation-trigger-rule-list/{ruleName}	Gets Mediation trigger point configuration for given ruleName	Trigger Rule Name	MediationTriggerRulesDTO Trigger Rules for the specific name.	curl -v http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/{version}/sepp-mediation-trigger-rule-list/{ruleName} -X GET

Method	URL	Description	Input	Return	Example
PUT	/sepp-configuration/{version}/sepp-mediation-trigger-rule-list/{ruleName}	Configures Mediation trigger point configuration for given data	MediationTriggerRulesDTO TriggerRules List configuration details	MediationTriggerRulesDTO Trigger Rules for the specific name.	curl -X 'PUT' \ 'http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/v1/sepp-mediation-trigger-rule-list/TRL1' \ -H 'accept: */*' \ -H 'Content-Type: application/json' \ -d '{ "triggerRuleListName": "TRL1", "triggerRules": [{ "triggerPoints": ["N32_Egress_Request"], "resourceURI": "/nsmf-pdusession/v1/pdu-sessions", "groupId": "SMF", "httpMethod": "POST" }], "matchAllEnabled": false, "ruleApplied": "REMOTE", "matchAllTriggerPoints": ["N32_Egress_Request"], "matchAllGroupId": "string" }'

Method	URL	Description	Input	Return	Example
DELETE	/sepp-configuration/{version}/sepp-mediation-trigger-rule-list/{ruleName}	Deletes Mediation trigger point configuration for given ruleName	Trigger Rule Name	HTTP Status 204	curl -v http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/{version}/sepp-mediation-trigger-rule-list/{ruleName} -X DELETE

Mediation Trigger Rules Data Model Parameters

Table 2-20 Mediation Trigger Rules Data Model Parameters

Attribute	Datatype	Mandatory(M)/ Conditional(C)/ Optional(O)	Description
triggerRuleListName	String	M	Name of Trigger Rule List Name
triggerRules	List<MediationTriggerRule>	M	List of MediationTriggerRule
matchAllEnabled	Boolean	M	if Enabled, Rule will be applied on every Request coming to SEPP. If Disabled, Rule will be applied on the basis of Trigger Rules.
ruleApplied	String	M	Rule is Applied for Local SEPP or Remote SEPP. Range: LOCAL or REMOTE
matchAllTriggerPoints	List<MediationTriggerPoint>	M	List of Trigger Point. It can be "N32_Egress_Request", "N32_Ingress_Response", "N32_Ingress_Request", "N32_Egress_Response"
matchAllGroupId	String	M	Group ID for which mediation configuration is to be done. This is passed to the Mediation Service for grouping similar rules.

Mediation Trigger Rule Parameters

Table 2-21 Mediation Trigger Rule Parameters

Attribute	Datatype	Mandatory(M)/ Conditional(C)/ Optional(O)	Description
triggerPoints	List<MediationTriggerPoint>	M 1..4	List of Trigger Point. It can be "N32_Egress_Request", "N32_Ingress_Response", "N32_Ingress_Request", "N32_Egress_Response"
resourceURI	String	M	Resource URI
groupId	String	M	Group ID for which mediation configuration is to be done. This is passed to the Mediation Service for grouping similar rules.
httpMethod	String	M	Request URI Method. Range: GET,POST,PUT,PATCH,DELETE, or OPTIONS

Mediation Trigger Rule Option Parameters**Table 2-22 Mediation Trigger Rule Option Parameters**

Attribute	Datatype	Mandatory(M)/ Conditional(C)/ Optional(O)	Description
enabled	boolean	M	Enable/Disable Mediation Feature
errorConfiguration	MediationErrorResponseConfigurationDTO	C Optional if feature not enable Mandatory if enabled	Error Configuration Data

Mediation Trigger Rule Error Configuration Parameters**Table 2-23 Mediation Trigger Rule Error Configuration Parameters**

Attribute	Datatype	Mandatory(M)/ Conditional(C)/ Optional(O)	Description
title	String	M	Title and details of Error
statusCode	Integer	M	Status Code of error of configured

Table 2-23 (Cont.) Mediation Trigger Rule Error Configuration Parameters

Attribute	Datatype	Mandatory(M)/ Conditional(C)/ Optional(O)	Description
action	String	M	action need to be taken when mediation filtering condition reaches an error state. Range: REJECT or CONTINUE

Sample Response body structure for GET ALL operations:

Resource API : /sepp-configuration/{version}/sepp-mediation-trigger-rule-list

Resource Method : GET ALL

Content Type: application/json

Response Body

Request :
/sepp-configuration/v1/sepp-mediation-trigger-rule-list

Response: 200

```
[
  {
    "triggerRuleListName": "SI- Test 1",
    "triggerRules": [
      {
        "triggerPoints": [
          "N32_Ingress_Request"
        ],
        "resourceURI": "/nausf-auth/v1/ue-authentications/{authCtxId}/5g-aka-confirmation",
        "groupId": "AUSF",
        "httpMethod": "PUT"
      },
      {
        "triggerPoints": [
          "N32_Ingress_Request"
        ],
        "resourceURI": "/namf-loc/v1/{ueContextId}/provide-loc-info",
        "groupId": "AMF",
        "httpMethod": "POST"
      },
      {
        "triggerPoints": [
          "N32_Ingress_Request",
          "N32_Egress_Response"
        ],
      }
    ]
  }
]
```

```

        "resourceURI": "/nnrf-disc/v1/nf-instances",
        "groupId": "NRF",
        "httpMethod": "GET"
    }
],
"matchAllEnabled": false,
"ruleApplied": "REMOTE"
},
{
    "triggerRuleListName": "SI Test 2",
    "triggerRules": [
        {
            "triggerPoints": [
                "N32_Egress_Request"
            ],
            "resourceURI": "/nsmf-pdusession/v1/pdu-sessions",
            "groupId": "SMF",
            "httpMethod": "POST"
        }
    ],
    "matchAllEnabled": false,
    "ruleApplied": "REMOTE"
}
]

```

Sample Response body structure for GET operations:

Resource API : /sepp-configuration/{version}/sepp-mediation-trigger-rule-list/{triggerRuleListName}

Resource Method : GET

Content Type: application/json

Response Body

Request:

/sepp-configuration/v1/sepp-mediation-trigger-rule-list/SI-%20Test%201

Response:

```

[
  {
    "triggerRuleListName": "SI- Test 1",
    "triggerRules": [
      {
        "triggerPoints": [
          "N32_Ingress_Request"
        ],
        "resourceURI": "/nausf-auth/v1/ue-authentications/{authCtxId}/5g-aka-confirmation",
        "groupId": "AUSF",
        "httpMethod": "PUT"
      },
      {
        "triggerPoints": [
          "N32_Ingress_Request"
        ]
      }
    ]
  }
]

```

```

    ],
    "resourceURI": "/namf-loc/v1/{ueContextId}/provide-loc-info",
    "groupId": "AMF",
    "httpMethod": "POST"
  },
  {
    "triggerPoints": [
      "N32_Ingress_Request",
      "N32_Egress_Response"
    ],
    "resourceURI": "/nnrf-disc/v1/nf-instances",
    "groupId": "NRF",
    "httpMethod": "GET"
  }
],
"matchAllEnabled": false,
"ruleApplied": "REMOTE"
}
]

```

Sample Response body structure for PUT operations:

Resource API : sepp-configuration/{version}/sepp-mediation-trigger-rule-list/{triggerRuleListName}

Resource Method : PUT

Content Type: application/json

Response Body

Response: 201

```

{
  "triggerRuleListName": "SI Test 3",
  "triggerRules": [
    {
      "triggerPoints": [
        "N32_Egress_Request"
      ],
      "resourceURI": "/nsmf-pdusession/v1/pdu-sessions",
      "groupId": "SMF",
      "httpMethod": "POST"
    }
  ],
  "matchAllEnabled": false,
  "ruleApplied": "REMOTE"
}

```

Sample Response body structure for DELETE operations:

Resource API : /sepp-configuration/{version}/sepp-mediation-trigger-rule-list/{triggerRuleListName}

Resource Method : DELETE

Content Type: application/json

Response Body

Response code :204

Sample Response body structure for GET (feature) operations:

Resource API : sepp-configuration/v1/mediation/feature

Resource Method : GET

Content Type: application/json

Response Body

```
{
  "mediationTriggerRuleEnabled": {
    "enabled": true,
    "errorConfiguration": {
      "title": "SI Test Mediation Error Config Title",
      "statusCode": 406,
      "action": "CONTINUE"
    }
  }
}
```

Sample Response body structure for PUT (feature) operations:

Resource API : sepp-configuration/v1/mediation/feature

Resource Method : PUT

Content Type: application/json

Response Body

```
{
  "mediationTriggerRuleEnabled": {
    "enabled": true,
    "errorConfiguration": {
      "title": "Mediation Failure",
      "statusCode": 503,
      "action": "REJECT"
    }
  }
}
```

2.9 Mediation Rules Configuration

Mediation Rules Configuration

Mediation rules configuration REST API allows user to create, modify, delete, compile, clone, and get rules using CNC Console or Rest APIs.

Table 2-24 Mediation Rules Configuration

Method	URL	Description	Input	Return	Example
GET	/sepp-configuration/mediation/v1/rules	Get all mediation rules	NA	List<Rule> Rule contains name, format, mode, status, and code.	<pre>curl -X 'GET' \ 'http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/mediation/v1/rules' \ -H 'accept: application/json'</pre>
GET	/sepp-configuration/mediation/v1/rules/{ruleName}	Get mediation rule with {ruleName}	ruleName	Rule Rule contains name, format, mode, status, and code.	<pre>curl -X 'GET' \ 'http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/mediation/v1/rules/test' \ -H 'accept: application/json'</pre>

Table 2-24 (Cont.) Mediation Rules Configuration

Method	URL	Description	Input	Return	Example
PUT	/sepp-configuration/mediation/v1/rules/{ruleName}	Creates/ Updates rule definition	ruleName and Rule	Rule Rule contains name, format, mode, status, code, state, and newName.	<pre> curl -X 'PUT' \ 'http:// <SEPP- Configurati on IP>:<PORT>/ sepp- configurati on/ mediation/v 1/rules/ test' \ -H 'accept: application /json' \ -H 'Content- Type: application /json' \ -d '{ "name": "test", "format": "DRL", "mode": "MEDIATION_ ACTIVE", "status": "DRAFT", "code": "package com.oracle. cgbu.ocmedi ation.nfmed iation;\n \n import com.oracle. cgbu.ocmedi ation.nfrul engine.NFD rulesRuleEn gine;\n </pre>

Table 2-24 (Cont.) Mediation Rules Configuration

Method	URL	Description	Input	Return	Example
					<pre> import com.oracle. cgbu.ocmedi ation.factd etails.Requ est\n import com.oracle. cgbu.ocmedi ation.factd etails.Resp onse;\n import java.util.M ap;\n import java.util.H ashMap;\n \n dialect \"mvel\"\n \n rule \"Rule_show _add_header \"\n when\n req : Request(hea ders.has(\" 3gpp-Sbi- Message- Priority\") == true) \n then\n req.headers .add(\"3gpp -Sbi- Message- Priority\", \"10\") \n end", "state" : "save" }' </pre>

Table 2-24 (Cont.) Mediation Rules Configuration

Method	URL	Description	Input	Return	Example
DELETE	/sepp-configuration/mediation/v1/rules/{ruleName}	Deletes mediation rule with {ruleName}	ruleName	Response status (String)	<pre>curl -X 'DELETE' \ 'http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/mediation/v1/rules/test' \ -H 'accept: */*'</pre>

Table 2-25 Mediation Rules Configuration Parameters

Attribute	Data Type	Mandatory(M)/ Conditional(C)/ Optional(O)	Description
Name	String	M	Name for mediation rule configuration.
Format	Enum	M	Rule format. Only DRL is supported currently.
Mode	Enum	M	MEIDATION_ACTIVE: is applicable only to mediation active mode MEDIATION_TEST: is applicable only to mediation test mode The user is required to configure the mediation rules using MEDIATION_ACTIVE mediation mode. MEDIATION_TEST mode is only for internal purpose.
Status	Enum	M	Mediation rule status: APPLIED or DRAFT

Table 2-25 (Cont.) Mediation Rules Configuration Parameters

Attribute	Data Type	Mandatory(M)/ Conditional(C)/ Optional(O)	Description
Code	String	M	Mediation rule code content User has to prepend the following data block along with the needed rules in the code section and provide state as Save to create a new rule in DRAFT status. If the user wants to apply this rule on mediation microservice then user need to modify the rule state to Apply. <pre> package com.oracle.cgbu.ocmediation.nfmediation; import com.oracle.cgbu.ocmediation.nfruleengine.NFDroolsRuleEngine; import com.oracle.cgbu.ocmediation.factdetails.Request; import com.oracle.cgbu.ocmediation.factdetails.Response; import java.util.Map; import java.util.HashMap; dialect "mvel" </pre> Following is a sample mediation rule code with above data block, including necessary escaped characters: <pre> "package com.oracle.cgbu.ocmediation.nfmediation;\n\nimport com.oracle.cgbu.ocmediation.nfruleengine.NFDroolsRuleEngine;\nimport </pre>

Table 2-25 (Cont.) Mediation Rules Configuration Parameters

Attribute	Data Type	Mandatory(M)/ Conditional(C)/ Optional(O)	Description
			<pre> com.oracle.cgbu.o cmediation.factde tails.Request\nim port com.oracle.cgbu.o cmediation.factde tails.Response;\n import java.util.Map;\ni mport java.util.HashMap ;\nimport java.lang.Object; \nimport java.util.ArrayLi st;\n\nndialect \nmvel\n\nrule \nNew Rule1\n\n agenda-group \nsepp17- N32_Ingress_Respo nse\n\nwhen\n rsp : Response(body.ha s(\\$.amData.mcsP riority\n)) \nthen\n rsp.body.del(\\$. amData.mcsPriorit y\n)\n rsp.body.put(\\$. amData\n,\n"sepp\n '\n"sepp\n");\nend" </pre>
State	Enum	M	The states are Compile, Clone, Save, Draft, and Apply. The user can choose one of these states.
NewName	String	C	New name of the rule to be given only when state is clone.

Note

The rule name for a rule in the **DRAFT** status must be unique. Otherwise, the new rule overwrites the old one.

Sample response body structure for GET operations:

Resource API : /sepp-configuration/mediation/v1/rules

Resource Method : GET

Content Type: application/json

Response status : 200 OK

Response Body

```
[
  {
    "name": "test",
    "format": "DRL",
    "mode": "MEDIATION_ACTIVE",
    "status": "DRAFT",
    "code": "package com.oracle.cgbu.ocmediation.nfmediation;\n\nimport
com.oracle.cgbu.ocmediation.nfruleengine.NFDroolsRuleEngine;\nimport
com.oracle.cgbu.ocmediation.factdetails.Request\nimport
com.oracle.cgbu.ocmediation.factdetails.Response;\nimport java.util.Map;\nimport
java.util.HashMap;\nimport java.lang.Object;\nimport java.util.ArrayList;\n\nndialect
\"mvel\"\n\nrule \"New Rule1\"\n  agenda-group \"sepp17-
N32_Ingress_Response\"\nwhen\n  rsp : Response(body.has(\"$.amData.mcsPriority\"))
\nthen\n  rsp.body.del(\"$.amData.mcsPriority\")\n
rsp.body.put(\"$.amData\", \"sepp\", \"sepp\");\nend"
  },
  {
    "name": "test2",
    "format": "DRL",
    "mode": "MEDIATION_ACTIVE",
    "status": "DRAFT",
    "code": "import com.oracle.cgbu.ocmediation.nfruleengine.NFDroolsRuleEngine;\nimport
com.oracle.cgbu.ocmediation.factdetails.Request\nimport
com.oracle.cgbu.ocmediation.factdetails.Response;\nimport java.util.Map;\nimport
java.util.HashMap;\nimport java.util.regex.Pattern;\nimport java.util.regex.Matcher;\n
\nndialect \"mvel\"\n\nrule \"Host-Header-Validation\"\n  agenda-group \"test-
N32_Ingress_Response\"\nwhen\n  rsp: Response((headers.has(\"host\") == true) &&
(headers.has(\"3gpp-sbi-target-apiroot\") == false))\nthen\n  rsp.headers.put(\"x-
hostHeader-validation\", \"successful\")\nend\nrule \"Host-Header-Validation-PSEPP\"\n
agenda-group \"psepp-N32_Egress_Response\"\nwhen\n  rsp: Response((headers.has(\"host\")
== true) && (headers.has(\"3gpp-sbi-target-apiroot\") == false))\nthen\n
rsp.headers.put(\"x-hostHeader-validation\", \"successful\")\nend\n"
  }
]
```

Resource API : /sepp-configuration/mediation/v1/rules/{ruleName}

Resource Method : GET

Content Type: application/json

Response status : 200 OK

Response Body

```
{
  "name": "test",
  "format": "DRL",
  "mode": "MEDIATION_ACTIVE",
  "status": "DRAFT",
  "code": "package com.oracle.cgbu.ocmediation.nfmediation;\n\nimport
com.oracle.cgbu.ocmediation.nfruleengine.NFDroolsRuleEngine;\nimport
com.oracle.cgbu.ocmediation.factdetails.Request\nimport
com.oracle.cgbu.ocmediation.factdetails.Response;\nimport java.util.Map;\nimport
java.util.HashMap;\nimport java.lang.Object;\nimport java.util.ArrayList;\n\n\nndialect
\"mvel\"\n\n\nrule \"New Rule1\"\n    agenda-group \"sepp17-
N32_Ingress_Response\"\n\nwhen\n    rsp : Response(body.has(\"$.amData.mcsPriority\"))
\nthen\n    rsp.body.del(\"$.amData.mcsPriority\")\n\n
rsp.body.put(\"$.amData\", \"sepp\", \"sepp\");\nend"
}
```

Sample response body structure for PUT operation:

Resource API : /sepp-configuration/mediation/v1/rules/{ruleName}

Resource Method : PUT

Content Type: application/json

Response status : 201 CREATED, 200 OK

Response Body

```
{
  "name": "test",
  "format": "DRL",
  "mode": "MEDIATION_ACTIVE",
  "status": "DRAFT",
  "code": "package com.oracle.cgbu.ocmediation.nfmediation;\n\nimport
com.oracle.cgbu.ocmediation.nfruleengine.NFDroolsRuleEngine;\nimport
com.oracle.cgbu.ocmediation.factdetails.Request\nimport
com.oracle.cgbu.ocmediation.factdetails.Response;\nimport java.util.Map;\nimport
java.util.HashMap;\nimport java.lang.Object;\nimport java.util.ArrayList;\n\nndialect
\"mvel\"\n\nrule \"New Rule1\"\n    agenda-group \"sepp17-
N32_Ingress_Response\"\nwhen\n    rsp : Response(body.has(\"$.amData.mcsPriority\"))
\nthen\n    rsp.body.del(\"$.amData.mcsPriority\")\n
rsp.body.put(\"$.amData\", \"sepp\", \"sepp\");\nend"
```

Sample response body structure for DELETE operation:

Resource API : /sepp-configuration/mediation/v1/rules/{ruleName}

Resource Method : DELETE

Content Type: application/json

Response status : 204

Response Body

204

2.10 Cat-1 Service API Validation Feature State

The Cat-1 Service API Validation Feature State REST API is used to enable or disable the Cat-1 Service API Validation feature.

Method	URL	Description	Input	Return	Example
GET	/sepp-configuration/v1/security-counter-measure/feature	Fetch Cat-1 Service API Validation Feature State		Returns Security Counter Measure Options	curl -v http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/v1/security-counter-measure/feature -X GET
PUT	/sepp-configuration/v1/security-counter-measure/feature		Boolean enable flag to determine Cat-1 Service API Validation feature to be enable/disabled	Cat-1 Service API Validation feature is Enabled.	curl -v http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/v1/security-counter-measure/feature -H 'Content-Type: application/json' -X PUT -d '{ "messageFilteringOnResourceUriAndHttpMethodEnabled": { "enabled": true } }'

Table 2-26 Cat-1 Service API Validation Feature State Parameters

Attribute	Datatype	Mandatory(M)/ Conditional(C)/ Optional(O)	Description
enable	Boolean	O	This is used to enable or disable Cat-1 Service API Validation feature. The feature is disabled (set to false) by default.

Sample Response body structure for PUT operations:

Resource API : /v1/security-counter-measure/feature

Resource Method : PUT

Content Type: application/json

Response Body

Request:

```
{
  "messageFilteringOnResourceUriAndHttpMethodEnabled": {
    "enabled": true
  }
}
```

```
}  
  
Response:  
{  
  "messageFilteringOnResourceUriAndHttpMethodEnabled": {  
    "enabled": true  
  }  
}
```

Sample Response body structure for GET operations:

Resource API : /v1/security-counter-measure/feature

Resource Method : GET

Content Type: application/json

Response Body

```
Response:  
{  
  "messageFilteringOnResourceUriAndHttpMethodEnabled": {  
    "enabled": true  
  }  
}
```

2.11 Security Countermeasure Service API Allowed List Name

The Security Countermeasure Service API Allowed List Name REST API is used to do the configurations on the allowed list.

Method	URL	Description	Input	Return	Example
POST	/sepp-configuration/v1/security-counter-measure/service-api-allowed-list/{allowedListName}	Create a new Allowed List	Creating a Security Countermeasure Service API Allowed List Name	HTTP Status 200	<pre>curl -v http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/v1/security-counter-measure/service-api-allowed-list/{allowedListName} -H 'Content-Type:application/json' -X POST -d '{ "allowedListName": "{allowedListName}", "ingressRule": [{ "resourceURI": "/namf-evts/v1/subscriptions", "httpMethod": "POST" }], { "resourceURI": "/namf-evts/v1/subscriptions/{subscriptionId}", "httpMethod": "DELETE" }], "egressRule": [{ "resourceURI": "/namf-loc/v1/{ueContextId}/provide-loc-info", "httpMethod": "POST" }], { "resourceURI": "/nausf-auth/v1/ue-authentications", "httpMethod": "POST" } }</pre>

Method	URL	Description	Input	Return	Example
					<pre>}}, "ingressAction": { "action": "REJE CT", "statusCode": "4 22", "title": "Service API is not whitelisted for ingress" }, "egressAction": { "action": "REJE CT", "statusCode": "4 22", "title": "Service API is not whitelisted for egress" } }'</pre>

Method	URL	Description	Input	Return	Example
PUT	/sepp-configuration/v1/security-counter-measure/service-api-allowed-list/{allowedListName}	Update Allowed List	Updating Security Countermeasure Service API Allowed List Name Configuration		<pre>curl -v http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/v1/security-counter-measure/service-api-allowed-list/{allowedListName} -H 'Content-Type:application/json' -X PUT -d '{ "allowedListName": "{allowedListName}", "ingressRule": [{ "resourceURI": "/namf-evts/v1/subscriptions", "httpMethod": "POST" }, { "resourceURI": "/namf-evts/v1/subscriptions/{subscriptionId}", "httpMethod": "DELETE" }], "egressRule": [{ "resourceURI": "/namf-loc/v1/{ueContextId}/provide-loc-info", "httpMethod": "POST" }, { "resourceURI": "/nausf-auth/v1/ue-authentications", "httpMethod": "DELETE" }]</pre>

Method	URL	Description	Input	Return	Example
					<pre> }}, "ingressAction": { "action": "REJECT", "statusCode": "422", "title": "Service API is not whitelisted for ingress" }, "egressAction": { "action": "REJECT", "statusCode": "422", "title": "Service API is not whitelisted for egress" } }' </pre>
GET	/sepp-configuration/v1/security-counter-measure/service-api-allowed-list/{allowedListName}	Fetching Configuration for Ingress/Egress Rules based on Allowed List Name	Security Countermeasure Service API Allowed List Name	Configuration for Ingress/Egress Rules for the Allowed List Name given in the input	<pre> curl -v GET http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/v1/security-counter-measure/service-api-allowed-list/{allowedListName} -X GET </pre>
GET	/sepp-configuration/v1/security-counter-measure/service-api-allowed-list/	Fetching complete list of Configuration for Ingress/Egress Rules for all the Allowed List Names configured in the system		Complete list of Configuration for Ingress/Egress Rules for all the Allowed List Names configured in the system 200 OK	<pre> curl -v http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/v1/security-counter-measure/service-api-allowed-list/ -X GET </pre>

Method	URL	Description	Input	Return	Example
DELETE	/sepp-configuration/v1/security-counter-measure/service-api-allowed-list/{allowedListName}	API will be used whenever there is a need to delete allowed List Name as well as its corresponding Ingress/Egress Rules and Ingress/Egress Actions	Allowed List Name which has to be deleted.	204 No Content	curl -v http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/v1/security-counter-measure/service-api-allowed-list/{allowedListName} -X DELETE

Default Service API List Configuration Parameters

Table 2-27 Default Service API List Configuration Parameters

Attribute	Datatype	Mandatory(M)/ Conditional(C)/ Optional(O)	Description
id	Integer		
resourceURI	String	M	Service API
method	String	M	Service API Method. Example: GET, POST, PUT, PATCH, and DELETE
regex	String	M	Regex for Service API

Security Allowed List Content Parameters

Table 2-28 Security Allowed List Content Parameters

Attribute	Datatype	Mandatory(M)/ Conditional(C)/ Optional(O)	Description
id	Integer	M	Primary Key of the Table (List Id)
allowedListName	String	M	Security Countermeasure Service API Feature Allowed List Name
ingressActionId	Integer	M	Allowed List Ingress Action ID
egressActionId	Integer	M	Allowed List Egress Action ID

Security Allowed List Action Parameters

Table 2-29 Security Allowed List Action Parameters

Attribute	Datatype	Mandatory(M)/ Conditional(C)/ Optional(O)	Description
Id	Integer	M	Primary Key (Rule Id)
httpMethod	string	M	HTTP Method. Example: GET, POST, PUT, PATCH, and DELETE
resourceURI	string	M	Service API
regex	string	M	Regex for Service API
direction	string	M	Direction (Ingress or Egress) to SEPP

Security Allowed List Content Rule Parameters**Table 2-30 Security Allowed List Content Rule Parameters**

Attribute	Datatype	Mandatory(M)/ Conditional(C)/ Optional(O)	Description
listId	Integer	M	List ID
ruleId	Integer	M	Rule ID

Security Allowed List Action Parameters**Table 2-31 Security Allowed List Action Parameters**

Attribute	Datatype	Mandatory(M)/ Conditional(C)/ Optional(O)	Description
Id	Integer	M	Primary Key (Rule Id)
action	string	M	Action. Example: Reject
title	string	M	Title/Detail of Error
direction	string	M	Direction (Ingress or Egress) to SEPP
statusCode	Integer	M	Status Code of error configured

Sample Response body structure for GET operations:

Resource API : v1/security-counter-measure/service-api-allowed-list/{allowedListName}

Resource Method : GET

Content Type: application/json

Response Body

Request :

v1/security-counter-measure/service-api-allowed-list/default

Response:

```
{
  "allowedListName": "default",
  "ingressRule": [
    {
      "id": 848,
      "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/amf-non-3gpp-access",
      "httpMethod": "PUT"
    },
    {
      "id": 854,
      "resourceURI": "/nudm-sdm/v1/{supi}/am-data",
      "httpMethod": "GET"
    },
    {
      "id": 855,
      "resourceURI": "/nudm-sdm/v1/{supi}/ue-context-in-smf-data",
      "httpMethod": "GET"
    },
    {
      "id": 883,
      "resourceURI": "/nausf-auth/v1/ue-authentications/{authCtxId}/5g-aka-confirmation",
      "httpMethod": "DELETE"
    },
    {
      "id": 902,
      "resourceURI": "/nudm-sdm/v1/{supi}/sdm-subscriptions",
      "httpMethod": "POST"
    },
    {
      "id": 858,
      "resourceURI": "/nudm-sdm/v2/{ueId}/sdm-subscriptions/{subscriptionId}",
      "httpMethod": "DELETE"
    },
    {
      "id": 868,
      "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/smsf-3gpp-access",
      "httpMethod": "GET"
    },
    {
      "id": 846,
      "resourceURI": "/nudm-sdm/v2/{supi}",
      "httpMethod": "GET"
    },
    {
      "id": 863,
      "resourceURI": "/notification",
      "httpMethod": "POST"
    },
    {
      "id": 906,
      "resourceURI": "/namf-comm/v1/subscriptions",
      "httpMethod": "POST"
    }
  ]
}
```

```

    },
    {
      "id": 900,
      "resourceURI": "/nudm-sdm/v1/{supi}/nssai",
      "httpMethod": "GET"
    },
    {
      "id": 872,
      "resourceURI": "/nudm-sdm/v2/{supi}/am-data/sor-ack",
      "httpMethod": "PUT"
    },
    {
      "id": 853,
      "resourceURI": "/nudm-sdm/v2/{supi}/am-data",
      "httpMethod": "POST"
    },
    {
      "id": 889,
      "resourceURI": "/nnssf-nsselection/v1/network-slice-information",
      "httpMethod": "GET"
    },
    {
      "id": 885,
      "resourceURI": "/npcf-ue-policy-control/v1/policies/{polAssoId}",
      "httpMethod": "GET"
    },
    {
      "id": 886,
      "resourceURI": "/nudm-sdm/v2/{supi}/sm-data",
      "httpMethod": "GET"
    },
    {
      "id": 887,
      "resourceURI": "/nudm-sdm/v2/{supi}/ue-context-in-smf-data",
      "httpMethod": "GET"
    },
    {
      "id": 892,
      "resourceURI": "/nudm-sdm/v1/{supi}/sm-data",
      "httpMethod": "GET"
    },
    {
      "id": 893,
      "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/smsf-non-3gpp-
access",
      "httpMethod": "GET"
    },
    {
      "id": 895,
      "resourceURI": "/nudm-sdm/v1/{supi}",
      "httpMethod": "GET"
    },
    {
      "id": 847,
      "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/smsf-3gpp-access",
      "httpMethod": "DELETE"
    }
  ]
}

```

```

    },
    {
      "id": 896,
      "resourceURI": "/nnrf-disc/v1/nf-instances",
      "httpMethod": "GET"
    },
    {
      "id": 891,
      "resourceURI": "/nudm-sdm/v2/{supi}/sms-data",
      "httpMethod": "GET"
    },
    {
      "id": 877,
      "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/smsf-non-3gpp-
access",
      "httpMethod": "PUT"
    },
    {
      "id": 856,
      "resourceURI": "/nsmf-pdusession/v1/pdu-sessions/{pduSessionRef}",
      "httpMethod": "POST"
    },
    {
      "id": 888,
      "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/amf-3gpp-access",
      "httpMethod": "PUT"
    },
    {
      "id": 866,
      "resourceURI": "/nudm-sdm/v2/{ueId}/sdm-subscriptions/{subscriptionId}",
      "httpMethod": "PATCH"
    },
    {
      "id": 860,
      "resourceURI": "/namf-comm/v1/subscriptions/{subscriptionId}",
      "httpMethod": "PUT"
    },
    {
      "id": 852,
      "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/amf-3gpp-access",
      "httpMethod": "GET"
    },
    {
      "id": 905,
      "resourceURI": "/nudm-sdm/v1/shared-data",
      "httpMethod": "GET"
    },
    {
      "id": 865,
      "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/smf-registrations/
{pduSessionId}",
      "httpMethod": "PUT"
    },
    {
      "id": 844,
      "resourceURI": "/nsmf-pdusession/v1/pdu-sessions",

```



```

    "httpMethod": "POST"
  },
  {
    "id": 842,
    "resourceURI": "/nudm-sdm/v2/{supi}/nssai",
    "httpMethod": "GET"
  },
  {
    "id": 850,
    "resourceURI": "/namf-loc/v1/{ueContextId}/provide-loc-info",
    "httpMethod": "POST"
  },
  {
    "id": 843,
    "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/smsf-3gpp-access",
    "httpMethod": "PUT"
  },
  {
    "id": 857,
    "resourceURI": "/nudm-sdm/v2/{supi}/am-data",
    "httpMethod": "GET"
  },
  {
    "id": 876,
    "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/amf-non-3gpp-access",
    "httpMethod": "GET"
  },
  {
    "id": 870,
    "resourceURI": "/nsmf-pdusession/v1/pdu-sessions/{pduSessionRef}/
transfer-mt-data",
    "httpMethod": "POST"
  },
  {
    "id": 875,
    "resourceURI": "/nudm-sdm/v2/{supi}/sms-mng-data",
    "httpMethod": "GET"
  },
  {
    "id": 890,
    "resourceURI": "/nudm-sdm/v1/{supi}/sdm-subscriptions/{subscriptionId}",
    "httpMethod": "DELETE"
  },
  {
    "id": 851,
    "resourceURI": "/nnrf-nfm/v1/NfStatusChangeNotification",
    "httpMethod": "POST"
  },
  {
    "id": 861,
    "resourceURI": "/npcf-ue-policy-control/v1/policies",
    "httpMethod": "POST"
  },
  {
    "id": 869,
    "resourceURI": "/nnrf-nfm/v1/subscriptions/{subscriptionID}",

```

```

        "httpMethod": "PATCH"
      },
      {
        "id": 859,
        "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/smsf-non-3gpp-
access",
        "httpMethod": "DELETE"
      },
      {
        "id": 899,
        "resourceURI": "/nudm-sdm/v1/{supi}/am-data/upu-ack",
        "httpMethod": "PUT"
      },
      {
        "id": 845,
        "resourceURI": "/nudm-sdm/v2/{supi}/am-data/upu-ack",
        "httpMethod": "PUT"
      },
      {
        "id": 909,
        "resourceURI": "/nsmf-pdusession/v1/pdu-sessions/{pduSessionRef}/
release",
        "httpMethod": "POST"
      },
      {
        "id": 862,
        "resourceURI": "/nnssf-nsselection/v2/network-slice-information",
        "httpMethod": "GET"
      },
      {
        "id": 864,
        "resourceURI": "/nudm-sdm/v2/{supi}/ue-context-in-smsf-data",
        "httpMethod": "GET"
      },
      {
        "id": 903,
        "resourceURI": "/nausf-auth/v1/ue-authentications/{authCtxId}/5g-aka-
confirmation",
        "httpMethod": "POST"
      },
      {
        "id": 897,
        "resourceURI": "/nnrf-nfm/v1/subscriptions",
        "httpMethod": "POST"
      },
      {
        "id": 867,
        "resourceURI": "/nudm-sdm/v2/shared-data",
        "httpMethod": "GET"
      },
      {
        "id": 882,
        "resourceURI": "/nudm-sdm/v2/{ueId}/sdm-subscriptions",
        "httpMethod": "POST"
      },
      {

```

```

        "id": 880,
        "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/amf-3gpp-access",
        "httpMethod": "PATCH"
    },
    {
        "id": 873,
        "resourceURI": "/nsmf-pdusession/v1/pdu-sessions/{pduSessionRef}/
modify",
        "httpMethod": "POST"
    },
    {
        "id": 884,
        "resourceURI": "/npcf-ue-policy-control/v1/policies/{polAssoId}/update",
        "httpMethod": "POST"
    },
    {
        "id": 849,
        "resourceURI": "/namf-evts/v1/subscriptions/{subscriptionId}",
        "httpMethod": "DELETE"
    },
    {
        "id": 871,
        "resourceURI": "/nudm-sdm/v1/{supi}/am-data/sor-ack",
        "httpMethod": "PUT"
    },
    {
        "id": 878,
        "resourceURI": "/namf-mt/v1/ue-contexts/{ueContextId}",
        "httpMethod": "GET"
    },
    {
        "id": 907,
        "resourceURI": "/nudm-sdm/v2/{supi}/smf-select-data",
        "httpMethod": "GET"
    },
    {
        "id": 908,
        "resourceURI": "/nsmf-pdusession/v1/pdu-sessions/{pduSessionRef}/
transfer-mo-data",
        "httpMethod": "POST"
    },
    {
        "id": 881,
        "resourceURI": "/nausf-auth/v1/ue-authentications",
        "httpMethod": "POST"
    },
    {
        "id": 904,
        "resourceURI": "/namf-comm/v1/subscriptions/{subscriptionId}",
        "httpMethod": "DELETE"
    },
    {
        "id": 894,
        "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/amf-non-3gpp-access",
        "httpMethod": "PATCH"
    },
    },

```

```

    {
      "id": 898,
      "resourceURI": "/namf-evts/v1/subscriptions",
      "httpMethod": "POST"
    },
    {
      "id": 879,
      "resourceURI": "/nausf-auth/v1/ue-authentications/{authCtxId}/5g-aka-confirmation",
      "httpMethod": "PUT"
    },
    {
      "id": 901,
      "resourceURI": "/npcf-ue-policy-control/v1/policies/{polAssoId}",
      "httpMethod": "DELETE"
    },
    {
      "id": 874,
      "resourceURI": "/namf-evts/v1/subscriptions/{subscriptionId}",
      "httpMethod": "PATCH"
    },
    {
      "id": 910,
      "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/smf-registrations/{pduSessionId}",
      "httpMethod": "DELETE"
    },
    {
      "id": 911,
      "resourceURI": "/nnrf-nfm/v1/subscriptions/{subscriptionID}",
      "httpMethod": "DELETE"
    }
  ],
  "egressRule": [
    {
      "id": 959,
      "resourceURI": "/nausf-auth/v1/ue-authentications/{authCtxId}/5g-aka-confirmation",
      "httpMethod": "PUT"
    },
    {
      "id": 939,
      "resourceURI": "/nudm-sdm/v1/shared-data",
      "httpMethod": "GET"
    },
    {
      "id": 977,
      "resourceURI": "/nudm-sdm/v2/{supi}/smf-select-data",
      "httpMethod": "GET"
    },
    {
      "id": 938,
      "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/smf-registrations/{pduSessionId}",
      "httpMethod": "DELETE"
    }
  ],

```

```

    {
      "id": 978,
      "resourceURI": "/nausf-auth/v1/ue-authentications/{authCtxId}/5g-aka-confirmation",
      "httpMethod": "POST"
    },
    {
      "id": 970,
      "resourceURI": "/nsmf-pdusession/v1/pdu-sessions/{pduSessionRef}/release",
      "httpMethod": "POST"
    },
    {
      "id": 981,
      "resourceURI": "/nudm-sdm/v1/{supi}/am-data/upu-ack",
      "httpMethod": "PUT"
    },
    {
      "id": 940,
      "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/smsf-non-3gpp-access",
      "httpMethod": "GET"
    },
    {
      "id": 960,
      "resourceURI": "/nudm-sdm/v1/{supi}/sm-data",
      "httpMethod": "GET"
    },
    {
      "id": 952,
      "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/amf-non-3gpp-access",
      "httpMethod": "PATCH"
    },
    {
      "id": 932,
      "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/amf-3gpp-access",
      "httpMethod": "GET"
    },
    {
      "id": 948,
      "resourceURI": "/nudm-sdm/v2/{supi}/sms-data",
      "httpMethod": "GET"
    },
    {
      "id": 972,
      "resourceURI": "/oauth2/token",
      "httpMethod": "POST"
    },
    {
      "id": 934,
      "resourceURI": "/nnrf-nfm/v1/NfStatusChangeNotification",
      "httpMethod": "POST"
    },
    {
      "id": 971,
      "resourceURI": "/namf-loc/v1/{ueContextId}/provide-loc-info",

```

```

        "httpMethod": "POST"
      },
      {
        "id": 916,
        "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/smsf-non-3gpp-
access",
        "httpMethod": "DELETE"
      },
      {
        "id": 962,
        "resourceURI": "/nnrf-nfm/v1/subscriptions/{subscriptionID}",
        "httpMethod": "PATCH"
      },
      {
        "id": 961,
        "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/amf-3gpp-access",
        "httpMethod": "PATCH"
      },
      {
        "id": 943,
        "resourceURI": "/npcf-ue-policy-control/v1/policies/{polAssoId}",
        "httpMethod": "GET"
      },
      {
        "id": 974,
        "resourceURI": "/nsmf-pdusession/v1/pdu-sessions/{pduSessionRef}",
        "httpMethod": "POST"
      },
      {
        "id": 949,
        "resourceURI": "/namf-evts/v1/subscriptions/{subscriptionId}",
        "httpMethod": "PATCH"
      },
      {
        "id": 946,
        "resourceURI": "/npcf-ue-policy-control/v1/policies/{polAssoId}",
        "httpMethod": "DELETE"
      },
      {
        "id": 923,
        "resourceURI": "/nudm-sdm/v1/{supi}/sdm-subscriptions/{subscriptionId}",
        "httpMethod": "DELETE"
      },
      {
        "id": 944,
        "resourceURI": "/nudm-sdm/v2/{supi}/am-data/upu-ack",
        "httpMethod": "PUT"
      },
      {
        "id": 956,
        "resourceURI": "/nsmf-pdusession/v1/pdu-sessions/{pduSessionRef}/
transfer-mt-data",
        "httpMethod": "POST"
      },
      {
        "id": 942,

```

```

    "resourceURI": "/nnrf-nfm/v1/subscriptions",
    "httpMethod": "POST"
  },
  {
    "id": 924,
    "resourceURI": "/nudm-sdm/v2/{supi}/ue-context-in-smsf-data",
    "httpMethod": "GET"
  },
  {
    "id": 953,
    "resourceURI": "/npcf-ue-policy-control/v1/policies",
    "httpMethod": "POST"
  },
  {
    "id": 915,
    "resourceURI": "/nnssf-nsselection/v2/network-slice-information",
    "httpMethod": "GET"
  },
  {
    "id": 936,
    "resourceURI": "/nudm-sdm/v2/{supi}/nssai",
    "httpMethod": "GET"
  },
  {
    "id": 933,
    "resourceURI": "/nudm-sdm/v2/{ueId}/sdm-subscriptions/{subscriptionId}",
    "httpMethod": "PATCH"
  },
  {
    "id": 969,
    "resourceURI": "/nudm-sdm/v2/{supi}/am-data",
    "httpMethod": "GET"
  },
  {
    "id": 958,
    "resourceURI": "/nnssf-nsselection/v1/network-slice-information",
    "httpMethod": "GET"
  },
  {
    "id": 928,
    "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/amf-non-3gpp-access",
    "httpMethod": "PUT"
  },
  {
    "id": 963,
    "resourceURI": "/nudm-sdm/v2/{ueId}/sdm-subscriptions/{subscriptionId}",
    "httpMethod": "DELETE"
  },
  {
    "id": 967,
    "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/smsf-3gpp-access",
    "httpMethod": "DELETE"
  },
  {
    "id": 921,
    "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/amf-non-3gpp-access",

```

```

        "httpMethod": "GET"
      },
      {
        "id": 945,
        "resourceURI": "/namf-comm/v1/subscriptions",
        "httpMethod": "POST"
      },
      {
        "id": 920,
        "resourceURI": "/nudm-sdm/v2/{supi}/am-data/sor-ack",
        "httpMethod": "PUT"
      },
      {
        "id": 965,
        "resourceURI": "/nsmf-pdusession/v1/pdu-sessions/{pduSessionRef}/
modify",
        "httpMethod": "POST"
      },
      {
        "id": 914,
        "resourceURI": "/nudm-sdm/v1/{supi}",
        "httpMethod": "GET"
      },
      {
        "id": 937,
        "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/amf-3gpp-access",
        "httpMethod": "PUT"
      },
      {
        "id": 912,
        "resourceURI": "/nnrf-disc/v1/nf-instances",
        "httpMethod": "GET"
      },
      {
        "id": 935,
        "resourceURI": "/namf-evts/v1/subscriptions/{subscriptionId}",
        "httpMethod": "DELETE"
      },
      {
        "id": 926,
        "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/smsf-non-3gpp-
access",
        "httpMethod": "PUT"
      },
      {
        "id": 968,
        "resourceURI": "/nudm-sdm/v1/{supi}/ue-context-in-smf-data",
        "httpMethod": "GET"
      },
      {
        "id": 927,
        "resourceURI": "/nudm-sdm/v1/{supi}/am-data/sor-ack",
        "httpMethod": "PUT"
      },
      {
        "id": 950,

```



```

        "resourceURI": "/nsmf-pdusession/v1/pdu-sessions/{pduSessionRef}/
transfer-mo-data",
        "httpMethod": "POST"
    },
    {
        "id": 913,
        "resourceURI": "/nudm-sdm/v2/{supi}/sm-data",
        "httpMethod": "GET"
    },
    {
        "id": 980,
        "resourceURI": "/nudm-sdm/v2/{supi}",
        "httpMethod": "GET"
    },
    {
        "id": 918,
        "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/smf-registrations/
{pduSessionId}",
        "httpMethod": "PUT"
    },
    {
        "id": 930,
        "resourceURI": "/nnrf-nfm/v1/subscriptions/{subscriptionID}",
        "httpMethod": "DELETE"
    },
    {
        "id": 947,
        "resourceURI": "/namf-comm/v1/subscriptions/{subscriptionId}",
        "httpMethod": "DELETE"
    },
    {
        "id": 919,
        "resourceURI": "/nudm-sdm/v1/{supi}/sdm-subscriptions",
        "httpMethod": "POST"
    },
    {
        "id": 931,
        "resourceURI": "/namf-comm/v1/subscriptions/{subscriptionId}",
        "httpMethod": "PUT"
    },
    {
        "id": 979,
        "resourceURI": "/nausf-auth/v1/ue-authentications/{authCtxId}/5g-aka-
confirmation",
        "httpMethod": "DELETE"
    },
    {
        "id": 955,
        "resourceURI": "/namf-evts/v1/subscriptions",
        "httpMethod": "POST"
    },
    {
        "id": 964,
        "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/smsf-3gpp-access",
        "httpMethod": "GET"
    },
    },

```

```

{
  "id": 922,
  "resourceURI": "/nudm-sdm/v2/shared-data",
  "httpMethod": "GET"
},
{
  "id": 941,
  "resourceURI": "/nudm-sdm/v1/{supi}/nssai",
  "httpMethod": "GET"
},
{
  "id": 975,
  "resourceURI": "/nudm-sdm/v1/{supi}/am-data",
  "httpMethod": "GET"
},
{
  "id": 951,
  "resourceURI": "/nudm-sdm/v2/{ueId}/sdm-subscriptions",
  "httpMethod": "POST"
},
{
  "id": 957,
  "resourceURI": "/nudm-sdm/v2/{supi}/ue-context-in-smf-data",
  "httpMethod": "GET"
},
{
  "id": 954,
  "resourceURI": "/nausf-auth/v1/ue-authentications",
  "httpMethod": "POST"
},
{
  "id": 976,
  "resourceURI": "/nsmf-pdusession/v1/pdu-sessions",
  "httpMethod": "POST"
},
{
  "id": 917,
  "resourceURI": "/npcf-ue-policy-control/v1/policies/{polAssoId}/update",
  "httpMethod": "POST"
},
{
  "id": 925,
  "resourceURI": "/namf-mt/v1/ue-contexts/{ueContextId}",
  "httpMethod": "GET"
},
{
  "id": 929,
  "resourceURI": "/nudm-sdm/v2/{supi}/sms-mng-data",
  "httpMethod": "GET"
},
{
  "id": 973,
  "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/smsf-3gpp-access",
  "httpMethod": "PUT"
},
{

```

```

        "id": 966,
        "resourceURI": "/nudm-sdm/v2/{supi}/am-data",
        "httpMethod": "POST"
    }
},
"ingressAction": {
    "title": "Service API not in allowed list",
    "statusCode": 406,
    "action": "REJECT"
},
"egressAction": {
    "title": "Service API not in allowed list",
    "statusCode": 406,
    "action": "REJECT"
}
}

```

Sample Response body structure for PUT operations:

Resource API : /v1/security-counter-measure/service-api-allowed-list/{allowedListName}

Resource Method : PUT

Content Type: application/json

Response Body

Request :

```

{
    "allowedListName": "test",
    "ingressRule": [
        {
            "id": 0,
            "resourceURI": "/notification",
            "httpMethod": "POST"
        }
    ],
    "egressRule": [
        {
            "id": 0,
            "resourceURI": "/token",
            "httpMethod": "POST"
        }
    ],
    "ingressAction": {
        "title": "Service API not in allowed list",
        "statusCode": 0,
        "action": "REJECT"
    },
    "egressAction": {
        "title": "Service API not in allowed list",
        "statusCode": 0,
        "action": "REJECT"
    }
}

```

Response:
same as request.

Sample Response body structure for POST operations:

Resource API : /v1/security-counter-measure/service-api-allowed-list/{allowedListName}

Resource Method : POST

Content Type: application/json

Response Body

Request :

```
{
  "allowedListName": "test",
  "ingressRule": [
    {
      "id": 0,
      "resourceURI": "/notification",
      "httpMethod": "POST"
    }
  ],
  "egressRule": [
    {
      "id": 0,
      "resourceURI": "/token",
      "httpMethod": "POST"
    }
  ],
  "ingressAction": {
    "title": "Service API not in allowed list",
    "statusCode": 0,
    "action": "REJECT"
  },
  "egressAction": {
    "title": "Service API not in allowed list",
    "statusCode": 0,
    "action": "REJECT"
  }
}
```

Response:
same as request.

Sample Response body structure for DELETE operations:

Resource API : /v1/security-counter-measure/service-api-allowed-list/{allowedListName}

Resource Method : POST

Content Type: application/json

Response Body

Request:
/v1/security-counter-measure/service-api-allowed-list/test1

Response:
204

2.12 Service APIs

Service APIs REST API has list of all APIs supported by SEPP.

Table 2-32 Service APIs

Method	URL	Description	Input	Return	Example
GET	/sepp-configuration/v1/service-apis	Fetch list of Supported Service APIs configured in the system		List of Supported Service API's configured in the system	curl -v http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/v1/service-apis -X GET
GET	/sepp-configuration/v1/service-apis/{defaultId}	Fetch Supported Service API's based on defaultId	defaultId		curl -v http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/v1/service-apis/1 -X GET
POST	/sepp-configuration/v1/service-apis/{defaultId}	Update Supported Service API's	resource URI, httpMethod and regex	200 OK	curl http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/v1/service-apis/1 -H 'Content-Type:application/json' -X POST -d '{ "resourceURI": "/nsmf-pdusession/v1/pdu-sessions", "httpMethod": "POST", "regex": "^/nsmf-pdusession/v1/pdu-sessions/?\$" }'
DELETE	/sepp-configuration/v1/service-apis/{defaultId}	Delete Supported Service API's		204 No Content	curl http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/v1/service-apis/1 -X DELETE -d '{"resourceURI": "/nsmf-pdusession/v1/pdu-sessions", "httpMethod": "POST", "regex": "^/nsmf-pdusession/v1/pdu-sessions/?\$"}'

Service API Parameters

Table 2-33 Service API Parameters

Attribute	Datatype	Compliance	Pattern	Description
id	Integer			
resourceURI	String	M		Service API
method	String	M	GET,POST,PUT,PATCH,DELETE,OPTIONS	Service API Method
regex	String	M		Regex for Service API

Sample Response body structure for GET operations:

Resource API : /sepp-configuration/v1/service-apis

Resource Method : GET

Content Type: application/json

Response Body

Request:

sepp-configuration/v1/service-apis/23

Response:

```
{
  "defaultId": 23,
  "resourceURI": "/nnrf-nfm/v1/subscriptions/{subscriptionID}",
  "httpMethod": "DELETE",
  "regex": "^/nnrf-nfm/v1/subscriptions/(([0-9]{5,6}-)?[^-]+)/?$"
```

Sample Response body structure for GET operations:

Resource API : /sepp-configuration/v1/service-apis/{defaultId}

Resource Method : GET

Content Type: application/json

Response Body

```
[
  {
    "defaultId": 1,
    "resourceURI": "/nudm-sdm/v1/{supi}/am-data",
    "httpMethod": "GET",
    "regex": "^/nudm-sdm/v1/(imsi-[0-9]{5,15}|nai-.+|.+)/am-data/?$"
  },
  {
    "defaultId": 2,
    "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/smsf-non-3gpp-access",
```

```

        "httpMethod": "GET",
        "regex": "^/nudm-uecm/v1/(imsi-[0-9]{5,15}|nai-.+|msisdn-[0-9]{5,15}|
    extid-[^@]+@[^@]+|gci-.+|gli-.+|.+)/registrations/smsf-non-3gpp-access/?$"
    },
    {
        "defaultId": 3,
        "resourceURI": "/nudm-sdm/v1/{supi}/nssai",
        "httpMethod": "GET",
        "regex": "^/nudm-sdm/v1/(imsi-[0-9]{5,15}|nai-.+|.+)/nssai/?$"
    },
    {
        "defaultId": 4,
        "resourceURI": "/nsmf-pdusession/v1/pdu-sessions/{pduSessionRef}/transfer-
    mo-data",
        "httpMethod": "POST",
        "regex": "^/nsmf-pdusession/v1/pdu-sessions/([0-9a-zA-Z-]+|.+)/transfer-
    mo-data/?$"
    },
    {
        "defaultId": 5,
        "resourceURI": "/nausf-auth/v1/ue-authentications/{authCtxId}/5g-aka-
    confirmation",
        "httpMethod": "DELETE",
        "regex": "^/nausf-auth/v1/ue-authentications/([0-9a-zA-Z-]+|.+)/5g-aka-
    confirmation/?$"
    },
    {
        "defaultId": 6,
        "resourceURI": "/nsmf-pdusession/v1/pdu-sessions/{pduSessionRef}",
        "httpMethod": "POST",
        "regex": "^/nsmf-pdusession/v1/pdu-sessions/([0-9a-zA-Z-]+|.+)/?$"
    },
    {
        "defaultId": 7,
        "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/amf-3gpp-access",
        "httpMethod": "PUT",
        "regex": "^/nudm-uecm/v1/(imsi-[0-9]{5,15}|nai-.+|msisdn-[0-9]{5,15}|
    extid-[^@]+@[^@]+|gci-.+|gli-.+|.+)/registrations/amf-3gpp-access/?$"
    },
    {
        "defaultId": 8,
        "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/amf-non-3gpp-access",
        "httpMethod": "PATCH",
        "regex": "^/nudm-uecm/v1/(imsi-[0-9]{5,15}|nai-.+|msisdn-[0-9]{5,15}|
    extid-[^@]+@[^@]+|gci-.+|gli-.+|.+)/registrations/amf-non-3gpp-access/?$"
    },
    {
        "defaultId": 9,
        "resourceURI": "/nnssf-nsselection/v2/network-slice-information",
        "httpMethod": "GET",
        "regex": "^/nnssf-nsselection/v2/network-slice-information/?$"
    },
    {
        "defaultId": 10,
        "resourceURI": "/namf-comm/v1/subscriptions/{subscriptionId}",
        "httpMethod": "DELETE",

```

```

    "regex": "^/namf-comm/v1/subscriptions/(([0-9]{5,6}-)?[^-]+)/?$"
  },
  {
    "defaultId": 11,
    "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/amf-non-3gpp-access",
    "httpMethod": "PUT",
    "regex": "^/nudm-uecm/v1/(imsi-[0-9]{5,15}|nai-.+|msisdn-[0-9]{5,15}|
extid-[^@]+@[^@]+|gci-.+|gli-.+|.+)/registrations/amf-non-3gpp-access/?$"
  },
  {
    "defaultId": 12,
    "resourceURI": "/nnrf-nfm/v1/subscriptions/{subscriptionID}",
    "httpMethod": "PATCH",
    "regex": "^/nnrf-nfm/v1/subscriptions/(([0-9]{5,6}-)?[^-]+)/?$"
  },
  {
    "defaultId": 13,
    "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/smf-registrations/
{pduSessionId}",
    "httpMethod": "PUT",
    "regex": "^/nudm-uecm/v1/(imsi-[0-9]{5,15}|nai-.+|msisdn-[0-9]{5,15}|
extid-[^@]+@[^@]+|gci-.+|gli-.+|.+)/registrations/smf-registrations/(([01]?
[0-9][0-9]?|2[0-4][0-9]|25[0-5])+)/?$"
  },
  {
    "defaultId": 14,
    "resourceURI": "/nudm-sdm/v1/{supi}/am-data/upu-ack",
    "httpMethod": "PUT",
    "regex": "^/nudm-sdm/v1/(imsi-[0-9]{5,15}|nai-.+|.+)/am-data/upu-ack/?$"
  },
  {
    "defaultId": 15,
    "resourceURI": "/nudm-sdm/v2/{ueId}/sdm-subscriptions/{subscriptionId}",
    "httpMethod": "DELETE",
    "regex": "^/nudm-sdm/v2/(imsi-[0-9]{5,15}|nai-.+|msisdn-[0-9]{5,15}|extid-
[^@]+@[^@]+|gci-.+|gli-.+|.+)/sdm-subscriptions/(([0-9]{5,6}-)?[^-]+)/?$"
  },
  {
    "defaultId": 16,
    "resourceURI": "/nudm-sdm/v2/{ueId}/sdm-subscriptions/{subscriptionId}",
    "httpMethod": "PATCH",
    "regex": "^/nudm-sdm/v2/(imsi-[0-9]{5,15}|nai-.+|msisdn-[0-9]{5,15}|extid-
[^@]+@[^@]+|gci-.+|gli-.+|.+)/sdm-subscriptions/(([0-9]{5,6}-)?[^-]+)/?$"
  },
  {
    "defaultId": 17,
    "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/amf-3gpp-access",
    "httpMethod": "GET",
    "regex": "^/nudm-uecm/v1/(imsi-[0-9]{5,15}|nai-.+|msisdn-[0-9]{5,15}|
extid-[^@]+@[^@]+|gci-.+|gli-.+|.+)/registrations/amf-3gpp-access/?$"
  },
  {
    "defaultId": 18,
    "resourceURI": "/namf-loc/v1/{ueContextId}/provide-loc-info",
    "httpMethod": "POST",
    "regex": "^/namf-loc/v1/(imsi-[0-9]{5,15}|nai-.+|gli-.+|gci-.+|imei-[0-9]

```



```

{15}|imeisv-[0-9]{16}|.+)/provide-loc-info/?$"
},
{
  "defaultId": 19,
  "resourceURI": "/nudm-sdm/v1/{supi}",
  "httpMethod": "GET",
  "regex": "^/nudm-sdm/v1/(imsi-[0-9]{5,15}|nai-.+|.+)/?$"
},
{
  "defaultId": 20,
  "resourceURI": "/nudm-sdm/v2/{supi}/nssai",
  "httpMethod": "GET",
  "regex": "^/nudm-sdm/v2/(imsi-[0-9]{5,15}|nai-.+|gci-.+|gli-.+|.+)/nssai/?$"
},
{
  "defaultId": 21,
  "resourceURI": "/namf-evts/v1/subscriptions",
  "httpMethod": "POST",
  "regex": "^/namf-evts/v1/subscriptions/?$"
},
{
  "defaultId": 22,
  "resourceURI": "/nudm-sdm/v1/{supi}/sm-data",
  "httpMethod": "GET",
  "regex": "^/nudm-sdm/v1/(imsi-[0-9]{5,15}|nai-.+|.+)/sm-data/?$"
},
{
  "defaultId": 23,
  "resourceURI": "/nnrf-nfm/v1/subscriptions/{subscriptionID}",
  "httpMethod": "DELETE",
  "regex": "^/nnrf-nfm/v1/subscriptions/(([0-9]{5,6}-)?[^-]+)/?$"
},
{
  "defaultId": 24,
  "resourceURI": "/nudm-sdm/v2/{supi}/ue-context-in-smf-data",
  "httpMethod": "GET",
  "regex": "^/nudm-sdm/v2/(imsi-[0-9]{5,15}|nai-.+|gci-.+|gli-.+|.+)/ue-context-in-smf-data/?$"
},
{
  "defaultId": 25,
  "resourceURI": "/namf-mt/v1/ue-contexts/{ueContextId}",
  "httpMethod": "GET",
  "regex": "^/namf-mt/v1/ue-contexts/(imsi-[0-9]{5,15}|nai-.+|gli-.+|gci-.+|.+)/?$"
},
{
  "defaultId": 26,
  "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/amf-3gpp-access",
  "httpMethod": "PATCH",
  "regex": "^/nudm-uecm/v1/(imsi-[0-9]{5,15}|nai-.+|msisdn-[0-9]{5,15}|extid-[^@]+@[^@]+|gci-.+|gli-.+|.+)/registrations/amf-3gpp-access/?$"
},
{
  "defaultId": 27,

```

```

    "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/smsf-3gpp-access",
    "httpMethod": "DELETE",
    "regex": "^/nudm-uecm/v1/(imsi-[0-9]{5,15}|nai-.+|msisdn-[0-9]{5,15}|
extid-[^@]+@[^@]+|gci-.+|gli-.+|.+)/registrations/smsf-3gpp-access/?$"
  },
  {
    "defaultId": 28,
    "resourceURI": "/npcf-ue-policy-control/v1/policies/{polAssoId}",
    "httpMethod": "DELETE",
    "regex": "^/npcf-ue-policy-control/v1/policies/([0-9a-zA-Z-]+|.+)/?$"
  },
  {
    "defaultId": 29,
    "resourceURI": "/nudm-sdm/v1/{supi}/sdm-subscriptions/{subscriptionId}",
    "httpMethod": "DELETE",
    "regex": "^/nudm-sdm/v1/(imsi-[0-9]{5,15}|nai-.+|.+)/sdm-subscriptions/
(( [0-9]{5,6}-)?[^-]+)/?$"
  },
  {
    "defaultId": 30,
    "resourceURI": "/nudm-sdm/v2/{supi}/am-data/upu-ack",
    "httpMethod": "PUT",
    "regex": "^/nudm-sdm/v2/(imsi-[0-9]{5,15}|nai-.+|gci-.+|gli-.+|.+)/am-
data/upu-ack/?$"
  },
  {
    "defaultId": 31,
    "resourceURI": "/nudm-sdm/v2/{ueId}/sdm-subscriptions",
    "httpMethod": "POST",
    "regex": "^/nudm-sdm/v2/(imsi-[0-9]{5,15}|nai-.+|msisdn-[0-9]{5,15}|extid-
[^@]+@[^@]+|gci-.+|gli-.+|.+)/sdm-subscriptions/?$"
  },
  {
    "defaultId": 32,
    "resourceURI": "/nnrf-disc/v1/nf-instances",
    "httpMethod": "GET",
    "regex": "^/nnrf-disc/v1/nf-instances/?$"
  },
  {
    "defaultId": 33,
    "resourceURI": "/npcf-ue-policy-control/v1/policies/{polAssoId}/update",
    "httpMethod": "POST",
    "regex": "^/npcf-ue-policy-control/v1/policies/([0-9a-zA-Z-]+|.+)/
update/?$"
  },
  {
    "defaultId": 34,
    "resourceURI": "/namf-comm/v1/subscriptions/{subscriptionId}",
    "httpMethod": "PUT",
    "regex": "^/namf-comm/v1/subscriptions/(( [0-9]{5,6}-)?[^-]+)/?$"
  },
  {
    "defaultId": 35,
    "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/smsf-3gpp-access",
    "httpMethod": "PUT",
    "regex": "^/nudm-uecm/v1/(imsi-[0-9]{5,15}|nai-.+|msisdn-[0-9]{5,15}|

```

```

    extid-[^@]+@[^@]+|gci-.+|gli-.+|.+)/registrations/smsf-3gpp-access/?$"
  },
  {
    "defaultId": 36,
    "resourceURI": "/nsmf-pdusession/v1/pdu-sessions",
    "httpMethod": "POST",
    "regex": "^/nsmf-pdusession/v1/pdu-sessions/?$"
  },
  {
    "defaultId": 37,
    "resourceURI": "/nudm-sdm/v2/{supi}/sms-data",
    "httpMethod": "GET",
    "regex": "^/nudm-sdm/v2/(imsi-[0-9]{5,15}|nai-.+|gci-.+|gli-.+|.+)/sms-
data/?$"
  },
  {
    "defaultId": 38,
    "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/smsf-non-3gpp-access",
    "httpMethod": "PUT",
    "regex": "^/nudm-uecm/v1/(imsi-[0-9]{5,15}|nai-.+|msisdn-[0-9]{5,15}|
extid-[^@]+@[^@]+|gci-.+|gli-.+|.+)/registrations/smsf-non-3gpp-access/?$"
  },
  {
    "defaultId": 39,
    "resourceURI": "/npcf-ue-policy-control/v1/policies",
    "httpMethod": "POST",
    "regex": "^/npcf-ue-policy-control/v1/policies/?$"
  },
  {
    "defaultId": 40,
    "resourceURI": "/nudm-sdm/v1/shared-data",
    "httpMethod": "GET",
    "regex": "^/nudm-sdm/v1/shared-data/?$"
  },
  {
    "defaultId": 41,
    "resourceURI": "/nudm-sdm/v2/{supi}/am-data",
    "httpMethod": "POST",
    "regex": "^/nudm-sdm/v2/(imsi-[0-9]{5,15}|nai-.+|gci-.+|gli-.+|.+)/am-
data/?$"
  },
  {
    "defaultId": 42,
    "resourceURI": "/nudm-sdm/v2/shared-data",
    "httpMethod": "GET",
    "regex": "^/nudm-sdm/v2/shared-data/?$"
  },
  {
    "defaultId": 43,
    "resourceURI": "/npcf-ue-policy-control/v1/policies/{polAssoId}",
    "httpMethod": "GET",
    "regex": "^/npcf-ue-policy-control/v1/policies/([0-9a-zA-Z-]+|.+)/?$"
  },
  {
    "defaultId": 44,
    "resourceURI": "/nudm-sdm/v2/{supi}/smf-select-data",

```

```

        "httpMethod": "GET",
        "regex": "^/nudm-sdm/v2/(imsi-[0-9]{5,15}|nai-.+|gci-.+|gli-.+|.+)/smf-select-data/?$"
    },
    {
        "defaultId": 45,
        "resourceURI": "/namf-evts/v1/subscriptions/{subscriptionId}",
        "httpMethod": "PATCH",
        "regex": "^/namf-evts/v1/subscriptions/(([0-9]{5,6}-)?[^-]+)/?$"
    },
    {
        "defaultId": 46,
        "resourceURI": "/nudm-sdm/v2/{supi}/am-data/sor-ack",
        "httpMethod": "PUT",
        "regex": "^/nudm-sdm/v2/(imsi-[0-9]{5,15}|nai-.+|gci-.+|gli-.+|.+)/am-data/sor-ack/?$"
    },
    {
        "defaultId": 47,
        "resourceURI": "/nudm-sdm/v2/{supi}",
        "httpMethod": "GET",
        "regex": "^/nudm-sdm/v2/(imsi-[0-9]{5,15}|nai-.+|gci-.+|gli-.+|.+)/?$"
    },
    {
        "defaultId": 48,
        "resourceURI": "/nudm-sdm/v2/{supi}/sms-mng-data",
        "httpMethod": "GET",
        "regex": "^/nudm-sdm/v2/(imsi-[0-9]{5,15}|nai-.+|gci-.+|gli-.+|.+)/sms-mng-data/?$"
    },
    {
        "defaultId": 49,
        "resourceURI": "/nudm-sdm/v2/{supi}/am-data",
        "httpMethod": "GET",
        "regex": "^/nudm-sdm/v2/(imsi-[0-9]{5,15}|nai-.+|gci-.+|gli-.+|.+)/am-data/?$"
    },
    {
        "defaultId": 50,
        "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/amf-non-3gpp-access",
        "httpMethod": "GET",
        "regex": "^/nudm-uecm/v1/(imsi-[0-9]{5,15}|nai-.+|msisdn-[0-9]{5,15}|extid-[^@]+@[^@]+|gci-.+|gli-.+|.+)/registrations/amf-non-3gpp-access/?$"
    },
    {
        "defaultId": 51,
        "resourceURI": "/nausf-auth/v1/ue-authentications/{authCtxId}/5g-aka-confirmation",
        "httpMethod": "POST",
        "regex": "^/nausf-auth/v1/ue-authentications/([0-9a-zA-Z-]+|.+)/5g-aka-confirmation/?$"
    },
    {
        "defaultId": 52,
        "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/smsf-non-3gpp-access",
        "httpMethod": "DELETE",

```

```

    "regex": "^/nudm-uecm/v1/(imsi-[0-9]{5,15}|nai-.+|msisdn-[0-9]{5,15}|
    extid-[^@]+@[^@]+|gci-.+|gli-.+|.+)/registrations/smf-non-3gpp-access/?$"
  },
  {
    "defaultId": 53,
    "resourceURI": "/namf-comm/v1/subscriptions",
    "httpMethod": "POST",
    "regex": "^/namf-comm/v1/subscriptions/?$"
  },
  {
    "defaultId": 54,
    "resourceURI": "/nsmf-pdusession/v1/pdu-sessions/{pduSessionRef}/transfer-
    mt-data",
    "httpMethod": "POST",
    "regex": "^/nsmf-pdusession/v1/pdu-sessions/([0-9a-zA-Z-]+|.+)/transfer-
    mt-data/?$"
  },
  {
    "defaultId": 55,
    "resourceURI": "/nudm-sdm/v2/{supi}/ue-context-in-smf-data",
    "httpMethod": "GET",
    "regex": "^/nudm-sdm/v2/(imsi-[0-9]{5,15}|nai-.+|gci-.+|gli-.+|.+)/ue-
    context-in-smf-data/?$"
  },
  {
    "defaultId": 56,
    "resourceURI": "/oauth2/token",
    "httpMethod": "POST",
    "regex": "^/oauth2/token/?$"
  },
  {
    "defaultId": 57,
    "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/smf-registrations/
    {pduSessionId}",
    "httpMethod": "DELETE",
    "regex": "^/nudm-uecm/v1/(imsi-[0-9]{5,15}|nai-.+|msisdn-[0-9]{5,15}|
    extid-[^@]+@[^@]+|gci-.+|gli-.+|.+)/registrations/smf-registrations/(([01]?
    [0-9][0-9]?|2[0-4][0-9]|25[0-5])+)/?$"
  },
  {
    "defaultId": 58,
    "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/smf-3gpp-access",
    "httpMethod": "GET",
    "regex": "^/nudm-uecm/v1/(imsi-[0-9]{5,15}|nai-.+|msisdn-[0-9]{5,15}|
    extid-[^@]+@[^@]+|gci-.+|gli-.+|.+)/registrations/smf-3gpp-access/?$"
  },
  {
    "defaultId": 59,
    "resourceURI": "/nnssf-nsselection/v1/network-slice-information",
    "httpMethod": "GET",
    "regex": "^/nnssf-nsselection/v1/network-slice-information/?$"
  },
  {
    "defaultId": 60,
    "resourceURI": "/namf-evts/v1/subscriptions/{subscriptionId}",
    "httpMethod": "DELETE",

```

```

    "regex": "^/namf-evts/v1/subscriptions/(([0-9]{5,6}-)?[^-]+)/?$"
  },
  {
    "defaultId": 61,
    "resourceURI": "/nsmf-pdusession/v1/pdu-sessions/{pduSessionRef}/release",
    "httpMethod": "POST",
    "regex": "^/nsmf-pdusession/v1/pdu-sessions/([0-9a-zA-Z-]+|.+)/release/?$"
  },
  {
    "defaultId": 62,
    "resourceURI": "/nudm-sdm/v2/{supi}/sm-data",
    "httpMethod": "GET",
    "regex": "^/nudm-sdm/v2/(imsi-[0-9]{5,15}|nai-.|gci-.|gli-.|.+)/sm-
data/?$"
  },
  {
    "defaultId": 63,
    "resourceURI": "/nudm-sdm/v1/{supi}/ue-context-in-smf-data",
    "httpMethod": "GET",
    "regex": "^/nudm-sdm/v1/(imsi-[0-9]{5,15}|nai-.|.+)/ue-context-in-smf-
data/?$"
  },
  {
    "defaultId": 64,
    "resourceURI": "/nudm-sdm/v1/{supi}/sdm-subscriptions",
    "httpMethod": "POST",
    "regex": "^/nudm-sdm/v1/(imsi-[0-9]{5,15}|nai-.|.+)/sdm-subscriptions/?$"
  },
  {
    "defaultId": 65,
    "resourceURI": "/nausf-auth/v1/ue-authentications/{authCtxId}/5g-aka-
confirmation",
    "httpMethod": "PUT",
    "regex": "^/nausf-auth/v1/ue-authentications/([0-9a-zA-Z-]+|.+)/5g-aka-
confirmation/?$"
  },
  {
    "defaultId": 66,
    "resourceURI": "/nsmf-pdusession/v1/pdu-sessions/{pduSessionRef}/modify",
    "httpMethod": "POST",
    "regex": "^/nsmf-pdusession/v1/pdu-sessions/([0-9a-zA-Z-]+|.+)/modify/?$"
  },
  {
    "defaultId": 67,
    "resourceURI": "/nudm-sdm/v1/{supi}/am-data/sor-ack",
    "httpMethod": "PUT",
    "regex": "^/nudm-sdm/v1/(imsi-[0-9]{5,15}|nai-.|.+)/am-data/sor-ack/?$"
  },
  {
    "defaultId": 68,
    "resourceURI": "/nausf-auth/v1/ue-authentications",
    "httpMethod": "POST",
    "regex": "^/nausf-auth/v1/ue-authentications/?$"
  },
  {
    "defaultId": 69,

```

```

    "resourceURI": "/nnrf-nfm/v1/subscriptions",
    "httpMethod": "POST",
    "regex": "^/nnrf-nfm/v1/subscriptions/?$"
  },
  {
    "defaultId": 70,
    "resourceURI": "/nnrf-nfm/v1/NfStatusChangeNotification",
    "httpMethod": "POST",
    "regex": "^/nnrf-nfm/v1/NfStatusChangeNotification/?$"
  },
  {
    "defaultId": 71,
    "resourceURI": "J",
    "httpMethod": "POST",
    "regex": "KK"
  },
  {
    "defaultId": 72,
    "resourceURI": "/notification",
    "httpMethod": "POST",
    "regex": "^/notification/?$"
  }
]

```

Sample Response body structure for POST operations:

Resource API : /sepp-configuration/v1/service-apis/{defaultId}

Resource Method : POST

Content Type: application/json

Response Body

Request:

```

{
  "defaultId": 0,
  "resourceURI": "/seppnotification",
  "httpMethod": "POST",
  "regex": "/seppnotification"
}

```

Response:

201 CREATED

Sample Response body structure for DELETE operations:

Resource API : /sepp-configuration/v1/service-apis/{defaultId}

Resource Method : DELETE

Content Type: application/json

Response Body

Request:
sepp-configuration/v1/service-apis/74

Response:
204

2.13 Overload Control

User can can enable and configure the the Overload Control feature using this REST API.

Method	URL	Description	Input	Return	Example
GET	sepp/nf-common-component/v1/igw/n32/errorcodeprofiles	Retrieve Error code profiles defined at IGW	NA	Error code , Description and Name	curl -X GET http://<SEPP-Configuration IP>:<PORT>/sepp/nf-common-component/v1/igw/n32/errorcodeprofiles

Method	URL	Description	Input	Return	Example
PUT	sepp/nf-common-component/v1/igw/n32/errorcodeprofiles	Update error code profile for IGW	Error code , Description and Name	Error code , Description and Name	<pre>curl -X PUT http://<SEPP-Configuration IP>:<PORT>/sepp/nf-common-component/v1/igw/n32/errorcodeprofiles -H 'Content-Type: application/json' -d '{ "name": "error429", "errorCode": 429, "errorCause": "Too many requests", "errorTitle": "Too many requests", "errorDescription": "Too many requests" }'</pre>
GET	sepp/nf-common-component/v1/igw/n32/ocdiscardpolicies	Retrieve Discard Policies for Overload Control at IGW	NA	Scheme , Policies	<pre>curl -X GET http://<SEPP-Configuration IP>:<PORT>/sepp/nf-common-component/v1/igw/n32/ocdiscardpolicies</pre>

Method	URL	Description	Input	Return	Example
PUT	sepp/nf-common-component/v1/i-gw/n32/ocdiscardpolicies	Define Discard Policies for Overload control at IGW	Scheme , Policies	Scheme , Policies	<pre>curl -X PUT http://<SEPP- Configuration IP>:<PORT>/ sepp/nf- common- component/v1/i- gw/n32/ ocdiscardpolicies -H 'Content- Type: application/json' -d' [{ "name": "OCDP1", "scheme": "PriorityBased", "policies": [{ "level": "Warning", "value": 30, "action": "RejectWith ErrorCode", "errorCodeProfile": "error429" }, { "level":</pre>

Method	URL	Description	Input	Return	Example
					<pre>"Minor", "value": 24, "action": "RejectWith ErrorCode", "errorCodeP rofile": "error429" }, { "level": "Major", "value": 15, "action": "RejectWith ErrorCode", "errorCodeP rofile": "error429" }, { "level": "Critical", "value": 10,</pre>

Method	URL	Description	Input	Return	Example
					<pre>"action": "RejectWith ErrorCode", "errorCodeP rofile": "error429" }], }, { "name": "OCDP2", "scheme": "Percentage Based", "policies": [{ "level": "Warning", "value": 0, "action": "RejectWith ErrorCode", "errorCodeP rofile": "error429" }, { "level": "Minor",</pre>

Method	URL	Description	Input	Return	Example
					<pre>"value": 5, "action": "RejectWith ErrorCode", "errorCodeP rofile": "error429" }, { "level": "Major", "value": 10, "action": "RejectWith ErrorCode", "errorCodeP rofile": "error429" }, { "level": "Critical", "value": 25, "action": "RejectWith ErrorCode",</pre>

Method	URL	Description	Input	Return	Example
					<pre>"errorCodeProfile": "error429" } }]'</pre>
GET	sepp/nf-common-component/v1/i gw/n32/ ocpolicymapping	retrieve Overload Control enable/ disable status	NA	Service name , sampling period , enable	<pre>curl -X GET http://<SEPP- Configuration IP>:<PORT>/ sepp/nf- common- component/v1/i gw/n32/ ocpolicymapping</pre>

Method	URL	Description	Input	Return	Example
PUT	sepp/nf-common-component/v1/i gw/n32/ ocpolicymapping	Enable/Disable Overload Control	Enable and service name	Details for Overload control enable	<pre>curl -X PUT http://<SEPP- Configuration IP>:<PORT>/ sepp/nf- common- component/v1/i gw/n32/ ocpolicymapping -H 'Content- Type: application/json' -d '{ "enabled": true, "mappings": [{ "svcName": "ocsepp- release- pn32f-svc", "policyName": "Policy1" }], "samplingPeriod": 5000 }'</pre>
GET	sepp/nf-common-component/v1/ perf-info/ overloadLevelThreshold	fetch Threshold levels defined for Overload control at Perf- info	NA		<pre>curl -X GET http://<SEPP- Configuration IP>:<PORT>/ sepp/nf- common- component/v1/ perf-info/ overloadLevelThreshold</pre>

Method	URL	Description	Input	Return	Example
PUT	sepp/nf-common-component/v1/perf-info/overloadLevelThreshold	Update Threshold levels defined at Perf-info	Threshold level - onset and abatement values. Service name	threshold levels for CPU and memory	<pre>curl -X PUT http://<SEPP-Configuration IP>:<PORT>/sepp/nf-common-component/v1/perf-info/overloadLevelThreshold -H 'Content-Type: application/json' -d '{ "svcName": "ocsepp-release-pn32f-svc", "metricsThresholdList": [{ "metricsName": "memory", "levelThresholdList": [{ "level": "Warning", "onsetValue": 50, "abatementValue": 45 }, { "level": "Minor", "onsetValue": 70,</pre>

Method	URL	Description	Input	Return	Example
					<pre>"abatementValue": 65 }, { "level": "Major", "onsetValue": 80, "abatementValue": 75 }, { "level": "Critical", "onsetValue": 90, "abatementValue": 85 }], { "metricsName": "cpu", "levelThresholdList": [{ "level": "Warning", "onsetValue": 65, "abatementValue": 60 }, {</pre>

Method	URL	Description	Input	Return	Example
					<pre>"level": "Minor", "onsetValue ": 75, "abatementV alue": 70 }, { "level": "Major", "onsetValue ": 85, "abatementV alue": 80 }, { "level": "Critical", "onsetValue ": 95, "abatementV alue": 90 }] }]'</pre>

Error Code profile Parameters

Table 2-34 Error Code profile Parameters

Attribute	DataType	Compliance	Description
name	string	M	name of error profile
errorCode	integer	M	http error code
errorCause	string	O	error cause

Table 2-34 (Cont.) Error Code profile Parameters

Attribute	DataType	Compliance	Description
errorTitle	string	O	error title
errorDescription	string	O	Error description

OC Discard Policies Parameters

Table 2-35 OC Discard Policies Parameters

Attribute	DataType	Compliance	Description
name	string	M	name of policy
scheme	string	M	scheme for discard. It can be PercentageBased or PriorityBased
policies	object	M	policy definition
level	string	M	name of level
value	integer	M	threshold value
action	string	M	action applied on discarded message that will be RejectWithErrorCode
errorCodeProfile	string	M	Error Code Profile name mapping

OC Policy mapping Parameters

Table 2-36 OC Policy mapping Parameters

Attribute	DataType	Compliance	Description
enabled	string	M	enable overload control
mappings	object	M	
svcName	string	M	map to service name
policyName	string	M	map to policy name
samplingPeriod	integer	M	sampling period interval in milliseconds

Overload threshold Level Parameters

Table 2-37 Overload threshold Level Parameters

Attribute	DataType	Compliance	Description
svcName	string	M	service name
metricThresholdList	object	M	
metrics name	string	M	metrics on which overload level calculated
levelThresholdList	object	M	Threshold level definition
level	string	M	error name

Table 2-37 (Cont.) Overload threshold Level Parameters

Attribute	DataType	Compliance	Description
onset-value	integer	M	Value for which level is applied
abatement-value	integer	M	Value till which the level remains active

Sample Response body structure for GET operations:Resource API: *sepp/nf-common-component/v1/igw/n32/errorcodeprofiles*

Resource Method: GET

Content Type: application/json

Response Body

```
[
  {
    "name": "error429",
    "errorCode": 429,
    "errorCause": "Too many requests",
    "errorTitle": "Too many requests",
    "errorDescription": "Too many requests"
  },
  {
    "name": "error503",
    "errorCode": 503,
    "errorCause": "Service Unavailable",
    "errorTitle": "Service Unavailable",
    "errorDescription": ""
  }
]
```

Sample Response body structure for PUT operations:Resource API: *sepp/nf-common-component/v1/igw/n32/errorcodeprofiles*

Resource Method: PUT

Content Type: application/json

Response Body

```
[
  {
    "name": "error429",
    "errorCode": 429,
    "errorCause": "Too many requests",
    "errorTitle": "Too many requests",
    "errorDescription": "Too many requests"
  },
  {

```

```

        "name": "error503",
        "errorCode": 503,
        "errorCause": "Service Unavailable",
        "errorTitle": "Service Unavailable",
        "errorDescription": ""
    } ]

```

Sample Response body structure for GET operations:

Resource API: *sepp/nf-common-component/v1/igw/n32/ocdiscardpolicies*

Resource Method: GET

Content Type: application/json

Response Body

```

[
  {
    "name": "OCDP1",
    "scheme": "PriorityBased",
    "policies": [
      {
        "level": "Warning",
        "value": 30,
        "action": "RejectWithErrorCode",
        "errorCodeProfile": "error429"
      },
      {
        "level": "Minor",
        "value": 24,
        "action": "RejectWithErrorCode",
        "errorCodeProfile": "error429"
      },
      {
        "level": "Major",
        "value": 15,
        "action": "RejectWithErrorCode",
        "errorCodeProfile": "error429"
      },
      {
        "level": "Critical",
        "value": 10,
        "action": "RejectWithErrorCode",
        "errorCodeProfile": "error429"
      }
    ]
  },
  {
    "name": "OCDP2",
    "scheme": "PercentageBased",
    "policies": [
      {
        "level": "Warning",
        "value": 0,

```

```

        "action": "RejectWithErrorCode",
        "errorCodeProfile": "error429"
    },
    {
        "level": "Minor",
        "value": 5,
        "action": "RejectWithErrorCode",
        "errorCodeProfile": "error429"
    },
    {
        "level": "Major",
        "value": 10,
        "action": "RejectWithErrorCode",
        "errorCodeProfile": "error429"
    },
    {
        "level": "Critical",
        "value": 25,
        "action": "RejectWithErrorCode",
        "errorCodeProfile": "error429"
    }
]
} ]

```

Sample Response body structure for PUT operations:Resource API: *sepp/nf-common-component/v1/igw/n32/ocdiscardpolicies*

Resource Method: PUT

Content Type: application/json

Response Body

```

[
  {
    "name": "OCDP1",
    "scheme": "PriorityBased",
    "policies": [
      {
        "level": "Warning",
        "value": 30,
        "action": "RejectWithErrorCode",
        "errorCodeProfile": "error429"
      },
      {
        "level": "Minor",
        "value": 24,
        "action": "RejectWithErrorCode",
        "errorCodeProfile": "error429"
      },
      {
        "level": "Major",
        "value": 15,
        "action": "RejectWithErrorCode",
        "errorCodeProfile": "error429"
      }
    ]
  }
]

```

```

        },
        {
            "level": "Critical",
            "value": 10,
            "action": "RejectWithErrorCode",
            "errorCodeProfile": "error429"
        }
    ]
},
{
    "name": "OCDP2",
    "scheme": "PercentageBased",
    "policies": [
        {
            "level": "Warning",
            "value": 0,
            "action": "RejectWithErrorCode",
            "errorCodeProfile": "error429"
        },
        {
            "level": "Minor",
            "value": 5,
            "action": "RejectWithErrorCode",
            "errorCodeProfile": "error429"
        },
        {
            "level": "Major",
            "value": 10,
            "action": "RejectWithErrorCode",
            "errorCodeProfile": "error429"
        },
        {
            "level": "Critical",
            "value": 25,
            "action": "RejectWithErrorCode",
            "errorCodeProfile": "error429"
        }
    ]
} ]

```

Sample Response body structure for GET operations:

Resource API: *sepp/nf-common-component/v1/igw/n32/ocpolicymapping*

Resource Method: GET

Content Type: application/json

Response Body

```

{
    "enabled": true,
    "mappings": [
        {
            "svcName": "ocsepp-release-pn32f-svc",
            "policyName": "OCDP1"
        }
    ]
}

```

```
    ],
    "samplingPeriod": 5000
  }
}
```

Sample Response body structure for PUT operations:

Resource API: *sepp/nf-common-component/v1/igw/n32/ocpolicymapping*

Resource Method: PUT

Content Type: application/json

Response Body

```
{
  "enabled": true,
  "mappings": [
    {
      "svcName": "ocsepp-release-pn32f-svc",
      "policyName": "OCDP1"
    }
  ],
  "samplingPeriod": 5000
}
```

Sample Response body structure for GET operations:

Resource API: *sepp/nf-common-component/v1/perf-info/overloadLevelThreshold*

Resource Method: GET

Content Type: application/json

Response Body

```
[{
  "svcName": "ocsepp-release-pn32f-svc",
  "metricsThresholdList": [{
    "metricsName": "memory",
    "levelThresholdList": [{
      "level": "Warning",
      "onsetValue": 50,
      "abatementValue": 45
    }, {
      "level": "Minor",
      "onsetValue": 70,
      "abatementValue": 65
    }, {
      "level": "Major",
      "onsetValue": 80,
      "abatementValue": 75
    }, {
      "level": "Critical",
      "onsetValue": 90,
      "abatementValue": 85
    }
  ]
}, {
```



```

        "metricsName": "cpu",
        "levelThresholdList": [{
            "level": "Warning",
            "onsetValue": 65,
            "abatementValue": 60
        }, {
            "level": "Minor",
            "onsetValue": 75,
            "abatementValue": 70
        }, {
            "level": "Major",
            "onsetValue": 85,
            "abatementValue": 80
        }, {
            "level": "Critical",
            "onsetValue": 95,
            "abatementValue": 90
        }]
    }]
}

```

Sample Response body structure for PUT operations:

Resource API: *sepp/nf-common-component/v1/perf-info/overloadLevelThreshold*

Resource Method: PUT

Content Type: application/json

Response Body

```

[
  {
    "svcName": "ocsepp-release-pn32f-svc",
    "metricsThresholdList": [
      {
        "metricsName": "memory",
        "levelThresholdList": [
          {
            "level": "Warning",
            "onsetValue": 50,
            "abatementValue": 45
          },
          {
            "level": "Minor",
            "onsetValue": 70,
            "abatementValue": 65
          },
          {
            "level": "Major",
            "onsetValue": 80,
            "abatementValue": 75
          },
          {
            "level": "Critical",
            "onsetValue": 90,
            "abatementValue": 85
          }
        ]
      },
      {
        "metricsName": "cpu",
        "levelThresholdList": [
          {
            "level": "Warning",
            "onsetValue": 65,

```

```

        "abatementValue": 60
    }, {
        "level": "Minor",
        "onsetValue": 75,
        "abatementValue": 70
    }, {
        "level": "Major",
        "onsetValue": 85,
        "abatementValue": 80
    }, {
        "level": "Critical",
        "onsetValue": 95,
        "abatementValue": 90
    }
  ]
}
}
}

```

2.14 Hosted SEPP

The Hosted SEPP REST API allows the user to enable or disable the Hosted SEPP feature.

Table 2-38 Hosted SEPP REST API

Method	URL	Description	Input	Return	Example
GET	sepp-configuration/v1/hosted-sepp/feature	Returns if the Hosted SEPP feature is enabled or not "true" indicates enabled "false" indicates disabled	NIL	HostedSEPPOptionDTO	curl -v http://127.0.0.1:9090/sepp-configuration/v1/hosted-sepp/feature -H 'Content-Type:application/json' -X GET
PUT	sepp-configuration/v1/hosted-sepp/feature	To Enable/ Disable the Hosted SEPP Feature To enable the feature, value should be set to true To disable the feature, value should be set to false	HostedSEPPOptionDTO to enable/disable the feature	String with response status	curl -v http://127.0.0.1:9090/sepp-configuration/v1/hosted-sepp/feature -H 'Content-Type:application/json' -X PUT -d '{ "hostedSepp": { "enabled": true } '

Table 2-39 Hosted SEPP Parameters

Attribute	Description	Details
enabled	This is an optional parameter. To enable or disable the the Hosted SEPP feature.	DataType: Boolean Range: True or False Default Value: False

Sample Response body structure for GET operations:

Resource API: *sepp-configuration/v1/hosted-sepp/feature*

Resource Method: GET

Content Type: application/json

Response Body

```
{  "hostedSepp": {
                                "enabled": false
                              }
}
```

Sample Response body structure for PUT operations:

Resource API: *sepp-configuration/v1/hosted-sepp/feature*

Resource Method: PUT

Content Type: application/json

Response Body

```
200 0k
```

2.15 Cat 2–Network ID Validation System Option

Cat 2 – Network ID Validation System Option REST API enables or disables the Cat 2 – Network ID Validation feature.

Table 2-40 Cat 2 – Network ID Validation System Option

Method	URL	Description	Input	Return	Example
GET	/sepp-configuration/v1/security-counter-measure/network-id-validation/options	Returns whether header and body Network ID Validation features are enable or disabled.	NA	NetworkID ValidationFeaturesOptions	curl -X 'GET' \ 'http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/v1/security-counter-measure/network-id-validation/options' \ -H 'accept: */*'

Table 2-40 (Cont.) Cat 2 – Network ID Validation System Option

Method	URL	Description	Input	Return	Example
PUT	/sepp-configuration/v1/security-counter-measure/network-id-validation/options	Enables or disables the Network ID Validation feature.	NetworkIDValidationFeaturesOptions Object containing Cat-2 Network ID Validation Feature Option Value	NetworkIDValidationFeaturesOptions	<pre>curl -X 'PUT' \ 'http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/v1/ security-counter-measure/network-id- validation/options' \ -H 'accept: */* \ -H 'Content-Type: application/json' \ -d '{ { "networkIdValidationEnabled": { "messageFilteringOnNetworkIdHeaderValidation": true, "messageFilteringOnNetworkIdBodyValidation": true } } }'</pre>

Cat-2 Network ID Validation Feature System Option Parameters

Table 2-41 Cat-2 Network ID Validation Feature System Option Parameters

Attribute	Data type	Mandatory(M)/ Conditional(C)/ Optional(O)	Description
messageFilteringOnNetworkIdHeaderValidation	boolean	O	Enable Network ID Header Validation Feature. Default value: False
messageFilteringOnNetworkIdBodyValidation	boolean	O	Enable Network ID Body Validation Feature. Default value: False

Sample Response body structure for GET operations:

Resource API: /sepp-configuration/v1/security-counter-measure/network-id-validation/options

Resource Method: GET

Content Type: application/json

Response Body

```
"networkIdValidationEnabled": {
  "messageFilteringOnNetworkIdHeaderValidation": true,
  "messageFilteringOnNetworkIdBodyValidation": true
}
```

Sample Response body structure for PUT operations:

Resource API: /sepp-configuration/v1/security-counter-measure/network-id-validation/options

Resource Method: PUT

Content Type: application/json

Response Body

```
{
  200 OK
}
```

2.16 Network ID Validation List Configuration

Network ID Validation List allows user to configure Ingress/Egress Rules along with their corresponding Ingress and Egress Actions for SEPP Mode and Egress Rules along with Egress Action for Roaming Hub mode.

Table 2-42 Network ID Validation List Configuration

Method	URL	Description	Input	Return	Example
GET	sepp-configuration/v1/security-counter-measure/network-id-validation-allowed-list	Returns all the Network ID Validation lists created as part of Network ID Validation Feature with their Ingress Rules, Egress Rules, Ingress Action and Egress Action.	No Input Required	All Network ID Validation lists configured in the system.	curl -X 'GET' \ 'http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/v1/security-counter-measure/network-id-validation-allowed-list' \ -H 'accept: */*'

Table 2-42 (Cont.) Network ID Validation List Configuration

Method	URL	Description	Input	Return	Example
GET	/sepp-configuration/v1/security-counter-measure/network-id-validation-allowed-list/{networkIdValidationListName }	Returns the Network ID Validation list based on Network ID List Name	networkIdValidationListName	Returns the detailed object which comprises of Ingress/Egress Rules along with their corresponding Ingress and Egress Actions	<pre>curl -X 'GET' \ 'http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/v1/security-counter-measure/network-id-validation-allowed-list/{networkIdValidationListName }' \ -H 'accept: */*' </pre>

Table 2-42 (Cont.) Network ID Validation List Configuration

Method	URL	Description	Input	Return	Example
POST	/sepp-configuration/v1/security-counter-measure/network-id-validation-allowed-list/{networkIdValidationListName }	This API is used to Add new Network ID validation list along with Ingress/ Egress rules and their Error configuration.	networkIdValidationListName	networkIdValidationListName and the detailed object comprising of rules and error configurations.	<pre>curl -X 'POST' \ 'http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/v1/security-counter-measure/network-id-validation-allowed-list/NewList' \ -H 'accept: */*' \ -H 'Content-Type: application/json' \ -d '{ "networkIdValidationListName ": "NewList", "ingressRule": [{ "id": 0, "resourceURI": "/namf-loc/v1/{ueContextId}/provide-loc-info", "httpMethod": "POST" }], "egressRule": [{ "id": 0, "resourceURI": "/namf-loc/v1/{ueContextId}/provide-loc-info", "httpMethod": "POST" } }</pre>

Table 2-42 (Cont.) Network ID Validation List Configuration

Method	URL	Description	Input	Return	Example
					<pre>], "ingressAction": { "title": "Network ID Validation Failure", "statusCode": 406, "action": "REJECT" }, "egressAction": { "title": "Network ID Validation Failure", "statusCode": 406, "action": "REJECT" } }' </pre>
DELETE	/sepp-configuration/v1/security-counter-measure/network-id-validation-allowed-list/{networkIdValidationListName }	This API is used to Delete an already Existing Network ID Validation List for which Network ID Validation List Name is provided.	networkId ValidationListName	204	<pre> curl -X 'DELETE' \ 'http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/v1/security-counter-measure/network-id-validation-allowed-list/NewList' \ -H 'accept: */*' </pre>

Table 2-42 (Cont.) Network ID Validation List Configuration

Method	URL	Description	Input	Return	Example
PUT	/sepp-configuration/v1/security-counter-measure/network-id-validation-allowed-list/{networkIdValidationListName }	This API is used to UpdateNetwork ID validation List along with Ingress/ Egress rules and their Error configuration.	networkIdValidationListName	201 CREATED	<pre>curl -X 'PUT' \ 'http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/v1/security-counter-measure/network-id-validation-allowed-list/{networkIdValidationListName }' \ -H 'accept: */* ' \ -H 'Content-Type: application/json' \ -d '{ "networkIdValidationListName ": "NewList", "ingressRule": [{ "id": 141, "resourceURI": "/nudm-sdm/v2/{supi}/sms-data", "httpMethod": "GET" }], "ingressAction": { "title": "Network ID Validation Failure", "statusCode": 406, "action": "REJECT" },</pre>

Table 2-42 (Cont.) Network ID Validation List Configuration

Method	URL	Description	Input	Return	Example
					<pre>"egressAction": { "title": "Network ID Validation Failure", "statusCode": 406, "action": "REJECT" }</pre>

Table 2-42 (Cont.) Network ID Validation List Configuration

Method	URL	Description	Input	Return	Example
PUT	/sepp-configuration/v1/security-counter-measure/network-id-validation-allowed-list/{networkIdValidationListName }	This API is used to add a specific rule to an existing list. We need to specify the proper rule in either Ingress or Egress Rules	networkIdValidationListName and the detailed objects containing rules.	200 OK	<pre>curl -X 'PUT' \ 'http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/v1/ security-counter-measure/network- id-validation-allowed-list/ update-rules/ ListRSS_1' \ -H 'accept: */.*' \ -H 'Content- Type: application/ json' \ -d '{ "networkIdValidationListName": "ListRSS_1", "ingressRule": [{ "id": 0, "resourceURI": "/ namf-evts/v1/ subscriptions", "httpMethod": "POST" }], "egressRule": [{ "id": 0, "resourceURI": "/ namf-evts/v1/ subscriptions/ {subscriptionId}" }, "httpMethod": "DELETE" }] }</pre>

Table 2-42 (Cont.) Network ID Validation List Configuration

Method	URL	Description	Input	Return	Example
					<pre>] }'</pre>

Table 2-42 (Cont.) Network ID Validation List Configuration

Method	URL	Description	Input	Return	Example
DELETE	/sepp-configuration/v1/security-counter-measure/network-id-validation-allowed-list/{networkIdValidationListName }	This API is used to delete a specific rule to an existing list. User has to specify the proper rule in Ingress and Egress Rules. Note: SEPP in Roaming Hub mode supports only Egress Rules.	networkIdValidationListName and the detailed objects containing rules.	204	<pre>curl -X 'DELETE' \ 'http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/v1/security-counter-measure/network-id-validation-allowed-list/delete-rules/ListRSS_1' \ -H 'accept: */*' \ -H 'Content-Type: application/json' \ -d '{ "networkIdValidationListName": "ListRSS_1", "ingressRule": [{ "id": 0, "resourceURI": "/namf-evts/v1/subscriptions/{subscriptionId}" }, { "httpMethod": "DELETE" }], "egressRule": [{ "id": 0, "resourceURI": "/namf-evts/v1/subscriptions/{subscriptionId}" }, { "httpMethod":</pre>

Table 2-42 (Cont.) Network ID Validation List Configuration

Method	URL	Description	Input	Return	Example
					<pre>"DELETE" }] }'</pre>

Network ID List Configuration Parameters**Table 2-43 Network ID List Configuration Parameters**

Attribute	Datatype	Mandatory(M)/ Conditional(C)/ Optional(O)	Description
networkIdValidationListName	string	M	Network ID Validation List Name
ingressRule	String	O	Ingress Rule with Resource URI and Http Method
egressRule	String	O	Egress Rule with Resource URI and Http Method
ingressAction	String	M	Ingress Action: - REJECT - FORWARD
egressAction	String	M	Egress Action: - REJECT - FORWARD

Table 2-44 Allowed Ingress/ Egress Data Model Parameters

Attribute	Datatype	Mandatory(M)/ Conditional(C)/ Optional(O)	Description
resourceURI	string	O	Resource URI for which Validation will happen
httpMethod	String	O	HTTP Method [POST, PUT, GET, PATCH, DELETE, OPTION, HEAD]

Error Response Configuration Data Model Parameters

Table 2-45 Error Response Configuration Data Model Parameters

Attribute	Datatype	Mandatory(M)/ Conditional(C)/ Optional(O)	Description
title	string	M	Title and details of Error
statusCode	integer	M	Status Code of configured errors
action	enum	M	Action needs to be taken when PLMN ID validation fails. Range: REJECT or FORWARD

Sample Response body structure for GET operations

Resource API : sepp-configuration/v1/security-counter-measure/network-id-validation-allowed-list

Resource Method : GET

Content Type : application/json

Response Body

```
[
  {
    "networkIdValidationListName": "Default",
    "ingressRule": [
      {
        "id": 76,
        "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/smsf-non-3gpp-
access",
        "httpMethod": "GET"
      },
      {
        "id": 111,
        "resourceURI": "/nausf-auth/v1/ue-authentications/{authCtxId}/5g-aka-
confirmation",
        "httpMethod": "POST"
      },
      {
        "id": 102,
        "resourceURI": "/namf-evts/v1/subscriptions/{subscriptionId}",
        "httpMethod": "DELETE"
      },
      {
        "id": 54,
        "resourceURI": "/namf-loc/v1/{ueContextId}/provide-loc-info",
        "httpMethod": "POST"
      },
      {
        "id": 90,
        "resourceURI": "/nudm-sdm/v2/{supi}/sms-data",
        "httpMethod": "GET"
      }
    ]
  }
]
```

```

    },
    {
      "id": 43,
      "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/smf-registrations/
{pduSessionId}",
      "httpMethod": "PUT"
    },
    {
      "id": 82,
      "resourceURI": "/nnssf-nsselection/v2/network-slice-information",
      "httpMethod": "GET"
    },
    {
      "id": 3,
      "resourceURI": "/nudm-sdm/v2/{supi}/ue-context-in-smf-data",
      "httpMethod": "GET"
    },
    {
      "id": 1,
      "resourceURI": "/nudm-sdm/v1/{supi}/sm-data",
      "httpMethod": "GET"
    },
    {
      "id": 21,
      "resourceURI": "/namf-evts/v1/subscriptions",
      "httpMethod": "POST"
    },
    {
      "id": 98,
      "resourceURI": "/namf-comm/v1/subscriptions/{subscriptionId}",
      "httpMethod": "PUT"
    },
    {
      "id": 50,
      "resourceURI": "/npcf-ue-policy-control/v1/policies/{polAssoId}",
      "httpMethod": "GET"
    },
    {
      "id": 103,
      "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/smf-3gpp-access",
      "httpMethod": "DELETE"
    },
    {
      "id": 118,
      "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/amf-non-3gpp-
access",
      "httpMethod": "PATCH"
    },
    {
      "id": 66,
      "resourceURI": "/nudm-sdm/v1/shared-data",
      "httpMethod": "GET"
    },
    {
      "id": 104,
      "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/smf-3gpp-access",

```



```

        "httpMethod": "PUT"
      },
      {
        "id": 23,
        "resourceURI": "/nudm-sdm/v2/{supi}/am-data",
        "httpMethod": "POST"
      },
      {
        "id": 34,
        "resourceURI": "/npcf-ue-policy-control/v1/policies/{polAssoId}/
update",
        "httpMethod": "POST"
      },
      {
        "id": 99,
        "resourceURI": "/nudm-sdm/v1/{supi}",
        "httpMethod": "GET"
      },
      {
        "id": 70,
        "resourceURI": "/namf-comm/v1/subscriptions",
        "httpMethod": "POST"
      },
      {
        "id": 114,
        "resourceURI": "/nausf-auth/v1/ue-authentications/{authCtxId}/5g-aka-
confirmation",
        "httpMethod": "PUT"
      },
      {
        "id": 116,
        "resourceURI": "/nudm-sdm/v1/{supi}/nssai",
        "httpMethod": "GET"
      },
      {
        "id": 20,
        "resourceURI": "/nudm-sdm/v1/{supi}/ue-context-in-smf-data",
        "httpMethod": "GET"
      },
      {
        "id": 140,
        "resourceURI": "/oauth2/token",
        "httpMethod": "POST"
      },
      {
        "id": 106,
        "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/smsf-non-3gpp-
access",
        "httpMethod": "PUT"
      },
      {
        "id": 65,
        "resourceURI": "/nudm-sdm/v2/{supi}/am-data/upu-ack",
        "httpMethod": "PUT"
      },
      {

```

```

        "id": 129,
        "resourceURI": "/nudm-sdm/v2/{supi}/am-data",
        "httpMethod": "GET"
    },
    {
        "id": 131,
        "resourceURI": "/npcf-ue-policy-control/v1/policies/{polAssoId}",
        "httpMethod": "DELETE"
    },
    {
        "id": 26,
        "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/smf-registrations/
{pduSessionId}",
        "httpMethod": "DELETE"
    },
    {
        "id": 100,
        "resourceURI": "/nsmf-pdusession/v1/pdu-sessions/{pduSessionRef}/
modify",
        "httpMethod": "POST"
    },
    {
        "id": 59,
        "resourceURI": "/nudm-sdm/v1/{supi}/sdm-subscriptions/
{subscriptionId}",
        "httpMethod": "DELETE"
    },
    {
        "id": 79,
        "resourceURI": "/nudm-sdm/v1/{supi}/sdm-subscriptions",
        "httpMethod": "POST"
    },
    {
        "id": 133,
        "resourceURI": "/nsmf-pdusession/v1/pdu-sessions/{pduSessionRef}",
        "httpMethod": "POST"
    },
    {
        "id": 60,
        "resourceURI": "/nudm-sdm/v1/{supi}/am-data/sor-ack",
        "httpMethod": "PUT"
    },
    {
        "id": 24,
        "resourceURI": "/nudm-sdm/v2/{supi}/ue-context-in-smf-data",
        "httpMethod": "GET"
    },
    {
        "id": 25,
        "resourceURI": "/nudm-sdm/v2/shared-data",
        "httpMethod": "GET"
    },
    {
        "id": 10,
        "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/amf-3gpp-access",
        "httpMethod": "GET"
    }

```

```

    },
    {
      "id": 55,
      "resourceURI": "/namf-comm/v1/subscriptions/{subscriptionId}",
      "httpMethod": "DELETE"
    },
    {
      "id": 8,
      "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/smf-3gpp-access",
      "httpMethod": "GET"
    },
    {
      "id": 40,
      "resourceURI": "/nnrf-disc/v1/nf-instances",
      "httpMethod": "GET"
    },
    {
      "id": 35,
      "resourceURI": "/nudm-sdm/v2/{ueId}/sdm-subscriptions/
{subscriptionId}",
      "httpMethod": "PATCH"
    },
    {
      "id": 52,
      "resourceURI": "/nsmf-pdusession/v1/pdu-sessions/{pduSessionRef}/
release",
      "httpMethod": "POST"
    },
    {
      "id": 64,
      "resourceURI": "/nnrf-nfm/v1/subscriptions",
      "httpMethod": "POST"
    },
    {
      "id": 83,
      "resourceURI": "/nudm-sdm/v1/{supi}/am-data",
      "httpMethod": "GET"
    },
    {
      "id": 7,
      "resourceURI": "/nnssf-nselection/v1/network-slice-information",
      "httpMethod": "GET"
    },
    {
      "id": 137,
      "resourceURI": "/nudm-sdm/v2/{ueId}/sdm-subscriptions",
      "httpMethod": "POST"
    },
    {
      "id": 139,
      "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/amf-3gpp-access",
      "httpMethod": "PUT"
    },
    {
      "id": 73,
      "resourceURI": "/npcf-ue-policy-control/v1/policies",

```

```

        "httpMethod": "POST"
      },
      {
        "id": 120,
        "resourceURI": "/nudm-sdm/v2/{supi}",
        "httpMethod": "GET"
      },
      {
        "id": 16,
        "resourceURI": "/nsmf-pdusession/v1/pdu-sessions",
        "httpMethod": "POST"
      },
      {
        "id": 78,
        "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/amf-3gpp-access",
        "httpMethod": "PATCH"
      },
      {
        "id": 125,
        "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/amf-non-3gpp-
access",
        "httpMethod": "PUT"
      },
      {
        "id": 80,
        "resourceURI": "/nausf-auth/v1/ue-authentications/{authCtxId}/5g-aka-
confirmation",
        "httpMethod": "DELETE"
      },
      {
        "id": 58,
        "resourceURI": "/nnrf-nfm/v1/subscriptions/{subscriptionID}",
        "httpMethod": "DELETE"
      },
      {
        "id": 123,
        "resourceURI": "/nudm-sdm/v2/{supi}/sms-mng-data",
        "httpMethod": "GET"
      },
      {
        "id": 115,
        "resourceURI": "/nudm-sdm/v2/{supi}/nssai",
        "httpMethod": "GET"
      },
      {
        "id": 41,
        "resourceURI": "/nnrf-nfm/v1/NfStatusChangeNotification",
        "httpMethod": "POST"
      },
      {
        "id": 127,
        "resourceURI": "/nudm-sdm/v1/{supi}/am-data/upu-ack",
        "httpMethod": "PUT"
      },
      {
        "id": 33,

```

```

        "resourceURI": "/nudm-sdm/v2/{supi}/sm-data",
        "httpMethod": "GET"
    },
    {
        "id": 18,
        "resourceURI": "/nudm-sdm/v2/{ueId}/sdm-subscriptions/
{subscriptionId}",
        "httpMethod": "DELETE"
    },
    {
        "id": 89,
        "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/amf-non-3gpp-
access",
        "httpMethod": "GET"
    },
    {
        "id": 72,
        "resourceURI": "/nsmf-pdusession/v1/pdu-sessions/{pduSessionRef}/
transfer-mo-data",
        "httpMethod": "POST"
    },
    {
        "id": 88,
        "resourceURI": "/namf-evts/v1/subscriptions/{subscriptionId}",
        "httpMethod": "PATCH"
    },
    {
        "id": 84,
        "resourceURI": "/nausf-auth/v1/ue-authentications",
        "httpMethod": "POST"
    },
    {
        "id": 138,
        "resourceURI": "/namf-mt/v1/ue-contexts/{ueContextId}",
        "httpMethod": "GET"
    },
    {
        "id": 68,
        "resourceURI": "/nudm-sdm/v2/{supi}/smf-select-data",
        "httpMethod": "GET"
    },
    {
        "id": 85,
        "resourceURI": "/nsmf-pdusession/v1/pdu-sessions/{pduSessionRef}/
transfer-mt-data",
        "httpMethod": "POST"
    },
    {
        "id": 122,
        "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/smsf-non-3gpp-
access",
        "httpMethod": "DELETE"
    },
    {
        "id": 11,
        "resourceURI": "/nudm-sdm/v2/{supi}/am-data/sor-ack",

```

```

        "httpMethod": "PUT"
      },
      {
        "id": 86,
        "resourceURI": "/nnrf-nfm/v1/subscriptions/{subscriptionID}",
        "httpMethod": "PATCH"
      }
    ],
    "egressRule": [
      {
        "id": 71,
        "resourceURI": "/nudm-sdm/v1/{supi}/am-data",
        "httpMethod": "GET"
      },
      {
        "id": 14,
        "resourceURI": "/nudm-sdm/v2/{supi}/sms-data",
        "httpMethod": "GET"
      },
      {
        "id": 121,
        "resourceURI": "/oauth2/token",
        "httpMethod": "POST"
      },
      {
        "id": 17,
        "resourceURI": "/nausf-auth/v1/ue-authentications/{authCtxId}/5g-aka-confirmation",
        "httpMethod": "DELETE"
      },
      {
        "id": 6,
        "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/smsf-non-3gpp-access",
        "httpMethod": "GET"
      },
      {
        "id": 38,
        "resourceURI": "/npcf-ue-policy-control/v1/policies/{polAssoId}",
        "httpMethod": "DELETE"
      },
      {
        "id": 47,
        "resourceURI": "/nnssf-nselection/v1/network-slice-information",
        "httpMethod": "GET"
      },
      {
        "id": 126,
        "resourceURI": "/nsmf-pdusession/v1/pdu-sessions/{pduSessionRef}/transfer-mo-data",
        "httpMethod": "POST"
      },
      {
        "id": 95,
        "resourceURI": "/nudm-sdm/v2/{supi}/am-data/upu-ack",
        "httpMethod": "PUT"
      }
    ]
  }
}

```

```

    },
    {
      "id": 63,
      "resourceURI": "/nudm-sdm/v2/{supi}/am-data",
      "httpMethod": "GET"
    },
    {
      "id": 107,
      "resourceURI": "/nudm-sdm/v2/{ueId}/sdm-subscriptions/
{subscriptionId}",
      "httpMethod": "PATCH"
    },
    {
      "id": 62,
      "resourceURI": "/nsmf-pdusession/v1/pdu-sessions/{pduSessionRef}/
transfer-mt-data",
      "httpMethod": "POST"
    },
    {
      "id": 101,
      "resourceURI": "/namf-evts/v1/subscriptions",
      "httpMethod": "POST"
    },
    {
      "id": 117,
      "resourceURI": "/nudm-sdm/v1/{supi}",
      "httpMethod": "GET"
    },
    {
      "id": 134,
      "resourceURI": "/nnrf-nfm/v1/subscriptions/{subscriptionID}",
      "httpMethod": "PATCH"
    },
    {
      "id": 112,
      "resourceURI": "/nnssf-nselection/v2/network-slice-information",
      "httpMethod": "GET"
    },
    {
      "id": 19,
      "resourceURI": "/nnrf-disc/v1/nf-instances",
      "httpMethod": "GET"
    },
    {
      "id": 12,
      "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/smsf-3gpp-access",
      "httpMethod": "DELETE"
    },
    {
      "id": 44,
      "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/amf-non-3gpp-
access",
      "httpMethod": "PUT"
    },
    {
      "id": 4,

```

```

        "resourceURI": "/nudm-sdm/v2/shared-data",
        "httpMethod": "GET"
    },
    {
        "id": 105,
        "resourceURI": "/namf-evts/v1/subscriptions/{subscriptionId}",
        "httpMethod": "DELETE"
    },
    {
        "id": 97,
        "resourceURI": "/nudm-sdm/v2/{ueId}/sdm-subscriptions/
{subscriptionId}",
        "httpMethod": "DELETE"
    },
    {
        "id": 27,
        "resourceURI": "/namf-comm/v1/subscriptions",
        "httpMethod": "POST"
    },
    {
        "id": 9,
        "resourceURI": "/nudm-sdm/v2/{supi}/sm-data",
        "httpMethod": "GET"
    },
    {
        "id": 81,
        "resourceURI": "/nudm-sdm/v2/{supi}/ue-context-in-smsf-data",
        "httpMethod": "GET"
    },
    {
        "id": 46,
        "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/amf-3gpp-access",
        "httpMethod": "PATCH"
    },
    {
        "id": 75,
        "resourceURI": "/npcf-ue-policy-control/v1/policies",
        "httpMethod": "POST"
    },
    {
        "id": 42,
        "resourceURI": "/nudm-sdm/v2/{supi}",
        "httpMethod": "GET"
    },
    {
        "id": 13,
        "resourceURI": "/nudm-sdm/v1/shared-data",
        "httpMethod": "GET"
    },
    {
        "id": 136,
        "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/smf-registrations/
{pduSessionId}",
        "httpMethod": "PUT"
    },
    {

```



```

        "id": 51,
        "resourceURI": "/nudm-sdm/v1/{supi}/ue-context-in-smf-data",
        "httpMethod": "GET"
    },
    {
        "id": 94,
        "resourceURI": "/nudm-sdm/v1/{supi}/sdm-subscriptions/
{subscriptionId}",
        "httpMethod": "DELETE"
    },
    {
        "id": 36,
        "resourceURI": "/npcf-ue-policy-control/v1/policies/{polAssoId}",
        "httpMethod": "GET"
    },
    {
        "id": 49,
        "resourceURI": "/nudm-sdm/v1/{supi}/sdm-subscriptions",
        "httpMethod": "POST"
    },
    {
        "id": 69,
        "resourceURI": "/namf-comm/v1/subscriptions/{subscriptionId}",
        "httpMethod": "DELETE"
    },
    {
        "id": 92,
        "resourceURI": "/nudm-sdm/v1/{supi}/am-data/sor-ack",
        "httpMethod": "PUT"
    },
    {
        "id": 135,
        "resourceURI": "/nausf-auth/v1/ue-authentications",
        "httpMethod": "POST"
    },
    {
        "id": 109,
        "resourceURI": "/nudm-sdm/v2/{supi}/am-data/sor-ack",
        "httpMethod": "PUT"
    },
    {
        "id": 130,
        "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/smf-registrations/
{pduSessionId}",
        "httpMethod": "DELETE"
    },
    {
        "id": 113,
        "resourceURI": "/nsmf-pdusession/v1/pdu-sessions",
        "httpMethod": "POST"
    },
    {
        "id": 96,
        "resourceURI": "/nudm-sdm/v2/{supi}/nssai",
        "httpMethod": "GET"
    }
},

```

```

    {
      "id": 37,
      "resourceURI": "/nausf-auth/v1/ue-authentications/{authCtxId}/5g-aka-confirmation",
      "httpMethod": "PUT"
    },
    {
      "id": 74,
      "resourceURI": "/nsmf-pdusession/v1/pdu-sessions/{pduSessionRef}/release",
      "httpMethod": "POST"
    },
    {
      "id": 56,
      "resourceURI": "/nnrf-nfm/v1/subscriptions",
      "httpMethod": "POST"
    },
    {
      "id": 110,
      "resourceURI": "/npcf-ue-policy-control/v1/policies/{polAssoId}/update",
      "httpMethod": "POST"
    },
    {
      "id": 32,
      "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/smsf-non-3gpp-access",
      "httpMethod": "PUT"
    },
    {
      "id": 132,
      "resourceURI": "/nudm-sdm/v2/{supi}/sms-mng-data",
      "httpMethod": "GET"
    },
    {
      "id": 22,
      "resourceURI": "/nudm-sdm/v2/{supi}/ue-context-in-smf-data",
      "httpMethod": "GET"
    },
    {
      "id": 57,
      "resourceURI": "/nnrf-nfm/v1/subscriptions/{subscriptionID}",
      "httpMethod": "DELETE"
    },
    {
      "id": 28,
      "resourceURI": "/nausf-auth/v1/ue-authentications/{authCtxId}/5g-aka-confirmation",
      "httpMethod": "POST"
    },
    {
      "id": 87,
      "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/amf-3gpp-access",
      "httpMethod": "PUT"
    },
    {

```

```

        "id": 53,
        "resourceURI": "/nudm-sdm/v2/{ueId}/sdm-subscriptions",
        "httpMethod": "POST"
    },
    {
        "id": 124,
        "resourceURI": "/namf-comm/v1/subscriptions/{subscriptionId}",
        "httpMethod": "PUT"
    },
    {
        "id": 77,
        "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/amf-non-3gpp-
access",
        "httpMethod": "GET"
    },
    {
        "id": 5,
        "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/smsf-non-3gpp-
access",
        "httpMethod": "DELETE"
    },
    {
        "id": 61,
        "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/amf-non-3gpp-
access",
        "httpMethod": "PATCH"
    },
    {
        "id": 128,
        "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/amf-3gpp-access",
        "httpMethod": "GET"
    },
    {
        "id": 15,
        "resourceURI": "/nudm-sdm/v2/{supi}/am-data",
        "httpMethod": "POST"
    },
    {
        "id": 91,
        "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/smsf-3gpp-access",
        "httpMethod": "GET"
    },
    {
        "id": 30,
        "resourceURI": "/nudm-sdm/v1/{supi}/sm-data",
        "httpMethod": "GET"
    },
    {
        "id": 31,
        "resourceURI": "/nudm-sdm/v2/{supi}/smf-select-data",
        "httpMethod": "GET"
    },
    {
        "id": 48,
        "resourceURI": "/namf-loc/v1/{ueContextId}/provide-loc-info",
        "httpMethod": "POST"
    }

```

```

    },
    {
      "id": 119,
      "resourceURI": "/nnrf-nfm/v1/NfStatusChangeNotification",
      "httpMethod": "POST"
    },
    {
      "id": 29,
      "resourceURI": "/namf-evts/v1/subscriptions/{subscriptionId}",
      "httpMethod": "PATCH"
    },
    {
      "id": 39,
      "resourceURI": "/nudm-sdm/v1/{supi}/nssai",
      "httpMethod": "GET"
    },
    {
      "id": 2,
      "resourceURI": "/nsmf-pdusession/v1/pdu-sessions/{pduSessionRef}/
modify",
      "httpMethod": "POST"
    },
    {
      "id": 108,
      "resourceURI": "/nsmf-pdusession/v1/pdu-sessions/{pduSessionRef}",
      "httpMethod": "POST"
    },
    {
      "id": 93,
      "resourceURI": "/nudm-sdm/v1/{supi}/am-data/upu-ack",
      "httpMethod": "PUT"
    },
    {
      "id": 45,
      "resourceURI": "/namf-mt/v1/ue-contexts/{ueContextId}",
      "httpMethod": "GET"
    },
    {
      "id": 67,
      "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/smsf-3gpp-access",
      "httpMethod": "PUT"
    }
  ],
  "ingressAction": {
    "title": "PLMN ID Validation Failed",
    "statusCode": 406,
    "action": "REJECT"
  },
  "egressAction": {
    "title": "PLMN ID Validation Failed",
    "statusCode": 406,
    "action": "REJECT"
  }
},
{
  "networkIdValidationListName": "NewCustomList",

```

```

    "ingressRule": [
      {
        "id": 141,
        "resourceURI": "/nausf-auth/v1/ue-authentications",
        "httpMethod": "POST"
      }
    ],
    "egressRule": [
      {
        "id": 142,
        "resourceURI": "/nausf-auth/v1/ue-authentications",
        "httpMethod": "POST"
      }
    ],
    "ingressAction": {
      "title": "PLMN ID Validation Failure",
      "statusCode": 406,
      "action": "REJECT"
    },
    "egressAction": {
      "title": "PLMN ID Validation Failure",
      "statusCode": 406,
      "action": "REJECT"
    }
  }
]

```

Sample Response body structure for GET operations

Resource API : /sepp-configuration/v1/security-counter-measure/network-id-validation-allowed-list/{networkIdValidationListName}

Resource Method : GET

Content Type : application/json

Response Body

```

{
  "networkIdValidationListName": "NewCustomList",
  "ingressRule": [
    {
      "id": 141,
      "resourceURI": "/nausf-auth/v1/ue-authentications",
      "httpMethod": "POST"
    }
  ],
  "egressRule": [
    {
      "id": 142,
      "resourceURI": "/nausf-auth/v1/ue-authentications",
      "httpMethod": "POST"
    }
  ],
  "ingressAction": {
    "title": "Network ID Validation Failed",

```

```
        "statusCode": 406,  
        "action": "REJECT"  
    },  
    "egressAction": {  
        "title": "Network ID Validation Failed",  
        "statusCode": 406,  
        "action": "REJECT"  
    }  
}
```

Sample Response body structure for POST operations

Resource API : /sepp-configuration/v1/security-counter-measure/network-id-validation-allowed-list/{networkIdValidationListName}

Resource Method : POST

Content Type : application/json

Response Body

201 CREATED

Sample Response body structure for DELETE operations

Resource API : /sepp-configuration/v1/security-counter-measure/network-id-validation-allowed-list/{networkIdValidationListName}

Resource Method : DELETE

Content Type : application/json

Response Body

204

Sample Response body structure for PUT operations

Resource API : /sepp-configuration/v1/security-counter-measure/network-id-validation-allowed-list/{networkIdValidationListName}

Resource Method : PUT

Content Type : application/json

Response Body

201 CREATED

Sample Response body structure for PUT operations

Resource API : /sepp-configuration/v1/security-counter-measure/network-id-validation-allowed-list/update-rules/{networkIdValidationListName }

Resource Method : PUT

Content Type : application/json

Response Body

200 OK

Sample Response body structure for DELETE operations

Resource API : /sepp-configuration/v1/security-counter-measure/network-id-validation-allowed-list/delete-rules/{networkIdValidationListName}

Resource Method : DELETE

Content Type : application/json

Response Body

204

2.17 Network ID in Header Validation Configuration

Network ID in Header Validation Configuration REST API allows the user to configure the headers for which Network ID validation take place.

Table 2-46 Network ID in Header Validation Configuration

Method	URL	Description	Input	Return	Example
GET	/sepp-configuration/v1/security-counter-measure/network-id-validation/header	This API is used to fetch Header configurations	Not Required	List of header detailed objects.	<pre>curl -X 'GET'\ 'http ://<SEPP-Configuration IP>:<PORT>/sepp-configuration/v1/security-counter-measure/network-id-validation/header'\ -H 'accept: */*'</pre>

Table 2-46 (Cont.) Network ID in Header Validation Configuration

Method	URL	Description	Input	Return	Example
GET	/sepp-configuration/v1/security-counter-measure/network-id-validation/header/{headerId}	This API is used to fetch the Header configurations for which {headerId} is given	{headerId}	Header Configuration	<pre>curl -X 'GET' \ 'http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/v1/security-counter-measure/network-id-validation/header/1' \ -H 'accept: */*'</pre>

Table 2-46 (Cont.) Network ID in Header Validation Configuration

Method	URL	Description	Input	Return	Example
POST	/sepp-configuration/v1/security-counter-measure/network-id-validation/header	This API is used to add new Header Configurations.	Header Configurations	201 Network ID Header Created Successfully.	<pre>curl -X 'POST' \ 'http://<SEPP-ConfigurationIP>:<PORT>/sepp-configuration/v1/security-counter-measure/network-id-validation/header' \ -H 'accept: */*' \ -H 'Content-Type: application/json' \ -d '{ "headerId": 0, "headerName": "custom", "regularExpression": "(?<=imsi-)[0-9]{6}", "resourceURI": "/nudm-sdm/v2/{ueid}/sdm-subscriptions", "httpMethod": "POST", "direction"</pre>

Table 2-46 (Cont.) Network ID in Header Validation Configuration

Method	URL	Description	Input	Return	Example
					: "PSEPP" }'
DELETE	/sepp-configuration/v1/security-counter-measure/network-id-validation/header/{headerId}	This API is used to delete header configuration for the given header Id.	header Id	204 No Content	curl -X 'DELETE' \ 'http:// <SEPP- Configurati on IP>:<PORT>/ sepp- configurati on/v1/ security- counter- measure/ network-id- validation/ header/28' \n -H 'accept: */*'

Network ID in Header Validation Configuration Parameters

Table 2-47 Network ID in Header Validation Configuration Parameters

Attribute	Data type	Mandatory(M)/ Conditional(C)/ Optional(O)	Description
headerName	String	M	Header Name for which PLMN ID validation should happen
regularExpression	String	M	Regular Expression to Fetch PLMN ID (MCC & MNC)
resourceURI	String	M	Resource URI for which Validation will happen
httpMethod	Enum	M	HTTP Method [POST, PUT, GET, PATCH, DELETE, OPTION, HEAD]
direction	Enum	M	PSEPP or CSEPP

Sample Response body structure for GET operations

Resource API: /sepp-configuration/v1/security-counter-measure/plmn-validation/header**Resource Method:** GET**Content Type:** application/json**Response Body**

```
[
  {
    "headerId": 9,
    "headerName": "ueId",
    "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/smf-registrations/{pduSessionId}",
    "direction": "PSEPP",
    "regularExpression": "(?<=imsi-)[0-9]{15,16}",
    "httpMethod": "PUT"
  },
  {
    "headerId": 17,
    "headerName": "supi",
    "resourceURI": "/nudm-sdm/v2/{supi}/ue-context-in-smf-data",
    "direction": "PSEPP",
    "regularExpression": "(?<=imsi-)[0-9]{15,16}",
    "httpMethod": "GET"
  },
  {
    "headerId": 41,
    "headerName": "supi",
    "resourceURI": "/nudm-sdm/v2/{supi}/sm-data",
    "direction": "PSEPP",
    "regularExpression": "(?<=imsi-)[0-9]{15,16}",
    "httpMethod": "GET"
  },
  {
    "headerId": 53,
    "headerName": "ueId",
    "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/amf-3gpp-access",
    "direction": "PSEPP",
    "regularExpression": "(?<=imsi-)[0-9]{15,16}",
    "httpMethod": "PUT"
  },
  {
    "headerId": 57,
    "headerName": "supi",
    "resourceURI": "/nnrf-disc/v1/nf-instances",
    "direction": "PSEPP",
    "regularExpression": "(?<=imsi-)[0-9]{15,16}",
    "httpMethod": "GET"
  },
  {
    "headerId": 65,
    "headerName": "ueId",
    "resourceURI": "/nudm-sdm/v2/{ueId}/sdm-subscriptions/{subscriptionId}",
    "direction": "PSEPP",
    "regularExpression": "(?<=imsi-)[0-9]{15,16}",
    "httpMethod": "DELETE"
  }
]
```

```

    },
    {
      "headerId": 85,
      "headerName": "ueContextId",
      "resourceURI": "/namf-mt/v1/ue-contexts/{ueContextId}",
      "direction": "PSEPP",
      "regularExpression": "(?<=imsi-)[0-9]{15,16}",
      "httpMethod": "GET"
    },
    {
      "headerId": 105,
      "headerName": "supi",
      "resourceURI": "/nudm-sdm/v2/{supi}/am-data/sor-ack",
      "direction": "PSEPP",
      "regularExpression": "(?<=imsi-)[0-9]{15,16}",
      "httpMethod": "PUT"
    },
    {
      "headerId": 109,
      "headerName": "supi",
      "resourceURI": "/nudm-sdm/v2/{supi}",
      "direction": "PSEPP",
      "regularExpression": "(?<=imsi-)[0-9]{15,16}",
      "httpMethod": "GET"
    },
    {
      "headerId": 73,
      "headerName": "supi",
      "resourceURI": "/nudm-sdm/v2/{supi}/am-data/upu-ack",
      "direction": "PSEPP",
      "regularExpression": "(?<=imsi-)[0-9]{15,16}",
      "httpMethod": "PUT"
    },
    {
      "headerId": 113,
      "headerName": "supi",
      "resourceURI": "/nudm-sdm/v2/{supi}/sdm-subscriptions",
      "direction": "PSEPP",
      "regularExpression": "(?<=imsi-)[0-9]{15,16}",
      "httpMethod": "POST"
    },
    {
      "headerId": 117,
      "headerName": "ueId",
      "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/smsf-non-3gpp-access",
      "direction": "PSEPP",
      "regularExpression": "(?<=imsi-)[0-9]{15,16}",
      "httpMethod": "PUT"
    },
    {
      "headerId": 29,
      "headerName": "ueId",
      "resourceURI": "/nudm-sdm/v2/{ueId}/sdm-subscriptions",
      "direction": "PSEPP",
      "regularExpression": "(?<=imsi-)[0-9]{15,16}",
      "httpMethod": "POST"
    }
  ],

```

```

    },
    {
      "headerId": 37,
      "headerName": "ueId",
      "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/amf-non-3gpp-access",
      "direction": "PSEPP",
      "regularExpression": "(?<=imsi-)[0-9]{15,16}",
      "httpMethod": "GET"
    },
    {
      "headerId": 69,
      "headerName": "supi",
      "resourceURI": "/nudm-sdm/v2/{supi}/ue-context-in-smsf-data",
      "direction": "PSEPP",
      "regularExpression": "(?<=imsi-)[0-9]{15,16}",
      "httpMethod": "GET"
    },
    {
      "headerId": 77,
      "headerName": "supi",
      "resourceURI": "/nudm-sdm/v2/{supi}/sms-mng-data",
      "direction": "PSEPP",
      "regularExpression": "(?<=imsi-)[0-9]{15,16}",
      "httpMethod": "GET"
    },
    {
      "headerId": 93,
      "headerName": "supi",
      "resourceURI": "/nudm-sdm/v2/{supi}/am-data",
      "direction": "PSEPP",
      "regularExpression": "(?<=imsi-)[0-9]{15,16}",
      "httpMethod": "GET"
    },
    {
      "headerId": 13,
      "headerName": "ueId",
      "resourceURI": "/nudm-sdm/v2/{ueId}/sdm-subscriptions/{subscriptionId}",
      "direction": "PSEPP",
      "regularExpression": "(?<=imsi-)[0-9]{15,16}",
      "httpMethod": "DELETE"
    },
    {
      "headerId": 33,
      "headerName": "ueId",
      "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/smsf-3gpp-access",
      "direction": "PSEPP",
      "regularExpression": "(?<=imsi-)[0-9]{15,16}",
      "httpMethod": "PUT"
    },
    {
      "headerId": 49,
      "headerName": "supi",
      "resourceURI": "/nudm-sdm/v2/{supi}/nssai",
      "direction": "PSEPP",
      "regularExpression": "(?<=imsi-)[0-9]{15,16}",
      "httpMethod": "GET"
    }
  ]
}

```

```

    },
    {
      "headerId": 45,
      "headerName": "supi",
      "resourceURI": "/nudm-sdm/v2/{supi}/sms-data",
      "direction": "PSEPP",
      "regularExpression": "(?<=imsi-)[0-9]{15,16}",
      "httpMethod": "GET"
    },
    {
      "headerId": 25,
      "headerName": "ueId",
      "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/smf-non-3gpp-access",
      "direction": "PSEPP",
      "regularExpression": "(?<=imsi-)[0-9]{15,16}",
      "httpMethod": "DELETE"
    },
    {
      "headerId": 4177,
      "headerName": "target-plmn",
      "resourceURI": "/nnrf-disc/v1/nf-instances",
      "direction": "PSEPP",
      "regularExpression": "(?<=msi-)[0-9]{15,16}",
      "httpMethod": "GET"
    },
    {
      "headerId": 1,
      "headerName": "ueId",
      "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/amf-non-3gpp-access",
      "direction": "PSEPP",
      "regularExpression": "(?<=imsi-)[0-9]{15,16}",
      "httpMethod": "PUT"
    },
    {
      "headerId": 21,
      "headerName": "supi",
      "resourceURI": "/nudm-sdm/v2/{supi}/smf-select-data",
      "direction": "PSEPP",
      "regularExpression": "(?<=imsi-)[0-9]{15,16}",
      "httpMethod": "GET"
    },
    {
      "headerId": 101,
      "headerName": "ueId",
      "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/smf-registrations/
{pduSessionId}",
      "direction": "PSEPP",
      "regularExpression": "(?<=imsi-)[0-9]{15,16}",
      "httpMethod": "DELETE"
    },
    {
      "headerId": 5,
      "headerName": "ueId",
      "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/amf-3gpp-access",
      "direction": "PSEPP",
      "regularExpression": "(?<=imsi-)[0-9]{15,16}",

```

```

        "httpMethod": "GET"
      },
      {
        "headerId": 89,
        "headerName": "ueContextId",
        "resourceURI": "/namf-loc/v1/{ueContextId}/provide-loc-info",
        "direction": "PSEPP",
        "regularExpression": "(?<=imsi-)[0-9]{15,16}",
        "httpMethod": "POST"
      },
      {
        "headerId": 61,
        "headerName": "ueId",
        "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/smsf-3gpp-access",
        "direction": "PSEPP",
        "regularExpression": "(?<=imsi-)[0-9]{15,16}",
        "httpMethod": "GET"
      },
      {
        "headerId": 81,
        "headerName": "ueId",
        "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/smsf-3gpp-access",
        "direction": "PSEPP",
        "regularExpression": "(?<=imsi-)[0-9]{15,16}",
        "httpMethod": "DELETE"
      },
      {
        "headerId": 97,
        "headerName": "ueId",
        "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/smsf-non-3gpp-access",
        "direction": "CSEPP",
        "regularExpression": "(?<=imsi-)[0-9]{15,16}",
        "httpMethod": "GET"
      }
    ]
  }

```

Sample Response body structure for GET operations

Resource API: /sepp-configuration/v1/security-counter-measure//network-id-validation/header/{headerId}

Resource Method: GET

Content Type: application/json

Response Body

```

{
  "headerId": 1,
  "headerName": "ueId",
  "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/amf-non-3gpp-access",
  "direction": "CSEPP",
  "regularExpression": "(?<=imsi-)[0-9]{15,16}",
  "httpMethod": "PUT"
}

```

Sample Response body structure for POST operations

Resource API: /sepp-configuration/v1/security-counter-measure/network-id-validation/header

Resource Method: POST

Content Type : application/json

Response Body

201

Network ID Header Created Successfully.

Sample Response body structure for DELETE operations

Resource API: /sepp-configuration/v1/security-counter-measure/network-id-validation/header/{headerId}

Resource Method: DELETE

Content Type: application/json

Response Body

204

No Content

2.18 Network ID in Body Validation Configuration

Network ID in Body Validation Configuration REST APIs allow the user to configure the Body IEs for which CSEPP and PSEPP PLMN ID Validation happens.

Method	URL	Description	Input	Return	Example
GET	/sepp-configuration/v1/security-counter-measure/network-id-validation/body	This API is used to fetch the complete list of Body IE's Configuration	Not Required	List of Network ID Validation Body IE detailed object.	curl -X 'GET' \ 'http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/v1/security-counter-measure/network-id-validation/body' \ -H 'accept: */*'
GET	/sepp-configuration/v1/security-counter-measure/network-id-validation/body/{bodyId}	This API is used to fetch the Body IE's Configuration for which bodyId is given	bodyId value of the configuration	Body IE detailed object configuration.	curl -X 'GET' \ 'http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/v1/security-counter-measure/network-id-validation/body/1' \ -H 'accept: */*'

Method	URL	Description	Input	Return	Example
POST	/sepp-configuration/v1/security-counter-measure/network-id-validation/body	This API is used to add Body IE's Configuration for which Network ID Validation is required.	Body IE Configuration	201	curl -X 'POST' \ 'http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/v1/security-counter-measure/network-id-validation/body' \ -H 'accept: */*' \ -H 'Content-Type: application/json' \ -d '{ "bodyId": 0, "httpMethod": "POST", "resourceURI": "/nausf-auth/v1/ue-authentications", "identifier": "supiOrSuci", "direction": "PSEPP", "regularExpression": "(?<=imsi-)[0-9]{6}((?<=suci-0-)[0-9]{6})" ' }
DELETE	/sepp-configuration/v1/security-counter-measure/network-id-validation/body/{bodyId}	This API is used to delete Body IE's Configuration	bodyId	204	curl -X 'DELETE' \ 'http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/v1/security-counter-measure/network-id-validation/body/1' \ -H 'accept: */*'

Network ID in Body Validation Configuration Parameters

Attribute	Data Type	Mandatory(M)/ Conditional(C)/ Optional(O)	Description
httpMethod	Enum	M	HTTP Method [POST, PUT, GET, PATCH, DELETE, OPTION, HEAD]
resourceURI	String	M	Resource URI for which Validation will happen
identifier	String	M	Body IE Identifier for which Network ID Validation should happen.
direction	Enum	M	Currently only PSEPP is supported
regularExpression	String	M	Regular Expression to fetch PLMN ID (MCC & MNC)

Sample Response body structure for GET operations

Resource API: /sepp-configuration/v1/security-counter-measure/network-id-validation/body

Resource Method: GET

Content Type: application/json

Response Body

```
{
  "bodyId": 73,
  "resourceURI": "/namf-evts/v1/subscriptions",
  "identifier": "supi",
  "direction": "PSEPP",
  "httpMethod": "POST",
  "regularExpression": "(?<=imsi-)[0-9]{15,16}"
},
{
  "bodyId": 113,
  "resourceURI": "/nsmf-pdusession/v1/pdu-sessions/{pduSessionRef}/modify",
  "identifier": "ueLocation",
  "direction": "CSEPP",
  "httpMethod": "POST",
  "regularExpression": "mcc-mnc"
},
{
  "bodyId": 149,
  "resourceURI": "/nsmf-pdusession/v1/pdu-sessions/{pduSessionRef}/transfer-
mo-data",
  "identifier": "ueLocation",
  "direction": "CSEPP",
  "httpMethod": "POST",
  "regularExpression": "mcc-mnc"
},
{
  "bodyId": 157,
  "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/amf-non-3gpp-access",
  "identifier": "guamiList",
  "direction": "CSEPP",
  "httpMethod": "PUT",
  "regularExpression": "mcc-mnc"
},
{
  "bodyId": 29,
  "resourceURI": "/npcf-ue-policy-control/v1/policies",
  "identifier": "supi",
  "direction": "PSEPP",
  "httpMethod": "POST",
  "regularExpression": "(?<=imsi-)[0-9]{15,16}"
},
{
  "bodyId": 37,
  "resourceURI": "/nsmf-pdusession/v1/pdu-sessions/{pduSessionRef}/modify",
  "identifier": "guami",
  "direction": "CSEPP",
  "httpMethod": "POST",

```

```

    "regularExpression": "mcc-mnc"
  },
  {
    "bodyId": 121,
    "resourceURI": "/npcf-ue-policy-control/v1/policies",
    "identifier": "userLoc",
    "direction": "CSEPP",
    "httpMethod": "POST",
    "regularExpression": "mcc-mnc"
  },
  {
    "bodyId": 9,
    "resourceURI": "/nsmf-pdusession/v1/pdu-sessions/{pduSessionRef}/modify",
    "identifier": "servingNetwork",
    "direction": "CSEPP",
    "httpMethod": "POST",
    "regularExpression": "mcc-mnc"
  },
  {
    "bodyId": 17,
    "resourceURI": "/nudm-sdm/v2/{supi}/sdm-subscriptions",
    "identifier": "plmnId",
    "direction": "CSEPP",
    "httpMethod": "POST",
    "regularExpression": "mcc-mnc"
  },
  {
    "bodyId": 41,
    "resourceURI": "/nsmf-pdusession/v1/pdu-sessions",
    "identifier": "servingNetwork",
    "direction": "CSEPP",
    "httpMethod": "POST",
    "regularExpression": "mcc-mnc"
  },
  {
    "bodyId": 53,
    "resourceURI": "/nsmf-pdusession/v1/pdu-sessions/{pduSessionRef}/modify",
    "identifier": "addUeLocation",
    "direction": "CSEPP",
    "httpMethod": "POST",
    "regularExpression": "mcc-mnc"
  },
  {
    "bodyId": 57,
    "resourceURI": "/nsmf-pdusession/v1/pdu-sessions",
    "identifier": "supi",
    "direction": "PSEPP",
    "httpMethod": "POST",
    "regularExpression": "(?<=imsi-)[0-9]{15,16}"
  },
  {
    "bodyId": 65,
    "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/amf-3gpp-access",
    "identifier": "guamiList",
    "direction": "CSEPP",
    "httpMethod": "PUT",

```

```

    "regularExpression": "mcc-mnc"
  },
  {
    "bodyId": 85,
    "resourceURI": "/oauth2/token",
    "identifier": "requesterPlmn",
    "direction": "CSEPP",
    "httpMethod": "POST",
    "regularExpression": "mcc-mnc"
  },
  {
    "bodyId": 105,
    "resourceURI": "/npcf-ue-policy-control/v1/policies/{polAssoId}/update",
    "identifier": "plmnId",
    "direction": "CSEPP",
    "httpMethod": "POST",
    "regularExpression": "mcc-mnc"
  },
  {
    "bodyId": 109,
    "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/smsf-non-3gpp-access",
    "identifier": "plmnId",
    "direction": "CSEPP",
    "httpMethod": "PUT",
    "regularExpression": "mcc-mnc"
  },
  {
    "bodyId": 145,
    "resourceURI": "/nsmf-pdusession/v1/pdu-sessions",
    "identifier": "addUeLocation",
    "direction": "CSEPP",
    "httpMethod": "POST",
    "regularExpression": "mcc-mnc"
  },
  {
    "bodyId": 117,
    "resourceURI": "/nsmf-pdusession/v1/pdu-sessions/{pduSessionRef}/release",
    "identifier": "ueLocation",
    "direction": "CSEPP",
    "httpMethod": "POST",
    "regularExpression": "mcc-mnc"
  },
  {
    "bodyId": 133,
    "resourceURI": "/namf-evts/v1/subscriptions",
    "identifier": "oldGuami",
    "direction": "CSEPP",
    "httpMethod": "POST",
    "regularExpression": "mcc-mnc"
  },
  {
    "bodyId": 69,
    "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/amf-non-3gpp-access",
    "identifier": "guami",
    "direction": "CSEPP",
    "httpMethod": "PUT",

```

```

    "regularExpression": "mcc-mnc"
  },
  {
    "bodyId": 77,
    "resourceURI": "/nausf-auth/v1/ue-authentications",
    "identifier": "supiOrSuci",
    "direction": "PSEPP",
    "httpMethod": "POST",
    "regularExpression": "(?<=imsi-)[0-9]{15,16}|(?<=suci-0-)[0-9]{15,16}"
  },
  {
    "bodyId": 93,
    "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/amf-non-3gpp-access",
    "identifier": "supi",
    "direction": "PSEPP",
    "httpMethod": "PUT",
    "regularExpression": "(?<=imsi-)[0-9]{15,16}"
  },
  {
    "bodyId": 125,
    "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/amf-3gpp-access",
    "identifier": "guami",
    "direction": "CSEPP",
    "httpMethod": "PUT",
    "regularExpression": "mcc-mnc"
  },
  {
    "bodyId": 141,
    "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/amf-3gpp-access",
    "identifier": "supi",
    "direction": "PSEPP",
    "httpMethod": "PUT",
    "regularExpression": "(?<=imsi-)[0-9]{15,16}"
  },
  {
    "bodyId": 13,
    "resourceURI": "/nnrf-nfm/v1/subscriptions",
    "identifier": "plmnId",
    "direction": "PSEPP",
    "httpMethod": "POST",
    "regularExpression": "mcc-mnc"
  },
  {
    "bodyId": 33,
    "resourceURI": "/nudm-sdm/v2/{ueId}/sdm-subscriptions",
    "identifier": "plmnId",
    "direction": "CSEPP",
    "httpMethod": "POST",
    "regularExpression": "mcc-mnc"
  },
  {
    "bodyId": 45,
    "resourceURI": "/namf-evts/v1/subscriptions",
    "identifier": "eventList",
    "direction": "CSEPP",
    "httpMethod": "POST",

```

```

    "regularExpression": "mcc-mnc"
  },
  {
    "bodyId": 1,
    "resourceURI": "/nnrf-nfm/v1/subscriptions",
    "identifier": "PlmnSnssai",
    "direction": "CSEPP",
    "httpMethod": "POST",
    "regularExpression": "mcc-mnc"
  },
  {
    "bodyId": 21,
    "resourceURI": "/nsmf-pdusession/v1/pdu-sessions",
    "identifier": "guami",
    "direction": "CSEPP",
    "httpMethod": "POST",
    "regularExpression": "mcc-mnc"
  },
  {
    "bodyId": 101,
    "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/smf-registrations/{pduSessionId}",
    "identifier": "plmnId",
    "direction": "CSEPP",
    "httpMethod": "PUT",
    "regularExpression": "mcc-mnc"
  },
  {
    "bodyId": 5,
    "resourceURI": "/nsmf-pdusession/v1/pdu-sessions/{pduSessionRef}/release",
    "identifier": "addUeLocation",
    "direction": "CSEPP",
    "httpMethod": "POST",
    "regularExpression": "mcc-mnc"
  },
  {
    "bodyId": 89,
    "resourceURI": "/oauth2/token",
    "identifier": "requesterPlmnList",
    "direction": "CSEPP",
    "httpMethod": "POST",
    "regularExpression": "mcc-mnc"
  },
  {
    "bodyId": 137,
    "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/smsf-3gpp-access",
    "identifier": "plmnId",
    "direction": "CSEPP",
    "httpMethod": "PUT",
    "regularExpression": "mcc-mnc"
  },
  {
    "bodyId": 49,
    "resourceURI": "/nnrf-nfm/v1/subscriptions",
    "identifier": "reqSnpnList",
    "direction": "CSEPP",

```

```

        "httpMethod": "POST",
        "regularExpression": "mcc-mnc"
    },
    {
        "bodyId": 25,
        "resourceURI": "/npcf-ue-policy-control/v1/policies/{polAssoId}/update",
        "identifier": "userLoc",
        "direction": "CSEPP",
        "httpMethod": "POST",
        "regularExpression": "mcc-mnc"
    },
    {
        "bodyId": 153,
        "resourceURI": "/namf-comm/v1/subscriptions/{subscriptionId}",
        "identifier": "guamiList",
        "direction": "CSEPP",
        "httpMethod": "PUT",
        "regularExpression": "mcc-mnc"
    },
    {
        "bodyId": 61,
        "resourceURI": "/namf-comm/v1/subscriptions",
        "identifier": "guamiList",
        "direction": "CSEPP",
        "httpMethod": "POST",
        "regularExpression": "mcc-mnc"
    },
    {
        "bodyId": 81,
        "resourceURI": "/nnrf-nfm/v1/subscriptions",
        "identifier": "reqPlmnList",
        "direction": "CSEPP",
        "httpMethod": "POST",
        "regularExpression": "mcc-mnc"
    },
    {
        "bodyId": 97,
        "resourceURI": "/nsmf-pdusession/v1/pdu-sessions",
        "identifier": "ueLocation",
        "direction": "CSEPP",
        "httpMethod": "POST",
        "regularExpression": "mcc-mnc"
    },
    {
        "bodyId": 129,
        "resourceURI": "/nausf-auth/v1/ue-authentications",
        "identifier": "servingNetworkName",
        "direction": "CSEPP",
        "httpMethod": "POST",
        "regularExpression": "(mcc)([0-9]*)|(mnc)([0-9]*)"
    }
]

```

Sample Response body structure for GET operations

Resource API: /sepp-configuration/v1/security-counter-measure/network-id-validation/body/{bodyId}

Resource Method: GET

Content Type: application/json

Response Body

```
{
  "bodyId": 1,
  "resourceURI": "/nnrf-nfm/v1/subscriptions",
  "identifier": "PlmnSnssai",
  "direction": "CSEPP",
  "httpMethod": "POST",
  "regularExpression": "mcc-mnc"
}
```

Sample Response body structure for POST operations

Resource API: /sepp-configuration/v1/security-counter-measure/network-id-validation/body

Resource Method: POST

Content Type: application/json

Response Body

200 CREATED

Sample Response body structure for DELETE operations

Resource API: /sepp-configuration/v1/security-counter-measure/network-id-validation/body/{bodyId}

Resource Method: DELETE

Content Type: application/json

Response Body

204

2.19 Ingress Rate Limiting System Option

Ingress Rate Limiting Option REST API enables and configures the global parameters for ingress rate limiting feature.

Table 2-48 Ingress Rate Limiting System Option

Method	URL	Description	Input	Return	Example
GET	/sepp-configuration/v1/ingress-rate-limiting	This returns the global configuration for ingress rate limiting feature.	No Input Required	IngressRateLimitingDTO	<pre>curl -X 'GET' 'http://<SEPP-ConfigurationIP>:<PORT>/sepp-configuration/v1/ingress-rate-limiting' -H 'accept: */*'</pre>

Table 2-48 (Cont.) Ingress Rate Limiting System Option

Method	URL	Description	Input	Return	Example
PUT	/sepp-configuration/v1/ingress-rate-limiting	This updates the global configuration for ingress rate limiting feature.	IngressRateLimitingDTO Object containing ingress rate limiting feature Option Value	IngressRateLimitingDTO	<pre>curl -X 'PUT' \ 'http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/v1/ingress-rate-limiting' \ -H 'accept: */*' \ -H 'Content-Type: application/json' \ -d '{ "header": ["3GPP-SBI-ASSERTED-PLMN-ID"], "ingressRateLimitingOptions": { "ingressRateLimitingEnabled": true, "capacity": 16000, "refillRate": 10000, "duration": 300, "requestTokens": 500, "errorConfiguration": { "action": "REJECT", "title": "Too Many Requests sent", "statusCode": 429 } } }</pre>

Ingress rate limiting Option Parameters

Table 2-49 Ingress rate limiting Option Parameters

Attribute	Datatype	Mandatory(M)/ Conditional(C)/ Optional(O)	Description
header	String	M	Header to Get PLMN ID from the request. [3GPP-SBI-ASSERTED-PLMN-ID, 3GPP-SBI-ORIGINATING-NETWORK-ID]
ingressRateLimitingOptions	Object	O	It contains Ingress Rate Limiting Configuration parameters for this RSS.
ingressRateLimitingEnabled	boolean	O	To enable or disable ingress rate limiting. The feature is disabled (set to false) by default.
capacity	integer	M	Integer Number for setting the Bucket Capacity as an input for Token Bucket Algorithm. Bucket size defined the capacity to handle traffic burst.
refillRate	integer	M	Refill rate to define the number of tokens to be added to refill the bucket.
duration	integer	M	Duration to decide how frequently to refill bucket
requestTokens	integer	M	Request Token to define the Pre loaded tokens to refill the bucket.
errorConfiguration	Object	M	Error configuration parameters.
action	String	M	By default, reject is selected as SBI request will be rejected with the user configured error configuration when the number of SBI requests is above the configured limit.
title	String	M	Title and details of error.
statusCode	integer	M	Error Status Code to be used in the Error Response for discarding the SBI requests when the number of SBI requests is above the configured limit.

Sample Response body structure for GET operations:

Resource API : /sepp-configuration/v1/ingress-rate-limiting

Resource Method : GET

Content Type: application/json

Response Body

```
{
  "header": [
    "3GPP-SBI-ASSERTED-PLMN-ID",
    "3GPP-SBI-ORIGINATING-NETWORK-ID"
  ],
  "ingressRateLimitingOptions": {
    "ingressRateLimitingEnabled": true,
    "capacity": 600,
    "refillRate": 600,
    "duration": 500,
    "requestTokens": 500,
    "errorConfiguration": {
      "action": "REJECT",
      "title": "Too many requests sent",
      "statusCode": 429
    }
  }
}
```

Sample Response body structure for PUT operations:

Resource API : /sepp-configuration/v1/ingress-rate-limiting

Resource Method : PUT

Content Type: application/json

Response Body

201 Created

2.20 SOR

SOR REST API enables or disables the SOR feature. The user can configure the trigger list and other configurations.

Table 2-50 SOR

Method	URL	Description	Input	Return	Example
GET	/sepp-configuration/{version}/sor/feature	Retrieves SOR feature options, SOR servers, and other configurational details.	NA	Feature options, error codes, SOR servers	<pre>curl -v http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/v1/sor/feature -X GET</pre>

Table 2-50 (Cont.) SOR

Method	URL	Description	Input	Return	Example
PUT	/sepp-configuration/{version}/sor/feature	Configures SOR feature options, SOR servers, and other configurational details.	SOR feature Options SOR server Deatils Error Codes	Feature options, error codes, SOR servers	<pre> curl -v http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/v1/sor/feature -d'{ "enabled": true, "retryToProducer": true, "redirection": { "enabled": true, "codes": "308" }, "servers": [{ "priority": "PRIMARY", "httpScheme": "http", "sorFqdn": "service-nodejs-2-mnc100-mcc111-3gppnetwork-org.adity-sepp2", "sorPort": "7070", "apiPrefix": "sor", "serverHeader": "SOR-service-nodejs-2-mnc100-mcc111-3gppnetwork-org.adity-sepp2" }], "retryWait": { "retryAltSor": false, "retryTime": 1000, "retryCount": 0 }, "httpCodes": { "errorCodes": "501", "exceptions": "java.util.concurren t.TimeoutException" }, "errorConfiguration" : { "errorCodesToConsume </pre>

Table 2-50 (Cont.) SOR

Method	URL	Description	Input	Return	Example
					<pre> r": "408", "errorMessageToConsumer": "Timeout at SOR" } }' -H 'Content- Type:application/ json' -X PUT </pre>
GET	/sepp-configuration/{version}/sorconfig	Retrieves Resource URI and Http method for all configured SOR Trigger Lists.		allowedListName sorRule-Resource URI+HTTPMethod	<pre> curl -v http:// <SEPP- Configuration IP>:<PORT>/sepp- configuration/v1/ sorconfig -H 'Content- Type:application/ json' -X GET </pre>

SOR Parameters

Table 2-51 SOR Parameters

Attribute	Data type	Mandatory(M)/ Conditional(C)/ Optional(O)	Description
enabled	boolean	M	To enable or disable the SOR feature.
retryAltSor	boolean	M	To enable or disable the alternative SOR option.
retryToProducer	boolean	M	To enable or disable the retry, in case of an error from SOR producer NF occurs.
redirection: enabled	boolean	M	If this parameter is enabled, then SOR responds to SEPP and SEPP sends request to producer. If this parameter is disabled, then SOR sends request to producer directly.

Table 2-51 (Cont.) SOR Parameters

Attribute	Data type	Mandatory(M)/ Conditional(C)/ Optional(O)	Description
Redirection: codes	String	M	This parameter is used to configure all the 3xx HTTP response codes that contain valid location header parameter in response, for which user wants to get the redirection applied.
servers: priority	String	M	SOR server priority must be as Primary, Secondary, and Tertiary. The first entry will always be saved as PRIMARY in database.
servers: httpScheme	String	M	The scheme can be http or https
servers: sorFqdn	String	M	Indicates the FQDN of SOR Server
servers: sorPort	String	M	Indicates the Port of SOR Server
servers: apiPrefix	String	M	Indicates the API Prefix for SOR Server
servers: serverHeader	String	M	Server header that is expected to be received from Sor Server. Typically, SOR-<SoR FQDN>
retryWait: retryTime	integer	M	Indicates the timer to set for retries towards SOR
retryWait: retryCount	integer	M	Indicates the number of times to retry towards the primary SOR end point
httpCodes: errorCodes	string	M	This is the list of expected response codes (multiple 5xx response codes seperated by (,) can be configured. Example: 501,504,510) from SOR that will need SEPP to contact the Producer directly in case of retry to producer is enabled.
httpCodes: exceptions	string	M	The exceptions that are expected to be returned from SOR in case of timeout

Table 2-51 (Cont.) SOR Parameters

Attribute	Data type	Mandatory(M)/ Conditional(C)/ Optional(O)	Description
errorConfiguration: errorCodesToConsumer	string	M	Error code that will be relayed to consumer in case of SOR Timeout
errorConfiguration: errorMessageToConsumer	string	M	Error message that will be relayed to consumer in case of SOR timeout

Sample response body structure for GET ALL operations:

Resource API : /sepp-configuration/{version}/sorconfig

Resource Method : GET ALL

Content Type: application/json

Response Body

Request : /sepp-configuration/v1/sorconfig

Response: 200

```
[
  {
    "allowedListName": "Default",
    "sorRule": [
      {
        "resourceURI": "/nausf-auth/v1/ue-authentications/{authCtxId}/5g-aka-confirmation",
        "httpMethod": "POST"
      }
    ]
  },
  {
    "allowedListName": "RSS-1",
    "sorRule": [
      {
        "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/amf-3gpp-access",
        "httpMethod": "PUT"
      },
      {
        "resourceURI": "/nudm-sdm/v2/{supi}/nssai",
        "httpMethod": "GET"
      }
    ]
  }
]
```

Sample response body structure for POST operations:

Resource API: /sepp-configuration/v1/sorconfig/Test

Resource Method: POST

Content Type: application/json

Response Body

```
Response: 201 {
  "allowedListName": "Test",
  "sorRule": [
    {
      "resourceURI": "/nausf-auth/v1/ue-authentications",
      "httpMethod": "POST"
    }
  ]
}
```

Sample response body structure for DELETE operations:

Resource API: /sepp-configuration/v1/sorconfig/Test

Resource Method: DELETE

Content Type: application/json

Response Body

Response code :204

2.21 SOR Config Trigger Rule List

The SOR Config Trigger Rule List REST API allows the user to configure the combination of the selected URIs and HTTP methods on which SOR feature is going to be applied.

Table 2-52 SOR Config Trigger Rule List

Method	URL	Description	Input	Return	Example
GET	/sepp-configuration/{version}/sorconfig/{allowedListName}	Retrieves Resource URI and Http Method for particular SOR Trigger List name.	allowedListName	allowedListName sorRule-Resource URI+HTTPMethod	c url -v http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/v1/sorconfig/Test1 -H 'Content-Type:application/json' -X GET

Table 2-52 (Cont.) SOR Config Trigger Rule List

Method	URL	Description	Input	Return	Example
POST	/sepp-configuration/{version}/sorconfig/{allowedListName}	Configures Resource URI and Http Method for particular SOR Trigger List name. Create new list, if list is already present, returns the error code 400	allowedListName sorRule	allowedListName sorRule-Resource URI+HTTPMethod	<pre>curl -v http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/v1/sorconfig/Test1 -d '{ "allowedListName": "Test1", "sorRule": [{ "resourceURI": "/nausf-auth/v1/ue-authentications", "httpMethod": "POST" }] }' -H 'Content-Type:application/json' -X POST</pre>
PUT	/sepp-configuration/{version}/sorconfig/{allowedListName}	Configures SOR Trigger list for given data.	allowedListName sorRule	allowedListName sorRule-Resource URI+HTTPMethod	<pre>curl -v http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/v1/sorconfig/Test1 -d '{ "allowedListName": "Test1", "sorRule": [{ "resourceURI": "/nausf-auth/v1/ue-authentications", "httpMethod": "POST" }] }' -H 'Content-Type:application/json' -X PUT</pre>

Table 2-52 (Cont.) SOR Config Trigger Rule List

Method	URL	Description	Input	Return	Example
DELETE	/sepp-configuration/{version}/sorconfig/{allowedListName}	Deletes particular SOR Trigger list, which name is given in input.	SOR allowedListName	HTTP Status 204	curl -v http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/v1/sorconfig/Test1 -H 'Content-Type:application/json' -X DELETE

SOR Config Trigger Rule List Parameters

Table 2-53 SOR Config Trigger Rule List Parameters

Attribute	Data type	Mandatory(M)/ Conditional(C)/ Optional(O)	Description
allowedListName	string	M	Name of the SOR Trigger List
sorRule: resourceURI	string	M	Resource URI
sorRule: httpMethod	string	M	Request URI Method.Range: POST, PUT, GET, PATCH, DELETE, OPTIONS, HEAD

Sample Response body structure for GET operations:

Resource API: /sepp-configuration/{version}/sorconfig/{allowedListName}

Resource Method: GET

Content Type: application/json

Response Body

Request: /sepp-configuration/v1/sorconfig/RSS-1

Response: 200

```
{
  "allowedListName": "RSS-1",
  "sorRule": [
    {
      "resourceURI": "/nudm-sdm/v2/{supi}/nssai",
      "httpMethod": "GET"
    },
    {
      "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/amf-3gpp-access",
      "httpMethod": "PUT"
    }
  ]
}
```

```
}  
  ]  
}
```

2.22 Cat 3 - Previous Location Check System Option

Cat 3 – Previous Location Check System Option REST API enables or disables the Cat 3 – Previous Location Check feature.

Table 2-54 Cat 3 - Previous Location Check System Option

Method	URL	Description	Input	Return	Example
GET	/sepp-configuration/v1/security-counter-measure/previous-location-validation/options	This API is used to check whether the previous location check feature is enabled or disabled.	NA	PreviousLocationCheckSystemOptions 200	curl -X 'GET' \ 'http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/v1/security-counter-measure/previous-location-validation/options' \ -H 'accept: */*'

Table 2-54 (Cont.) Cat 3 - Previous Location Check System Option

Method	URL	Description	Input	Return	Example
PUT	/sepp-configuration/v1/security-counter-measure/previous-location-validation/options	This API is used to enable or disable previous location check feature.	PreviousLocationCheckSystemOptions Object containing Previous Location Check Feature Enable/Disable status	PreviousLocationCheckSystemOptions 200	curl -X 'PUT' \ 'http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/v1/security-counter-measure/previous-location-validation/options' \ -H 'accept: */*' \ -H 'Content-Type: application/json' \ -d '{ { "previousLocationCheckValidationEnabled": { "messageFilteringOnPreviousLocationCheckValidation": true, "cacheRefreshTimer": 5 } } '

Previous Location Check System Option Parameters

Table 2-55 Previous Location Check System Option Parameters

Attribute	Datatype	Description
messageFilteringOnPreviousLocationCheckValidation	Boolean	This is a mandatory parameter. Enable or disable Previous Location Check Validation feature. Default Value: False
cacheRefreshTimer	Integer	This is a mandatory parameter. Timer to clean coherence cache storing UE Authentication status Default Value: 120000

Sample Response body structure for GET operations

Resource API : /sepp-configuration/v1/security-counter-measure/previous-location-validation/options

Resource Method : GET

Content Type : application/json

Response Body: 200

```
"previousLocationCheckValidationEnabled": {
  "messageFilteringOnPreviousLocationCheckValidation": true,
  "cacheRefreshTimer": 120000
}
```

Sample Response body structure for PUT operations

Resource API : /sepp-configuration/v1/security-counter-measure/previous-location-validation/options

Resource Method : PUT

Content Type : application/json

Response Body: 200

```
"previousLocationCheckValidationEnabled": {
  "messageFilteringOnPreviousLocationCheckValidation": true,
  "cacheRefreshTimer": 120000
}
```

2.23 Previous Location Check Trigger List Configuration

Previous Location Check Trigger List allows the users to configure Ingress Rules along with their corresponding Ingress Actions for SEPP Mode.

Method	URL	Description	Input	Return	Example
GET	sepp-configuration/v1/security-counter-measure/previous-location-validation	This API is used to fetch all the Previous Location Check Trigger Lists created as part of Previous Location Check Feature with their Ingress Rules, Error Action and Exception Action.	No Input Required	List of Previous Location Check Trigger lists configured in the system.	curl -X 'GET' \ 'http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/v1/security-counter-measure/previous-location-validation' \ -H 'accept: */*'

Method	URL	Description	Input	Return	Example
GET	/sepp-configuration/v1/security-counter-measure/previous-location-validation/{previousLocationTriggerListName}	This API is used to fetch the Previous Location Check Trigger List based on Previous Location Trigger List Name	previousLocationTriggerListName	Returns object which comprises of Ingress Rules along with their corresponding Error Action and Exception Action.	curl -X 'GET' \ 'http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/v1/security-counter-measure/previous-location-validation/{previousLocationTriggerListName}' \ -H 'accept: */*'

Method	URL	Description	Input	Return	Example
POST	/sepp-configuration/v1/security-counter-measure/previous-location-validation/{previousLocationTriggerListName}	This API is used to add Previous Location Check Trigger List based on Previous Location Trigger List Name	previousLocationTriggerListName	previousLocationTriggerListName and DTO comprising of rules and error configurations.	<pre>curl -X 'POST' \ 'http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/v1/security-counter-measure/previous-location-validation/NewList' \ -H 'accept: */*' \ -H 'Content-Type: application/json' \ -d '{ "previousLocationTriggerListName": "NewList", "ingressRule": [{ "id": 0, "resourceURI": "/namf-loc/v1/{ueContextId}/provide-loc-info", "httpMethod": "POST" }], "errorAction": { "title": "Previous Location check validation Failure", "statusCode": 406, "action": "REJECT" }, "exceptionAction": { "title": "Previous Location check validation Failure", "statusCode": 406,</pre>

Method	URL	Description	Input	Return	Example
					"action": "REJECT" }}'
DELETE	/sepp-configuration/v1 /security-counter-measure/ previous-location-validation/ {previousLocationTriggerListName}	This API is used to delete Previous Location Check Trigger List based on Previous Location Trigger List Name	previousLocationTriggerListName	204	curl -X 'DELETE' \ 'http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/v1/security-counter-measure/previous-location-validation/NewList' \ -H 'accept: */*'

Method	URL	Description	Input	Return	Example
PUT	/sepp-configuration/v1/security-counter-measure/previous-location-validation/{previousLocationTriggerListName}	This API is used to update Previous Location Check Trigger List based on Previous Location Trigger List Name	previousLocationTriggerListName	previousLocationTriggerListName and DTO comprising of rules and error configurations.	<pre>curl -X 'PUT' \ 'http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/v1/security-counter-measure/previous-location-validation/NewList' \ -H 'accept: */*' \ -H 'Content-Type: application/json' \ -d '{ "previousLocationTriggerListName": "NewList", "ingressRule": [{ "id": 0, "resourceURI": "/namf-loc/v1/{ueContextId}/provide-loc-info", "httpMethod": "POST" }], "errorAction": { "title": "Previous Location check validation Failure", "statusCode": 406, "action": "REJECT" }, "exceptionAction": { "title": "Previous Location check validation Failure", "statusCode": 406,</pre>

Method	URL	Description	Input	Return	Example
					"action": "REJECT" }'

Previous Location Check Trigger List Configuration Parameters

Table 2-56 Previous Location Check Trigger List Configuration Parameters

Attribute	Datatype	Mandatory(M)/ Conditional(C)/ Optional(O)	Description
previousLocationTrigger ListName	string	M	Previous Location Check Validation List Name
ingressRule	List<AllowedServiceApi DTO>	O	Ingress Rule with Resource URI and Http Method
errorAction	ErrorResponseConfigur ationDTO	M	Ingress Action: - REJECT - FORWARD
exceptionAction	ErrorResponseConfigur ationDTO	M	Egress Action: - REJECT - FORWARD

Allowed Ingress Data Model Parameters

Table 2-57 Allowed Ingress Data Model Parameters

Attribute	Datatype	Mandatory(M)/ Conditional(C)/ Optional(O)	Description
resourceURI	string	O	Resource URI for which Validation will happen
httpMethod	HTTP Method	O	HTTP Method [POST, PUT, GET, PATCH, DELETE, OPTION, HEAD]

Error Response Configuration Data Model Parameters

Table 2-58 Error Response Configuration Data Model Parameters

Attribute	Datatype	Mandatory(M)/ Conditional(C)/ Optional(O)	Description
title	string	M	Title and details of Error
statusCode	integer	M	Status Code of error of configured. Status codes 401and 407 are not supported at present.

Table 2-58 (Cont.) Error Response Configuration Data Model Parameters

Attribute	Datatype	Mandatory(M)/ Conditional(C)/ Optional(O)	Description
action	enum	M	Action need to be taken when mediation filtering condition reaches an error state. Range: REJECT or FORWARD

Sample Response body structure for GET operations

Resource API : /sepp-configuration/v1/security-counter-measure/previous-location-validation/{previousLocationTriggerListName}

Resource Method : GET

Content Type : application/json

Response Body:

```
{
  "previousLocationTriggerListName": "NewCustomList",
  "ingressRule": [
    {
      "id": 141,
      "resourceURI": "/namf-loc/v1/{ueContextId}/provide-loc-info",
      "httpMethod": "POST"
    }
  ],
  "errorAction": {
    "title": "Previous Location Check validation Failed",
    "statusCode": 406,
    "action": "REJECT"
  },
  "exceptionAction": {
    "title": "Previous Location Check Validation Failed due to exception",
    "statusCode": 406,
    "action": "REJECT"
  }
}
```

Sample Response body structure for POST operations

Resource API : /sepp-configuration/v1/security-counter-measure/previous-location-validation/{previousLocationTriggerListName}

Resource Method : POST

Content Type : application/json

Response Body:

Previous Location Trigger Rule List Created Successfully

Sample Response body structure for DELETE operations

Resource API : /sepp-configuration/v1/security-counter-measure/previous-location-validation/{previousLocationTriggerListName}

Resource Method : DELETE

Content Type : application/json

Response Body:

204

Sample Response body structure for PUT operations

Resource API : /sepp-configuration/v1/security-counter-measure/previous-location-validation/{previousLocationTriggerListName}

Resource Method : PUT

Content Type : application/json

Response Body:

Previous Location Trigger Rule List Created Successfully

2.24 Previous Location Check Header Configuration

2.24.1 Serving Network ID

This set of APIs allows the users to configure the serving network name header, for which the validation takes place.

Table 2-59 Serving Network ID

Description	Method	URL	Input	Return	Example
GET	/sepp-configuration/v1/security-counter-measure/previous-location-validation/header	This API is used to fetch Header configurations for Serving Network ID	Not Required	List of header DTOs	curl -X 'GET' \ 'http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/v1/security-counter-measure/previous-location-validation/header' \ -H 'accept: */*'
GET	/sepp-configuration/v1/security-counter-measure/previous-location-validation/header/{headerId}	This API is used to fetch the Serving Network ID Header configurations for which {headerId} is given	{headerId}	Header Configuration	curl -X 'GET' \ 'http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/v1/security-counter-measure/previous-location-validation/header/1' \ -H 'accept: */*'

Table 2-59 (Cont.) Serving Network ID

Description	Method	URL	Input	Return	Example
POST	/sepp-configuration/v1/security-counter-measure/previous-location-validation/header	This API is used to add new Serving Network ID Header Configurations.	PreviousLocationValidationServingHeaderDTO Header DTO object	201 Serving Network ID Header Created Successfully.	curl -X 'POST' \ 'http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/v1/security-counter-measure/previous-location-validation/header' \ -H 'accept: */*' \ -H 'Content-Type: application/json' \ -d '{ "headerId": 0, "headerName": "custom", "regularExpression": "(?<=imsi-)[0-9]{6}", "resourceURI": "/nudm-sdm/v2/{ueid}/sdm-subscriptions", "httpMethod": "POST"}'
DELETE	/sepp-configuration/v1/security-counter-measure/previous-location-validation/header/{headerId}	This API is used to delete Serving Network ID header configuration for the given headerId.	headerId	204 No Content	curl -X 'DELETE' \ 'http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/v1/security-counter-measure/previous-location-validation/header/28' \ -H 'accept: */*'

Previous Location Check Header Configuration Parameters

Table 2-60 Previous Location Check Header Configuration Parameters

Attribute	Datatype	Mandatory(M)/ Conditional(C)/ Optional(O)	Description
headerName	String	M	Header Name for which Cat 3 - Previous Location Check should happen
resourceURI	String	M	Resource URI for which Cat 3 - Previous Location Check will happen
regularExpression	String	M	Regular Expression to fetch Serving Network ID (MCC and MNC)
httpMethod	Enum	M	HTTP Method [POST, PUT, GET, PATCH, DELETE, OPTION, HEAD]

Sample Response body structure for GET operations

Resource API : /sepp-configuration/v1/security-counter-measure/previous-location-validation/header

Resource Method : GET

Content Type : application/json

Response Body

```
[
  {
    "headerId": 1,
    "headerName": "plmn-id",
    "resourceURI": "/nudm-sdm/v2/{supi}/am-data",
    "regularExpression": "mcc-mnc",
    "httpMethod": "GET"
  },
  {
    "headerId": 3,
    "headerName": "plmn-id",
    "resourceURI": "/nudm-sdm/v2/{supi}/sms-mng-data",
    "regularExpression": "mcc-mnc",
    "httpMethod": "GET"
  },
  {
    "headerId": 5,
    "headerName": "plmn-id",
    "resourceURI": "/nudm-sdm/v2/{supi}/smf-select-data",
    "regularExpression": "mcc-mnc",
    "httpMethod": "GET"
  },
  {
    "headerId": 6,
```

```

    "headerName": "plmn-id",
    "resourceURI": "/nudm-sdm/v2/{supi}/sm-data",
    "regularExpression": "mcc-mnc",
    "httpMethod": "GET"
  },
  {
    "headerId": 7,
    "headerName": "plmn-id",
    "resourceURI": "/nudm-sdm/v2/{supi}/sms-data",
    "regularExpression": "mcc-mnc",
    "httpMethod": "GET"
  },
  {
    "headerId": 33,
    "headerName": "plmn-id",
    "resourceURI": "/nudm-sdm/v2/{supi}",
    "regularExpression": "mcc-mnc",
    "httpMethod": "GET"
  },
  {
    "headerId": 34,
    "headerName": "3gpp-sbi-asserted-plmn-Id",
    "resourceURI": "/nudm-sdm/v2/{ueId}/sdm-subscriptions",
    "regularExpression": "[0-9]{2,3}",
    "httpMethod": "POST"
  }
]

```

Sample Response body structure for GET operations

Resource API : /sepp-configuration/v1/security-counter-measure/previous-location-validation/header/{headerId}

Resource Method : GET

Content Type : application/json

Response Body

```

{
  "headerId": 1,
  "headerName": "plmn-id",
  "resourceURI": "/nudm-sdm/v2/{supi}/am-data",
  "regularExpression": "mcc-mnc",
  "httpMethod": "GET"
}

```

Sample Response body structure for POST operations

Resource API : /sepp-configuration/v1/security-counter-measure/previous-location-validation/header

Resource Method : POST

Content Type : application/json

Response Body

201 Serving Header Created Successfully.

Sample Response body structure for Delete operations

Resource API : /sepp-configuration/v1/security-counter-measure/previous-location-validation/header/{headerId}

Resource Method : DELETE

Content Type : application/json

Response Body

204 No Content

2.24.2 UE ID

This set of APIs allow user to configure UE ID header for which the validation takes place.

Table 2-61 UE ID

Method	URL	Description	Input	Return	Example
GET	/sepp-configuration/v1/security-counter-measure/previous-ue-location/header	This API is used to fetch ue id Header configurations	Not Required	List of header DTOs	curl -X 'GET' \ 'http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/v1/security-counter-measure/previous-ue-location/header' \ -H 'accept: */*'
GET	/sepp-configuration/v1/security-counter-measure/previous-ue-location/header/{headerId}	This API is used to fetch the ue id header configurations for which {headerId} is given	{headerId}	Header Configuration	curl -X 'GET' \ 'http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/v1/security-counter-measure/previous-ue-location/header/1' \ -H 'accept: */*'

Table 2-61 (Cont.) UE ID

Method	URL	Description	Input	Return	Example
POST	/sepp-configuration/v1/security-counter-measure/previous-ue-location/header	This API is used to add new ue id header configurations.	PreviousLocationValidationServiceHeaderDTO object	201 Previous Location UE Configuration Header Created Successfully.	curl -X 'POST' \ 'http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/v1/security-counter-measure/previous-ue-location/header' \ -H 'accept: */*' \ -H 'Content-Type: application/json' \ -d '{ "headerId": 0, "headerName": "custom", "regularExpression": "(?<=imsi-)[0-9]{6}", "resourceURI": "/nudm-sdm/v2/{ueid}/sdm-subscriptions", "httpMethod": "POST"}'
DELETE	/sepp-configuration/v1/security-counter-measure/previous-ue-location/header/{headerId}	This API is used to delete ue id header configuration for the given headerId.	headerId	204 No Content	curl -X 'DELETE' \ 'http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/v1/security-counter-measure/previous-ue-location/header/28' \ -H 'accept: */*'

Previous Location Check UE ID Header Configuration Parameters

Table 2-62 Previous Location Check UE ID Header Configuration Parameters

Attribute	Datatype	Mandatory(M)/ Conditional(C)/ Optional(O)	Description
headerName	String	M	UE ID Header Name for which Previous Location Check should happen

Table 2-62 (Cont.) Previous Location Check UE ID Header Configuration Parameters

Attribute	Datatype	Mandatory(M)/ Conditional(C)/ Optional(O)	Description
resourceURI	String	M	Resource URI for which UE is configured.
regularExpression	String	M	Regular Expression to Fetch UE ID
httpMethod	Enum	M	HTTP Method [POST, PUT, GET, PATCH, DELETE, OPTION, HEAD]

Sample Response body structure for GET operations

Resource API : /sepp-configuration/v1/security-counter-measure/previous-ue-location/header

Resource Method : GET

Content Type : application/json

Response Body

```
[
  {
    "headerId": 9,
    "headerName": "ueId",
    "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/smf-registrations/{pduSessionId}",
    "regularExpression": "(?<=imsi-)[0-9]{15,16}",
    "httpMethod": "PUT"
  },
  {
    "headerId": 17,
    "headerName": "supi",
    "resourceURI": "/nudm-sdm/v2/{supi}/ue-context-in-smf-data",
    "regularExpression": "(?<=imsi-)[0-9]{15,16}",
    "httpMethod": "GET"
  },
  {
    "headerId": 41,
    "headerName": "supi",
    "resourceURI": "/nudm-sdm/v2/{supi}/sm-data",
    "regularExpression": "(?<=imsi-)[0-9]{15,16}",
    "httpMethod": "GET"
  },
  {
    "headerId": 53,
    "headerName": "ueId",
    "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/amf-3gpp-access",
    "regularExpression": "(?<=imsi-)[0-9]{15,16}",
    "httpMethod": "PUT"
  },
  {
    "headerId": 57,
```

```

    "headerName": "supi",
    "resourceURI": "/nnrf-disc/v1/nf-instances",
    "regularExpression": "(?<=imsi-)[0-9]{15,16}",
    "httpMethod": "GET"
  },
  {
    "headerId": 65,
    "headerName": "ueId",
    "resourceURI": "/nudm-sdm/v2/{ueId}/sdm-subscriptions/{subscriptionId}",
    "regularExpression": "(?<=imsi-)[0-9]{15,16}",
    "httpMethod": "DELETE"
  },
  {
    "headerId": 85,
    "headerName": "ueContextId",
    "resourceURI": "/namf-mt/v1/ue-contexts/{ueContextId}",
    "regularExpression": "(?<=imsi-)[0-9]{15,16}",
    "httpMethod": "GET"
  },
  {
    "headerId": 105,
    "headerName": "supi",
    "resourceURI": "/nudm-sdm/v2/{supi}/am-data/sor-ack",
    "regularExpression": "(?<=imsi-)[0-9]{15,16}",
    "httpMethod": "PUT"
  },
  {
    "headerId": 109,
    "headerName": "supi",
    "resourceURI": "/nudm-sdm/v2/{supi}",
    "regularExpression": "(?<=imsi-)[0-9]{15,16}",
    "httpMethod": "GET"
  },
  {
    "headerId": 73,
    "headerName": "supi",
    "resourceURI": "/nudm-sdm/v2/{supi}/am-data/upu-ack",
    "regularExpression": "(?<=imsi-)[0-9]{15,16}",
    "httpMethod": "PUT"
  },
  {
    "headerId": 113,
    "headerName": "supi",
    "resourceURI": "/nudm-sdm/v2/{supi}/sdm-subscriptions",
    "regularExpression": "(?<=imsi-)[0-9]{15,16}",
    "httpMethod": "POST"
  },
  {
    "headerId": 117,
    "headerName": "ueId",
    "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/smsf-non-3gpp-access",
    "regularExpression": "(?<=imsi-)[0-9]{15,16}",
    "httpMethod": "PUT"
  },
  {
    "headerId": 29,

```

```

    "headerName": "ueId",
    "resourceURI": "/nudm-sdm/v2/{ueId}/sdm-subscriptions",
    "regularExpression": "(?<=imsi-)[0-9]{15,16}",
    "httpMethod": "POST"
  },
  {
    "headerId": 37,
    "headerName": "ueId",
    "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/amf-non-3gpp-access",
    "regularExpression": "(?<=imsi-)[0-9]{15,16}",
    "httpMethod": "GET"
  },
  {
    "headerId": 69,
    "headerName": "supi",
    "resourceURI": "/nudm-sdm/v2/{supi}/ue-context-in-smsf-data",
    "regularExpression": "(?<=imsi-)[0-9]{15,16}",
    "httpMethod": "GET"
  },
  {
    "headerId": 77,
    "headerName": "supi",
    "resourceURI": "/nudm-sdm/v2/{supi}/sms-mng-data",
    "regularExpression": "(?<=imsi-)[0-9]{15,16}",
    "httpMethod": "GET"
  },
  {
    "headerId": 93,
    "headerName": "supi",
    "resourceURI": "/nudm-sdm/v2/{supi}/am-data",
    "regularExpression": "(?<=imsi-)[0-9]{15,16}",
    "httpMethod": "GET"
  },
  {
    "headerId": 13,
    "headerName": "ueId",
    "resourceURI": "/nudm-sdm/v2/{ueId}/sdm-subscriptions/{subscriptionId}",
    "regularExpression": "(?<=imsi-)[0-9]{15,16}",
    "httpMethod": "DELETE"
  },
  {
    "headerId": 33,
    "headerName": "ueId",
    "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/smsf-3gpp-access",
    "regularExpression": "(?<=imsi-)[0-9]{15,16}",
    "httpMethod": "PUT"
  },
  {
    "headerId": 49,
    "headerName": "supi",
    "resourceURI": "/nudm-sdm/v2/{supi}/nssai",
    "regularExpression": "(?<=imsi-)[0-9]{15,16}",
    "httpMethod": "GET"
  },
  {
    "headerId": 45,

```

```

    "headerName": "supi",
    "resourceURI": "/nudm-sdm/v2/{supi}/sms-data",
    "regularExpression": "(?<=imsi-)[0-9]{15,16}",
    "httpMethod": "GET"
  },
  {
    "headerId": 25,
    "headerName": "ueId",
    "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/smsf-non-3gpp-access",
    "regularExpression": "(?<=imsi-)[0-9]{15,16}",
    "httpMethod": "DELETE"
  },
  {
    "headerId": 4177,
    "headerName": "target-plmn",
    "resourceURI": "/nnrf-disc/v1/nf-instances",
    "regularExpression": "(?<=msi-)[0-9]{15,16}",
    "httpMethod": "GET"
  },
  {
    "headerId": 1,
    "headerName": "ueId",
    "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/amf-non-3gpp-access",
    "regularExpression": "(?<=imsi-)[0-9]{15,16}",
    "httpMethod": "PUT"
  },
  {
    "headerId": 21,
    "headerName": "supi",
    "resourceURI": "/nudm-sdm/v2/{supi}/smf-select-data",
    "regularExpression": "(?<=imsi-)[0-9]{15,16}",
    "httpMethod": "GET"
  },
  {
    "headerId": 101,
    "headerName": "ueId",
    "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/smf-registrations/
{pduSessionId}",
    "regularExpression": "(?<=imsi-)[0-9]{15,16}",
    "httpMethod": "DELETE"
  },
  {
    "headerId": 5,
    "headerName": "ueId",
    "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/amf-3gpp-access",
    "regularExpression": "(?<=imsi-)[0-9]{15,16}",
    "httpMethod": "GET"
  },
  {
    "headerId": 89,
    "headerName": "ueContextId",
    "resourceURI": "/namf-loc/v1/{ueContextId}/provide-loc-info",
    "regularExpression": "(?<=imsi-)[0-9]{15,16}",
    "httpMethod": "POST"
  },
  {

```



```

        "headerId": 61,
        "headerName": "ueId",
        "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/smsf-3gpp-access",
        "regularExpression": "(?<=imsi-)[0-9]{15,16}",
        "httpMethod": "GET"
    },
    {
        "headerId": 81,
        "headerName": "ueId",
        "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/smsf-3gpp-access",
        "regularExpression": "(?<=imsi-)[0-9]{15,16}",
        "httpMethod": "DELETE"
    },
    {
        "headerId": 97,
        "headerName": "ueId",
        "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/smsf-non-3gpp-access",
        "regularExpression": "(?<=imsi-)[0-9]{15,16}",
        "httpMethod": "GET"
    }
]

```

Sample Response body structure for GET operations

Resource API : /sepp-configuration/v1/security-counter-measure/previous-ue-location/header/{headerId}

Resource Method : GET

Content Type : application/json

Response Body

```

{
    "headerId": 1,
    "headerName": "ueId",
    "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/amf-non-3gpp-access",
    "regularExpression": "(?<=imsi-)[0-9]{15,16}",
    "httpMethod": "PUT"
}

```

2.25 Previous Location Check Body Configuration

2.25.1 Serving Network ID

Previous Location Check Serving Network Name Json IE Configuration REST APIs allows the users to configure the Body IEs, for which previous location check validation takes place.

Method	URL	Description	Input	Return	Example
GET	/sepp-configuration/v1/security-counter-measure/previous-location-validation/body	This API is used to fetch the complete list of Body IE's Configuration for CAT 3 Previous Location Check feature.	Not Required	List of PreviousLocationCheckServingNameBodyDTO	curl -X 'GET' \ 'http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/v1/security-counter-measure/previous-location-validation/body' \ -H 'accept: */*'
GET	/sepp-configuration/v1/security-counter-measure/previous-location-validation/body/{bodyId}	This API is used to fetch the Body IE's Configuration for which bodyId is given	bodyId value of the configuration	Body DTO object.	curl -X 'GET' \ 'http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/v1/security-counter-measure/previous-location-validation/body/1' \ -H 'accept: */*'

Method	URL	Description	Input	Return	Example
POST	/sepp-configuration/v1/security-counter-measure/previous-location-validation/body	This API is used to add Body IE's Configuration for which Previous Location Check is required.	PreviousLocationCheckServingNameBodyDTO body DTO object	Body DTO object.	<pre>curl -X 'POST' \ 'http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/v1/security-counter-measure/previous-location-validation/body' \ -H 'accept: */*' \ -H 'Content-Type: application/json' \ -d '{ "bodyId": 0, "httpMethod": "POST", "resourceURI": "/nausf-auth/v1/ue-authentications" , "identifier": "supiOrSuci", "regularExpression": "(?<=imsi-)[0-9]{6}?(?<=suci-0-)[0-9]{6}" }'</pre>

Method	URL	Description	Input	Return	Example
PUT	/sepp-configuration/v1/security-counter-measure/previous-location-validation/body	This API is used to update Body IE's Configuration for which Previous Location Check is required.	PreviousLocationCheckServingNameBodyDTO body DTO object	200	curl -X 'PUT' \ 'http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/v1/security-counter-measure/previous-location-validation/body' \ -H 'accept: */*' \ -H 'Content-Type: application/json' \ -d '{ "bodyId": 5, "httpMethod": "PUT", "resourceURI": "/nudm-uecm/v1/{ueld}/registrations/amf-3gpp-access", "identifier": "ueld", "regularExpression": "(?<=imsi-)[0-9]{6}" }'
DELETE	/sepp-configuration/v1/security-counter-measure/previous-location-validation/body/{bodyId}	This API is used to delete Body IE's Configuration	bodyId	204	curl -X 'DELETE' \ 'http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/v1/security-counter-measure/previous-location-validation/body/1' \ -H 'accept: */*'

Previous Location Check Validation Serving Name Json IE Configuration Parameters

Table 2-63 Previous Location Check Validation Serving Name Json IE Configuration Parameters

Attribute	Datatype	Mandatory(M)/ Conditional(C)/ Optional(O)	Description
resourceURI	String	M	Resource URI for which Validation happens.

Table 2-63 (Cont.) Previous Location Check Validation Serving Name Json IE Configuration Parameters

Attribute	Datatype	Mandatory(M)/ Conditional(C)/ Optional(O)	Description
identifier	String	M	Body IE Identifier for which Previous Location Check Validation should happen.
httpMethod	Enum	M	HTTP Method [POST, PUT, GET, PATCH, DELETE, OPTION, HEAD]
regularExpression	String	M	Regular Expression to Fetch PLMN ID (MCC & MNC)

Sample Response body structure for GET operations

Resource API : /sepp-configuration/v1/security-counter-measure/previous-location-validation/body

Resource Method: GET

Content Type : application/json

Response Body

```
[
  {
    "bodyId": 73,
    "resourceURI": "/namf-evts/v1/subscriptions",
    "identifier": "supi",
    "httpMethod": "POST",
    "regularExpression": "(?<=imsi-)[0-9]{15,16}"
  },
  {
    "bodyId": 113,
    "resourceURI": "/nsmf-pdusession/v1/pdu-sessions/{pduSessionRef}/modify",
    "identifier": "ueLocation",
    "httpMethod": "POST",
    "regularExpression": "mcc-mnc"
  },
  {
    "bodyId": 149,
    "resourceURI": "/nsmf-pdusession/v1/pdu-sessions/{pduSessionRef}/transfer-
mo-data",
    "identifier": "ueLocation",
    "httpMethod": "POST",
    "regularExpression": "mcc-mnc"
  },
  {
    "bodyId": 157,
    "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/amf-non-3gpp-access",
    "identifier": "guamList",
```

```

    "httpMethod": "PUT",
    "regularExpression": "mcc-mnc"
  },
  {
    "bodyId": 29,
    "resourceURI": "/npcf-ue-policy-control/v1/policies",
    "identifier": "supi",
    "httpMethod": "POST",
    "regularExpression": "(?<=imsi-)[0-9]{15,16}"
  },
  {
    "bodyId": 37,
    "resourceURI": "/nsmf-pdusession/v1/pdu-sessions/{pduSessionRef}/modify",
    "identifier": "guami",
    "httpMethod": "POST",
    "regularExpression": "mcc-mnc"
  },
  {
    "bodyId": 121,
    "resourceURI": "/npcf-ue-policy-control/v1/policies",
    "identifier": "userLoc",
    "httpMethod": "POST",
    "regularExpression": "mcc-mnc"
  },
  {
    "bodyId": 9,
    "resourceURI": "/nsmf-pdusession/v1/pdu-sessions/{pduSessionRef}/modify",
    "identifier": "servingNetwork",
    "httpMethod": "POST",
    "regularExpression": "mcc-mnc"
  },
  {
    "bodyId": 17,
    "resourceURI": "/nudm-sdm/v2/{supi}/sdm-subscriptions",
    "identifier": "plmnId",
    "httpMethod": "POST",
    "regularExpression": "mcc-mnc"
  },
  {
    "bodyId": 41,
    "resourceURI": "/nsmf-pdusession/v1/pdu-sessions",
    "identifier": "servingNetwork",
    "httpMethod": "POST",
    "regularExpression": "mcc-mnc"
  },
  {
    "bodyId": 53,
    "resourceURI": "/nsmf-pdusession/v1/pdu-sessions/{pduSessionRef}/modify",
    "identifier": "addUeLocation",
    "httpMethod": "POST",
    "regularExpression": "mcc-mnc"
  },
  {
    "bodyId": 57,
    "resourceURI": "/nsmf-pdusession/v1/pdu-sessions",
    "identifier": "supi",

```

```

    "httpMethod": "POST",
    "regularExpression": "(?<=imsi-)[0-9]{15,16}"
  },
  {
    "bodyId": 65,
    "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/amf-3gpp-access",
    "identifier": "guamiList",
    "httpMethod": "PUT",
    "regularExpression": "mcc-mnc"
  },
  {
    "bodyId": 85,
    "resourceURI": "/oauth2/token",
    "identifier": "requesterPlmn",
    "httpMethod": "POST",
    "regularExpression": "mcc-mnc"
  },
  {
    "bodyId": 105,
    "resourceURI": "/npcf-ue-policy-control/v1/policies/{polAssoId}/update",
    "identifier": "plmnId",
    "httpMethod": "POST",
    "regularExpression": "mcc-mnc"
  },
  {
    "bodyId": 109,
    "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/smsf-non-3gpp-access",
    "identifier": "plmnId",
    "httpMethod": "PUT",
    "regularExpression": "mcc-mnc"
  },
  {
    "bodyId": 145,
    "resourceURI": "/nsmf-pdusession/v1/pdu-sessions",
    "identifier": "addUeLocation",
    "httpMethod": "POST",
    "regularExpression": "mcc-mnc"
  },
  {
    "bodyId": 117,
    "resourceURI": "/nsmf-pdusession/v1/pdu-sessions/{pduSessionRef}/release",
    "identifier": "ueLocation",
    "httpMethod": "POST",
    "regularExpression": "mcc-mnc"
  },
  {
    "bodyId": 133,
    "resourceURI": "/namf-evts/v1/subscriptions",
    "identifier": "oldGuami",
    "httpMethod": "POST",
    "regularExpression": "mcc-mnc"
  },
  {
    "bodyId": 69,
    "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/amf-non-3gpp-access",
    "identifier": "guami",

```

```

    "httpMethod": "PUT",
    "regularExpression": "mcc-mnc"
  },
  {
    "bodyId": 77,
    "resourceURI": "/nausf-auth/v1/ue-authentications",
    "identifier": "supiOrSuci",
    "httpMethod": "POST",
    "regularExpression": "(?<=imsi-)[0-9]{15,16}|(?<=suci-0-)[0-9]{15,16}"
  },
  {
    "bodyId": 93,
    "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/amf-non-3gpp-access",
    "identifier": "supi",
    "httpMethod": "PUT",
    "regularExpression": "(?<=imsi-)[0-9]{15,16}"
  },
  {
    "bodyId": 125,
    "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/amf-3gpp-access",
    "identifier": "guami",
    "httpMethod": "PUT",
    "regularExpression": "mcc-mnc"
  },
  {
    "bodyId": 141,
    "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/amf-3gpp-access",
    "identifier": "supi",
    "httpMethod": "PUT",
    "regularExpression": "(?<=imsi-)[0-9]{15,16}"
  },
  {
    "bodyId": 13,
    "resourceURI": "/nnrf-nfm/v1/subscriptions",
    "identifier": "plmnId",
    "httpMethod": "POST",
    "regularExpression": "mcc-mnc"
  },
  {
    "bodyId": 33,
    "resourceURI": "/nudm-sdm/v2/{ueId}/sdm-subscriptions",
    "identifier": "plmnId",
    "httpMethod": "POST",
    "regularExpression": "mcc-mnc"
  },
  {
    "bodyId": 45,
    "resourceURI": "/namf-evts/v1/subscriptions",
    "identifier": "eventList",
    "httpMethod": "POST",
    "regularExpression": "mcc-mnc"
  },
  {
    "bodyId": 1,
    "resourceURI": "/nnrf-nfm/v1/subscriptions",
    "identifier": "PlmnSnssai",

```



```

        "httpMethod": "POST",
        "regularExpression": "mcc-mnc"
    },
    {
        "bodyId": 21,
        "resourceURI": "/nsmf-pdusession/v1/pdu-sessions",
        "identifier": "guami",
        "httpMethod": "POST",
        "regularExpression": "mcc-mnc"
    },
    {
        "bodyId": 101,
        "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/smf-registrations/{pduSessionId}",
        "identifier": "plmnId",
        "httpMethod": "PUT",
        "regularExpression": "mcc-mnc"
    },
    {
        "bodyId": 5,
        "resourceURI": "/nsmf-pdusession/v1/pdu-sessions/{pduSessionRef}/release",
        "identifier": "addUeLocation",
        "httpMethod": "POST",
        "regularExpression": "mcc-mnc"
    },
    {
        "bodyId": 89,
        "resourceURI": "/oauth2/token",
        "identifier": "requesterPlmnList",
        "httpMethod": "POST",
        "regularExpression": "mcc-mnc"
    },
    {
        "bodyId": 137,
        "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/smsf-3gpp-access",
        "identifier": "plmnId",
        "httpMethod": "PUT",
        "regularExpression": "mcc-mnc"
    },
    {
        "bodyId": 49,
        "resourceURI": "/nnrf-nfm/v1/subscriptions",
        "identifier": "reqSnpnList",
        "httpMethod": "POST",
        "regularExpression": "mcc-mnc"
    },
    {
        "bodyId": 25,
        "resourceURI": "/npcf-ue-policy-control/v1/policies/{polAssoId}/update",
        "identifier": "userLoc",
        "httpMethod": "POST",
        "regularExpression": "mcc-mnc"
    },
    {
        "bodyId": 153,
        "resourceURI": "/namf-comm/v1/subscriptions/{subscriptionId}",

```

```

        "identifier": "guamiList",
        "httpMethod": "PUT",
        "regularExpression": "mcc-mnc"
    },
    {
        "bodyId": 61,
        "resourceURI": "/namf-comm/v1/subscriptions",
        "identifier": "guamiList",
        "httpMethod": "POST",
        "regularExpression": "mcc-mnc"
    },
    {
        "bodyId": 81,
        "resourceURI": "/nnrf-nfm/v1/subscriptions",
        "identifier": "reqPlmnList",
        "httpMethod": "POST",
        "regularExpression": "mcc-mnc"
    },
    {
        "bodyId": 97,
        "resourceURI": "/nsmf-pdusession/v1/pdu-sessions",
        "identifier": "ueLocation",
        "httpMethod": "POST",
        "regularExpression": "mcc-mnc"
    },
    {
        "bodyId": 129,
        "resourceURI": "/nausf-auth/v1/ue-authentications",
        "identifier": "servingNetworkName",
        "httpMethod": "POST",
        "regularExpression": "(mcc)([0-9]*)|(mnc)([0-9]*)"
    }
]

```

Sample Response body structure for GET operations

Resource API : /sepp-configuration/v1/security-counter-measure/previous-location-validation/body/{bodyId}

Resource Method: GET

Content Type : application/json

Response Body

```

{
    "bodyId": 1,
    "resourceURI": "/nnrf-nfm/v1/subscriptions",
    "identifier": "PlmnSnssai",
    "httpMethod": "POST",
    "regularExpression": "mcc-mnc"
}

```

Sample Response body structure for POST operations

Resource API : /sepp-configuration/v1/security-counter-measure/previous-location-validation/body

Resource Method: POST**Content Type :** application/json**Response Body**

Serving Body Created Successfully

Sample Response body structure for DELETE operations

Resource API : /sepp-configuration/v1/security-counter-measure/previous-location-validation/{bodyId}**Resource Method:** DELETE**Content Type :** application/json**Response Body**

204

2.25.2 UE ID

Previous Location Check UE ID Body IE Configuration REST APIs allows user to configure the UE ID Body IEs, for which CAT 3 - Previous Location check takes place.

Method	URL	Description	Input	Return	Example
GET	/sepp-configuration/v1/security-counter-measure/previous-ue-location/body	This API is used to fetch the complete list of UE ID Body IEs configuration.	Not Required	List of PreviousLocationCheckServingNameBodyDTO	curl -X 'GET' \ 'http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/v1/security-counter-measure/previous-ue-location/body' \ -H 'accept: */*'
GET	/sepp-configuration/v1/security-counter-measure/previous-ue-location/body/{bodyId}	This API is used to fetch the UE ID Body IEs configuration for which bodyId is given.	bodyId value of the configuration	Body DTO object.	curl -X 'GET' \ 'http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/v1/security-counter-measure/previous-ue-location/body/1' \ -H 'accept: */*'

Method	URL	Description	Input	Return	Example
POST	/sepp-configuration/v1/security-counter-measure/previous-ue-location/body	This API is used to add UE ID Body IEs Configuration for which Previous Location Check is required.	PreviousLocationCheckServingNameBodyDTO body DTO object	Body DTO object.	curl -X 'POST' \ 'http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/v1/security-counter-measure/previous-ue-location/body' \ -H 'accept: */*' \ -H 'Content-Type: application/json' \ -d '{ "bodyId": 0, "httpMethod": "POST", "resourceURI": "/nausf-auth/v1/ue-authentications", "identifier": "supiOrSuci", "regularExpression": "(?<=imsi-)[0-9]{6}(<=suci-0-)[0-9]{6}" }'
DELETE	/sepp-configuration/v1/security-counter-measure/previous-ue-location/body/{bodyId}	This API is used to delete UE ID Body IEs configuration.	bodyId	204	curl -X 'DELETE' \ 'http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/v1/security-counter-measure/previous-ue-location/body/1' \ -H 'accept: */*' \

Previous Location Check UE ID Json IE Configuration Parameters

Table 2-64 Previous Location Check UE ID Json IE Configuration Parameters

Attribute	Datatype	Mandatory(M)/ Conditional(C)/ Optional(O)	Description
resourceURI	String	M	Resource URI for which Cat-3 Previous Location Check happens.
identifier	String	M	UE ID Body IE Identifier for which Previous Location Check Validation should happen.
httpMethod	Enum	M	HTTP Method [POST, PUT, GET, PATCH, DELETE, OPTION, HEAD]
regularExpression	String	M	Regular Expression to Fetch UE ID

Sample Response body structure for GET operations

Resource API: /sepp-configuration/v1/security-counter-measure/previous-ue-location/body

Resource Method: GET

Content Type : application/json

Response Body

```
[
  {
    "bodyId": 51,
    "resourceURI": "/nsmf-pdusession/v1/pdu-sessions",
    "identifier": "supi",
    "httpMethod": "POST",
    "regularExpression": "(imsi-)[0-9]{15,16}"
  }
]
```

Sample Response body structure for GET operations

Resource API : /sepp-configuration/v1/security-counter-measure/previous-ue-location/body/{bodyId}

Resource Method : GET

Content Type : application/json

Response Body

```
[
  {
    "bodyId": 51,
    "resourceURI": "/nsmf-pdusession/v1/pdu-sessions",
    "identifier": "supi",
    "httpMethod": "POST",
```

```
    "regularExpression": "(imsi-)[0-9]{15,16}"  
  }  
]
```

Sample Response body structure for POST operations

Resource API: /sepp-configuration/v1/security-counter-measure/previous-ue-location/body

Resource Method: POST

Content Type : application/json

Response Body

201 Body UE Configuration Created Successfully

Sample Response body structure for DELETE operations

Resource API: /sepp-configuration/v1/security-counter-measure/previous-ue-location/body/
{bodyId}

Resource Method: DELETE

Content Type : application/json

Response Body

204

2.26 Cat-0 SBI Message Schema Validation REST APIs

The following are the Cat-0 SBI Message Schema Validation REST APIs.

2.26.1 Message Validation System Option

Message Validation Option REST API enables or disables the message validation feature.

Table 2-65 Message Validation Option REST API

Method	URL	Description	Input	Return	Example
GET	/sepp-configuration/v1/security-counter-measure/message-validation/options	This API is used to get the following information: - if message validation is enabled on request body. - if message validation is enabled on request query parameters - current value of maximum allowed request size - current value of maximum number of allowed query parameters		MessageValidationSystemOption DTO having below data: messageValidationOnBodyEnabled messageValidationOnQueryParametersEnabled maxRequestSize maxNumberOfQueryParams	<pre>curl -X 'GET' \ 'http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/v1/security-counter-measure/message-validation/options' \ -H 'accept: */*'</pre>

Table 2-65 (Cont.) Message Validation Option REST API

Method	URL	Description	Input	Return	Example
PUT	/sepp-configuration/v1/security-counter-measure/message-validation/options	This API is used to configure the below information: - enable or disable the message validation on request body. - enable or disable the message validation on request query parameters. - value of maximum allowed request size. - value of maximum number of allowed query parameters.	MessageValidationSystemOption DTO having below data: <pre> messageValidationOnBodyEnabled messageValidationOnQueryParametersEnabled maxRequestSize maxNumberOfQueryParams </pre>	ResponseEntity<String> 200 Saved	<pre> curl -X 'PUT' \ 'http://<SEPP-ConfigurationIP>:<PORT>/sepp-configuration/v1/security-counter-measure/message-validation/options' \ -H 'accept: */* ' \ -H 'Content-Type: application/json' \ -d '{ "messageValidationOption": { "messageValidationOnBodyEnabled": true, "messageValidationOnQueryParametersEnabled": true, "maxRequestSize": 0, "maxNumberOfQueryParams": 0 } }' </pre>

Table 2-66 Message Validation Option Parameters

Attribute	Datatype	Mandatory(M)/ Conditional(C)/ Optional(O)	Description
messageValidationOnBodyEnabled	boolean	O	Enables or disables the message validation on request body.
messageValidationOnQueryParametersEnabled	boolean	O	Enables or disables the message validation on request query parameters.
maxRequestSize	integer	O	Provides maximum allowed request body size (Default 40 KB).
maxNumberOfQueryParams	integer	O	Provides maximum number of allowed query parameters (Default 100)

Sample Response body structure for GET operations

Resource API : /sepp-configuration/v1/security-counter-measure/message-validation/options

Resource Method : GET

Content Type : application/json

Response Body

```
{
  "messageValidationOption": {
    "messageValidationOnBodyEnabled": false,
    "messageValidationOnQueryParametersEnabled": false,
    "maxRequestSize": 40,
    "maxNumberOfQueryParams": 100
  }
}
```

Sample Response body structure for PUT operations

Resource API : /sepp-configuration/v1/security-counter-measure/message-validation/options

Resource Method : PUT

Content Type : application/json

Response Body

200

2.26.2 Message Validation List Configuration

Message Validation List Configuration REST API allows the user to configure the message validation list, Ingress/Egress rule, and Ingress/Egress error configurations.

Method	URL	Description	Input	Return	Example
GET	"/sepp-configuration/v1/security-counter-measure/message-validation-list"	This API is used to fetch all the message validation list created as part of message validation feature with their Ingress Rules, Egress Rules, Ingress Action, and Egress Action.	No Input Required	List<MessageValidationListConfiguration> List of message validation lists configured in the system.	curl -X 'GET' \ 'http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/v1/security-counter-measure/message-validation-list' \ -H 'accept: */*'
GET	"/sepp-configuration/v1/security-counter-measure/message-validation-list/{listName}"	This API is used to fetch the message validation list based on message validation list Name.	MessageValidationListName	MessageValidationListConfiguration DTO which comprises of list name, ingress/egress Rules along with their corresponding ingress and egress actions	curl -X 'GET' \ 'http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/v1/security-counter-measure/message-validation-list/Default' \ -H 'accept: */*'

Method	URL	Description	Input	Return	Example
PUT	"/sepp-configuration/v1/security-counter-measure/message-validation-list/{listName}"	This API is used to update the already existing message validation list along with Ingress/Egress rules and their error configuration. Note: The acceptable value for id is zero.	Existing MessageValidationListName and MessageValidationListConfiguration	201 Created	<pre>curl -X 'PUT' \ 'http:// <SEPP- Configuration IP>:<PORT>/ sepp- configuration /v1/security- counter- measure/ message- validation- list/ TestList' \ -H 'accept: */*' \ -H 'Content- Type: application/ json' \ -d '{ "messageValid ationListName ": "TestList", "ingressAllow edServiceApis ": [{ "id": 0, "resourceURI" : "/nausf- auth/v1/ue- authentication s", "httpMethod": "POST" }], "egressAllowe dServiceApis" : [{ "id": 0, "resourceURI" : "/nausf-</pre>

Method	URL	Description	Input	Return	Example
					<pre>auth/v1/ue- authentication s/ {authCtxId}/5 g-aka- confirmation" , "httpMethod": "PUT" }], "ingressError ResponseConfi guration": { "title": "Message Validation Failed", "statusCode": 406, "action": "REJECT" }, "egressErrorR esponseConfig uration": { "title": "Message Validation Failed", "statusCode": 406, "action": "FORWARD" } }'</pre>

Method	URL	Description	Input	Return	Example
POST	"/sepp-configuration/v1/security-counter-measure/message-validation-list/{listName}"	This API is used to add a new message validation list along with Ingress/Egress rules and their error configuration. Note: The acceptable value for id is zero.	MessageValidationListName and MessageValidationListConfiguration (DTO) comprising of Ingress/Egress rules and error configurations.	201 Created	<pre>curl -X 'POST' \ 'http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/v1/security-counter-measure/message-validation-list/NewTestList' \ -H 'accept: */*' \ -H 'Content-Type: application/json' \ -d '{ "messageValidationListName": "NewTestList", "ingressAllowedServiceApis": [{ "id": 0, "resourceURI": "/namf-evts/v1/subscriptions", "httpMethod": "POST" }], "egressAllowedServiceApis": [{ "id": 0,</pre>

Method	URL	Description	Input	Return	Example
					<pre>"resourceURI" : "/nausf- auth/v1/ue- authenticatio ns/ {authCtxId}/5 g-aka- confirmation" , "httpMethod": "PUT" }], "ingressError ResponseConfi guration": { "title": "Message Validation Failed", "statusCode": 406, "action": "REJECT" }, "egressErrorR esponseConfig uration": { "title": "Message Validation Failed", "statusCode": 406, "action": "FORWARD" } }'</pre>

Method	URL	Description	Input	Return	Example
DELETE	"/sepp-configuration/v1/security-counter-measure/message-validation-list/{listName}"	This API is used to delete an already existing message validation list corresponding to given name.	MessageValidationListName	No Content	<pre>curl -X 'DELETE' \ 'http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/v1/security-counter-measure/message-validation-list/NewTestList' \ -H 'accept: */*'</pre>

Method	URL	Description	Input	Return	Example
PUT	"/sepp-configuration/v1/security-counter-measure/message-validation-list/update-rules/{listName}"	This API is used to update or override existing rule(s) in an existing message validation list. The user has to specify the proper Ingress/Egress rules.	MessageValidationListName MessageValidationRulesDTO	201 CREATED	<pre> curl -X 'PUT' \ 'http:// <SEPP- Configuration IP>:<PORT>/ sepp- configuration /v1/security- counter- measure/ message- validation- list/update- rules/ TestList' \ -H 'accept: */*' \ -H 'Content- Type: application/ json' \ -d '{ "ingressRules ": [{ "id": 0, "resourceURI ": "/namf- evts/v1/ subscriptions ", "httpMethod": "POST" }], "egressRules ": [{ "id": 0, "resourceURI ": "/namf- loc/v1/ {ueContextId} /provide-loc- info", "httpMethod": </pre>

Method	URL	Description	Input	Return	Example
					"POST" }] '}

Method	URL	Description	Input	Return	Example
DELETE	"/sepp-configuration/v1/security-counter-measure/message-validation-list/delete-rules/{listName}"	This API is used to delete a specific rule to an existing list. The user has to specify the proper rule in Ingress/Egress Rules.	MessageValidationListName	No Content	<pre> curl -X 'DELETE' \ 'http:/ <SEPP- Configuration IP>:<PORT>/ sepp- configuration /v1/security- counter- measure/ message- validation- list/delete- rules/ TestList' \ -H 'accept: */'*' \ -H 'Content- Type: application/ json' \ -d '{ "ingressRules ": [{ "id": 0, "resourceURI" : "/nnrf- disc/v1/nf- instances", "httpMethod": "GET" }], "egressRules" : [{ "id": 0, "resourceURI" : "/namf- loc/v1/ {ueContextId} /provide-loc- info", "httpMethod": "POST" </pre>

Method	URL	Description	Input	Return	Example
					<pre> }] }' </pre>

Message Validation List Configuration Parameters

Table 2-67 Message Validation List Configuration Parameters

Attribute	Datatype	Mandatory(M)/ Conditional(C)/ Optional(O)	Description
messageValidationListName	string	M	Message validation list name.
ingressAllowedServiceApis (ingress rules)	List<AllowedServiceApi>	O	Ingress Rule(s) with corresponding Resource URI and HTTP Method.
egressAllowedServiceApis (egress rules)	List<AllowedServiceApi>	O	Egress Rule(s) with corresponding Resource URI and HTTP Method.
ingressErrorResponseConfiguration (ingressErrorAction)	ErrorResponseConfiguration	O	Ingress Action: - REJECT - FORWARD
egressErrorResponseConfiguration (egressErrorAction)	ErrorResponseConfiguration	O	Egress Action: - REJECT - FORWARD

AllowedServiceApi (Allowed Ingress/Egress Data Model) Parameters

Table 2-68 AllowedServiceApi (Allowed Ingress/Egress Data Model) Parameters

Attribute	Datatype	Mandatory(M)/ Conditional(C)/ Optional(O)	Description
resourceURI	string	M	Resource URI for which Validation happens.
httpMethod	HTTP Method	M	HTTP Method [POST, PUT, GET, PATCH, DELETE, OPTION, HEAD]

ErrorResponseConfigurationDTO (Error Response Configuration Data Model) Parameters

Table 2-69 ErrorResponseConfigurationDTO (Error Response Configuration Data Model) Parameters

Attribute	Datatype	Mandatory(M)/ Conditional(C)/ Optional(O)	Description
title	string	M	Title and details of error.
statusCode	integer	M	Status Code of error of configured.
action	enum	M	Action need to be taken when mediation filtering condition reaches an error state. Range: REJECT, FORWARD

Sample Response body structure for GET operations

Resource API : /sepp-configuration/v1/security-counter-measure/message-validation-list

Resource Method : GET

Content Type : application/json

```
[
  {
    "messageValidationListName": "Default",
    "ingressAllowedServiceApis": [
      {
        "id": 197,
        "resourceURI": "/nudm-sdm/v1/{supi}/sm-data",
        "httpMethod": "GET"
      },
      {
        "id": 148,
        "resourceURI": "/nudm-sdm/v2/{supi}/am-data/upu-ack",
        "httpMethod": "PUT"
      },
      {
        "id": 187,
        "resourceURI": "/nsmf-pdusession/v1/pdu-sessions",
        "httpMethod": "POST"
      },
      {
        "id": 139,
        "resourceURI": "/nudm-sdm/v1/{supi}",
        "httpMethod": "GET"
      },
      {
        "id": 111,
        "resourceURI": "/nudm-sdm/v1/shared-data",
        "httpMethod": "GET"
      },
      {
        "id": 123,
```

```

        "resourceURI": "/nudm-sdm/v2/{supi}/am-data/sor-ack",
        "httpMethod": "PUT"
    },
    {
        "id": 142,
        "resourceURI": "/namf-mt/v1/ue-contexts/{ueContextId}",
        "httpMethod": "GET"
    },
    {
        "id": 131,
        "resourceURI": "/nnssf-nsselection/v1/network-slice-information",
        "httpMethod": "GET"
    },
    {
        "id": 173,
        "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/smf-registrations/
{pduSessionId}",
        "httpMethod": "DELETE"
    },
    {
        "id": 162,
        "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/amf-non-3gpp-
access",
        "httpMethod": "PUT"
    },
    {
        "id": 154,
        "resourceURI": "/nudm-sdm/v1/{supi}/sdm-subscriptions",
        "httpMethod": "POST"
    },
    {
        "id": 192,
        "resourceURI": "/nudm-sdm/v1/{supi}/nssai",
        "httpMethod": "GET"
    },
    {
        "id": 203,
        "resourceURI": "/nudm-sdm/v2/{supi}/ue-context-in-smf-data",
        "httpMethod": "GET"
    },
    {
        "id": 147,
        "resourceURI": "/nsmf-pdusession/v1/pdu-sessions/{pduSessionRef}/
modify",
        "httpMethod": "POST"
    },
    {
        "id": 121,
        "resourceURI": "/nnrf-nfm/v1/subscriptions",
        "httpMethod": "POST"
    },
    {
        "id": 141,
        "resourceURI": "/npcf-ue-policy-control/v1/policies",
        "httpMethod": "POST"
    },
    },

```

```

    {
      "id": 116,
      "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/amf-3gpp-access",
      "httpMethod": "PUT"
    },
    {
      "id": 124,
      "resourceURI": "/nudm-sdm/v2/{supi}/ue-context-in-smf-data",
      "httpMethod": "GET"
    },
    {
      "id": 180,
      "resourceURI": "/npcf-ue-policy-control/v1/policies/{polAssoId}/
update",
      "httpMethod": "POST"
    },
    {
      "id": 172,
      "resourceURI": "/nudm-sdm/v2/{supi}",
      "httpMethod": "GET"
    },
    {
      "id": 198,
      "resourceURI": "/namf-loc/v1/{ueContextId}/provide-loc-info",
      "httpMethod": "POST"
    },
    {
      "id": 145,
      "resourceURI": "/nudm-sdm/v2/shared-data",
      "httpMethod": "GET"
    },
    {
      "id": 137,
      "resourceURI": "/nudm-sdm/v2/{ueId}/sdm-subscriptions",
      "httpMethod": "POST"
    },
    {
      "id": 207,
      "resourceURI": "/namf-evts/v1/subscriptions",
      "httpMethod": "POST"
    },
    {
      "id": 183,
      "resourceURI": "/nudm-sdm/v2/{supi}/sms-mng-data",
      "httpMethod": "GET"
    },
    {
      "id": 176,
      "resourceURI": "/nudm-sdm/v1/{supi}/ue-context-in-smf-data",
      "httpMethod": "GET"
    },
    {
      "id": 208,
      "resourceURI": "/nudm-sdm/v1/{supi}/am-data",
      "httpMethod": "GET"
    },
  },

```

```

    {
      "id": 163,
      "resourceURI": "/nsmf-pdusession/v1/pdu-sessions/{pduSessionRef}/
retrieve",
      "httpMethod": "POST"
    },
    {
      "id": 210,
      "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/smsf-3gpp-access",
      "httpMethod": "GET"
    },
    {
      "id": 178,
      "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/smsf-3gpp-access",
      "httpMethod": "PUT"
    },
    {
      "id": 120,
      "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/smsf-non-3gpp-
access",
      "httpMethod": "DELETE"
    },
    {
      "id": 119,
      "resourceURI": "/namf-comm/v1/subscriptions",
      "httpMethod": "POST"
    },
    {
      "id": 150,
      "resourceURI": "/nudm-sdm/v1/{supi}/am-data/sor-ack",
      "httpMethod": "PUT"
    },
    {
      "id": 125,
      "resourceURI": "/nudm-sdm/v2/{supi}/sms-data",
      "httpMethod": "GET"
    },
    {
      "id": 144,
      "resourceURI": "/nudm-sdm/v2/{supi}/am-data",
      "httpMethod": "GET"
    },
    {
      "id": 171,
      "resourceURI": "/namf-comm/v1/subscriptions/{subscriptionId}",
      "httpMethod": "PUT"
    },
    {
      "id": 156,
      "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/smsf-non-3gpp-
access",
      "httpMethod": "PUT"
    },
    {
      "id": 193,
      "resourceURI": "/nudm-sdm/v2/{supi}/nssai",

```

```

        "httpMethod": "GET"
      },
      {
        "id": 118,
        "resourceURI": "/nsmf-pdusession/v1/pdu-sessions/{pduSessionRef}/
release",
        "httpMethod": "POST"
      },
      {
        "id": 122,
        "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/amf-3gpp-access",
        "httpMethod": "GET"
      },
      {
        "id": 153,
        "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/smf-3gpp-access",
        "httpMethod": "DELETE"
      },
      {
        "id": 167,
        "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/amf-non-3gpp-
access",
        "httpMethod": "GET"
      },
      {
        "id": 190,
        "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/smf-registrations/
{pduSessionId}",
        "httpMethod": "PUT"
      },
      {
        "id": 199,
        "resourceURI": "/nausf-auth/v1/ue-authentications/{authCtxId}/5g-aka-
confirmation",
        "httpMethod": "PUT"
      },
      {
        "id": 174,
        "resourceURI": "/nausf-auth/v1/ue-authentications",
        "httpMethod": "POST"
      },
      {
        "id": 201,
        "resourceURI": "/nudm-sdm/v2/{supi}/smf-select-data",
        "httpMethod": "GET"
      },
      {
        "id": 202,
        "resourceURI": "/nnssf-nssselection/v2/network-slice-information",
        "httpMethod": "GET"
      },
      {
        "id": 143,
        "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/smf-non-3gpp-
access",
        "httpMethod": "GET"
      }

```



```

    },
    {
      "id": 166,
      "resourceURI": "/nudm-sdm/v2/{supi}/sm-data",
      "httpMethod": "GET"
    },
    {
      "id": 112,
      "resourceURI": "/nnrf-disc/v1/nf-instances",
      "httpMethod": "GET"
    }
  ],
  "egressAllowedServiceApis": [
    {
      "id": 157,
      "resourceURI": "/nudm-sdm/v1/{supi}/sm-data",
      "httpMethod": "GET"
    },
    {
      "id": 135,
      "resourceURI": "/nudm-sdm/v2/{supi}/am-data/upu-ack",
      "httpMethod": "PUT"
    },
    {
      "id": 188,
      "resourceURI": "/nsmf-pdusession/v1/pdu-sessions",
      "httpMethod": "POST"
    },
    {
      "id": 134,
      "resourceURI": "/nudm-sdm/v1/{supi}",
      "httpMethod": "GET"
    },
    {
      "id": 114,
      "resourceURI": "/nudm-sdm/v1/shared-data",
      "httpMethod": "GET"
    },
    {
      "id": 133,
      "resourceURI": "/nudm-sdm/v2/{supi}/am-data/sor-ack",
      "httpMethod": "PUT"
    },
    {
      "id": 146,
      "resourceURI": "/nnssf-nsselection/v1/network-slice-information",
      "httpMethod": "GET"
    },
    {
      "id": 138,
      "resourceURI": "/namf-mt/v1/ue-contexts/{ueContextId}",
      "httpMethod": "GET"
    },
    {
      "id": 186,
      "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/smf-registrations/

```

```

    {pduSessionId}",
      "httpMethod": "DELETE"
    },
    {
      "id": 170,
      "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/amf-non-3gpp-
access",
      "httpMethod": "PUT"
    },
    {
      "id": 129,
      "resourceURI": "/nudm-sdm/v1/{supi}/sdm-subscriptions",
      "httpMethod": "POST"
    },
    {
      "id": 204,
      "resourceURI": "/nudm-sdm/v1/{supi}/nssai",
      "httpMethod": "GET"
    },
    {
      "id": 132,
      "resourceURI": "/nudm-sdm/v2/{supi}/ue-context-in-smf-data",
      "httpMethod": "GET"
    },
    {
      "id": 136,
      "resourceURI": "/nsmf-pdusession/v1/pdu-sessions/{pduSessionRef}/
modify",
      "httpMethod": "POST"
    },
    {
      "id": 113,
      "resourceURI": "/nnrf-nfm/v1/subscriptions",
      "httpMethod": "POST"
    },
    {
      "id": 195,
      "resourceURI": "/npcf-ue-policy-control/v1/policies",
      "httpMethod": "POST"
    },
    {
      "id": 115,
      "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/amf-3gpp-access",
      "httpMethod": "PUT"
    },
    {
      "id": 130,
      "resourceURI": "/nudm-sdm/v2/{supi}/ue-context-in-smf-data",
      "httpMethod": "GET"
    },
    {
      "id": 149,
      "resourceURI": "/npcf-ue-policy-control/v1/policies/{polAssoId}/
update",
      "httpMethod": "POST"
    },
  },

```

```

{
  "id": 159,
  "resourceURI": "/nudm-sdm/v2/{supi}",
  "httpMethod": "GET"
},
{
  "id": 151,
  "resourceURI": "/namf-loc/v1/{ueContextId}/provide-loc-info",
  "httpMethod": "POST"
},
{
  "id": 196,
  "resourceURI": "/nudm-sdm/v2/shared-data",
  "httpMethod": "GET"
},
{
  "id": 209,
  "resourceURI": "/nudm-sdm/v2/{ueId}/sdm-subscriptions",
  "httpMethod": "POST"
},
{
  "id": 155,
  "resourceURI": "/namf-evts/v1/subscriptions",
  "httpMethod": "POST"
},
{
  "id": 185,
  "resourceURI": "/nudm-sdm/v2/{supi}/sms-mng-data",
  "httpMethod": "GET"
},
{
  "id": 175,
  "resourceURI": "/nudm-sdm/v1/{supi}/ue-context-in-smf-data",
  "httpMethod": "GET"
},
{
  "id": 140,
  "resourceURI": "/nudm-sdm/v1/{supi}/am-data",
  "httpMethod": "GET"
},
{
  "id": 164,
  "resourceURI": "/nsmf-pdusession/v1/pdu-sessions/{pduSessionRef}/
retrieve",
  "httpMethod": "POST"
},
{
  "id": 165,
  "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/smsf-3gpp-access",
  "httpMethod": "GET"
},
{
  "id": 181,
  "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/smsf-3gpp-access",
  "httpMethod": "PUT"
},

```

```

    {
      "id": 158,
      "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/smsf-non-3gpp-
access",
      "httpMethod": "DELETE"
    },
    {
      "id": 117,
      "resourceURI": "/namf-comm/v1/subscriptions",
      "httpMethod": "POST"
    },
    {
      "id": 126,
      "resourceURI": "/nudm-sdm/v1/{supi}/am-data/sor-ack",
      "httpMethod": "PUT"
    },
    {
      "id": 127,
      "resourceURI": "/nudm-sdm/v2/{supi}/sms-data",
      "httpMethod": "GET"
    },
    {
      "id": 191,
      "resourceURI": "/nudm-sdm/v2/{supi}/am-data",
      "httpMethod": "GET"
    },
    {
      "id": 194,
      "resourceURI": "/namf-comm/v1/subscriptions/{subscriptionId}",
      "httpMethod": "PUT"
    },
    {
      "id": 200,
      "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/smsf-non-3gpp-
access",
      "httpMethod": "PUT"
    },
    {
      "id": 182,
      "resourceURI": "/nudm-sdm/v2/{supi}/nssai",
      "httpMethod": "GET"
    },
    {
      "id": 206,
      "resourceURI": "/nsmf-pdusession/v1/pdu-sessions/{pduSessionRef}/
release",
      "httpMethod": "POST"
    },
    {
      "id": 152,
      "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/amf-3gpp-access",
      "httpMethod": "GET"
    },
    {
      "id": 177,
      "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/smsf-3gpp-access",

```

```

        "httpMethod": "DELETE"
      },
      {
        "id": 169,
        "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/amf-non-3gpp-
access",
        "httpMethod": "GET"
      },
      {
        "id": 184,
        "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/smf-registrations/
{pduSessionId}",
        "httpMethod": "PUT"
      },
      {
        "id": 128,
        "resourceURI": "/nausf-auth/v1/ue-authentications/{authCtxId}/5g-aka-
confirmation",
        "httpMethod": "PUT"
      },
      {
        "id": 160,
        "resourceURI": "/nudm-sdm/v2/{supi}/smf-select-data",
        "httpMethod": "GET"
      },
      {
        "id": 189,
        "resourceURI": "/nausf-auth/v1/ue-authentications",
        "httpMethod": "POST"
      },
      {
        "id": 179,
        "resourceURI": "/nnssf-nsselection/v2/network-slice-information",
        "httpMethod": "GET"
      },
      {
        "id": 168,
        "resourceURI": "/nudm-sdm/v2/{supi}/sm-data",
        "httpMethod": "GET"
      },
      {
        "id": 205,
        "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/smsf-non-3gpp-
access",
        "httpMethod": "GET"
      },
      {
        "id": 161,
        "resourceURI": "/nnrf-disc/v1/nf-instances",
        "httpMethod": "GET"
      }
    ],
    "ingressErrorResponseConfiguration": {
      "title": "Message validation failed",
      "statusCode": 406,
      "action": "REJECT"
    }
  }

```

```

    },
    "egressErrorResponseConfiguration": {
      "title": "Message validation failed",
      "statusCode": 406,
      "action": "REJECT"
    }
  }
}
]

```

Sample Response body structure for GET operations

Resource API : "/sepp-configuration/v1/security-counter-measure/message-validation-list/{listName}"

Resource Method : GET

Content Type : application/json

```

{
  "messageValidationListName": "TestList",
  "ingressAllowedServiceApis": [
    {
      "id": 216,
      "resourceURI": "/nausf-auth/v1/ue-authentications",
      "httpMethod": "POST"
    }
  ],
  "egressAllowedServiceApis": [
    {
      "id": 215,
      "resourceURI": "/nausf-auth/v1/ue-authentications/{authCtxId}/5g-aka-confirmation",
      "httpMethod": "PUT"
    }
  ],
  "ingressErrorResponseConfiguration": {
    "title": "Message Validation Failed",
    "statusCode": 406,
    "action": "REJECT"
  },
  "egressErrorResponseConfiguration": {
    "title": "Message Validation Failed",
    "statusCode": 406,
    "action": "FORWARD"
  }
}

```

Sample Response body structure for PUT operations

Resource API : "/sepp-configuration/v1/security-counter-measure/message-validation-list/{listName}"

Resource Method : PUT

Content Type : application/json

201 CREATED

Sample Response body structure for POST operations

Resource API : "/sepp-configuration/v1/security-counter-measure/message-validation-list/{listName}"

Resource Method : POST

Content Type : application/json

201 CREATED

Sample Response body structure for DELETE operations

Resource API : "/sepp-configuration/v1/security-counter-measure/message-validation-list/{listName}"

Resource Method : DELETE

Content Type : application/json

204 NO CONTENT

Sample Response body structure for PUT operations

Resource API : "/sepp-configuration/v1/security-counter-measure/message-validation-list/update-rules/{listName}"

Resource Method : PUT

Content Type : application/json

201 CREATED

Sample Response body structure for DELETE operations

Resource API : "/sepp-configuration/v1/security-counter-measure/message-validation-list/delete-rules/{listName}"

Resource Method : DELETE

Content Type : application/json

204 NO CONTENT

2.26.3 Message Validation Services API

Message Validation Services REST API allows the user to fetch the complete list of services APIs for which the configured or default schema available in the system.

Method	URL	Description	Input	Return	Example
GET	"/sepp-configuration/v1/security-counter-measure/message-validation/default-service-apis"	This API is used to fetch the complete list of services APIs for which we have the default/configured message schema available.	Not required	List<DefaultA piDT0> List of services apis	curl -X 'GET' \ 'http:// <SEPP- Configuration IP>:<PORT>/ sepp- configuration /v1/security- counter- measure/ message- validation/ default- service- apis' \ -H 'accept: */*'

Sample Response body structure for GET operations

Resource API :"/sepp-configuration/v1/security-counter-measure/message-validation/default-service-apis"

Resource Method : GET

Content Type : application/json

```
[
  {
    "defaultId": 1,
    "resourceURI": "/npcf-ue-policy-control/v1/policies",
    "httpMethod": "POST",
    "regex": "^(?:[^\#,{,},?,^])*?npcf-ue-policy-control/v1/policies/?$"
  },
  {
    "defaultId": 2,
    "resourceURI": "/nudm-sdm/v2/{supi}/am-data/sor-ack",
    "httpMethod": "PUT",
    "regex": "^(?:[^\#,{,},?,^])*?nudm-sdm/v2/(imsi-[0-9]{5,15}|nai-.+|gci-.+|gli-.+|.+)/am-data/sor-ack/?$"
  },
  {
    "defaultId": 4,
    "resourceURI": "/nudm-sdm/v2/{supi}/ue-context-in-smf-data",
    "httpMethod": "GET",
    "regex": "^(?:[^\#,{,},?,^])*?nudm-sdm/v2/(imsi-[0-9]{5,15}|nai-.+|gci-.+|gli-.+|.+)/ue-context-in-smf-data/?$"
  },
  {
    "defaultId": 5,
    "resourceURI": "/namf-comm/v1/subscriptions",
    "httpMethod": "POST",
    "regex": "^(?:[^\#,{,},?,^])*?namf-comm/v1/subscriptions/?$"
  }
]
```



```

    },
    {
      "defaultId": 7,
      "resourceURI": "/nudm-sdm/v2/{supi}/am-data",
      "httpMethod": "GET",
      "regex": "^(?:[^#,{,},?,^])*?/nudm-sdm/v2/(imsi-[0-9]{5,15}|nai-.+|gci-.+|gli-.+|.+)/am-data/?$"
    },
    {
      "defaultId": 8,
      "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/amf-non-3gpp-access",
      "httpMethod": "GET",
      "regex": "^(?:[^#,{,},?,^])*?/nudm-uecm/v1/(imsi-[0-9]{5,15}|nai-.+|msisdn-[0-9]{5,15}|extid-[^@]+@[^@]+|gci-.+|gli-.+|.+)/registrations/amf-non-3gpp-access/?$"
    },
    {
      "defaultId": 9,
      "resourceURI": "/nudm-sdm/v1/{supi}/sdm-subscriptions",
      "httpMethod": "POST",
      "regex": "^(?:[^#,{,},?,^])*?/nudm-sdm/v1/(imsi-[0-9]{5,15}|nai-.+|.+)/sdm-subscriptions/?$"
    },
    {
      "defaultId": 10,
      "resourceURI": "/nudm-sdm/v2/{supi}/ue-context-in-smsf-data",
      "httpMethod": "GET",
      "regex": "^(?:[^#,{,},?,^])*?/nudm-sdm/v2/(imsi-[0-9]{5,15}|nai-.+|gci-.+|gli-.+|.+)/ue-context-in-smsf-data/?$"
    },
    {
      "defaultId": 11,
      "resourceURI": "/namf-loc/v1/{ueContextId}/provide-loc-info",
      "httpMethod": "POST",
      "regex": "^(?:[^#,{,},?,^])*?/namf-loc/v1/(imsi-[0-9]{5,15}|nai-.+|gli-.+|gci-.+|imei-[0-9]{15}|imeisv-[0-9]{16}|.+)/provide-loc-info/?$"
    },
    {
      "defaultId": 12,
      "resourceURI": "/nausf-auth/v1/ue-authentications",
      "httpMethod": "POST",
      "regex": "^(?:[^#,{,},?,^])*?/nausf-auth/v1/ue-authentications/?$"
    },
    {
      "defaultId": 14,
      "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/smsf-3gpp-access",
      "httpMethod": "DELETE",
      "regex": "^(?:[^#,{,},?,^])*?/nudm-uecm/v1/(imsi-[0-9]{5,15}|nai-.+|msisdn-[0-9]{5,15}|extid-[^@]+@[^@]+|gci-.+|gli-.+|.+)/registrations/smsf-3gpp-access/?$"
    },
    {
      "defaultId": 15,
      "resourceURI": "/nudm-sdm/v2/shared-data",
      "httpMethod": "GET",
      "regex": "^(?:[^#,{,},?,^])*?/nudm-sdm/v2/shared-data/?$"
    }
  ]

```

```

    },
    {
      "defaultId": 18,
      "resourceURI": "/nnssf-nsselection/v1/network-slice-information",
      "httpMethod": "GET",
      "regex": "^(?:[^#,{,},?,^])*?/nnssf-nsselection/v1/network-slice-
information/?$"
    },
    {
      "defaultId": 19,
      "resourceURI": "/nudm-sdm/v2/{supi}",
      "httpMethod": "GET",
      "regex": "^(?:[^#,{,},?,^])*?/nudm-sdm/v2/(imsi-[0-9]{5,15}|nai-.+|gci-.+|
gli-.+|.+)/?$"
    },
    {
      "defaultId": 20,
      "resourceURI": "/nudm-sdm/v1/{supi}/sm-data",
      "httpMethod": "GET",
      "regex": "^(?:[^#,{,},?,^])*?/nudm-sdm/v1/(imsi-[0-9]{5,15}|nai-.+|.+)/sm-
data/?$"
    },
    {
      "defaultId": 22,
      "resourceURI": "/npcf-ue-policy-control/v1/policies/{polAssoId}/update",
      "httpMethod": "POST",
      "regex": "^(?:[^#,{,},?,^])*?/npcf-ue-policy-control/v1/policies/([0-9a-
zA-Z-]+|.+)/update/?$"
    },
    {
      "defaultId": 23,
      "resourceURI": "/nudm-sdm/v2/{ueId}/sdm-subscriptions",
      "httpMethod": "POST",
      "regex": "^(?:[^#,{,},?,^])*?/nudm-sdm/v2/(imsi-[0-9]{5,15}|nai-.+|
msisdn-[0-9]{5,15}|extid-[^@]+@[^@]+|gci-.+|gli-.+|.+)/sdm-subscriptions/?$"
    },
    {
      "defaultId": 24,
      "resourceURI": "/nudm-sdm/v2/{supi}/sms-data",
      "httpMethod": "GET",
      "regex": "^(?:[^#,{,},?,^])*?/nudm-sdm/v2/(imsi-[0-9]{5,15}|nai-.+|gci-.+|
gli-.+|.+)/sms-data/?$"
    },
    {
      "defaultId": 25,
      "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/smsf-non-3gpp-access",
      "httpMethod": "DELETE",
      "regex": "^(?:[^#,{,},?,^])*?/nudm-uecm/v1/(imsi-[0-9]{5,15}|nai-.+|
msisdn-[0-9]{5,15}|extid-[^@]+@[^@]+|gci-.+|gli-.+|.+)/registrations/smsf-
non-3gpp-access/?$"
    },
    {
      "defaultId": 27,
      "resourceURI": "/nsmf-pdusession/v1/pdu-sessions/{pduSessionRef}/modify",
      "httpMethod": "POST",
      "regex": "^(?:[^#,{,},?,^])*?/nsmf-pdusession/v1/pdu-sessions/([0-9a-zA-

```

```

Z-]|.|.)/modify/?$"
},
{
  "defaultId": 28,
  "resourceURI": "/nudm-sdm/v1/{supi}/am-data/sor-ack",
  "httpMethod": "PUT",
  "regex": "^(?:[^#,{,},?,^])*?/nudm-sdm/v1/(imsi-[0-9]{5,15}|nai-.+|.|.)/am-
data/sor-ack/?$"
},
{
  "defaultId": 31,
  "resourceURI": "/nsmf-pdusession/v1/pdu-sessions/{pduSessionRef}/release",
  "httpMethod": "POST",
  "regex": "^(?:[^#,{,},?,^])*?/nsmf-pdusession/v1/pdu-sessions/([0-9a-zA-
Z-]|.|.)/release/?$"
},
{
  "defaultId": 32,
  "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/smsf-3gpp-access",
  "httpMethod": "PUT",
  "regex": "^(?:[^#,{,},?,^])*?/nudm-uecm/v1/(imsi-[0-9]{5,15}|nai-.+|
msisdn-[0-9]{5,15}|extid-[^@]+@[^@]+|gci-.+|gli-.+|.|.)/registrations/
smsf-3gpp-access/?$"
},
{
  "defaultId": 33,
  "resourceURI": "/nudm-sdm/v2/{supi}/am-data/upu-ack",
  "httpMethod": "PUT",
  "regex": "^(?:[^#,{,},?,^])*?/nudm-sdm/v2/(imsi-[0-9]{5,15}|nai-.+|gci-.+|
gli-.+|.|.)/am-data/upu-ack/?$"
},
{
  "defaultId": 35,
  "resourceURI": "/nausf-auth/v1/ue-authentications/{authCtxId}/5g-aka-
confirmation",
  "httpMethod": "PUT",
  "regex": "^(?:[^#,{,},?,^])*?/nausf-auth/v1/ue-authentications/([0-9a-zA-
Z-]|.|.)/5g-aka-confirmation/?$"
},
{
  "defaultId": 36,
  "resourceURI": "/nnrf-nfm/v1/subscriptions",
  "httpMethod": "POST",
  "regex": "^(?:[^#,{,},?,^])*?/nnrf-nfm/v1/subscriptions/?$"
},
{
  "defaultId": 37,
  "resourceURI": "/nudm-sdm/v2/{supi}/sm-data",
  "httpMethod": "GET",
  "regex": "^(?:[^#,{,},?,^])*?/nudm-sdm/v2/(imsi-[0-9]{5,15}|nai-.+|gci-.+|
gli-.+|.|.)/sm-data/?$"
},
{
  "defaultId": 38,
  "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/amf-3gpp-access",
  "httpMethod": "PUT",

```

```

    "regex": "^(?:[^\#,\{\},\?,^])*/nudm-uecm/v1/(imsi-[0-9]{5,15}|nai-.+|
msisdn-[0-9]{5,15}|extid-[^\@]+\@[^\@]+|gci-.+|gli-.+|.+)/registrations/amf-3gpp-
access/?$"
  },
  {
    "defaultId": 40,
    "resourceURI": "/namf-mt/v1/ue-contexts/{ueContextId}",
    "httpMethod": "GET",
    "regex": "^(?:[^\#,\{\},\?,^])*/namf-mt/v1/ue-contexts/(imsi-[0-9]{5,15}|
nai-.+|gli-.+|gci-.+|.+)/?$"
  },
  {
    "defaultId": 41,
    "resourceURI": "/nudm-sdm/v1/{supi}",
    "httpMethod": "GET",
    "regex": "^(?:[^\#,\{\},\?,^])*/nudm-sdm/v1/(imsi-[0-9]{5,15}|nai-.+|.+)/?$"
  },
  {
    "defaultId": 45,
    "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/smf-registrations/
{pduSessionId}",
    "httpMethod": "DELETE",
    "regex": "^(?:[^\#,\{\},\?,^])*/nudm-uecm/v1/(imsi-[0-9]{5,15}|nai-.+|
msisdn-[0-9]{5,15}|extid-[^\@]+\@[^\@]+|gci-.+|gli-.+|.+)/registrations/smf-
registrations/((([01]?[0-9][0-9]?|2[0-4][0-9]|25[0-5])+)/?$"
  },
  {
    "defaultId": 46,
    "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/smsf-non-3gpp-access",
    "httpMethod": "PUT",
    "regex": "^(?:[^\#,\{\},\?,^])*/nudm-uecm/v1/(imsi-[0-9]{5,15}|nai-.+|
msisdn-[0-9]{5,15}|extid-[^\@]+\@[^\@]+|gci-.+|gli-.+|.+)/registrations/smsf-
non-3gpp-access/?$"
  },
  {
    "defaultId": 47,
    "resourceURI": "/nudm-sdm/v1/{supi}/am-data",
    "httpMethod": "GET",
    "regex": "^(?:[^\#,\{\},\?,^])*/nudm-sdm/v1/(imsi-[0-9]{5,15}|nai-.+|.+)/am-
data/?$"
  },
  {
    "defaultId": 48,
    "resourceURI": "/namf-evts/v1/subscriptions",
    "httpMethod": "POST",
    "regex": "^(?:[^\#,\{\},\?,^])*/namf-evts/v1/subscriptions/?$"
  },
  {
    "defaultId": 49,
    "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/smsf-non-3gpp-access",
    "httpMethod": "GET",
    "regex": "^(?:[^\#,\{\},\?,^])*/nudm-uecm/v1/(imsi-[0-9]{5,15}|nai-.+|
msisdn-[0-9]{5,15}|extid-[^\@]+\@[^\@]+|gci-.+|gli-.+|.+)/registrations/smsf-
non-3gpp-access/?$"
  },
  {

```

```

    "defaultId": 50,
    "resourceURI": "/nudm-sdm/v1/{supi}/ue-context-in-smf-data",
    "httpMethod": "GET",
    "regex": "^(?:[^#,{,},?,^])*?/nudm-sdm/v1/(imsi-[0-9]{5,15}|nai-.+|.+)/ue-
context-in-smf-data/?$"
  },
  {
    "defaultId": 51,
    "resourceURI": "/nudm-sdm/v1/shared-data",
    "httpMethod": "GET",
    "regex": "^(?:[^#,{,},?,^])*?/nudm-sdm/v1/shared-data/?$"
  },
  {
    "defaultId": 52,
    "resourceURI": "/nsmf-pdusession/v1/pdu-sessions",
    "httpMethod": "POST",
    "regex": "^(?:[^#,{,},?,^])*?/nsmf-pdusession/v1/pdu-sessions/?$"
  },
  {
    "defaultId": 54,
    "resourceURI": "/nnrf-disc/v1/nf-instances",
    "httpMethod": "GET",
    "regex": "^(?:[^#,{,},?,^])*?/nnrf-disc/v1/nf-instances/?$"
  },
  {
    "defaultId": 55,
    "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/smf-3gpp-access",
    "httpMethod": "GET",
    "regex": "^(?:[^#,{,},?,^])*?/nudm-uecm/v1/(imsi-[0-9]{5,15}|nai-.+|
msisdn-[0-9]{5,15}|extid-[^@]+@[^@]+|gci-.+|gli-.+|.+)/registrations/
smf-3gpp-access/?$"
  },
  {
    "defaultId": 56,
    "resourceURI": "/nnssf-nsselection/v2/network-slice-information",
    "httpMethod": "GET",
    "regex": "^(?:[^#,{,},?,^])*?/nnssf-nsselection/v2/network-slice-
information/?$"
  },
  {
    "defaultId": 57,
    "resourceURI": "/namf-comm/v1/subscriptions/{subscriptionId}",
    "httpMethod": "PUT",
    "regex": "^(?:[^#,{,},?,^])*?/namf-comm/v1/subscriptions/(([0-9]{5,6})-)?
[^-]+)?/?$"
  },
  {
    "defaultId": 60,
    "resourceURI": "/nudm-sdm/v2/{supi}/sms-mng-data",
    "httpMethod": "GET",
    "regex": "^(?:[^#,{,},?,^])*?/nudm-sdm/v2/(imsi-[0-9]{5,15}|nai-.+|gci-.+|
gli-.+|.+)/sms-mng-data/?$"
  },
  {
    "defaultId": 63,
    "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/amf-3gpp-access",

```

```

        "httpMethod": "GET",
        "regex": "^(?:[^#,{,},?,^])*?/nudm-uecm/v1/(imsi-[0-9]{5,15}|nai-.+|msisdn-[0-9]{5,15}|extid-[^@]+@[^@]+|gci-.+|gli-.+|.+)/registrations/amf-3gpp-access/?$"
    },
    {
        "defaultId": 64,
        "resourceURI": "/nudm-sdm/v1/{supi}/nssai",
        "httpMethod": "GET",
        "regex": "^(?:[^#,{,},?,^])*?/nudm-sdm/v1/(imsi-[0-9]{5,15}|nai-.+|.+)/nssai/?$"
    },
    {
        "defaultId": 65,
        "resourceURI": "/nudm-sdm/v2/{supi}/nssai",
        "httpMethod": "GET",
        "regex": "^(?:[^#,{,},?,^])*?/nudm-sdm/v2/(imsi-[0-9]{5,15}|nai-.+|gci-.+|gli-.+|.+)/nssai/?$"
    },
    {
        "defaultId": 66,
        "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/amf-non-3gpp-access",
        "httpMethod": "PUT",
        "regex": "^(?:[^#,{,},?,^])*?/nudm-uecm/v1/(imsi-[0-9]{5,15}|nai-.+|msisdn-[0-9]{5,15}|extid-[^@]+@[^@]+|gci-.+|gli-.+|.+)/registrations/amf-non-3gpp-access/?$"
    },
    {
        "defaultId": 67,
        "resourceURI": "/nudm-sdm/v2/{supi}/smf-select-data",
        "httpMethod": "GET",
        "regex": "^(?:[^#,{,},?,^])*?/nudm-sdm/v2/(imsi-[0-9]{5,15}|nai-.+|gci-.+|gli-.+|.+)/smf-select-data/?$"
    },
    {
        "defaultId": 69,
        "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/smf-registrations/{pduSessionId}",
        "httpMethod": "PUT",
        "regex": "^(?:[^#,{,},?,^])*?/nudm-uecm/v1/(imsi-[0-9]{5,15}|nai-.+|msisdn-[0-9]{5,15}|extid-[^@]+@[^@]+|gci-.+|gli-.+|.+)/registrations/smf-registrations/(([01]?[0-9][0-9]?|2[0-4][0-9]|25[0-5])+)/?$"
    },
    {
        "defaultId": 85,
        "resourceURI": "/nsmf-pdusession/v1/pdu-sessions/{pduSessionRef}/retrieve",
        "httpMethod": "POST",
        "regex": "^(?:[^#,{,},?,^])*?/nsmf-pdusession/v1/pdu-sessions/([0-9a-zA-Z-]+|.+)/retrieve/?$"
    }
}

```

2.26.4 Message Validation Schema Configuration

Message Validation Schema Configuration REST API allows the user to configure the schema for a given Resource URI and HTTP Methods.

Table 2-70 Message Validation Schema Configuration REST API

Method	URL	Description	Input	Return	Example
GET	"/sepp-configuration/v1/message-validation-api-config"	This API is used to fetch the complete list of message validation default apis schema configurations		List<MessageValidationApiConfig>	curl -X 'GET' \ 'http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/v1/message-validation-api-config' \ -H 'accept: */*'
GET	"/sepp-configuration/v1/message-validation-api-config/{id}"	This API is used to fetch a particular api and its schema corresponding to given id (picked from message_validation_api_config db table id column) as an input	id	MessageValidationApiConfig	curl -X 'GET' \ 'http://<SEPP-Configuration IP>:<PORT>/sepp-configuration/v1/message-validation-api-config/1' \ -H 'accept: */*'

Table 2-70 (Cont.) Message Validation Schema Configuration REST API

Method	URL	Description	Input	Return	Example
POST	/sepp-configuration/v1/message-validation-api-config/{id}"	This API is used to add new Message validation api (resource URI, HTTP method and schema Value(JSON format)).User provided id and the id which will be saved in db might not be same.Note: Before adding any resource URI and corresponding schema using this API, that resource URI/ HTTP method combination need to be present in default_service_api_list_configuration table first.	id and MessageValidationApiConfig	201 CREATED	<pre> curl -X 'POST' \ 'http:// localhost:9090/ sepp- configuration/v1/ message- validation-api- config/51' \ -H 'accept: */.*' \ -H 'Content- Type: application/ json' \ -d '{ "defaultId": 51, "resourceURI" : "/namf- loc/v1/ {ueContextId} /provide-loc- info", "httpMethod": "POST", "schemaValue" : {"type":\ object\,\ properties\ :{"req5gsLoc\ ": {"type":\ boolean\,\ default\ :false },\ "reqRatTyp e\ :{"type":\ boolean\,\ default\ :false },\ "reqTimeZo ne\ :{"type":\ boolean\,\ default\ :false },\ "reqCurren tLoc\ :{"type":\ boolean\ </pre>

Table 2-70 (Cont.) Message Validation Schema Configuration REST API

Method	URL	Description	Input	Return	Example
					oolean\", \"default\":false}, \"supportedFeatures\": {\"type\": \"string\", \"pattern\": \"^[A-Za-f0-9]*\$\"}}}

Table 2-70 (Cont.) Message Validation Schema Configuration REST API

Method	URL	Description	Input	Return	Example
PUT	"/sepp-configuration/v1/message-validation-api-config/{id}"	This API is used to update existing resource URI, HTTP method, schema corresponding to given id (picked from message_validation_api_config db table id column) as an input	id and MessageValidationApiConfig	201 CREATED	<pre>curl -X 'PUT' \ 'http:// localhost:9090/ sepp- configuration/v1/ message- validation-api- config/33' \ -H 'accept: */.*' \ -H 'Content- Type: application/ json' \ -d '{ "defaultId": 33, "resourceURI" : "/nudm- uecm/v1/ {ueId}/ registrations /smsf-3gpp- access", "httpMethod": "GET", "schemaValue" : "[{"in": "query", "name": "supported- features", "schema": { "type": "string", "pattern": "[A-Fa-f0-9]*\$"}, "required": false}]' }</pre>

Table 2-70 (Cont.) Message Validation Schema Configuration REST API

Method	URL	Description	Input	Return	Example
DELETE	/sepp-configuration/v1/message-validation-api-config/{id}	This API is used to delete an existing message validation api and corresponding schema.	ID	204 No Content	<pre>curl -X 'DELETE' \ 'http:// <SEPP- Configuration IP>:<PORT>/ sepp- configuration /v1/message- validation- api- config/1' \ - H 'accept: */' \sepp- configuration /v1/message- validation- api- config/1' \ -H 'accept: */'</pre>

Table 2-71 Message Validation Schema Configuration Parameters

Attribute	Datatype	Mandatory(M)/ Conditional(C)/ Optional(O)	Description
defaultId	integer	M	Id
resourceURI	String	M	Resource URI
httpMethod	HTTPMethod	M	HTTP Method
schemaValue	String	M	schema value (JSON)

Sample Response body structure for GET operations

Resource API :"/sepp-configuration/v1/message-validation-api-config"

Resource Method : GET

Content Type : application/json

```
[
  {
    "defaultId": 1,
    "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/smsf-non-3gpp-access",
    "httpMethod": "DELETE",
    "schemaValue": "[{\"in\": \"query\", \"name\": \"smsf-set-id\",
\\schema\": {\"type\": \"string\", \"required\": false}}]",
  },
  {
    "defaultId": 2,
    "resourceURI": "/nudm-sdm/v2/{supi}/am-data/sor-ack",
```

```

    "httpMethod": "PUT",
    "schemaValue": "{ \"type\": \"object\", \"required\":
[\"provisioningTime\", \"properties\": { \"sorMacIue\": { \"type\":
\"string\", \"pattern\": \"^[A-Fa-f0-9]{32}$\"}, \"upuMacIue\": { \"type\":
\"string\", \"pattern\": \"^[A-Fa-f0-9]{32}$\"}, \"securedPacket\":
{ \"type\": \"string\", \"format\": \"byte\"}, \"ueNotReachable\": { \"type\":
\"boolean\", \"default\": false}, \"provisioningTime\": { \"type\":
\"string\", \"format\": \"date-time\"}} }"
  },
  {
    "defaultId": 3,
    "resourceURI": "/nnrf-disc/v1/nf-instances",
    "httpMethod": "GET",
    "schemaValue": "[ { \"in\": \"query\", \"name\": \"target-nf-type\",
\"schema\": { \"anyOf\": [ { \"enum\": [ \"NRF\", \"UDM\", \"AMF\", \"SMF\",
\"AUSF\", \"NEF\", \"PCF\", \"SMSF\", \"NSSF\", \"UDR\", \"LMF\", \"GMLC\",
\"5G_EIR\", \"SEPP\", \"UPF\", \"N3IWF\", \"AF\", \"UDSF\", \"BSF\", \"CHF\",
\"NWDAF\", \"PCSCF\", \"CBCF\", \"HSS\", \"UCMF\", \"SOR_AF\", \"SPAF\",
\"MME\", \"SCSAS\", \"SCEF\", \"SCP\", \"NSSAAF\", \"ICSCF\", \"SCSCF\",
\"DRA\", \"IMS_AS\", \"CEF\" ], \"type\": \"string\" }, { \"type\":
\"string\" } ], \"description\": \"NF types known to NRF\", \"required\":
true }, { \"in\": \"query\", \"name\": \"requester-nf-type\", \"schema\":
{ \"anyOf\": [ { \"enum\": [ \"NRF\", \"UDM\", \"AMF\", \"SMF\", \"AUSF\",
\"NEF\", \"PCF\", \"SMSF\", \"NSSF\", \"UDR\", \"LMF\", \"GMLC\", \"5G_EIR\",
\"SEPP\", \"UPF\", \"N3IWF\", \"AF\", \"UDSF\", \"BSF\", \"CHF\", \"NWDAF\",
\"PCSCF\", \"CBCF\", \"HSS\", \"UCMF\", \"SOR_AF\", \"SPAF\", \"MME\",
\"SCSAS\", \"SCEF\", \"SCP\", \"NSSAAF\", \"ICSCF\", \"SCSCF\", \"DRA\",
\"IMS_AS\", \"CEF\" ], \"type\": \"string\" }, { \"type\": \"string\" } ],
\"description\": \"NF types known to NRF\", \"required\": true }, { \"in\":
\"query\", \"name\": \"requester-nf-instance-id\", \"schema\": { \"type\":
\"string\", \"format\": \"uuid\" }, \"required\": false }, { \"in\": \"query\",
\"name\": \"service-names\", \"schema\": { \"type\": \"array\", \"items\":
{ \"anyOf\": [ { \"enum\": [ \"nnrf-nfm\", \"nnrf-disc\", \"nnrf-oauth2\", \"nudm-
sdm\", \"nudm-uecm\", \"nudm-ueau\", \"nudm-ee\", \"nudm-pp\", \"nudm-
niddau\", \"nudm-mt\", \"namf-comm\", \"namf-evts\", \"namf-mt\", \"namf-
loc\", \"nsmf-pdusession\", \"nsmf-event-exposure\", \"nsmf-nidd\", \"nausf-
auth\", \"nausf-sorprotection\", \"nausf-upuprotection\", \"nnef-
pfdmanagement\", \"nnef-smcontext\", \"nnef-eventexposure\", \"3gpp-cp-
parameter-provisioning\", \"3gpp-device-triggering\", \"3gpp-bdt\", \"3gpp-
traffic-influence\", \"3gpp-chargeable-party\", \"3gpp-as-session-with-qos\",
\"3gpp-msisdn-less-mo-sms\", \"3gpp-service-parameter\", \"3gpp-monitoring-
event\", \"3gpp-nidd-configuration-trigger\", \"3gpp-nidd\", \"3gpp-
analyticsexposure\", \"3gpp-racs-parameter-provisioning\", \"3gpp-ecr-
control\", \"3gpp-applying-bdt-policy\", \"3gpp-mo-lcs-notify\", \"npcf-am-
policy-control\", \"npcf-smpolicycontrol\", \"npcf-policyauthorization\",
\"npcf-bdtpolicycontrol\", \"npcf-eventexposure\", \"npcf-ue-policy-
control\", \"nsmf-sms\", \"nsmf-nssaiavailability\", \"nsmf-
management\", \"nchf-spendinglemitcontrol\", \"nchf-convergedcharging\",
\"nchf-offlineonlycharging\", \"nnwdafeventsubscription\", \"nnwdafe-
analyticsinfo\", \"ngmlc-loc\", \"nucmf-provisioning\", \"nucmf-
uecapabilitymanagement\", \"nhss-sdm\", \"nhss-uecm\", \"nhss-ueau\", \"nhss-
ee\", \"nhss-ims-sdm\", \"nhss-ims-uecm\", \"nhss-ims-ueau\", \"nsepp-
telescopic\", \"nsoraf-sor\", \"nspaf-secured-packet\", \"nudsf-dr\",
\"nssaa-nssaa\" ], \"type\": \"string\" }, { \"type\": \"string\" } ],
\"description\": \"Service names known to NRF\", \"minItems\": 1,

```

```

\"uniqueItems\": true}, \"required\": false}, {\"in\": \"query\", \"name\":
\"requester-nf-instance-fqdn\", \"schema\": {\"type\": \"string\",
\"description\": \"Fully Qualified Domain Name\", \"required\": false},
{\"in\": \"query\", \"name\": \"target-plmn-list\", \"content\":
{\"application/json\": {\"schema\": {\"type\": \"array\", \"items\":
{\"type\": \"object\", \"required\": [\"mcc\", \"mnc\"], \"properties\":
{\"mcc\": {\"type\": \"string\", \"pattern\": \"^\\\\\\\\d{3}$\", \"mnc\":
{\"type\": \"string\", \"pattern\": \"^\\\\\\\\d{2,3}$\"}}}, \"minItems\": 1}}},
\"required\": false}, {\"in\": \"query\", \"name\": \"requester-plmn-list\",
\"content\": {\"application/json\": {\"schema\": {\"type\": \"array\",
\"items\": {\"type\": \"object\", \"required\": [\"mcc\", \"mnc\"],
\"properties\": {\"mcc\": {\"type\": \"string\", \"pattern\": \"^\\\\\\\\d{3}$
\", \"mnc\": {\"type\": \"string\", \"pattern\": \"^\\\\\\\\d{2,3}$\"}}},
\"minItems\": 1}}}, \"required\": false}, {\"in\": \"query\", \"name\":
\"target-nf-instance-id\", \"schema\": {\"type\": \"string\", \"format\":
\"uuid\", \"required\": false}, {\"in\": \"query\", \"name\": \"target-nf-
fqdn\", \"schema\": {\"type\": \"string\", \"description\": \"Fully Qualified
Domain Name\", \"required\": false}, {\"in\": \"query\", \"name\": \"hnrf-
uri\", \"schema\": {\"type\": \"string\", \"required\": false}, {\"in\":
\"query\", \"name\": \"snssais\", \"content\": {\"application/json\":
{\"schema\": {\"type\": \"array\", \"items\": {\"type\": \"object\",
\"required\": [\"sst\"], \"properties\": {\"sd\": {\"type\": \"string\",
\"pattern\": \"^[A-Fa-f0-9]{6}$\", \"sst\": {\"type\": \"integer\",
\"maximum\": 255, \"minimum\": 0}}}, \"minItems\": 1}}}, \"required\":
false}, {\"in\": \"query\", \"name\": \"requester-snssais\", \"content\":
{\"application/json\": {\"schema\": {\"type\": \"array\", \"items\":
{\"type\": \"object\", \"required\": [\"sst\"], \"properties\": {\"sd\":
{\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{6}$\", \"sst\":
{\"type\": \"integer\", \"maximum\": 255, \"minimum\": 0}}}, \"minItems\":
1}}}, \"required\": false}, {\"in\": \"query\", \"name\": \"plmn-specific-
snssai-list\", \"content\": {\"application/json\": {\"schema\": {\"type\":
\"array\", \"items\": {\"type\": \"object\", \"required\": [\"plmnId\",
\"snssaiList\"], \"properties\": {\"nid\": {\"type\": \"string\",
\"pattern\": \"^[A-Fa-f0-9]{11}$\", \"plmnId\": {\"type\": \"object\",
\"required\": [\"mcc\", \"mnc\"], \"properties\": {\"mcc\": {\"type\":
\"string\", \"pattern\": \"^\\\\\\\\d{3}$\", \"mnc\": {\"type\": \"string\",
\"pattern\": \"^\\\\\\\\d{2,3}$\"}}}, \"snssaiList\": {\"type\": \"array\",
\"items\": {\"allof\": [{\"type\": \"object\", \"required\": [\"sst\"],
\"properties\": {\"sd\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]
{6}$\", \"sst\": {\"type\": \"integer\", \"maximum\": 255, \"minimum\":
0}}}, {\"not\": {\"required\": [\"sdRanges\", \"wildcardSd\"]}, \"type\":
\"object\", \"properties\": {\"sdRanges\": {\"type\": \"array\", \"items\":
{\"type\": \"object\", \"properties\": {\"end\": {\"type\": \"string\",
\"pattern\": \"^[A-Fa-f0-9]{6}$\", \"start\": {\"type\": \"string\",
\"pattern\": \"^[A-Fa-f0-9]{6}$\"}}, \"description\": \"A range of SDs (Slice
Differentiators)\", \"minItems\": 1, \"description\": \"When present, it
shall contain the range(s) of Slice Differentiator values supported for the
Slice/Service Type value indicated in the sst attribute of the Snssai data
type\", \"wildcardSd\": {\"enum\": [true], \"type\": \"boolean\",
\"description\": \"When present, it shall be set to true, to indicate that
all SD values are supported for the Slice/Service Type value indicated in the
sst attribute of the Snssai data type\"}}, \"description\": \"List of network
slices (S-NSSAIs) for a given PLMN ID\", \"minItems\": 1}}}, \"required\":
false}, {\"in\": \"query\", \"name\": \"requester-plmn-specific-snssai-

```

```

list\", \"content\": {\"application/json\": {\"schema\": {\"type\":
\"array\", \"items\": {\"type\": \"object\", \"required\": [\"plmnId\",
\"sNssaiList\"], \"properties\": {\"nid\": {\"type\": \"string\",
\"pattern\": \"^[A-Fa-f0-9]{11}$\"}, \"plmnId\": {\"type\": \"object\",
\"required\": [\"mcc\", \"mnc\"], \"properties\": {\"mcc\": {\"type\":
\"string\", \"pattern\": \"^[\\d]{3}$\"}, \"mnc\": {\"type\": \"string\",
\"pattern\": \"^[\\d]{2,3}$\"}}}, \"sNssaiList\": {\"type\": \"array\",
\"items\": {\"allOf\": [{\"type\": \"object\", \"required\": [\"sst\"],
\"properties\": {\"sd\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]
{6}$\"}, \"sst\": {\"type\": \"integer\", \"maximum\": 255, \"minimum\":
0}}}, {\"not\": {\"required\": [\"sdRanges\", \"wildcardSd\"]}, \"type\":
\"object\", \"properties\": {\"sdRanges\": {\"type\": \"array\", \"items\":
{\"type\": \"object\", \"properties\": {\"end\": {\"type\": \"string\",
\"pattern\": \"^[A-Fa-f0-9]{6}$\"}, \"start\": {\"type\": \"string\",
\"pattern\": \"^[A-Fa-f0-9]{6}$\"}}, \"description\": \"A range of SDs (Slice
Differentiators)\", \"minItems\": 1, \"description\": \"When present, it
shall contain the range(s) of Slice Differentiator values supported for the
Slice/Service Type value indicated in the sst attribute of the Snsai data
type\", \"wildcardSd\": {\"enum\": [true], \"type\": \"boolean\",
\"description\": \"When present, it shall be set to true, to indicate that
all SD values are supported for the Slice/Service Type value indicated in the
sst attribute of the Snsai data type\"}}, \"description\": \"Extensions to
the Snsai data type, sdRanges and wildcardSd shall not be present
simultaneously\"}}}, \"minItems\": 1}}, \"description\": \"List of network
slices (S-NSSAIs) for a given PLMN ID\", \"minItems\": 1}}, \"required\":
false}, {\"in\": \"query\", \"name\": \"dnn\", \"schema\": {\"type\":
\"string\", \"required\": false}, {\"in\": \"query\", \"name\": \"nsi-
list\", \"schema\": {\"type\": \"array\", \"items\": {\"type\": \"string\",
\"minItems\": 1}, \"required\": false}, {\"in\": \"query\", \"name\": \"smf-
serving-area\", \"schema\": {\"type\": \"string\", \"required\": false},
{\"in\": \"query\", \"name\": \"tai\", \"content\": {\"application/json\":
{\"schema\": {\"type\": \"object\", \"required\": [\"plmnId\", \"tac\"],
\"properties\": {\"nid\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]
{11}$\"}, \"tac\": {\"type\": \"string\", \"pattern\": \"(^[A-Fa-f0-9]{4}$)|
(^[A-Fa-f0-9]{6}$)\"}, \"plmnId\": {\"type\": \"object\", \"required\":
[\"mcc\", \"mnc\"], \"properties\": {\"mcc\": {\"type\": \"string\",
\"pattern\": \"^[\\d]{3}$\"}, \"mnc\": {\"type\": \"string\", \"pattern\":
\"^[\\d]{2,3}$\"}}}}}, \"required\": false}, {\"in\": \"query\", \"name\":
\"amf-region-id\", \"schema\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-
f0-9]{2}$\"}, \"required\": false}, {\"in\": \"query\", \"name\": \"amf-set-
id\", \"schema\": {\"type\": \"string\", \"pattern\": \"^[0-3][A-Fa-f0-9]{2}$
\"}, \"required\": false}, {\"in\": \"query\", \"name\": \"guami\",
\"content\": {\"application/json\": {\"schema\": {\"type\": \"object\",
\"required\": [\"amfId\", \"plmnId\"], \"properties\": {\"amfId\": {\"type\":
\"string\", \"pattern\": \"^[A-Fa-f0-9]{6}$\"}, \"plmnId\": {\"type\":
\"object\", \"required\": [\"mcc\", \"mnc\"], \"properties\": {\"mcc\":
{\"type\": \"string\", \"pattern\": \"^[\\d]{3}$\"}, \"mnc\": {\"type\":
\"string\", \"pattern\": \"^[\\d]{2,3}$\"}, \"nid\": {\"type\": \"string\",
\"pattern\": \"^[A-Fa-f0-9]{11}$\"}}}}}, \"required\": false}, {\"in\":
\"query\", \"name\": \"supi\", \"schema\": {\"type\": \"string\",
\"pattern\": \"^(imsi-[0-9]{5,15}|nai-.+|gci-.+|gli-.+|.+)\"}, \"required\":
false}, {\"in\": \"query\", \"name\": \"ue-ip4-address\", \"schema\":
{\"type\": \"string\", \"example\": \"198.51.100.1\", \"pattern\": \"^([0-9]
|1-9|[0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5])\\.\\.\\.){3}([0-9]|1-9|[0-9]|1[0-9]
[0-9]|2[0-4][0-9]|25[0-5])$\"}, \"required\": false}, {\"in\": \"query\",
\"name\": \"ip-domain\", \"schema\": {\"type\": \"string\", \"required\":

```

```
{
  "in": "\query", "name": "\ue-ipv6-prefix", "schema": {
    "type": "\string", "allof": [
      {
        "pattern": "\^((|(?|([1-9a-f][0-9a-f]{0,3})))|((?|([1-9a-f][0-9a-f]{0,3})))|{0,6}:(|(?|([1-9a-f][0-9a-f]{0,3})))|\\\|/((([0-9])|([0-9]{2})|(1[0-1][0-9])|(12[0-8]))))$"}, {
        "pattern": "\^((([^\:]+):){7}([^\:]+)|((([^\:]+)*[^\:]+)?::(([^\:]+)*[^\:]+)?)(\\\|/.)+$\n"}], "example": "\2001:db8:abcd:12::0/64", "required": false,
    "in": "\query", "name": "\pgw-ind", "schema": {
      "type": "\boolean", "required": false,
      "in": "\query", "name": "\pgw", "schema": {
        "type": "\string", "description": "\Fully Qualified Domain Name", "required": false,
        "in": "\query", "name": "\gpsi", "schema": {
          "type": "\string", "pattern": "\^([msidsn-[0-9]{5,15}|extid-[^\@]+@[^\@]+|.+)$$", "required": false,
          "in": "\query", "name": "\external-group-identity", "schema": {
            "type": "\string", "pattern": "\^extgroupid-[^\@]+@[^\@]+$$", "required": false,
            "in": "\query", "name": "\internal-group-identity", "schema": {
              "type": "\string", "pattern": "\^[A-Za-f0-9]{8}-[0-9]{3}-[0-9]{2,3}-([A-Za-f0-9][A-Za-f0-9]){1,10}$$", "required": false,
              "in": "\query", "name": "\pfd-data", "content": {
                "application/json": {
                  "schema": {
                    "type": "\object", "properties": {
                      "afIds": {
                        "type": "\array", "items": {
                          "type": "\string", "minItems": 1,
                          "appIds": {
                            "type": "\array", "items": {
                              "type": "\string", "minItems": 1,
                              "description": "\List of Application IDs and/or AF IDs managed by a given NEF Instance"
                            }
                          }
                        }
                      }
                    }
                  }, "required": false,
                  "in": "\query", "name": "\data-set", "schema": {
                    "anyOf": [
                      {
                        "enum": [
                          "\SUBSCRIPTION", "\POLICY", "\EXPOSURE", "\APPLICATION"
                        ], "type": "\string", "type": "\string"
                      }, "description": "\Types of data sets stored in UDR", "required": false,
                      "in": "\query", "name": "\routing-indicator", "schema": {
                        "type": "\string", "pattern": "\^[0-9]{1,4}$$", "required": false,
                        "in": "\query", "name": "\group-id-list", "schema": {
                          "type": "\array", "items": {
                            "type": "\string", "minItems": 1, "required": false,
                            "in": "\query", "name": "\dnai-list", "schema": {
                              "type": "\array", "items": {
                                "type": "\string", "minItems": 1, "required": false,
                                "in": "\query", "name": "\pdu-session-types", "schema": {
                                  "type": "\array", "items": {
                                    "anyOf": [
                                      {
                                        "enum": [
                                          "\IPv4", "\IPv6", "\IPv4v6", "\UNSTRUCTURED", "\ETHERNET"
                                        ], "type": "\string", "type": "\string"
                                      }
                                    ], "minItems": 1, "required": false,
                                    "in": "\query", "name": "\event-id-list", "schema": {
                                      "type": "\array", "items": {
                                        "anyOf": [
                                          {
                                            "enum": [
                                              "\LOAD_LEVEL_INFORMATION", "\NETWORK_PERFORMANCE", "\NF_LOAD", "\SERVICE_EXPERIENCE", "\UE_MOBILITY", "\UE_COMMUNICATION", "\QOS_SUSTAINABILITY", "\ABNORMAL_BEHAVIOUR", "\USER_DATA_CONGESTION", "\NSI_LOAD_LEVEL"
                                            ], "type": "\string", "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.\n\n"}], "description": "\Possible values are - LOAD_LEVEL_INFORMATION: Represent the analytics of load level information of corresponding network slice. - NETWORK_PERFORMANCE: Represent the analytics of network performance information. - NF_LOAD: Indicates that the event subscribed is NF Load. - SERVICE_EXPERIENCE: Represent the analytics of service experience information of the specific applications. - UE_MOBILITY: Represent the analytics of UE mobility. - UE_COMMUNICATION: Represent the analytics of UE communication. - QOS_SUSTAINABILITY: Represent the analytics of QoS sustainability information in the certain area. - ABNORMAL_BEHAVIOUR: Indicates that the event subscribed is abnormal behaviour information. - USER_DATA_CONGESTION: Represent the analytics of the user data congestion in the certain area. - NSI_LOAD_LEVEL: Represent the analytics of Network Slice and the optionally
```

```

associated Network Slice Instance.\n\n"}, {"minItems": 1}, {"required":
false}, {"in": "query", "name": "nwdafeventlist", "schema":
{"type": "array", "items": {"anyOf": [{"enum":
["SLICE_LOAD_LEVEL", "NETWORK_PERFORMANCE", "NF_LOAD",
"SERVICE_EXPERIENCE", "UE_MOBILITY", "UE_COMMUNICATION",
"QOS_SUSTAINABILITY", "ABNORMAL_BEHAVIOUR", "USER_DATA_CONGESTION",
"NSI_LOAD_LEVEL"], "type": "string"}, {"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.\n\n"}], "description": "Possible values
are - SLICE_LOAD_LEVEL: Indicates that the event subscribed is load level
information of Network Slice - NETWORK_PERFORMANCE: Indicates that the event
subscribed is network performance information. - NF_LOAD: Indicates that the
event subscribed is load level and status of one or several Network
Functions. - SERVICE_EXPERIENCE: Indicates that the event subscribed is
service experience. - UE_MOBILITY: Indicates that the event subscribed is UE
mobility information. - UE_COMMUNICATION: Indicates that the event subscribed
is UE communication information. - QOS_SUSTAINABILITY: Indicates that the
event subscribed is QoS sustainability. - ABNORMAL_BEHAVIOUR: Indicates that
the event subscribed is abnormal behaviour. - USER_DATA_CONGESTION: Indicates
that the event subscribed is user data congestion information. -
NSI_LOAD_LEVEL: Indicates that the event subscribed is load level information
of Network Slice and the optionally associated Network Slice Instance\n\n"},
{"minItems": 1}, {"required": false}, {"in": "query", "name":
"supportedfeatures", "schema": {"type": "string", "pattern": "^[A-
Fa-f0-9]*$"}, {"required": false}, {"in": "query", "name": "upfiwk-
epsind", "schema": {"type": "boolean"}, {"required": false},
{"in": "query", "name": "chfsupportedplmn", "content":
{"application/json": {"schema": {"type": "object", "required":
["mcc", "mnc"], "properties": {"mcc": {"type": "string",
"pattern": "^[0-9]{3}$"}, "mnc": {"type": "string", "pattern":
"^[0-9]{2,3}$"}}, {"required": false}, {"in": "query", "name":
"preferredlocality", "schema": {"type": "string"}, {"required":
false}, {"in": "query", "name": "accesstype", "schema": {"enum":
["3GPP_ACCESS", "NON_3GPP_ACCESS"], "type": "string"}, {"required":
false}, {"in": "query", "name": "limit", "schema": {"type":
"integer", "minimum": 1}, {"required": false}, {"in": "query",
"name": "requiredfeatures", "schema": {"type": "array", "items":
{"type": "string", "pattern": "^[A-Fa-f0-9]*$"}, {"minItems": 1},
{"required": false}, {"in": "query", "name": "complexquery",
"content": {"application/json": {"schema": {"oneOf": [{"type":
"object", "required": ["cnfUnits"], "properties": {"cnfUnits":
{"type": "array", "items": {"type": "object", "required":
["cnfUnit"], "properties": {"cnfUnit": {"type": "array", "items":
{"type": "object", "required": ["attr", "value"], "properties":
{"attr": {"type": "string"}, "value": {}, "negative": {"type":
"boolean"}}}, {"minItems": 1}}}, {"minItems": 1}}}, {"type":
"object", "required": ["dnfUnits"], "properties": {"dnfUnits":
{"type": "array", "items": {"type": "object", "required":
["dnfUnit"], "properties": {"dnfUnit": {"type": "array", "items":
{"type": "object", "required": ["attr", "value"], "properties":
{"attr": {"type": "string"}, "value": {}, "negative": {"type":
"boolean"}}}, {"minItems": 1}}}, {"minItems": 1}}]}], "required":
false}, {"in": "query", "name": "maxpayloadsize", "schema":
{"type": "integer", "default": 124, "maximum": 2000}, {"required":
false}, {"in": "query", "name": "maxpayloadsize-ext", "schema":

```



```

{"type": "integer", "default": 124, "required": false, "in": "query", "name": "atsss-capability", "content": {"application/json": {"schema": {"type": "object", "properties": {"mptcp": {"type": "boolean", "default": false, "atsssLL": {"type": "boolean", "default": false}, "rttWithoutPmf": {"type": "boolean", "default": false}}}}, "required": false, "in": "query", "name": "upf-ue-ip-addr-ind", "schema": {"type": "boolean"}, "required": false, "in": "query", "name": "client-type", "content": {"application/json": {"schema": {"anyOf": [{"enum": ["EMERGENCY_SERVICES", "VALUE_ADDED_SERVICES", "PLMN_OPERATOR_SERVICES", "LAWFUL_INTERCEPT_SERVICES", "PLMN_OPERATOR_BROADCAST_SERVICES", "PLMN_OPERATOR_OM", "PLMN_OPERATOR_ANONYMOUS_STATISTICS", "PLMN_OPERATOR_TARGET_MS_SERVICE_SUPPORT"], "type": "string"}, {"type": "string"}]}}, "required": false, "in": "query", "name": "lmf-id", "content": {"application/json": {"schema": {"type": "string"}, "required": false, "in": "query", "name": "an-node-type", "content": {"application/json": {"schema": {"anyOf": [{"enum": ["GNB", "NG_ENB"], "type": "string"}, {"type": "string"}], "description": "Access Network Node Type (gnb, ng-enb...)"}}, "required": false, "in": "query", "name": "rat-type", "content": {"application/json": {"schema": {"anyOf": [{"enum": ["NR", "EUTRA", "WLAN", "VIRTUAL", "NBIOT", "WIREFLINE", "WIREFLINE_CABLE", "WIREFLINE_BBF", "LTE-M", "NR-U", "EUTRA-U", "TRUSTED_N3GA", "TRUSTED_WLAN", "UTRA", "GERA"], "type": "string"}, {"type": "string"}]}}, "required": false, "in": "query", "name": "preferred-tai", "content": {"application/json": {"schema": {"type": "object", "required": ["plmnId", "tac"], "properties": {"nid": {"type": "string", "pattern": "^([A-Fa-f0-9]{11}$)|(^([A-Fa-f0-9]{6}$))", "tac": {"type": "string", "pattern": "^([A-Fa-f0-9]{4}$)|(^([A-Fa-f0-9]{6}$))", "plmnId": {"type": "object", "required": ["mcc", "mnc"], "properties": {"mcc": {"type": "string", "pattern": "^\\d{3}$"}, "mnc": {"type": "string", "pattern": "^\\d{2,3}$"}}, "required": false, "in": "query", "name": "preferred-nf-instances", "schema": {"type": "array", "items": {"type": "string", "format": "uuid"}, "minItems": 1}, "required": false, "in": "query", "name": "target-snpn", "content": {"application/json": {"schema": {"type": "object", "required": ["mcc", "mnc"], "properties": {"mcc": {"type": "string", "pattern": "^\\d{3}$"}, "mnc": {"type": "string", "pattern": "^\\d{2,3}$"}, "nid": {"type": "string", "pattern": "^([A-Fa-f0-9]{11}$)|(^([A-Fa-f0-9]{6}$))", "required": false, "in": "query", "name": "requester-snpn-list", "content": {"application/json": {"schema": {"type": "array", "items": {"type": "object", "required": ["mcc", "mnc"], "properties": {"mcc": {"type": "string", "pattern": "^\\d{3}$"}, "mnc": {"type": "string", "pattern": "^\\d{2,3}$"}, "nid": {"type": "string", "pattern": "^([A-Fa-f0-9]{11}$)|(^([A-Fa-f0-9]{6}$))", "minItems": 1}}, "required": false, "in": "query", "name": "af-ee-data", "content": {"application/json": {"schema": {"type": "object", "required": ["afEvents"], "properties": {"afIds": {"type": "array", "items": {"type": "string"}, "minItems": 1}, "appIds": {"type": "array", "items": {"type": "string"}, "minItems": 1}, "afEvents": {"type": "array", "items": {"anyOf": [{"enum": ["SVC_EXPERIENCE", "UE_MOBILITY", "UE_COMM", "EXCEPTIONS"], "type": "string"}, {"type": "string"}]}}, "minItems": 1}}, "description": "AF Event Exposure data managed by a

```

```

given NEF Instance\}}}, {"required": false}, {"in": "query", "name":
"w-agf-info", "content": {"application/json": {"schema": {"type":
"object", "properties": {"endpointFqdn": {"type": "string",
"description": "Fully Qualified Domain Name"}, "ipv4EndpointAddresses":
{"type": "array", "items": {"type": "string", "example":
"198.51.100.1", "pattern": "^([0-9]|[1-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|
25[0-5])\\.([0-9]|[1-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5])$"},
"minItems": 1}, "ipv6EndpointAddresses": {"type": "array", "items":
{"type": "string", "allOf": [{"pattern": "^([0?|([1-9a-f][0-9a-f]
{0,3}))|([0?|([1-9a-f][0-9a-f]{0,3})):{0,6}(:|([0?|([1-9a-f][0-9a-f]
{0,3}))$"}, {"pattern": "^([[:+]]{7}([[:+]]|([[:+]]*[:+])?:
([[:+]]*[:+])?)$"}], "example": "2001:db8:85a3::8a2e:370:7334"},
"minItems": 1}}, {"description": "Information of the W-AGF end-
points\}}}, {"required": false}, {"in": "query", "name": "tngf-
info", "content": {"application/json": {"schema": {"type":
"object", "properties": {"endpointFqdn": {"type": "string",
"description": "Fully Qualified Domain Name"}, "ipv4EndpointAddresses":
{"type": "array", "items": {"type": "string", "example":
"198.51.100.1", "pattern": "^([0-9]|[1-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|
25[0-5])\\.([0-9]|[1-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5])$"},
"minItems": 1}, "ipv6EndpointAddresses": {"type": "array", "items":
{"type": "string", "allOf": [{"pattern": "^([0?|([1-9a-f][0-9a-f]
{0,3}))|([0?|([1-9a-f][0-9a-f]{0,3})):{0,6}(:|([0?|([1-9a-f][0-9a-f]
{0,3}))$"}, {"pattern": "^([[:+]]{7}([[:+]]|([[:+]]*[:+])?:
([[:+]]*[:+])?)$"}], "example": "2001:db8:85a3::8a2e:370:7334"},
"minItems": 1}}, {"description": "Infomation of the TNGF endpoints\}}},
{"required": false}, {"in": "query", "name": "twif-info",
"content": {"application/json": {"schema": {"type": "object",
"properties": {"endpointFqdn": {"type": "string", "description":
"Fully Qualified Domain Name"}, "ipv4EndpointAddresses": {"type":
"array", "items": {"type": "string", "example": "198.51.100.1",
"pattern": "^([0-9]|[1-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5])\\.([0-9]|
[1-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5])$"}, "minItems": 1},
"ipv6EndpointAddresses": {"type": "array", "items": {"type":
"string", "allOf": [{"pattern": "^([0?|([1-9a-f][0-9a-f]{0,3}))|
([0?|([1-9a-f][0-9a-f]{0,3})):{0,6}(:|([0?|([1-9a-f][0-9a-f]{0,3}))$"},
{"pattern": "^([[:+]]{7}([[:+]]|([[:+]]*[:+])?:
([[:+]]*[:+])?)$"}], "example": "2001:db8:85a3::8a2e:370:7334"},
"minItems": 1}}, {"description": "Addressing information (IP addresses, FQDN) of the
TWIF\}}}, {"required": false}, {"in": "query", "name": "target-nf-
set-id", "schema": {"type": "string"}, {"required": false}, {"in":
"query", "name": "target-nf-service-set-id", "schema": {"type":
"string"}, {"required": false}, {"in": "query", "name": "nef-id",
"schema": {"type": "string", "description": "Identity of the NEF"},
{"required": false}, {"in": "query", "name": "notification-type",
"schema": {"anyOf": [{"enum": ["N1_MESSAGES", "N2_INFORMATION",
"LOCATION_NOTIFICATION", "DATA_REMOVAL_NOTIFICATION",
"DATA_CHANGE_NOTIFICATION", "LOCATION_UPDATE_NOTIFICATION",
"NSSAA_REAUTH_NOTIFICATION", "NSSAA_REVOC_NOTIFICATION",
"LCS_KEY_DELIVERY_NOTIFICATION"], "type": "string"}, {"type":
"string"}], "description": "Types of notifications used in Default
Notification URIs in the NF Profile of an NF Instance"}, {"required":
false}, {"in": "query", "name": "n1-msg-class", "schema":
{"anyOf": [{"enum": ["5GMM", "SM", "LPP", "SMS", "UPDP",
"LCS"], "type": "string"}, {"type": "string"}]}, {"required":
false}, {"in": "query", "name": "n2-info-class", "schema":

```

```
{
  "anyOf": [
    {
      "enum": [
        "\SM",
        "\NRPPa",
        "\PWS",
        "\PWS-BCAL",
        "\PWS-RF",
        "\RAN",
        "\V2X"
      ],
      "type": "string"
    },
    {
      "type": "string"
    }
  ],
  "required": false,
  "in": "query",
  "name": "serving-scope",
  "schema": {
    "type": "array",
    "items": {
      "type": "string"
    },
    "minItems": 1,
    "required": false,
    "in": "query",
    "name": "imsi",
    "schema": {
      "type": "string"
    },
    "required": false,
    "in": "query",
    "name": "ims-private-identity",
    "schema": {
      "type": "string"
    },
    "required": false,
    "in": "query",
    "name": "ims-public-identity",
    "schema": {
      "type": "string"
    },
    "required": false,
    "in": "query",
    "name": "msisdn",
    "schema": {
      "type": "string"
    },
    "required": false,
    "in": "query",
    "name": "preferred-api-versions",
    "content": {
      "application/json": {
        "schema": {
          "type": "object",
          "minProperties": 1,
          "additionalProperties": {
            "type": "string"
          }
        }
      }
    },
    "required": false,
    "in": "query",
    "name": "v2x-support-ind",
    "schema": {
      "type": "boolean"
    },
    "required": false,
    "in": "query",
    "name": "redundant-gtpu",
    "schema": {
      "type": "boolean"
    },
    "required": false,
    "in": "query",
    "name": "redundant-transport",
    "schema": {
      "type": "boolean"
    },
    "required": false,
    "in": "query",
    "name": "ipups",
    "schema": {
      "type": "boolean"
    },
    "required": false,
    "in": "query",
    "name": "scp-domain-list",
    "schema": {
      "type": "array",
      "items": {
        "type": "string"
      },
      "minItems": 1,
      "required": false,
      "in": "query",
      "name": "address-domain",
      "schema": {
        "type": "string",
        "description": "Fully Qualified Domain Name",
        "required": false,
        "in": "query",
        "name": "ipv4-addr",
        "schema": {
          "type": "string",
          "example": "198.51.100.1",
          "pattern": "^(([0-9]|[1-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5])\\.){3}([0-9]|[1-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5])$"
        },
        "required": false,
        "in": "query",
        "name": "ipv6-prefix",
        "schema": {
          "type": "string",
          "allOf": [
            {
              "pattern": "^(::|0?([1-9a-f][0-9a-f]{0,3}))?(:0?([1-9a-f][0-9a-f]{0,3}))?:{0,6}(:0?([1-9a-f][0-9a-f]{0,3}))?(/((0-9)|([0-9]{2})|(1[0-1][0-9])|(12[0-8]))$)"
            },
            {
              "pattern": "^(::|0?([1-9a-f][0-9a-f]{0,3}))?(:0?([1-9a-f][0-9a-f]{0,3}))?:{0,6}(:0?([1-9a-f][0-9a-f]{0,3}))?(/((0-9)|([0-9]{2})|(1[0-1][0-9])|(12[0-8]))$)"
            },
            {
              "pattern": "^(::|0?([1-9a-f][0-9a-f]{0,3}))?(:0?([1-9a-f][0-9a-f]{0,3}))?:{0,6}(:0?([1-9a-f][0-9a-f]{0,3}))?(/((0-9)|([0-9]{2})|(1[0-1][0-9])|(12[0-8]))$)"
            }
          ],
          "example": "2001:db8:abcd:12::0/64",
          "required": false,
          "in": "query",
          "name": "served-nf-set-id",
          "schema": {
            "type": "string",
            "required": false,
            "in": "query",
            "name": "remote-plmn-id",
            "content": {
              "application/json": {
                "schema": {
                  "type": "object",
                  "required": [
                    "mcc",
                    "mnc"
                  ],
                  "properties": {
                    "mcc": {
                      "type": "string",
                      "pattern": "^[0-9]{3}$"
                    },
                    "mnc": {
                      "type": "string",
                      "pattern": "^[0-9]{2,3}$"
                    }
                  }
                }
              }
            },
            "required": false,
            "in": "query",
            "name": "data-forwarding",
            "schema": {
              "type": "boolean",
              "required": false,
              "in": "query",
              "name": "preferred-full-plmn",
              "schema": {
                "type": "boolean",
                "required": false,
                "in": "query",
                "name": "requester-features",
                "schema": {
                  "type": "string",
                  "pattern": "^[A-Za-f0-9]*$"
                },
                "required": false,
                "in": "query",
                "name": "realm-id",
                "schema": {
                  "type": "string",
                  "required": false,
                  "in": "query",
                },
                "name": "storage-id",
                "schema": {
                  "type": "string",
                  "required": false,
                  "in": "query",
                },
                "name": "vsmf-support-ind",
                "schema": {
                  "type": "boolean",
                  "required": false,
                  "in": "query",
                },
                "name": "gmlc-number",
                "schema": {
                  "type": "string",
                  "pattern": "^[0-9]{5,15}$"
                },
                "required": false
              }
            }
          }
        }
      }
    }
  ],
  "defaultId": 4,
  "resourceURI": "/nsmf-pdusession/v1/pdu-sessions/{pduSessionRef}/retrieve",
}
```

```

    "httpMethod": "POST",
    "schemaValue": "{ \"type\": \"object\", \"properties\":
{ \"smallDataRateStatusReq\": { \"type\": \"boolean\", \"default\": false } } }",
  },
  {
    "defaultId": 5,
    "resourceURI": "/npcf-ue-policy-control/v1/policies",
    "httpMethod": "POST",
    "schemaValue": "{ \"type\": \"object\", \"required\":
[ \"notificationUri\", \"supi\", \"suppFeat\" ], \"properties\": { \"pei\":
{ \"type\": \"string\", \"pattern\": \"^(imei-[0-9]{15}|imeisv-[0-9]{16}|
mac((-[0-9a-fA-F]{2}){6})(-untrusted)?|eui((-[0-9a-fA-F]{2}){8})|.+)$\",
\"gpsi\": { \"type\": \"string\", \"pattern\": \"^(msisdn-[0-9]{5,15}|extid-
[^@]+@[^@]+|.+) $\", \"supi\": { \"type\": \"string\", \"pattern\":
\"^(imsi-[0-9]{5,15}|nai-.+|gci-.+|gli-.+|.+) $\", \"guami\": { \"type\":
\"object\", \"required\": [ \"amfId\", \"plmnId\" ], \"properties\":
{ \"amfId\": { \"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{6}$\",
\"plmnId\": { \"type\": \"object\", \"required\": [ \"mcc\", \"mnc\" ],
\"properties\": { \"mcc\": { \"type\": \"string\", \"pattern\": \"^[\\d]{3}$
\" }, \"mnc\": { \"type\": \"string\", \"pattern\": \"^[\\d]{2,3}$\" }, \"nid\":
{ \"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{11}$\" } } } } }, \"hPcfId\":
{ \"type\": \"string\", \"format\": \"uuid\" }, \"ratType\": { \"anyOf\":
[ { \"enum\": [ \"NR\", \"EUTRA\", \"WLAN\", \"VIRTUAL\", \"NBIOT\",
\"WIRELINE\", \"WIRELINE_CABLE\", \"WIRELINE_BBF\", \"LTE-M\", \"NR-U\",
\"EUTRA-U\", \"TRUSTED_N3GA\", \"TRUSTED_WLAN\", \"UTRA\", \"GERA\" ],
\"type\": \"string\" }, { \"type\": \"string\" } ] }, \"userLoc\": { \"type\":
\"object\", \"properties\": { \"nrLocation\": { \"type\": \"object\",
\"required\": [ \"ncgi\", \"tai\" ], \"properties\": { \"tai\": { \"type\":
\"object\", \"required\": [ \"plmnId\", \"tac\" ], \"properties\": { \"nid\":
{ \"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{11}$\", \"tac\":
{ \"type\": \"string\", \"pattern\": \"(^([A-Fa-f0-9]{4}$)|(^([A-Fa-f0-9]{6}$)
\" }, \"plmnId\": { \"type\": \"object\", \"required\": [ \"mcc\", \"mnc\" ],
\"properties\": { \"mcc\": { \"type\": \"string\", \"pattern\": \"^[\\d]{3}$
\" }, \"mnc\": { \"type\": \"string\", \"pattern\": \"^[\\d]{2,3}$\" } } } } },
\"ncgi\": { \"type\": \"object\", \"required\": [ \"nrCellId\", \"plmnId\" ],
\"properties\": { \"nid\": { \"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]
{11}$\", \"plmnId\": { \"type\": \"object\", \"required\": [ \"mcc\",
\"mnc\" ], \"properties\": { \"mcc\": { \"type\": \"string\", \"pattern\": \"^[\\d]
{3}$\", \"mnc\": { \"type\": \"string\", \"pattern\": \"^[\\d]{2,3}$\" } } } },
\"nrCellId\": { \"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{9}$\" } } },
\"ignoreNcgi\": { \"type\": \"boolean\", \"default\": false }, \"globalGnbId\":
{ \"type\": \"object\", \"oneOf\": [ { \"required\": [ \"n3IwfId\" ] },
{ \"required\": [ \"gNbId\" ] }, { \"required\": [ \"ngeNbId\" ] }, { \"required\":
[ \"wagfId\" ] }, { \"required\": [ \"tngfId\" ] }, { \"required\": [ \"eNbId\" ] } ] },
\"required\": [ \"plmnId\" ], \"properties\": { \"nid\": { \"type\": \"string\",
\"pattern\": \"^[A-Fa-f0-9]{11}$\", \"eNbId\": { \"type\": \"string\",
\"pattern\": \"^(MacroNb-[A-Fa-f0-9]{5}|MacroNb-[A-Fa-f0-9]{6}|SMacroNb-
[A-Fa-f0-9]{5}|HomeNb-[A-Fa-f0-9]{7})$\", \"gNbId\": { \"type\": \"object\",
\"required\": [ \"bitLength\", \"gNBValue\" ], \"properties\": { \"gNBValue\":
{ \"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{6,8}$\", \"bitLength\":
{ \"type\": \"integer\", \"maximum\": 32, \"minimum\": 22 } } } }, \"plmnId\":
{ \"type\": \"object\", \"required\": [ \"mcc\", \"mnc\" ], \"properties\":
{ \"mcc\": { \"type\": \"string\", \"pattern\": \"^[\\d]{3}$\", \"mnc\":
{ \"type\": \"string\", \"pattern\": \"^[\\d]{2,3}$\" } } } }, \"tngfId\":
{ \"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]+$\", \"wagfId\":
{ \"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]+$\", \"n3IwfId\":

```

```

{"type": "string", "pattern": "^([A-Za-f0-9]+)$", "ngnNbId":
{"type": "string", "pattern": "^(MacroNGeNB-[A-Za-f0-9]{5}|LMacroNGeNB-[A-Za-f0-9]{6}|SMacroNGeNB-[A-Za-f0-9]{5})$", "geodeticInformation":
{"type": "string", "pattern": "[0-9A-F]{20}$",
"ueLocationTimestamp": {"type": "string", "format": "date-time"},
"geographicalInformation": {"type": "string", "pattern": "[0-9A-F]{16}$"},
"ageOfLocationInformation": {"type": "integer", "maximum": 32767, "minimum": 0}},
"geraLocation": {"type": "object", "oneOf": [
{"required": ["cgi"]}, {"required": ["sai"]}, {"required": ["rai"]}, {"required": ["lai"]}],
"properties": {"cgi": {"type": "object", "required": ["cellId", "lac", "plmnId"], "properties": {"lac": {"type": "string", "pattern": "[A-Za-f0-9]{4}$"}, "cellId": {"type": "string", "pattern": "[A-Za-f0-9]{4}$"}, "plmnId": {"type": "object", "required": ["mcc", "mnc"], "properties": {"mcc": {"type": "string", "pattern": "\\d{3}$"}, "mnc": {"type": "string", "pattern": "\\d{2,3}$"}}, "lai": {"type": "object", "required": ["lac", "plmnId"], "properties": {"lac": {"type": "string", "pattern": "[A-Za-f0-9]{4}$"}, "plmnId": {"type": "object", "required": ["mcc", "mnc"], "properties": {"mcc": {"type": "string", "pattern": "\\d{3}$"}, "mnc": {"type": "string", "pattern": "\\d{2,3}$"}}, "rai": {"type": "object", "required": ["lac", "plmnId", "rac"], "properties": {"lac": {"type": "string", "pattern": "[A-Za-f0-9]{4}$"}, "rac": {"type": "string", "pattern": "[A-Za-f0-9]{2}$"}, "plmnId": {"type": "object", "required": ["mcc", "mnc"], "properties": {"mcc": {"type": "string", "pattern": "\\d{3}$"}, "mnc": {"type": "string", "pattern": "\\d{2,3}$"}}, "sai": {"type": "object", "required": ["lac", "plmnId", "sac"], "properties": {"lac": {"type": "string", "pattern": "[A-Za-f0-9]{4}$"}, "sac": {"type": "string", "pattern": "[A-Za-f0-9]{4}$"}, "plmnId": {"type": "object", "required": ["mcc", "mnc"], "properties": {"mcc": {"type": "string", "pattern": "\\d{3}$"}, "mnc": {"type": "string", "pattern": "\\d{2,3}$"}}, "mncNumber": {"type": "string"}, "vlrNumber": {"type": "string"}, "locationNumber": {"type": "string"}, "geodeticInformation": {"type": "string", "pattern": "[0-9A-F]{20}$",
"ueLocationTimestamp": {"type": "string", "format": "date-time"},
"geographicalInformation": {"type": "string", "pattern": "[0-9A-F]{16}$"},
"ageOfLocationInformation": {"type": "integer", "maximum": 32767, "minimum": 0}},
"n3gaLocation": {"type": "object", "properties": {"gci": {"type": "string"}, "gli": {"type": "string", "format": "byte"}, "tnapId": {"type": "object", "properties": {"ssId": {"type": "string"}, "bssId": {"type": "string"}, "civicAddress": {"type": "string", "format": "byte"}}, "twapId": {"type": "object", "required": ["ssId"], "properties": {"ssId": {"type": "string"}, "bssId": {"type": "string"}, "civicAddress": {"type": "string", "format": "byte"}}, "n3IwfId": {"type": "string", "pattern": "[A-Za-f0-9]+$"}, "n3gppTai": {"type": "object", "required": ["plmnId", "tac"], "properties": {"nid": {"type": "string", "pattern": "[A-Za-f0-9]{11}$"}, "tac": {"type": "string", "pattern": "^(^([A-Za-f0-9]{4}$)|(^([A-Za-f0-9]{6}$)\\d{2}$)|(^([A-Za-f0-9]{6}$)\\d{3}$)\\d{2,3}$)}", "plmnId": {"type": "object", "required": ["mcc", "mnc"], "properties": {"mcc": {"type": "string", "pattern": "\\d{3}$"}, "mnc": {"type": "string", "pattern": "\\d{2,3}$"}}, "protocol": {"anyOf": [{"enum": ["UDP", "TCP"]}, {"type": "string"}], "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.\n\n\"}], \"description\": \"Possible values are - UDP: User
Datagram Protocol. - TCP: Transmission Control Protocol.\n\n\"},
\"hfcNodeId\": {\"type\": \"object\", \"required\": [\"hfcNid\"],
\"properties\": {\"hfcNid\": {\"type\": \"string\", \"maxLength\": 6}}},
\"portNumber\": {\"type\": \"integer\", \"minimum\": 0}, \"ueIpv4Addr\":
{\"type\": \"string\", \"example\": \"198.51.100.1\", \"pattern\": \"^([0-9]
[1-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5])\\.\\.\\.){3}([0-9]|1[0-9][0-9]|1[0-9]
[0-9]|2[0-4][0-9]|25[0-5])$\"}, \"ueIpv6Addr\": {\"type\": \"string\",
\"allof\": [{\"pattern\": \"^((?|(?|([1-9a-f][0-9a-f]{0,3})))|(?|([1-9a-f]
[0-9a-f]{0,3})))$\"}, {\"pattern\": \"^((?|([1-9a-f][0-9a-f]{0,3})))$\"}, {\"pattern\":
\"^((([^\"]+):){7}([^\"]+)|((([^\"]+)*[^\"]+)?::([^\"]+)*[^\"]+)?))$\"}],
\"example\": \"2001:db8:85a3::8a2e:370:7334\"}, \"w5gbanLineType\":
{\"anyOf\": [{\"enum\": [\"DSL\", \"PON\"], \"type\": \"string\"}, {\"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.\n\n\"}], \"description\":
\"Possible values are - DSL: Identifies a DSL line - PON: Identifies a PON
line\n\n\"}}}, \"utraLocation\": {\"type\": \"object\", \"oneOf\":
[{\"required\": [\"cgi\"]}, {\"required\": [\"sai\"]}, {\"required\":
[\"rai\"]}], \"properties\": {\"cgi\": {\"type\": \"object\", \"required\":
[\"cellId\", \"lac\", \"plmnId\"], \"properties\": {\"lac\": {\"type\":
\"string\", \"pattern\": \"^[A-Fa-f0-9]{4}$\"}, \"cellId\": {\"type\":
\"string\", \"pattern\": \"^[A-Fa-f0-9]{4}$\"}, \"plmnId\": {\"type\":
\"object\", \"required\": [\"mcc\", \"mnc\"], \"properties\": {\"mcc\":
{\"type\": \"string\", \"pattern\": \"^\\\\\\\\d{3}$\"}, \"mnc\": {\"type\":
\"string\", \"pattern\": \"^\\\\\\\\d{2,3}$\"}}}}}, \"lai\": {\"type\":
\"object\", \"required\": [\"lac\", \"plmnId\"], \"properties\": {\"lac\":
{\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{4}$\"}, \"plmnId\":
{\"type\": \"object\", \"required\": [\"mcc\", \"mnc\"], \"properties\":
{\"mcc\": {\"type\": \"string\", \"pattern\": \"^\\\\\\\\d{3}$\"}, \"mnc\":
{\"type\": \"string\", \"pattern\": \"^\\\\\\\\d{2,3}$\"}}}}}, \"rai\":
{\"type\": \"object\", \"required\": [\"lac\", \"plmnId\", \"rac\"],
\"properties\": {\"lac\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]
{4}$\"}, \"rac\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{2}$\"},
\"plmnId\": {\"type\": \"object\", \"required\": [\"mcc\", \"mnc\"],
\"properties\": {\"mcc\": {\"type\": \"string\", \"pattern\": \"^\\\\\\\\d{3}$
\"}, \"mnc\": {\"type\": \"string\", \"pattern\": \"^\\\\\\\\d{2,3}$\"}}}}},
\"sai\": {\"type\": \"object\", \"required\": [\"lac\", \"plmnId\", \"sac\"],
\"properties\": {\"lac\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]
{4}$\"}, \"sac\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{4}$\"},
\"plmnId\": {\"type\": \"object\", \"required\": [\"mcc\", \"mnc\"],
\"properties\": {\"mcc\": {\"type\": \"string\", \"pattern\": \"^\\\\\\\\d{3}$
\"}, \"mnc\": {\"type\": \"string\", \"pattern\": \"^\\\\\\\\d{2,3}$\"}}}}},
\"geodeticInformation\": {\"type\": \"string\", \"pattern\": \"^[0-9A-F]{20}$
\"}, \"ueLocationTimestamp\": {\"type\": \"string\", \"format\": \"date-
time\"}, \"geographicalInformation\": {\"type\": \"string\", \"pattern\":
\"^[0-9A-F]{16}$\"}, \"ageOfLocationInformation\": {\"type\": \"integer\",
\"maximum\": 32767, \"minimum\": 0}}}, \"eutraLocation\": {\"type\":
\"object\", \"required\": [\"ecgi\", \"tai\"], \"properties\": {\"tai\":
{\"type\": \"object\", \"required\": [\"plmnId\", \"tac\"], \"properties\":
{\"nid\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{11}$\"},
\"tac\": {\"type\": \"string\", \"pattern\": \"(^[A-Fa-f0-9]{4}$)|(^[A-Fa-
f0-9]{6}$)\"}, \"plmnId\": {\"type\": \"object\", \"required\": [\"mcc\",
\"mnc\"], \"properties\": {\"mcc\": {\"type\": \"string\", \"pattern\": \"^\\\\

```

```

\d{3}$\"}, \"mnc\": {\"type\": \"string\", \"pattern\": \"^\\\\d{2,3}$\"}}}}, \"ecgi\": {\"type\": \"object\", \"required\": [\"eutraCellId\", \"plmnId\"], \"properties\": {\"nid\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{11}$\"}, \"plmnId\": {\"type\": \"object\", \"required\": [\"mcc\", \"mnc\"], \"properties\": {\"mcc\": {\"type\": \"string\", \"pattern\": \"^\\\\d{3}$\"}, \"mnc\": {\"type\": \"string\", \"pattern\": \"^\\\\d{2,3}$\"}}}}, \"eutraCellId\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{7}$\"}}, \"ignoreTai\": {\"type\": \"boolean\", \"default\": false}, \"ignoreEcgi\": {\"type\": \"boolean\", \"default\": false}, \"globalENbId\": {\"type\": \"object\", \"oneOf\": [{\"required\": [\"n3IwfId\"], \"required\": [\"gnNbId\"], \"required\": [\"ngeNbId\"], \"required\": [\"wagfId\"], \"required\": [\"tngfId\"], \"required\": [\"eNbId\"]}], \"required\": [\"plmnId\"], \"properties\": {\"nid\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{11}$\"}, \"eNbId\": {\"type\": \"string\", \"pattern\": \"^(MacroNB-[A-Fa-f0-9]{5}|MacroNB-[A-Fa-f0-9]{6}|MacroNB-[A-Fa-f0-9]{5}|HomeNB-[A-Fa-f0-9]{7})$\"}, \"gnNbId\": {\"type\": \"object\", \"required\": [\"bitLength\", \"gnBValue\"], \"properties\": {\"gnBValue\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{6,8}$\"}, \"bitLength\": {\"type\": \"integer\", \"maximum\": 32, \"minimum\": 22}}, \"plmnId\": {\"type\": \"object\", \"required\": [\"mcc\", \"mnc\"], \"properties\": {\"mcc\": {\"type\": \"string\", \"pattern\": \"^\\\\d{3}$\"}, \"mnc\": {\"type\": \"string\", \"pattern\": \"^\\\\d{2,3}$\"}}}}, \"tngfId\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]+$\"}, \"wagfId\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]+$\"}, \"n3IwfId\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]+$\"}, \"ngeNbId\": {\"type\": \"string\", \"pattern\": \"^(MacroNGeNB-[A-Fa-f0-9]{5}|MacroNGeNB-[A-Fa-f0-9]{6}|MacroNGeNB-[A-Fa-f0-9]{5})$\"}}, \"globalNgenbId\": {\"type\": \"object\", \"oneOf\": [{\"required\": [\"n3IwfId\"], \"required\": [\"gnNbId\"], \"required\": [\"ngeNbId\"], \"required\": [\"wagfId\"], \"required\": [\"tngfId\"], \"required\": [\"eNbId\"]}], \"required\": [\"plmnId\"], \"properties\": {\"nid\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{11}$\"}, \"eNbId\": {\"type\": \"string\", \"pattern\": \"^(MacroNB-[A-Fa-f0-9]{5}|MacroNB-[A-Fa-f0-9]{6}|MacroNB-[A-Fa-f0-9]{5}|HomeNB-[A-Fa-f0-9]{7})$\"}, \"gnNbId\": {\"type\": \"object\", \"required\": [\"bitLength\", \"gnBValue\"], \"properties\": {\"gnBValue\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{6,8}$\"}, \"bitLength\": {\"type\": \"integer\", \"maximum\": 32, \"minimum\": 22}}, \"plmnId\": {\"type\": \"object\", \"required\": [\"mcc\", \"mnc\"], \"properties\": {\"mcc\": {\"type\": \"string\", \"pattern\": \"^\\\\d{3}$\"}, \"mnc\": {\"type\": \"string\", \"pattern\": \"^\\\\d{2,3}$\"}}}}, \"tngfId\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]+$\"}, \"wagfId\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]+$\"}, \"n3IwfId\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]+$\"}, \"ngeNbId\": {\"type\": \"string\", \"pattern\": \"^(MacroNGeNB-[A-Fa-f0-9]{5}|MacroNGeNB-[A-Fa-f0-9]{6}|MacroNGeNB-[A-Fa-f0-9]{5})$\"}}, \"geodeticInformation\": {\"type\": \"string\", \"pattern\": \"^[0-9A-F]{20}$\"}, \"ueLocationTimestamp\": {\"type\": \"string\", \"format\": \"date-time\"}, \"geographicalInformation\": {\"type\": \"string\", \"pattern\": \"^[0-9A-F]{16}$\"}, \"ageOfLocationInformation\": {\"type\": \"integer\", \"maximum\": 32767, \"minimum\": 0}}}}, \"groupIds\": {\"type\": \"array\", \"items\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{8}-[0-9]{3}-[0-9]{2,3}-([A-Fa-f0-9]{1,10})$\"}, \"minItems\": 1}, \"pc5Capab\": {\"anyOf\": [{\"enum\": [\"LTE_PC5\", \"NR_PC5\", \"LTE_NR_PC5\"], \"type\": \"string\"}, {\"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.\n\n"}], \n"description": \n"Possible values
are - LTE_PC5: This value is used to indicate that UE supports PC5 LTE RAT
for V2X communication over PC5 reference point. - NR_PC5: This value is used
to indicate that UE supports PC5 NR RAT for V2X communication over PC5
reference point. - LTE_NR_PC5: This value is used to indicate that UE
supports both PC5 LTE and NR RAT for V2X communication over PC5 reference
point.\n\n"}, \n"suppFeat": {\n"type": \n"string", \n"pattern": \n"^[A-Fa-
f0-9]*$"}, \n"timeZone": {\n"type": \n"string"}, \n"uePolReq": {\n"type":
\n"string", \n"format": \n"byte"}, \n"accessType": {\n"enum":
[\n"3GPP_ACCESS", \n"NON_3GPP_ACCESS"], \n"type": \n"string"},
\n"serviceName": {\n"anyOf": [{\n"enum": [\n"nrf-nfm", \n"nrf-disc", \n"nrf-
oauth2", \n"nudm-sdm", \n"nudm-uecm", \n"nudm-ueau", \n"nudm-ee", \n"nudm-
pp", \n"nudm-niddau", \n"nudm-mt", \n"namf-comm", \n"namf-evts", \n"namf-
mt", \n"namf-loc", \n"nsmf-pdusession", \n"nsmf-event-exposure", \n"nsmf-
nidd", \n"nausf-auth", \n"nausf-sorprotection", \n"nausf-upuprotection",
\n"nef-pfdmanagement", \n"nef-smcontext", \n"nef-eventexposure", \n"3gpp-cp-
parameter-provisioning", \n"3gpp-device-triggering", \n"3gpp-bdt", \n"3gpp-
traffic-influence", \n"3gpp-chargeable-party", \n"3gpp-as-session-with-qos",
\n"3gpp-msisdn-less-mo-sms", \n"3gpp-service-parameter", \n"3gpp-monitoring-
event", \n"3gpp-nidd-configuration-trigger", \n"3gpp-nidd", \n"3gpp-
analyticsexposure", \n"3gpp-racs-parameter-provisioning", \n"3gpp-ecr-
control", \n"3gpp-applying-bdt-policy", \n"3gpp-mo-lcs-notify", \n"npcf-am-
policy-control", \n"npcf-smpolicycontrol", \n"npcf-policyauthorization",
\n"npcf-bdtpolicycontrol", \n"npcf-eventexposure", \n"npcf-ue-policy-
control", \n"nsmf-sms", \n"nssf-nssselection", \n"nssf-nssaiavailability",
\n"nudr-dr", \n"nudr-group-id-map", \n"nlmf-loc", \n"n5g-eir-eic", \n"nbsf-
management", \n"nchf-spendinglemitcontrol", \n"nchf-convergedcharging",
\n"nchf-offlineonlycharging", \n"nnwdafeventssubscription", \n"nnwdafe-
analyticsinfo", \n"ngmlc-loc", \n"nucmf-provisioning", \n"nucmf-
uecapabilitymanagement", \n"nhss-sdm", \n"nhss-uecm", \n"nhss-ueau", \n"nhss-
ee", \n"nhss-ims-sdm", \n"nhss-ims-uecm", \n"nhss-ims-ueau", \n"nsepp-
telescopic", \n"nsoraf-sor", \n"nspaf-secured-packet", \n"nudsf-dr",
\n"nssaa-nssaa"], \n"type": \n"string"}, {\n"type": \n"string"}]},
\n"description": \n"Service names known to NRF"}, \n"servingNfId": {\n"type":
\n"string", \n"format": \n"uuid"}, \n"servingPlmn": {\n"type": \n"object",
\n"required": [\n"mcc", \n"mnc"], \n"properties": {\n"mcc": {\n"type":
\n"string", \n"pattern": \n"^\\d{3}$"}, \n"mnc": {\n"type": \n"string",
\n"pattern": \n"^\\d{2,3}$"}, \n"nid": {\n"type": \n"string", \n"pattern":
\n"^[A-Fa-f0-9]{11}$"}}, \n"altNotifFqdns": {\n"type": \n"array", \n"items":
{\n"type": \n"string", \n"description": \n"Fully Qualified Domain Name"},
\n"minItems": 1, \n"description": \n"Alternate or backup FQDN(s) where to send
Notifications."}, \n"notificationUri": {\n"type": \n"string"},
\n"altNotifIpv4Addrs": {\n"type": \n"array", \n"items": {\n"type":
\n"string", \n"example": \n"198.51.100.1", \n"pattern": \n"^([0-9]|[1-9][0-9]|
1[0-9][0-9]|2[0-4][0-9]|25[0-5])\\.([0-9]|[1-9][0-9]|1[0-9][0-9]|2[0-4]
[0-9]|25[0-5])$"}, \n"minItems": 1, \n"description": \n"Alternate or backup
IPv4 Address(es) where to send Notifications."}, \n"altNotifIpv6Addrs":
{\n"type": \n"array", \n"items": {\n"type": \n"string", \n"allOf":
[{\n"pattern": \n"^((?|(?|([1-9a-f][0-9a-f]{0,3})))|(?|([1-9a-f][0-9a-f]
{0,3})))|(?|([1-9a-f][0-9a-f]{0,3})))$"}, {\n"pattern": \n"^((([^\:]+):)
{7}([^\:]+))|((([^\:]+):)*[^\:]+)?::([^\:]+)*[^\:]+)?$"}], \n"example":
\n"2001:db8:85a3::8a2e:370:7334"}, \n"minItems": 1, \n"description":
\n"Alternate or backup IPV6 Address(es) where to send Notifications."}}}],
},
{
  "defaultId": 6,

```



```

    "resourceURI": "/nudm-sdm/v2/{supi}",
    "httpMethod": "GET",
    "schemaValue": "[{"in": "query", "name": "dataset-names",
    "schema": {"type": "array", "items": {"anyOf": [{"enum": ["AM",
    "SMF_SEL", "UEC_SMF", "UEC_SMSF", "SMS_SUB", "SM", "TRACE",
    "SMS_MNG", "LCS_PRIVACY", "LCS_MO", "UEC_AMF", "V2X"], "type":
    "string"}, {"type": "string"}]}}, {"minItems": 2, "uniqueItems":
    true}, {"required": true}, {"in": "query", "name": "plmn-id",
    "content": {"application/json": {"schema": {"type": "object",
    "required": ["mcc", "mnc"], "properties": {"mcc": {"type":
    "string", "pattern": "^[0-9]{3}$"}, "mnc": {"type": "string",
    "pattern": "^[0-9]{2,3}$"}}}}, {"required": false}, {"in": "query",
    "name": "supported-features", "schema": {"type": "string",
    "pattern": "^[A-Za-f0-9]*$"}, {"required": false}]"}],
    {
      "defaultId": 7,
      "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/smsf-3gpp-access",
      "httpMethod": "PUT",
      "schemaValue": [{"type": "object", "required": ["plmnId",
      "smsfInstanceId"], "properties": {"plmnId": {"type": "object",
      "required": ["mcc", "mnc"], "properties": {"mcc": {"type":
      "string", "pattern": "^[0-9]{3}$"}, "mnc": {"type": "string",
      "pattern": "^[0-9]{2,3}$"}}, "smsfSetId": {"type": "string",
      "contextInfo": {"type": "object", "properties": {"origHeaders":
      {"type": "array", "items": {"type": "string", "minItems": 1}}},
      "smsfInstanceId": {"type": "string", "format": "uuid"},
      "smsfMAPAddress": {"type": "string", "pattern": "^[0-9]{1,15}$"},
      "registrationTime": {"type": "string", "format": "date-time"},
      "supportedFeatures": {"type": "string", "pattern": "^[A-Za-f0-9]*$"},
      "smsfDiameterAddress": {"type": "object", "required": ["name",
      "realm"], "properties": {"name": {"type": "string", "pattern":
      "^[A-Za-z0-9]+([-A-Za-z0-9]+\\.)*[a-z]{2}$"}, "realm": {"type":
      "string", "pattern": "^[A-Za-z0-9]+([-A-Za-z0-9]+\\.)*[a-z]{2}$"}]]}]"}],
      {
        "defaultId": 8,
        "resourceURI": "/namf-loc/v1/{ueContextId}/provide-loc-info",
        "httpMethod": "POST",
        "schemaValue": [{"type": "object", "properties": {"req5gsLoc":
        {"type": "boolean", "default": false}, "reqRatType": {"type":
        "boolean", "default": false}, "reqTimeZone": {"type": "boolean",
        "default": false}, "reqCurrentLoc": {"type": "boolean", "default":
        false}, "supportedFeatures": {"type": "string", "pattern": "^[A-Za-f0-9]*$"}]}],
        {
          "defaultId": 9,
          "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/smf-registrations/{pduSessionId}",
          "httpMethod": "DELETE",
          "schemaValue": [{"in": "query", "name": "smf-set-id",
          "schema": {"type": "string", "required": false}, {"in": "query",
          "name": "smf-instance-id", "schema": {"type": "string", "format":
          "uuid"}, {"required": false}]"}]

```

```

    },
    {
      "defaultId": 10,
      "resourceURI": "/nudm-sdm/v2/{supi}/ue-context-in-smsf-data",
      "httpMethod": "GET",
      "schemaValue": "[{"in": "query", "name": "supported-features",
\"schema\": {\"type\": \"string\", \"pattern\": \"^[A-Za-f0-9]*$\"},
\"required\": false}]"
    },
    {
      "defaultId": 11,
      "resourceURI": "/namf-comm/v1/subscriptions",
      "httpMethod": "POST",
      "schemaValue": [{"type": "object", "required": ["amfStatusUri"],
\"properties\": {\"guamiList\": {\"type\": \"array\", \"items\": {\"type\":
\"object\", \"required\": [\"amfId\", \"plmnId\"], \"properties\":
{\"amfId\": {\"type\": \"string\", \"pattern\": \"^[A-Za-f0-9]{6}$\"},
\"plmnId\": {\"type\": \"object\", \"required\": [\"mcc\", \"mnc\"],
\"properties\": {\"mcc\": {\"type\": \"string\", \"pattern\": \"^[\\d]{3}$
\"}, \"mnc\": {\"type\": \"string\", \"pattern\": \"^[\\d]{2,3}$\"}, \"nid\":
{\"type\": \"string\", \"pattern\": \"^[A-Za-f0-9]{11}$\"}}}}, \"minItems\":
1}, \"amfStatusUri\": {\"type\": \"string\"}}}]"
    },
    {
      "defaultId": 12,
      "resourceURI": "/nudm-sdm/v2/{supi}/am-data",
      "httpMethod": "GET",
      "schemaValue": "[{"in": "query", "name": "supported-features",
\"schema\": {\"type\": \"string\", \"pattern\": \"^[A-Za-f0-9]*$\"},
\"required\": false}, {"in": "query", "name": "plmn-id", "content":
{\"application/json\": {\"schema\": {\"type\": \"object\", \"required\":
[\"mcc\", \"mnc\"], \"properties\": {\"mcc\": {\"type\": \"string\",
\"pattern\": \"^[\\d]{3}$\"}, \"mnc\": {\"type\": \"string\", \"pattern\":
\"^[\\d]{2,3}$\"}}}}, \"required\": false}]"
    },
    {
      "defaultId": 13,
      "resourceURI": "/nudm-sdm/v1/{supi}",
      "httpMethod": "GET",
      "schemaValue": "[{"in": "query", "name": "dataset-names",
\"schema\": {\"type\": \"array\", \"items\": {\"anyOf\": [{\"enum\": [\"AM\",
\"SMF_SEL\", \"UEC_SMF\", \"UEC_SMSF\", \"SMS_SUB\", \"SM\", \"TRACE\",
\"SMS_MNG\"], \"type\": \"string\"}, {\"type\": \"string\"}]}, \"minItems\":
2, \"uniqueItems\": true}, \"required\": true}, {"in": "query", "name":
\"plmn-id\", \"content\": {\"application/json\": {\"schema\": {\"type\":
\"object\", \"required\": [\"mcc\", \"mnc\"], \"properties\": {\"mcc\":
{\"type\": \"string\", \"pattern\": \"^[\\d]{3}$\"}, \"mnc\": {\"type\":
\"string\", \"pattern\": \"^[\\d]{2,3}$\"}}}}, \"required\": false},
{\"in\": \"query\", \"name\": \"supported-features\", \"schema\": {\"type\":
\"string\", \"pattern\": \"^[A-Za-f0-9]*$\", \"required\": false}]"
    },
    {
      "defaultId": 14,
      "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/amf-non-3gpp-access",
      "httpMethod": "GET",
      "schemaValue": "[{"in": "query", "name": "supported-features",

```

```

\"schema\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]*$\"},
\"required\": false}]\"
},
{
  \"defaultId\": 15,
  \"resourceURI\": \"/nudm-uecm/v1/{ueId}/registrations/smsf-non-3gpp-access\",
  \"httpMethod\": \"GET\",
  \"schemaValue\": \"[{\"in\": \"query\", \"name\": \"supported-features\",
\"schema\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]*$\"},
\"required\": false}]\"
},
{
  \"defaultId\": 16,
  \"resourceURI\": \"/nudm-sdm/v2/{supi}/am-data/upu-ack\",
  \"httpMethod\": \"PUT\",
  \"schemaValue\": \"{\"type\": \"object\", \"required\":
[\"provisioningTime\", \"properties\": {\"sorMacIue\": {\"type\":
\"string\", \"pattern\": \"^[A-Fa-f0-9]{32}$\", \"upuMacIue\": {\"type\":
\"string\", \"pattern\": \"^[A-Fa-f0-9]{32}$\", \"securedPacket\":
{\"type\": \"string\", \"format\": \"byte\"}, \"ueNotReachable\": {\"type\":
\"boolean\", \"default\": false}, \"provisioningTime\": {\"type\":
\"string\", \"format\": \"date-time\"}}}]\"
},
{
  \"defaultId\": 17,
  \"resourceURI\": \"/nnssf-nsselection/v1/network-slice-information\",
  \"httpMethod\": \"GET\",
  \"schemaValue\": \"[{\"in\": \"query\", \"name\": \"nf-type\", \"schema\":
{\"anyOf\": [{\"enum\": [\"NRF\", \"UDM\", \"AMF\", \"SMF\", \"AUSF\",
\"NEF\", \"PCF\", \"SMSF\", \"NSSF\", \"UDR\", \"LMF\", \"GMLC\", \"5G_EIR\",
\"SEPP\", \"UPF\", \"N3IWF\", \"AF\", \"UDSF\", \"BSF\", \"CHF\", \"NWDAF\"],
\"type\": \"string\"}, {\"type\": \"string\"}]}], \"required\": true},
{\"in\": \"query\", \"name\": \"nf-id\", \"schema\": {\"type\": \"string\",
\"format\": \"uuid\"}, \"required\": true}, {\"in\": \"query\", \"name\":
\"slice-info-request-for-registration\", \"content\": {\"application/json\":
{\"schema\": {\"type\": \"object\", \"properties\": {\"mappingOfNssai\":
{\"type\": \"array\", \"items\": {\"type\": \"object\", \"required\":
[\"homeSnssai\", \"servingSnssai\"], \"properties\": {\"homeSnssai\":
{\"type\": \"object\", \"required\": [\"sst\"], \"properties\": {\"sd\":
{\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{6}$\", \"sst\":
{\"type\": \"integer\", \"maximum\": 255, \"minimum\": 0}}},
\"servingSnssai\": {\"type\": \"object\", \"required\": [\"sst\"],
\"properties\": {\"sd\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{6}$\",
\"sst\": {\"type\": \"integer\", \"maximum\": 255, \"minimum\":
0}}}}}, \"minItems\": 1}, \"requestMapping\": {\"type\": \"boolean\"},
\"requestedNssai\": {\"type\": \"array\", \"items\": {\"type\": \"object\",
\"required\": [\"sst\"], \"properties\": {\"sd\": {\"type\": \"string\",
\"pattern\": \"^[A-Fa-f0-9]{6}$\", \"sst\": {\"type\": \"integer\",
\"maximum\": 255, \"minimum\": 0}}}, \"minItems\": 1}, \"subscribedNssai\":
{\"type\": \"array\", \"items\": {\"type\": \"object\", \"required\":
[\"subscribedSnssai\"], \"properties\": {\"subscribedSnssai\": {\"type\":
\"object\", \"required\": [\"sst\"], \"properties\": {\"sd\": {\"type\":
\"string\", \"pattern\": \"^[A-Fa-f0-9]{6}$\", \"sst\": {\"type\":
\"integer\", \"maximum\": 255, \"minimum\": 0}}}, \"defaultIndication\":
{\"type\": \"boolean\"}}}, \"minItems\": 1}, \"sNssaiForMapping\": {\"type\":
\"array\", \"items\": {\"type\": \"object\", \"required\": [\"sst\"],

```

```

\"properties\": {\"sd\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{6}$\"}, \"sst\": {\"type\": \"integer\", \"maximum\": 255, \"minimum\": 0}}, \"minItems\": 1, \"allowedNssaiOtherAccess\": {\"type\": \"object\", \"required\": [\"accessType\", \"allowedSnssaiList\"], \"properties\": {\"accessType\": {\"enum\": [\"3GPP_ACCESS\", \"NON_3GPP_ACCESS\"], \"type\": \"string\"}, \"allowedSnssaiList\": {\"type\": \"array\", \"items\": {\"type\": \"object\", \"required\": [\"allowedSnssai\"], \"properties\": {\"allowedSnssai\": {\"type\": \"object\", \"required\": [\"sst\"], \"properties\": {\"sd\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{6}$\"}, \"sst\": {\"type\": \"integer\", \"maximum\": 255, \"minimum\": 0}}, \"mappedHomeSnssai\": {\"type\": \"object\", \"required\": [\"sst\"], \"properties\": {\"sd\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{6}$\"}, \"sst\": {\"type\": \"integer\", \"maximum\": 255, \"minimum\": 0}}, \"nsiInformationList\": {\"type\": \"array\", \"items\": {\"type\": \"object\", \"required\": [\"nrfId\"], \"properties\": {\"nrfId\": {\"type\": \"string\"}, \"nsiId\": {\"type\": \"string\"}}}, \"minItems\": 1}}, \"minItems\": 1}}, \"allowedNssaiCurrentAccess\": {\"type\": \"object\", \"required\": [\"accessType\", \"allowedSnssaiList\"], \"properties\": {\"accessType\": {\"enum\": [\"3GPP_ACCESS\", \"NON_3GPP_ACCESS\"], \"type\": \"string\"}, \"allowedSnssaiList\": {\"type\": \"array\", \"items\": {\"type\": \"object\", \"required\": [\"allowedSnssai\"], \"properties\": {\"allowedSnssai\": {\"type\": \"object\", \"required\": [\"sst\"], \"properties\": {\"sd\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{6}$\"}, \"sst\": {\"type\": \"integer\", \"maximum\": 255, \"minimum\": 0}}, \"mappedHomeSnssai\": {\"type\": \"object\", \"required\": [\"sst\"], \"properties\": {\"sd\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{6}$\"}, \"sst\": {\"type\": \"integer\", \"maximum\": 255, \"minimum\": 0}}, \"nsiInformationList\": {\"type\": \"array\", \"items\": {\"type\": \"object\", \"required\": [\"nrfId\"], \"properties\": {\"nrfId\": {\"type\": \"string\"}, \"nsiId\": {\"type\": \"string\"}}}, \"minItems\": 1}}, \"minItems\": 1}}, \"defaultConfiguredSnssaiInd\": {\"type\": \"boolean\"}}}}, \"required\": false}, {\"in\": \"query\", \"name\": \"slice-info-request-for-pdu-session\", \"content\": {\"application/json\": {\"schema\": {\"type\": \"object\", \"required\": [\"roamingIndication\", \"sNssai\"], \"properties\": {\"sNssai\": {\"type\": \"object\", \"required\": [\"sst\"], \"properties\": {\"sd\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{6}$\"}, \"sst\": {\"type\": \"integer\", \"maximum\": 255, \"minimum\": 0}}, \"homeSnssai\": {\"type\": \"object\", \"required\": [\"sst\"], \"properties\": {\"sd\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{6}$\"}, \"sst\": {\"type\": \"integer\", \"maximum\": 255, \"minimum\": 0}}, \"roamingIndication\": {\"anyOf\": [{\"enum\": [\"NON_ROAMING\", \"LOCAL_BREAKOUT\", \"HOME_ROUTED_ROAMING\"], \"type\": \"string\"}, {\"type\": \"string\"}]}}}}, \"required\": false}, {\"in\": \"query\", \"name\": \"home-plmn-id\", \"content\": {\"application/json\": {\"schema\": {\"type\": \"object\", \"required\": [\"mcc\", \"mnc\"], \"properties\": {\"mcc\": {\"type\": \"string\", \"pattern\": \"^[0-9]{3}$\"}, \"mnc\": {\"type\": \"string\", \"pattern\": \"^[0-9]{2,3}$\"}}}}, \"required\": false}, {\"in\": \"query\", \"name\": \"tai\", \"content\": {\"application/json\": {\"schema\": {\"type\": \"object\", \"required\": [\"plmnId\", \"tac\"], \"properties\": {\"tac\": {\"type\": \"string\", \"pattern\": \"(^([A-Fa-f0-9]{4}$)|(^([A-Fa-f0-9]{6}$)\\$\"}, \"plmnId\": {\"type\": \"object\", \"required\": [\"mcc\", \"mnc\"], \"properties\": {\"mcc\": {\"type\": \"string\", \"pattern\": \"^[0-9]{3}$\"}, \"mnc\": {\"type\": \"string\", \"pattern\": \"^[0-9]{2,3}$\"}}}}, \"required\": false}, {\"in\": \"query\", \"name\": \"supported-features\", \"schema\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]*$\"}, \"required\":

```

```

false}}"
  },
  {
    "defaultId": 18,
    "resourceURI": "/nudm-sdm/v1/{supi}/am-data",
    "httpMethod": "GET",
    "schemaValue": "[{"in": \"query\", \"name\": \"supported-features\",
\"schema\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]*$\"},
\"required\": false}, {\"in\": \"query\", \"name\": \"plmn-id\", \"content\":
{\"application/json\": {\"schema\": {\"type\": \"object\", \"required\":
[\"mcc\", \"mnc\"], \"properties\": {\"mcc\": {\"type\": \"string\",
\"pattern\": \"^[\\d]{3}$\"}, \"mnc\": {\"type\": \"string\", \"pattern\":
\"^[\\d]{2,3}$\"}}}}, \"required\": false}]]"
  },
  {
    "defaultId": 19,
    "resourceURI": "/namf-evts/v1/subscriptions",
    "httpMethod": "POST",
    "schemaValue": [{"type": \"object\", \"required\": [\"subscription\"],
\"properties\": {\"oldGuami\": {\"type\": \"object\", \"required\":
[\"amfId\", \"plmnId\"], \"properties\": {\"amfId\": {\"type\": \"string\",
\"pattern\": \"^[A-Fa-f0-9]{6}$\"}, \"plmnId\": {\"type\": \"object\",
\"required\": [\"mcc\", \"mnc\"], \"properties\": {\"mcc\": {\"type\":
\"string\", \"pattern\": \"^[\\d]{3}$\"}, \"mnc\": {\"type\": \"string\",
\"pattern\": \"^[\\d]{2,3}$\"}, \"nid\": {\"type\": \"string\", \"pattern\":
\"^[A-Fa-f0-9]{11}$\"}}}}, \"subscription\": {\"type\": \"object\",
\"required\": [\"eventList\", \"eventNotifyUri\", \"nfId\",
\"notifyCorrelationId\"], \"properties\": {\"pei\": {\"type\": \"string\",
\"pattern\": \"^(imei-[0-9]{15}|meisv-[0-9]{16}|mac((-[0-9a-fA-F]{2}){6})(-
untrusted)?|eui((-[0-9a-fA-F]{2}){8})|.+)\"}, \"gpsi\": {\"type\":
\"string\", \"pattern\": \"^(msisdn-[0-9]{5,15}|extid-[^@]+@[^@]+|.+)\"},
\"nfId\": {\"type\": \"string\", \"format\": \"uuid\"}, \"supi\": {\"type\":
\"string\", \"pattern\": \"^(imsi-[0-9]{5,15}|nai-.+|gci-.+|gli-.+|.+)\"},
\"anyUE\": {\"type\": \"boolean\"}, \"groupId\": {\"type\": \"string\",
\"pattern\": \"^[A-Fa-f0-9]{8}-[0-9]{3}-[0-9]{2,3}-([A-Fa-f0-9]{A-Fa-f0-9})
{1,10}$\"}, \"options\": {\"type\": \"object\", \"required\": [\"trigger\"],
\"properties\": {\"expiry\": {\"type\": \"string\", \"format\": \"date-
time\"}, \"trigger\": {\"anyOf\": [{\"enum\": [\"ONE_TIME\", \"CONTINUOUS\",
\"PERIODIC\"], \"type\": \"string\"}, {\"type\": \"string\"}]},
\"repPeriod\": {\"type\": \"integer\"}, \"sampRatio\": {\"type\":
\"integer\", \"maximum\": 100, \"minimum\": 1}, \"maxReports\": {\"type\":
\"integer\"}}}, \"eventList\": {\"type\": \"array\", \"items\": {\"type\":
\"object\", \"required\": [\"type\"], \"properties\": {\"anyOf\":
[{\"enum\": [\"LOCATION_REPORT\", \"PRESENCE_IN_AOI_REPORT\",
\"TIMEZONE_REPORT\", \"ACCESS_TYPE_REPORT\", \"REGISTRATION_STATE_REPORT\",
\"CONNECTIVITY_STATE_REPORT\", \"REACHABILITY_REPORT\",
\"COMMUNICATION_FAILURE_REPORT\", \"UES_IN_AREA_REPORT\",
\"SUBSCRIPTION_ID_CHANGE\", \"SUBSCRIPTION_ID_ADDITION\",
\"LOSS_OF_CONNECTIVITY\", \"5GS_USER_STATE_REPORT\",
\"AVAILABILITY_AFTER_DDN_FAILURE\", \"TYPE_ALLOCATION_CODE_REPORT\",
\"FREQUENT_MOBILITY_REGISTRATION_REPORT\"], \"type\": \"string\"}, {\"type\":
\"string\"}]}, \"refId\": {\"type\": \"integer\"}, \"areaList\": {\"type\":
\"array\", \"items\": {\"type\": \"object\", \"properties\": {\"nsiId\":
{\"type\": \"string\"}, \"sNssai\": {\"type\": \"object\", \"required\":
[\"sst\"], \"properties\": {\"sd\": {\"type\": \"string\", \"pattern\": \"^[A-
Fa-f0-9]{6}$\"}, \"sst\": {\"type\": \"integer\", \"maximum\": 255,

```

```

\"minimum\": 0}}}, \"ladnInfo\": {\"type\": \"object\", \"required\":
[\"ladn\"], \"properties\": {\"ladn\": {\"type\": \"string\", \"presence\":
{\"anyOf\": [{\"enum\": [\"IN_AREA\", \"OUT_OF_AREA\", \"UNKNOWN\",
\"INACTIVE\"], \"type\": \"string\", {\"type\": \"string\"}}]}},
\"presenceInfo\": {\"type\": \"object\", \"properties\": {\"praId\":
{\"type\": \"string\", \"ecgiList\": {\"type\": \"array\", \"items\":
{\"type\": \"object\", \"required\": [\"eutraCellId\", \"plmnId\"],
\"properties\": {\"nid\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]
{11}$\"}, \"plmnId\": {\"type\": \"object\", \"required\": [\"mcc\",
\"mnc\"], \"properties\": {\"mcc\": {\"type\": \"string\", \"pattern\": \"^\\\\
d{3}$\"}, \"mnc\": {\"type\": \"string\", \"pattern\": \"^\\\\d{2,3}$\"}}},
\"eutraCellId\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{7}$\"}},
\"minItems\": 1}, \"ncgiList\": {\"type\": \"array\", \"items\": {\"type\":
\"object\", \"required\": [\"nrCellId\", \"plmnId\"], \"properties\":
{\"nid\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{11}$\"},
\"plmnId\": {\"type\": \"object\", \"required\": [\"mcc\", \"mnc\"],
\"properties\": {\"mcc\": {\"type\": \"string\", \"pattern\": \"^\\\\d{3}$
\"}, \"mnc\": {\"type\": \"string\", \"pattern\": \"^\\\\d{2,3}$\"}}},
\"nrCellId\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{9}$\"}},
\"minItems\": 1}, \"presenceState\": {\"anyOf\": [{\"enum\": [\"IN_AREA\",
\"OUT_OF_AREA\", \"UNKNOWN\", \"INACTIVE\"], \"type\": \"string\",
{\"type\": \"string\"}}]}, \"additionalPraId\": {\"type\": \"string\",
\"globaleNbIdList\": {\"type\": \"array\", \"items\": {\"type\": \"object\",
\"oneOf\": [{\"required\": [\"n3IwfId\"], {\"required\": [\"gNbId\"],
{\"required\": [\"ngeNbId\"], {\"required\": [\"wagfId\"], {\"required\":
[\"tngfId\"], {\"required\": [\"eNbId\"], \"required\": [\"plmnId\"],
\"properties\": {\"nid\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]
{11}$\"}, \"eNbId\": {\"type\": \"string\", \"pattern\": \"^(MacroeNB-[A-Fa-
f0-9]{5}|LMacroeNB-[A-Fa-f0-9]{6}|SMacroeNB-[A-Fa-f0-9]{5}|HomeeNB-[A-Fa-f0-9]
{7})$\"}, \"gNbId\": {\"type\": \"object\", \"required\": [\"bitLength\",
\"gNBValue\"], \"properties\": {\"gNBValue\": {\"type\": \"string\",
\"pattern\": \"^[A-Fa-f0-9]{6,8}$\"}, \"bitLength\": {\"type\": \"integer\",
\"maximum\": 32, \"minimum\": 22}}}, \"plmnId\": {\"type\": \"object\",
\"required\": [\"mcc\", \"mnc\"], \"properties\": {\"mcc\": {\"type\":
\"string\", \"pattern\": \"^\\\\d{3}$\"}, \"mnc\": {\"type\": \"string\",
\"pattern\": \"^\\\\d{2,3}$\"}}, \"tngfId\": {\"type\": \"string\",
\"pattern\": \"^[A-Fa-f0-9]+$\"}, \"wagfId\": {\"type\": \"string\",
\"pattern\": \"^[A-Fa-f0-9]+$\"}, \"n3IwfId\": {\"type\": \"string\",
\"pattern\": \"^[A-Fa-f0-9]+$\"}, \"ngeNbId\": {\"type\": \"string\",
\"pattern\": \"^(MacroNGeNB-[A-Fa-f0-9]{5}|LMacroNGeNB-[A-Fa-f0-9]{6}|
SMacroNGeNB-[A-Fa-f0-9]{5})$\"}}, \"minItems\": 1}, \"trackingAreaList\":
{\"type\": \"array\", \"items\": {\"type\": \"object\", \"required\":
[\"plmnId\", \"tac\"], \"properties\": {\"nid\": {\"type\": \"string\",
\"pattern\": \"^[A-Fa-f0-9]{11}$\"}, \"tac\": {\"type\": \"string\",
\"pattern\": \"(^[A-Fa-f0-9]{4}$)|(^[A-Fa-f0-9]{6}$)\"}, \"plmnId\":
{\"type\": \"object\", \"required\": [\"mcc\", \"mnc\"], \"properties\":
{\"mcc\": {\"type\": \"string\", \"pattern\": \"^\\\\d{3}$\"}, \"mnc\":
{\"type\": \"string\", \"pattern\": \"^\\\\d{2,3}$\"}}}}, \"minItems\": 1},
\"globalRanNodeIdList\": {\"type\": \"array\", \"items\": {\"type\":
\"object\", \"oneOf\": [{\"required\": [\"n3IwfId\"], {\"required\":
[\"gNbId\"], {\"required\": [\"ngeNbId\"], {\"required\": [\"wagfId\"],
{\"required\": [\"tngfId\"], {\"required\": [\"eNbId\"], \"required\":
[\"plmnId\"], \"properties\": {\"nid\": {\"type\": \"string\", \"pattern\":
\"^[A-Fa-f0-9]{11}$\"}, \"eNbId\": {\"type\": \"string\", \"pattern\":
\"^(MacroeNB-[A-Fa-f0-9]{5}|LMacroeNB-[A-Fa-f0-9]{6}|SMacroeNB-[A-Fa-f0-9]{5}|
HomeeNB-[A-Fa-f0-9]{7})$\"}, \"gNbId\": {\"type\": \"object\", \"required\":

```

```

["bitLength\","gNBValue\","properties\": {"gNBValue\": {"type\":"string\","pattern\":"^[A-Fa-f0-9]{6,8}$"}, "bitLength\": {"type\":"integer\","maximum\": 32, "minimum\": 22}}, "plmnId\": {"type\":"object\","required\": ["mcc\","mnc\"],"properties\": {"mcc\": {"type\":"string\","pattern\":"^\\\\\\d{3}$"}, "mnc\": {"type\":"string\","pattern\":"^\\\\\\d{2,3}$"}}, "tngfId\": {"type\":"string\","pattern\":"^[A-Fa-f0-9]+$"}, "wagfId\": {"type\":"string\","pattern\":"^[A-Fa-f0-9]+$"}, "n3IwfId\": {"type\":"string\","pattern\":"^[A-Fa-f0-9]+$"}, "ngeNbId\": {"type\":"string\","pattern\":"^(MacroNGeNB-[A-Fa-f0-9]{5}|MacroNGeNB-[A-Fa-f0-9]{6}|SMacroNGeNB-[A-Fa-f0-9]{5})$"}}, "minItems\": 1}}}, {"type\":"integer\","idleStatusInd\": {"type\":"boolean\","default\": false}, "immediateFlag\": {"type\":"boolean\","default\": false}, "maxResponseTime\": {"type\":"integer\","reportUeReachable\": {"type\":"boolean\","default\": false}, "locationFilterList\": {"type\":"array\","items\": {"anyOf\": [{"enum\": ["TAI\","CELL_ID\","N3IWF\","UE_IP\","UDP_PORT\","TNAP_ID\","GLI\","TWAP_ID"],"type\":"string\"}]}}, "minItems\": 1, "reachabilityFilter\": {"anyOf\": [{"enum\": ["UE_REACHABILITY_STATUS_CHANGE\","UE_REACHABLE_DL_TRAFFIC"],"type\":"string\"}]}}, {"type\":"array\","items\": {"type\":"object\","properties\": {"dnn\": {"type\":"string\"},"sNssai\": {"type\":"object\","required\": ["sst\"],"properties\": {"sd\": {"type\":"string\","pattern\":"^[A-Fa-f0-9]{6}$"}, "sst\": {"type\":"integer\","maximum\": 255, "minimum\": 0}}}}, {"type\":"array\","items\": {"type\":"object\","properties\": {"macAddr\": {"type\":"string\","pattern\":"^([0-9a-fA-F]{2})((-[0-9a-fA-F]{2}){5})$"}, "ipv4Addr\": {"type\":"string\","example\":"198.51.100.1","pattern\":"^((([0-9]|[1-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5])\\.){3}([0-9]|[1-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5])$"), "ipv6Addr\": {"type\":"string\","allOf\": [{"pattern\":"^((:|0?|([1-9a-f][0-9a-f]{0,3}))|((0?|([1-9a-f][0-9a-f]{0,3})):{0,6}(:|0?|([1-9a-f][0-9a-f]{0,3}))$)|((:[^:]+)|((:[^:]+)*[[:^:]]+)?))$"}, {"pattern\":"^(((^:]+:){7}([[:^:]]+))|(((^:]+:)*[[:^:]]+)?))$"}, {"example\":"2001:db8:85a3::8a2e:370:7334"}]}}, {"type\":"integer\","minimum\": 0}}}, {"type\":"string\","format\":"date-time"}}, {"type\":"string\","minItems\": 1, "sourceNfType\": {"anyOf\": [{"enum\": ["NRF\","UDM\","AMF\","SMF\","AUSF\","NEF\","PCF\","SMSF\","NSSF\","UDR\","LMF\","GMLC\","5G_EIR\","SEPP\","UPF\","N3IWF\","AF\","UDSF\","BSF\","CHF\","NWDAF\","PCSCF\","CBCF\","HSS\","UCMF\","SOR_AF\","SPAF\","MME\","SCSAS\","SCEF\","SCP\","NSSAAF\","ICSCF\","SCSCF\","DRA\","IMS_AS\","CEF"],"type\":"string\"}]}}, {"type\":"string\","description\":"NF types known to NRF"}, "eventNotifyUri\": {"type\":"string\"},"notifyCorrelationId\": {"type\":"string\"},"subsChangeNotifyUri\": {"type\":"string\"},"subsChangeNotifyCorrelationId\": {"type\":"string\"}}, {"type\":"string\","supportedFeatures\": {"type\":"string\","pattern\":"^[A-Fa-f0-9]*$"}}, {"type\":"object\","required\":"defaultId\": 20, "resourceURI\": "/nausf-auth/v1/ue-authentications", "httpMethod\": "POST", "schemaValue\":"{"type\":"object\","required\":"servingNetworkName\","supiOrSuci\"],"properties\": {"pei\":"

```



```

{"type": "string", "pattern": "^([0-9]{15}|imeisv-[0-9]{16}|
mac((-[0-9a-fA-F]{2}){6})(-untrusted)?|eui((-[0-9a-fA-F]{2}){8})|.+)$"},
{"n5gcInd": {"type": "boolean", "default": false}, "traceData":
{"type": "object", "nullable": true, "required": ["eventList",
"neTypeList", "traceDepth", "traceRef"], "properties": {"traceRef":
{"type": "string", "pattern": "[0-9]{3}[0-9]{2,3}-[A-Fa-f0-9]{6}$"},
"eventList": {"type": "string", "pattern": "[A-Fa-f0-9]+$"},
"neTypeList": {"type": "string", "pattern": "[A-Fa-f0-9]+$"},
"traceDepth": {"anyOf": [{"enum": ["MINIMUM", "MEDIUM",
"MAXIMUM", "MINIMUM_WO_VENDOR_EXTENSION", "MEDIUM_WO_VENDOR_EXTENSION",
"MAXIMUM_WO_VENDOR_EXTENSION"]}, {"type": "string"}]}, {"type":
"string"}]}, "interfaceList": {"type": "string", "pattern": "[A-
Fa-f0-9]+$"}, "collectionEntityIpv4Addr": {"type": "string",
"example": "198.51.100.1", "pattern": "^([0-9]|[1-9][0-9]|1[0-9][0-9]|
2[0-4][0-9]|25[0-5])\\.([0-9]|[1-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|
25[0-5])$"}, "collectionEntityIpv6Addr": {"type": "string", "allOf":
[{"pattern": "^((:|0?|([1-9a-f][0-9a-f]{0,3})))(0?|([1-9a-f][0-9a-f]
{0,3})):{0,6}(:|0?|([1-9a-f][0-9a-f]{0,3}))$"}, {"pattern": "^(([:]
+){7}([:]+)|((([:]+)*[:]+)?::(([:]+)*[:]+)?))$"}, {"example":
"2001:db8:85a3::8a2e:370:7334"}]}, "supiOrSuci": {"type": "string",
"pattern": "^([imsi-[0-9]{5,15}|nai-.+|gli-.+|gci-.+|suci-(0-[0-9]{3}-[0-9]
{2,3}|1-7)-.+-[0-9]{1,4}-(0-0-.+|[a-fA-F1-9]-([1-9]|1[0-9]|1[0-9]{2}|
2[0-4][0-9]|25[0-5])-[a-fA-F0-9]+)|.+)$"}, "udmGroupId": {"type":
"string", "cellCagInfo": {"type": "array", "items": {"type":
"string", "pattern": "[A-Fa-f0-9]{8}$"}, "minItems": 1},
"routingIndicator": {"type": "string", "pattern": "[0-9]{1,4}$"},
"supportedFeatures": {"type": "string", "pattern": "[A-Fa-f0-9]*$"},
"servingNetworkName": {"type": "string", "pattern":
"^5G:mnc[0-9]{3}[.]mcc[0-9]{3}[.]3gppnetwork[.]org(:[A-F0-9]{11})?$"},
"resynchronizationInfo": {"type": "object", "required": ["auts",
"rand"], "properties": {"auts": {"type": "string", "pattern":
"[A-Fa-f0-9]{28}$"}, "rand": {"type": "string", "pattern": "[A-
Fa-f0-9]{32}$"}]}]}},
},
{
  "defaultId": 21,
  "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/amf-3gpp-access",
  "httpMethod": "GET",
  "schemaValue": "[{"in": "query", "name": "supported-features",
"schema": {"type": "string", "pattern": "[A-Fa-f0-9]*$"},
"required": false}]"]",
},
{
  "defaultId": 22,
  "resourceURI": "/nudm-sdm/v2/{supi}/smf-select-data",
  "httpMethod": "GET",
  "schemaValue": "[{"in": "query", "name": "supported-features",
"schema": {"type": "string", "pattern": "[A-Fa-f0-9]*$"},
"required": false}, {"in": "query", "name": "plmn-id", "content":
{"application/json": {"schema": {"type": "object", "required":
["mcc", "mnc"], "properties": {"mcc": {"type": "string",
"pattern": "^\\d{3}$"}, "mnc": {"type": "string", "pattern":
"^\\d{2,3}$"}]}]}}, {"required": false}]"]",
},
{
  "defaultId": 23,

```



```

    "resourceURI": "/nudm-sdm/v2/{supi}/nssai",
    "httpMethod": "GET",
    "schemaValue": "[{"in": "query", "name": "supported-features",
\"schema\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]*$\"},
\"required\": false}, {\"in\": \"query\", \"name\": \"plmn-id\", \"content\":
{\"application/json\": {\"schema\": {\"type\": \"object\", \"required\":
[\"mcc\", \"mnc\"], \"properties\": {\"mcc\": {\"type\": \"string\",
\"pattern\": \"^[\\\\\\\\d{3}$\"}, \"mnc\": {\"type\": \"string\", \"pattern\":
\"^[\\\\\\\\d{2,3}$\"}}}}}, \"required\": false}]\"
  },
  {
    "defaultId": 24,
    "resourceURI": "/nudm-sdm/v2/{supi}/ue-context-in-smf-data",
    "httpMethod": "GET",
    "schemaValue": "[{"in": "query", "name": "supported-features",
\"schema\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]*$\"},
\"required\": false}, {\"in\": \"query\", \"name\": \"plmn-id\", \"content\":
{\"application/json\": {\"schema\": {\"type\": \"object\", \"required\":
[\"mcc\", \"mnc\"], \"properties\": {\"mcc\": {\"type\": \"string\",
\"pattern\": \"^[\\\\\\\\d{3}$\"}, \"mnc\": {\"type\": \"string\", \"pattern\":
\"^[\\\\\\\\d{2,3}$\"}}}}}, \"required\": false}]\"
  },
  {
    "defaultId": 25,
    "resourceURI": "/nudm-sdm/v1/{supi}/nssai",
    "httpMethod": "GET",
    "schemaValue": "[{"in": "query", "name": "supported-features",
\"schema\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]*$\"},
\"required\": false}, {\"in\": \"query\", \"name\": \"plmn-id\", \"content\":
{\"application/json\": {\"schema\": {\"type\": \"object\", \"required\":
[\"mcc\", \"mnc\"], \"properties\": {\"mcc\": {\"type\": \"string\",
\"pattern\": \"^[\\\\\\\\d{3}$\"}, \"mnc\": {\"type\": \"string\", \"pattern\":
\"^[\\\\\\\\d{2,3}$\"}}}}}, \"required\": false}]\"
  },
  {
    "defaultId": 26,
    "resourceURI": "/nudm-sdm/v2/{supi}/sms-data",
    "httpMethod": "GET",
    "schemaValue": "[{"in": "query", "name": "supported-features",
\"schema\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]*$\"},
\"required\": false}, {\"in\": \"query\", \"name\": \"plmn-id\", \"content\":
{\"application/json\": {\"schema\": {\"type\": \"object\", \"required\":
[\"mcc\", \"mnc\"], \"properties\": {\"mcc\": {\"type\": \"string\",
\"pattern\": \"^[\\\\\\\\d{3}$\"}, \"mnc\": {\"type\": \"string\", \"pattern\":
\"^[\\\\\\\\d{2,3}$\"}}}}}, \"required\": false}]\"
  },
  {
    "defaultId": 27,
    "resourceURI": "/nnrf-nfm/v1/subscriptions",
    "httpMethod": "POST",
    "schemaValue": "{ \"type\": \"object\", \"required\":
[\"nfStatusNotificationUri\", \"subscriptionId\", \"properties\": {\"nid\":
{\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{11}$\"}, \"plmnId\":
{\"type\": \"object\", \"required\": [\"mcc\", \"mnc\"], \"properties\":
{\"mcc\": {\"type\": \"string\", \"pattern\": \"^[\\\\\\\\d{3}$\"}, \"mnc\":
{\"type\": \"string\", \"pattern\": \"^[\\\\\\\\d{2,3}$\"}}}, \"reqNfFqdn\":
{\"type\": \"string\", \"description\": \"Fully Qualified Domain Name\",
\"reqNfType\": {\"anyOf\": [{\"enum\": [\"NRF\", \"UDM\", \"AMF\", \"SMF\",
\"AUSF\", \"NEF\", \"PCF\", \"SMSF\", \"NSSF\", \"UDR\", \"LMF\", \"GMLC\",
\"5G_EIR\", \"SEPP\", \"UPF\", \"N3IWF\", \"AF\", \"UDSF\", \"BSF\", \"CHF\",

```

```

\ "NWDAF\ ", \ "PCSCF\ ", \ "CBCF\ ", \ "HSS\ ", \ "UCMF\ ", \ "SOR_AF\ ", \ "SPAF\ ",
\ "MME\ ", \ "SCSAS\ ", \ "SCEF\ ", \ "SCP\ ", \ "NSSAAF\ ", \ "ICSCF\ ", \ "SCSCF\ ",
\ "DRA\ ", \ "IMS_AS\ ", \ "CEF\ "], \ "type\ ": \ "string\ "}, { \ "type\ ":
\ "string\ "}], \ "description\ ": \ "NF types known to NRF\ "}, \ "reqSnssais\ ":
{ \ "type\ ": \ "array\ ", \ "items\ ": { \ "type\ ": \ "object\ ", \ "required\ ":
[ \ "sst\ "], \ "properties\ ": { \ "sd\ ": { \ "type\ ": \ "string\ ", \ "pattern\ ": \ "^[A-
Fa-f0-9]{6}$\ "}, \ "sst\ ": { \ "type\ ": \ "integer\ ", \ "maximum\ ": 255,
\ "minimum\ ": 0 } }}, \ "minItems\ ": 1}, \ "subscrCond\ ": { \ "oneOf\ ": [ { \ "type\ ":
\ "object\ ", \ "required\ ": [ \ "nfInstanceId\ "], \ "properties\ ":
{ \ "nfInstanceId\ ": { \ "type\ ": \ "string\ ", \ "format\ ": \ "uuid\ " } }},
\ "description\ ": \ "Subscription to a given NF Instance Id\ "}, { \ "type\ ":
\ "object\ ", \ "required\ ": [ \ "nfInstanceIdList\ "], \ "properties\ ":
{ \ "nfInstanceIdList\ ": { \ "type\ ": \ "array\ ", \ "items\ ": { \ "type\ ":
\ "string\ ", \ "format\ ": \ "uuid\ "}, \ "minItems\ ": 1 } }}, \ "description\ ":
\ "Subscription to a list of NF Instances\ "}, { \ "not\ ": { \ "required\ ":
[ \ "nfGroupId\ " ] }, \ "type\ ": \ "object\ ", \ "required\ ": [ \ "nfType\ "],
\ "properties\ ": { \ "nfType\ ": { \ "anyOf\ ": [ { \ "enum\ ": [ \ "NRF\ ", \ "UDM\ ",
\ "AMF\ ", \ "SMF\ ", \ "AUSF\ ", \ "NEF\ ", \ "PCF\ ", \ "SMSF\ ", \ "NSSF\ ", \ "UDR\ ",
\ "LMF\ ", \ "GMLC\ ", \ "5G_EIR\ ", \ "SEPP\ ", \ "UPF\ ", \ "N3IWF\ ", \ "AF\ ",
\ "UDSF\ ", \ "BSF\ ", \ "CHF\ ", \ "NWDAF\ ", \ "PCSCF\ ", \ "CBCF\ ", \ "HSS\ ",
\ "UCMF\ ", \ "SOR_AF\ ", \ "SPAF\ ", \ "MME\ ", \ "SCSAS\ ", \ "SCEF\ ", \ "SCP\ ",
\ "NSSAAF\ ", \ "ICSCF\ ", \ "SCSCF\ ", \ "DRA\ ", \ "IMS_AS\ ", \ "CEF\ "], \ "type\ ":
\ "string\ "}, { \ "type\ ": \ "string\ " } }}, \ "description\ ": \ "NF types known to
NRF\ " } }}, \ "description\ ": \ "Subscription to a set of NFs based on their NF
Type\ "}, { \ "type\ ": \ "object\ ", \ "required\ ": [ \ "serviceName\ "],
\ "properties\ ": { \ "serviceName\ ": { \ "anyOf\ ": [ { \ "enum\ ": [ \ "nnrf-nfm\ ",
\ "nnrf-disc\ ", \ "nnrf-oauth2\ ", \ "nudm-sdm\ ", \ "nudm-uecm\ ", \ "nudm-ueau\ ",
\ "nudm-ee\ ", \ "nudm-pp\ ", \ "nudm-niddau\ ", \ "nudm-mt\ ", \ "namf-comm\ ", \ "namf-
evts\ ", \ "namf-mt\ ", \ "namf-loc\ ", \ "nsmf-pdusession\ ", \ "nsmf-event-
exposure\ ", \ "nsmf-nidd\ ", \ "nausf-auth\ ", \ "nausf-sorprotection\ ", \ "nausf-
upuprotection\ ", \ "nnef-pfdmanagement\ ", \ "nnef-smcontext\ ", \ "nnef-
eventexposure\ ", \ "3gpp-cp-parameter-provisioning\ ", \ "3gpp-device-
triggering\ ", \ "3gpp-bdt\ ", \ "3gpp-traffic-influence\ ", \ "3gpp-chargeable-
party\ ", \ "3gpp-as-session-with-qos\ ", \ "3gpp-msisdn-less-mo-sms\ ", \ "3gpp-
service-parameter\ ", \ "3gpp-monitoring-event\ ", \ "3gpp-nidd-configuration-
trigger\ ", \ "3gpp-nidd\ ", \ "3gpp-analyticsexposure\ ", \ "3gpp-racs-parameter-
provisioning\ ", \ "3gpp-ecr-control\ ", \ "3gpp-applying-bdt-policy\ ", \ "3gpp-mo-
lcs-notify\ ", \ "npcf-am-policy-control\ ", \ "npcf-smpolicycontrol\ ", \ "npcf-
policyauthorization\ ", \ "npcf-bdtpolicycontrol\ ", \ "npcf-eventexposure\ ",
\ "npcf-ue-policy-control\ ", \ "nsmf-sms\ ", \ "nsssf-nssselection\ ", \ "nsssf-
nssaiavailability\ ", \ "nudr-dr\ ", \ "nudr-group-id-map\ ", \ "nlmf-loc\ ", \ "n5g-
eir-eic\ ", \ "nbsf-management\ ", \ "nchf-spendinglimitcontrol\ ", \ "nchf-
convergedcharging\ ", \ "nchf-offlineonlycharging\ ", \ "nnwda-
eventssubscription\ ", \ "nnwda-analyticinfo\ ", \ "ngmlc-loc\ ", \ "nucmf-
provisioning\ ", \ "nucmf-uecapabilitymanagement\ ", \ "nhss-sdm\ ", \ "nhss-
uecm\ ", \ "nhss-ueau\ ", \ "nhss-ee\ ", \ "nhss-ims-sdm\ ", \ "nhss-ims-uecm\ ",
\ "nhss-ims-ueau\ ", \ "nsepp-telescopic\ ", \ "nsoraf-sor\ ", \ "nspaf-secured-
packet\ ", \ "nudsf-dr\ ", \ "nsssaaf-nssaa\ "], \ "type\ ": \ "string\ "}, { \ "type\ ":
\ "string\ " } }}, \ "description\ ": \ "Service names known to NRF\ " } }},
\ "description\ ": \ "Subscription to a set of NFs based on their support for a
given Service Name\ "}, { \ "type\ ": \ "object\ ", \ "anyOf\ ": [ { \ "required\ ":
[ \ "amfSetId\ " ] }, { \ "required\ ": [ \ "amfRegionId\ " ] } }, \ "properties\ ":
{ \ "amfSetId\ ": { \ "type\ ": \ "string\ ", \ "pattern\ ": \ "^[0-3][A-Fa-f0-9]{2}$\ "
}, \ "amfRegionId\ ": { \ "type\ ": \ "string\ ", \ "pattern\ ": \ "^[A-Fa-f0-9]{2}$\ "
} } }, \ "description\ ": \ "Subscription to a set of AMFs, based on AMF Set Id
and/or AMF Region Id\ "}, { \ "type\ ": \ "object\ ", \ "required\ ":

```

```

["guamiList"], "properties": {"guamiList": {"type": "array",
"items": {"type": "object", "required": ["amfId", "plmnId"],
"properties": {"amfId": {"type": "string", "pattern": "^[A-Fa-f0-9]{6}$"},
"plmnId": {"type": "object", "required": ["mcc", "mnc"],
"properties": {"mcc": {"type": "string", "pattern": "^[0-9]{3}$"},
"mnc": {"type": "string", "pattern": "^[0-9]{2,3}$"}, "nid": {"type": "string", "pattern": "^[A-Fa-f0-9]{11}$"}}}}},
"description": "Subscription to a set of AMFs, based on their GUAMIs",
"type": "object", "required": ["snssaiList"], "properties":
{"nsiList": {"type": "array", "items": {"type": "string"}},
"snssaiList": {"type": "array", "items": {"type": "object",
"required": ["sst"], "properties": {"sd": {"type": "string",
"pattern": "^[A-Fa-f0-9]{6}$"}, "sst": {"type": "integer",
"maximum": 255, "minimum": 0}}}}, "description": "Subscription to a
set of NFs, based on the slices (S-NSSAI and NSI) they support", "type":
"object", "required": ["nfGroupId", "nfType"], "properties":
{"nfType": {"enum": ["UDM", "AUSF", "UDR", "PCF", "CHF"],
"type": "string"}, "nfGroupId": {"type": "string"}},
"description": "Subscription to a set of NFs based on their Group Id",
"type": "object", "required": ["nfSetId"], "properties":
{"nfSetId": {"type": "string"}}, "description": "Subscription to a
set of NFs based on their Set Id", "type": "object", "required":
["nfServiceSetId"], "properties": {"nfServiceSetId": {"type":
"string"}}, "description": "Subscription to a set of NFs based on their
Service Set Id", "type": "object", "required": ["conditionType"],
"properties": {"taiList": {"type": "array", "items": {"type":
"object", "required": ["plmnId", "tac"], "properties": {"nid":
{"type": "string", "pattern": "^[A-Fa-f0-9]{11}$"}, "tac":
{"type": "string", "pattern": "^(^([A-Fa-f0-9]{4}$)|(^([A-Fa-f0-9]{6}$)
$)}, "plmnId": {"type": "object", "required": ["mcc", "mnc"],
"properties": {"mcc": {"type": "string", "pattern": "^[0-9]{3}$"},
"mnc": {"type": "string", "pattern": "^[0-9]{2,3}$"}}}}},
"minItems": 1, "conditionType": {"enum": ["UPF_COND"], "type":
"string"}, "smfServingArea": {"type": "array", "items": {"type":
"string"}, "minItems": 1}}, "description": "Subscription to a set of
NF Instances (UPFs), able to serve a certain service area (i.e. SMF serving
area or TAI list)", "type": "object", "required": ["scpDomains"],
"properties": {"scpDomains": {"type": "array", "items": {"type":
"string"}, "minItems": 1}}, "description": "Subscription to a set of
NF or SCP instances belonging to certain SCP domains", "type":
"object", "required": ["conditionType"], "properties": {"taiList":
{"type": "array", "items": {"type": "object", "required":
["plmnId", "tac"], "properties": {"nid": {"type": "string",
"pattern": "^[A-Fa-f0-9]{11}$"}, "tac": {"type": "string",
"pattern": "^(^([A-Fa-f0-9]{4}$)|(^([A-Fa-f0-9]{6}$)
$)}, "plmnId": {"type": "object", "required": ["mcc", "mnc"], "properties":
{"mcc": {"type": "string", "pattern": "^[0-9]{3}$"}, "mnc":
{"type": "string", "pattern": "^[0-9]{2,3}$"}}}}}, "minItems": 1,
"snssaiList": {"type": "array", "items": {"type": "object",
"required": ["sst"], "properties": {"sd": {"type": "string",
"pattern": "^[A-Fa-f0-9]{6}$"}, "sst": {"type": "integer",
"maximum": 255, "minimum": 0}}}}, "minItems": 1, "analyticsIds":
{"type": "array", "items": {"type": "string"}, "minItems": 1},
"taiRangeList": {"type": "array", "items": {"type": "object",
"required": ["plmnId", "tacRangeList"], "properties": {"nid":
{"type": "string", "pattern": "^[A-Fa-f0-9]{11}$"}, "plmnId":

```

```

{"type": "object", "required": ["mcc", "mnc"], "properties": {
  "mcc": {"type": "string", "pattern": "\\^\\\\d{3}$"}, "mnc": {
    "type": "string", "pattern": "\\^\\\\d{2,3}$"}}, "tacRangeList": {
  "type": "array", "items": {"type": "object", "properties": {
    "end": {"type": "string", "pattern": "\\^[A-Fa-f0-9]{4}|[A-Fa-f0-9]{6}$"},
    "start": {"type": "string", "pattern": "\\^[A-Fa-f0-9]{4}|[A-Fa-f0-9]{6}$"},
    "pattern": {"type": "string"}}, "description": "Range of TACs (Tracking Area Codes)",
    "minItems": 1}}, "description": "Range of TAIs (Tracking Area Identities)",
    "minItems": 1}, "conditionType": {"enum": ["NWDAF_COND"], "type": "string"},
    "description": "Subscription to a set of NF Instances (NWDAFs), identified by Analytics ID(s), S-NSSAI(s) or NWDAF Serving Area information, i.e. list of TAIs for which the NWDAF can provide analytics.", {"type": "object", "required": ["conditionType"], "properties": {"pfdData": {"type": "object", "properties": {"afIds": {"type": "array", "items": {"type": "string", "minItems": 1}, "appIds": {"type": "array", "items": {"type": "string", "minItems": 1}}, "description": "List of Application IDs and/or AF IDs managed by a given NEF Instance", "afEvents": {"type": "array", "items": {"anyOf": [{"enum": ["SVC_EXPERIENCE", "UE_MOBILITY", "UE_COMM", "EXCEPTIONS"], "type": "string"}, {"type": "string"}]}}, "minItems": 1}, "gpsiRanges": {"type": "array", "items": {"type": "object", "properties": {"end": {"type": "string", "pattern": "\\^[0-9]+$"}, "start": {"type": "string", "pattern": "\\^[0-9]+$"}, "pattern": {"type": "string"}}, "description": "A range of GPSIs (subscriber identities), either based on a numeric range, or based on regular-expression matching", "minItems": 1}, "snssaiList": {"type": "array", "items": {"type": "object", "required": ["sst"], "properties": {"sd": {"type": "string", "pattern": "\\^[A-Fa-f0-9]{6}$"}, "sst": {"type": "integer", "maximum": 255, "minimum": 0}}, "minItems": 1}, "conditionType": {"enum": ["NEF_COND"], "type": "string"}, "servedFqdnList": {"type": "array", "items": {"type": "string", "minItems": 1}, "externalGroupIdentifiersRanges": {"type": "array", "items": {"type": "object", "properties": {"end": {"type": "string", "pattern": "\\^[0-9]+$"}, "start": {"type": "string", "pattern": "\\^[0-9]+$"}, "pattern": {"type": "string"}}, "description": "A range of GPSIs (subscriber identities), either based on a numeric range, or based on regular-expression matching", "minItems": 1}}, "description": "Subscription to a set of NF Instances (NEFs), identified by Event ID(s) provided by AF, S-NSSAI(s), AF Instance ID, Application Identifier, External Identifier, External Group Identifier, or domain name."}}}, "reqPlmnList": {"type": "array", "items": {"type": "object", "required": ["mcc", "mnc"], "properties": {"mcc": {"type": "string", "pattern": "\\^\\\\d{3}$"}, "mnc": {"type": "string", "pattern": "\\^\\\\d{2,3}$"}}, "minItems": 1}, "reqSnpnList": {"type": "array", "items": {"type": "object", "required": ["mcc", "mnc"], "properties": {"mcc": {"type": "string", "pattern": "\\^\\\\d{3}$"}, "mnc": {"type": "string", "pattern": "\\^\\\\d{2,3}$"}, "nid": {"type": "string", "pattern": "\\^[A-Fa-f0-9]{11}$"}}, "minItems": 1}, "servingScope": {"type": "array", "items": {"type": "string", "minItems": 1}, "validityTime": {"type": "string", "format": "date-time"}, "notifCondition": {"not": {"required": ["monitoredAttributes", "unmonitoredAttributes"]}, "type": "object", "properties": {"monitoredAttributes": {"type": "array", "items": {"type": "string", "minItems": 1}, "unmonitoredAttributes": {"type":

```

```

    \"array\", \"items\": {\"type\": \"string\"}, \"minItems\": 1}},
    \"description\": \"Condition (list of attributes in the NF Profile) to
    determine whether a notification must be sent by NRF\", \"reqNotifEvents\":
    {\"type\": \"array\", \"items\": {\"anyOf\": [{\"enum\": [\"NF_REGISTERED\",
    \"NF_DEREGISTERED\", \"NF_PROFILE_CHANGED\"], \"type\": \"string\"},
    {\"type\": \"string\"}], \"description\": \"Types of events sent in
    notifications from NRF to subscribed NF Instances\", \"minItems\": 1},
    \"subscriptionId\": {\"type\": \"string\", \"pattern\": \"^[0-9]{5,6}-?[^-]
    +$\", \"readOnly\": true}, \"reqNfInstanceId\": {\"type\": \"string\",
    \"format\": \"uuid\"}, \"reqPerPlmnSnssais\": {\"type\": \"array\",
    \"items\": {\"type\": \"object\", \"required\": [\"plmnId\", \"snssaiList\"],
    \"properties\": {\"nid\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]
    {11}$\", \"plmnId\": {\"type\": \"object\", \"required\": [\"mcc\",
    \"mnc\"], \"properties\": {\"mcc\": {\"type\": \"string\", \"pattern\": \"^[\\d
    {3}$\", \"mnc\": {\"type\": \"string\", \"pattern\": \"^[\\d{2,3}$\"}}},
    \"snssaiList\": {\"type\": \"array\", \"items\": {\"allOf\": [{\"type\":
    \"object\", \"required\": [\"sst\"], \"properties\": {\"sd\": {\"type\":
    \"string\", \"pattern\": \"^[A-Fa-f0-9]{6}$\", \"sst\": {\"type\":
    \"integer\", \"maximum\": 255, \"minimum\": 0}}}, {\"not\": {\"required\":
    [\"sdRanges\", \"wildcardSd\"]}, \"type\": \"object\", \"properties\":
    {\"sdRanges\": {\"type\": \"array\", \"items\": {\"type\": \"object\",
    \"properties\": {\"end\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]
    {6}$\", \"start\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{6}$
    \"}}, \"description\": \"A range of SDs (Slice Differentiators)\",
    \"minItems\": 1, \"description\": \"When present, it shall contain the
    range(s) of Slice Differentiator values supported for the Slice/Service Type
    value indicated in the sst attribute of the Snssai data type\"},
    \"wildcardSd\": {\"enum\": [true], \"type\": \"boolean\", \"description\":
    \"When present, it shall be set to true, to indicate that all SD values are
    supported for the Slice/Service Type value indicated in the sst attribute of
    the Snssai data type\"}}, \"description\": \"Extensions to the Snssai data
    type, sdRanges and wildcardSd shall not be present simultaneously\"}}},
    \"minItems\": 1}}, \"description\": \"List of network slices (S-NSSAIs) for a
    given PLMN ID\", \"minItems\": 1, \"requesterFeatures\": {\"allOf\":
    [{\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]*$\"}], \"writeOnly\":
    true}, \"nrfSupportedFeatures\": {\"allOf\": [{\"type\": \"string\",
    \"pattern\": \"^[A-Fa-f0-9]*$\"}], \"readOnly\": true},
    \"nfStatusNotificationUri\": {\"type\": \"string\"}}, \"description\":
    \"Information of a subscription to notifications to NRF events, included in
    subscription requests and responses\"}
  },
  {
    \"defaultId\": 28,
    \"resourceURI\": \"/nnssf-nssselection/v2/network-slice-information\",
    \"httpMethod\": \"GET\",
    \"schemaValue\": \"[{\"in\": \"query\", \"name\": \"nf-type\", \"schema\":
    {\"anyOf\": [{\"enum\": [\"NRF\", \"UDM\", \"AMF\", \"SMF\", \"AUSF\",
    \"NEF\", \"PCF\", \"SMSF\", \"NSSF\", \"UDR\", \"LMF\", \"GMLC\", \"5G_EIR\",
    \"SEPP\", \"UPF\", \"N3IWF\", \"AF\", \"UDSF\", \"BSF\", \"CHF\", \"NWDAF\",
    \"PCSCF\", \"CBCF\", \"HSS\", \"UCMF\", \"SOR_AF\", \"SPAF\", \"MME\",
    \"SCSAS\", \"SCEF\", \"SCP\", \"NSSAAF\", \"ICSCF\", \"SCSCF\", \"DRA\",
    \"IMS_AS\", \"CEF\"], \"type\": \"string\"}, {\"type\": \"string\"}],
    \"description\": \"NF types known to NRF\", \"required\": true}, {\"in\":
    \"query\", \"name\": \"nf-id\", \"schema\": {\"type\": \"string\",
    \"format\": \"uuid\"}, \"required\": true}, {\"in\": \"query\", \"name\":
    \"slice-info-request-for-registration\", \"content\": {\"application/json\":

```

```

{"schema": {"type": "object", "properties": {"mappingOfNssai": {"type": "array", "items": {"type": "object", "required": ["homeSnssai", "servingSnssai"], "properties": {"homeSnssai": {"type": "object", "required": ["sst"], "properties": {"sd": {"type": "string", "pattern": "^A-Fa-f0-9{6}$"}, "sst": {"type": "integer", "maximum": 255, "minimum": 0}}}, "servingSnssai": {"type": "object", "required": ["sst"], "properties": {"sd": {"type": "string", "pattern": "^A-Fa-f0-9{6}$"}, "sst": {"type": "integer", "maximum": 255, "minimum": 0}}}}}, {"minItems": 1}, {"requestMapping": {"type": "boolean"}, {"requestedNssai": {"type": "array", "items": {"type": "object", "required": ["sst"], "properties": {"sd": {"type": "string", "pattern": "^A-Fa-f0-9{6}$"}, "sst": {"type": "integer", "maximum": 255, "minimum": 0}}}, {"minItems": 1}, {"subscribedNssai": {"type": "array", "items": {"type": "object", "required": ["subscribedSnssai"], "properties": {"subscribedSnssai": {"type": "object", "required": ["sst"], "properties": {"sd": {"type": "string", "pattern": "^A-Fa-f0-9{6}$"}, "sst": {"type": "integer", "maximum": 255, "minimum": 0}}}, {"defaultIndication": {"type": "boolean"}}, {"minItems": 1}, {"sNssaiForMapping": {"type": "array", "items": {"type": "object", "required": ["sst"], "properties": {"sd": {"type": "string", "pattern": "^A-Fa-f0-9{6}$"}, "sst": {"type": "integer", "maximum": 255, "minimum": 0}}}, {"minItems": 1}, {"allowedNssaiOtherAccess": {"type": "object", "required": ["accessType", "allowedSnssaiList"], "properties": {"accessType": {"enum": ["3GPP_ACCESS", "NON_3GPP_ACCESS"], "type": "string"}, "allowedSnssaiList": {"type": "array", "items": {"type": "object", "required": ["allowedSnssai"], "properties": {"allowedSnssai": {"type": "object", "required": ["sst"], "properties": {"sd": {"type": "string", "pattern": "^A-Fa-f0-9{6}$"}, "sst": {"type": "integer", "maximum": 255, "minimum": 0}}}, {"mappedHomeSnssai": {"type": "object", "required": ["sst"], "properties": {"sd": {"type": "string", "pattern": "^A-Fa-f0-9{6}$"}, "sst": {"type": "integer", "maximum": 255, "minimum": 0}}}, {"nsiInformationList": {"type": "array", "items": {"type": "object", "required": ["nrfId"], "properties": {"nrfId": {"type": "string"}, "nsiId": {"type": "string"}, "nrfNfMgtUri": {"type": "string"}, "nrfAccessTokenUri": {"type": "string"}}}, {"minItems": 1}, {"minItems": 1}, {"allowedNssaiCurrentAccess": {"type": "object", "required": ["accessType", "allowedSnssaiList"], "properties": {"accessType": {"enum": ["3GPP_ACCESS", "NON_3GPP_ACCESS"], "type": "string"}, "allowedSnssaiList": {"type": "array", "items": {"type": "object", "required": ["allowedSnssai"], "properties": {"allowedSnssai": {"type": "object", "required": ["sst"], "properties": {"sd": {"type": "string", "pattern": "^A-Fa-f0-9{6}$"}, "sst": {"type": "integer", "maximum": 255, "minimum": 0}}}, {"mappedHomeSnssai": {"type": "object", "required": ["sst"], "properties": {"sd": {"type": "string", "pattern": "^A-Fa-f0-9{6}$"}, "sst": {"type": "integer", "maximum": 255, "minimum": 0}}}, {"nsiInformationList": {"type": "array", "items": {"type": "object", "required": ["nrfId"], "properties": {"nrfId": {"type": "string"}, "nsiId": {"type": "string"}, "nrfNfMgtUri": {"type": "string"}, "nrfAccessTokenUri": {"type": "string"}}}, {"minItems": 1}, {"minItems": 1}, {"defaultConfiguredSnssaiInd": {"type": "boolean"}}, {"required": false}, {"in": "query", "name": "slice-

```

```

info-request-for-pdu-session\", \"content\": {\"application/json\":
{\"schema\": {\"type\": \"object\", \"required\": [\"roamingIndication\",
\"sNssai\"], \"properties\": {\"sNssai\": {\"type\": \"object\",
\"required\": [\"sst\"], \"properties\": {\"sd\": {\"type\": \"string\",
\"pattern\": \"^[A-Za-f0-9]{6}$\"}, \"sst\": {\"type\": \"integer\",
\"maximum\": 255, \"minimum\": 0}}}, \"homeSnssai\": {\"type\": \"object\",
\"required\": [\"sst\"], \"properties\": {\"sd\": {\"type\": \"string\",
\"pattern\": \"^[A-Za-f0-9]{6}$\"}, \"sst\": {\"type\": \"integer\",
\"maximum\": 255, \"minimum\": 0}}}, \"roamingIndication\": {\"anyOf\":
[{\"enum\": [\"NON_ROAMING\", \"LOCAL_BREAKOUT\", \"HOME_ROUTED_ROAMING\"],
\"type\": \"string\"}, {\"type\": \"string\"}]}}}}, \"required\": false},
{\"in\": \"query\", \"name\": \"slice-info-request-for-ue-cu\", \"content\":
{\"application/json\": {\"schema\": {\"type\": \"object\", \"properties\":
{\"mappingOfNssai\": {\"type\": \"array\", \"items\": {\"type\": \"object\",
\"required\": [\"homeSnssai\", \"servingSnssai\"], \"properties\":
{\"homeSnssai\": {\"type\": \"object\", \"required\": [\"sst\"],
\"properties\": {\"sd\": {\"type\": \"string\", \"pattern\": \"^[A-Za-f0-9]{6}$\"},
\"sst\": {\"type\": \"integer\", \"maximum\": 255, \"minimum\": 0}}},
\"servingSnssai\": {\"type\": \"object\", \"required\": [\"sst\"],
\"properties\": {\"sd\": {\"type\": \"string\", \"pattern\": \"^[A-Za-f0-9]{6}$\"},
\"sst\": {\"type\": \"integer\", \"maximum\": 255, \"minimum\": 0}}}},
\"minItems\": 1}, \"requestedNssai\": {\"type\": \"array\",
\"items\": {\"type\": \"object\", \"required\": [\"sst\"], \"properties\":
{\"sd\": {\"type\": \"string\", \"pattern\": \"^[A-Za-f0-9]{6}$\"}, \"sst\":
{\"type\": \"integer\", \"maximum\": 255, \"minimum\": 0}}}, \"minItems\":
1}, \"subscribedNssai\": {\"type\": \"array\", \"items\": {\"type\":
\"object\", \"required\": [\"subscribedSnssai\"], \"properties\":
{\"subscribedSnssai\": {\"type\": \"object\", \"required\": [\"sst\"],
\"properties\": {\"sd\": {\"type\": \"string\", \"pattern\": \"^[A-Za-f0-9]{6}$\"},
\"sst\": {\"type\": \"integer\", \"maximum\": 255, \"minimum\": 0}}},
\"defaultIndication\": {\"type\": \"boolean\"}}, \"minItems\": 1},
\"allowedNssaiOtherAccess\": {\"type\": \"object\", \"required\":
[\"accessType\", \"allowedSnssaiList\"], \"properties\": {\"accessType\":
{\"enum\": [\"3GPP_ACCESS\", \"NON_3GPP_ACCESS\"], \"type\": \"string\"},
\"allowedSnssaiList\": {\"type\": \"array\", \"items\": {\"type\":
\"object\", \"required\": [\"allowedSnssai\"], \"properties\":
{\"allowedSnssai\": {\"type\": \"object\", \"required\": [\"sst\"],
\"properties\": {\"sd\": {\"type\": \"string\", \"pattern\": \"^[A-Za-f0-9]{6}$\"},
\"sst\": {\"type\": \"integer\", \"maximum\": 255, \"minimum\": 0}}},
\"mappedHomeSnssai\": {\"type\": \"object\", \"required\": [\"sst\"],
\"properties\": {\"sd\": {\"type\": \"string\", \"pattern\": \"^[A-Za-f0-9]{6}$\"},
\"sst\": {\"type\": \"integer\", \"maximum\": 255, \"minimum\": 0}}},
\"nsiInformationList\": {\"type\": \"array\", \"items\": {\"type\":
\"object\", \"required\": [\"nrfId\"], \"properties\": {\"nrfId\": {\"type\":
\"string\"}, \"nsiId\": {\"type\": \"string\"}, \"nrfNfMgtUri\": {\"type\":
\"string\"}, \"nrfAccessTokenUri\": {\"type\": \"string\"}}}, \"minItems\":
1}}, \"minItems\": 1}}, \"allowedNssaiCurrentAccess\": {\"type\":
\"object\", \"required\": [\"accessType\", \"allowedSnssaiList\"],
\"properties\": {\"accessType\": {\"enum\": [\"3GPP_ACCESS\",
\"NON_3GPP_ACCESS\"], \"type\": \"string\"}, \"allowedSnssaiList\":
{\"type\": \"array\", \"items\": {\"type\": \"object\", \"required\":
[\"allowedSnssai\"], \"properties\": {\"allowedSnssai\": {\"type\":
\"object\", \"required\": [\"sst\"], \"properties\": {\"sd\": {\"type\":
\"string\", \"pattern\": \"^[A-Za-f0-9]{6}$\"}, \"sst\": {\"type\":
\"integer\", \"maximum\": 255, \"minimum\": 0}}}, \"mappedHomeSnssai\":
{\"type\": \"object\", \"required\": [\"sst\"], \"properties\": {\"sd\":

```



```

{"type": "string", "pattern": "^[A-Fa-f0-9]{6}$", "sst":
{"type": "integer", "maximum": 255, "minimum": 0}},
"nsiInformationList": {"type": "array", "items": {"type":
"object", "required": ["nrfId"], "properties": {"nrfId": {"type":
"string", "nsiId": {"type": "string", "nrfNfMgtUri": {"type":
"string", "nrfAccessTokenUri": {"type": "string"}}}, "minItems":
1}}, "minItems": 1}}, "defaultConfiguredSnssaiInd": {"type":
"boolean"}}}}, "required": false, {"in": "query", "name": "home-
plmn-id", "content": {"application/json": {"schema": {"type":
"object", "required": ["mcc", "mnc"], "properties": {"mcc":
{"type": "string", "pattern": "^[0-9]{3}$", "mnc": {"type":
"string", "pattern": "^[0-9]{2,3}$"}}}}, "required": false,
{"in": "query", "name": "tai", "content": {"application/json":
{"schema": {"type": "object", "required": ["plmnId", "tac"],
"properties": {"nid": {"type": "string", "pattern": "^[A-Fa-f0-9]
{11}$", "tac": {"type": "string", "pattern": "^(^([A-Fa-f0-9]{4}$)|
(^([A-Fa-f0-9]{6}$))", "plmnId": {"type": "object", "required":
["mcc", "mnc"], "properties": {"mcc": {"type": "string",
"pattern": "^[0-9]{3}$", "mnc": {"type": "string", "pattern":
"^[0-9]{2,3}$"}}}}}}, "required": false, {"in": "query", "name":
"supported-features", "schema": {"type": "string", "pattern": "^[A-
Fa-f0-9]*$"}, "required": false}]
},
{
  "defaultId": 29,
  "resourceURI": "/nausf-auth/v1/ue-authentications/{authCtxId}/5g-aka-
confirmation",
  "httpMethod": "PUT",
  "schemaValue": {"type": "object", "required": ["resStar"],
"properties": {"resStar": {"type": "string", "pattern": "[A-Fa-
f0-9]{32}", "nullable": true}, "supportedFeatures": {"type":
"string", "pattern": "^[A-Fa-f0-9]*$"}}
},
{
  "defaultId": 30,
  "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/amf-3gpp-access",
  "httpMethod": "PUT",
  "schemaValue": {"type": "object", "required": ["amfInstanceId",
"deregCallbackUri", "guami", "ratType"], "properties": {"pei":
{"type": "string", "pattern": "^(imei-[0-9]{15}|imeisv-[0-9]{16}|
mac((-[0-9a-fA-F]{2}){6})(-untrusted)?|eui((-[0-9a-fA-F]{2}){8})|.+)$",
"supi": {"type": "string", "pattern": "^(imsi-[0-9]{15}|nai-.+|
gci-.+|gli-.+|.+)$", "guami": {"type": "object", "required":
["amfId", "plmnId"], "properties": {"amfId": {"type": "string",
"pattern": "^[A-Fa-f0-9]{6}$", "plmnId": {"type": "object",
"required": ["mcc", "mnc"], "properties": {"mcc": {"type":
"string", "pattern": "^[0-9]{3}$", "mnc": {"type": "string",
"pattern": "^[0-9]{2,3}$", "nid": {"type": "string", "pattern":
"^[A-Fa-f0-9]{11}$"}}}}, "drFlag": {"type": "boolean"}, "imsVoPs":
{"anyOf": [{"enum": ["HOMOGENEOUS_SUPPORT",
"HOMOGENEOUS_NON_SUPPORT", "NON_HOMOGENEOUS_OR_UNKNOWN"], "type":
"string"}, {"type": "string"}]}, "ratType": {"anyOf": [{"enum":
["NR", "EUTRA", "WLAN", "VIRTUAL", "NB-IOT", "WIRELINE",
"WIRELINE_CABLE", "WIRELINE_BBF", "LTE-M", "NR-U", "EUTRA-U",
"TRUSTED_N3GA", "TRUSTED_WLAN", "UTRA", "GERA"], "type":
"string"}, {"type": "string"}]}, "purgeFlag": {"type":

```



```

\"boolean\"}, \"contextInfo\": {\"type\": \"object\", \"properties\":
{\"origHeaders\": {\"type\": \"array\", \"items\": {\"type\": \"string\"},
\"minItems\": 1}}, \"vgmlcAddress\": {\"type\": \"object\", \"properties\":
{\"vgmlcFqdn\": {\"type\": \"string\", \"description\": \"Fully Qualified
Domain Name\"}, \"vgmlcAddressIpv4\": {\"type\": \"string\", \"example\":
\"198.51.100.1\", \"pattern\": \"^([0-9]|[1-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|
25[0-5])\\.\\.\\.){3}([0-9]|[1-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5])$\"},
\"vgmlcAddressIpv6\": {\"type\": \"string\", \"allOf\": [{\"pattern\": \"^((:|
(0?|([1-9a-f][0-9a-f]{0,3})))|((0?|([1-9a-f][0-9a-f]{0,3})))|{0,6}(:|0?|
([1-9a-f][0-9a-f]{0,3})))$\"}, {\"pattern\": \"^((([^\":+])?{7}([^\":+])|((([^\":
+])?)*[^\":+])?::(([^\":+])?)*[^\":+])?)$\"}], \"example\":
\"2001:db8:85a3::8a2e:370:7334\"}}}, \"amfInstanceId\": {\"type\":
\"string\", \"format\": \"uuid\"}, \"backupAmfInfo\": {\"type\": \"array\",
\"items\": {\"type\": \"object\", \"required\": [\"backupAmf\"],
\"properties\": {\"backupAmf\": {\"type\": \"string\"}, \"guamiList\":
{\"type\": \"array\", \"items\": {\"type\": \"object\", \"required\":
[\"amfId\", \"plmnId\"], \"properties\": {\"amfId\": {\"type\": \"string\",
\"pattern\": \"^[A-Fa-f0-9]{6}$\"}, \"plmnId\": {\"type\": \"object\",
\"required\": [\"mcc\", \"mnc\"], \"properties\": {\"mcc\": {\"type\":
\"string\", \"pattern\": \"^[0-9]{3}$\"}, \"mnc\": {\"type\": \"string\",
\"pattern\": \"^[0-9]{2,3}$\"}, \"nid\": {\"type\": \"string\", \"pattern\":
\"^[A-Fa-f0-9]{11}$\"}}}}}, \"minItems\": 1}}, \"minItems\": 1,
\"urrrIndicator\": {\"type\": \"boolean\"}, \"deregCallbackUri\": {\"type\":
\"string\"}, \"registrationTime\": {\"type\": \"string\", \"format\": \"date-
time\"}, \"supportedFeatures\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-
f0-9]*$\"}, \"ueSrvccCapability\": {\"type\": \"boolean\"},
\"amfEeSubscriptionId\": {\"type\": \"string\"}, \"amfServiceNameDereg\":
{\"anyOf\": [{\"enum\": [\"nnrf-nfm\", \"nnrf-disc\", \"nnrf-oauth2\", \"nudm-
sdm\", \"nudm-uecm\", \"nudm-ueau\", \"nudm-ee\", \"nudm-pp\", \"nudm-
niddau\", \"nudm-mt\", \"namf-comm\", \"namf-evts\", \"namf-mt\", \"namf-
loc\", \"nsmf-pdusession\", \"nsmf-event-exposure\", \"nsmf-nidd\", \"nausf-
auth\", \"nausf-sorprotection\", \"nausf-upuprotection\", \"nnef-
pfdmanagement\", \"nnef-smcontext\", \"nnef-eventexposure\", \"3gpp-cp-
parameter-provisioning\", \"3gpp-device-triggering\", \"3gpp-bdt\", \"3gpp-
traffic-influence\", \"3gpp-chargeable-party\", \"3gpp-as-session-with-qos\",
\"3gpp-msisd- less-mo-sms\", \"3gpp-service-parameter\", \"3gpp-monitoring-
event\", \"3gpp-nidd-configuration-trigger\", \"3gpp-nidd\", \"3gpp-
analyticsexposure\", \"3gpp-racs-parameter-provisioning\", \"3gpp-ecr-
control\", \"3gpp-applying-bdt-policy\", \"3gpp-mo-lcs-notify\", \"npcf-am-
policy-control\", \"npcf-smpolicycontrol\", \"npcf-policyauthorization\",
\"npcf-bdtpolicycontrol\", \"npcf-eventexposure\", \"npcf-ue-policy-
control\", \"nsmf-sms\", \"nsmf-nssaiavailability\", \"nsmf-
nudr-dr\", \"nudr-group-id-map\", \"nsmf-loc\", \"nsmf-eir-eic\", \"nsmf-
management\", \"nchf-spendinglemitcontrol\", \"nchf-convergedcharging\",
\"nchf-offlineonlycharging\", \"nnwdafeventsubscription\", \"nnwdafe-
analyticsinfo\", \"ngmlc-loc\", \"nucmf-provisioning\", \"nucmf-
uecapabilitymanagement\", \"nhss-sdm\", \"nhss-uecm\", \"nhss-ueau\", \"nhss-
ee\", \"nhss-ims-sdm\", \"nhss-ims-uecm\", \"nhss-ims-ueau\", \"nsepp-
telescopic\", \"nsoraf-sor\", \"nspaf-secured-packet\", \"nuds-dr\",
\"nssaa-nssaa\"], \"type\": \"string\"}, {\"type\": \"string\"}],
\"description\": \"Service names known to NRF\"}, \"epsInterworkingInfo\":
{\"type\": \"object\", \"properties\": {\"epsIwkPgws\": {\"type\":
\"object\", \"description\": \"A map (list of key-value pairs where Dnn
serves as key) of EpsIwkPgws\", \"additionalProperties\": {\"type\":
\"object\", \"required\": [\"pgwFqdn\", \"smfInstanceId\"], \"properties\":
{\"pgwFqdn\": {\"type\": \"string\"}, \"smfInstanceId\": {\"type\":

```

```

\"string\", \"format\": \"uuid\"}}}}}, \"noEeSubscriptionInd\": {\"type\": 
\"boolean\"}, \"initialRegistrationInd\": {\"type\": \"boolean\"}, 
\"amfServiceNamePcscfRest\": {\"anyOf\": [{\"enum\": [\"nnrf-nfm\", \"nnrf-
disc\", \"nnrf-oauth2\", \"nudm-sdm\", \"nudm-uecm\", \"nudm-ueau\", \"nudm-
ee\", \"nudm-pp\", \"nudm-niddau\", \"nudm-mt\", \"namf-comm\", \"namf-
evts\", \"namf-mt\", \"namf-loc\", \"nsmf-pdusession\", \"nsmf-event-
exposure\", \"nsmf-nidd\", \"nausf-auth\", \"nausf-sorprotection\", \"nausf-
upuprotection\", \"nnef-pfdmanagement\", \"nnef-smcontext\", \"nnef-
eventexposure\", \"3gpp-cp-parameter-provisioning\", \"3gpp-device-
triggering\", \"3gpp-bdt\", \"3gpp-traffic-influence\", \"3gpp-chargeable-
party\", \"3gpp-as-session-with-qos\", \"3gpp-msisd- less-mo-sms\", \"3gpp-
service-parameter\", \"3gpp-monitoring-event\", \"3gpp-nidd-configuration-
trigger\", \"3gpp-nidd\", \"3gpp-analyticsexposure\", \"3gpp-racs-parameter-
provisioning\", \"3gpp-ecr-control\", \"3gpp-applying-bdt-policy\", \"3gpp-mo-
lcs-notify\", \"npcf-am-policy-control\", \"npcf-smpolicycontrol\", \"npcf-
policyauthorization\", \"npcf-bdtpolicycontrol\", \"npcf-eventexposure\", 
\"npcf-ue-policy-control\", \"nsmf-sms\", \"nsssf-nssselection\", \"nsssf-
nssaiavailability\", \"nudr-dr\", \"nudr-group-id-map\", \"nlmf-loc\", \"n5g-
eir-eic\", \"nbsf-management\", \"nchf-spendinglimitcontrol\", \"nchf-
convergedcharging\", \"nchf-offlineonlycharging\", \"nnwda-
eventssubscription\", \"nnwda- analyticsinfo\", \"ngmlc-loc\", \"nucmf-
provisioning\", \"nucmf-uecapabilitymanagement\", \"nhss-sdm\", \"nhss-
uecm\", \"nhss-ueau\", \"nhss-ee\", \"nhss-ims-sdm\", \"nhss-ims-uecm\", 
\"nhss-ims-ueau\", \"nsepp-telescopic\", \"nsoraf-sor\", \"nspaf-secured-
packet\", \"nuds- dr\", \"nsssaaf-nssaa\"], \"type\": \"string\"}, {\"type\": 
\"string\"}], \"description\": \"Service names known to NRF\"}, 
\"pcscfRestorationCallbackUri\": {\"type\": \"string\"}}}
},
{
  \"defaultId\": 31,
  \"resourceURI\": \"/nudm-uecm/v1/{ueId}/registrations/smf-registrations/
{pduSessionId}\",
  \"httpMethod\": \"PUT\",
  \"schemaValue\": \"{ \"type\": \"object\", \"required\": [\"pduSessionId\", 
\"plmnId\", \"singleNssai\", \"smfInstanceId\"], \"properties\": {\"dnn\": 
{\"type\": \"string\", \"plmnId\": {\"type\": \"object\", \"required\": 
[\"mcc\", \"mnc\"], \"properties\": {\"mcc\": {\"type\": \"string\", 
\"pattern\": \"^[0-9]{3}$\"}, \"mnc\": {\"type\": \"string\", \"pattern\": 
\"^[0-9]{2,3}$\"}}}, \"epdgInd\": {\"type\": \"boolean\", \"default\": 
false}, \"pgwFqdn\": {\"type\": \"string\", \"smfSetId\": {\"type\": 
\"string\", \"contextInfo\": {\"type\": \"object\", \"properties\": 
{\"origHeaders\": {\"type\": \"array\", \"items\": {\"type\": \"string\"}, 
\"minItems\": 1}}, \"singleNssai\": {\"type\": \"object\", \"required\": 
[\"sst\"], \"properties\": {\"sd\": {\"type\": \"string\", \"pattern\": 
\"^[A-Fa-f0-9]{6}$\"}, \"sst\": {\"type\": \"integer\", \"maximum\": 255, 
\"minimum\": 0}}, \"pduSessionId\": {\"type\": \"integer\", \"maximum\": 
255, \"minimum\": 0}, \"smfInstanceId\": {\"type\": \"string\", \"format\": 
\"uuid\"}, \"deregCallbackUri\": {\"type\": \"string\", 
\"registrationTime\": {\"type\": \"string\", \"format\": \"date-time\"}, 
\"emergencyServices\": {\"type\": \"boolean\"}, \"supportedFeatures\": 
{\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]*$\"}, 
\"registrationReason\": {\"anyOf\": [{\"enum\": 
[\"SMF_CONTEXT_TRANSFERRED\"], \"type\": \"string\"}, {\"type\": 
\"string\"}]}}, \"pcscfRestorationCallbackUri\": {\"type\": \"string\"}}}\"
},
{

```

```

"defaultId": 32,
"resourceURI": "/nsmf-pdusession/v1/pdu-sessions",
"httpMethod": "POST",
"schemaValue": "{ \"type\": \"object\", \"oneOf\": [{ \"required\": [\"vsmfId\", \"vsmfPduSessionUri\"], \"required\": [\"ismfId\", \"ismfPduSessionUri\"] }, { \"required\": [\"anType\", \"dnn\", \"servingNetwork\"], \"properties\": { \"dnn\": { \"type\": \"string\" }, \"pei\": { \"type\": \"string\", \"pattern\": \"^(imei-[0-9]{15}|imeisv-[0-9]{16}|mac((-[0-9a-fA-F]{2}){6})(-untrusted)?|eui((-[0-9a-fA-F]{2}){8})|.+)$\", \"gpsi\": { \"type\": \"string\", \"pattern\": \"^(msisdn-[0-9]{5,15}|extid-[^@]+@[^@]+|.+)$$\", \"supi\": { \"type\": \"string\", \"pattern\": \"^(imsi-[0-9]{5,15}|nai-.+|gci-.+|gli-.+|.+)$$\", \"guami\": { \"type\": \"object\", \"required\": [\"amfId\", \"plmnId\"], \"properties\": { \"amfId\": { \"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{6}$$\", \"plmnId\": { \"type\": \"object\", \"required\": [\"mcc\", \"mnc\"], \"properties\": { \"mcc\": { \"type\": \"string\", \"pattern\": \"^[0-9]{3}$$\", \"mnc\": { \"type\": \"string\", \"pattern\": \"^[0-9]{2,3}$$\", \"nid\": { \"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{11}$$\" } } } }, \"pcfId\": { \"type\": \"string\", \"format\": \"uuid\" }, \"anType\": { \"enum\": [\"3GPP_ACCESS\", \"NON_3GPP_ACCESS\"], \"type\": \"string\" }, \"hPcfId\": { \"type\": \"string\", \"format\": \"uuid\" }, \"ismfId\": { \"type\": \"string\", \"format\": \"uuid\" }, \"sNssai\": { \"type\": \"object\", \"required\": [\"sst\"], \"properties\": { \"sd\": { \"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{6}$$\", \"sst\": { \"type\": \"integer\", \"maximum\": 255, \"minimum\": 0 } } }, \"vsmfId\": { \"type\": \"string\", \"format\": \"uuid\" }, \"amfNfId\": { \"type\": \"string\", \"format\": \"uuid\" }, \"ratType\": { \"anyOf\": [{ \"enum\": [\"NR\", \"EUTRA\", \"WLAN\", \"VIRTUAL\", \"NB-IOT\", \"WIRELINE\", \"WIRELINE_CABLE\", \"WIRELINE_BBF\", \"LTE-M\", \"NR-U\", \"EUTRA-U\", \"TRUSTED_N3GA\", \"TRUSTED_WLAN\", \"UTRA\", \"GERA\"], \"type\": \"string\" }, { \"type\": \"string\" } ] }, \"selMode\": { \"anyOf\": [{ \"enum\": [\"VERIFIED\", \"UE_DNN_NOT_VERIFIED\", \"NW_DNN_NOT_VERIFIED\"], \"type\": \"string\" }, { \"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.\\n\\n\" }, { \"description\": \"Possible values are - VERIFIED - UE_DNN_NOT_VERIFIED - NW_DNN_NOT_VERIFIED\\n\\n\" }, \"dnaiList\": { \"type\": \"array\", \"items\": { \"type\": \"string\" }, \"minItems\": 1 }, \"pcfSetId\": { \"type\": \"string\" }, \"vplmnQos\": { \"type\": \"object\", \"properties\": { \"5qi\": { \"type\": \"integer\", \"maximum\": 255, \"minimum\": 0 }, \"arp\": { \"type\": \"object\", \"required\": [\"preemptCap\", \"preemptVuln\", \"priorityLevel\"], \"properties\": { \"preemptCap\": { \"anyOf\": [{ \"enum\": [\"NOT_PREEMPT\", \"MAY_PREEMPT\"], \"type\": \"string\" }, { \"type\": \"string\" } ] }, \"preemptVuln\": { \"anyOf\": [{ \"enum\": [\"NOT_PREEMPTABLE\", \"PREEMPTABLE\"], \"type\": \"string\" }, { \"type\": \"string\" } ] }, \"priorityLevel\": { \"type\": \"integer\", \"maximum\": 15, \"minimum\": 1 }, \"nullable\": true, \"description\": \"nullable true shall not be used for this attribute\" } } } }, \"guaFbrDl\": { \"type\": \"string\", \"pattern\": \"^[0-9]{1,15}(\\.[0-9]{1,15})?(bps|Kbps|Mbps|Gbps|Tbps)$\", \"guaFbrUl\": { \"type\": \"string\", \"pattern\": \"^[0-9]{1,15}(\\.[0-9]{1,15})?(bps|Kbps|Mbps|Gbps|Tbps)$\", \"maxFbrDl\": { \"type\": \"string\", \"pattern\": \"^[0-9]{1,15}(\\.[0-9]{1,15})?(bps|Kbps|Mbps|Gbps|Tbps)$\", \"maxFbrUl\": { \"type\": \"string\", \"pattern\": \"^[0-9]{1,15}(\\.[0-9]{1,15})?(bps|Kbps|Mbps|Gbps|Tbps)$\", \"sessionAmbr\": { \"type\": \"object\", \"required\": [\"downlink\", \"uplink\"], \"properties\": { \"uplink\": { \"type\": \"string\", \"pattern\": \"^[0-9]{1,15}(\\.[0-9]{1,15})?(bps|Kbps|Mbps|Gbps|Tbps)$\", \"downlink\":

```

```

{"type": "string", "pattern": "^\\\\d+(\\\\\\\\.\\\\\\\\d+)? (bps|Kbps|Mbps|
Gbps|Tbps)$"}, {"cpOnlyInd": {"type": "boolean", "default":
false}, {"invokeNef": {"type": "boolean", "default": false},
{"chargingId": {"type": "string", "pattern": "^(0|([1-9]{1}[0-9]
{0,9}))$"}, {"pcfGroupId": {"type": "string"}, {"udmGroupId":
{"type": "string"}, {"ueLocation": {"type": "object",
{"properties": {"nrLocation": {"type": "object", "required":
["ncgi", "tai"], "properties": {"tai": {"type": "object",
"required": ["plmnId", "tac"], "properties": {"nid": {"type":
"string", "pattern": "[A-Fa-f0-9]{11}$"}, "tac": {"type":
"string", "pattern": "^(^([A-Fa-f0-9]{4}$)|([A-Fa-f0-9]{6}$)"}},
"plmnId": {"type": "object", "required": ["mcc", "mnc"],
"properties": {"mcc": {"type": "string", "pattern": "^\\\\d{3}$
"}, "mnc": {"type": "string", "pattern": "^\\\\d{2,3}$"}}}},
"ncgi": {"type": "object", "required": ["nrCellId", "plmnId"],
"properties": {"nid": {"type": "string", "pattern": "[A-Fa-f0-9]
{11}$"}, "plmnId": {"type": "object", "required": ["mcc",
"mnc"], "properties": {"mcc": {"type": "string", "pattern": "^\\\\
d{3}$"}, "mnc": {"type": "string", "pattern": "^\\\\d{2,3}$"}}}},
"nrCellId": {"type": "string", "pattern": "[A-Fa-f0-9]{9}$"}},
{"ignoreNcgi": {"type": "boolean", "default": false}, {"globalGnbId":
{"type": "object", "oneOf": [{"required": ["n3IwfId"]},
{"required": ["gNbId"]}, {"required": ["ngeNbId"]}, {"required":
["wagfId"]}, {"required": ["tngfId"]}, {"required": ["eNbId"]}],
"required": ["plmnId"], "properties": {"nid": {"type": "string",
"pattern": "[A-Fa-f0-9]{11}$"}, "eNbId": {"type": "string",
"pattern": "[A-Fa-f0-9]{11}$"}, "gNbId": {"type": "object",
"required": ["bitLength", "gNBValue"], "properties": {"gNBValue":
{"type": "string", "pattern": "[A-Fa-f0-9]{6,8}$"}, "bitLength":
{"type": "integer", "maximum": 32, "minimum": 22}}}, "plmnId":
{"type": "object", "required": ["mcc", "mnc"], "properties":
{"mcc": {"type": "string", "pattern": "^\\\\d{3}$"}, "mnc":
{"type": "string", "pattern": "^\\\\d{2,3}$"}}, {"tngfId":
{"type": "string", "pattern": "[A-Fa-f0-9]+$"}, {"wagfId":
{"type": "string", "pattern": "[A-Fa-f0-9]+$"}, {"n3IwfId":
{"type": "string", "pattern": "[A-Fa-f0-9]+$"}, {"ngeNbId":
{"type": "string", "pattern": "[A-Fa-f0-9]{5}|LMacroNGeNB-
[A-Fa-f0-9]{6}|SMacroNGeNB-[A-Fa-f0-9]{5})$"}}, {"geodeticInformation":
{"type": "string", "pattern": "[0-9A-F]{20}$"},
{"ueLocationTimestamp": {"type": "string", "format": "date-time"},
{"geographicalInformation": {"type": "string", "pattern": "[0-9A-F]
{16}$"}, {"ageOfLocationInformation": {"type": "integer", "maximum":
32767, "minimum": 0}}, {"geraLocation": {"type": "object", "oneOf":
[{"required": ["cgi"]}, {"required": ["sai"]}, {"required":
["rai"]}, {"required": ["lai"]}], "properties": {"cgi": {"type":
"object", "required": ["cellId", "lac", "plmnId"], "properties":
{"lac": {"type": "string", "pattern": "[A-Fa-f0-9]{4}$"},
"cellId": {"type": "string", "pattern": "[A-Fa-f0-9]{4}$"},
"plmnId": {"type": "object", "required": ["mcc", "mnc"],
"properties": {"mcc": {"type": "string", "pattern": "^\\\\d{3}$
"}, "mnc": {"type": "string", "pattern": "^\\\\d{2,3}$"}}}},
"lai": {"type": "object", "required": ["lac", "plmnId"],
"properties": {"lac": {"type": "string", "pattern": "[A-Fa-f0-9]
{4}$"}, "plmnId": {"type": "object", "required": ["mcc", "mnc"],
"properties": {"mcc": {"type": "string", "pattern": "^\\\\d{3}$

```

```
\}, \mnc\": {\\"type\\\": \\"string\\\", \\"pattern\\\": \"^\\\\d{2,3}$\"}}}},  
\\rail\\\": {\\"type\\\": \\"object\\\", \\"required\\\": [\\\"lac\\\", \\\"plmnId\\\", \\\"rac\\\"],  
\\\"properties\\\": {\\"lac\\\": {\\"type\\\": \\"string\\\", \\"pattern\\\": \"^[A-Fa-f0-9]{4}$\"}, \\\"rac\\\": {\\"type\\\": \\"string\\\", \\"pattern\\\": \"^[A-Fa-f0-9]{2}$\"},  
\\\"plmnId\\\": {\\"type\\\": \\"object\\\", \\"required\\\": [\\\"mcc\\\", \\\"mnc\\\"],  
\\\"properties\\\": {\\"mcc\\\": {\\"type\\\": \\"string\\\", \\"pattern\\\": \"^\\\\\\\\d{3}$\"},  
\\\"mnc\\\": {\\"type\\\": \\"string\\\", \\"pattern\\\": \"^\\\\\\\\d{2,3}$\"}}}}}},  
\\sai\\\": {\\"type\\\": \\"object\\\", \\"required\\\": [\\\"lac\\\", \\\"plmnId\\\", \\\"sac\\\"],  
\\\"properties\\\": {\\"lac\\\": {\\"type\\\": \\"string\\\", \\"pattern\\\": \"^[A-Fa-f0-9]{4}$\"}, \\\"sac\\\": {\\"type\\\": \\"string\\\", \\"pattern\\\": \"^[A-Fa-f0-9]{4}$\"},  
\\\"plmnId\\\": {\\"type\\\": \\"object\\\", \\"required\\\": [\\\"mcc\\\", \\\"mnc\\\"],  
\\\"properties\\\": {\\"mcc\\\": {\\"type\\\": \\"string\\\", \\"pattern\\\": \"^\\\\\\\\d{3}$\"},  
\\\"mnc\\\": {\\"type\\\": \\"string\\\", \\"pattern\\\": \"^\\\\\\\\d{2,3}$\"}}}}}},  
\\mscNumber\\\": {\\"type\\\": \\"string\\\", \\"vlrNumber\\\": {\\"type\\\": \\"string\\\",  
\\\"locationNumber\\\": {\\"type\\\": \\"string\\\", \\"geodeticInformation\\\":  
{\\"type\\\": \\"string\\\", \\"pattern\\\": \"^[0-9A-F]{20}$\"},  
\\ueLocationTimestamp\\\": {\\"type\\\": \\"string\\\", \\"format\\\": \\"date-time\\\"},  
\\geographicalInformation\\\": {\\"type\\\": \\"string\\\", \\"pattern\\\": \"^[0-9A-F]{16}$\"},  
\\ageOfLocationInformation\\\": {\\"type\\\": \\"integer\\\", \\"maximum\\\":  
32767, \\"minimum\\\": 0}}, \\n3gaLocation\\\": {\\"type\\\": \\"object\\\",  
\\\"properties\\\": {\\"gci\\\": {\\"type\\\": \\"string\\\", \\"gli\\\": {\\"type\\\":  
\\\"string\\\", \\"format\\\": \\"byte\\\", \\"tnapId\\\": {\\"type\\\": \\"object\\\",  
\\\"properties\\\": {\\"ssId\\\": {\\"type\\\": \\"string\\\", \\"bssId\\\": {\\"type\\\":  
\\\"string\\\", \\"civicAddress\\\": {\\"type\\\": \\"string\\\", \\"format\\\":  
\\\"byte\\\"}}}}, \\twapId\\\": {\\"type\\\": \\"object\\\", \\"required\\\": [\\\"ssId\\\"],  
\\\"properties\\\": {\\"ssId\\\": {\\"type\\\": \\"string\\\", \\"bssId\\\": {\\"type\\\":  
\\\"string\\\", \\"civicAddress\\\": {\\"type\\\": \\"string\\\", \\"format\\\":  
\\\"byte\\\"}}}}, \\n3IwfId\\\": {\\"type\\\": \\"string\\\", \\"pattern\\\": \"^[A-Fa-f0-9]+$\"},  
\\n3gppTai\\\": {\\"type\\\": \\"object\\\", \\"required\\\": [\\\"plmnId\\\",  
\\tac\\\"], \\\"properties\\\": {\\"nid\\\": {\\"type\\\": \\"string\\\", \\"pattern\\\": \"^[A-Fa-f0-9]{11}$\"},  
\\tac\\\": {\\"type\\\": \\"string\\\", \\"pattern\\\": \"(^[A-Fa-f0-9]{4}$)|(^[A-Fa-f0-9]{6}$)\\\",  
\\plmnId\\\": {\\"type\\\": \\"object\\\", \\"required\\\": [\\\"mcc\\\", \\\"mnc\\\"], \\\"properties\\\": {\\"mcc\\\": {\\"type\\\": \\"string\\\",  
\\\"pattern\\\": \"^\\\\\\\\d{3}$\"}, \\\"mnc\\\": {\\"type\\\": \\"string\\\", \\"pattern\\\":  
\"^\\\\\\\\d{2,3}$\"}}}}}}, \\protocol\\\": {\\"anyOf\\\": [{\\enum\\\": [\\UDP\\\",  
\\TCP\\\"], \\type\\\": \\"string\\\", {\\"type\\\": \\"string\\\", \\description\\\":  
\\This string provides forward-compatibility with future extensions to the  
enumeration but is not used to encode content defined in the present version  
of this API.\\n\\}], \\description\\\": \\Possible values are - UDP: User  
Datagram Protocol. - TCP: Transmission Control Protocol.\\n\\\"},  
\\hfcNodeId\\\": {\\"type\\\": \\"object\\\", \\"required\\\": [\\hfcNid\\\"],  
\\\"properties\\\": {\\"hfcNid\\\": {\\"type\\\": \\"string\\\", \\"maxLength\\\": 6}},  
\\portNumber\\\": {\\"type\\\": \\"integer\\\", \\"minimum\\\": 0}, \\ueIpv4Addr\\\":  
{\\"type\\\": \\"string\\\", \\example\\\": \\198.51.100.1\\\", \\pattern\\\": \"^(([0-9]|[1-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5])\\\\\\\\.){3}([0-9]|[1-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5])$\"}, \\ueIpv6Addr\\\": {\\"type\\\": \\"string\\\",  
\\allOf\\\": [{\\pattern\\\": \"^((|0?|[1-9a-f][0-9a-f]{0,3})))(0?|[1-9a-f][0-9a-f]{0,3})){0,6}(:|0?|[1-9a-f][0-9a-f]{0,3}))$\"}, {\\"pattern\\\":  
\"^((([^\"]+:){7}([^\"]+))|(((([^\"]+:)*[^\"]+)??:((([^\"]+:)*[^\"]+)?))$\"}],  
\\example\\\": \\2001.db8:85a3::8a2e:370:7334\\\", \\w5gbanLineType\\\":  
{\\"anyOf\\\": [{\\enum\\\": [\\DSL\\\", \\PON\\\"], \\type\\\": \\"string\\\", {\\"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.\\n\\\"}], \\description\\\":  
\\Possible values are - DSL: Identifies a DSL line - PON: Identifies a PON  
line\\n\\\"}}}}, \\utraLocation\\\": {\\"type\\\": \\"object\\\", \\oneOf\\\":
```

```

[{"required": ["cgi"]}, {"required": ["sai"]}, {"required": ["rai"]}], "properties": {"cgi": {"type": "object", "required": ["cellId", "lac", "plmnId"], "properties": {"lac": {"type": "string", "pattern": "^[A-Fa-f0-9]{4}$"}, "cellId": {"type": "string", "pattern": "^[A-Fa-f0-9]{4}$"}, "plmnId": {"type": "object", "required": ["mcc", "mnc"], "properties": {"mcc": {"type": "string", "pattern": "^[0-9]{3}$"}, "mnc": {"type": "string", "pattern": "^[0-9]{2,3}$"}}}}, "lai": {"type": "object", "required": ["lac", "plmnId"], "properties": {"lac": {"type": "string", "pattern": "^[A-Fa-f0-9]{4}$"}, "plmnId": {"type": "object", "required": ["mcc", "mnc"], "properties": {"mcc": {"type": "string", "pattern": "^[0-9]{3}$"}, "mnc": {"type": "string", "pattern": "^[0-9]{2,3}$"}}}}, "rai": {"type": "object", "required": ["lac", "plmnId", "rac"], "properties": {"lac": {"type": "string", "pattern": "^[A-Fa-f0-9]{4}$"}, "rac": {"type": "string", "pattern": "^[A-Fa-f0-9]{2}$"}, "plmnId": {"type": "object", "required": ["mcc", "mnc"], "properties": {"mcc": {"type": "string", "pattern": "^[0-9]{3}$"}, "mnc": {"type": "string", "pattern": "^[0-9]{2,3}$"}}}}, "sai": {"type": "object", "required": ["lac", "plmnId", "sac"], "properties": {"lac": {"type": "string", "pattern": "^[A-Fa-f0-9]{4}$"}, "sac": {"type": "string", "pattern": "^[A-Fa-f0-9]{4}$"}, "plmnId": {"type": "object", "required": ["mcc", "mnc"], "properties": {"mcc": {"type": "string", "pattern": "^[0-9]{3}$"}, "mnc": {"type": "string", "pattern": "^[0-9]{2,3}$"}}}}, "geodeticInformation": {"type": "string", "pattern": "^[0-9A-F]{20}$"}, "ueLocationTimestamp": {"type": "string", "format": "date-time"}, "geographicalInformation": {"type": "string", "pattern": "^[0-9A-F]{16}$"}, "ageOfLocationInformation": {"type": "integer", "maximum": 32767, "minimum": 0}}, "eutraLocation": {"type": "object", "required": ["ecgi", "tai"], "properties": {"tai": {"type": "object", "required": ["plmnId", "tac"], "properties": {"nid": {"type": "string", "pattern": "^[A-Fa-f0-9]{11}$"}, "tac": {"type": "string", "pattern": "^(^([A-Fa-f0-9]{4}$)|(^([A-Fa-f0-9]{6}$))$"}, "plmnId": {"type": "object", "required": ["mcc", "mnc"], "properties": {"mcc": {"type": "string", "pattern": "^[0-9]{3}$"}, "mnc": {"type": "string", "pattern": "^[0-9]{2,3}$"}}}}, "ecgi": {"type": "object", "required": ["eutraCellId", "plmnId"], "properties": {"nid": {"type": "string", "pattern": "^[A-Fa-f0-9]{11}$"}, "plmnId": {"type": "object", "required": ["mcc", "mnc"], "properties": {"mcc": {"type": "string", "pattern": "^[0-9]{3}$"}, "mnc": {"type": "string", "pattern": "^[0-9]{2,3}$"}}}}, "eutraCellId": {"type": "string", "pattern": "^[A-Fa-f0-9]{7}$"}}, "ignoreTai": {"type": "boolean", "default": false}, "ignoreEcgi": {"type": "boolean", "default": false}, "globalENbId": {"type": "object", "oneOf": [{"required": ["n3IwfId"]}, {"required": ["gNbId"]}, {"required": ["ngeNbId"]}, {"required": ["wagfId"]}, {"required": ["tngfId"]}, {"required": ["eNbId"]}], "required": ["plmnId"], "properties": {"nid": {"type": "string", "pattern": "^[A-Fa-f0-9]{11}$"}, "eNbId": {"type": "string", "pattern": "^(MacroNb-[A-Fa-f0-9]{5}|MacroNb-[A-Fa-f0-9]{6}|SMacroNb-[A-Fa-f0-9]{5}|HomeNb-[A-Fa-f0-9]{7})$"}, "gNbId": {"type": "object", "required": ["bitLength", "gNbValue"], "properties": {"gNbValue": {"type": "string", "pattern": "^[A-Fa-f0-9]{6,8}$"}, "bitLength": {"type": "integer", "maximum": 32, "minimum": 22}}, "plmnId": {"type": "object", "required":

```

```

["mcc", "mnc"], "properties": {"mcc": {"type": "string",
"pattern": "\\^\\\\d{3}$"}, "mnc": {"type": "string", "pattern":
"\\^\\\\d{2,3}$"}}, "tngfId": {"type": "string", "pattern": "\\^[A-Fa-
f0-9]+$"}, "wagfId": {"type": "string", "pattern": "\\^[A-Fa-f0-9]+$
"}, "n3IwfId": {"type": "string", "pattern": "\\^[A-Fa-f0-9]+$"},
"ngeNbId": {"type": "string", "pattern": "\\^(MacroNGeNB-[A-Fa-f0-9]
{5}|MacroNGeNB-[A-Fa-f0-9]{6}|MacroNGeNB-[A-Fa-f0-9]{5})$"},
"globalNgenbId": {"type": "object", "oneOf": [{"required":
["n3IwfId"]}, {"required": ["gNbId"]}, {"required": ["ngeNbId"]},
{"required": ["wagfId"]}, {"required": ["tngfId"]}, {"required":
["eNbId"]}], "required": ["plmnId"], "properties": {"nid":
{"type": "string", "pattern": "\\^[A-Fa-f0-9]{11}$"}, "eNbId":
{"type": "string", "pattern": "\\^(MacroeNB-[A-Fa-f0-9]{5}|MacroeNB-[A-
Fa-f0-9]{6}|MacroeNB-[A-Fa-f0-9]{5}|HomeeNB-[A-Fa-f0-9]{7})$"}, "gNbId":
{"type": "object", "required": ["bitLength", "gNBValue"],
"properties": {"gNBValue": {"type": "string", "pattern": "\\^[A-Fa-
f0-9]{6,8}$"}, "bitLength": {"type": "integer", "maximum": 32,
"minimum": 22}}, "plmnId": {"type": "object", "required":
["mcc", "mnc"], "properties": {"mcc": {"type": "string",
"pattern": "\\^\\\\d{3}$"}, "mnc": {"type": "string", "pattern":
"\\^\\\\d{2,3}$"}}, "tngfId": {"type": "string", "pattern": "\\^[A-Fa-
f0-9]+$"}, "wagfId": {"type": "string", "pattern": "\\^[A-Fa-f0-9]+$
"}, "n3IwfId": {"type": "string", "pattern": "\\^[A-Fa-f0-9]+$"},
"ngeNbId": {"type": "string", "pattern": "\\^(MacroNGeNB-[A-Fa-f0-9]
{5}|MacroNGeNB-[A-Fa-f0-9]{6}|MacroNGeNB-[A-Fa-f0-9]{5})$"},
"geodeticInformation": {"type": "string", "pattern": "\\^[0-9A-F]{20}$
"}, "ueLocationTimestamp": {"type": "string", "format": "date-
time"}, "geographicalInformation": {"type": "string", "pattern":
"\\^[0-9A-F]{16}$"}, "ageOfLocationInformation": {"type": "integer",
"maximum": 32767, "minimum": 0}}}}, "ueTimeZone": {"type":
"string"}, "upCnxState": {"anyOf": [{"enum": ["ACTIVATED",
"DEACTIVATED", "ACTIVATING", "SUSPENDED"], "type": "string"},
{"type": "string", "description": "This string provides forward-
compatibility with future extensions to the enumeration but is not used to
encode content defined in the present version of this API.\n\n"}],
"description": "Possible values are - ACTIVATED - DEACTIVATED - ACTIVATING
- SUSPENDED\n\n"}, "epsBearerId": {"type": "array", "items":
{"type": "integer", "maximum": 15, "minimum": 0}, "minItems": 1},
"pgwS8cFteid": {"type": "string", "format": "byte"},
"requestType": {"anyOf": [{"enum": ["INITIAL_REQUEST",
"EXISTING_PDU_SESSION", "INITIAL_EMERGENCY_REQUEST",
"EXISTING_EMERGENCY_PDU_SESSION"], "type": "string"}, {"type":
"string", "description": "This string provides forward-compatibility
with future extensions to the enumeration but is not used to encode content
defined in the present version of this API.\n\n"}], "description":
"Possible values are - INITIAL_REQUEST - EXISTING_PDU_SESSION -
INITIAL_EMERGENCY_REQUEST - EXISTING_EMERGENCY_PDU_SESSION\n\n"},
"selectedDnn": {"type": "string"}, "maRequestInd": {"type":
"boolean", "default": false}, "pduSessionId": {"type": "integer",
"maximum": 255, "minimum": 0}, "recoveryTime": {"type": "string",
"format": "date-time"}, "addUeLocation": {"type": "object",
"properties": {"nrLocation": {"type": "object", "required":
["ncgi", "tai"], "properties": {"tai": {"type": "object",
"required": ["plmnId", "tac"], "properties": {"nid": {"type":
"string", "pattern": "\\^[A-Fa-f0-9]{11}$"}, "tac": {"type":
"string", "pattern": "\\^[A-Fa-f0-9]{4}$"}|(^[A-Fa-f0-9]{6}$)"},

```



```

\"plmnId\": {\"type\": \"object\", \"required\": [\"mcc\", \"mnc\"],
\"properties\": {\"mcc\": {\"type\": \"string\", \"pattern\": \"^[0-9]{3}$\"},
\"mnc\": {\"type\": \"string\", \"pattern\": \"^[0-9]{2,3}$\"}}}},
\"ncgi\": {\"type\": \"object\", \"required\": [\"nrCellId\", \"plmnId\"],
\"properties\": {\"nid\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{11}$\"},
\"plmnId\": {\"type\": \"object\", \"required\": [\"mcc\",
\"mnc\"], \"properties\": {\"mcc\": {\"type\": \"string\", \"pattern\": \"^[0-9]{3}$\"},
\"mnc\": {\"type\": \"string\", \"pattern\": \"^[0-9]{2,3}$\"}}}},
\"nrCellId\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{9}$\"}},
\"ignoreNcgi\": {\"type\": \"boolean\", \"default\": false}, \"globalGnbId\":
{\"type\": \"object\", \"oneOf\": [{\"required\": [\"n3IwfId\"],
\"required\": [\"gNbId\"], {\"required\": [\"ngeNbId\"], {\"required\":
[\"wagfId\"], {\"required\": [\"tngfId\"], {\"required\": [\"eNbId\"]}],
\"required\": [\"plmnId\"], \"properties\": {\"nid\": {\"type\": \"string\",
\"pattern\": \"^[A-Fa-f0-9]{11}$\"}, \"eNbId\": {\"type\": \"string\",
\"pattern\": \"^[MacroNB-[A-Fa-f0-9]{5}|MacroNB-[A-Fa-f0-9]{6}|SMacroNB-
[A-Fa-f0-9]{5}|HomeNB-[A-Fa-f0-9]{7})$\"}, \"gNbId\": {\"type\": \"object\",
\"required\": [\"bitLength\", \"gNBValue\"], \"properties\": {\"gNBValue\":
{\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{6,8}$\"}, \"bitLength\":
{\"type\": \"integer\", \"maximum\": 32, \"minimum\": 22}}}, \"plmnId\":
{\"type\": \"object\", \"required\": [\"mcc\", \"mnc\"], \"properties\":
{\"mcc\": {\"type\": \"string\", \"pattern\": \"^[0-9]{3}$\"}, \"mnc\":
{\"type\": \"string\", \"pattern\": \"^[0-9]{2,3}$\"}}}, \"tngfId\":
{\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]+$\"}, \"wagfId\":
{\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]+$\"}, \"n3IwfId\":
{\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]+$\"}, \"ngeNbId\":
{\"type\": \"string\", \"pattern\": \"^[MacroNGNB-[A-Fa-f0-9]{5}|MacroNGNB-
[A-Fa-f0-9]{6}|SMacroNGNB-[A-Fa-f0-9]{5})$\"}}, \"geodeticInformation\":
{\"type\": \"string\", \"pattern\": \"^[0-9A-F]{20}$\"},
\"ueLocationTimestamp\": {\"type\": \"string\", \"format\": \"date-time\"},
\"geographicalInformation\": {\"type\": \"string\", \"pattern\": \"^[0-9A-F]{16}$\"},
\"ageOfLocationInformation\": {\"type\": \"integer\", \"maximum\":
32767, \"minimum\": 0}}, \"geraLocation\": {\"type\": \"object\", \"oneOf\":
[{\"required\": [\"cgi\"], {\"required\": [\"sai\"], {\"required\":
[\"rai\"], {\"required\": [\"lai\"]}], \"properties\": {\"cgi\": {\"type\":
\"object\", \"required\": [\"cellId\", \"lac\", \"plmnId\"], \"properties\":
{\"lac\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{4}$\"},
\"cellId\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{4}$\"},
\"plmnId\": {\"type\": \"object\", \"required\": [\"mcc\", \"mnc\"],
\"properties\": {\"mcc\": {\"type\": \"string\", \"pattern\": \"^[0-9]{3}$\"},
\"mnc\": {\"type\": \"string\", \"pattern\": \"^[0-9]{2,3}$\"}}}},
\"lai\": {\"type\": \"object\", \"required\": [\"lac\", \"plmnId\"],
\"properties\": {\"lac\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{4}$\"},
\"plmnId\": {\"type\": \"object\", \"required\": [\"mcc\", \"mnc\"],
\"properties\": {\"mcc\": {\"type\": \"string\", \"pattern\": \"^[0-9]{3}$\"},
\"mnc\": {\"type\": \"string\", \"pattern\": \"^[0-9]{2,3}$\"}}}},
\"rai\": {\"type\": \"object\", \"required\": [\"lac\", \"plmnId\", \"rac\"],
\"properties\": {\"lac\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{4}$\"},
\"rac\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{2}$\"},
\"plmnId\": {\"type\": \"object\", \"required\": [\"mcc\", \"mnc\"],
\"properties\": {\"mcc\": {\"type\": \"string\", \"pattern\": \"^[0-9]{3}$\"},
\"mnc\": {\"type\": \"string\", \"pattern\": \"^[0-9]{2,3}$\"}}}},
\"sai\": {\"type\": \"object\", \"required\": [\"lac\", \"plmnId\", \"sac\"],
\"properties\": {\"lac\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{4}$\"},
\"sac\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{4}$\"},
\"plmnId\": {\"type\": \"object\", \"required\": [\"mcc\", \"mnc\"],

```



```

\"properties\": {\"mcc\": {\"type\": \"string\", \"pattern\": \"^\\\\d{3}$\"},
\"mnc\": {\"type\": \"string\", \"pattern\": \"^\\\\d{2,3}$\"}}},
\"mscNumber\": {\"type\": \"string\"}, \"vlnrNumber\": {\"type\": \"string\"},
\"locationNumber\": {\"type\": \"string\"}, \"geodeticInformation\":
{\"type\": \"string\", \"pattern\": \"^[0-9A-F]{20}$\"},
\"ueLocationTimestamp\": {\"type\": \"string\", \"format\": \"date-time\"},
\"geographicalInformation\": {\"type\": \"string\", \"pattern\": \"^[0-9A-F]{16}$\"},
\"ageOfLocationInformation\": {\"type\": \"integer\", \"maximum\": 32767,
\"minimum\": 0}}, \"n3gaLocation\": {\"type\": \"object\",
\"properties\": {\"gci\": {\"type\": \"string\"}, \"gli\": {\"type\":
\"string\", \"format\": \"byte\"}, \"tnapId\": {\"type\": \"object\",
\"properties\": {\"ssId\": {\"type\": \"string\"}, \"bssId\": {\"type\":
\"string\"}, \"civicAddress\": {\"type\": \"string\", \"format\":
\"byte\"}}}, \"twapId\": {\"type\": \"object\", \"required\": [\"ssId\"],
\"properties\": {\"ssId\": {\"type\": \"string\"}, \"bssId\": {\"type\":
\"string\"}, \"civicAddress\": {\"type\": \"string\", \"format\":
\"byte\"}}}, \"n3IwfId\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]+$\"},
\"n3gppTai\": {\"type\": \"object\", \"required\": [\"plmnId\",
\"tac\"], \"properties\": {\"nid\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{11}$\"},
\"tac\": {\"type\": \"string\", \"pattern\": \"^(^([A-Fa-f0-9]{4}$)|(^([A-Fa-f0-9]{6}$)\\\\)\"},
\"plmnId\": {\"type\": \"object\", \"required\": [\"mcc\", \"mnc\"], \"properties\": {\"mcc\": {\"type\": \"string\",
\"pattern\": \"^\\\\d{3}$\"}, \"mnc\": {\"type\": \"string\", \"pattern\":
\"^\\\\d{2,3}$\"}}}}, \"protocol\": {\"anyOf\": [{\"enum\": [\"UDP\",
\"TCP\"], \"type\": \"string\"}, {\"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.\\\\n\"}], \"description\": \"Possible values are - UDP: User
Datagram Protocol. - TCP: Transmission Control Protocol.\\\\n\"},
\"hfcNodeId\": {\"type\": \"object\", \"required\": [\"hfcNId\"],
\"properties\": {\"hfcNId\": {\"type\": \"string\", \"maxLength\": 6}}},
\"portNumber\": {\"type\": \"integer\", \"minimum\": 0}, \"ueIpv4Addr\":
{\"type\": \"string\", \"example\": \"198.51.100.1\", \"pattern\": \"^((([0-9]{1-9}[0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5]))\\\\.){3}([0-9]{1-9}[0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5])$\"},
\"ueIpv6Addr\": {\"type\": \"string\",
\"allof\": [{\"pattern\": \"^((:|0?|([1-9a-f][0-9a-f]{0,3}))):((0?|([1-9a-f][0-9a-f]{0,3}))):{0,6}(:|0?|([1-9a-f][0-9a-f]{0,3}))$\"}, {\"pattern\":
\"^(((^[:+])?){7}([^:]*)|(((^[:+])?)*([^:]*)?:((^[:+])?)*([^:]*)?))$\"}],
\"example\": \"2001:db8:85a3::8a2e:370:7334\", \"w5gbanLineType\":
{\"anyOf\": [{\"enum\": [\"DSL\", \"PON\"], \"type\": \"string\"}, {\"type\":
\"string\", \"description\": \"This string provides forward-compatibility
with future extensions to the enumeration but is not used to encode content
defined in the present version of this API.\\\\n\"}], \"description\":
\"Possible values are - DSL: Identifies a DSL line - PON: Identifies a PON
line\\\\n\"}}}, \"utraLocation\": {\"type\": \"object\", \"oneOf\":
[{\"required\": [\"cgi\"], \"required\": [\"sai\"], \"required\":
[\"rai\"]}], \"properties\": {\"cgi\": {\"type\": \"object\", \"required\":
[\"cellId\", \"lac\", \"plmnId\"], \"properties\": {\"lac\": {\"type\":
\"string\", \"pattern\": \"^[A-Fa-f0-9]{4}$\"}, \"cellId\": {\"type\":
\"string\", \"pattern\": \"^[A-Fa-f0-9]{4}$\"}, \"plmnId\": {\"type\":
\"object\", \"required\": [\"mcc\", \"mnc\"], \"properties\": {\"mcc\":
{\"type\": \"string\", \"pattern\": \"^\\\\d{3}$\"}, \"mnc\": {\"type\":
\"string\", \"pattern\": \"^\\\\d{2,3}$\"}}}}, \"lai\": {\"type\":
\"object\", \"required\": [\"lac\", \"plmnId\"], \"properties\": {\"lac\":
{\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{4}$\"}, \"plmnId\":
{\"type\": \"object\", \"required\": [\"mcc\", \"mnc\"], \"properties\":

```

```

{"mcc": {"type": "string", "pattern": "\\^\\\\\\\\d{3}$"}, "mnc": {"type": "string", "pattern": "\\^\\\\\\\\d{2,3}$"}}, {"rai": {"type": "object", "required": ["lac", "plmnId", "rac"], "properties": {"lac": {"type": "string", "pattern": "\\^[A-Fa-f0-9]{4}$"}, "rac": {"type": "string", "pattern": "\\^[A-Fa-f0-9]{2}$"}, "plmnId": {"type": "object", "required": ["mcc", "mnc"], "properties": {"mcc": {"type": "string", "pattern": "\\^\\\\\\\\d{3}$"}, "mnc": {"type": "string", "pattern": "\\^\\\\\\\\d{2,3}$"}}, "sai": {"type": "object", "required": ["lac", "plmnId", "sac"], "properties": {"lac": {"type": "string", "pattern": "\\^[A-Fa-f0-9]{4}$"}, "sac": {"type": "string", "pattern": "\\^[A-Fa-f0-9]{4}$"}, "plmnId": {"type": "object", "required": ["mcc", "mnc"], "properties": {"mcc": {"type": "string", "pattern": "\\^\\\\\\\\d{3}$"}, "mnc": {"type": "string", "pattern": "\\^\\\\\\\\d{2,3}$"}}, "geodeticInformation": {"type": "string", "pattern": "\\^[0-9A-F]{20}$"}, "ueLocationTimestamp": {"type": "string", "format": "date-time"}, "geographicalInformation": {"type": "string", "pattern": "\\^[0-9A-F]{16}$"}, "ageOfLocationInformation": {"type": "integer", "maximum": 32767, "minimum": 0}}, "eutraLocation": {"type": "object", "required": ["ecgi", "tai"], "properties": {"tai": {"type": "object", "required": ["plmnId", "tac"], "properties": {"nid": {"type": "string", "pattern": "\\^[A-Fa-f0-9]{11}$"}, "tac": {"type": "string", "pattern": "\\^(^([A-Fa-f0-9]{4}$)|(^([A-Fa-f0-9]{6}$))$"}, "plmnId": {"type": "object", "required": ["mcc", "mnc"], "properties": {"mcc": {"type": "string", "pattern": "\\^\\\\\\\\d{3}$"}, "mnc": {"type": "string", "pattern": "\\^\\\\\\\\d{2,3}$"}}, "ecgi": {"type": "object", "required": ["eutraCellId", "plmnId"], "properties": {"nid": {"type": "string", "pattern": "\\^[A-Fa-f0-9]{11}$"}, "plmnId": {"type": "object", "required": ["mcc", "mnc"], "properties": {"mcc": {"type": "string", "pattern": "\\^\\\\\\\\d{3}$"}, "mnc": {"type": "string", "pattern": "\\^\\\\\\\\d{2,3}$"}}, "eutraCellId": {"type": "string", "pattern": "\\^[A-Fa-f0-9]{7}$"}, "ignoreTai": {"type": "boolean", "default": false}, "ignoreEcgi": {"type": "boolean", "default": false}, "globalENbId": {"type": "object", "oneOf": [{"required": ["n3IwfId"]}, {"required": ["gNbId"]}, {"required": ["ngeNbId"]}, {"required": ["wagfId"]}, {"required": ["tngfId"]}, {"required": ["eNbId"]}], "required": ["plmnId"], "properties": {"nid": {"type": "string", "pattern": "\\^[A-Fa-f0-9]{11}$"}, "eNbId": {"type": "string", "pattern": "\\^(MacroNB-[A-Fa-f0-9]{5}|MacroNB-[A-Fa-f0-9]{6}|MacroNB-[A-Fa-f0-9]{5}|HomeNB-[A-Fa-f0-9]{7})$"}, "gNbId": {"type": "object", "required": ["bitLength", "gNBValue"], "properties": {"gNBValue": {"type": "string", "pattern": "\\^[A-Fa-f0-9]{6,8}$"}, "bitLength": {"type": "integer", "maximum": 32, "minimum": 22}}, "plmnId": {"type": "object", "required": ["mcc", "mnc"], "properties": {"mcc": {"type": "string", "pattern": "\\^\\\\\\\\d{3}$"}, "mnc": {"type": "string", "pattern": "\\^\\\\\\\\d{2,3}$"}}, "tngfId": {"type": "string", "pattern": "\\^[A-Fa-f0-9]+$"}, "wagfId": {"type": "string", "pattern": "\\^[A-Fa-f0-9]+$"}, "n3IwfId": {"type": "string", "pattern": "\\^[A-Fa-f0-9]+$"}, "ngeNbId": {"type": "string", "pattern": "\\^(MacroNGeNB-[A-Fa-f0-9]{5}|MacroNGeNB-[A-Fa-f0-9]{6}|MacroNGeNB-[A-Fa-f0-9]{5})$"}}, "globalNgenbId": {"type": "object", "oneOf": [{"required": ["n3IwfId"]}, {"required": ["gNbId"]}, {"required": ["ngeNbId"]}, {"required": ["wagfId"]}, {"required": ["tngfId"]}, {"required": ["eNbId"]}], "required": ["plmnId"], "properties": {"nid":

```

```

{"type": "string", "pattern": "\\^[A-Fa-f0-9]{11}$\\", "eNbId":
{"type": "string", "pattern": "\\^(MacroNB-[A-Fa-f0-9]{5}|MacroNB-[A-
Fa-f0-9]{6}|MacroNB-[A-Fa-f0-9]{5}|HomeNB-[A-Fa-f0-9]{7})$\\", "gNbId":
{"type": "object", "required": ["bitLength", "gNBValue"],
"properties": {"gNBValue": {"type": "string", "pattern": "\\^[A-Fa-
f0-9]{6,8}$\\", "bitLength": {"type": "integer", "maximum": 32,
"minimum": 22}}, "plmnId": {"type": "object", "required":
["mcc", "mnc"], "properties": {"mcc": {"type": "string",
"pattern": "\\^\\\\d{3}$\\", "mnc": {"type": "string", "pattern":
"\\^\\\\d{2,3}$\\"}}, "tngfId": {"type": "string", "pattern": "\\^[A-Fa-
f0-9]+$\\", "wagfId": {"type": "string", "pattern": "\\^[A-Fa-f0-9]+$\\",
"n3IwfId": {"type": "string", "pattern": "\\^[A-Fa-f0-9]+$\\",
"ngeNbId": {"type": "string", "pattern": "\\^(MacroNGeNB-[A-Fa-f0-9]
{5}|MacroNGeNB-[A-Fa-f0-9]{6}|MacroNGeNB-[A-Fa-f0-9]{5})$\\"}},
"geodeticInformation": {"type": "string", "pattern": "\\^[0-9A-F]{20}$\\",
"ueLocationTimestamp": {"type": "string", "format": "date-
time\\", "geographicalInformation": {"type": "string", "pattern":
"\\^[0-9A-F]{16}$\\", "ageOfLocationInformation": {"type": "integer",
"maximum": 32767, "minimum": 0}}}}, "apnRateStatus": {"type":
"object", "properties": {"validityTime": {"type": "string",
"format": "date-time\\", "remainPacketsDL": {"type": "integer",
"minimum": 0}, "remainPacketsUL": {"type": "integer", "minimum":
0}, "remainExReportsDL": {"type": "integer", "minimum": 0},
"remainExReportsUL": {"type": "integer", "minimum": 0}},
"cpCiotEnabled": {"type": "boolean", "default": false},
"icnTunnelInfo": {"type": "object", "required": ["gtpTeid"],
"properties": {"anType": {"enum": ["3GPP_ACCESS",
"NON_3GPP_ACCESS"], "type": "string"}, "gtpTeid": {"type":
"string", "pattern": "\\^[A-Fa-f0-9]{8}$\\", "ipv4Addr": {"type":
"string", "example": "198.51.100.1", "pattern": "\\^((([0-9]|[1-9][0-9]
|1[0-9]|2[0-4]|25[0-5])\\\\.){3}([0-9]|[1-9][0-9]|1[0-9][0-9]|2[0-4]
[0-9]|25[0-5])$\\", "ipv6Addr": {"type": "string", "allof":
{"pattern": "\\^((([0-9]|[1-9a-f][0-9a-f]{0,3}))|([0-9a-f]
{0,3}))|([0-9a-f]{0,3}))$\\", "pattern": "\\^(((\\^:|
+){7}(\\^:|+)|(((\\^:|+)*\\^:|+)?::((\\^:|+)*\\^:|+)?))$\\", "example":
"2001:db8:85a3::8a2e:370:7334\\"}}, "vcnTunnelInfo": {"type":
"object", "required": ["gtpTeid"], "properties": {"anType":
{"enum": ["3GPP_ACCESS", "NON_3GPP_ACCESS"], "type": "string"},
"gtpTeid": {"type": "string", "pattern": "\\^[A-Fa-f0-9]{8}$\\",
"ipv4Addr": {"type": "string", "example": "198.51.100.1",
"pattern": "\\^((([0-9]|[1-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5])\\\\.){3}
([0-9]|[1-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5])$\\", "ipv6Addr":
{"type": "string", "allof": {"pattern": "\\^((([0-9]|[1-9a-f][0-9a-f]
{0,3}))|([0-9a-f]{0,3}))|([0-9a-f]{0,3}))$\\", "pattern": "\\^(((\\^:|
+){7}(\\^:|+)|(((\\^:|+)*\\^:|+)?::((\\^:|+)*\\^:|+)?))$\\", "example":
"2001:db8:85a3::8a2e:370:7334\\"}}, "maNwUpgradeInd": {"type": "boolean",
"default": false},
"n1SmInfoFromUe": {"type": "object", "required": ["contentId"],
"properties": {"contentId": {"type": "string"}}, "presenceInLadn":
{"anyOf": [{"enum": ["IN_AREA", "OUT_OF_AREA", "UNKNOWN",
"INACTIVE"], "type": "string"}, {"type": "string"}]},
"servingNetwork": {"type": "object", "required": ["mcc", "mnc"],
"properties": {"mcc": {"type": "string", "pattern": "\\^\\\\d{3}$\\",
"mnc": {"type": "string", "pattern": "\\^\\\\d{2,3}$\\", "nid":
{"type": "string", "pattern": "\\^[A-Fa-f0-9]{11}$\\"}},
"upSecurityInfo": {"type": "object", "required": ["upSecurity"],

```

```

\"properties\": {\"upSecurity\": {\"type\": \"object\", \"required\":
[\"upConfid\", \"upIntegr\"], \"properties\": {\"upConfid\": {\"anyOf\":
[\"enum\": [\"REQUIRED\", \"PREFERRED\", \"NOT_NEEDED\"], \"type\":
\"string\"}, {\"type\": \"string\"}}}, \"upIntegr\": {\"anyOf\": [\"enum\":
[\"REQUIRED\", \"PREFERRED\", \"NOT_NEEDED\"], \"type\": \"string\"},
{\"type\": \"string\"}}}}, \"securityResult\": {\"type\": \"object\",
\"properties\": {\"integrityProtectionResult\": {\"anyOf\": [\"enum\":
[\"PERFORMED\", \"NOT_PERFORMED\"], \"type\": \"string\"}, {\"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.\\n\\n\"}}, \"description\":
\"Possible values are\\n - PERFORMED\\n - NOT_PERFORMED\\n\\n\"},
\"confidentialityProtectionResult\": {\"anyOf\": [\"enum\": [\"PERFORMED\",
\"NOT_PERFORMED\"], \"type\": \"string\"}, {\"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.\\n\\n\"}}, \"description\": \"Possible values
are\\n - PERFORMED\\n - NOT_PERFORMED\\n\\n\"}}},
\"maxIntegrityProtectedDataRateDl\": {\"anyOf\": [\"enum\": [\"64_KBPS\",
\"MAX_UE_RATE\"], \"type\": \"string\"}, {\"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.\\n\\n\"}}, \"description\": \"Possible values
are\\n - 64_KBPS\\n - MAX_UE_RATE\\n\\n\"},
\"maxIntegrityProtectedDataRateUl\": {\"anyOf\": [\"enum\": [\"64_KBPS\",
\"MAX_UE_RATE\"], \"type\": \"string\"}, {\"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.\\n\\n\"}}, \"description\": \"Possible values
are\\n - 64_KBPS\\n - MAX_UE_RATE\\n\\n\"}}}, \"oldPduSessionId\": {\"type\":
\"integer\", \"maximum\": 255, \"minimum\": 0}, \"unknownN1SmInfo\":
{\"type\": \"object\", \"required\": [\"contentId\"], \"properties\":
{\"contentId\": {\"type\": \"string\"}}, \"additionalAnType\": {\"enum\":
[\"3GPP_ACCESS\", \"NON_3GPP_ACCESS\"], \"type\": \"string\"},
\"routingIndicator\": {\"type\": \"string\"}, \"alwaysOnRequested\":
{\"type\": \"boolean\", \"default\": false}, \"ismfPduSessionUri\":
{\"type\": \"string\"}, \"supportedFeatures\": {\"type\": \"string\",
\"pattern\": \"^[A-Fa-f0-9]*$\"}, \"vsmfPduSessionUri\": {\"type\":
\"string\", \"epsBearerCtxStatus\": {\"type\": \"string\", \"pattern\":
\"^[A-Fa-f0-9]{4}$\"}, \"epsInterworkingInd\": {\"anyOf\": [\"enum\":
[\"NONE\", \"WITH_N26\", \"WITHOUT_N26\", \"IWK_NON_3GPP\"], \"type\":
\"string\", {\"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.\\n\\n\"}},
\"description\": \"Possible values are - NONE - WITH_N26 - WITHOUT_N26 -
IWK_NON_3GPP\\n\\n\"}, \"smallDataRateStatus\": {\"type\": \"object\",
\"properties\": {\"validityTime\": {\"type\": \"string\", \"format\": \"date-
time\"}, \"remainPacketsDl\": {\"type\": \"integer\", \"minimum\": 0},
\"remainPacketsUl\": {\"type\": \"integer\", \"minimum\": 0},
\"remainExReportsDl\": {\"type\": \"integer\", \"minimum\": 0},
\"remainExReportsUl\": {\"type\": \"integer\", \"minimum\": 0}}},
\"unauthenticatedSupi\": {\"type\": \"boolean\", \"default\": false},
\"dlServingPlmnRateCtl\": {\"type\": \"integer\", \"minimum\": 10},
\"iSmfServiceInstanceId\": {\"type\": \"string\"}, \"secondaryRatUsageInfo\":
{\"type\": \"array\", \"items\": {\"type\": \"object\", \"required\":
[\"secondaryRatType\"], \"properties\": {\"secondaryRatType\": {\"anyOf\":

```

```
[{"enum": ["NR", "EUTRA", "WLAN", "VIRTUAL", "NBIOT", "WIRELINE", "WIRELINE_CABLE", "WIRELINE_BBF", "LTE-M", "NR-U", "EUTRA-U", "TRUSTED_N3GA", "TRUSTED_WLAN", "UTRA", "GERA"], "type": "string"}, {"type": "string"}], "qosFlowsUsageData": {"type": "array", "items": {"type": "object", "required": ["downlinkVolume", "endTimeStamp", "qfi", "startTimeStamp", "uplinkVolume"], "properties": {"qfi": {"type": "integer", "maximum": 63, "minimum": 0}, "endTimeStamp": {"type": "string", "format": "date-time"}, "uplinkVolume": {"type": "integer", "format": "int64"}, "downlinkVolume": {"type": "integer", "format": "int64"}, "startTimeStamp": {"type": "string", "format": "date-time"}}, "minItems": 1}, "pduSessionUsageData": {"type": "array", "items": {"type": "object", "required": ["downlinkVolume", "endTimeStamp", "startTimeStamp", "uplinkVolume"], "properties": {"endTimeStamp": {"type": "string", "format": "date-time"}, "uplinkVolume": {"type": "integer", "format": "int64"}, "downlinkVolume": {"type": "integer", "format": "int64"}, "startTimeStamp": {"type": "string", "format": "date-time"}}, "minItems": 1}}, "minItems": 1}, "vSmfServiceInstanceId": {"type": "string"}, "additionalCnTunnelInfo": {"type": "object", "required": ["gtpTeid"], "properties": {"anType": {"enum": ["3GPP_ACCESS", "NON_3GPP_ACCESS"], "type": "string"}, "gtpTeid": {"type": "string", "pattern": "\\^[A-Fa-f0-9]{8}$"}, "ipv4Addr": {"type": "string", "example": "198.51.100.1", "pattern": "\\^([0-9]|[1-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5])\\.([0-9]|[1-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5])$"}, "ipv6Addr": {"type": "string", "allof": [{"pattern": "\\^((0?|([1-9a-f][0-9a-f]{0,3})))(0?|([1-9a-f][0-9a-f]{0,3}))(:|0?|([1-9a-f][0-9a-f]{0,3}))$"}, {"pattern": "\\^((([:+]){7}([[:+])|((([:+])*[:+])?:(([:+])*[:+])?))$"}], "example": "2001:db8:85a3::8a2e:370:7334"}}, "n9ForwardingTunnelInfo": {"type": "object", "required": ["gtpTeid"], "properties": {"anType": {"enum": ["3GPP_ACCESS", "NON_3GPP_ACCESS"], "type": "string"}, "gtpTeid": {"type": "string", "pattern": "\\^[A-Fa-f0-9]{8}$"}, "ipv4Addr": {"type": "string", "example": "198.51.100.1", "pattern": "\\^([0-9]|[1-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5])\\.([0-9]|[1-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5])$"}, "ipv6Addr": {"type": "string", "allof": [{"pattern": "\\^((0?|([1-9a-f][0-9a-f]{0,3})))(0?|([1-9a-f][0-9a-f]{0,3}))(:|0?|([1-9a-f][0-9a-f]{0,3}))$"}, {"pattern": "\\^((([:+]){7}([[:+])|((([:+])*[:+])?:(([:+])*[:+])?))$"}], "example": "2001:db8:85a3::8a2e:370:7334"}}, "roamingChargingProfile": {"type": "object", "properties": {"triggers": {"type": "array", "items": {"type": "object", "required": ["triggerCategory", "triggerType"], "properties": {"timeLimit": {"type": "integer", "maximum": 4294967295, "minimum": 0}, "eventLimit": {"type": "integer", "maximum": 4294967295, "minimum": 0}, "triggerType": {"anyOf": [{"enum": ["QUOTA_THRESHOLD", "QHT", "FINAL", "QUOTA_EXHAUSTED", "VALIDITY_TIME", "OTHER_QUOTA_TYPE", "FORCED_REAUTHORISATION", "UNUSED_QUOTA_TIMER", "UNIT_COUNT_INACTIVITY_TIMER", "ABNORMAL_RELEASE", "QOS_CHANGE", "VOLUME_LIMIT", "TIME_LIMIT", "EVENT_LIMIT", "PLMN_CHANGE", "USER_LOCATION_CHANGE", "RAT_CHANGE", "SESSION_AMBR_CHANGE", "UE_TIMEZONE_CHANGE", "TARIFF_TIME_CHANGE", "MAX_NUMBER_OF_CHANGES_IN_CHARGING_CONDITIONS", "MANAGEMENT_INTERVENTION", "CHANGE_OF_UE_PRESENCE_IN_PRESENCE_REPORTING_AREA", "CHANGE_OF_3GPP_PS_DATA_OFF_STATUS", "SERVING_NODE_CHANGE"]}]
```

```

\ "REMOVAL_OF_UPF\ ", \ "ADDITION_OF_UPF\ ", \ "INSERTION_OF_ISMF\ ",
\ "REMOVAL_OF_ISMF\ ", \ "CHANGE_OF_ISMF\ ", \ "START_OF_SERVICE_DATA_FLOW\ ",
\ "ECGI_CHANGE\ ", \ "TAI_CHANGE\ ", \ "HANDOVER_CANCEL\ ", \ "HANDOVER_START\ ",
\ "HANDOVER_COMPLETE\ ", \ "GFBR_GUARANTEED_STATUS_CHANGE\ ",
\ "ADDITION_OF_ACCESS\ ", \ "REMOVAL_OF_ACCESS\ ",
\ "START_OF_SDF_ADDITIONAL_ACCESS\ ", \ "type\ ": \ "string\ ", { \ "type\ ":
\ "string\ " } } } , \ "volumeLimit\ ": { \ "type\ ": \ "integer\ ", \ "maximum\ ":
4294967295, \ "minimum\ ": 0 } , \ "volumeLimit64\ ": { \ "type\ ": \ "integer\ ",
\ "maximum\ ": 18446744073709551615, \ "minimum\ ": 0 } , \ "maxNumberOfccc\ ":
{ \ "type\ ": \ "integer\ ", \ "maximum\ ": 4294967295, \ "minimum\ ": 0 } ,
\ "triggerCategory\ ": { \ "anyOf\ ": [ { \ "enum\ ": [ \ "IMMEDIATE_REPORT\ ",
\ "DEFERRED_REPORT\ " ] , \ "type\ ": \ "string\ " } , { \ "type\ ": \ "string\ " } ] } ,
\ "tariffTimeChange\ ": { \ "type\ ": \ "string\ ", \ "format\ ": \ "date-time\ " } } } ,
\ "minItems\ ": 0 } , \ "partialRecordMethod\ ": { \ "anyOf\ ": [ { \ "enum\ ":
[ \ "DEFAULT\ ", \ "INDIVIDUAL\ " ] , \ "type\ ": \ "string\ " } , { \ "type\ ":
\ "string\ " } ] } } } , \ "hoPreparationIndication\ ": { \ "type\ ": \ "boolean\ " } ,
\ "maxIntegrityProtectedDataRateDl\ ": { \ "anyOf\ ": [ { \ "enum\ ": [ \ "64_KBPS\ ",
\ "MAX_UE_RATE\ " ] , \ "type\ ": \ "string\ " } , { \ "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.\n\n" } ] , \ "description\ ": \ "Possible values
are\n\n - 64_KBPS\n\n - MAX_UE_RATE\n\n" } ,
\ "maxIntegrityProtectedDataRateUl\ ": { \ "anyOf\ ": [ { \ "enum\ ": [ \ "64_KBPS\ ",
\ "MAX_UE_RATE\ " ] , \ "type\ ": \ "string\ " } , { \ "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.\n\n" } ] , \ "description\ ": \ "Possible values
are\n\n - 64_KBPS\n\n - MAX_UE_RATE\n\n" } } } }
    } ,
    {
      "defaultId": 33,
      "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/smsf-3gpp-access",
      "httpMethod": "GET",
      "schemaValue": "[ { \ "in\ ": \ "query\ ", \ "name\ ": \ "supported-features\ ",
\ "schema\ ": { \ "type\ ": \ "string\ ", \ "pattern\ ": \ "^[A-Fa-f0-9]*$\" } ,
\ "required\ ": false } ] "
    } ,
    {
      "defaultId": 34,
      "resourceURI": "/nudm-sdm/v2/{supi}/sm-data",
      "httpMethod": "GET",
      "schemaValue": "[ { \ "in\ ": \ "query\ ", \ "name\ ": \ "supported-features\ ",
\ "schema\ ": { \ "type\ ": \ "string\ ", \ "pattern\ ": \ "^[A-Fa-f0-9]*$\" } ,
\ "required\ ": false } , { \ "in\ ": \ "query\ ", \ "name\ ": \ "single-nssai\ ",
\ "content\ ": { \ "application/json\ ": { \ "schema\ ": { \ "type\ ": \ "object\ ",
\ "required\ ": [ \ "sst\ " ] , \ "properties\ ": { \ "sd\ ": { \ "type\ ": \ "string\ ",
\ "pattern\ ": \ "^[A-Fa-f0-9]{6}$\" } , \ "sst\ ": { \ "type\ ": \ "integer\ ",
\ "maximum\ ": 255, \ "minimum\ ": 0 } } } } } , \ "required\ ": false } , { \ "in\ ":
\ "query\ ", \ "name\ ": \ "dnn\ ", \ "schema\ ": { \ "type\ ": \ "string\ " } ,
\ "required\ ": false } , { \ "in\ ": \ "query\ ", \ "name\ ": \ "plmn-id\ ", \ "content\ ":
{ \ "application/json\ ": { \ "schema\ ": { \ "type\ ": \ "object\ ", \ "required\ ":
[ \ "mcc\ ", \ "mnc\ " ] , \ "properties\ ": { \ "mcc\ ": { \ "type\ ": \ "string\ ",
\ "pattern\ ": \ "^[0-9]{3}$\" } , \ "mnc\ ": { \ "type\ ": \ "string\ ", \ "pattern\ ":
\ "^[0-9]{2,3}$\" } } } } } , \ "required\ ": false } ] "
    } ,
    {

```

```

    "defaultId": 35,
    "resourceURI": "/nudm-sdm/v2/{supi}/sms-mng-data",
    "httpMethod": "GET",
    "schemaValue": "[{"in": \"query\", \"name\": \"supported-features\",
    \"schema\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]*$\"},
    \"required\": false}, {\"in\": \"query\", \"name\": \"plmn-id\", \"content\":
    {\"application/json\": {\"schema\": {\"type\": \"object\", \"required\":
    [\"mcc\", \"mnc\"], \"properties\": {\"mcc\": {\"type\": \"string\",
    \"pattern\": \"^[\\d]{3}$\"}, \"mnc\": {\"type\": \"string\", \"pattern\":
    \"^[\\d]{2,3}$\"}}}}, \"required\": false}]\"
  },
  {
    "defaultId": 36,
    "resourceURI": "/nudm-sdm/v1/{supi}/am-data/sor-ack",
    "httpMethod": "PUT",
    "schemaValue": "{\"type\": \"object\", \"properties\": {\"sorMacIue\":
    {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{32}$\"},
    \"securedPacket\": {\"type\": \"string\", \"format\": \"base64\"}}}\"
  },
  {
    "defaultId": 37,
    "resourceURI": "/npcf-ue-policy-control/v1/policies/{polAssoId}/update",
    "httpMethod": "POST",
    "schemaValue": "{\"type\": \"object\", \"properties\": {\"guami\":
    {\"type\": \"object\", \"required\": [\"amfId\", \"plmnId\"], \"properties\":
    {\"amfId\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{6}$\"},
    \"plmnId\": {\"type\": \"object\", \"required\": [\"mcc\", \"mnc\"],
    \"properties\": {\"mcc\": {\"type\": \"string\", \"pattern\": \"^[\\d]{3}$
    \"}, \"mnc\": {\"type\": \"string\", \"pattern\": \"^[\\d]{2,3}$\"}, \"nid\":
    {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{11}$\"}}}}, \"plmnId\":
    {\"type\": \"object\", \"required\": [\"mcc\", \"mnc\"], \"properties\":
    {\"mcc\": {\"type\": \"string\", \"pattern\": \"^[\\d]{3}$\"}, \"mnc\":
    {\"type\": \"string\", \"pattern\": \"^[\\d]{2,3}$\"}}, \"userLoc\":
    {\"type\": \"object\", \"properties\": {\"nrLocation\": {\"type\":
    \"object\", \"required\": [\"ncgi\", \"tai\"], \"properties\": {\"tai\":
    {\"type\": \"object\", \"required\": [\"plmnId\", \"tac\"], \"properties\":
    {\"nid\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{11}$\"},
    \"tac\": {\"type\": \"string\", \"pattern\": \"(^([A-Fa-f0-9]{4}$)|(^([A-Fa-
    f0-9]{6}$)\\\", \"plmnId\": {\"type\": \"object\", \"required\": [\"mcc\",
    \"mnc\"], \"properties\": {\"mcc\": {\"type\": \"string\", \"pattern\": \"^[\\d
    {3}$\"}, \"mnc\": {\"type\": \"string\", \"pattern\": \"^[\\d]{2,3}$
    \"}}}}, \"ncgi\": {\"type\": \"object\", \"required\": [\"nrCellId\",
    \"plmnId\"], \"properties\": {\"nid\": {\"type\": \"string\", \"pattern\":
    \"^[A-Fa-f0-9]{11}$\"}, \"plmnId\": {\"type\": \"object\", \"required\":
    [\"mcc\", \"mnc\"], \"properties\": {\"mcc\": {\"type\": \"string\",
    \"pattern\": \"^[\\d]{3}$\"}, \"mnc\": {\"type\": \"string\", \"pattern\":
    \"^[\\d]{2,3}$\"}}}}, \"nrCellId\": {\"type\": \"string\", \"pattern\": \"^[A-
    Fa-f0-9]{9}$\"}}, \"ignoreNcgi\": {\"type\": \"boolean\", \"default\":
    false}, \"globalGnbId\": {\"type\": \"object\", \"oneOf\": [{\"required\":
    [\"n3IwfId\"], \"required\": [\"gNbId\"], \"required\": [\"ngeNbId\"],
    {\"required\": [\"wagfId\"], \"required\": [\"tngfId\"], \"required\":
    [\"eNbId\"]}], \"required\": [\"plmnId\"], \"properties\": {\"nid\":
    {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{11}$\"}, \"eNbId\":
    {\"type\": \"string\", \"pattern\": \"^(MacroNb-[A-Fa-f0-9]{5}|MacroNb-[A-
    Fa-f0-9]{6}|SMacroNb-[A-Fa-f0-9]{5}|HomeNb-[A-Fa-f0-9]{7})$\"}, \"gNbId\":
    {\"type\": \"object\", \"required\": [\"bitLength\", \"gNbValue\"],

```



```

\"properties\": {\"gNBValue\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{6,8}$\"}, \"bitLength\": {\"type\": \"integer\", \"maximum\": 32, \"minimum\": 22}}, \"plmnId\": {\"type\": \"object\", \"required\": [\"mcc\", \"mnc\"], \"properties\": {\"mcc\": {\"type\": \"string\", \"pattern\": \"^[\\d]{3}$\"}, \"mnc\": {\"type\": \"string\", \"pattern\": \"^[\\d]{2,3}$\"}}, \"tngfId\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]+$\"}, \"wagfId\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]+$\"}, \"n3IwfId\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]+$\"}, \"ngeNbId\": {\"type\": \"string\", \"pattern\": \"^(MacroNGeNB-[A-Fa-f0-9]{5}|MacroNGeNB-[A-Fa-f0-9]{6}|MacroNGeNB-[A-Fa-f0-9]{5})$\"}}, \"geodeticInformation\": {\"type\": \"string\", \"pattern\": \"^[0-9A-F]{20}$\"}, \"ueLocationTimestamp\": {\"type\": \"string\", \"format\": \"date-time\"}, \"geographicalInformation\": {\"type\": \"string\", \"pattern\": \"^[0-9A-F]{16}$\"}, \"ageOfLocationInformation\": {\"type\": \"integer\", \"maximum\": 32767, \"minimum\": 0}}, \"geraLocation\": {\"type\": \"object\", \"oneOf\": [{\"required\": [\"cgi\"], \"required\": [\"sai\"]}, {\"required\": [\"rai\"], \"required\": [\"lai\"]}], \"properties\": {\"cgi\": {\"type\": \"object\", \"required\": [\"cellId\", \"lac\", \"plmnId\"], \"properties\": {\"lac\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{4}$\"}, \"cellId\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{4}$\"}, \"plmnId\": {\"type\": \"object\", \"required\": [\"mcc\", \"mnc\"], \"properties\": {\"mcc\": {\"type\": \"string\", \"pattern\": \"^[\\d]{3}$\"}, \"mnc\": {\"type\": \"string\", \"pattern\": \"^[\\d]{2,3}$\"}}}}, \"lai\": {\"type\": \"object\", \"required\": [\"lac\", \"plmnId\"], \"properties\": {\"lac\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{4}$\"}, \"plmnId\": {\"type\": \"object\", \"required\": [\"mcc\", \"mnc\"], \"properties\": {\"mcc\": {\"type\": \"string\", \"pattern\": \"^[\\d]{3}$\"}, \"mnc\": {\"type\": \"string\", \"pattern\": \"^[\\d]{2,3}$\"}}}}, \"rai\": {\"type\": \"object\", \"required\": [\"lac\", \"plmnId\", \"rac\"], \"properties\": {\"lac\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{4}$\"}, \"rac\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{2}$\"}, \"plmnId\": {\"type\": \"object\", \"required\": [\"mcc\", \"mnc\"], \"properties\": {\"mcc\": {\"type\": \"string\", \"pattern\": \"^[\\d]{3}$\"}, \"mnc\": {\"type\": \"string\", \"pattern\": \"^[\\d]{2,3}$\"}}}}, \"sai\": {\"type\": \"object\", \"required\": [\"lac\", \"plmnId\", \"sac\"], \"properties\": {\"lac\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{4}$\"}, \"sac\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{4}$\"}, \"plmnId\": {\"type\": \"object\", \"required\": [\"mcc\", \"mnc\"], \"properties\": {\"mcc\": {\"type\": \"string\", \"pattern\": \"^[\\d]{3}$\"}, \"mnc\": {\"type\": \"string\", \"pattern\": \"^[\\d]{2,3}$\"}}}}, \"mncNumber\": {\"type\": \"string\"}, \"vlrNumber\": {\"type\": \"string\"}, \"locationNumber\": {\"type\": \"string\", \"pattern\": \"^[0-9A-F]{20}$\"}, \"ueLocationTimestamp\": {\"type\": \"string\", \"format\": \"date-time\"}, \"geographicalInformation\": {\"type\": \"string\", \"pattern\": \"^[0-9A-F]{16}$\"}, \"ageOfLocationInformation\": {\"type\": \"integer\", \"maximum\": 32767, \"minimum\": 0}}, \"n3gaLocation\": {\"type\": \"object\", \"properties\": {\"gci\": {\"type\": \"string\"}, \"gli\": {\"type\": \"string\", \"format\": \"byte\"}, \"tnapId\": {\"type\": \"object\", \"properties\": {\"ssId\": {\"type\": \"string\"}, \"bssId\": {\"type\": \"string\", \"format\": \"byte\"}}, \"twapId\": {\"type\": \"object\", \"required\": [\"ssId\"], \"properties\": {\"ssId\": {\"type\": \"string\"}, \"bssId\": {\"type\": \"string\", \"format\": \"byte\"}}, \"n3IwfId\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]+$\"}, \"n3gppTai\": {\"type\": \"object\", \"required\": [\"plmnId\",

```



```

\tac\"], \"properties\": {\"nid\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{11}$\"}, \"tac\": {\"type\": \"string\", \"pattern\": \"(^([A-Fa-f0-9]{4}$)|(^([A-Fa-f0-9]{6}$)\"}, \"plmnId\": {\"type\": \"object\", \"required\": [\"mcc\", \"mnc\"], \"properties\": {\"mcc\": {\"type\": \"string\", \"pattern\": \"^[0-9]{3}$\"}, \"mnc\": {\"type\": \"string\", \"pattern\": \"^[0-9]{2,3}$\"}}}}, \"protocol\": {\"anyOf\": [{\"enum\": [\"UDP\", \"TCP\"], \"type\": \"string\"}, {\"type\": \"string\", \"description\": \"This string provides forward-compatibility with future extensions to the enumeration but is not used to encode content defined in the present version of this API.\\n\"}], \"description\": \"Possible values are - UDP: User Datagram Protocol. - TCP: Transmission Control Protocol.\\n\"}, \"hfcNodeId\": {\"type\": \"object\", \"required\": [\"hfcNid\"], \"properties\": {\"hfcNid\": {\"type\": \"string\", \"maxLength\": 6}}, \"portNumber\": {\"type\": \"integer\", \"minimum\": 0}, \"ueIpv4Addr\": {\"type\": \"string\", \"example\": \"198.51.100.1\", \"pattern\": \"^([0-9]{1-9}[0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5])\\.([0-9]{1-9}|1[0-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5])$\"}, \"ueIpv6Addr\": {\"type\": \"string\", \"allof\": [{\"pattern\": \"^((?!(1-9a-f)[0-9a-f]{0,3})):(?!(1-9a-f)[0-9a-f]{0,3}):([0-9a-f]{0,3})$\"}, {\"pattern\": \"^(((^[^:]+):){7}([^[^:]+))|(((^[^:]+)*[^[^:]+)?::([^[^:]+)*[^[^:]+)?)$\"}], \"example\": \"2001:db8:85a3::8a2e:370:7334\", \"w5gbanLineType\": {\"anyOf\": [{\"enum\": [\"DSL\", \"PON\"], \"type\": \"string\"}, {\"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.\\n\"}], \"description\": \"Possible values are - DSL: Identifies a DSL line - PON: Identifies a PON line\\n\"}}}, \"utraLocation\": {\"type\": \"object\", \"oneOf\": [{\"required\": [\"cgi\"], \"required\": [\"sai\"], \"required\": [\"rai\"]}], \"properties\": {\"cgi\": {\"type\": \"object\", \"required\": [\"cellId\", \"lac\", \"plmnId\"], \"properties\": {\"lac\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{4}$\"}, \"cellId\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{4}$\"}, \"plmnId\": {\"type\": \"object\", \"required\": [\"mcc\", \"mnc\"], \"properties\": {\"mcc\": {\"type\": \"string\", \"pattern\": \"^[0-9]{3}$\"}, \"mnc\": {\"type\": \"string\", \"pattern\": \"^[0-9]{2,3}$\"}}}}, \"lai\": {\"type\": \"object\", \"required\": [\"lac\", \"plmnId\"], \"properties\": {\"lac\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{4}$\"}, \"plmnId\": {\"type\": \"object\", \"required\": [\"mcc\", \"mnc\"], \"properties\": {\"mcc\": {\"type\": \"string\", \"pattern\": \"^[0-9]{3}$\"}, \"mnc\": {\"type\": \"string\", \"pattern\": \"^[0-9]{2,3}$\"}}}}, \"rai\": {\"type\": \"object\", \"required\": [\"lac\", \"plmnId\", \"rac\"], \"properties\": {\"lac\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{4}$\"}, \"rac\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{2}$\"}, \"plmnId\": {\"type\": \"object\", \"required\": [\"mcc\", \"mnc\"], \"properties\": {\"mcc\": {\"type\": \"string\", \"pattern\": \"^[0-9]{3}$\"}, \"mnc\": {\"type\": \"string\", \"pattern\": \"^[0-9]{2,3}$\"}}}}, \"sai\": {\"type\": \"object\", \"required\": [\"lac\", \"plmnId\", \"sac\"], \"properties\": {\"lac\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{4}$\"}, \"sac\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{4}$\"}, \"plmnId\": {\"type\": \"object\", \"required\": [\"mcc\", \"mnc\"], \"properties\": {\"mcc\": {\"type\": \"string\", \"pattern\": \"^[0-9]{3}$\"}, \"mnc\": {\"type\": \"string\", \"pattern\": \"^[0-9]{2,3}$\"}}}}, \"geodeticInformation\": {\"type\": \"string\", \"pattern\": \"^[0-9A-F]{20}$\"}, \"ueLocationTimestamp\": {\"type\": \"string\", \"format\": \"date-time\"}, \"geographicalInformation\": {\"type\": \"string\", \"pattern\": \"^[0-9A-F]{16}$\"}, \"ageOfLocationInformation\": {\"type\": \"integer\",

```

```

\"maximum\": 32767, \"minimum\": 0}}}, \"eutraLocation\": {\"type\":
\"object\", \"required\": [\"ecgi\", \"tai\"], \"properties\": {\"tai\":
{\"type\": \"object\", \"required\": [\"plmnId\", \"tac\"], \"properties\":
{\"nid\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{11}$\"},
\"tac\": {\"type\": \"string\", \"pattern\": \"(^([A-Fa-f0-9]{4}$)|(^([A-Fa-
f0-9]{6}$))\"}, \"plmnId\": {\"type\": \"object\", \"required\": [\"mcc\",
\"mnc\"], \"properties\": {\"mcc\": {\"type\": \"string\", \"pattern\": \"^\\\\
d{3}$\"}, \"mnc\": {\"type\": \"string\", \"pattern\": \"^\\\\d{2,3}$
\"}}}}, \"ecgi\": {\"type\": \"object\", \"required\": [\"eutraCellId\",
\"plmnId\"], \"properties\": {\"nid\": {\"type\": \"string\", \"pattern\":
\"^[A-Fa-f0-9]{11}$\"}, \"plmnId\": {\"type\": \"object\", \"required\":
[\"mcc\", \"mnc\"], \"properties\": {\"mcc\": {\"type\": \"string\",
\"pattern\": \"^\\\\d{3}$\"}, \"mnc\": {\"type\": \"string\", \"pattern\":
\"^\\\\d{2,3}$\"}}}}, \"eutraCellId\": {\"type\": \"string\", \"pattern\":
\"^[A-Fa-f0-9]{7}$\"}}}, \"ignoreTai\": {\"type\": \"boolean\", \"default\":
false}, \"ignoreEcgi\": {\"type\": \"boolean\", \"default\": false},
\"globalENbId\": {\"type\": \"object\", \"oneOf\": [{\"required\":
[\"n3IwfId\"], {\"required\": [\"gnbId\"], {\"required\": [\"ngeNbId\"],
{\"required\": [\"wagfId\"], {\"required\": [\"tngfId\"], {\"required\":
[\"eNbId\"]}], \"required\": [\"plmnId\"], \"properties\": {\"nid\":
{\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{11}$\"}, \"eNbId\":
{\"type\": \"string\", \"pattern\": \"^(MacroENB-[A-Fa-f0-9]{5}|MacroENB-[A-
Fa-f0-9]{6}|SMacroENB-[A-Fa-f0-9]{5}|HomeENB-[A-Fa-f0-9]{7})$\"}, \"gnbId\":
{\"type\": \"object\", \"required\": [\"bitLength\", \"gnbValue\"],
\"properties\": {\"gnbValue\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-
f0-9]{6,8}$\"}, \"bitLength\": {\"type\": \"integer\", \"maximum\": 32,
\"minimum\": 22}}}, \"plmnId\": {\"type\": \"object\", \"required\":
[\"mcc\", \"mnc\"], \"properties\": {\"mcc\": {\"type\": \"string\",
\"pattern\": \"^\\\\d{3}$\"}, \"mnc\": {\"type\": \"string\", \"pattern\":
\"^\\\\d{2,3}$\"}}}, \"tngfId\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-
f0-9]+$\"}, \"wagfId\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]+$
\"}, \"n3IwfId\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]+$\"},
\"ngeNbId\": {\"type\": \"string\", \"pattern\": \"^(MacroNGeNB-[A-Fa-f0-9]
{5}|MacroNGeNB-[A-Fa-f0-9]{6}|SMacroNGeNB-[A-Fa-f0-9]{5})$\"}}},
\"globalNgenbId\": {\"type\": \"object\", \"oneOf\": [{\"required\":
[\"n3IwfId\"], {\"required\": [\"gnbId\"], {\"required\": [\"ngeNbId\"],
{\"required\": [\"wagfId\"], {\"required\": [\"tngfId\"], {\"required\":
[\"eNbId\"]}], \"required\": [\"plmnId\"], \"properties\": {\"nid\":
{\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{11}$\"}, \"eNbId\":
{\"type\": \"string\", \"pattern\": \"^(MacroENB-[A-Fa-f0-9]{5}|MacroENB-[A-
Fa-f0-9]{6}|SMacroENB-[A-Fa-f0-9]{5}|HomeENB-[A-Fa-f0-9]{7})$\"}, \"gnbId\":
{\"type\": \"object\", \"required\": [\"bitLength\", \"gnbValue\"],
\"properties\": {\"gnbValue\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-
f0-9]{6,8}$\"}, \"bitLength\": {\"type\": \"integer\", \"maximum\": 32,
\"minimum\": 22}}}, \"plmnId\": {\"type\": \"object\", \"required\":
[\"mcc\", \"mnc\"], \"properties\": {\"mcc\": {\"type\": \"string\",
\"pattern\": \"^\\\\d{3}$\"}, \"mnc\": {\"type\": \"string\", \"pattern\":
\"^\\\\d{2,3}$\"}}}, \"tngfId\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-
f0-9]+$\"}, \"wagfId\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]+$
\"}, \"n3IwfId\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]+$\"},
\"ngeNbId\": {\"type\": \"string\", \"pattern\": \"^(MacroNGeNB-[A-Fa-f0-9]
{5}|MacroNGeNB-[A-Fa-f0-9]{6}|SMacroNGeNB-[A-Fa-f0-9]{5})$\"}}},
\"geodeticInformation\": {\"type\": \"string\", \"pattern\": \"^[0-9A-F]{20}$
\"}, \"ueLocationTimestamp\": {\"type\": \"string\", \"format\": \"date-
time\"}, \"geographicalInformation\": {\"type\": \"string\", \"pattern\":
\"^[0-9A-F]{16}$\"}, \"ageOfLocationInformation\": {\"type\": \"integer\",

```

```

\"maximum\": 32767, \"minimum\": 0}}}}, \"groupId\": {\"type\": \"array\",
\"items\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{8}-[0-9]
{3}-[0-9]{2,3}-[A-Fa-f0-9][A-Fa-f0-9]{1,10}$\"}, \"minItems\": 1,
\"triggers\": {\"type\": \"array\", \"items\": {\"anyOf\": [{\"enum\":
[\"LOC_CH\", \"PRA_CH\", \"UE_POLICY\", \"PLMN_CH\", \"CON_STATE_CH\",
\"GROUP_ID_LIST_CHG\"], \"type\": \"string\"}, {\"type\": \"string\",
\"description\": \"This string provides forward-compatibility with future
extensions to the enumeration but is not used to encode content defined in
the present version of this API.\\n\\n\"}], \"description\": \"Possible values
are - LOC_CH: Location change (tracking area). The tracking area of the UE
has changed. - PRA_CH: Change of UE presence in PRA. The AMF reports the
current presence status of the UE in a Presence Reporting Area, and notifies
that the UE enters/leaves the Presence Reporting Area. - UE_POLICY: A MANAGE
UE POLICY COMPLETE message or a MANAGE UE POLICY COMMAND REJECT message, as
defined in Annex D.5 of 3GPP TS 24.501 or a \\\"UE POLICY PROVISIONING
REQUEST\\\" message, as defined in subclause 7.2.1.1 of 3GPP TS 24.587 , has
been received by the AMF and is being forwarded. - PLMN_CH: PLMN change. the
serving PLMN of UE has changed. - CON_STATE_CH: Connectivity state change:
the connectivity state of UE has changed. - GROUP_ID_LIST_CHG: UE Internal
Group Identifier(s) has changed. This event does not require a subscription\\
\\n\\\", \"minItems\": 1, \"description\": \"Request Triggers that the NF
service consumer observes.\"}, \"uePolReq\": {\"type\": \"string\",
\"format\": \"byte\"}, \"praStatuses\": {\"type\": \"object\",
\"description\": \"Map of PRA status information.\"}, \"minProperties\": 1,
\"additionalProperties\": {\"type\": \"object\", \"properties\": {\"praId\":
{\"type\": \"string\"}, \"ecgiList\": {\"type\": \"array\", \"items\":
{\"type\": \"object\", \"required\": [\"eutraCellId\", \"plmnId\"],
\"properties\": {\"nid\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]
{11}$\"}, \"plmnId\": {\"type\": \"object\", \"required\": [\"mcc\",
\"mnc\"], \"properties\": {\"mcc\": {\"type\": \"string\", \"pattern\": \"^\\\\
d{3}$\"}, \"mnc\": {\"type\": \"string\", \"pattern\": \"^\\\\d{2,3}$\"}}}},
\"eutraCellId\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{7}$\"}},
\"minItems\": 1}, \"ncgiList\": {\"type\": \"array\", \"items\": {\"type\":
\"object\", \"required\": [\"nrCellId\", \"plmnId\"], \"properties\":
{\"nid\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{11}$\"},
\"plmnId\": {\"type\": \"object\", \"required\": [\"mcc\", \"mnc\"],
\"properties\": {\"mcc\": {\"type\": \"string\", \"pattern\": \"^\\\\d{3}$
\"}, \"mnc\": {\"type\": \"string\", \"pattern\": \"^\\\\d{2,3}$\"}}}},
\"nrCellId\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{9}$\"}},
\"minItems\": 1}, \"presenceState\": {\"anyOf\": [{\"enum\": [\"IN_AREA\",
\"OUT_OF_AREA\", \"UNKNOWN\", \"INACTIVE\"], \"type\": \"string\"},
{\"type\": \"string\"}], \"additionalPraId\": {\"type\": \"string\"},
\"globaleNbIdList\": {\"type\": \"array\", \"items\": {\"type\": \"object\",
\"oneOf\": [{\"required\": [\"n3IwfId\"], \"required\": [\"gNbId\"],
{\"required\": [\"ngeNbId\"], \"required\": [\"wagfId\"], \"required\":
[\"tngfId\"], \"required\": [\"eNbId\"], \"required\": [\"plmnId\"],
\"properties\": {\"nid\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]
{11}$\"}, \"eNbId\": {\"type\": \"string\", \"pattern\": \"^(MacroENB-[A-Fa-
f0-9]{5}|MacroENB-[A-Fa-f0-9]{6}|SMacroENB-[A-Fa-f0-9]{5}|HomeENB-[A-Fa-f0-9]
{7})$\"}, \"gNbId\": {\"type\": \"object\", \"required\": [\"bitLength\",
\"gNBValue\"], \"properties\": {\"gNBValue\": {\"type\": \"string\",
\"pattern\": \"^[A-Fa-f0-9]{6,8}$\"}, \"bitLength\": {\"type\": \"integer\",
\"maximum\": 32, \"minimum\": 22}}}}, \"plmnId\": {\"type\": \"object\",
\"required\": [\"mcc\", \"mnc\"], \"properties\": {\"mcc\": {\"type\":
\"string\", \"pattern\": \"^\\\\d{3}$\"}, \"mnc\": {\"type\": \"string\",
\"pattern\": \"^\\\\d{2,3}$\"}}, \"tngfId\": {\"type\": \"string\",

```

```

\"pattern\": \"^[A-Fa-f0-9]+$\", \"wagfId\": {\"type\": \"string\",
\"pattern\": \"^[A-Fa-f0-9]+$\", \"n3IwfId\": {\"type\": \"string\",
\"pattern\": \"^[A-Fa-f0-9]+$\", \"ngeNbId\": {\"type\": \"string\",
\"pattern\": \"^(MacronGeNB-[A-Fa-f0-9]{5}|LMacronGeNB-[A-Fa-f0-9]{6}|
SMacronGeNB-[A-Fa-f0-9]{5})$\"}}, \"minItems\": 1}, \"trackingAreaList\":
{\"type\": \"array\", \"items\": {\"type\": \"object\", \"required\":
[\"plmnId\", \"tac\"], \"properties\": {\"nid\": {\"type\": \"string\",
\"pattern\": \"^[A-Fa-f0-9]{11}$\", \"tac\": {\"type\": \"string\",
\"pattern\": \"^(^([A-Fa-f0-9]{4}$)|(^([A-Fa-f0-9]{6}$)\\\"}}, \"plmnId\":
{\"type\": \"object\", \"required\": [\"mcc\", \"mnc\"], \"properties\":
{\"mcc\": {\"type\": \"string\", \"pattern\": \"^\\\\\\\\d{3}$\", \"mnc\":
{\"type\": \"string\", \"pattern\": \"^\\\\\\\\d{2,3}$\"}}}}, \"minItems\": 1},
\"globalRanNodeIdList\": {\"type\": \"array\", \"items\": {\"type\":
\"object\", \"oneOf\": [{\"required\": [\"n3IwfId\"]}, {\"required\":
[\"gNbId\"]}, {\"required\": [\"ngeNbId\"]}, {\"required\": [\"wagfId\"]},
{\"required\": [\"tngfId\"]}, {\"required\": [\"eNbId\"]}], \"required\":
[\"plmnId\"], \"properties\": {\"nid\": {\"type\": \"string\", \"pattern\":
\"^[A-Fa-f0-9]{11}$\", \"eNbId\": {\"type\": \"string\", \"pattern\":
\"^(MacroENB-[A-Fa-f0-9]{5}|LMacroENB-[A-Fa-f0-9]{6}|SMacroENB-[A-Fa-f0-9]{5}|
HomeeNB-[A-Fa-f0-9]{7})$\", \"gNbId\": {\"type\": \"object\", \"required\":
[\"bitLength\", \"gNBValue\"], \"properties\": {\"gNBValue\": {\"type\":
\"string\", \"pattern\": \"^[A-Fa-f0-9]{6,8}$\", \"bitLength\": {\"type\":
\"integer\", \"maximum\": 32, \"minimum\": 22}}, \"plmnId\": {\"type\":
\"object\", \"required\": [\"mcc\", \"mnc\"], \"properties\": {\"mcc\":
{\"type\": \"string\", \"pattern\": \"^\\\\\\\\d{3}$\", \"mnc\": {\"type\":
\"string\", \"pattern\": \"^\\\\\\\\d{2,3}$\"}}}}, \"tngfId\": {\"type\":
\"string\", \"pattern\": \"^[A-Fa-f0-9]+$\", \"wagfId\": {\"type\":
\"string\", \"pattern\": \"^[A-Fa-f0-9]+$\", \"n3IwfId\": {\"type\":
\"string\", \"pattern\": \"^[A-Fa-f0-9]+$\", \"ngeNbId\": {\"type\":
\"string\", \"pattern\": \"^(MacronGeNB-[A-Fa-f0-9]{5}|LMacronGeNB-[A-Fa-f0-9]{
6}|SMacronGeNB-[A-Fa-f0-9]{5})$\"}}, \"minItems\": 1}}}}, \"servingNfId\":
{\"type\": \"string\", \"format\": \"uuid\", \"connectState\": {\"anyOf\":
[{\"enum\": [\"IDLE\", \"CONNECTED\"], \"type\": \"string\"}, {\"type\":
\"string\"}]}, \"altNotifFqdns\": {\"type\": \"array\", \"items\": {\"type\":
\"string\", \"description\": \"Fully Qualified Domain Name\", \"minItems\":
1, \"description\": \"Alternate or backup FQDN(s) where to send
Notifications.\"}, \"uePolDelResult\": {\"type\": \"string\", \"format\":
\"byte\"}, \"notificationUri\": {\"type\": \"string\",
\"altNotifIpv4Addr\": {\"type\": \"array\", \"items\": {\"type\":
\"string\", \"example\": \"198.51.100.1\", \"pattern\": \"^((([0-9]|[1-9][0-9]|
1[0-9][0-9]|2[0-4][0-9]|25[0-5])\\\\\\\\.){3}([0-9]|[1-9][0-9]|1[0-9][0-9]|2[0-4]
[0-9]|25[0-5])$\", \"minItems\": 1, \"description\": \"Alternate or backup
IPv4 Address(es) where to send Notifications.\"}, \"altNotifIpv6Addr\":
{\"type\": \"array\", \"items\": {\"type\": \"string\", \"allOf\":
[{\"pattern\": \"^((:|0?|([1-9a-f][0-9a-f]{0,3})))(0?|([1-9a-f][0-9a-f]{
0,3})):{0,6}(:|0?|([1-9a-f][0-9a-f]{0,3}))$\", {\"pattern\": \"^((([^\":
+):}{7}([^\":+))|((([^\":+)*[^\":+]??:((([^\":+)*[^\":+]?))$\"}], \"example\":
\"2001:db8:85a3::8a2e:370:7334\", \"minItems\": 1, \"description\":
\"Alternate or backup IPv6 Address(es) where to send Notifications.\"},
\"uePolTransFailNotif\": {\"type\": \"object\", \"required\": [\"cause\",
\"ptis\"], \"properties\": {\"ptis\": {\"type\": \"array\", \"items\":
{\"type\": \"integer\", \"minimum\": 0}, \"minItems\": 1}, \"cause\":
{\"anyOf\": [{\"enum\": [\"ATTEMPTING_TO_REACH_UE\",
\"N1_N2_TRANSFER_INITIATED\", \"WAITING_FOR_ASYNCHRONOUS_TRANSFER\",
\"UE_NOT_RESPONDING\", \"N1_MSG_NOT_TRANSFERRED\",
\"UE_NOT_REACHABLE_FOR_SESSION\", \"TEMPORARY_REJECT_REGISTRATION_ONGOING\",

```

```

\"TEMPORARY_REJECT_HANOVER_ONGOING\"], \"type\": \"string\"}, {\"type\":
\"string\"}}}}}}"
    },
    {
      "defaultId": 38,
      "resourceURI": "/namf-comm/v1/subscriptions/{subscriptionId}",
      "httpMethod": "PUT",
      "schemaValue": "{ \"type\": \"object\", \"required\": [\"amfStatusUri\"],
\"properties\": {\"guamiList\": {\"type\": \"array\", \"items\": {\"type\":
\"object\", \"required\": [\"amfId\", \"plmnId\"], \"properties\":
{\"amfId\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{6}$\"},
\"plmnId\": {\"type\": \"object\", \"required\": [\"mcc\", \"mnc\"],
\"properties\": {\"mcc\": {\"type\": \"string\", \"pattern\": \"^\\\\\\\\d{3}$
\"}, \"mnc\": {\"type\": \"string\", \"pattern\": \"^\\\\\\\\d{2,3}$\"}, \"nid\":
{\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{11}$\"}}}}}, \"minItems\":
1, \"amfStatusUri\": {\"type\": \"string\"}}}"
    },
    {
      "defaultId": 39,
      "resourceURI": "/namf-mt/v1/ue-contexts/{ueContextId}",
      "httpMethod": "GET",
      "schemaValue": "[{ \"in\": \"query\", \"name\": \"info-class\",
\"schema\": {\"anyOf\": [{\"enum\": [\"TADS\"], \"type\": \"string\"},
{\"type\": \"string\"}], \"required\": false}, {\"in\": \"query\", \"name\":
\"supported-features\", \"schema\": {\"type\": \"string\", \"pattern\": \"^[A-
Fa-f0-9]*$\"}, \"required\": false}, {\"in\": \"query\", \"name\": \"old-
guami\", \"content\": {\"application/json\": {\"schema\": {\"type\":
\"object\", \"required\": [\"amfId\", \"plmnId\"], \"properties\":
{\"amfId\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{6}$\"},
\"plmnId\": {\"type\": \"object\", \"required\": [\"mcc\", \"mnc\"],
\"properties\": {\"mcc\": {\"type\": \"string\", \"pattern\": \"^\\\\\\\\d{3}$
\"}, \"mnc\": {\"type\": \"string\", \"pattern\": \"^\\\\\\\\d{2,3}$\"}, \"nid\":
{\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{11}$\"}}}}}}},
\"required\": false}]"
    },
    {
      "defaultId": 40,
      "resourceURI": "/nudm-sdm/v1/{supi}/sm-data",
      "httpMethod": "GET",
      "schemaValue": "[{ \"in\": \"query\", \"name\": \"supported-features\",
\"schema\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]*$\"},
\"required\": false}, {\"in\": \"query\", \"name\": \"single-nssai\",
\"content\": {\"application/json\": {\"schema\": {\"type\": \"object\",
\"required\": [\"sst\"], \"properties\": {\"sd\": {\"type\": \"string\",
\"pattern\": \"^[A-Fa-f0-9]{6}$\"}, \"sst\": {\"type\": \"integer\",
\"maximum\": 255, \"minimum\": 0}}}}}, \"required\": false}, {\"in\":
\"query\", \"name\": \"dnn\", \"schema\": {\"type\": \"string\",
\"required\": false}, {\"in\": \"query\", \"name\": \"plmn-id\", \"content\":
{\"application/json\": {\"schema\": {\"type\": \"object\", \"required\":
[\"mcc\", \"mnc\"], \"properties\": {\"mcc\": {\"type\": \"string\",
\"pattern\": \"^\\\\\\\\d{3}$\"}, \"mnc\": {\"type\": \"string\", \"pattern\":
\"^\\\\\\\\d{2,3}$\"}}}}}, \"required\": false}]"
    },
    {
      "defaultId": 41,
      "resourceURI": "/nudm-uecm/v1/{ueId}/registrations/smsf-3gpp-access",

```

```

    "httpMethod": "DELETE",
    "schemaValue": "[{"in": "query", "name": "smsf-set-id",
\"schema\": {\"type\": \"string\", \"required\": false}}]
  },
  {
    "defaultId": 42,
    "resourceURI": "/nudm-sdm/v1/shared-data",
    "httpMethod": "GET",
    "schemaValue": "[{"in": "query", "name": "shared-data-ids",
\"schema\": {\"type\": \"array\", \"items\": {\"type\": \"string\",
\"pattern\": \"^[0-9]{5,6}-.$\"}}, \"required\": true}, {\"in\": \"query\",
\"name\": \"supportedFeatures\", \"schema\": {\"type\": \"string\",
\"pattern\": \"^[A-Za-f0-9]*$\"}, \"required\": false}]"
  },
  {
    "defaultId": 43,
    "resourceURI": "/nudm-sdm/v1/{supi}/ue-context-in-smf-data",
    "httpMethod": "GET",
    "schemaValue": "[{"in": "query", "name": "supported-features",
\"schema\": {\"type\": \"string\", \"pattern\": \"^[A-Za-f0-9]*$\"},
\"required\": false}]"
  },
  {
    "defaultId": 44,
    "resourceURI": "/nsmf-pdusession/v1/pdu-sessions/{pduSessionRef}/release",
    "httpMethod": "POST",
    "schemaValue": "{ \"type\": \"object\", \"properties\": {\"cause\":
{ \"anyOf\": [{ \"enum\": [\"REL_DUE_TO_HO\", \"EPS_FALLBACK\",
\"REL_DUE_TO_UP_SEC\", \"DNN_CONGESTION\", \"S_NSSAI_CONGESTION\",
\"REL_DUE_TO_REACTIVATION\", \"5G_AN_NOT_RESPONDING\",
\"REL_DUE_TO_SLICE_NOT_AVAILABLE\", \"REL_DUE_TO_DUPLICATE_SESSION_ID\",
\"PDU_SESSION_STATUS_MISMATCH\", \"HO_FAILURE\",
\"INSUFFICIENT_UP_RESOURCES\", \"PDU_SESSION_HANDED_OVER\",
\"PDU_SESSION_RESUMED\", \"CN_ASSISTED_RAN_PARAMETER_TUNING\",
\"ISMF_CONTEXT_TRANSFER\", \"SMF_CONTEXT_TRANSFER\",
\"REL_DUE_TO_PS_TO_CS_HO\", \"REL_DUE_TO_SUBSCRIPTION_CHANGE\",
\"HO_CANCEL\", \"REL_DUE_TO_SLICE_NOT_AUTHORIZED\",
\"PDU_SESSION_HAND_OVER_FAILURE\", \"DDN_FAILURE_STATUS\",
\"REL_DUE_TO_CP_ONLY_NOT_APPLICABLE\", \"NOT_SUPPORTED_WITH_ISMF\",
\"CHANGED_ANCHOR_SMF\", \"CHANGED_INTERMEDIATE_SMF\",
\"REL_DUE_TO_SMF_NOT_SUPPORT_PSETR\"], \"type\": \"string\"}, {\"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.\\n\"}], \"description\":
\"Possible values are - REL_DUE_TO_HO - EPS_FALLBACK - REL_DUE_TO_UP_SEC -
DNN_CONGESTION - S_NSSAI_CONGESTION - REL_DUE_TO_REACTIVATION -
5G_AN_NOT_RESPONDING - REL_DUE_TO_SLICE_NOT_AVAILABLE -
REL_DUE_TO_DUPLICATE_SESSION_ID - PDU_SESSION_STATUS_MISMATCH - HO_FAILURE -
INSUFFICIENT_UP_RESOURCES - PDU_SESSION_HANDED_OVER - PDU_SESSION_RESUMED -
CN_ASSISTED_RAN_PARAMETER_TUNING - ISMF_CONTEXT_TRANSFER -
SMF_CONTEXT_TRANSFER - REL_DUE_TO_PS_TO_CS_HO -
REL_DUE_TO_SUBSCRIPTION_CHANGE - HO_CANCEL - REL_DUE_TO_SLICE_NOT_AUTHORIZED
- PDU_SESSION_HAND_OVER_FAILURE - DDN_FAILURE_STATUS -
REL_DUE_TO_CP_ONLY_NOT_APPLICABLE - NOT_SUPPORTED_WITH_ISMF -
CHANGED_ANCHOR_SMF - CHANGED_INTERMEDIATE_SMF -
REL_DUE_TO_SMF_NOT_SUPPORT_PSETR\\n\"}, \"n4Info\": {\"type\": \"object\",

```

```

\"required\": [\"n4MessagePayload\", \"n4MessageType\"], \"properties\":
{\"n4DnaiInfo\": {\"type\": \"object\", \"required\": [\"dnai\"],
\"properties\": {\"dnai\": {\"type\": \"string\"}, \"noDnaiChangeInd\":
{\"type\": \"boolean\"}, \"noLocalPsaChangeInd\": {\"type\": \"boolean\"}}},
\"n4MessageType\": {\"anyOf\": [{\"enum\": [\"PFCP_SES_EST_REQ\",
\"PFCP_SES_EST_RSP\", \"PFCP_SES_MOD_REQ\", \"PFCP_SES_MOD_RSP\",
\"PFCP_SES_DEL_REQ\", \"PFCP_SES_DEL_RSP\", \"PFCP_SES_REP_REQ\",
\"PFCP_SES_REP_RSP\"], \"type\": \"string\"}, {\"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.\\n\\n\"}], \"description\": \"Possible values
are\\n - PFCP_SES_EST_REQ\\n - PFCP_SES_EST_RSP\\n - PFCP_SES_MOD_REQ\\n
- PFCP_SES_MOD_RSP\\n - PFCP_SES_DEL_REQ\\n - PFCP_SES_DEL_RSP\\n -
PFCP_SES_REP_REQ\\n - PFCP_SES_REP_RSP\\n\\n\"}, \"n4MessagePayload\":
{\"type\": \"object\", \"required\": [\"contentId\"], \"properties\":
{\"contentId\": {\"type\": \"string\"}}}}, \"ngApCause\": {\"type\":
\"object\", \"required\": [\"group\", \"value\"], \"properties\": {\"group\":
{\"type\": \"integer\", \"minimum\": 0}, \"value\": {\"type\": \"integer\",
\"minimum\": 0}}}, \"n4InfoExt1\": {\"type\": \"object\", \"required\":
[\"n4MessagePayload\", \"n4MessageType\"], \"properties\": {\"n4DnaiInfo\":
{\"type\": \"object\", \"required\": [\"dnai\"], \"properties\": {\"dnai\":
{\"type\": \"string\"}, \"noDnaiChangeInd\": {\"type\": \"boolean\"},
\"noLocalPsaChangeInd\": {\"type\": \"boolean\"}}}, \"n4MessageType\":
{\"anyOf\": [{\"enum\": [\"PFCP_SES_EST_REQ\", \"PFCP_SES_EST_RSP\",
\"PFCP_SES_MOD_REQ\", \"PFCP_SES_MOD_RSP\", \"PFCP_SES_DEL_REQ\",
\"PFCP_SES_DEL_RSP\", \"PFCP_SES_REP_REQ\", \"PFCP_SES_REP_RSP\"], \"type\":
\"string\"}, {\"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.\\n\\n\"}],
\"description\": \"Possible values are\\n - PFCP_SES_EST_REQ\\n -
PFCP_SES_EST_RSP\\n - PFCP_SES_MOD_REQ\\n - PFCP_SES_MOD_RSP\\n -
PFCP_SES_DEL_REQ\\n - PFCP_SES_DEL_RSP\\n - PFCP_SES_REP_REQ\\n -
PFCP_SES_REP_RSP\\n\\n\"}, \"n4MessagePayload\": {\"type\": \"object\",
\"required\": [\"contentId\"], \"properties\": {\"contentId\": {\"type\":
\"string\"}}}}, \"n4InfoExt2\": {\"type\": \"object\", \"required\":
[\"n4MessagePayload\", \"n4MessageType\"], \"properties\": {\"n4DnaiInfo\":
{\"type\": \"object\", \"required\": [\"dnai\"], \"properties\": {\"dnai\":
{\"type\": \"string\"}, \"noDnaiChangeInd\": {\"type\": \"boolean\"},
\"noLocalPsaChangeInd\": {\"type\": \"boolean\"}}}, \"n4MessageType\":
{\"anyOf\": [{\"enum\": [\"PFCP_SES_EST_REQ\", \"PFCP_SES_EST_RSP\",
\"PFCP_SES_MOD_REQ\", \"PFCP_SES_MOD_RSP\", \"PFCP_SES_DEL_REQ\",
\"PFCP_SES_DEL_RSP\", \"PFCP_SES_REP_REQ\", \"PFCP_SES_REP_RSP\"], \"type\":
\"string\"}, {\"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.\\n\\n\"}],
\"description\": \"Possible values are\\n - PFCP_SES_EST_REQ\\n -
PFCP_SES_EST_RSP\\n - PFCP_SES_MOD_REQ\\n - PFCP_SES_MOD_RSP\\n -
PFCP_SES_DEL_REQ\\n - PFCP_SES_DEL_RSP\\n - PFCP_SES_REP_REQ\\n -
PFCP_SES_REP_RSP\\n\\n\"}, \"n4MessagePayload\": {\"type\": \"object\",
\"required\": [\"contentId\"], \"properties\": {\"contentId\": {\"type\":
\"string\"}}}}, \"ueLocation\": {\"type\": \"object\", \"properties\":
{\"nrLocation\": {\"type\": \"object\", \"required\": [\"ncgi\", \"tai\"],
\"properties\": {\"tai\": {\"type\": \"object\", \"required\": [\"plmnId\",
\"tac\"], \"properties\": {\"nid\": {\"type\": \"string\", \"pattern\": \"^[A-
Fa-f0-9]{11}$\"}, \"tac\": {\"type\": \"string\", \"pattern\": \"^(^([A-Fa-f0-9]
{4}$)|(^([A-Fa-f0-9]{6}$)\\\"}, \"plmnId\": {\"type\": \"object\", \"required\":

```



```

[\"mcc\", \"mnc\"], \"properties\": {\"mcc\": {\"type\": \"string\",
\"pattern\": \"^\\\\\\\\d{3}$\"}, \"mnc\": {\"type\": \"string\", \"pattern\":
\"^\\\\\\\\d{2,3}$\"}}}}, \"ncgi\": {\"type\": \"object\", \"required\":
[\"nrCellId\", \"plmnId\"], \"properties\": {\"nid\": {\"type\": \"string\",
\"pattern\": \"^[A-Fa-f0-9]{11}$\"}, \"plmnId\": {\"type\": \"object\",
\"required\": [\"mcc\", \"mnc\"], \"properties\": {\"mcc\": {\"type\":
\"string\", \"pattern\": \"^\\\\\\\\d{3}$\"}, \"mnc\": {\"type\": \"string\",
\"pattern\": \"^\\\\\\\\d{2,3}$\"}}}}, \"nrCellId\": {\"type\": \"string\",
\"pattern\": \"^[A-Fa-f0-9]{9}$\"}}, \"ignoreNcgi\": {\"type\": \"boolean\",
\"default\": false}, \"globalGnbId\": {\"type\": \"object\", \"oneOf\":
[{\"required\": [\"n3IwfId\"]}, {\"required\": [\"gnbId\"]}, {\"required\":
[\"ngenbId\"]}, {\"required\": [\"wagfId\"]}, {\"required\": [\"tngfId\"]},
{\"required\": [\"enbId\"]}], \"required\": [\"plmnId\"], \"properties\":
{\"nid\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{11}$\"},
\"enbId\": {\"type\": \"string\", \"pattern\": \"^(MacroenB-[A-Fa-f0-9]{5}|
LMacroenB-[A-Fa-f0-9]{6}|SMacroenB-[A-Fa-f0-9]{5}|HomeenB-[A-Fa-f0-9]{7})$
\"}, \"gnbId\": {\"type\": \"object\", \"required\": [\"bitLength\",
\"gnbValue\"], \"properties\": {\"gnbValue\": {\"type\": \"string\",
\"pattern\": \"^[A-Fa-f0-9]{6,8}$\"}, \"bitLength\": {\"type\": \"integer\",
\"maximum\": 32, \"minimum\": 22}}}}, \"plmnId\": {\"type\": \"object\",
\"required\": [\"mcc\", \"mnc\"], \"properties\": {\"mcc\": {\"type\":
\"string\", \"pattern\": \"^\\\\\\\\d{3}$\"}, \"mnc\": {\"type\": \"string\",
\"pattern\": \"^\\\\\\\\d{2,3}$\"}}}}, \"tngfId\": {\"type\": \"string\",
\"pattern\": \"^[A-Fa-f0-9]+$\"}, \"wagfId\": {\"type\": \"string\",
\"pattern\": \"^[A-Fa-f0-9]+$\"}, \"n3IwfId\": {\"type\": \"string\",
\"pattern\": \"^[A-Fa-f0-9]+$\"}, \"ngenbId\": {\"type\": \"string\",
\"pattern\": \"^(MacroNGenB-[A-Fa-f0-9]{5}|LMacroNGenB-[A-Fa-f0-9]{6}|
SMacroNGenB-[A-Fa-f0-9]{5})$\"}}}}, \"geodeticInformation\": {\"type\":
\"string\", \"pattern\": \"^[0-9A-F]{20}$\"}, \"ueLocationTimestamp\":
{\"type\": \"string\", \"format\": \"date-time\"},
\"geographicalInformation\": {\"type\": \"string\", \"pattern\": \"^[0-9A-F]
{16}$\"}, \"ageOfLocationInformation\": {\"type\": \"integer\", \"maximum\":
32767, \"minimum\": 0}}, \"geraLocation\": {\"type\": \"object\", \"oneOf\":
[{\"required\": [\"cgi\"]}, {\"required\": [\"sai\"]}, {\"required\":
[\"rai\"]}, {\"required\": [\"lai\"]}], \"properties\": {\"cgi\": {\"type\":
\"object\", \"required\": [\"cellId\", \"lac\", \"plmnId\"], \"properties\":
{\"lac\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{4}$\"},
\"cellId\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{4}$\"},
\"plmnId\": {\"type\": \"object\", \"required\": [\"mcc\", \"mnc\"],
\"properties\": {\"mcc\": {\"type\": \"string\", \"pattern\": \"^\\\\\\\\d{3}$
\"}, \"mnc\": {\"type\": \"string\", \"pattern\": \"^\\\\\\\\d{2,3}$\"}}}},
\"lai\": {\"type\": \"object\", \"required\": [\"lac\", \"plmnId\"],
\"properties\": {\"lac\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]
{4}$\"}, \"plmnId\": {\"type\": \"object\", \"required\": [\"mcc\", \"mnc\"],
\"properties\": {\"mcc\": {\"type\": \"string\", \"pattern\": \"^\\\\\\\\d{3}$
\"}, \"mnc\": {\"type\": \"string\", \"pattern\": \"^\\\\\\\\d{2,3}$\"}}}},
\"rai\": {\"type\": \"object\", \"required\": [\"lac\", \"plmnId\", \"rac\"],
\"properties\": {\"lac\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]
{4}$\"}, \"rac\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{2}$\"},
\"plmnId\": {\"type\": \"object\", \"required\": [\"mcc\", \"mnc\"],
\"properties\": {\"mcc\": {\"type\": \"string\", \"pattern\": \"^\\\\\\\\d{3}$
\"}, \"mnc\": {\"type\": \"string\", \"pattern\": \"^\\\\\\\\d{2,3}$\"}}}},
\"sai\": {\"type\": \"object\", \"required\": [\"lac\", \"plmnId\", \"sac\"],
\"properties\": {\"lac\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]
{4}$\"}, \"sac\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{4}$\"},
\"plmnId\": {\"type\": \"object\", \"required\": [\"mcc\", \"mnc\"],

```



```

\"properties\": {\"mcc\": {\"type\": \"string\", \"pattern\": \"^\\\\d{3}$\"},
\"mnc\": {\"type\": \"string\", \"pattern\": \"^\\\\d{2,3}$\"}}},
\"mscNumber\": {\"type\": \"string\"}, \"vlnrNumber\": {\"type\": \"string\"},
\"locationNumber\": {\"type\": \"string\"}, \"geodeticInformation\":
{\"type\": \"string\", \"pattern\": \"^[0-9A-F]{20}$\"},
\"ueLocationTimestamp\": {\"type\": \"string\", \"format\": \"date-time\"},
\"geographicalInformation\": {\"type\": \"string\", \"pattern\": \"^[0-9A-F]{16}$\"},
\"ageOfLocationInformation\": {\"type\": \"integer\", \"maximum\": 32767, \"minimum\": 0}},
\"n3gaLocation\": {\"type\": \"object\",
\"properties\": {\"gci\": {\"type\": \"string\"}, \"gli\": {\"type\": \"string\", \"format\": \"byte\"},
\"tnapId\": {\"type\": \"object\",
\"properties\": {\"ssId\": {\"type\": \"string\"}, \"bssId\": {\"type\": \"string\", \"format\": \"byte\"}},
\"twapId\": {\"type\": \"object\", \"required\": [\"ssId\"],
\"properties\": {\"ssId\": {\"type\": \"string\"}, \"bssId\": {\"type\": \"string\", \"format\": \"byte\"}},
\"n3IwfId\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]+$\"},
\"n3gppTai\": {\"type\": \"object\", \"required\": [\"plmnId\", \"tac\"],
\"properties\": {\"nid\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{11}$\"}, \"tac\": {\"type\": \"string\", \"pattern\": \"^(^([A-Fa-f0-9]{4}$)|(^([A-Fa-f0-9]{6}$)\\\\$\"}, \"plmnId\": {\"type\": \"object\", \"required\": [\"mcc\", \"mnc\"],
\"properties\": {\"mcc\": {\"type\": \"string\", \"pattern\": \"^\\\\d{3}$\"}, \"mnc\": {\"type\": \"string\", \"pattern\": \"^\\\\d{2,3}$\"}}}},
\"protocol\": {\"anyOf\": [{\"enum\": [\"UDP\", \"TCP\"], \"type\": \"string\"}, {\"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.\\\\n\"}], \"description\": \"Possible values are - UDP: User Datagram Protocol. - TCP: Transmission Control Protocol.\\\\n\"},
\"hfcNodeId\": {\"type\": \"object\", \"required\": [\"hfcNid\"],
\"properties\": {\"hfcNid\": {\"type\": \"string\", \"maxLength\": 6}},
\"portNumber\": {\"type\": \"integer\", \"minimum\": 0}, \"ueIpv4Addr\": {\"type\": \"string\", \"example\": \"198.51.100.1\", \"pattern\": \"^((([0-9]{1-9}[0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5]))\\\\\\\\.){3}([0-9]|1[0-9][0-9]|2[0-9]|2[0-4][0-9]|25[0-5])$\"}, \"ueIpv6Addr\": {\"type\": \"string\", \"allof\": [{\"pattern\": \"^((:|0?|([1-9a-f][0-9a-f]{0,3}))):((0?|([1-9a-f][0-9a-f]{0,3}))):{0,6}(:|0?|([1-9a-f][0-9a-f]{0,3}))$\"}, {\"pattern\": \"^(((^[:+])?){7}([^:]*)|(((^[:+])?)*([^:]*)?::((^[:+])?)*([^:]*)?))$\"}],
\"example\": \"2001:db8:85a3::8a2e:370:7334\"}, \"w5gbanLineType\": {\"anyOf\": [{\"enum\": [\"DSL\", \"PON\"], \"type\": \"string\"}, {\"type\": \"string\", \"description\": \"This string provides forward-compatibility with future extensions to the enumeration but is not used to encode content defined in the present version of this API.\\\\n\"}], \"description\": \"Possible values are - DSL: Identifies a DSL line - PON: Identifies a PON line\\\\n\"}}},
\"utraLocation\": {\"type\": \"object\", \"oneOf\": [{\"required\": [\"cgi\"], \"required\": [\"sai\"], \"required\": [\"rai\"]}],
\"properties\": {\"cgi\": {\"type\": \"object\", \"required\": [\"cellId\", \"lac\", \"plmnId\"],
\"properties\": {\"lac\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{4}$\"}, \"cellId\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{4}$\"}, \"plmnId\": {\"type\": \"object\", \"required\": [\"mcc\", \"mnc\"],
\"properties\": {\"mcc\": {\"type\": \"string\", \"pattern\": \"^\\\\d{3}$\"}, \"mnc\": {\"type\": \"string\", \"pattern\": \"^\\\\d{2,3}$\"}}}},
\"lai\": {\"type\": \"object\", \"required\": [\"lac\", \"plmnId\"],
\"properties\": {\"lac\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{4}$\"}, \"plmnId\": {\"type\": \"object\", \"required\": [\"mcc\", \"mnc\"],
\"properties\":

```

```

{"mcc": {"type": "string", "pattern": "\\^\\\\\\\\d{3}$"}, "mnc": {"type": "string", "pattern": "\\^\\\\\\\\d{2,3}$"}}, {"rai": {"type": "object", "required": ["lac", "plmnId", "rac"], "properties": {"lac": {"type": "string", "pattern": "\\^[A-Fa-f0-9]{4}$"}, "rac": {"type": "string", "pattern": "\\^[A-Fa-f0-9]{2}$"}, "plmnId": {"type": "object", "required": ["mcc", "mnc"], "properties": {"mcc": {"type": "string", "pattern": "\\^\\\\\\\\d{3}$"}, "mnc": {"type": "string", "pattern": "\\^\\\\\\\\d{2,3}$"}}, "sai": {"type": "object", "required": ["lac", "plmnId", "sac"], "properties": {"lac": {"type": "string", "pattern": "\\^[A-Fa-f0-9]{4}$"}, "sac": {"type": "string", "pattern": "\\^[A-Fa-f0-9]{4}$"}, "plmnId": {"type": "object", "required": ["mcc", "mnc"], "properties": {"mcc": {"type": "string", "pattern": "\\^\\\\\\\\d{3}$"}, "mnc": {"type": "string", "pattern": "\\^\\\\\\\\d{2,3}$"}}, "geodeticInformation": {"type": "string", "pattern": "\\^[0-9A-F]{20}$"}, "ueLocationTimestamp": {"type": "string", "format": "date-time"}, "geographicalInformation": {"type": "string", "pattern": "\\^[0-9A-F]{16}$"}, "ageOfLocationInformation": {"type": "integer", "maximum": 32767, "minimum": 0}}, "eutraLocation": {"type": "object", "required": ["ecgi", "tai"], "properties": {"tai": {"type": "object", "required": ["plmnId", "tac"], "properties": {"nid": {"type": "string", "pattern": "\\^[A-Fa-f0-9]{11}$"}, "tac": {"type": "string", "pattern": "\\^(^([A-Fa-f0-9]{4}$)|(^([A-Fa-f0-9]{6}$))$"}, "plmnId": {"type": "object", "required": ["mcc", "mnc"], "properties": {"mcc": {"type": "string", "pattern": "\\^\\\\\\\\d{3}$"}, "mnc": {"type": "string", "pattern": "\\^\\\\\\\\d{2,3}$"}}, "ecgi": {"type": "object", "required": ["eutraCellId", "plmnId"], "properties": {"nid": {"type": "string", "pattern": "\\^[A-Fa-f0-9]{11}$"}, "plmnId": {"type": "object", "required": ["mcc", "mnc"], "properties": {"mcc": {"type": "string", "pattern": "\\^\\\\\\\\d{3}$"}, "mnc": {"type": "string", "pattern": "\\^\\\\\\\\d{2,3}$"}}, "eutraCellId": {"type": "string", "pattern": "\\^[A-Fa-f0-9]{7}$"}, "ignoreTai": {"type": "boolean", "default": false}, "ignoreEcgi": {"type": "boolean", "default": false}, "globalENbId": {"type": "object", "oneOf": [{"required": ["n3IwfId"]}, {"required": ["gNbId"]}, {"required": ["ngeNbId"]}, {"required": ["wagfId"]}, {"required": ["tngfId"]}, {"required": ["eNbId"]}], "required": ["plmnId"], "properties": {"nid": {"type": "string", "pattern": "\\^[A-Fa-f0-9]{11}$"}, "eNbId": {"type": "string", "pattern": "\\^(MacroNB-[A-Fa-f0-9]{5}|MacroNB-[A-Fa-f0-9]{6}|MacroNB-[A-Fa-f0-9]{5}|HomeNB-[A-Fa-f0-9]{7})$"}, "gNbId": {"type": "object", "required": ["bitLength", "gNBValue"], "properties": {"gNBValue": {"type": "string", "pattern": "\\^[A-Fa-f0-9]{6,8}$"}, "bitLength": {"type": "integer", "maximum": 32, "minimum": 22}}, "plmnId": {"type": "object", "required": ["mcc", "mnc"], "properties": {"mcc": {"type": "string", "pattern": "\\^\\\\\\\\d{3}$"}, "mnc": {"type": "string", "pattern": "\\^\\\\\\\\d{2,3}$"}}, "tngfId": {"type": "string", "pattern": "\\^[A-Fa-f0-9]+$"}, "wagfId": {"type": "string", "pattern": "\\^[A-Fa-f0-9]+$"}, "n3IwfId": {"type": "string", "pattern": "\\^[A-Fa-f0-9]+$"}, "ngeNbId": {"type": "string", "pattern": "\\^(MacroNGeNB-[A-Fa-f0-9]{5}|MacroNGeNB-[A-Fa-f0-9]{6}|MacroNGeNB-[A-Fa-f0-9]{5})$"}}, "globalNgenbId": {"type": "object", "oneOf": [{"required": ["n3IwfId"]}, {"required": ["gNbId"]}, {"required": ["ngeNbId"]}, {"required": ["wagfId"]}, {"required": ["tngfId"]}, {"required": ["eNbId"]}], "required": ["plmnId"], "properties": {"nid":

```

```

{"type": "string", "pattern": "\\^[A-Fa-f0-9]{11}$\\", "eNbId":
{"type": "string", "pattern": "\\^(MacroNB-[A-Fa-f0-9]{5}|MacroNB-[A-
Fa-f0-9]{6}|MacroNB-[A-Fa-f0-9]{5}|HomeNB-[A-Fa-f0-9]{7})$\\", "gNbId":
{"type": "object", "required": ["bitLength", "gNBValue"],
"properties": {"gNBValue": {"type": "string", "pattern": "\\^[A-Fa-
f0-9]{6,8}$\\", "bitLength": {"type": "integer", "maximum": 32,
"minimum": 22}}, "plmnId": {"type": "object", "required":
["mcc", "mnc"], "properties": {"mcc": {"type": "string",
"pattern": "\\^[0-9]{3}$\\", "mnc": {"type": "string", "pattern":
 "\\^[0-9]{2,3}$\\"}}, "tngfId": {"type": "string", "pattern": "\\^[A-Fa-
f0-9]+$\\", "wagfId": {"type": "string", "pattern": "\\^[A-Fa-f0-9]+$\\",
"n3IwfId": {"type": "string", "pattern": "\\^[A-Fa-f0-9]+$\\",
"ngeNbId": {"type": "string", "pattern": "\\^(MacroNGeNB-[A-Fa-f0-9]
{5}|MacroNGeNB-[A-Fa-f0-9]{6}|MacroNGeNB-[A-Fa-f0-9]{5})$\\"}},
"geodeticInformation": {"type": "string", "pattern": "\\^[0-9A-F]{20}$\\",
"ueLocationTimestamp": {"type": "string", "format": "date-
time\\", "geographicalInformation": {"type": "string", "pattern":
 "\\^[0-9A-F]{16}$\\", "ageOfLocationInformation": {"type": "integer\\",
"maximum": 32767, "minimum": 0}}}}, "ueTimeZone": {"type":
"string\\", "addUeLocation": {"type": "object\\", "properties":
{"nrLocation": {"type": "object\\", "required": ["ncgi", "tai"],
"properties": {"tai": {"type": "object\\", "required": ["plmnId",
"tac"], "properties": {"nid": {"type": "string\\", "pattern": "\\^[A-
Fa-f0-9]{11}$\\", "tac": {"type": "string\\", "pattern": "\\^(^([A-Fa-f0-9]
{4}$)|(^([A-Fa-f0-9]{6}$)|\\", "plmnId": {"type": "object\\", "required":
["mcc", "mnc"], "properties": {"mcc": {"type": "string\\",
"pattern": "\\^[0-9]{3}$\\", "mnc": {"type": "string\\", "pattern":
 "\\^[0-9]{2,3}$\\"}}, "ncgi": {"type": "object\\", "required":
["nrCellId", "plmnId"], "properties": {"nid": {"type": "string\\",
"pattern": "\\^[A-Fa-f0-9]{11}$\\", "plmnId": {"type": "object\\",
"required": ["mcc", "mnc"], "properties": {"mcc": {"type":
"string\\", "pattern": "\\^[0-9]{3}$\\", "mnc": {"type": "string\\",
"pattern": "\\^[0-9]{2,3}$\\"}}, "nrCellId": {"type": "string\\",
"pattern": "\\^[A-Fa-f0-9]{9}$\\"}}, "ignoreNcgi": {"type": "boolean\\",
"default": false}, "globalGnbId": {"type": "object\\", "oneOf":
[{"required": ["n3IwfId"]}, {"required": ["gNbId"]}, {"required":
["ngeNbId"]}, {"required": ["wagfId"]}, {"required": ["tngfId"]},
{"required": ["eNbId"]]}, "required": ["plmnId"], "properties":
{"nid": {"type": "string\\", "pattern": "\\^[A-Fa-f0-9]{11}$\\",
"eNbId": {"type": "string\\", "pattern": "\\^(MacroNB-[A-Fa-f0-9]{5}|
MacroNB-[A-Fa-f0-9]{6}|MacroNB-[A-Fa-f0-9]{5}|HomeNB-[A-Fa-f0-9]{7})$\\",
"gNbId": {"type": "object\\", "required": ["bitLength",
"gNBValue"], "properties": {"gNBValue": {"type": "string\\",
"pattern": "\\^[A-Fa-f0-9]{6,8}$\\", "bitLength": {"type": "integer\\",
"maximum": 32, "minimum": 22}}, "plmnId": {"type": "object\\",
"required": ["mcc", "mnc"], "properties": {"mcc": {"type":
"string\\", "pattern": "\\^[0-9]{3}$\\", "mnc": {"type": "string\\",
"pattern": "\\^[0-9]{2,3}$\\"}}, "tngfId": {"type": "string\\",
"pattern": "\\^[A-Fa-f0-9]+$\\", "wagfId": {"type": "string\\",
"pattern": "\\^[A-Fa-f0-9]+$\\", "n3IwfId": {"type": "string\\",
"pattern": "\\^[A-Fa-f0-9]+$\\", "ngeNbId": {"type": "string\\",
"pattern": "\\^(MacroNGeNB-[A-Fa-f0-9]{5}|MacroNGeNB-[A-Fa-f0-9]{6}|
MacroNGeNB-[A-Fa-f0-9]{5})$\\"}}, "geodeticInformation": {"type":
"string\\", "pattern": "\\^[0-9A-F]{20}$\\", "ueLocationTimestamp":
{"type": "string\\", "format": "date-time\\",
"geographicalInformation": {"type": "string\\", "pattern": "\\^[0-9A-F]

```

```

{16}$\"}, \"ageOfLocationInformation\": {\"type\": \"integer\", \"maximum\":
32767, \"minimum\": 0}}, \"generalLocation\": {\"type\": \"object\", \"oneOf\":
[{\"required\": [\"cgi\"]}, {\"required\": [\"sai\"]}, {\"required\":
[\"rai\"]}, {\"required\": [\"lai\"]}], \"properties\": {\"cgi\": {\"type\":
\"object\", \"required\": [\"cellId\", \"lac\", \"plmnId\"], \"properties\":
{\"lac\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{4}$\"},
\"cellId\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{4}$\"},
\"plmnId\": {\"type\": \"object\", \"required\": [\"mcc\", \"mnc\"],
\"properties\": {\"mcc\": {\"type\": \"string\", \"pattern\": \"^[\\d]{3}$
\"}, \"mnc\": {\"type\": \"string\", \"pattern\": \"^[\\d]{2,3}$\"}}}},
\"lai\": {\"type\": \"object\", \"required\": [\"lac\", \"plmnId\"],
\"properties\": {\"lac\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]
{4}$\"}, \"plmnId\": {\"type\": \"object\", \"required\": [\"mcc\", \"mnc\"],
\"properties\": {\"mcc\": {\"type\": \"string\", \"pattern\": \"^[\\d]{3}$
\"}, \"mnc\": {\"type\": \"string\", \"pattern\": \"^[\\d]{2,3}$\"}}}},
\"rai\": {\"type\": \"object\", \"required\": [\"lac\", \"plmnId\", \"rac\"],
\"properties\": {\"lac\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]
{4}$\"}, \"rac\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{2}$\"},
\"plmnId\": {\"type\": \"object\", \"required\": [\"mcc\", \"mnc\"],
\"properties\": {\"mcc\": {\"type\": \"string\", \"pattern\": \"^[\\d]{3}$
\"}, \"mnc\": {\"type\": \"string\", \"pattern\": \"^[\\d]{2,3}$\"}}}},
\"sai\": {\"type\": \"object\", \"required\": [\"lac\", \"plmnId\", \"sac\"],
\"properties\": {\"lac\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]
{4}$\"}, \"sac\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{4}$\"},
\"plmnId\": {\"type\": \"object\", \"required\": [\"mcc\", \"mnc\"],
\"properties\": {\"mcc\": {\"type\": \"string\", \"pattern\": \"^[\\d]{3}$
\"}, \"mnc\": {\"type\": \"string\", \"pattern\": \"^[\\d]{2,3}$\"}}}},
\"mscNumber\": {\"type\": \"string\"}, \"vlrNumber\": {\"type\": \"string\"},
\"locationNumber\": {\"type\": \"string\"}, \"geodeticInformation\":
{\"type\": \"string\", \"pattern\": \"^[0-9A-F]{20}$\"},
\"ueLocationTimestamp\": {\"type\": \"string\", \"format\": \"date-time\"},
\"geographicalInformation\": {\"type\": \"string\", \"pattern\": \"^[0-9A-F]
{16}$\"}, \"ageOfLocationInformation\": {\"type\": \"integer\", \"maximum\":
32767, \"minimum\": 0}}, \"n3gaLocation\": {\"type\": \"object\",
\"properties\": {\"gci\": {\"type\": \"string\"}, \"gli\": {\"type\":
\"string\", \"format\": \"byte\"}, \"tnapId\": {\"type\": \"object\",
\"properties\": {\"ssId\": {\"type\": \"string\"}, \"bssId\": {\"type\":
\"string\", \"civicAddress\": {\"type\": \"string\", \"format\":
\"byte\"}}}, \"twapId\": {\"type\": \"object\", \"required\": [\"ssId\"],
\"properties\": {\"ssId\": {\"type\": \"string\"}, \"bssId\": {\"type\":
\"string\", \"civicAddress\": {\"type\": \"string\", \"format\":
\"byte\"}}}, \"n3IwfId\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]+$
\"}, \"n3gppTai\": {\"type\": \"object\", \"required\": [\"plmnId\",
\"tac\"], \"properties\": {\"nid\": {\"type\": \"string\", \"pattern\": \"^[A-
Fa-f0-9]{11}$\"}, \"tac\": {\"type\": \"string\", \"pattern\": \"(^[A-Fa-f0-9]
{4}$)|(^[A-Fa-f0-9]{6}$)\", \"plmnId\": {\"type\": \"object\", \"required\":
[\"mcc\", \"mnc\"], \"properties\": {\"mcc\": {\"type\": \"string\",
\"pattern\": \"^[\\d]{3}$\"}, \"mnc\": {\"type\": \"string\", \"pattern\":
\"^[\\d]{2,3}$\"}}}}, \"protocol\": {\"anyOf\": [{\"enum\": [\"UDP\",
\"TCP\"], \"type\": \"string\"}, {\"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.\\n\"}], \"description\": \"Possible values are - UDP: User
Datagram Protocol. - TCP: Transmission Control Protocol.\\n\"},
\"hfcNodeId\": {\"type\": \"object\", \"required\": [\"hfcNid\"],
\"properties\": {\"hfcNid\": {\"type\": \"string\", \"maxLength\": 6}}},

```

```

\"portNumber\": {\"type\": \"integer\", \"minimum\": 0}, \"ueIpv4Addr\":
{\"type\": \"string\", \"example\": \"198.51.100.1\", \"pattern\": \"^([0-9]
[1-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5])\\.\\.\\.){3}([0-9]|1[0-9]|1[0-9]
[0-9]|2[0-4][0-9]|25[0-5])$\"}, \"ueIpv6Addr\": {\"type\": \"string\",
\"allof\": [{\"pattern\": \"^((?|([1-9a-f][0-9a-f]{0,3})))(?|([1-9a-f]
[0-9a-f]{0,3})):[0,6]:([0-9a-f]{0,3})$\"}, {\"pattern\":
\"^((([^\":+]{7}([^\":+]))|((([^\":+])*[^\":+]?::([^\":+])*[^\":+]?))$\"}],
\"example\": \"2001:db8:85a3::8a2e:370:7334\"}, \"w5gbanLineType\":
{\"anyOf\": [{\"enum\": [\"DSL\", \"PON\"], \"type\": \"string\"}, {\"type\":
\"string\", \"description\": \"This string provides forward-compatibility
with future extensions to the enumeration but is not used to encode content
defined in the present version of this API.\\n\"}], \"description\":
\"Possible values are - DSL: Identifies a DSL line - PON: Identifies a PON
line\\n\"}}}, \"utraLocation\": {\"type\": \"object\", \"oneOf\":
[{\"required\": [\"cgi\"]}, {\"required\": [\"sai\"]}, {\"required\":
[\"rai\"]}], \"properties\": {\"cgi\": {\"type\": \"object\", \"required\":
[\"cellId\", \"lac\", \"plmnId\"], \"properties\": {\"lac\": {\"type\":
\"string\", \"pattern\": \"^[A-Fa-f0-9]{4}$\"}, \"cellId\": {\"type\":
\"string\", \"pattern\": \"^[A-Fa-f0-9]{4}$\"}, \"plmnId\": {\"type\":
\"object\", \"required\": [\"mcc\", \"mnc\"], \"properties\": {\"mcc\":
{\"type\": \"string\", \"pattern\": \"^\\\\\\\\d{3}$\"}, \"mnc\": {\"type\":
\"string\", \"pattern\": \"^\\\\\\\\d{2,3}$\"}}}}}, \"lai\": {\"type\":
\"object\", \"required\": [\"lac\", \"plmnId\"], \"properties\": {\"lac\":
{\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{4}$\"}, \"plmnId\":
{\"type\": \"object\", \"required\": [\"mcc\", \"mnc\"], \"properties\":
{\"mcc\": {\"type\": \"string\", \"pattern\": \"^\\\\\\\\d{3}$\"}, \"mnc\":
{\"type\": \"string\", \"pattern\": \"^\\\\\\\\d{2,3}$\"}}}}}, \"rai\":
{\"type\": \"object\", \"required\": [\"lac\", \"plmnId\", \"rac\"],
\"properties\": {\"lac\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]
{4}$\"}, \"rac\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{2}$\"},
\"plmnId\": {\"type\": \"object\", \"required\": [\"mcc\", \"mnc\"],
\"properties\": {\"mcc\": {\"type\": \"string\", \"pattern\": \"^\\\\\\\\d{3}$
\"}, \"mnc\": {\"type\": \"string\", \"pattern\": \"^\\\\\\\\d{2,3}$\"}}}}},
\"sai\": {\"type\": \"object\", \"required\": [\"lac\", \"plmnId\", \"sac\"],
\"properties\": {\"lac\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]
{4}$\"}, \"sac\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{4}$\"},
\"plmnId\": {\"type\": \"object\", \"required\": [\"mcc\", \"mnc\"],
\"properties\": {\"mcc\": {\"type\": \"string\", \"pattern\": \"^\\\\\\\\d{3}$
\"}, \"mnc\": {\"type\": \"string\", \"pattern\": \"^\\\\\\\\d{2,3}$\"}}}}},
\"geodeticInformation\": {\"type\": \"string\", \"pattern\": \"^[0-9A-F]{20}$
\"}, \"ueLocationTimestamp\": {\"type\": \"string\", \"format\": \"date-
time\"}, \"geographicalInformation\": {\"type\": \"string\", \"pattern\":
\"^[0-9A-F]{16}$\"}, \"ageOfLocationInformation\": {\"type\": \"integer\",
\"maximum\": 32767, \"minimum\": 0}}}, \"eutraLocation\": {\"type\":
\"object\", \"required\": [\"ecgi\", \"tai\"], \"properties\": {\"tai\":
{\"type\": \"object\", \"required\": [\"plmnId\", \"tac\"], \"properties\":
{\"nid\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{11}$\"},
\"tac\": {\"type\": \"string\", \"pattern\": \"(^[A-Fa-f0-9]{4}$)(^[A-Fa-
f0-9]{6}$)\"}, \"plmnId\": {\"type\": \"object\", \"required\": [\"mcc\",
\"mnc\"], \"properties\": {\"mcc\": {\"type\": \"string\", \"pattern\": \"^\\\\
\\\\d{3}$\"}, \"mnc\": {\"type\": \"string\", \"pattern\": \"^\\\\\\\\d{2,3}$
\"}}}}}, \"ecgi\": {\"type\": \"object\", \"required\": [\"eutraCellId\",
\"plmnId\"], \"properties\": {\"nid\": {\"type\": \"string\", \"pattern\":
\"^[A-Fa-f0-9]{11}$\"}, \"plmnId\": {\"type\": \"object\", \"required\":
[\"mcc\", \"mnc\"], \"properties\": {\"mcc\": {\"type\": \"string\",
\"pattern\": \"^\\\\\\\\d{3}$\"}, \"mnc\": {\"type\": \"string\", \"pattern\":

```

```

    \"^\\\\d{2,3}$\"}}, \"eutraCellId\": {\"type\": \"string\", \"pattern\":
    \"^[A-Fa-f0-9]{7}$\"}}, \"ignoreTai\": {\"type\": \"boolean\", \"default\":
    false}, \"ignoreEcgi\": {\"type\": \"boolean\", \"default\": false},
    \"globalENbId\": {\"type\": \"object\", \"oneOf\": [{\"required\":
    [\"n3IwfId\"], {\"required\": [\"gNbId\"], {\"required\": [\"ngeNbId\"],
    {\"required\": [\"wagfId\"], {\"required\": [\"tngfId\"], {\"required\":
    [\"eNbId\"]}], \"required\": [\"plmnId\"], \"properties\": {\"nid\":
    {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{11}$\", \"eNbId\":
    {\"type\": \"string\", \"pattern\": \"^(MacroENB-[A-Fa-f0-9]{5}|MacroENB-[A-
    Fa-f0-9]{6}|SMacroENB-[A-Fa-f0-9]{5}|HomeENB-[A-Fa-f0-9]{7})$\", \"gNbId\":
    {\"type\": \"object\", \"required\": [\"bitLength\", \"gNBValue\"],
    \"properties\": {\"gNBValue\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-
    f0-9]{6,8}$\", \"bitLength\": {\"type\": \"integer\", \"maximum\": 32,
    \"minimum\": 22}}, \"plmnId\": {\"type\": \"object\", \"required\":
    [\"mcc\", \"mnc\"], \"properties\": {\"mcc\": {\"type\": \"string\",
    \"pattern\": \"^\\\\d{3}$\", \"mnc\": {\"type\": \"string\", \"pattern\":
    \"^\\\\d{2,3}$\"}}, \"tngfId\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-
    f0-9]+$\", \"wagfId\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]+$
    \", \"n3IwfId\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]+$\",
    \"ngeNbId\": {\"type\": \"string\", \"pattern\": \"^(MacroNGENB-[A-Fa-f0-9]
    {5}|MacroNGENB-[A-Fa-f0-9]{6}|SMacroNGENB-[A-Fa-f0-9]{5})$\"}},
    \"globalNgenbId\": {\"type\": \"object\", \"oneOf\": [{\"required\":
    [\"n3IwfId\"], {\"required\": [\"gNbId\"], {\"required\": [\"ngeNbId\"],
    {\"required\": [\"wagfId\"], {\"required\": [\"tngfId\"], {\"required\":
    [\"eNbId\"]}], \"required\": [\"plmnId\"], \"properties\": {\"nid\":
    {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{11}$\", \"eNbId\":
    {\"type\": \"string\", \"pattern\": \"^(MacroENB-[A-Fa-f0-9]{5}|MacroENB-[A-
    Fa-f0-9]{6}|SMacroENB-[A-Fa-f0-9]{5}|HomeENB-[A-Fa-f0-9]{7})$\", \"gNbId\":
    {\"type\": \"object\", \"required\": [\"bitLength\", \"gNBValue\"],
    \"properties\": {\"gNBValue\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-
    f0-9]{6,8}$\", \"bitLength\": {\"type\": \"integer\", \"maximum\": 32,
    \"minimum\": 22}}, \"plmnId\": {\"type\": \"object\", \"required\":
    [\"mcc\", \"mnc\"], \"properties\": {\"mcc\": {\"type\": \"string\",
    \"pattern\": \"^\\\\d{3}$\", \"mnc\": {\"type\": \"string\", \"pattern\":
    \"^\\\\d{2,3}$\"}}, \"tngfId\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-
    f0-9]+$\", \"wagfId\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]+$
    \", \"n3IwfId\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]+$\",
    \"ngeNbId\": {\"type\": \"string\", \"pattern\": \"^(MacroNGENB-[A-Fa-f0-9]
    {5}|MacroNGENB-[A-Fa-f0-9]{6}|SMacroNGENB-[A-Fa-f0-9]{5})$\"}},
    \"geodeticInformation\": {\"type\": \"string\", \"pattern\": \"^[0-9A-F]{20}$
    \", \"ueLocationTimestamp\": {\"type\": \"string\", \"format\": \"date-
    time\"}, \"geographicalInformation\": {\"type\": \"string\", \"pattern\":
    \"^[0-9A-F]{16}$\", \"ageOfLocationInformation\": {\"type\": \"integer\",
    \"maximum\": 32767, \"minimum\": 0}}}}, \"5gMmCauseValue\": {\"type\":
    \"integer\", \"minimum\": 0}, \"secondaryRatUsageInfo\": {\"type\":
    \"array\", \"items\": {\"type\": \"object\", \"required\":
    [\"secondaryRatType\"], \"properties\": {\"secondaryRatType\": {\"anyOf\":
    [{\"enum\": [\"NR\", \"EUTRA\", \"WLAN\", \"VIRTUAL\", \"NBIOT\",
    \"WIRELINE\", \"WIRELINE_CABLE\", \"WIRELINE_BBF\", \"LTE-M\", \"NR-U\",
    \"EUTRA-U\", \"TRUSTED_N3GA\", \"TRUSTED_WLAN\", \"UTRA\", \"GERA\"],
    \"type\": \"string\"}, {\"type\": \"string\"}]}, \"qosFlowsUsageData\":
    {\"type\": \"array\", \"items\": {\"type\": \"object\", \"required\":
    [\"downlinkVolume\", \"endTimeStamp\", \"qfi\", \"startTimeStamp\",
    \"uplinkVolume\"], \"properties\": {\"qfi\": {\"type\": \"integer\",
    \"maximum\": 63, \"minimum\": 0}, \"endTimeStamp\": {\"type\": \"string\",
    \"format\": \"date-time\"}, \"uplinkVolume\": {\"type\": \"integer\",

```



```

    \"format\": \"int64\", \"downlinkVolume\": {\"type\": \"integer\",
    \"format\": \"int64\", \"startTimeStamp\": {\"type\": \"string\",
    \"format\": \"date-time\"}}}, \"minItems\": 1}, \"pduSessionUsageData\":
    {\"type\": \"array\", \"items\": {\"type\": \"object\", \"required\":
    [\"downlinkVolume\", \"endTimeStamp\", \"startTimeStamp\", \"uplinkVolume\"],
    \"properties\": {\"endTimeStamp\": {\"type\": \"string\", \"format\": \"date-
    time\", \"uplinkVolume\": {\"type\": \"integer\", \"format\": \"int64\"},
    \"downlinkVolume\": {\"type\": \"integer\", \"format\": \"int64\"},
    \"startTimeStamp\": {\"type\": \"string\", \"format\": \"date-time\"}}},
    \"minItems\": 1}}}, \"minItems\": 1}, \"secondaryRatUsageReport\": {\"type\":
    \"array\", \"items\": {\"type\": \"object\", \"required\":
    [\"qosFlowsUsageData\", \"secondaryRatType\"], \"properties\":
    {\"secondaryRatType\": {\"anyOf\": [{\"enum\": [\"NR\", \"EUTRA\", \"WLAN\",
    \"VIRTUAL\", \"NBIOT\", \"WIRELINE\", \"WIRELINE_CABLE\", \"WIRELINE_BBF\",
    \"LTE-M\", \"NR_U\", \"EUTRA_U\", \"TRUSTED_N3GA\", \"TRUSTED_WLAN\",
    \"UTRA\", \"GERA\"], \"type\": \"string\"}, {\"type\": \"string\"}]},
    \"qosFlowsUsageData\": {\"type\": \"array\", \"items\": {\"type\":
    \"object\", \"required\": [\"downlinkVolume\", \"endTimeStamp\", \"qfi\",
    \"startTimeStamp\", \"uplinkVolume\"], \"properties\": {\"qfi\": {\"type\":
    \"integer\", \"maximum\": 63, \"minimum\": 0}, \"endTimeStamp\": {\"type\":
    \"string\", \"format\": \"date-time\", \"uplinkVolume\": {\"type\":
    \"integer\", \"format\": \"int64\"}, \"downlinkVolume\": {\"type\":
    \"integer\", \"format\": \"int64\"}, \"startTimeStamp\": {\"type\":
    \"string\", \"format\": \"date-time\"}}}, \"minItems\": 1}}}, \"minItems\":
    1}}}}
  },
  {
    \"defaultId\": 45,
    \"resourceURI\": \"/nudm-sdm/v2/shared-data\",
    \"httpMethod\": \"GET\",
    \"schemaValue\": \"{\\\"in\\\": \\\"query\\\", \\\"name\\\": \\\"shared-data-ids\\\",
    \\\"schema\\\": {\\\"type\\\": \\\"array\\\", \\\"items\\\": {\\\"type\\\": \\\"string\\\",
    \\\"pattern\\\": \\\"^[0-9]{5,6}-.+\\$\\\", \\\"minItems\\\": 1, \\\"uniqueItems\\\": true},
    \\\"required\\\": true}, {\\\"in\\\": \\\"query\\\", \\\"name\\\": \\\"supportedFeatures\\\",
    \\\"schema\\\": {\\\"type\\\": \\\"string\\\", \\\"pattern\\\": \\\"^[A-Fa-f0-9]*\\$\\\",
    \\\"required\\\": false, \\\"deprecated\\\": true}, {\\\"in\\\": \\\"query\\\", \\\"name\\\":
    \\\"supported-features\\\", \\\"schema\\\": {\\\"type\\\": \\\"string\\\", \\\"pattern\\\": \\\"^[A-
    Fa-f0-9]*\\$\\\", \\\"required\\\": false}}}\",
  },
  {
    \"defaultId\": 46,
    \"resourceURI\": \"/nudm-sdm/v1/{supi}/sdm-subscriptions\",
    \"httpMethod\": \"POST\",
    \"schemaValue\": \"{\\\"type\\\": \\\"object\\\", \\\"required\\\": [\\\"callbackUri\\\",
    \\\"monitoredResourceUri\\\", \\\"nfInstanceId\\\"], \\\"properties\\\": {\\\"dnn\\\":
    {\\\"type\\\": \\\"string\\\", \\\"expires\\\": {\\\"type\\\": \\\"string\\\", \\\"format\\\":
    \\\"date-time\\\", \\\"singleNssai\\\": {\\\"type\\\": \\\"object\\\", \\\"required\\\":
    [\\\"sst\\\", \\\"properties\\\": {\\\"sd\\\": {\\\"type\\\": \\\"string\\\", \\\"pattern\\\": \\\"^[A-
    Fa-f0-9]{6}\\$\\\", \\\"sst\\\": {\\\"type\\\": \\\"integer\\\", \\\"maximum\\\": 255,
    \\\"minimum\\\": 0}}}, \\\"nfInstanceId\\\": {\\\"type\\\": \\\"string\\\", \\\"format\\\":
    \\\"uuid\\\", \\\"amfServiceName\\\": {\\\"anyOf\\\": [{\\\"enum\\\": [\\\"nnrf-
    disc\\\", \\\"nudm-sdm\\\", \\\"nudm-uecm\\\", \\\"nudm-ueau\\\", \\\"nudm-ee\\\", \\\"nudm-pp\\\",
    \\\"namf-comm\\\", \\\"namf-evts\\\", \\\"namf-mt\\\", \\\"namf-loc\\\", \\\"nsmf-pdusession\\\",
    \\\"nsmf-event-exposure\\\", \\\"nausf-auth\\\", \\\"nausf-sorprotection\\\", \\\"nausf-
    upuprotection\\\", \\\"nnef-pfdmanagement\\\", \\\"npcf-am-policy-control\\\", \\\"npcf-
    smpolicycontrol\\\", \\\"npcf-policyauthorization\\\", \\\"npcf-bdtpolicycontrol\\\",

```

```

\npcf-eventexposure\", \npcf-ue-policy-control\", \nsmf-sms\", \nssf-
nsselection\", \nssf-nssaiavailability\", \nudr-dr\", \nlmf-loc\", \n5g-
eir-eic\", \nbsf-management\", \nchf-spendinglimitcontrol\", \nchf-
convergedcharging\", \nnwdafeventsubscription\", \nnwdafe-
analyticsinfo\"], \"type\": \"string\"}, {\"type\": \"string\"}},
\"callbackReference\": {\"type\": \"string\"}, \"implicitUnsubscribe\":
{\"type\": \"boolean\"}, \"monitoredResourceUri\": {\"type\": \"array\",
\"items\": {\"type\": \"string\"}, \"minItems\": 1}}\"
},
{
  \"defaultId\": 47,
  \"resourceURI\": \"/nudm-uecm/v1/{ueId}/registrations/smf-non-3gpp-access\",
  \"httpMethod\": \"PUT\",
  \"schemaValue\": \"{\\\"type\\\": \\\"object\\\", \\\"required\\\": [\\\"plmnId\\\",
\\\"smfInstanceId\\\", \\\"properties\\\": {\\\"plmnId\\\": {\\\"type\\\": \\\"object\\\",
\\\"required\\\": [\\\"mcc\\\", \\\"mnc\\\"], \\\"properties\\\": {\\\"mcc\\\": {\\\"type\\\":
\\\"string\\\", \\\"pattern\\\": \\\"^\\\\\\\\d{3}$\\\"}, \\\"mnc\\\": {\\\"type\\\": \\\"string\\\",
\\\"pattern\\\": \\\"^\\\\\\\\d{2,3}$\\\"}}}, \\\"smfSetId\\\": {\\\"type\\\": \\\"string\\\",
\\\"contextInfo\\\": {\\\"type\\\": \\\"object\\\", \\\"properties\\\": {\\\"origHeaders\\\":
{\\\"type\\\": \\\"array\\\", \\\"items\\\": {\\\"type\\\": \\\"string\\\", \\\"minItems\\\": 1}}},
\\\"smfInstanceId\\\": {\\\"type\\\": \\\"string\\\", \\\"format\\\": \\\"uuid\\\"},
\\\"smfMAPAddress\\\": {\\\"type\\\": \\\"string\\\", \\\"pattern\\\": \\\"^[0-9]{1,15}$\\\",
\\\"registrationTime\\\": {\\\"type\\\": \\\"string\\\", \\\"format\\\": \\\"date-time\\\",
\\\"supportedFeatures\\\": {\\\"type\\\": \\\"string\\\", \\\"pattern\\\": \\\"^[A-Fa-f0-9]*$
\\\", \\\"smfDiameterAddress\\\": {\\\"type\\\": \\\"object\\\", \\\"required\\\": [\\\"name\\\",
\\\"realm\\\", \\\"properties\\\": {\\\"name\\\": {\\\"type\\\": \\\"string\\\", \\\"pattern\\\":
\\\"^([A-Za-z0-9]+([-A-Za-z0-9]+)\\\\\\\\.\\\\\\\\)+[a-z]{2,}$\\\", \\\"realm\\\": {\\\"type\\\":
\\\"string\\\", \\\"pattern\\\": \\\"^([A-Za-z0-9]+([-A-Za-z0-9]+)\\\\\\\\.\\\\\\\\)+[a-z]{2,}$
\\\"}}}}}\"
},
{
  \"defaultId\": 48,
  \"resourceURI\": \"/nudm-sdm/v2/{ueId}/sdm-subscriptions\",
  \"httpMethod\": \"POST\",
  \"schemaValue\": \"{\\\"type\\\": \\\"object\\\", \\\"required\\\":
[\\\"callbackReference\\\", \\\"monitoredResourceUri\\\", \\\"nfInstanceId\\\",
\\\"properties\\\": {\\\"dnn\\\": {\\\"type\\\": \\\"string\\\", \\\"plmnId\\\": {\\\"type\\\":
\\\"object\\\", \\\"required\\\": [\\\"mcc\\\", \\\"mnc\\\"], \\\"properties\\\": {\\\"mcc\\\":
{\\\"type\\\": \\\"string\\\", \\\"pattern\\\": \\\"^\\\\\\\\d{3}$\\\", \\\"mnc\\\": {\\\"type\\\":
\\\"string\\\", \\\"pattern\\\": \\\"^\\\\\\\\d{2,3}$\\\"}}}, \\\"report\\\": {\\\"type\\\":
\\\"object\\\", \\\"properties\\\": {\\\"amData\\\": {\\\"type\\\": \\\"object\\\",
\\\"properties\\\": {\\\"gpsis\\\": {\\\"type\\\": \\\"array\\\", \\\"items\\\": {\\\"type\\\":
\\\"string\\\", \\\"pattern\\\": \\\"^(msisdn-[0-9]{5,15}|extid-[^@]+@[^@]+|.)$\\\"}},
\\\"nssai\\\": {\\\"type\\\": \\\"object\\\", \\\"nullable\\\": true, \\\"required\\\":
[\\\"defaultSingleNssais\\\", \\\"properties\\\": {\\\"singleNssais\\\": {\\\"type\\\":
\\\"array\\\", \\\"items\\\": {\\\"type\\\": \\\"object\\\", \\\"required\\\": [\\\"sst\\\",
\\\"properties\\\": {\\\"sd\\\": {\\\"type\\\": \\\"string\\\", \\\"pattern\\\": \\\"^[A-Fa-f0-9]{6}$\\\",
\\\"sst\\\": {\\\"type\\\": \\\"integer\\\", \\\"maximum\\\": 255, \\\"minimum\\\":
0}}}, \\\"minItems\\\": 1}, \\\"provisioningTime\\\": {\\\"type\\\": \\\"string\\\",
\\\"format\\\": \\\"date-time\\\", \\\"supportedFeatures\\\": {\\\"type\\\": \\\"string\\\",
\\\"pattern\\\": \\\"^[A-Fa-f0-9]*$\\\", \\\"defaultSingleNssais\\\": {\\\"type\\\":
\\\"array\\\", \\\"items\\\": {\\\"type\\\": \\\"object\\\", \\\"required\\\": [\\\"sst\\\",
\\\"properties\\\": {\\\"sd\\\": {\\\"type\\\": \\\"string\\\", \\\"pattern\\\": \\\"^[A-Fa-f0-9]{6}$\\\",
\\\"sst\\\": {\\\"type\\\": \\\"integer\\\", \\\"maximum\\\": 255, \\\"minimum\\\":
0}}}, \\\"minItems\\\": 1}, \\\"additionalNssaiData\\\": {\\\"type\\\": \\\"object\\\",
\\\"minProperties\\\": 1, \\\"additionalProperties\\\": {\\\"type\\\": \\\"object\\\",

```



```

\"properties\": {\"requiredAuthnAuthz\": {\"type\": \"boolean\"}}}},
\"stnSr\": {\"type\": \"string\"}, \"cMsisdn\": {\"type\": \"string\"},
\"pattern\": \"^[0-9]{5,15}$\", \"cagData\": {\"type\": \"object\",
\"required\": [\"cagInfos\"], \"properties\": {\"cagInfos\": {\"type\":
\"object\", \"description\": \"A map (list of key-value pairs where PlmnId
serves as key) of CagInfo\", \"additionalProperties\": {\"type\": \"object\",
\"required\": [\"allowedCagList\"], \"properties\": {\"allowedCagList\":
{\"type\": \"array\", \"items\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{8}$\"}},
\"cagOnlyIndicator\": {\"type\": \"boolean\"}}}},
\"provisioningTime\": {\"type\": \"string\", \"format\": \"date-time\"}},
\"sorInfo\": {\"type\": \"object\", \"required\": [\"ackInd\",
\"provisioningTime\"], \"properties\": {\"ackInd\": {\"type\": \"boolean\"},
\"countersor\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{4}$\"},
\"sorMacIausf\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{32}$\"},
\"provisioningTime\": {\"type\": \"string\", \"format\": \"date-time\"},
\"steeringContainer\": {\"oneOf\": [{\"type\": \"array\", \"items\":
{\"type\": \"object\", \"required\": [\"plmnId\"], \"properties\":
{\"plmnId\": {\"type\": \"object\", \"required\": [\"mcc\", \"mnc\"],
\"properties\": {\"mcc\": {\"type\": \"string\", \"pattern\": \"^[\\d]{3}$
\"}, \"mnc\": {\"type\": \"string\", \"pattern\": \"^[\\d]{2,3}$\"}}}},
\"accessTechList\": {\"type\": \"array\", \"items\": {\"anyOf\": [{\"enum\":
[\"NR\", \"EUTRAN_IN_WBS1_MODE_AND_NBS1_MODE\", \"EUTRAN_IN_NBS1_MODE_ONLY\",
\"EUTRAN_IN_WBS1_MODE_ONLY\", \"UTRAN\", \"GSM_AND_ECGSM_IoT\",
\"GSM_WITHOUT_ECGSM_IoT\", \"ECGSM_IoT_ONLY\", \"CDMA_1xRTT\", \"CDMA_HRPD\",
\"GSM_COMPACT\"], \"type\": \"string\"}, {\"type\": \"string\"}]}},
\"minItems\": 1}}}, \"minItems\": 1, {\"type\": \"string\", \"format\":
\"byte\"}}}}, \"upuInfo\": {\"type\": \"object\", \"required\":
[\"provisioningTime\", \"upuAckInd\", \"upuDataList\", \"upuRegInd\"],
\"properties\": {\"upuAckInd\": {\"type\": \"boolean\"}, \"upuRegInd\":
{\"type\": \"boolean\"}, \"counterUpu\": {\"type\": \"string\", \"pattern\":
\"^[A-Fa-f0-9]{4}$\"}, \"upuDataList\": {\"type\": \"array\", \"items\":
{\"type\": \"object\", \"properties\": {\"routingId\": {\"type\": \"string\",
\"pattern\": \"^[0-9]{1,4}$\"}, \"secPacket\": {\"type\": \"string\",
\"format\": \"base64\"}, \"defaultConfNssai\": {\"type\": \"array\",
\"items\": {\"type\": \"object\", \"required\": [\"sst\"], \"properties\":
{\"sd\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{6}$\"}, \"sst\":
{\"type\": \"integer\", \"maximum\": 255, \"minimum\": 0}}}, \"minItems\":
1}}}, \"minItems\": 1, \"upuMacIausf\": {\"type\": \"string\", \"pattern\":
\"^[A-Fa-f0-9]{32}$\"}, \"provisioningTime\": {\"type\": \"string\",
\"format\": \"date-time\"}}}, \"rfspIndex\": {\"type\": \"integer\",
\"maximum\": 256, \"minimum\": 1, \"nullable\": true}, \"traceData\":
{\"type\": \"object\", \"nullable\": true, \"required\": [\"eventList\",
\"neTypeList\", \"traceDepth\", \"traceRef\"], \"properties\": {\"traceRef\":
{\"type\": \"string\", \"pattern\": \"^[0-9]{3}[0-9]{2,3}-[A-Fa-f0-9]{6}$\"},
\"eventList\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]+$\"},
\"neTypeList\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]+$\"},
\"traceDepth\": {\"anyOf\": [{\"enum\": [\"MINIMUM\", \"MEDIUM\",
\"MAXIMUM\", \"MINIMUM_WO_VENDOR_EXTENSION\", \"MEDIUM_WO_VENDOR_EXTENSION\",
\"MAXIMUM_WO_VENDOR_EXTENSION\"], \"type\": \"string\"}, {\"type\":
\"string\"}]}}, \"interfaceList\": {\"type\": \"string\", \"pattern\": \"^[A-
Fa-f0-9]+$\"}, \"collectionEntityIpv4Addr\": {\"type\": \"string\",
\"example\": \"198.51.100.1\", \"pattern\": \"^((([0-9]|[1-9][0-9]|1[0-9][0-9]|
2[0-4][0-9]|25[0-5])\\.){3}([0-9]|[1-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|
25[0-5])$\"}, \"collectionEntityIpv6Addr\": {\"type\": \"string\", \"allOf\":
[{\"pattern\": \"^((:|0?|([1-9a-f][0-9a-f]{0,3})))(0?|([1-9a-f][0-9a-f]{
0,3})):{0,6}(:|0?|([1-9a-f][0-9a-f]{0,3}))$\"}, {\"pattern\": \"^(((^:|

```

```

+:){7}([^:]+)|(((^[^:]+)*[^\:]+)?::(((^[^:]+)*[^\:]+)?))$\"}, \"example\":
\"2001:db8:85a3::8a2e:370:7334\"}}}, \"activeTime\": {\"type\": \"integer\",
\"nullable\": true}, \"mcsPriority\": {\"type\": \"boolean\"},
\"micoAllowed\": {\"type\": \"boolean\"}, \"mpsPriority\": {\"type\":
\"boolean\"}, \"ueUsageType\": {\"type\": \"integer\"}, \"subsRegTimer\":
{\"type\": \"integer\", \"nullable\": true}, \"forbiddenAreas\": {\"type\":
\"array\", \"items\": {\"type\": \"object\", \"oneOf\": [{\"required\":
[\"tacs\"}], {\"required\": [\"areaCode\"]}], \"properties\": {\"tacs\":
{\"type\": \"array\", \"items\": {\"type\": \"string\", \"pattern\": \"(^[A-
Fa-f0-9]{4}$)|(^[A-Fa-f0-9]{6}$)\"}, \"minItems\": 1}, \"areaCode\":
{\"type\": \"string\"}}}}, \"mdtUserConsent\": {\"anyOf\": [{\"enum\":
[\"CONSENT_NOT_GIVEN\", \"CONSENT_GIVEN\"], \"type\": \"string\"}, {\"type\":
\"string\"}]}, \"serviceGapTime\": {\"type\": \"integer\"},
\"sorafRetrieval\": {\"type\": \"boolean\", \"default\": false},
\"nbIoTuePriority\": {\"type\": \"integer\", \"maximum\": 255, \"minimum\":
0}, \"ratRestrictions\": {\"type\": \"array\", \"items\": {\"anyOf\":
[{\"enum\": [\"NR\", \"EUTRA\", \"WLAN\", \"VIRTUAL\", \"NBIOT\",
\"WIRELINE\", \"WIRELINE_CABLE\", \"WIRELINE_BBF\", \"LTE-M\", \"NR-U\",
\"EUTRA-U\", \"TRUSTED_N3GA\", \"TRUSTED_WLAN\", \"UTRA\", \"GERA\"],
\"type\": \"string\"}, {\"type\": \"string\"}]}, \"sharedAmDataIds\":
{\"type\": \"array\", \"items\": {\"type\": \"string\", \"pattern\": \"^[0-9]
{5,6}-.+\"}, \"minItems\": 1}, \"internalGroupIds\": {\"type\": \"array\",
\"items\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{8}-[0-9]
{3}-[0-9]{2,3}-([A-Fa-f0-9][A-Fa-f0-9]){1,10}$\"}, \"minItems\": 1},
\"mdtConfiguration\": {\"type\": \"object\", \"required\": [\"jobType\"],
\"properties\": {\"jobType\": {\"anyOf\": [{\"enum\":
[\"IMMEDIATE_MDT_ONLY\", \"LOGGED_MDT_ONLY\", \"TRACE_ONLY\",
\"IMMEDIATE_MDT_AND_TRACE\", \"RLF_REPORTS_ONLY\", \"RCEF_REPORTS_ONLY\",
\"LOGGED_MBSFN_MDT\"], \"type\": \"string\"}, {\"type\": \"string\"}]},
\"areaScope\": {\"type\": \"object\", \"properties\": {\"tacList\":
{\"type\": \"array\", \"items\": {\"type\": \"string\", \"pattern\": \"(^[A-
Fa-f0-9]{4}$)|(^[A-Fa-f0-9]{6}$)\"}, \"minItems\": 1}, \"nrCellIdList\":
{\"type\": \"array\", \"items\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-
f0-9]{9}$\"}, \"minItems\": 1}, \"tacInfoPerPlmn\": {\"type\": \"object\",
\"additionalProperties\": {\"type\": \"object\", \"required\": [\"tacList\"],
\"properties\": {\"tacList\": {\"type\": \"array\", \"items\": {\"type\":
\"string\", \"pattern\": \"(^[A-Fa-f0-9]{4}$)|(^[A-Fa-f0-9]{6}$)\"},
\"minItems\": 1}}}}, \"eutraCellIdList\": {\"type\": \"array\", \"items\":
{\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{7}$\"}, \"minItems\":
1}}, \"eventList\": {\"type\": \"array\", \"items\": {\"anyOf\": [{\"enum\":
[\"OUT_OF_COVERAG\", \"A2_EVENT\"], \"type\": \"string\"}, {\"type\":
\"string\"}]}, \"minItems\": 1}, \"reportType\": {\"anyOf\": [{\"enum\":
[\"PERIODICAL\", \"EVENT_TRIGGERED\"], \"type\": \"string\"}, {\"type\":
\"string\"}]}, \"reportAmount\": {\"anyOf\": [{\"enum\": [\"1\", \"2\",
\"4\", \"8\", \"16\", \"32\", \"64\", \"infinity\"], \"type\": \"string\"},
{\"type\": \"string\"}]}, \"mbsfnAreaList\": {\"type\": \"array\", \"items\":
{\"type\": \"object\", \"properties\": {\"mbsfnAreaId\": {\"type\":
\"integer\", \"maximum\": 255, \"minimum\": 0}, \"carrierFrequency\":
{\"type\": \"integer\", \"maximum\": 262143, \"minimum\": 0}}}, \"maxItems\":
8, \"minItems\": 1}, \"reportInterval\": {\"anyOf\": [{\"enum\": [\"120\",
\"240\", \"480\", \"640\", \"1024\", \"2048\", \"5120\", \"10240\",
\"60000\", \"360000\", \"720000\", \"1800000\", \"3600000\"], \"type\":
\"string\"}, {\"type\": \"string\"}]}, \"loggingDuration\": {\"anyOf\":
[{\"enum\": [\"600\", \"1200\", \"2400\", \"3600\", \"5400\", \"7200\"],
\"type\": \"string\"}, {\"type\": \"string\"}]}, \"loggingInterval\":
{\"anyOf\": [{\"enum\": [\"128\", \"256\", \"512\", \"1024\", \"2048\",

```

```

\"3072\", \"4096\", \"6144\"], \"type\": \"string\"}, {\"type\":
\"string\"}}], \"reportIntervalNr\": {\"anyOf\": [{\"enum\": [\"120\",
\"240\", \"480\", \"640\", \"1024\", \"2048\", \"5120\", \"10240\",
\"20480\", \"40960\", \"60000\", \"360000\", \"720000\", \"1800000\",
\"3600000\"], \"type\": \"string\"}, {\"type\": \"string\"}}],
\"loggingDurationNr\": {\"anyOf\": [{\"enum\": [\"600\", \"1200\", \"2400\",
\"3600\", \"5400\", \"7200\"], \"type\": \"string\"}, {\"type\":
\"string\"}}], \"loggingIntervalNr\": {\"anyOf\": [{\"enum\": [\"128\",
\"256\", \"512\", \"1024\", \"2048\", \"3072\", \"4096\", \"6144\", \"320\",
\"640\", \"infinity\"], \"type\": \"string\"}, {\"type\": \"string\"}}],
\"measurementNrList\": {\"type\": \"array\", \"items\": {\"anyOf\":
[{\"enum\": [\"M1\", \"M2\", \"M3\", \"M4_DL\", \"M4_UL\", \"M5_DL\",
\"M5_UL\", \"M6_DL\", \"M6_UL\", \"M7_DL\", \"M7_UL\", \"M8\", \"M9\"],
\"type\": \"string\"}, {\"type\": \"string\"}}], \"minItems\": 1},
\"positioningMethod\": {\"anyOf\": [{\"enum\": [\"GNSS\", \"E_CELL_ID\"],
\"type\": \"string\"}, {\"type\": \"string\"}}], \"eventThresholdRsrp\":
{\"type\": \"integer\", \"maximum\": 97, \"minimum\": 0},
\"eventThresholdRsrq\": {\"type\": \"integer\", \"maximum\": 34, \"minimum\":
0}, \"measurementLteList\": {\"type\": \"array\", \"items\": {\"anyOf\":
[{\"enum\": [\"M1\", \"M2\", \"M3\", \"M4_DL\", \"M4_UL\", \"M5_DL\",
\"M5_UL\", \"M6_DL\", \"M6_UL\", \"M7_DL\", \"M7_UL\", \"M8\", \"M9\"],
\"type\": \"string\"}, {\"type\": \"string\"}}], \"interFreqTargetList\":
{\"type\": \"array\", \"items\": {\"type\": \"object\", \"required\":
[\"dlCarrierFreq\"], \"properties\": {\"cellIdList\": {\"type\": \"array\",
\"items\": {\"type\": \"integer\", \"maximum\": 1007, \"minimum\": 0},
\"maxItems\": 32, \"minItems\": 1}, \"dlCarrierFreq\": {\"type\":
\"integer\", \"maximum\": 3279165, \"minimum\": 0}}}, \"maxItems\": 8,
\"minItems\": 1}, \"eventThresholdRsrpNr\": {\"type\": \"integer\",
\"maximum\": 127, \"minimum\": 0}, \"eventThresholdRsrqNr\": {\"type\":
\"integer\", \"maximum\": 127, \"minimum\": 0}, \"mdtAllowedPlmnIdList\":
{\"type\": \"array\", \"items\": {\"type\": \"object\", \"required\":
[\"mcc\", \"mnc\"], \"properties\": {\"mcc\": {\"type\": \"string\",
\"pattern\": \"^\\\\\\\\d{3}$\"}, \"mnc\": {\"type\": \"string\", \"pattern\":
\"^\\\\\\\\d{2,3}$\"}}}, \"maxItems\": 16, \"minItems\": 1},
\"measurementPeriodLte\": {\"anyOf\": [{\"enum\": [\"1024\", \"1280\",
\"2048\", \"2560\", \"5120\", \"10240\", \"60000\"], \"type\": \"string\"},
{\"type\": \"string\"}}], \"reportingTriggerList\": {\"type\": \"array\",
\"items\": {\"anyOf\": [{\"enum\": [\"PERIODICAL\", \"EVENT_A2\",
\"EVENT_A2_PERIODIC\", \"ALL_RRM_EVENT_TRIGGERS\"], \"type\": \"string\"},
{\"type\": \"string\"}}], \"minItems\": 1}, \"collectionPeriodRmmNr\":
{\"anyOf\": [{\"enum\": [\"1024\", \"2048\", \"5120\", \"10240\", \"60000\"],
\"type\": \"string\"}, {\"type\": \"string\"}}], \"sensorMeasurementList\":
{\"type\": \"array\", \"items\": {\"anyOf\": [{\"enum\":
[\"BAROMETRIC_PRESSURE\", \"UE_SPEED\", \"UE_ORIENTATION\"], \"type\":
\"string\"}, {\"type\": \"string\"}}], \"minItems\": 1},
\"collectionPeriodRmmLte\": {\"anyOf\": [{\"enum\": [\"1024\", \"1280\",
\"2048\", \"2560\", \"5120\", \"10240\", \"60000\"], \"type\": \"string\"},
{\"type\": \"string\"}}], \"addPositioningMethodList\": {\"type\": \"array\",
\"items\": {\"anyOf\": [{\"enum\": [\"GNSS\", \"E_CELL_ID\"], \"type\":
\"string\"}, {\"type\": \"string\"}}], \"minItems\": 1}},
\"sorInfoExpectInd\": {\"type\": \"boolean\"}, \"subscribedUeAmbr\":
{\"anyOf\": [{\"type\": \"object\", \"required\": [\"downlink\", \"uplink\"],
\"properties\": {\"uplink\": {\"type\": \"string\", \"pattern\": \"^\\\\\\\\d+(\\\\\\\\
\\\\\\\\d+)? (bps|Kbps|Mbps|Gbps|Tbps)$\"}, \"downlink\": {\"type\":
\"string\", \"pattern\": \"^\\\\\\\\d+(\\\\\\\\.\\\\\\\\d+)? (bps|Kbps|Mbps|Gbps|Tbps)$
\\\\\\\\\"}}, {\"enum\": [null], \"type\": \"string\"}}], \"odbPacketServices\":

```

```

{"anyOf": [{"anyOf": [{"enum": ["ALL_PACKET_SERVICES",
"ROAMER_ACCESS_HPLMN_AP", "ROAMER_ACCESS_VPLMN_AP"], "type":
"string"}, {"type": "string"}]}, {"enum": [null], "type":
"string"}]}, {"ptwParametersList": {"type": "array", "items":
{"type": "object", "required": ["operationMode", "ptwValue"],
"properties": {"ptwValue": {"type": "string", "pattern": "^[0-1]{4}$"},
"operationMode": {"anyOf": [{"enum": ["WB_S1", "NB_S1",
"WB_N1", "NB_N1"], "type": "string"}, {"type": "string"}]}},
"minItems": 1, "subscribedDnnList": {"type": "array", "items":
{"anyOf": [{"type": "string"}, {"type": "string", "pattern":
"^[*]$"}]}, {"supportedFeatures": {"type": "string", "pattern":
"^[A-Fa-f0-9]*$"}, "edrxParametersList": {"type": "array", "items":
{"type": "object", "required": ["edrxValue", "ratType"],
"properties": {"ratType": {"anyOf": [{"enum": ["NR", "EUTRA",
"WLAN", "VIRTUAL", "NBIOT", "WIRELINE", "WIRELINE_CABLE",
"WIRELINE_BBF", "LTE-M", "NR-U", "EUTRA-U", "TRUSTED_N3GA",
"TRUSTED_WLAN", "UTRA", "GERA"], "type": "string"}, {"type":
"string"}]}, {"edrxValue": {"type": "string", "pattern": "^[0-1]{4}$"}},
"minItems": 1, "ecRestrictionDataNb": {"type":
"boolean", "default": false}, "ecRestrictionDataWb": {"type":
"object", "anyOf": [{"required": ["ecModeARestricted"]},
{"required": ["ecModeBRestricted"]}], "properties":
{"ecModeARestricted": {"type": "boolean"}, "ecModeBRestricted":
{"type": "boolean"}}, {"iabOperationAllowed": {"type": "boolean",
"default": false}, "sharedVnGroupDataIds": {"type": "object",
"minProperties": 1, "additionalProperties": {"type": "string",
"pattern": "^[0-9]{5,6}-.$"}}, {"nssaiInclusionAllowed": {"type":
"boolean", "default": false}, "primaryRatRestrictions": {"type":
"array", "items": {"anyOf": [{"enum": ["NR", "EUTRA", "WLAN",
"VIRTUAL", "NBIOT", "WIRELINE", "WIRELINE_CABLE", "WIRELINE_BBF",
"LTE-M", "NR-U", "EUTRA-U", "TRUSTED_N3GA", "TRUSTED_WLAN",
"UTRA", "GERA"], "type": "string"}, {"type": "string"}]}},
"serviceAreaRestriction": {"type": "object", "allOf": [{"oneOf":
[{"not": {"required": ["restrictionType"]}], {"required":
["areas"]}]}, {"anyOf": [{"not": {"required": ["restrictionType"],
"properties": {"restrictionType": {"enum": ["NOT_ALLOWED_AREAS"],
"type": "string"}}, {"not": {"required": ["maxNumOfTAs"]}]}, {"anyOf": [{"not": {"required": ["restrictionType"], "properties":
{"restrictionType": {"enum": ["ALLOWED_AREAS"], "type":
"string"}}, {"not": {"required":
["maxNumOfTAsForNotAllowedAreas"]}]}, {"properties": {"areas":
{"type": "array", "items": {"type": "object", "oneOf":
[{"required": ["tacs"], {"required": ["areaCode"]}], "properties":
{"tacs": {"type": "array", "items": {"type": "string",
"pattern": "^[A-Fa-f0-9]{4}$"}}, {"areaCode": {"type": "string"}},
"maxNumOfTAs": {"type":
"integer", "minimum": 0}, "restrictionType": {"anyOf": [{"enum":
["ALLOWED_AREAS", "NOT_ALLOWED_AREAS"], "type": "string"}, {"type":
"string"}]}, {"maxNumOfTAsForNotAllowedAreas": {"type": "integer",
"minimum": 0}], "sorUpdateIndicatorList": {"type": "array",
"items": {"anyOf": [{"enum": ["INITIAL_REGISTRATION",
"EMERGENCY_REGISTRATION"], "type": "string"}, {"type": "string"}]},
"minItems": 1, "wirelineForbiddenAreas": {"type": "array",
"items": {"type": "object", "properties": {"hfcNIds": {"type":
"array", "items": {"type": "string", "maxLength": 6}, "minItems":
1, "areaCodeB": {"type": "string"}, "areaCodeC": {"type":

```

```

\"string\"}, \"globalLineIds\": {\"type\": \"array\", \"items\": {\"type\":
\"string\", \"format\": \"byte\"}, \"minItems\": 1}}},
\"expectedUeBehaviourList\": {\"type\": \"object\", \"properties\":
{\"expectedUmts\": {\"type\": \"array\", \"items\": {\"type\": \"object\",
\"properties\": {\"nwAreaInfo\": {\"type\": \"object\", \"properties\":
{\"tais\": {\"type\": \"array\", \"items\": {\"type\": \"object\",
\"required\": [\"plmnId\", \"tac\"], \"properties\": {\"nid\": {\"type\":
\"string\", \"pattern\": \"^[A-Fa-f0-9]{11}$\"}, \"tac\": {\"type\":
\"string\", \"pattern\": \"(^[A-Fa-f0-9]{4}$)|(^[A-Fa-f0-9]{6}$)\"},
\"plmnId\": {\"type\": \"object\", \"required\": [\"mcc\", \"mnc\"],
\"properties\": {\"mcc\": {\"type\": \"string\", \"pattern\": \"^\\\\\\\\d{3}$
\"}, \"mnc\": {\"type\": \"string\", \"pattern\": \"^\\\\\\\\d{2,3}$\"}}}},
\"minItems\": 1, \"description\": \"Contains a list of tracking area
identities.\"}, \"ecgis\": {\"type\": \"array\", \"items\": {\"type\":
\"object\", \"required\": [\"eutraCellId\", \"plmnId\"], \"properties\":
{\"nid\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{11}$\"},
\"plmnId\": {\"type\": \"object\", \"required\": [\"mcc\", \"mnc\"],
\"properties\": {\"mcc\": {\"type\": \"string\", \"pattern\": \"^\\\\\\\\d{3}$
\"}, \"mnc\": {\"type\": \"string\", \"pattern\": \"^\\\\\\\\d{2,3}$\"}}}},
\"eutraCellId\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{7}$\"}},
\"minItems\": 1, \"description\": \"Contains a list of E-UTRA cell
identities.\"}, \"ncgis\": {\"type\": \"array\", \"items\": {\"type\":
\"object\", \"required\": [\"nrCellId\", \"plmnId\"], \"properties\":
{\"nid\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{11}$\"},
\"plmnId\": {\"type\": \"object\", \"required\": [\"mcc\", \"mnc\"],
\"properties\": {\"mcc\": {\"type\": \"string\", \"pattern\": \"^\\\\\\\\d{3}$
\"}, \"mnc\": {\"type\": \"string\", \"pattern\": \"^\\\\\\\\d{2,3}$\"}}}},
\"nrCellId\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{9}$\"}},
\"minItems\": 1, \"description\": \"Contains a list of NR cell
identities.\"}, \"gRanNodeIds\": {\"type\": \"array\", \"items\": {\"type\":
\"object\", \"oneOf\": [{\"required\": [\"n3IwfId\"]}, {\"required\":
[\"gNbId\"]}, {\"required\": [\"ngeNbId\"]}, {\"required\": [\"wagfId\"]},
{\"required\": [\"tngfId\"]}, {\"required\": [\"eNbId\"]}], \"required\":
[\"plmnId\"], \"properties\": {\"nid\": {\"type\": \"string\", \"pattern\":
\"^[A-Fa-f0-9]{11}$\"}, \"eNbId\": {\"type\": \"string\", \"pattern\":
\"^(MacroENB-[A-Fa-f0-9]{5}|MacroENB-[A-Fa-f0-9]{6}|SMacroENB-[A-Fa-f0-9]{5}|
HomeENB-[A-Fa-f0-9]{7})$\"}, \"gNbId\": {\"type\": \"object\", \"required\":
[\"bitLength\", \"gNBValue\"], \"properties\": {\"gNBValue\": {\"type\":
\"string\", \"pattern\": \"^[A-Fa-f0-9]{6,8}$\"}, \"bitLength\": {\"type\":
\"integer\", \"maximum\": 32, \"minimum\": 22}}, \"plmnId\": {\"type\":
\"object\", \"required\": [\"mcc\", \"mnc\"], \"properties\": {\"mcc\":
{\"type\": \"string\", \"pattern\": \"^\\\\\\\\d{3}$\"}, \"mnc\": {\"type\":
\"string\", \"pattern\": \"^\\\\\\\\d{2,3}$\"}}, \"tngfId\": {\"type\":
\"string\", \"pattern\": \"^[A-Fa-f0-9]+$\"}, \"wagfId\": {\"type\":
\"string\", \"pattern\": \"^[A-Fa-f0-9]+$\"}, \"n3IwfId\": {\"type\":
\"string\", \"pattern\": \"^[A-Fa-f0-9]+$\"}, \"ngeNbId\": {\"type\":
\"string\", \"pattern\": \"^(MacroNGeNB-[A-Fa-f0-9]{5}|MacroNGeNB-[A-Fa-f0-9]
{6}|SMacroNGeNB-[A-Fa-f0-9]{5})$\"}}, \"minItems\": 1, \"description\":
\"Contains a list of NG RAN nodes.\"}, \"description\": \"Describes a
network area information in which the NF service consumer requests the number
of UEs.\"}, \"civicAddresses\": {\"type\": \"array\", \"items\": {\"type\":
\"object\", \"properties\": {\"A1\": {\"type\": \"string\"}, \"A2\":
{\"type\": \"string\"}, \"A3\": {\"type\": \"string\"}, \"A4\": {\"type\":
\"string\"}, \"A5\": {\"type\": \"string\"}, \"A6\": {\"type\": \"string\"},
\"PC\": {\"type\": \"string\"}, \"RD\": {\"type\": \"string\"}, \"BLD\":
{\"type\": \"string\"}, \"FLR\": {\"type\": \"string\"}, \"HNO\": {\"type\":

```

```

\"string\"}, \"HNS\": {\"type\": \"string\"}, \"LMK\": {\"type\":
\"string\"}, \"LOC\": {\"type\": \"string\"}, \"NAM\": {\"type\":
\"string\"}, \"PCN\": {\"type\": \"string\"}, \"PLC\": {\"type\":
\"string\"}, \"POD\": {\"type\": \"string\"}, \"POM\": {\"type\":
\"string\"}, \"PRD\": {\"type\": \"string\"}, \"PRM\": {\"type\":
\"string\"}, \"STS\": {\"type\": \"string\"}, \"RDBR\": {\"type\":
\"string\"}, \"ROOM\": {\"type\": \"string\"}, \"SEAT\": {\"type\":
\"string\"}, \"UNIT\": {\"type\": \"string\"}, \"POBOX\": {\"type\":
\"string\"}, \"RDSEC\": {\"type\": \"string\"}, \"method\": {\"type\":
\"string\"}, \"ADDCODE\": {\"type\": \"string\"}, \"RDSUBBR\": {\"type\":
\"string\"}, \"country\": {\"type\": \"string\"}, \"providedBy\": {\"type\":
\"string\"}, \"usageRules\": {\"type\": \"string\"}}}, \"minItems\": 0,
\"description\": \"Identifies a list of civic addresses of the user where the
UE is located.\"}, \"geographicAreas\": {\"type\": \"array\", \"items\":
{\"anyOf\": [{\"allOf\": [{\"type\": \"object\", \"required\": [\"shape\"],
\"properties\": {\"shape\": {\"anyOf\": [{\"enum\": [\"POINT\",
\"POINT_UNCERTAINTY_CIRCLE\", \"POINT_UNCERTAINTY_ELLIPSE\", \"POLYGON\",
\"POINT_ALTITUDE\", \"POINT_ALTITUDE_UNCERTAINTY\", \"ELLIPSOID_ARC\"],
\"type\": \"string\"}, {\"type\": \"string\"}]}}], \"discriminator\":
{\"mapping\": {\"POINT\": \"#/components/schemas/Point\", \"POLYGON\": \"#/
components/schemas/Polygon\", \"ELLIPSOID_ARC\": \"#/components/schemas/
EllipsoidArc\", \"POINT_ALTITUDE\": \"#/components/schemas/PointAltitude\",
\"POINT_UNCERTAINTY_CIRCLE\": \"#/components/schemas/
PointUncertaintyCircle\", \"POINT_UNCERTAINTY_ELLIPSE\": \"#/components/
schemas/PointUncertaintyEllipse\", \"POINT_ALTITUDE_UNCERTAINTY\": \"#/
components/schemas/PointAltitudeUncertainty\"}, \"propertyName\":
\"shape\"}}, {\"type\": \"object\", \"required\": [\"point\"],
\"properties\": {\"point\": {\"type\": \"object\", \"required\": [\"lat\",
\"lon\"], \"properties\": {\"lat\": {\"type\": \"number\", \"format\":
\"double\", \"maximum\": 90, \"minimum\": -90}, \"lon\": {\"type\":
\"number\", \"format\": \"double\", \"maximum\": 180, \"minimum\":
-180}}}}}], {\"allOf\": [{\"type\": \"object\", \"required\": [\"shape\"],
\"properties\": {\"shape\": {\"anyOf\": [{\"enum\": [\"POINT\",
\"POINT_UNCERTAINTY_CIRCLE\", \"POINT_UNCERTAINTY_ELLIPSE\", \"POLYGON\",
\"POINT_ALTITUDE\", \"POINT_ALTITUDE_UNCERTAINTY\", \"ELLIPSOID_ARC\"],
\"type\": \"string\"}, {\"type\": \"string\"}]}}], \"discriminator\":
{\"mapping\": {\"POINT\": \"#/components/schemas/Point\", \"POLYGON\": \"#/
components/schemas/Polygon\", \"ELLIPSOID_ARC\": \"#/components/schemas/
EllipsoidArc\", \"POINT_ALTITUDE\": \"#/components/schemas/PointAltitude\",
\"POINT_UNCERTAINTY_CIRCLE\": \"#/components/schemas/
PointUncertaintyCircle\", \"POINT_UNCERTAINTY_ELLIPSE\": \"#/components/
schemas/PointUncertaintyEllipse\", \"POINT_ALTITUDE_UNCERTAINTY\": \"#/
components/schemas/PointAltitudeUncertainty\"}, \"propertyName\":
\"shape\"}}, {\"type\": \"object\", \"required\": [\"point\",
\"uncertainty\"], \"properties\": {\"point\": {\"type\": \"object\",
\"required\": [\"lat\", \"lon\"], \"properties\": {\"lat\": {\"type\":
\"number\", \"format\": \"double\", \"maximum\": 90, \"minimum\": -90},
\"lon\": {\"type\": \"number\", \"format\": \"double\", \"maximum\": 180,
\"minimum\": -180}}}, \"uncertainty\": {\"type\": \"number\", \"format\":
\"float\", \"minimum\": 0}}}], {\"allOf\": [{\"type\": \"object\",
\"required\": [\"shape\"], \"properties\": {\"shape\": {\"anyOf\":
[{\"enum\": [\"POINT\", \"POINT_UNCERTAINTY_CIRCLE\",
\"POINT_UNCERTAINTY_ELLIPSE\", \"POLYGON\", \"POINT_ALTITUDE\",
\"POINT_ALTITUDE_UNCERTAINTY\", \"ELLIPSOID_ARC\"], \"type\": \"string\"},
{\"type\": \"string\"}]}}], \"discriminator\": {\"mapping\": {\"POINT\": \"#/
components/schemas/Point\", \"POLYGON\": \"#/components/schemas/Polygon\",

```

```

\ "ELLIPSOID_ARC\ ": \ "#/components/schemas/EllipsoidArc\ ", \ "POINT_ALTITUDE\ ":
\ "#/components/schemas/PointAltitude\ ", \ "POINT_UNCERTAINTY_CIRCLE\ ": \ "#/
components/schemas/PointUncertaintyCircle\ ", \ "POINT_UNCERTAINTY_ELLIPSE\ ":
\ "#/components/schemas/PointUncertaintyEllipse\ ",
\ "POINT_ALTITUDE_UNCERTAINTY\ ": \ "#/components/schemas/
PointAltitudeUncertainty\ ", \ "propertyName\ ": \ "shape\ "}}, { \ "type\ ":
\ "object\ ", \ "required\ ": [ \ "confidence\ ", \ "point\ ",
\ "uncertaintyEllipse\ "], \ "properties\ ": { \ "point\ ": { \ "type\ ": \ "object\ ",
\ "required\ ": [ \ "lat\ ", \ "lon\ "], \ "properties\ ": { \ "lat\ ": { \ "type\ ":
\ "number\ ", \ "format\ ": \ "double\ ", \ "maximum\ ": 90, \ "minimum\ ": -90},
\ "lon\ ": { \ "type\ ": \ "number\ ", \ "format\ ": \ "double\ ", \ "maximum\ ": 180,
\ "minimum\ ": -180}}}, \ "confidence\ ": { \ "type\ ": \ "integer\ ", \ "maximum\ ":
100, \ "minimum\ ": 0}, \ "uncertaintyEllipse\ ": { \ "type\ ": \ "object\ ",
\ "required\ ": [ \ "orientationMajor\ ", \ "semiMajor\ ", \ "semiMinor\ "],
\ "properties\ ": { \ "semiMajor\ ": { \ "type\ ": \ "number\ ", \ "format\ ": \ "float\ ",
\ "minimum\ ": 0}, \ "semiMinor\ ": { \ "type\ ": \ "number\ ", \ "format\ ": \ "float\ ",
\ "minimum\ ": 0}, \ "orientationMajor\ ": { \ "type\ ": \ "integer\ ", \ "maximum\ ":
180, \ "minimum\ ": 0}}}}}}, { \ "allOf\ ": [ { \ "type\ ": \ "object\ ", \ "required\ ":
[ \ "shape\ "], \ "properties\ ": { \ "shape\ ": { \ "anyOf\ ": [ { \ "enum\ ": [ \ "POINT\ ",
\ "POINT_UNCERTAINTY_CIRCLE\ ", \ "POINT_UNCERTAINTY_ELLIPSE\ ", \ "POLYGON\ ",
\ "POINT_ALTITUDE\ ", \ "POINT_ALTITUDE_UNCERTAINTY\ ", \ "ELLIPSOID_ARC\ "],
\ "type\ ": \ "string\ "}, { \ "type\ ": \ "string\ "}}}}, \ "discriminator\ ":
{ \ "mapping\ ": { \ "POINT\ ": \ "#/components/schemas/Point\ ", \ "POLYGON\ ": \ "#/
components/schemas/Polygon\ ", \ "ELLIPSOID_ARC\ ": \ "#/components/schemas/
EllipsoidArc\ ", \ "POINT_ALTITUDE\ ": \ "#/components/schemas/PointAltitude\ ",
\ "POINT_UNCERTAINTY_CIRCLE\ ": \ "#/components/schemas/
PointUncertaintyCircle\ ", \ "POINT_UNCERTAINTY_ELLIPSE\ ": \ "#/components/
schemas/PointUncertaintyEllipse\ ", \ "POINT_ALTITUDE_UNCERTAINTY\ ": \ "#/
components/schemas/PointAltitudeUncertainty\ "}}, \ "propertyName\ ":
\ "shape\ "}}, { \ "type\ ": \ "object\ ", \ "required\ ": [ \ "pointList\ "],
\ "properties\ ": { \ "pointList\ ": { \ "type\ ": \ "array\ ", \ "items\ ": { \ "type\ ":
\ "object\ ", \ "required\ ": [ \ "lat\ ", \ "lon\ "], \ "properties\ ": { \ "lat\ ":
{ \ "type\ ": \ "number\ ", \ "format\ ": \ "double\ ", \ "maximum\ ": 90, \ "minimum\ ":
-90}, \ "lon\ ": { \ "type\ ": \ "number\ ", \ "format\ ": \ "double\ ", \ "maximum\ ":
180, \ "minimum\ ": -180}}}, \ "maxItems\ ": 15, \ "minItems\ ": 3}}}},
{ \ "allOf\ ": [ { \ "type\ ": \ "object\ ", \ "required\ ": [ \ "shape\ "],
\ "properties\ ": { \ "shape\ ": { \ "anyOf\ ": [ { \ "enum\ ": [ \ "POINT\ ",
\ "POINT_UNCERTAINTY_CIRCLE\ ", \ "POINT_UNCERTAINTY_ELLIPSE\ ", \ "POLYGON\ ",
\ "POINT_ALTITUDE\ ", \ "POINT_ALTITUDE_UNCERTAINTY\ ", \ "ELLIPSOID_ARC\ "],
\ "type\ ": \ "string\ "}, { \ "type\ ": \ "string\ "}}}}, \ "discriminator\ ":
{ \ "mapping\ ": { \ "POINT\ ": \ "#/components/schemas/Point\ ", \ "POLYGON\ ": \ "#/
components/schemas/Polygon\ ", \ "ELLIPSOID_ARC\ ": \ "#/components/schemas/
EllipsoidArc\ ", \ "POINT_ALTITUDE\ ": \ "#/components/schemas/PointAltitude\ ",
\ "POINT_UNCERTAINTY_CIRCLE\ ": \ "#/components/schemas/
PointUncertaintyCircle\ ", \ "POINT_UNCERTAINTY_ELLIPSE\ ": \ "#/components/
schemas/PointUncertaintyEllipse\ ", \ "POINT_ALTITUDE_UNCERTAINTY\ ": \ "#/
components/schemas/PointAltitudeUncertainty\ "}}, \ "propertyName\ ":
\ "shape\ "}}, { \ "type\ ": \ "object\ ", \ "required\ ": [ \ "altitude\ ", \ "point\ "],
\ "properties\ ": { \ "point\ ": { \ "type\ ": \ "object\ ", \ "required\ ": [ \ "lat\ ",
\ "lon\ "], \ "properties\ ": { \ "lat\ ": { \ "type\ ": \ "number\ ", \ "format\ ":
\ "double\ ", \ "maximum\ ": 90, \ "minimum\ ": -90}, \ "lon\ ": { \ "type\ ":
\ "number\ ", \ "format\ ": \ "double\ ", \ "maximum\ ": 180, \ "minimum\ ": -180}}},
\ "altitude\ ": { \ "type\ ": \ "number\ ", \ "format\ ": \ "double\ ", \ "maximum\ ":
32767, \ "minimum\ ": -32767}}}}, { \ "allOf\ ": [ { \ "type\ ": \ "object\ ",
\ "required\ ": [ \ "shape\ "], \ "properties\ ": { \ "shape\ ": { \ "anyOf\ ":
[ { \ "enum\ ": [ \ "POINT\ ", \ "POINT_UNCERTAINTY_CIRCLE\ ",

```



```

\"POINT_UNCERTAINTY_ELLIPSE\", \"POLYGON\", \"POINT_ALTITUDE\",
\"POINT_ALTITUDE_UNCERTAINTY\", \"ELLIPSOID_ARC\", \"type\": \"string\"},
{\"type\": \"string\"}}}, \"discriminator\": {\"mapping\": {\"POINT\": \"#/components/schemas/Point\", \"POLYGON\": \"#/components/schemas/Polygon\", \"ELLIPSOID_ARC\": \"#/components/schemas/EllipsoidArc\", \"POINT_ALTITUDE\": \"#/components/schemas/PointAltitude\", \"POINT_UNCERTAINTY_CIRCLE\": \"#/components/schemas/PointUncertaintyCircle\", \"POINT_UNCERTAINTY_ELLIPSE\": \"#/components/schemas/PointUncertaintyEllipse\", \"POINT_ALTITUDE_UNCERTAINTY\": \"#/components/schemas/PointAltitudeUncertainty\"}, \"propertyName\": \"shape\"}}, {\"type\": \"object\", \"required\": [\"altitude\", \"confidence\", \"point\", \"uncertaintyAltitude\", \"uncertaintyEllipse\"], \"properties\": {\"point\": {\"type\": \"object\", \"required\": [\"lat\", \"lon\"], \"properties\": {\"lat\": {\"type\": \"number\", \"format\": \"double\", \"maximum\": 90, \"minimum\": -90}, \"lon\": {\"type\": \"number\", \"format\": \"double\", \"maximum\": 180, \"minimum\": -180}}}, \"altitude\": {\"type\": \"number\", \"format\": \"double\", \"maximum\": 32767, \"minimum\": -32767}, \"confidence\": {\"type\": \"integer\", \"maximum\": 100, \"minimum\": 0}, \"uncertaintyEllipse\": {\"type\": \"object\", \"required\": [\"orientationMajor\", \"semiMajor\", \"semiMinor\"], \"properties\": {\"semiMajor\": {\"type\": \"number\", \"format\": \"float\", \"minimum\": 0}, \"semiMinor\": {\"type\": \"number\", \"format\": \"float\", \"minimum\": 0}, \"orientationMajor\": {\"type\": \"integer\", \"maximum\": 180, \"minimum\": 0}}}, \"uncertaintyAltitude\": {\"type\": \"number\", \"format\": \"float\", \"minimum\": 0}}}}, {\"allOf\": [{\"type\": \"object\", \"required\": [\"shape\"], \"properties\": {\"shape\": {\"anyOf\": [{\"enum\": [\"POINT\", \"POINT_UNCERTAINTY_CIRCLE\", \"POINT_UNCERTAINTY_ELLIPSE\", \"POLYGON\", \"POINT_ALTITUDE\", \"POINT_ALTITUDE_UNCERTAINTY\", \"ELLIPSOID_ARC\"], \"type\": \"string\"}, {\"type\": \"string\"}}]}, \"discriminator\": {\"mapping\": {\"POINT\": \"#/components/schemas/Point\", \"POLYGON\": \"#/components/schemas/Polygon\", \"ELLIPSOID_ARC\": \"#/components/schemas/EllipsoidArc\", \"POINT_ALTITUDE\": \"#/components/schemas/PointAltitude\", \"POINT_UNCERTAINTY_CIRCLE\": \"#/components/schemas/PointUncertaintyCircle\", \"POINT_UNCERTAINTY_ELLIPSE\": \"#/components/schemas/PointUncertaintyEllipse\", \"POINT_ALTITUDE_UNCERTAINTY\": \"#/components/schemas/PointAltitudeUncertainty\"}, \"propertyName\": \"shape\"}}, {\"type\": \"object\", \"required\": [\"confidence\", \"includedAngle\", \"innerRadius\", \"offsetAngle\", \"point\", \"uncertaintyRadius\"], \"properties\": {\"point\": {\"type\": \"object\", \"required\": [\"lat\", \"lon\"], \"properties\": {\"lat\": {\"type\": \"number\", \"format\": \"double\", \"maximum\": 90, \"minimum\": -90}, \"lon\": {\"type\": \"number\", \"format\": \"double\", \"maximum\": 180, \"minimum\": -180}}}, \"confidence\": {\"type\": \"integer\", \"maximum\": 100, \"minimum\": 0}, \"innerRadius\": {\"type\": \"integer\", \"format\": \"int32\", \"maximum\": 327675, \"minimum\": 0}, \"offsetAngle\": {\"type\": \"integer\", \"maximum\": 360, \"minimum\": 0}, \"includedAngle\": {\"type\": \"integer\", \"maximum\": 360, \"minimum\": 0}, \"uncertaintyRadius\": {\"type\": \"number\", \"format\": \"float\", \"minimum\": 0}}}}}], \"minItems\": 0, \"description\": \"Identifies a list of geographic area of the user where the UE is located.\"}}, {\"minItems\": 1, \"description\": \"Identifies the UE's expected geographical movement. The attribute is only applicable in 5G.\"}, {\"periodicTime\": {\"type\": \"integer\"}, \"validityTime\": {\"type\": \"string\", \"format\": \"date-time\"}, \"trafficProfile\": {\"anyOf\": [{\"enum\": [\"SINGLE_TRANS_UL\", \"SINGLE_TRANS_DL\", \"DUAL_TRANS_UL_FIRST\", \"DUAL_TRANS_DL_FIRST\", \"MULTI_TRANS\"], \"type\":

```



```

\"string\"}, {\"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.\\n\\n\"}},
\"description\": \"Possible values are - SINGLE_TRANS_UL: Uplink single
packet transmission. - SINGLE_TRANS_DL: Downlink single packet transmission.
- DUAL_TRANS_UL_FIRST: Dual packet transmission, firstly uplink packet
transmission with subsequent downlink packet transmission. -
DUAL_TRANS_DL_FIRST: Dual packet transmission, firstly downlink packet
transmission with subsequent uplink packet transmission.\\n\\n\"},
\"batteryIndication\": {\"type\": \"object\", \"properties\":
{\"batteryInd\": {\"type\": \"boolean\"}, \"replaceableInd\": {\"type\":
\"boolean\"}, \"rechargeableInd\": {\"type\": \"boolean\"}}},
\"stationaryIndication\": {\"anyOf\": [{\"enum\": [\"STATIONARY\",
\"MOBILE\"], \"type\": \"string\"}, {\"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.\\n\\n\"}], \"description\": \"Possible values are - STATIONARY:
Identifies the UE is stationary - MOBILE: Identifies the UE is mobile\\n\\n\"},
\"communicationDurationTime\": {\"type\": \"integer\"},
\"scheduledCommunicationTime\": {\"type\": \"object\", \"properties\":
{\"daysOfWeek\": {\"type\": \"array\", \"items\": {\"type\": \"integer\",
\"maximum\": 7, \"minimum\": 1, \"description\": \"integer between and
including 1 and 7 denoting a weekday. 1 shall indicate Monday, and the
subsequent weekdays shall be indicated with the next higher numbers. 7 shall
indicate Sunday.\"}, \"maxItems\": 6, \"minItems\": 1, \"description\":
\"Identifies the day(s) of the week. If absent, it indicates every day of the
week.\"}, \"timeOfDayEnd\": {\"type\": \"string\", \"description\": \"String
with format partial-time or full-time as defined in clause 5.6 of IETF RFC
3339. Examples, 20:15:00, 20:15:00-08:00 (for 8 hours behind UTC).\"},
\"timeOfDayStart\": {\"type\": \"string\", \"description\": \"String with
format partial-time or full-time as defined in clause 5.6 of IETF RFC 3339.
Examples, 20:15:00, 20:15:00-08:00 (for 8 hours behind UTC).\"}}},
\"scheduledCommunicationType\": {\"anyOf\": [{\"enum\": [\"DOWNLINK_ONLY\",
\"UPLINK_ONLY\", \"BIDIRECTIONAL\"], \"type\": \"string\"}, {\"type\":
\"string\"}]}}, \"secondaryRatRestrictions\": {\"type\": \"array\",
\"items\": {\"anyOf\": [{\"enum\": [\"NR\", \"EUTRA\", \"WLAN\", \"VIRTUAL\",
\"NB-IOT\", \"WIRELINE\", \"WIRELINE_CABLE\", \"WIRELINE_BBF\", \"LTE-M\",
\"NR_U\", \"EUTRA_U\", \"TRUSTED_N3GA\", \"TRUSTED_WLAN\", \"UTRA\",
\"GERA\"], \"type\": \"string\"}, {\"type\": \"string\"}]}},
\"rgWirelineCharacteristics\": {\"type\": \"string\", \"format\": \"byte\"},
\"coreNetworkTypeRestrictions\": {\"type\": \"array\", \"items\": {\"anyOf\":
[{\"enum\": [\"5GC\", \"EPC\"], \"type\": \"string\"}, {\"type\":
\"string\"}]}}, \"wirelineServiceAreaRestriction\": {\"type\": \"object\",
\"properties\": {\"areas\": {\"type\": \"array\", \"items\": {\"type\":
\"object\", \"properties\": {\"hfcNIds\": {\"type\": \"array\", \"items\":
{\"type\": \"string\", \"maxLength\": 6}, \"minItems\": 1}, \"areaCodeB\":
{\"type\": \"string\"}, \"areaCodeC\": {\"type\": \"string\"},
\"globalLineIds\": {\"type\": \"array\", \"items\": {\"type\": \"string\",
\"format\": \"byte\"}, \"minItems\": 1}}}, \"restrictionType\": {\"anyOf\":
[{\"enum\": [\"ALLOWED_AREAS\", \"NOT_ALLOWED_AREAS\"], \"type\":
\"string\"}, {\"type\": \"string\"}]}}}}, \"smData\": {\"type\": \"array\",
\"items\": {\"type\": \"object\", \"required\": [\"singleNssai\"],
\"properties\": {\"traceData\": {\"type\": \"object\", \"nullable\": true,
\"required\": [\"eventList\", \"neTypeList\", \"traceDepth\", \"traceRef\"],
\"properties\": {\"traceRef\": {\"type\": \"string\", \"pattern\": \"^[0-9]{3}
[0-9]{2,3}-[A-Fa-f0-9]{6}$\"}, \"eventList\": {\"type\": \"string\",

```

```

\"pattern\": \"^[A-Fa-f0-9]+$\", \"neTypeList\": {\"type\": \"string\",
\"pattern\": \"^[A-Fa-f0-9]+$\", \"traceDepth\": {\"anyOf\": [{\"enum\":
[\"MINIMUM\", \"MEDIUM\", \"MAXIMUM\", \"MINIMUM_WO_VENDOR_EXTENSION\",
\"MEDIUM_WO_VENDOR_EXTENSION\", \"MAXIMUM_WO_VENDOR_EXTENSION\"], \"type\":
\"string\"}, {\"type\": \"string\"}]}, \"interfaceList\": {\"type\":
\"string\", \"pattern\": \"^[A-Fa-f0-9]+$\", \"collectionEntityIpv4Addr\":
{\"type\": \"string\", \"example\": \"198.51.100.1\", \"pattern\": \"^([0-9]|
[1-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5])\\\\\\\\.){3}([0-9]|1[0-9]|1[0-9]
[0-9]|2[0-4][0-9]|25[0-5])$\", \"collectionEntityIpv6Addr\": {\"type\":
\"string\", \"allOf\": [{\"pattern\": \"^((:|0?|([1-9a-f][0-9a-f]{0,3}))):
((0?|([1-9a-f][0-9a-f]{0,3}))):{0,6}(:|0?|([1-9a-f][0-9a-f]{0,3}))$\",
{\"pattern\": \"^(((^[^:]+):){7}([^[^:]+))|(((^[^:]+)*^[^:]+)?::((^[^:]+):)*^[^:
+)?))$\"}], \"example\": \"2001:db8:85a3::8a2e:370:7334\"}}},
\"singleNssai\": {\"type\": \"object\", \"required\": [\"sst\"],
\"properties\": {\"sd\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]
{6}$\", \"sst\": {\"type\": \"integer\", \"maximum\": 255, \"minimum\":
0}}}, \"internalGroupIds\": {\"type\": \"array\", \"items\": {\"type\":
\"string\", \"pattern\": \"^[A-Fa-f0-9]{8}-[0-9]{3}-[0-9]{2,3}-([A-Fa-f0-9][A-
Fa-f0-9]){1,10}$\", \"minItems\": 1}, \"dnnConfigurations\": {\"type\":
\"object\", \"description\": \"A map (list of key-value pairs where Dnn, or
optionally the Wildcard DNN, serves as key) of DnnConfigurations\",
\"additionalProperties\": {\"type\": \"object\", \"required\":
[\"pduSessionTypes\", \"sscModes\"], \"properties\": {\"acsInfo\": {\"type\":
\"object\", \"properties\": {\"acsUrl\": {\"type\": \"string\",
\"acsIpv4Addr\": {\"type\": \"string\", \"example\": \"198.51.100.1\",
\"pattern\": \"^([0-9]|1[0-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5])\\\\\\\\.){3}
([0-9]|1[0-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5])$\", \"acsIpv6Addr\":
{\"type\": \"string\", \"allOf\": [{\"pattern\": \"^((:|0?|([1-9a-f][0-9a-f]
{0,3}))):((0?|([1-9a-f][0-9a-f]{0,3}))):{0,6}(:|0?|([1-9a-f][0-9a-f]
{0,3}))$\", {\"pattern\": \"^(((^[^:]+):){7}([^[^:]+))|(((^[^:]+)*^[^:]+)?::
((^[^:]+):)*^[^:]+)?))$\"}], \"example\": \"2001:db8:85a3::8a2e:370:7334\"}}},
\"niddInfo\": {\"type\": \"object\", \"required\": [\"afId\"],
\"properties\": {\"afId\": {\"type\": \"string\", \"gpsi\": {\"type\":
\"string\", \"pattern\": \"^(msisdn-[0-9]{5,15}|extid-[^@]+@[^@]+|.+)\"},
\"extGroupId\": {\"type\": \"string\", \"pattern\": \"^extgroupid-[^@]+@[^@]+$
\"}}}, \"sscModes\": {\"type\": \"object\", \"required\":
[\"defaultSscMode\"], \"properties\": {\"defaultSscMode\": {\"anyOf\":
[\"enum\": [\"SSC_MODE_1\", \"SSC_MODE_2\", \"SSC_MODE_3\"], \"type\":
\"string\"}, {\"type\": \"string\"}]}, \"allowedSscModes\": {\"type\":
\"array\", \"items\": {\"anyOf\": [{\"enum\": [\"SSC_MODE_1\",
\"SSC_MODE_2\", \"SSC_MODE_3\"], \"type\": \"string\"}, {\"type\":
\"string\"}]}, \"maxItems\": 2, \"minItems\": 1}}, \"iwbEpsInd\": {\"type\":
\"boolean\"}, \"niddNefId\": {\"type\": \"string\", \"description\":
\"Identity of the NEF\", \"upSecurity\": {\"type\": \"object\",
\"required\": [\"upConfid\", \"upIntegr\"], \"properties\": {\"upConfid\":
{\"anyOf\": [{\"enum\": [\"REQUIRED\", \"PREFERRED\", \"NOT_NEEDED\"],
\"type\": \"string\"}, {\"type\": \"string\"}]}, \"upIntegr\": {\"anyOf\":
[\"enum\": [\"REQUIRED\", \"PREFERRED\", \"NOT_NEEDED\"], \"type\":
\"string\"}, {\"type\": \"string\"}]}}}, \"sessionAmbr\": {\"type\":
\"object\", \"required\": [\"downlink\", \"uplink\"], \"properties\":
{\"uplink\": {\"type\": \"string\", \"pattern\": \"^\\\\\\\\d+(\\\\\\\\.\\\\\\\\d+)? (bps|
Kbps|Mbps|Gbps|Tbps)$\", \"downlink\": {\"type\": \"string\", \"pattern\":
\"^\\\\\\\\d+(\\\\\\\\.\\\\\\\\d+)? (bps|Kbps|Mbps|Gbps|Tbps)$\"}}}, \"5gQosProfile\":
{\"type\": \"object\", \"required\": [\"5qi\", \"arp\"], \"properties\":
{\"5qi\": {\"type\": \"integer\", \"maximum\": 255, \"minimum\": 0}, \"arp\":
{\"type\": \"object\", \"required\": [\"preemptCap\", \"preemptVuln\",

```

```

\"priorityLevel\"], \"properties\": {\"preemptCap\": {\"anyOf\": [{\"enum\": [\"NOT_PREEMPT\", \"MAY_PREEMPT\"], \"type\": \"string\"}, {\"type\": \"string\"}]}, \"preemptVuln\": {\"anyOf\": [{\"enum\": [\"NOT_PREEMPTABLE\", \"PREEMPTABLE\"], \"type\": \"string\"}, {\"type\": \"string\"}]}, \"priorityLevel\": {\"type\": \"integer\", \"maximum\": 15, \"minimum\": 1, \"nullable\": true, \"description\": \"nullable true shall not be used for this attribute\"}}, \"priorityLevel\": {\"type\": \"integer\", \"maximum\": 127, \"minimum\": 1}}, \"atsssAllowed\": {\"type\": \"boolean\", \"default\": false}, \"dnAaaAddress\": {\"type\": \"object\", \"oneOf\": [{\"required\": [\"ipv4Addr\"], \"required\": [\"ipv6Addr\"], \"required\": [\"ipv6Prefix\"]}, \"properties\": {\"ipv4Addr\": {\"type\": \"string\", \"example\": \"198.51.100.1\", \"pattern\": \"^([0-9]|[1-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5])\\\\\\\\.){3}([0-9]|[1-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5])$\"}, \"ipv6Addr\": {\"type\": \"string\", \"allof\": [{\"pattern\": \"^((?:|0?|([1-9a-f][0-9a-f]{0,3})))(?:|([1-9a-f][0-9a-f]{0,3})):{0,6}(:|0?|([1-9a-f][0-9a-f]{0,3}))$\"}, {\"pattern\": \"^(((\\[:+\\]){7}(\\[:+\\))|(((\\[:+\\))*[\\[:+\\])?:((\\[:+\\))*[\\[:+\\])?))$\"}, \"example\": \"2001:db8:85a3::8a2e:370:7334\"}, \"ipv6Prefix\": {\"type\": \"string\", \"allof\": [{\"pattern\": \"^((?:|0?|([1-9a-f][0-9a-f]{0,3})))(?:|([1-9a-f][0-9a-f]{0,3})):{0,6}(:|0?|([1-9a-f][0-9a-f]{0,3}))\\\\\\\\/((\\[:+\\])|([0-9]{2})|(1[0-1][0-9])|(12[0-8]))$\"}, {\"pattern\": \"^(((\\[:+\\]){7}(\\[:+\\))|(((\\[:+\\))*[\\[:+\\])?:((\\[:+\\))*[\\[:+\\])?))\\\\\\\\/\\.+)\"}, \"example\": \"2001:db8:abcd:12::0/64\"}]}, \"secondaryAuth\": {\"type\": \"boolean\"}, \"iptvAccCtrlInfo\": {\"type\": \"string\"}, \"pduSessionTypes\": {\"type\": \"object\", \"required\": [\"defaultSessionType\"], \"properties\": {\"defaultSessionType\": {\"anyOf\": [{\"enum\": [\"IPV4\", \"IPV6\", \"IPV4V6\", \"UNSTRUCTURED\", \"ETHERNET\"], \"type\": \"string\"}, {\"type\": \"string\"}]}, \"allowedSessionTypes\": {\"type\": \"array\", \"items\": {\"anyOf\": [{\"enum\": [\"IPV4\", \"IPV6\", \"IPV4V6\", \"UNSTRUCTURED\", \"ETHERNET\"], \"type\": \"string\"}, {\"type\": \"string\"}]}, \"minItems\": 1}}, \"staticIpAddress\": {\"type\": \"array\", \"items\": {\"type\": \"object\", \"oneOf\": [{\"required\": [\"ipv4Addr\"], \"required\": [\"ipv6Addr\"], \"required\": [\"ipv6Prefix\"]}, \"properties\": {\"ipv4Addr\": {\"type\": \"string\", \"example\": \"198.51.100.1\", \"pattern\": \"^([0-9]|[1-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5])\\\\\\\\.){3}([0-9]|[1-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5])$\"}, \"ipv6Addr\": {\"type\": \"string\", \"allof\": [{\"pattern\": \"^((?:|0?|([1-9a-f][0-9a-f]{0,3})))(?:|([1-9a-f][0-9a-f]{0,3})):{0,6}(:|0?|([1-9a-f][0-9a-f]{0,3}))$\"}, {\"pattern\": \"^(((\\[:+\\]){7}(\\[:+\\))|(((\\[:+\\))*[\\[:+\\])?:((\\[:+\\))*[\\[:+\\])?))$\"}, \"example\": \"2001:db8:85a3::8a2e:370:7334\"}, \"ipv6Prefix\": {\"type\": \"string\", \"allof\": [{\"pattern\": \"^((?:|0?|([1-9a-f][0-9a-f]{0,3})))(?:|([1-9a-f][0-9a-f]{0,3})):{0,6}(:|0?|([1-9a-f][0-9a-f]{0,3}))\\\\\\\\/((\\[:+\\])|([0-9]{2})|(1[0-1][0-9])|(12[0-8]))$\"}, {\"pattern\": \"^(((\\[:+\\]){7}(\\[:+\\))|(((\\[:+\\))*[\\[:+\\])?:((\\[:+\\))*[\\[:+\\])?))\\\\\\\\/\\.+)\"}, \"example\": \"2001:db8:abcd:12::0/64\"}]}, \"maxItems\": 2, \"minItems\": 1}, \"ipv4FrameRouteList\": {\"type\": \"array\", \"items\": {\"type\": \"object\", \"properties\": {\"ipv4Mask\": {\"type\": \"string\", \"example\": \"198.51.0.0/16\", \"pattern\": \"^([0-9]|[1-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5])\\\\\\\\.){3}([0-9]|[1-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5])\\\\\\\\/((\\[:+\\])|([0-9]{2})|(1[0-1][0-9])|(12[0-8]))$\"}, {\"pattern\": \"^(((\\[:+\\]){7}(\\[:+\\))|(((\\[:+\\))*[\\[:+\\])?:((\\[:+\\))*[\\[:+\\])?))\\\\\\\\/\\.+)\"}, \"example\": \"2001:db8:abcd:12::0/64\"}]}, \"minItems\": 1},

```

```

\"ipv6FrameRouteList\": {\"type\": \"array\", \"items\": {\"type\":
\"object\", \"properties\": {\"ipv4Mask\": {\"type\": \"string\",
\"example\": \"198.51.0.0/16\", \"pattern\": \"^([0-9]|[1-9][0-9]|1[0-9]
[0-9]|2[0-4][0-9]|25[0-5])\\.\\.\\.\\{3\\}([0-9]|[1-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|
25[0-5])(\\.\\.\\.\\/([0-9]|[1-2][0-9]|3[0-2]))$\"}, \"ipv6Prefix\": {\"type\":
\"string\", \"allof\": [{\"pattern\": \"^((:|0?|([1-9a-f][0-9a-f]{0,3}))):
(0?|([1-9a-f][0-9a-f]{0,3})):{0,6}(:|0?|([1-9a-f][0-9a-f]{0,3}))\\.\\.\\.\\/
([0-9]|([0-9]{2})|(1[0-1][0-9])|(12[0-8]))$\"}, {\"pattern\": \"^(([:+]:
{7}([[:+]]+))|((([:+]:+)*[:+])?:((([:+]:+)*[:+])?))\\.\\.\\.\\.+)$\"},
\"example\": \"2001:db8:abcd:12::0/64\"}}}, \"minItems\": 1},
\"pduSessionContinuityInd\": {\"anyOf\": [{\"enum\":
[\"MAINTAIN_PDUSESSION\", \"RECONNECT_PDUSESSION\", \"RELEASE_PDUSESSION\"],
\"type\": \"string\"}, {\"type\": \"string\"}]}, \"redundantSessionAllowed\":
{\"type\": \"boolean\"}, \"dnAaaIpAddressAllocation\": {\"type\":
\"boolean\"}, \"3gppChargingCharacteristics\": {\"type\": \"string\"}}},
\"odbPacketServices\": {\"anyOf\": [{\"anyOf\": [{\"enum\":
[\"ALL_PACKET_SERVICES\", \"ROAMER_ACCESS_HPLMN_AP\",
\"ROAMER_ACCESS_VPLMN_AP\"], \"type\": \"string\"}, {\"type\": \"string\"}]},
{\"enum\": [null], \"type\": \"string\"}]}, \"sharedTraceDataId\": {\"type\":
\"string\", \"pattern\": \"^[0-9]{5,6}-+.$\"}, \"sharedVnGroupDataIds\":
{\"type\": \"object\", \"minProperties\": 1, \"additionalProperties\":
{\"type\": \"string\", \"pattern\": \"^[0-9]{5,6}-+.$\"}},
\"expectedUeBehavioursList\": {\"type\": \"object\", \"minProperties\": 1,
\"additionalProperties\": {\"type\": \"object\", \"properties\":
{\"expectedUmts\": {\"type\": \"array\", \"items\": {\"type\": \"object\",
\"properties\": {\"nwAreaInfo\": {\"type\": \"object\", \"properties\":
{\"tais\": {\"type\": \"array\", \"items\": {\"type\": \"object\",
\"required\": [\"plmnId\", \"tac\"], \"properties\": {\"nid\": {\"type\":
\"string\", \"pattern\": \"^[A-Fa-f0-9]{11}$\"}, \"tac\": {\"type\":
\"string\", \"pattern\": \"(^[A-Fa-f0-9]{4}$)|(^[A-Fa-f0-9]{6}$)\"},
\"plmnId\": {\"type\": \"object\", \"required\": [\"mcc\", \"mnc\"],
\"properties\": {\"mcc\": {\"type\": \"string\", \"pattern\": \"^\\\\\\\\d{3}$
\"}, \"mnc\": {\"type\": \"string\", \"pattern\": \"^\\\\\\\\d{2,3}$\"}}}}},
\"minItems\": 1, \"description\": \"Contains a list of tracking area
identities.\"}, \"ecgis\": {\"type\": \"array\", \"items\": {\"type\":
\"object\", \"required\": [\"eutraCellId\", \"plmnId\"], \"properties\":
{\"nid\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{11}$\"},
\"plmnId\": {\"type\": \"object\", \"required\": [\"mcc\", \"mnc\"],
\"properties\": {\"mcc\": {\"type\": \"string\", \"pattern\": \"^\\\\\\\\d{3}$
\"}, \"mnc\": {\"type\": \"string\", \"pattern\": \"^\\\\\\\\d{2,3}$\"}}},
\"eutraCellId\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{7}$\"}}},
\"minItems\": 1, \"description\": \"Contains a list of E-UTRA cell
identities.\"}, \"ncgis\": {\"type\": \"array\", \"items\": {\"type\":
\"object\", \"required\": [\"nrCellId\", \"plmnId\"], \"properties\":
{\"nid\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{11}$\"},
\"plmnId\": {\"type\": \"object\", \"required\": [\"mcc\", \"mnc\"],
\"properties\": {\"mcc\": {\"type\": \"string\", \"pattern\": \"^\\\\\\\\d{3}$
\"}, \"mnc\": {\"type\": \"string\", \"pattern\": \"^\\\\\\\\d{2,3}$\"}}},
\"nrCellId\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{9}$\"}}},
\"minItems\": 1, \"description\": \"Contains a list of NR cell
identities.\"}, \"gRanNodeIds\": {\"type\": \"array\", \"items\": {\"type\":
\"object\", \"oneOf\": [{\"required\": [\"n3IwfId\"], \"required\":
[\"gNbId\"], {\"required\": [\"ngeNbId\"], {\"required\": [\"wagfId\"],
{\"required\": [\"tngfId\"], {\"required\": [\"eNbId\"]}], \"required\":
[\"plmnId\"], \"properties\": {\"nid\": {\"type\": \"string\", \"pattern\":
\"^[A-Fa-f0-9]{11}$\"}, \"eNbId\": {\"type\": \"string\", \"pattern\":

```

```

\^(MacroNb-[A-Fa-f0-9]{5}|MacroNb-[A-Fa-f0-9]{6}|MacroNb-[A-Fa-f0-9]{5}|
HomeNb-[A-Fa-f0-9]{7})$\", \"gNbId\": {\"type\": \"object\", \"required\":
[\"bitLength\", \"gNbValue\"], \"properties\": {\"gNbValue\": {\"type\":
\"string\", \"pattern\": \"^[A-Fa-f0-9]{6,8}$\"}, \"bitLength\": {\"type\":
\"integer\", \"maximum\": 32, \"minimum\": 22}}}, \"plmnId\": {\"type\":
\"object\", \"required\": [\"mcc\", \"mnc\"], \"properties\": {\"mcc\":
{\"type\": \"string\", \"pattern\": \"^[\\d]{3}$\"}, \"mnc\": {\"type\":
\"string\", \"pattern\": \"^[\\d]{2,3}$\"}}}, \"tngfId\": {\"type\":
\"string\", \"pattern\": \"^[A-Fa-f0-9]+$\"}, \"wagfId\": {\"type\":
\"string\", \"pattern\": \"^[A-Fa-f0-9]+$\"}, \"n3IwfId\": {\"type\":
\"string\", \"pattern\": \"^[A-Fa-f0-9]+$\"}, \"ngeNbId\": {\"type\":
\"string\", \"pattern\": \"^(MacroNGeNb-[A-Fa-f0-9]{5}|MacroNGeNb-[A-Fa-f0-9]
{6}|MacroNGeNb-[A-Fa-f0-9]{5})$\"}}}, \"minItems\": 1, \"description\":
\"Contains a list of NG RAN nodes.\"}}, \"description\": \"Describes a
network area information in which the NF service consumer requests the number
of UEs.\"}, \"civicAddresses\": {\"type\": \"array\", \"items\": {\"type\":
\"object\", \"properties\": {\"A1\": {\"type\": \"string\"}, \"A2\":
{\"type\": \"string\"}, \"A3\": {\"type\": \"string\"}, \"A4\": {\"type\":
\"string\"}, \"A5\": {\"type\": \"string\"}, \"A6\": {\"type\": \"string\"},
\"PC\": {\"type\": \"string\"}, \"RD\": {\"type\": \"string\"}, \"BLD\":
{\"type\": \"string\"}, \"FLR\": {\"type\": \"string\"}, \"HNO\": {\"type\":
\"string\"}, \"HNS\": {\"type\": \"string\"}, \"LMK\": {\"type\":
\"string\"}, \"LOC\": {\"type\": \"string\"}, \"NAM\": {\"type\":
\"string\"}, \"PCN\": {\"type\": \"string\"}, \"PLC\": {\"type\":
\"string\"}, \"POD\": {\"type\": \"string\"}, \"POM\": {\"type\":
\"string\"}, \"PRD\": {\"type\": \"string\"}, \"PRM\": {\"type\":
\"string\"}, \"STS\": {\"type\": \"string\"}, \"RDBR\": {\"type\":
\"string\"}, \"ROOM\": {\"type\": \"string\"}, \"SEAT\": {\"type\":
\"string\"}, \"UNIT\": {\"type\": \"string\"}, \"POBOX\": {\"type\":
\"string\"}, \"RDSEC\": {\"type\": \"string\"}, \"method\": {\"type\":
\"string\"}, \"ADDCODE\": {\"type\": \"string\"}, \"RDSUBBR\": {\"type\":
\"string\"}, \"country\": {\"type\": \"string\"}, \"providedBy\": {\"type\":
\"string\"}, \"usageRules\": {\"type\": \"string\"}}}, \"minItems\": 0,
\"description\": \"Identifies a list of civic addresses of the user where the
UE is located.\"}, \"geographicAreas\": {\"type\": \"array\", \"items\":
{\"anyOf\": [{\"allOf\": [{\"type\": \"object\", \"required\": [\"shape\"],
\"properties\": {\"shape\": {\"anyOf\": [{\"enum\": [\"POINT\",
\"POINT_UNCERTAINTY_CIRCLE\", \"POINT_UNCERTAINTY_ELLIPSE\", \"POLYGON\",
\"POINT_ALTITUDE\", \"POINT_ALTITUDE_UNCERTAINTY\", \"ELLIPSOID_ARC\"],
\"type\": \"string\"}, {\"type\": \"string\"}]}]}, \"discriminator\":
{\"mapping\": {\"POINT\": \"#/components/schemas/Point\", \"POLYGON\": \"#/
components/schemas/Polygon\", \"ELLIPSOID_ARC\": \"#/components/schemas/
EllipsoidArc\", \"POINT_ALTITUDE\": \"#/components/schemas/PointAltitude\",
\"POINT_UNCERTAINTY_CIRCLE\": \"#/components/schemas/
PointUncertaintyCircle\", \"POINT_UNCERTAINTY_ELLIPSE\": \"#/components/
schemas/PointUncertaintyEllipse\", \"POINT_ALTITUDE_UNCERTAINTY\": \"#/
components/schemas/PointAltitudeUncertainty\"}, \"propertyName\":
\"shape\"}}, {\"type\": \"object\", \"required\": [\"point\"],
\"properties\": {\"point\": {\"type\": \"object\", \"required\": [\"lat\",
\"lon\"], \"properties\": {\"lat\": {\"type\": \"number\", \"format\":
\"double\", \"maximum\": 90, \"minimum\": -90}, \"lon\": {\"type\":
\"number\", \"format\": \"double\", \"maximum\": 180, \"minimum\":
-180}}}}}], {\"allOf\": [{\"type\": \"object\", \"required\": [\"shape\"],
\"properties\": {\"shape\": {\"anyOf\": [{\"enum\": [\"POINT\",
\"POINT_UNCERTAINTY_CIRCLE\", \"POINT_UNCERTAINTY_ELLIPSE\", \"POLYGON\",
\"POINT_ALTITUDE\", \"POINT_ALTITUDE_UNCERTAINTY\", \"ELLIPSOID_ARC\"],

```

```

"type": "string"}, {"type": "string"}]}, "discriminator":
{"mapping": {"POINT": "#/components/schemas/Point", "POLYGON": "#/
components/schemas/Polygon", "ELLIPSOID_ARC": "#/components/schemas/
EllipsoidArc", "POINT_ALTITUDE": "#/components/schemas/PointAltitude",
"POINT_UNCERTAINTY_CIRCLE": "#/components/schemas/
PointUncertaintyCircle", "POINT_UNCERTAINTY_ELLIPSE": "#/components/
schemas/PointUncertaintyEllipse", "POINT_ALTITUDE_UNCERTAINTY": "#/
components/schemas/PointAltitudeUncertainty"}, "propertyName":
"shape"}, {"type": "object", "required": ["point",
"uncertainty"], "properties": {"point": {"type": "object",
"required": ["lat", "lon"], "properties": {"lat": {"type":
"number", "format": "double", "maximum": 90, "minimum": -90},
"lon": {"type": "number", "format": "double", "maximum": 180,
"minimum": -180}}}, "uncertainty": {"type": "number", "format":
"float", "minimum": 0}}}}, {"allOf": [{"type": "object",
"required": ["shape"], "properties": {"shape": {"anyOf":
[{"enum": ["POINT", "POINT_UNCERTAINTY_CIRCLE",
"POINT_UNCERTAINTY_ELLIPSE", "POLYGON", "POINT_ALTITUDE",
"POINT_ALTITUDE_UNCERTAINTY", "ELLIPSOID_ARC"], "type": "string"},
{"type": "string"}]}]}, "discriminator": {"mapping": {"POINT": "#/
components/schemas/Point", "POLYGON": "#/components/schemas/Polygon",
"ELLIPSOID_ARC": "#/components/schemas/EllipsoidArc", "POINT_ALTITUDE":
"#/components/schemas/PointAltitude", "POINT_UNCERTAINTY_CIRCLE": "#/
components/schemas/PointUncertaintyCircle", "POINT_UNCERTAINTY_ELLIPSE":
"#/components/schemas/PointUncertaintyEllipse",
"POINT_ALTITUDE_UNCERTAINTY": "#/components/schemas/
PointAltitudeUncertainty"}, "propertyName": "shape"}}, {"type":
"object", "required": ["confidence", "point",
"uncertaintyEllipse"], "properties": {"point": {"type": "object",
"required": ["lat", "lon"], "properties": {"lat": {"type":
"number", "format": "double", "maximum": 90, "minimum": -90},
"lon": {"type": "number", "format": "double", "maximum": 180,
"minimum": -180}}}, "confidence": {"type": "integer", "maximum":
100, "minimum": 0}, "uncertaintyEllipse": {"type": "object",
"required": ["orientationMajor", "semiMajor", "semiMinor"],
"properties": {"semiMajor": {"type": "number", "format": "float",
"minimum": 0}, "semiMinor": {"type": "number", "format": "float",
"minimum": 0}, "orientationMajor": {"type": "integer", "maximum":
180, "minimum": 0}}}}]}, {"allOf": [{"type": "object", "required":
["shape"], "properties": {"shape": {"anyOf": [{"enum": ["POINT",
"POINT_UNCERTAINTY_CIRCLE", "POINT_UNCERTAINTY_ELLIPSE", "POLYGON",
"POINT_ALTITUDE", "POINT_ALTITUDE_UNCERTAINTY", "ELLIPSOID_ARC"],
"type": "string"}, {"type": "string"}]}]}, "discriminator":
{"mapping": {"POINT": "#/components/schemas/Point", "POLYGON": "#/
components/schemas/Polygon", "ELLIPSOID_ARC": "#/components/schemas/
EllipsoidArc", "POINT_ALTITUDE": "#/components/schemas/PointAltitude",
"POINT_UNCERTAINTY_CIRCLE": "#/components/schemas/
PointUncertaintyCircle", "POINT_UNCERTAINTY_ELLIPSE": "#/components/
schemas/PointUncertaintyEllipse", "POINT_ALTITUDE_UNCERTAINTY": "#/
components/schemas/PointAltitudeUncertainty"}, "propertyName":
"shape"}, {"type": "object", "required": ["pointList"],
"properties": {"pointList": {"type": "array", "items": {"type":
"object", "required": ["lat", "lon"], "properties": {"lat":
{"type": "number", "format": "double", "maximum": 90, "minimum":
-90}, "lon": {"type": "number", "format": "double", "maximum":
180, "minimum": -180}}}, "maxItems": 15, "minItems": 3}}]}],

```

```

{"allof": [{"type": "object", "required": ["shape"],
"properties": {"shape": {"anyOf": [{"enum": ["POINT",
"POINT_UNCERTAINTY_CIRCLE", "POINT_UNCERTAINTY_ELLIPSE", "POLYGON",
"POINT_ALTITUDE", "POINT_ALTITUDE_UNCERTAINTY", "ELLIPSOID_ARC"],
"type": "string"}], "type": "string"}]}, {"discriminator":
{"mapping": {"POINT": "#/components/schemas/Point", "POLYGON": "#/
components/schemas/Polygon", "ELLIPSOID_ARC": "#/components/schemas/
EllipsoidArc", "POINT_ALTITUDE": "#/components/schemas/PointAltitude",
"POINT_UNCERTAINTY_CIRCLE": "#/components/schemas/
PointUncertaintyCircle", "POINT_UNCERTAINTY_ELLIPSE": "#/components/
schemas/PointUncertaintyEllipse", "POINT_ALTITUDE_UNCERTAINTY": "#/
components/schemas/PointAltitudeUncertainty"}}, {"propertyName":
"shape"}]}, {"type": "object", "required": ["altitude", "point"],
"properties": {"point": {"type": "object", "required": ["lat",
"lon"], "properties": {"lat": {"type": "number", "format":
"double", "maximum": 90, "minimum": -90}, "lon": {"type":
"number", "format": "double", "maximum": 180, "minimum": -180}},
"altitude": {"type": "number", "format": "double", "maximum":
32767, "minimum": -32767}}}}, {"allof": [{"type": "object",
"required": ["shape"], "properties": {"shape": {"anyOf":
[{"enum": ["POINT", "POINT_UNCERTAINTY_CIRCLE",
"POINT_UNCERTAINTY_ELLIPSE", "POLYGON", "POINT_ALTITUDE",
"POINT_ALTITUDE_UNCERTAINTY", "ELLIPSOID_ARC"], "type": "string"},
{"type": "string"}]}]}, {"discriminator": {"mapping": {"POINT": "#/
components/schemas/Point", "POLYGON": "#/components/schemas/Polygon",
"ELLIPSOID_ARC": "#/components/schemas/EllipsoidArc", "POINT_ALTITUDE":
"#/components/schemas/PointAltitude", "POINT_UNCERTAINTY_CIRCLE": "#/
components/schemas/PointUncertaintyCircle", "POINT_UNCERTAINTY_ELLIPSE":
"#/components/schemas/PointUncertaintyEllipse",
"POINT_ALTITUDE_UNCERTAINTY": "#/components/schemas/
PointAltitudeUncertainty"}}, {"propertyName": "shape"}]}, {"type":
"object", "required": ["altitude", "confidence", "point",
"uncertaintyAltitude", "uncertaintyEllipse"], "properties": {"point":
{"type": "object", "required": ["lat", "lon"], "properties":
{"lat": {"type": "number", "format": "double", "maximum": 90,
"minimum": -90}, "lon": {"type": "number", "format": "double",
"maximum": 180, "minimum": -180}}, "altitude": {"type": "number",
"format": "double", "maximum": 32767, "minimum": -32767},
"confidence": {"type": "integer", "maximum": 100, "minimum": 0},
"uncertaintyEllipse": {"type": "object", "required":
["orientationMajor", "semiMajor", "semiMinor"], "properties":
{"semiMajor": {"type": "number", "format": "float", "minimum":
0}, "semiMinor": {"type": "number", "format": "float", "minimum":
0}, "orientationMajor": {"type": "integer", "maximum": 180,
"minimum": 0}}}, "uncertaintyAltitude": {"type": "number",
"format": "float", "minimum": 0}}}}, {"allof": [{"type":
"object", "required": ["shape"], "properties": {"shape":
{"anyOf": [{"enum": ["POINT", "POINT_UNCERTAINTY_CIRCLE",
"POINT_UNCERTAINTY_ELLIPSE", "POLYGON", "POINT_ALTITUDE",
"POINT_ALTITUDE_UNCERTAINTY", "ELLIPSOID_ARC"], "type": "string"},
{"type": "string"}]}]}, {"discriminator": {"mapping": {"POINT": "#/
components/schemas/Point", "POLYGON": "#/components/schemas/Polygon",
"ELLIPSOID_ARC": "#/components/schemas/EllipsoidArc", "POINT_ALTITUDE":
"#/components/schemas/PointAltitude", "POINT_UNCERTAINTY_CIRCLE": "#/
components/schemas/PointUncertaintyCircle", "POINT_UNCERTAINTY_ELLIPSE":
"#/components/schemas/PointUncertaintyEllipse",

```



```

\"POINT_ALTITUDE_UNCERTAINTY\": \"#/components/schemas/
PointAltitudeUncertainty\"}, \"propertyName\": \"shape\"}}, {\"type\":
\"object\", \"required\": [\"confidence\", \"includedAngle\",
\"innerRadius\", \"offsetAngle\", \"point\", \"uncertaintyRadius\"],
\"properties\": {\"point\": {\"type\": \"object\", \"required\": [\"lat\",
\"lon\"], \"properties\": {\"lat\": {\"type\": \"number\", \"format\":
\"double\", \"maximum\": 90, \"minimum\": -90}, \"lon\": {\"type\":
\"number\", \"format\": \"double\", \"maximum\": 180, \"minimum\": -180}}},
\"confidence\": {\"type\": \"integer\", \"maximum\": 100, \"minimum\": 0},
\"innerRadius\": {\"type\": \"integer\", \"format\": \"int32\", \"maximum\":
327675, \"minimum\": 0}, \"offsetAngle\": {\"type\": \"integer\",
\"maximum\": 360, \"minimum\": 0}, \"includedAngle\": {\"type\": \"integer\",
\"maximum\": 360, \"minimum\": 0}, \"uncertaintyRadius\": {\"type\":
\"number\", \"format\": \"float\", \"minimum\": 0}}}}}], \"minItems\": 0,
\"description\": \"Identifies a list of geographic area of the user where the
UE is located.\"}}, \"minItems\": 1, \"description\": \"Identifies the UE's
expected geographical movement. The attribute is only applicable in 5G.\"},
\"periodicTime\": {\"type\": \"integer\"}, \"validityTime\": {\"type\":
\"string\", \"format\": \"date-time\"}, \"trafficProfile\": {\"anyOf\":
[{\"enum\": [\"SINGLE_TRANS_UL\", \"SINGLE_TRANS_DL\",
\"DUAL_TRANS_UL_FIRST\", \"DUAL_TRANS_DL_FIRST\", \"MULTI_TRANS\"], \"type\":
\"string\"}, {\"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\": \"Possible values are - SINGLE_TRANS_UL: Uplink single
packet transmission. - SINGLE_TRANS_DL: Downlink single packet transmission.
- DUAL_TRANS_UL_FIRST: Dual packet transmission, firstly uplink packet
transmission with subsequent downlink packet transmission. -
DUAL_TRANS_DL_FIRST: Dual packet transmission, firstly downlink packet
transmission with subsequent uplink packet transmission.\"}],
\"batteryIndication\": {\"type\": \"object\", \"properties\":
{\"batteryInd\": {\"type\": \"boolean\"}, \"replaceableInd\": {\"type\":
\"boolean\"}, \"rechargeableInd\": {\"type\": \"boolean\"}}},
\"stationaryIndication\": {\"anyOf\": [{\"enum\": [\"STATIONARY\",
\"MOBILE\"], \"type\": \"string\"}, {\"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\": \"Possible values are - STATIONARY:
Identifies the UE is stationary - MOBILE: Identifies the UE is mobile\"},
\"communicationDurationTime\": {\"type\": \"integer\"},
\"scheduledCommunicationTime\": {\"type\": \"object\", \"properties\":
{\"daysOfWeek\": {\"type\": \"array\", \"items\": {\"type\": \"integer\",
\"maximum\": 7, \"minimum\": 1, \"description\": \"integer between and
including 1 and 7 denoting a weekday. 1 shall indicate Monday, and the
subsequent weekdays shall be indicated with the next higher numbers. 7 shall
indicate Sunday.\"}, \"maxItems\": 6, \"minItems\": 1, \"description\":
\"Identifies the day(s) of the week. If absent, it indicates every day of the
week.\"}, \"timeOfDayEnd\": {\"type\": \"string\", \"description\": \"String
with format partial-time or full-time as defined in clause 5.6 of IETF RFC
3339. Examples, 20:15:00, 20:15:00-08:00 (for 8 hours behind UTC).\"},
\"timeOfDayStart\": {\"type\": \"string\", \"description\": \"String with
format partial-time or full-time as defined in clause 5.6 of IETF RFC 3339.
Examples, 20:15:00, 20:15:00-08:00 (for 8 hours behind UTC).\"}},
\"scheduledCommunicationType\": {\"anyOf\": [{\"enum\": [\"DOWNLINK_ONLY\",
\"UPLINK_ONLY\", \"BIDIRECTIONAL\"], \"type\": \"string\"}, {\"type\":
\"string\"}]}]}], \"suggestedPacketNumDLList\": {\"type\": \"object\",

```



```

\"minProperties\": 1, \"additionalProperties\": {\"type\": \"object\",
\"required\": [\"suggestedPacketNumDl\"], \"properties\": {\"validityTime\":
{\"type\": \"string\", \"format\": \"date-time\"}, \"suggestedPacketNumDl\":
{\"type\": \"integer\", \"minimum\": 1}}}, \"sharedDnnConfigurationsId\":
{\"type\": \"string\", \"pattern\": \"^[0-9]{5,6}-.+\"},
\"3gppChargingCharacteristics\": {\"type\": \"string\"}}, \"minItems\": 1},
\"v2xData\": {\"type\": \"object\", \"properties\": {\"ltePc5Ambr\":
{\"type\": \"string\", \"pattern\": \"^\\\\\\\\d+(\\\\\\\\.\\\\\\\\d+)? (bps|Kbps|Mbps|
Gbps|Tbps)$\"}, \"nrUePc5Ambr\": {\"type\": \"string\", \"pattern\": \"^\\\\\\\\d+
(\\\\\\\\.\\\\\\\\d+)? (bps|Kbps|Mbps|Gbps|Tbps)$\"}, \"nrV2xServicesAuth\":
{\"type\": \"object\", \"properties\": {\"vehicleUeAuth\": {\"anyOf\":
[{\"enum\": [\"AUTHORIZED\", \"NOT_AUTHORIZED\"], \"type\": \"string\"},
{\"type\": \"string\"}]}, \"pedestrianUeAuth\": {\"anyOf\": [{\"enum\":
[\"AUTHORIZED\", \"NOT_AUTHORIZED\"], \"type\": \"string\"}, {\"type\":
\"string\"}]}}}, \"lteV2xServicesAuth\": {\"type\": \"object\",
\"properties\": {\"vehicleUeAuth\": {\"anyOf\": [{\"enum\": [\"AUTHORIZED\",
\"NOT_AUTHORIZED\"], \"type\": \"string\"}, {\"type\": \"string\"}]},
\"pedestrianUeAuth\": {\"anyOf\": [{\"enum\": [\"AUTHORIZED\",
\"NOT_AUTHORIZED\"], \"type\": \"string\"}, {\"type\": \"string\"}]}}}}},
\"lcsMoData\": {\"type\": \"object\", \"required\":
[\"allowedServiceClasses\"], \"properties\": {\"allowedServiceClasses\":
{\"type\": \"array\", \"items\": {\"anyOf\": [{\"enum\":
[\"BASIC_SELF_LOCATION\", \"AUTONOMOUS_SELF_LOCATION\",
\"TRANSFER_TO_THIRD_PARTY\"], \"type\": \"string\"}, {\"type\":
\"string\"}]}, \"minItems\": 1}}}, \"traceData\": {\"type\": \"object\",
\"nullable\": true, \"required\": [\"eventList\", \"neTypeList\",
\"traceDepth\", \"traceRef\"], \"properties\": {\"traceRef\": {\"type\":
\"string\", \"pattern\": \"^[0-9]{3}[0-9]{2,3}-[A-Fa-f0-9]{6}$\"},
\"eventList\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]+$\"},
\"neTypeList\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]+$\"},
\"traceDepth\": {\"anyOf\": [{\"enum\": [\"MINIMUM\", \"MEDIUM\",
\"MAXIMUM\", \"MINIMUM_WO_VENDOR_EXTENSION\", \"MEDIUM_WO_VENDOR_EXTENSION\",
\"MAXIMUM_WO_VENDOR_EXTENSION\"], \"type\": \"string\"}, {\"type\":
\"string\"}]}, \"interfaceList\": {\"type\": \"string\", \"pattern\": \"^[A-
Fa-f0-9]+$\"}, \"collectionEntityIpv4Addr\": {\"type\": \"string\",
\"example\": \"198.51.100.1\", \"pattern\": \"^((([0-9]|[1-9][0-9]|1[0-9][0-9]|
2[0-4][0-9]|25[0-5])\\\\\\\\.){3}([0-9]|[1-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|
25[0-5])$\"}, \"collectionEntityIpv6Addr\": {\"type\": \"string\", \"allof\":
[{\"pattern\": \"^((:|0?|([1-9a-f][0-9a-f]{0,3})))(0?|([1-9a-f][0-9a-f]
{0,3}))(:|0?|([1-9a-f][0-9a-f]{0,3}))$\"}, {\"pattern\": \"^((([^\
+:]{7}([^\
+:)+)|((([^\
+:)+)*[^\
+:]+)?::([^\
+:)+)*[^\
+:]+)?))$\"}], \"example\":
\"2001:db8:85a3::8a2e:370:7334\"}}}, \"smfSelData\": {\"type\": \"object\",
\"properties\": {\"supportedFeatures\": {\"type\": \"string\", \"pattern\":
\"^[A-Fa-f0-9]*$\"}, \"sharedSnssaiInfosId\": {\"type\": \"string\",
\"pattern\": \"^[0-9]{5,6}-.+\"}, \"subscribedSnssaiInfos\": {\"type\":
\"object\", \"additionalProperties\": {\"type\": \"object\", \"required\":
[\"dnnInfos\"], \"properties\": {\"dnnInfos\": {\"type\": \"array\",
\"items\": {\"type\": \"object\", \"required\": [\"dnn\"], \"properties\":
{\"dnn\": {\"anyOf\": [{\"type\": \"string\"}, {\"type\": \"string\",
\"pattern\": \"^[*]$\"}]}, \"smfList\": {\"type\": \"array\", \"items\":
{\"type\": \"string\", \"format\": \"uuid\"}, \"minItems\": 1},
\"dnnBarred\": {\"type\": \"boolean\"}, \"iwkEpsInd\": {\"type\":
\"boolean\"}, \"sameSmfInd\": {\"type\": \"boolean\"}, \"invokeNefInd\":
{\"type\": \"boolean\"}, \"lboRoamingAllowed\": {\"type\": \"boolean\"},
\"defaultDnnIndicator\": {\"type\": \"boolean\"}}}, \"minItems\": 1}}}}},
\"smsMngData\": {\"type\": \"object\", \"properties\": {\"traceData\":

```

```

{"type": "object", "nullable": true, "required": ["eventList",
"neTypeList", "traceDepth", "traceRef"], "properties": {"traceRef":
{"type": "string", "pattern": "^[0-9]{3}[0-9]{2,3}-[A-Fa-f0-9]{6}$"},
"eventList": {"type": "string", "pattern": "^[A-Fa-f0-9]+$"},
"neTypeList": {"type": "string", "pattern": "^[A-Fa-f0-9]+$"},
"traceDepth": {"anyOf": [{"enum": ["MINIMUM", "MEDIUM",
"MAXIMUM", "MINIMUM_WO_VENDOR_EXTENSION", "MEDIUM_WO_VENDOR_EXTENSION",
"MAXIMUM_WO_VENDOR_EXTENSION"]}, {"type": "string"}]}, {"type":
"string"}]}, {"interfaceList": {"type": "string", "pattern": "^[A-
Fa-f0-9]+$"}, {"collectionEntityIpv4Addr": {"type": "string",
"example": "198.51.100.1", "pattern": "^(([0-9]|[1-9][0-9]|1[0-9][0-9]|
2[0-4][0-9]|25[0-5])\\.){3}([0-9]|[1-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|
25[0-5])$"}, {"collectionEntityIpv6Addr": {"type": "string", "allOf":
[{"pattern": "^(::|0?|([1-9a-f][0-9a-f]{0,3}))?::([0-9a-f]{0,3})?::
{0,6}(:|0?|([1-9a-f][0-9a-f]{0,3}))?$"}, {"pattern": "^(::|0?|([1-9a-f][0-9a-f]{0,3})?::
{0,6}(:|0?|([1-9a-f][0-9a-f]{0,3}))?$"}, {"pattern": "^(::|0?|([1-9a-f][0-9a-f]{0,3})?::
{0,6}(:|0?|([1-9a-f][0-9a-f]{0,3}))?$"}, {"pattern": "^(::|0?|([1-9a-f][0-9a-f]{0,3})?::
{0,6}(:|0?|([1-9a-f][0-9a-f]{0,3}))?$"}]}, {"example":
"2001:db8:85a3::8a2e:370:7334"}]}, {"moSmsBarringAll": {"type":
"boolean"}, {"moSmsSubscribed": {"type": "boolean"}, {"mtSmsBarringAll": {"type": "boolean"}, {"mtSmsSubscribed": {"type":
"boolean"}, {"supportedFeatures": {"type": "string", "pattern":
"^[A-Fa-f0-9]*$"}, {"moSmsBarringRoaming": {"type": "boolean"}, {"mtSmsBarringRoaming": {"type": "boolean"}, {"sharedSmsMngDataIds":
{"type": "array", "items": {"type": "string", "pattern": "^[0-9]
{5,6}-.+ $"}, {"minItems": 1}}}, {"uecAmfData": {"type": "object",
"properties": {"epsInterworkingInfo": {"type": "object",
"properties": {"epsIwkPgws": {"type": "object", "description": "A
map (list of key-value pairs where Dnn serves as key) of EpsIwkPgws",
"additionalProperties": {"type": "object", "required": ["pgwFqdn",
"smfInstanceId"], "properties": {"pgwFqdn": {"type": "string"},
"smfInstanceId": {"type": "string", "format": "uuid"}}}}}}, {"uecSmfData": {"type": "object", "properties": {"pgwInfo":
{"type": "array", "items": {"type": "object", "required":
["dnn", "pgwFqdn"], "properties": {"dnn": {"type": "string"},
"plmnId": {"type": "object", "required": ["mcc", "mnc"],
"properties": {"mcc": {"type": "string", "pattern": "^[0-9]{3}$"},
"mnc": {"type": "string", "pattern": "^[0-9]{2,3}$"}}, {"epdgInd": {"type": "boolean", "default": false}, {"pgwFqdn":
{"type": "string"}]}, {"minItems": 1}, {"pduSessions": {"type":
"object", "description": "A map (list of key-value pairs where
PduSessionId serves as key) of PduSessions", "additionalProperties":
{"type": "object", "required": ["dnn", "plmnId",
"smfInstanceId"], "properties": {"dnn": {"type": "string"},
"plmnId": {"type": "object", "required": ["mcc", "mnc"],
"properties": {"mcc": {"type": "string", "pattern": "^[0-9]{3}$"},
"mnc": {"type": "string", "pattern": "^[0-9]{2,3}$"}}, {"singleNssai": {"type": "object", "required": ["sst"],
"properties": {"sd": {"type": "string", "pattern": "^[A-Fa-f0-9]
{6}$"}, {"sst": {"type": "integer", "maximum": 255, "minimum":
0}}}, {"smfInstanceId": {"type": "string", "format": "uuid"}]}, {"emergencyInfo": {"type": "object", "oneOf": [{"required":
["pgwFqdn"]}, {"required": ["pgwIpAddress"]}], "properties":
{"epdgInd": {"type": "boolean", "default": false}, {"pgwFqdn":
{"type": "string"}, {"pgwIpAddress": {"type": "object", "oneOf":
[{"required": ["ipv4Addr"]}, {"required": ["ipv6Addr"]}, {"required": ["ipv6Prefix"]}], "properties": {"ipv4Addr": {"type":
"string", "example": "198.51.100.1", "pattern": "^(([0-9]|[1-9][0-9]|

```

```

1[0-9][0-9]|2[0-4][0-9]|25[0-5])\\\\.){3}([0-9]|1[0-9][0-9]|1[0-9][0-9]|2[0-4]
[0-9]|25[0-5])$"}, {"type": "string", "allof":
[{"pattern": "\\^((?:|([1-9a-f][0-9a-f]{0,3})))|((?:|([1-9a-f][0-9a-f]
{0,3})))|{0,6}(:|(|([1-9a-f][0-9a-f]{0,3})))$"}, {"pattern": "\\^(((\\^:|
+):){7}(\\^:|+)|(((\\^:|+)*\\^:|+)?::((\\^:|+)*\\^:|+)?))$"}, {"example":
"2001:db8:85a3::8a2e:370:7334"}, {"type": "string",
"allof": [{"pattern": "\\^((?:|([1-9a-f][0-9a-f]{0,3})))|((?:|([1-9a-f]
[0-9a-f]{0,3})))|{0,6}(:|(|([1-9a-f][0-9a-f]{0,3})))|\\\\\\\\/((([0-9])|([0-9]
{2}))|(1[0-1][0-9])|(12[0-8])))$"}, {"pattern": "\\^(((\\^:|+):){7}(\\^:|+)|
(((\\^:|+)*\\^:|+)?::((\\^:|+)*\\^:|+)?))|\\\\\\\\/\\.+$"}, {"example":
"2001:db8:abcd:12::0/64"}]}, {"type": "string",
"format": "uuid"}]}, {"type": "object",
"properties": {"smsSubscribed": {"type": "boolean"},
"sharedSmsSubsDataId": {"type": "string", "pattern": "\\^[0-9]{5,6}-.+ $
"}]}, {"type": "object", "properties":
{"smsfInfo3GppAccess": {"type": "object", "required": ["plmnId",
"smsfInstanceId"], "properties": {"plmnId": {"type": "object",
"required": ["mcc", "mnc"], "properties": {"mcc": {"type":
"string", "pattern": "\\^\\\\\\\\d{3}$"}, "mnc": {"type": "string",
"pattern": "\\^\\\\\\\\d{2,3}$"}]}, "smsfInstanceId": {"type": "string",
"format": "uuid"}]}, {"type": "object", "required": ["plmnId", "smsfInstanceId"], "properties": {"plmnId":
{"type": "object", "required": ["mcc", "mnc"], "properties":
{"mcc": {"type": "string", "pattern": "\\^\\\\\\\\d{3}$"}, "mnc":
{"type": "string", "pattern": "\\^\\\\\\\\d{2,3}$"}]}, "smsfInstanceId":
{"type": "string", "format": "uuid"}]}]}, {"type": "object", "properties": {"lcsPrivacyData":
{"type": "object", "properties": {"lpi": {"type": "object",
"required": ["locationPrivacyInd"], "properties": {"validTimePeriod":
{"type": "object", "properties": {"endTime": {"type": "string",
"format": "date-time"}, "startTime": {"type": "string", "format":
"date-time"}]}, "locationPrivacyInd": {"anyOf": [{"enum":
["LOCATION_DISALLOWED", "LOCATION_ALLOWED"], "type": "string"},
{"type": "string"}]}]}, "unrelatedClass": {"type": "object",
"required": ["defaultUnrelatedClass"], "properties":
{"defaultUnrelatedClass": {"type": "object", "properties":
{"codeWordInd": {"anyOf": [{"enum": ["CODEWORD_CHECK_IN_UE",
"CODEWORD_CHECK_IN_GMLC"], "type": "string"}, {"type": "string"}]},
"codeWordList": {"type": "array", "items": {"type": "string"},
"minItems": 1}, "validTimePeriod": {"type": "object", "properties":
{"endTime": {"type": "string", "format": "date-time"},
"startTime": {"type": "string", "format": "date-time"}]},
"allowedGeographicArea": {"type": "array", "items": {"anyOf":
[{"allof": [{"type": "object", "required": ["shape"],
"properties": {"shape": {"anyOf": [{"enum": ["POINT",
"POINT_UNCERTAINTY_CIRCLE", "POINT_UNCERTAINTY_ELLIPSE", "POLYGON",
"POINT_ALTITUDE", "POINT_ALTITUDE_UNCERTAINTY", "ELLIPSOID_ARC"],
"type": "string"}, {"type": "string"}]}]}, "discriminator":
{"mapping": {"POINT": "#/components/schemas/Point", "POLYGON": "#/
components/schemas/Polygon", "ELLIPSOID_ARC": "#/components/schemas/
EllipsoidArc", "POINT_ALTITUDE": "#/components/schemas/PointAltitude",
"POINT_UNCERTAINTY_CIRCLE": "#/components/schemas/
PointUncertaintyCircle", "POINT_UNCERTAINTY_ELLIPSE": "#/components/
schemas/PointUncertaintyEllipse", "POINT_ALTITUDE_UNCERTAINTY": "#/
components/schemas/PointAltitudeUncertainty"}, "propertyName":
"shape"}]}, {"type": "object", "required": ["point"],
"properties": {"point": {"type": "object", "required": ["lat",

```

```

{"lon\\": {"type\\": "number\\", "format\\":
\\\"double\\\", \"maximum\\\": 90, \"minimum\\\": -90}, \"lon\\\": {\"type\\\":
\\\"number\\\", \"format\\\": \\\"double\\\", \"maximum\\\": 180, \"minimum\\\":
-180}}}}}}}, {\\\"allof\\\": [{\\\"type\\\": \\\"object\\\", \\\"required\\\": [\\\"shape\\\",
\\\"properties\\\": {\\\"shape\\\": {\\\"anyOf\\\": [{\\\"enum\\\": [\\\"POINT\\\",
\\\"POINT_UNCERTAINTY_CIRCLE\\\", \\\"POINT_UNCERTAINTY_ELLIPSE\\\", \\\"POLYGON\\\",
\\\"POINT_ALTITUDE\\\", \\\"POINT_ALTITUDE_UNCERTAINTY\\\", \\\"ELLIPSOID_ARC\\\",
\\\"type\\\": \\\"string\\\", {\\\"type\\\": \\\"string\\\"}}]}}, \\\"discriminator\\\":
{\\\"mapping\\\": {\\\"POINT\\\": \\\"#/components/schemas/Point\\\", \\\"POLYGON\\\": \\\"#/
components/schemas/Polygon\\\", \\\"ELLIPSOID_ARC\\\": \\\"#/components/schemas/
EllipsoidArc\\\", \\\"POINT_ALTITUDE\\\": \\\"#/components/schemas/PointAltitude\\\",
\\\"POINT_UNCERTAINTY_CIRCLE\\\": \\\"#/components/schemas/
PointUncertaintyCircle\\\", \\\"POINT_UNCERTAINTY_ELLIPSE\\\": \\\"#/components/
schemas/PointUncertaintyEllipse\\\", \\\"POINT_ALTITUDE_UNCERTAINTY\\\": \\\"#/
components/schemas/PointAltitudeUncertainty\\\", \\\"propertyName\\\":
\\\"shape\\\"}}}, {\\\"type\\\": \\\"object\\\", \\\"required\\\": [\\\"point\\\",
\\\"uncertainty\\\", \\\"properties\\\": {\\\"point\\\": {\\\"type\\\": \\\"object\\\",
\\\"required\\\": [\\\"lat\\\", \\\"lon\\\", \\\"properties\\\": {\\\"lat\\\": {\\\"type\\\":
\\\"number\\\", \\\"format\\\": \\\"double\\\", \\\"maximum\\\": 90, \\\"minimum\\\": -90},
\\\"lon\\\": {\\\"type\\\": \\\"number\\\", \\\"format\\\": \\\"double\\\", \\\"maximum\\\": 180,
\\\"minimum\\\": -180}}}, \\\"uncertainty\\\": {\\\"type\\\": \\\"number\\\", \\\"format\\\":
\\\"float\\\", \\\"minimum\\\": 0}}}}}], {\\\"allof\\\": [{\\\"type\\\": \\\"object\\\",
\\\"required\\\": [\\\"shape\\\", \\\"properties\\\": {\\\"shape\\\": {\\\"anyOf\\\":
[{\\\"enum\\\": [\\\"POINT\\\", \\\"POINT_UNCERTAINTY_CIRCLE\\\",
\\\"POINT_UNCERTAINTY_ELLIPSE\\\", \\\"POLYGON\\\", \\\"POINT_ALTITUDE\\\",
\\\"POINT_ALTITUDE_UNCERTAINTY\\\", \\\"ELLIPSOID_ARC\\\", \\\"type\\\": \\\"string\\\",
{\\\"type\\\": \\\"string\\\"}}]}}, \\\"discriminator\\\": {\\\"mapping\\\": {\\\"POINT\\\": \\\"#/
components/schemas/Point\\\", \\\"POLYGON\\\": \\\"#/components/schemas/Polygon\\\",
\\\"ELLIPSOID_ARC\\\": \\\"#/components/schemas/EllipsoidArc\\\", \\\"POINT_ALTITUDE\\\":
\\\"#/components/schemas/PointAltitude\\\", \\\"POINT_UNCERTAINTY_CIRCLE\\\": \\\"#/
components/schemas/PointUncertaintyCircle\\\", \\\"POINT_UNCERTAINTY_ELLIPSE\\\":
\\\"#/components/schemas/PointUncertaintyEllipse\\\",
\\\"POINT_ALTITUDE_UNCERTAINTY\\\": \\\"#/components/schemas/
PointAltitudeUncertainty\\\", \\\"propertyName\\\": \\\"shape\\\"}}}, {\\\"type\\\":
\\\"object\\\", \\\"required\\\": [\\\"confidence\\\", \\\"point\\\",
\\\"uncertaintyEllipse\\\", \\\"properties\\\": {\\\"point\\\": {\\\"type\\\": \\\"object\\\",
\\\"required\\\": [\\\"lat\\\", \\\"lon\\\", \\\"properties\\\": {\\\"lat\\\": {\\\"type\\\":
\\\"number\\\", \\\"format\\\": \\\"double\\\", \\\"maximum\\\": 90, \\\"minimum\\\": -90},
\\\"lon\\\": {\\\"type\\\": \\\"number\\\", \\\"format\\\": \\\"double\\\", \\\"maximum\\\": 180,
\\\"minimum\\\": -180}}}, \\\"confidence\\\": {\\\"type\\\": \\\"integer\\\", \\\"maximum\\\":
100, \\\"minimum\\\": 0}, \\\"uncertaintyEllipse\\\": {\\\"type\\\": \\\"object\\\",
\\\"required\\\": [\\\"orientationMajor\\\", \\\"semiMajor\\\", \\\"semiMinor\\\",
\\\"properties\\\": {\\\"semiMajor\\\": {\\\"type\\\": \\\"number\\\", \\\"format\\\": \\\"float\\\",
\\\"minimum\\\": 0}, \\\"semiMinor\\\": {\\\"type\\\": \\\"number\\\", \\\"format\\\": \\\"float\\\",
\\\"minimum\\\": 0}, \\\"orientationMajor\\\": {\\\"type\\\": \\\"integer\\\", \\\"maximum\\\":
180, \\\"minimum\\\": 0}}}}}}}], {\\\"allof\\\": [{\\\"type\\\": \\\"object\\\", \\\"required\\\":
[\\\"shape\\\", \\\"properties\\\": {\\\"shape\\\": {\\\"anyOf\\\": [{\\\"enum\\\": [\\\"POINT\\\",
\\\"POINT_UNCERTAINTY_CIRCLE\\\", \\\"POINT_UNCERTAINTY_ELLIPSE\\\", \\\"POLYGON\\\",
\\\"POINT_ALTITUDE\\\", \\\"POINT_ALTITUDE_UNCERTAINTY\\\", \\\"ELLIPSOID_ARC\\\",
\\\"type\\\": \\\"string\\\", {\\\"type\\\": \\\"string\\\"}}]}}, \\\"discriminator\\\":
{\\\"mapping\\\": {\\\"POINT\\\": \\\"#/components/schemas/Point\\\", \\\"POLYGON\\\": \\\"#/
components/schemas/Polygon\\\", \\\"ELLIPSOID_ARC\\\": \\\"#/components/schemas/
EllipsoidArc\\\", \\\"POINT_ALTITUDE\\\": \\\"#/components/schemas/PointAltitude\\\",
\\\"POINT_UNCERTAINTY_CIRCLE\\\": \\\"#/components/schemas/
PointUncertaintyCircle\\\", \\\"POINT_UNCERTAINTY_ELLIPSE\\\": \\\"#/components/
schemas/PointUncertaintyEllipse\\\", \\\"POINT_ALTITUDE_UNCERTAINTY\\\": \\\"#/

```

```

components/schemas/PointAltitudeUncertainty\"}, \"propertyName\":
\"shape\"}}, {\"type\": \"object\", \"required\": [\"pointList\"],
\"properties\": {\"pointList\": {\"type\": \"array\", \"items\": {\"type\":
\"object\", \"required\": [\"lat\", \"lon\"], \"properties\": {\"lat\":
{\"type\": \"number\", \"format\": \"double\", \"maximum\": 90, \"minimum\":
-90}, \"lon\": {\"type\": \"number\", \"format\": \"double\", \"maximum\":
180, \"minimum\": -180}}}, \"maxItems\": 15, \"minItems\": 3}}}},
{\"allOf\": [{\"type\": \"object\", \"required\": [\"shape\"],
\"properties\": {\"shape\": {\"anyOf\": [{\"enum\": [\"POINT\",
\"POINT_UNCERTAINTY_CIRCLE\", \"POINT_UNCERTAINTY_ELLIPSE\", \"POLYGON\",
\"POINT_ALTITUDE\", \"POINT_ALTITUDE_UNCERTAINTY\", \"ELLIPSOID_ARC\"],
\"type\": \"string\"}}, {\"type\": \"string\"}}]}, \"discriminator\":
{\"mapping\": {\"POINT\": \"#/components/schemas/Point\", \"POLYGON\": \"#/
components/schemas/Polygon\", \"ELLIPSOID_ARC\": \"#/components/schemas/
EllipsoidArc\", \"POINT_ALTITUDE\": \"#/components/schemas/PointAltitude\",
\"POINT_UNCERTAINTY_CIRCLE\": \"#/components/schemas/
PointUncertaintyCircle\", \"POINT_UNCERTAINTY_ELLIPSE\": \"#/components/
schemas/PointUncertaintyEllipse\", \"POINT_ALTITUDE_UNCERTAINTY\": \"#/
components/schemas/PointAltitudeUncertainty\"}, \"propertyName\":
\"shape\"}}, {\"type\": \"object\", \"required\": [\"altitude\", \"point\"],
\"properties\": {\"point\": {\"type\": \"object\", \"required\": [\"lat\",
\"lon\"], \"properties\": {\"lat\": {\"type\": \"number\", \"format\":
\"double\", \"maximum\": 90, \"minimum\": -90}, \"lon\": {\"type\":
\"number\", \"format\": \"double\", \"maximum\": 180, \"minimum\": -180}}},
\"altitude\": {\"type\": \"number\", \"format\": \"double\", \"maximum\":
32767, \"minimum\": -32767}}}}, {\"allOf\": [{\"type\": \"object\",
\"required\": [\"shape\"], \"properties\": {\"shape\": {\"anyOf\":
[{\"enum\": [\"POINT\", \"POINT_UNCERTAINTY_CIRCLE\",
\"POINT_UNCERTAINTY_ELLIPSE\", \"POLYGON\", \"POINT_ALTITUDE\",
\"POINT_ALTITUDE_UNCERTAINTY\", \"ELLIPSOID_ARC\"], \"type\": \"string\"},
{\"type\": \"string\"}}]}, \"discriminator\": {\"mapping\": {\"POINT\": \"#/
components/schemas/Point\", \"POLYGON\": \"#/components/schemas/Polygon\",
\"ELLIPSOID_ARC\": \"#/components/schemas/EllipsoidArc\", \"POINT_ALTITUDE\":
\"#/components/schemas/PointAltitude\", \"POINT_UNCERTAINTY_CIRCLE\": \"#/
components/schemas/PointUncertaintyCircle\", \"POINT_UNCERTAINTY_ELLIPSE\":
\"#/components/schemas/PointUncertaintyEllipse\",
\"POINT_ALTITUDE_UNCERTAINTY\": \"#/components/schemas/
PointAltitudeUncertainty\"}, \"propertyName\": \"shape\"}}, {\"type\":
\"object\", \"required\": [\"altitude\", \"confidence\", \"point\",
\"uncertaintyAltitude\", \"uncertaintyEllipse\"], \"properties\": {\"point\":
{\"type\": \"object\", \"required\": [\"lat\", \"lon\"], \"properties\":
{\"lat\": {\"type\": \"number\", \"format\": \"double\", \"maximum\": 90,
\"minimum\": -90}, \"lon\": {\"type\": \"number\", \"format\": \"double\",
\"maximum\": 180, \"minimum\": -180}}}, \"altitude\": {\"type\": \"number\",
\"format\": \"double\", \"maximum\": 32767, \"minimum\": -32767},
\"confidence\": {\"type\": \"integer\", \"maximum\": 100, \"minimum\": 0},
\"uncertaintyEllipse\": {\"type\": \"object\", \"required\":
[\"orientationMajor\", \"semiMajor\", \"semiMinor\"], \"properties\":
{\"semiMajor\": {\"type\": \"number\", \"format\": \"float\", \"minimum\":
0}, \"semiMinor\": {\"type\": \"number\", \"format\": \"float\", \"minimum\":
0}, \"orientationMajor\": {\"type\": \"integer\", \"maximum\": 180,
\"minimum\": 0}}}, \"uncertaintyAltitude\": {\"type\": \"number\",
\"format\": \"float\", \"minimum\": 0}}}}, {\"allOf\": [{\"type\":
\"object\", \"required\": [\"shape\"], \"properties\": {\"shape\":
{\"anyOf\": [{\"enum\": [\"POINT\", \"POINT_UNCERTAINTY_CIRCLE\",
\"POINT_UNCERTAINTY_ELLIPSE\", \"POLYGON\", \"POINT_ALTITUDE\",

```

```

\"POINT_ALTITUDE_UNCERTAINTY\", \"ELLIPSOID_ARC\"], \"type\": \"string\"},
{\"type\": \"string\"}}}, \"discriminator\": {\"mapping\": {\"POINT\": \"#/components/schemas/Point\", \"POLYGON\": \"#/components/schemas/Polygon\", \"ELLIPSOID_ARC\": \"#/components/schemas/EllipsoidArc\", \"POINT_ALTITUDE\": \"#/components/schemas/PointAltitude\", \"POINT_UNCERTAINTY_CIRCLE\": \"#/components/schemas/PointUncertaintyCircle\", \"POINT_UNCERTAINTY_ELLIPSE\": \"#/components/schemas/PointUncertaintyEllipse\", \"POINT_ALTITUDE_UNCERTAINTY\": \"#/components/schemas/PointAltitudeUncertainty\"}, \"propertyName\": \"shape\"}}, {\"type\": \"object\", \"required\": [\"confidence\", \"includedAngle\", \"innerRadius\", \"offsetAngle\", \"point\", \"uncertaintyRadius\"], \"properties\": {\"point\": {\"type\": \"object\", \"required\": [\"lat\", \"lon\"], \"properties\": {\"lat\": {\"type\": \"number\", \"format\": \"double\", \"maximum\": 90, \"minimum\": -90}, \"lon\": {\"type\": \"number\", \"format\": \"double\", \"maximum\": 180, \"minimum\": -180}}}, \"confidence\": {\"type\": \"integer\", \"maximum\": 100, \"minimum\": 0}, \"innerRadius\": {\"type\": \"integer\", \"format\": \"int32\", \"maximum\": 327675, \"minimum\": 0}, \"offsetAngle\": {\"type\": \"integer\", \"maximum\": 360, \"minimum\": 0}, \"includedAngle\": {\"type\": \"integer\", \"maximum\": 360, \"minimum\": 0}, \"uncertaintyRadius\": {\"type\": \"number\", \"format\": \"float\", \"minimum\": 0}}}}}, {\"minItems\": 1, \"privacyCheckRelatedAction\": {\"anyOf\": [{\"enum\": [\"LOCATION_NOT_ALLOWED\", \"LOCATION_ALLOWED_WITH_NOTIFICATION\", \"LOCATION_ALLOWED_WITHOUT_NOTIFICATION\", \"LOCATION_ALLOWED_WITHOUT_RESPONSE\", \"LOCATION_RESTRICTED_WITHOUT_RESPONSE\"], \"type\": \"string\"}, {\"type\": \"string\"}]}}, {\"externalUnrelatedClass\": {\"properties\": {\"afExternals\": {\"type\": \"array\", \"items\": {\"type\": \"object\", \"properties\": {\"afId\": {\"type\": \"string\"}, \"validTimePeriod\": {\"type\": \"object\", \"properties\": {\"endTime\": {\"type\": \"string\", \"format\": \"date-time\"}, \"startTime\": {\"type\": \"string\", \"format\": \"date-time\"}}}, \"allowedGeographicArea\": {\"type\": \"array\", \"items\": {\"anyOf\": [{\"allOf\": [{\"type\": \"object\", \"required\": [\"shape\"], \"properties\": {\"shape\": {\"anyOf\": [{\"enum\": [\"POINT\", \"POINT_UNCERTAINTY_CIRCLE\", \"POINT_UNCERTAINTY_ELLIPSE\", \"POLYGON\", \"POINT_ALTITUDE\", \"POINT_ALTITUDE_UNCERTAINTY\", \"ELLIPSOID_ARC\"], \"type\": \"string\"}, {\"type\": \"string\"}]}}, \"discriminator\": {\"mapping\": {\"POINT\": \"#/components/schemas/Point\", \"POLYGON\": \"#/components/schemas/Polygon\", \"ELLIPSOID_ARC\": \"#/components/schemas/EllipsoidArc\", \"POINT_ALTITUDE\": \"#/components/schemas/PointAltitude\", \"POINT_UNCERTAINTY_CIRCLE\": \"#/components/schemas/PointUncertaintyCircle\", \"POINT_UNCERTAINTY_ELLIPSE\": \"#/components/schemas/PointUncertaintyEllipse\", \"POINT_ALTITUDE_UNCERTAINTY\": \"#/components/schemas/PointAltitudeUncertainty\"}, \"propertyName\": \"shape\"}}, {\"type\": \"object\", \"required\": [\"point\"], \"properties\": {\"point\": {\"type\": \"object\", \"required\": [\"lat\", \"lon\"], \"properties\": {\"lat\": {\"type\": \"number\", \"format\": \"double\", \"maximum\": 90, \"minimum\": -90}, \"lon\": {\"type\": \"number\", \"format\": \"double\", \"maximum\": 180, \"minimum\": -180}}}}}, {\"allOf\": [{\"type\": \"object\", \"required\": [\"shape\"], \"properties\": {\"shape\": {\"anyOf\": [{\"enum\": [\"POINT\", \"POINT_UNCERTAINTY_CIRCLE\", \"POINT_UNCERTAINTY_ELLIPSE\", \"POLYGON\", \"POINT_ALTITUDE\", \"POINT_ALTITUDE_UNCERTAINTY\", \"ELLIPSOID_ARC\"], \"type\": \"string\"}, {\"type\": \"string\"}]}}, \"discriminator\": {\"mapping\": {\"POINT\": \"#/components/schemas/Point\", \"POLYGON\": \"#/components/schemas/Polygon\", \"ELLIPSOID_ARC\": \"#/components/schemas/

```

```

EllipsoidArc\", \"POINT_ALTITUDE\": \"#/components/schemas/PointAltitude\",
\"POINT_UNCERTAINTY_CIRCLE\": \"#/components/schemas/
PointUncertaintyCircle\", \"POINT_UNCERTAINTY_ELLIPSE\": \"#/components/
schemas/PointUncertaintyEllipse\", \"POINT_ALTITUDE_UNCERTAINTY\": \"#/
components/schemas/PointAltitudeUncertainty\"}, \"propertyName\":
\"shape\"}}, {\"type\": \"object\", \"required\": [\"point\",
\"uncertainty\"], \"properties\": {\"point\": {\"type\": \"object\",
\"required\": [\"lat\", \"lon\"], \"properties\": {\"lat\": {\"type\":
\"number\", \"format\": \"double\", \"maximum\": 90, \"minimum\": -90},
\"lon\": {\"type\": \"number\", \"format\": \"double\", \"maximum\": 180,
\"minimum\": -180}}}, \"uncertainty\": {\"type\": \"number\", \"format\":
\"float\", \"minimum\": 0}}}}, {\"allOf\": [{\"type\": \"object\",
\"required\": [\"shape\"], \"properties\": {\"shape\": {\"anyOf\":
[{\"enum\": [\"POINT\", \"POINT_UNCERTAINTY_CIRCLE\",
\"POINT_UNCERTAINTY_ELLIPSE\", \"POLYGON\", \"POINT_ALTITUDE\",
\"POINT_ALTITUDE_UNCERTAINTY\", \"ELLIPSOID_ARC\"], \"type\": \"string\"},
{\"type\": \"string\"}]}}, \"discriminator\": {\"mapping\": {\"POINT\": \"#/
components/schemas/Point\", \"POLYGON\": \"#/components/schemas/Polygon\",
\"ELLIPSOID_ARC\": \"#/components/schemas/EllipsoidArc\", \"POINT_ALTITUDE\":
\"#/components/schemas/PointAltitude\", \"POINT_UNCERTAINTY_CIRCLE\": \"#/
components/schemas/PointUncertaintyCircle\", \"POINT_UNCERTAINTY_ELLIPSE\":
\"#/components/schemas/PointUncertaintyEllipse\",
\"POINT_ALTITUDE_UNCERTAINTY\": \"#/components/schemas/
PointAltitudeUncertainty\"}, \"propertyName\": \"shape\"}}, {\"type\":
\"object\", \"required\": [\"confidence\", \"point\",
\"uncertaintyEllipse\"], \"properties\": {\"point\": {\"type\": \"object\",
\"required\": [\"lat\", \"lon\"], \"properties\": {\"lat\": {\"type\":
\"number\", \"format\": \"double\", \"maximum\": 90, \"minimum\": -90},
\"lon\": {\"type\": \"number\", \"format\": \"double\", \"maximum\": 180,
\"minimum\": -180}}}, \"confidence\": {\"type\": \"integer\", \"maximum\":
100, \"minimum\": 0}, \"uncertaintyEllipse\": {\"type\": \"object\",
\"required\": [\"orientationMajor\", \"semiMajor\", \"semiMinor\"],
\"properties\": {\"semiMajor\": {\"type\": \"number\", \"format\": \"float\",
\"minimum\": 0}, \"semiMinor\": {\"type\": \"number\", \"format\": \"float\",
\"minimum\": 0}, \"orientationMajor\": {\"type\": \"integer\", \"maximum\":
180, \"minimum\": 0}}}}}}, {\"allOf\": [{\"type\": \"object\", \"required\":
[\"shape\"], \"properties\": {\"shape\": {\"anyOf\": [{\"enum\": [\"POINT\",
\"POINT_UNCERTAINTY_CIRCLE\", \"POINT_UNCERTAINTY_ELLIPSE\", \"POLYGON\",
\"POINT_ALTITUDE\", \"POINT_ALTITUDE_UNCERTAINTY\", \"ELLIPSOID_ARC\"],
\"type\": \"string\"}, {\"type\": \"string\"}]}}, \"discriminator\":
{\"mapping\": {\"POINT\": \"#/components/schemas/Point\", \"POLYGON\": \"#/
components/schemas/Polygon\", \"ELLIPSOID_ARC\": \"#/components/schemas/
EllipsoidArc\", \"POINT_ALTITUDE\": \"#/components/schemas/PointAltitude\",
\"POINT_UNCERTAINTY_CIRCLE\": \"#/components/schemas/
PointUncertaintyCircle\", \"POINT_UNCERTAINTY_ELLIPSE\": \"#/components/
schemas/PointUncertaintyEllipse\", \"POINT_ALTITUDE_UNCERTAINTY\": \"#/
components/schemas/PointAltitudeUncertainty\"}, \"propertyName\":
\"shape\"}}, {\"type\": \"object\", \"required\": [\"pointList\"],
\"properties\": {\"pointList\": {\"type\": \"array\", \"items\": {\"type\":
\"object\", \"required\": [\"lat\", \"lon\"], \"properties\": {\"lat\":
{\"type\": \"number\", \"format\": \"double\", \"maximum\": 90, \"minimum\":
-90}, \"lon\": {\"type\": \"number\", \"format\": \"double\", \"maximum\":
180, \"minimum\": -180}}}, \"maxItems\": 15, \"minItems\": 3}}}},
{\"allOf\": [{\"type\": \"object\", \"required\": [\"shape\"],
\"properties\": {\"shape\": {\"anyOf\": [{\"enum\": [\"POINT\",
\"POINT_UNCERTAINTY_CIRCLE\", \"POINT_UNCERTAINTY_ELLIPSE\", \"POLYGON\",

```



```

\"POINT_ALTITUDE\", \"POINT_ALTITUDE_UNCERTAINTY\", \"ELLIPSOID_ARC\"],
\"type\": \"string\"}, {\"type\": \"string\"}}}, \"discriminator\":
{\"mapping\": {\"POINT\": \"#/components/schemas/Point\", \"POLYGON\": \"#/
components/schemas/Polygon\", \"ELLIPSOID_ARC\": \"#/components/schemas/
EllipsoidArc\", \"POINT_ALTITUDE\": \"#/components/schemas/PointAltitude\",
\"POINT_UNCERTAINTY_CIRCLE\": \"#/components/schemas/
PointUncertaintyCircle\", \"POINT_UNCERTAINTY_ELLIPSE\": \"#/components/
schemas/PointUncertaintyEllipse\", \"POINT_ALTITUDE_UNCERTAINTY\": \"#/
components/schemas/PointAltitudeUncertainty\"}, \"propertyName\":
\"shape\"}}, {\"type\": \"object\", \"required\": [\"altitude\", \"point\"],
\"properties\": {\"point\": {\"type\": \"object\", \"required\": [\"lat\",
\"lon\"], \"properties\": {\"lat\": {\"type\": \"number\", \"format\":
\"double\", \"maximum\": 90, \"minimum\": -90}, \"lon\": {\"type\":
\"number\", \"format\": \"double\", \"maximum\": 180, \"minimum\": -180}}},
\"altitude\": {\"type\": \"number\", \"format\": \"double\", \"maximum\":
32767, \"minimum\": -32767}}}}, {\"allOf\": [{\"type\": \"object\",
\"required\": [\"shape\"], \"properties\": {\"shape\": {\"anyOf\":
[{\"enum\": [\"POINT\", \"POINT_UNCERTAINTY_CIRCLE\",
\"POINT_UNCERTAINTY_ELLIPSE\", \"POLYGON\", \"POINT_ALTITUDE\",
\"POINT_ALTITUDE_UNCERTAINTY\", \"ELLIPSOID_ARC\"], \"type\": \"string\"},
{\"type\": \"string\"}}]}, \"discriminator\": {\"mapping\": {\"POINT\": \"#/
components/schemas/Point\", \"POLYGON\": \"#/components/schemas/Polygon\",
\"ELLIPSOID_ARC\": \"#/components/schemas/EllipsoidArc\", \"POINT_ALTITUDE\":
\"#/components/schemas/PointAltitude\", \"POINT_UNCERTAINTY_CIRCLE\": \"#/
components/schemas/PointUncertaintyCircle\", \"POINT_UNCERTAINTY_ELLIPSE\":
\"#/components/schemas/PointUncertaintyEllipse\",
\"POINT_ALTITUDE_UNCERTAINTY\": \"#/components/schemas/
PointAltitudeUncertainty\"}, \"propertyName\": \"shape\"}}, {\"type\":
\"object\", \"required\": [\"altitude\", \"confidence\", \"point\",
\"uncertaintyAltitude\", \"uncertaintyEllipse\"], \"properties\": {\"point\":
{\"type\": \"object\", \"required\": [\"lat\", \"lon\"], \"properties\":
{\"lat\": {\"type\": \"number\", \"format\": \"double\", \"maximum\": 90,
\"minimum\": -90}, \"lon\": {\"type\": \"number\", \"format\": \"double\",
\"maximum\": 180, \"minimum\": -180}}}, \"altitude\": {\"type\": \"number\",
\"format\": \"double\", \"maximum\": 32767, \"minimum\": -32767},
\"confidence\": {\"type\": \"integer\", \"maximum\": 100, \"minimum\": 0},
\"uncertaintyEllipse\": {\"type\": \"object\", \"required\":
[\"orientationMajor\", \"semiMajor\", \"semiMinor\"], \"properties\":
{\"semiMajor\": {\"type\": \"number\", \"format\": \"float\", \"minimum\":
0}, \"semiMinor\": {\"type\": \"number\", \"format\": \"float\", \"minimum\":
0}, \"orientationMajor\": {\"type\": \"integer\", \"maximum\": 180,
\"minimum\": 0}}}, \"uncertaintyAltitude\": {\"type\": \"number\",
\"format\": \"float\", \"minimum\": 0}}}}, {\"allOf\": [{\"type\":
\"object\", \"required\": [\"shape\"], \"properties\": {\"shape\":
{\"anyOf\": [{\"enum\": [\"POINT\", \"POINT_UNCERTAINTY_CIRCLE\",
\"POINT_UNCERTAINTY_ELLIPSE\", \"POLYGON\", \"POINT_ALTITUDE\",
\"POINT_ALTITUDE_UNCERTAINTY\", \"ELLIPSOID_ARC\"], \"type\": \"string\"},
{\"type\": \"string\"}}]}, \"discriminator\": {\"mapping\": {\"POINT\": \"#/
components/schemas/Point\", \"POLYGON\": \"#/components/schemas/Polygon\",
\"ELLIPSOID_ARC\": \"#/components/schemas/EllipsoidArc\", \"POINT_ALTITUDE\":
\"#/components/schemas/PointAltitude\", \"POINT_UNCERTAINTY_CIRCLE\": \"#/
components/schemas/PointUncertaintyCircle\", \"POINT_UNCERTAINTY_ELLIPSE\":
\"#/components/schemas/PointUncertaintyEllipse\",
\"POINT_ALTITUDE_UNCERTAINTY\": \"#/components/schemas/
PointAltitudeUncertainty\"}, \"propertyName\": \"shape\"}}, {\"type\":
\"object\", \"required\": [\"confidence\", \"includedAngle\",

```



```

    \"innerRadius\", \"offsetAngle\", \"point\", \"uncertaintyRadius\"],
    \"properties\": {\"point\": {\"type\": \"object\", \"required\": [\"lat\",
    \"lon\"], \"properties\": {\"lat\": {\"type\": \"number\", \"format\":
    \"double\", \"maximum\": 90, \"minimum\": -90}, \"lon\": {\"type\":
    \"number\", \"format\": \"double\", \"maximum\": 180, \"minimum\": -180}}},
    \"confidence\": {\"type\": \"integer\", \"maximum\": 100, \"minimum\": 0},
    \"innerRadius\": {\"type\": \"integer\", \"format\": \"int32\", \"maximum\":
    327675, \"minimum\": 0}, \"offsetAngle\": {\"type\": \"integer\",
    \"maximum\": 360, \"minimum\": 0}, \"includedAngle\": {\"type\": \"integer\",
    \"maximum\": 360, \"minimum\": 0}, \"uncertaintyRadius\": {\"type\":
    \"number\", \"format\": \"float\", \"minimum\": 0}}}}}], \"minItems\": 1},
    \"privacyCheckRelatedAction\": {\"anyOf\": [{\"enum\":
    [\"LOCATION_NOT_ALLOWED\", \"LOCATION_ALLOWED_WITH_NOTIFICATION\",
    \"LOCATION_ALLOWED_WITHOUT_NOTIFICATION\",
    \"LOCATION_ALLOWED_WITHOUT_RESPONSE\",
    \"LOCATION_RESTRICTED_WITHOUT_RESPONSE\"], \"type\": \"string\"}, {\"type\":
    \"string\"}]}], \"minItems\": 1}, \"lcsClientExternals\": {\"type\":
    \"array\", \"items\": {\"type\": \"object\", \"properties\":
    {\"validTimePeriod\": {\"type\": \"object\", \"properties\": {\"endTime\":
    {\"type\": \"string\", \"format\": \"date-time\"}, \"startTime\": {\"type\":
    \"string\", \"format\": \"date-time\"}}}, \"allowedGeographicArea\":
    {\"type\": \"array\", \"items\": {\"anyOf\": [{\"allOf\": [{\"type\":
    \"object\", \"required\": [\"shape\"], \"properties\": {\"shape\":
    {\"anyOf\": [{\"enum\": [\"POINT\", \"POINT_UNCERTAINTY_CIRCLE\",
    \"POINT_UNCERTAINTY_ELLIPSE\", \"POLYGON\", \"POINT_ALTITUDE\",
    \"POINT_ALTITUDE_UNCERTAINTY\", \"ELLIPSOID_ARC\"], \"type\": \"string\"},
    {\"type\": \"string\"}]}], \"discriminator\": {\"mapping\": {\"POINT\": \"#/
    components/schemas/Point\", \"POLYGON\": \"#/components/schemas/Polygon\",
    \"ELLIPSOID_ARC\": \"#/components/schemas/EllipsoidArc\", \"POINT_ALTITUDE\":
    \"#/components/schemas/PointAltitude\", \"POINT_UNCERTAINTY_CIRCLE\": \"#/
    components/schemas/PointUncertaintyCircle\", \"POINT_UNCERTAINTY_ELLIPSE\":
    \"#/components/schemas/PointUncertaintyEllipse\",
    \"POINT_ALTITUDE_UNCERTAINTY\": \"#/components/schemas/
    PointAltitudeUncertainty\"}, \"propertyName\": \"shape\"}}, {\"type\":
    \"object\", \"required\": [\"point\"], \"properties\": {\"point\": {\"type\":
    \"object\", \"required\": [\"lat\", \"lon\"], \"properties\": {\"lat\":
    {\"type\": \"number\", \"format\": \"double\", \"maximum\": 90, \"minimum\":
    -90}, \"lon\": {\"type\": \"number\", \"format\": \"double\", \"maximum\":
    180, \"minimum\": -180}}}}}], {\"allOf\": [{\"type\": \"object\",
    \"required\": [\"shape\"], \"properties\": {\"shape\": {\"anyOf\":
    [{\"enum\": [\"POINT\", \"POINT_UNCERTAINTY_CIRCLE\",
    \"POINT_UNCERTAINTY_ELLIPSE\", \"POLYGON\", \"POINT_ALTITUDE\",
    \"POINT_ALTITUDE_UNCERTAINTY\", \"ELLIPSOID_ARC\"], \"type\": \"string\"},
    {\"type\": \"string\"}]}], \"discriminator\": {\"mapping\": {\"POINT\": \"#/
    components/schemas/Point\", \"POLYGON\": \"#/components/schemas/Polygon\",
    \"ELLIPSOID_ARC\": \"#/components/schemas/EllipsoidArc\", \"POINT_ALTITUDE\":
    \"#/components/schemas/PointAltitude\", \"POINT_UNCERTAINTY_CIRCLE\": \"#/
    components/schemas/PointUncertaintyCircle\", \"POINT_UNCERTAINTY_ELLIPSE\":
    \"#/components/schemas/PointUncertaintyEllipse\",
    \"POINT_ALTITUDE_UNCERTAINTY\": \"#/components/schemas/
    PointAltitudeUncertainty\"}, \"propertyName\": \"shape\"}}, {\"type\":
    \"object\", \"required\": [\"point\", \"uncertainty\"], \"properties\":
    {\"point\": {\"type\": \"object\", \"required\": [\"lat\", \"lon\"],
    \"properties\": {\"lat\": {\"type\": \"number\", \"format\": \"double\",
    \"maximum\": 90, \"minimum\": -90}, \"lon\": {\"type\": \"number\",
    \"format\": \"double\", \"maximum\": 180, \"minimum\": -180}}},

```

```

\"uncertainty\": {\"type\": \"number\", \"format\": \"float\", \"minimum\":
0}}}}, {\"allof\": [{\"type\": \"object\", \"required\": [\"shape\"],
\"properties\": {\"shape\": {\"anyOf\": [{\"enum\": [\"POINT\",
\"POINT_UNCERTAINTY_CIRCLE\", \"POINT_UNCERTAINTY_ELLIPSE\", \"POLYGON\",
\"POINT_ALTITUDE\", \"POINT_ALTITUDE_UNCERTAINTY\", \"ELLIPSOID_ARC\"],
\"type\": \"string\"}, {\"type\": \"string\"}]}}}, \"discriminator\":
{\"mapping\": {\"POINT\": \"#/components/schemas/Point\", \"POLYGON\": \"#/
components/schemas/Polygon\", \"ELLIPSOID_ARC\": \"#/components/schemas/
EllipsoidArc\", \"POINT_ALTITUDE\": \"#/components/schemas/PointAltitude\",
\"POINT_UNCERTAINTY_CIRCLE\": \"#/components/schemas/
PointUncertaintyCircle\", \"POINT_UNCERTAINTY_ELLIPSE\": \"#/components/
schemas/PointUncertaintyEllipse\", \"POINT_ALTITUDE_UNCERTAINTY\": \"#/
components/schemas/PointAltitudeUncertainty\"}, \"propertyName\":
\"shape\"}}, {\"type\": \"object\", \"required\": [\"confidence\", \"point\",
\"uncertaintyEllipse\"], \"properties\": {\"point\": {\"type\": \"object\",
\"required\": [\"lat\", \"lon\"], \"properties\": {\"lat\": {\"type\":
\"number\", \"format\": \"double\", \"maximum\": 90, \"minimum\": -90},
\"lon\": {\"type\": \"number\", \"format\": \"double\", \"maximum\": 180,
\"minimum\": -180}}}}, \"confidence\": {\"type\": \"integer\", \"maximum\":
100, \"minimum\": 0}, \"uncertaintyEllipse\": {\"type\": \"object\",
\"required\": [\"orientationMajor\", \"semiMajor\", \"semiMinor\"],
\"properties\": {\"semiMajor\": {\"type\": \"number\", \"format\": \"float\",
\"minimum\": 0}, \"semiMinor\": {\"type\": \"number\", \"format\": \"float\",
\"minimum\": 0}, \"orientationMajor\": {\"type\": \"integer\", \"maximum\":
180, \"minimum\": 0}}}}}}, {\"allof\": [{\"type\": \"object\", \"required\":
[\"shape\"], \"properties\": {\"shape\": {\"anyOf\": [{\"enum\": [\"POINT\",
\"POINT_UNCERTAINTY_CIRCLE\", \"POINT_UNCERTAINTY_ELLIPSE\", \"POLYGON\",
\"POINT_ALTITUDE\", \"POINT_ALTITUDE_UNCERTAINTY\", \"ELLIPSOID_ARC\"],
\"type\": \"string\"}, {\"type\": \"string\"}]}}}, \"discriminator\":
{\"mapping\": {\"POINT\": \"#/components/schemas/Point\", \"POLYGON\": \"#/
components/schemas/Polygon\", \"ELLIPSOID_ARC\": \"#/components/schemas/
EllipsoidArc\", \"POINT_ALTITUDE\": \"#/components/schemas/PointAltitude\",
\"POINT_UNCERTAINTY_CIRCLE\": \"#/components/schemas/
PointUncertaintyCircle\", \"POINT_UNCERTAINTY_ELLIPSE\": \"#/components/
schemas/PointUncertaintyEllipse\", \"POINT_ALTITUDE_UNCERTAINTY\": \"#/
components/schemas/PointAltitudeUncertainty\"}, \"propertyName\":
\"shape\"}}, {\"type\": \"object\", \"required\": [\"pointList\"],
\"properties\": {\"pointList\": {\"type\": \"array\", \"items\": {\"type\":
\"object\", \"required\": [\"lat\", \"lon\"], \"properties\": {\"lat\":
{\"type\": \"number\", \"format\": \"double\", \"maximum\": 90, \"minimum\":
-90}, \"lon\": {\"type\": \"number\", \"format\": \"double\", \"maximum\":
180, \"minimum\": -180}}}}, \"maxItems\": 15, \"minItems\": 3}}}},
{\"allof\": [{\"type\": \"object\", \"required\": [\"shape\"],
\"properties\": {\"shape\": {\"anyOf\": [{\"enum\": [\"POINT\",
\"POINT_UNCERTAINTY_CIRCLE\", \"POINT_UNCERTAINTY_ELLIPSE\", \"POLYGON\",
\"POINT_ALTITUDE\", \"POINT_ALTITUDE_UNCERTAINTY\", \"ELLIPSOID_ARC\"],
\"type\": \"string\"}, {\"type\": \"string\"}]}}}, \"discriminator\":
{\"mapping\": {\"POINT\": \"#/components/schemas/Point\", \"POLYGON\": \"#/
components/schemas/Polygon\", \"ELLIPSOID_ARC\": \"#/components/schemas/
EllipsoidArc\", \"POINT_ALTITUDE\": \"#/components/schemas/PointAltitude\",
\"POINT_UNCERTAINTY_CIRCLE\": \"#/components/schemas/
PointUncertaintyCircle\", \"POINT_UNCERTAINTY_ELLIPSE\": \"#/components/
schemas/PointUncertaintyEllipse\", \"POINT_ALTITUDE_UNCERTAINTY\": \"#/
components/schemas/PointAltitudeUncertainty\"}, \"propertyName\":
\"shape\"}}, {\"type\": \"object\", \"required\": [\"altitude\", \"point\"],
\"properties\": {\"point\": {\"type\": \"object\", \"required\": [\"lat\",

```

```

\"lon\\\", \"properties\\\": {\"lat\\\": {\"type\\\": \"number\\\", \"format\\\": 
\"double\\\", \"maximum\\\": 90, \"minimum\\\": -90}, \"lon\\\": {\"type\\\": 
\"number\\\", \"format\\\": \"double\\\", \"maximum\\\": 180, \"minimum\\\": -180}}}, 
\"altitude\\\": {\"type\\\": \"number\\\", \"format\\\": \"double\\\", \"maximum\\\": 
32767, \"minimum\\\": -32767}}}}}, {\"allOf\\\": [{\"type\\\": \"object\\\", 
\"required\\\": [\"shape\\\", \"properties\\\": {\"shape\\\": {\"anyOf\\\": 
[{\"enum\\\": [\"POINT\\\", \"POINT_UNCERTAINTY_CIRCLE\\\", 
\"POINT_UNCERTAINTY_ELLIPSE\\\", \"POLYGON\\\", \"POINT_ALTITUDE\\\", 
\"POINT_ALTITUDE_UNCERTAINTY\\\", \"ELLIPSOID_ARC\\\", \"type\\\": \"string\\\", 
{\"type\\\": \"string\\\"}]}], \"discriminator\\\": {\"mapping\\\": {\"POINT\\\": \"#/ 
components/schemas/Point\\\", \"POLYGON\\\": \"#/components/schemas/Polygon\\\", 
\"ELLIPSOID_ARC\\\": \"#/components/schemas/EllipsoidArc\\\", \"POINT_ALTITUDE\\\": 
\"#/components/schemas/PointAltitude\\\", \"POINT_UNCERTAINTY_CIRCLE\\\": \"#/ 
components/schemas/PointUncertaintyCircle\\\", \"POINT_UNCERTAINTY_ELLIPSE\\\": 
\"#/components/schemas/PointUncertaintyEllipse\\\", 
\"POINT_ALTITUDE_UNCERTAINTY\\\": \"#/components/schemas/ 
PointAltitudeUncertainty\\\", \"propertyName\\\": \"shape\\\"}}, {\"type\\\": 
\"object\\\", \"required\\\": [\"altitude\\\", \"confidence\\\", \"point\\\", 
\"uncertaintyAltitude\\\", \"uncertaintyEllipse\\\", \"properties\\\": {\"point\\\": 
{\"type\\\": \"object\\\", \"required\\\": [\"lat\\\", \"lon\\\", \"properties\\\": 
{\"lat\\\": {\"type\\\": \"number\\\", \"format\\\": \"double\\\", \"maximum\\\": 90, 
\"minimum\\\": -90}, \"lon\\\": {\"type\\\": \"number\\\", \"format\\\": \"double\\\", 
\"maximum\\\": 180, \"minimum\\\": -180}}}, \"altitude\\\": {\"type\\\": \"number\\\", 
\"format\\\": \"double\\\", \"maximum\\\": 32767, \"minimum\\\": -32767}, 
\"confidence\\\": {\"type\\\": \"integer\\\", \"maximum\\\": 100, \"minimum\\\": 0}, 
\"uncertaintyEllipse\\\": {\"type\\\": \"object\\\", \"required\\\": 
[\"orientationMajor\\\", \"semiMajor\\\", \"semiMinor\\\", \"properties\\\": 
{\"semiMajor\\\": {\"type\\\": \"number\\\", \"format\\\": \"float\\\", \"minimum\\\": 
0}, \"semiMinor\\\": {\"type\\\": \"number\\\", \"format\\\": \"float\\\", \"minimum\\\": 
0}, \"orientationMajor\\\": {\"type\\\": \"integer\\\", \"maximum\\\": 180, 
\"minimum\\\": 0}}}, \"uncertaintyAltitude\\\": {\"type\\\": \"number\\\", 
\"format\\\": \"float\\\", \"minimum\\\": 0}}}}}, {\"allOf\\\": [{\"type\\\": 
\"object\\\", \"required\\\": [\"shape\\\", \"properties\\\": {\"shape\\\": 
{\"anyOf\\\": [{\"enum\\\": [\"POINT\\\", \"POINT_UNCERTAINTY_CIRCLE\\\", 
\"POINT_UNCERTAINTY_ELLIPSE\\\", \"POLYGON\\\", \"POINT_ALTITUDE\\\", 
\"POINT_ALTITUDE_UNCERTAINTY\\\", \"ELLIPSOID_ARC\\\", \"type\\\": \"string\\\", 
{\"type\\\": \"string\\\"}]}], \"discriminator\\\": {\"mapping\\\": {\"POINT\\\": \"#/ 
components/schemas/Point\\\", \"POLYGON\\\": \"#/components/schemas/Polygon\\\", 
\"ELLIPSOID_ARC\\\": \"#/components/schemas/EllipsoidArc\\\", \"POINT_ALTITUDE\\\": 
\"#/components/schemas/PointAltitude\\\", \"POINT_UNCERTAINTY_CIRCLE\\\": \"#/ 
components/schemas/PointUncertaintyCircle\\\", \"POINT_UNCERTAINTY_ELLIPSE\\\": 
\"#/components/schemas/PointUncertaintyEllipse\\\", 
\"POINT_ALTITUDE_UNCERTAINTY\\\": \"#/components/schemas/ 
PointAltitudeUncertainty\\\", \"propertyName\\\": \"shape\\\"}}, {\"type\\\": 
\"object\\\", \"required\\\": [\"confidence\\\", \"includedAngle\\\", 
\"innerRadius\\\", \"offsetAngle\\\", \"point\\\", \"uncertaintyRadius\\\", 
\"properties\\\": {\"point\\\": {\"type\\\": \"object\\\", \"required\\\": [\"lat\\\", 
\"lon\\\", \"properties\\\": {\"lat\\\": {\"type\\\": \"number\\\", \"format\\\": 
\"double\\\", \"maximum\\\": 90, \"minimum\\\": -90}, \"lon\\\": {\"type\\\": 
\"number\\\", \"format\\\": \"double\\\", \"maximum\\\": 180, \"minimum\\\": -180}}}, 
\"confidence\\\": {\"type\\\": \"integer\\\", \"maximum\\\": 100, \"minimum\\\": 0}, 
\"innerRadius\\\": {\"type\\\": \"integer\\\", \"format\\\": \"int32\\\", \"maximum\\\": 
327675, \"minimum\\\": 0}, \"offsetAngle\\\": {\"type\\\": \"integer\\\", 
\"maximum\\\": 360, \"minimum\\\": 0}, \"includedAngle\\\": {\"type\\\": \"integer\\\", 
\"maximum\\\": 360, \"minimum\\\": 0}, \"uncertaintyRadius\\\": {\"type\\\": 
\"number\\\", \"format\\\": \"float\\\", \"minimum\\\": 0}}}}}}}, {\"minItems\\\": 1},

```

```

\ "privacyCheckRelatedAction\": {\"anyOf\": [{\"enum\":
[\"LOCATION_NOT_ALLOWED\", \"LOCATION_ALLOWED_WITH_NOTIFICATION\",
\"LOCATION_ALLOWED_WITHOUT_NOTIFICATION\",
\"LOCATION_ALLOWED_WITHOUT_RESPONSE\",
\"LOCATION_RESTRICTED_WITHOUT_RESPONSE\"], \"type\": \"string\"}, {\"type\":
\"string\"}]}], \"minItems\": 1}, \"lcsClientGroupExternals\": {\"type\":
\"array\", \"items\": {\"type\": \"object\", \"properties\":
{\"validTimePeriod\": {\"type\": \"object\", \"properties\": {\"endTime\":
{\"type\": \"string\", \"format\": \"date-time\"}, \"startTime\": {\"type\":
\"string\", \"format\": \"date-time\"}}}, \"lcsClientGroupId\": {\"type\":
\"string\", \"pattern\": \"^extgroupid-[^@]+@[^@]+$.\"},
\"allowedGeographicArea\": {\"type\": \"array\", \"items\": {\"anyOf\":
[{\"allof\": [{\"type\": \"object\", \"required\": [\"shape\"],
\"properties\": {\"shape\": {\"anyOf\": [{\"enum\": [\"POINT\",
\"POINT_UNCERTAINTY_CIRCLE\", \"POINT_UNCERTAINTY_ELLIPSE\", \"POLYGON\",
\"POINT_ALTITUDE\", \"POINT_ALTITUDE_UNCERTAINTY\", \"ELLIPSOID_ARC\"],
\"type\": \"string\"}, {\"type\": \"string\"}]}], \"discriminator\":
{\"mapping\": {\"POINT\": \"#/components/schemas/Point\", \"POLYGON\": \"#/
components/schemas/Polygon\", \"ELLIPSOID_ARC\": \"#/components/schemas/
EllipsoidArc\", \"POINT_ALTITUDE\": \"#/components/schemas/PointAltitude\",
\"POINT_UNCERTAINTY_CIRCLE\": \"#/components/schemas/
PointUncertaintyCircle\", \"POINT_UNCERTAINTY_ELLIPSE\": \"#/components/
schemas/PointUncertaintyEllipse\", \"POINT_ALTITUDE_UNCERTAINTY\": \"#/
components/schemas/PointAltitudeUncertainty\"}, \"propertyName\":
\"shape\"}}, {\"type\": \"object\", \"required\": [\"point\"],
\"properties\": {\"point\": {\"type\": \"object\", \"required\": [\"lat\",
\"lon\"], \"properties\": {\"lat\": {\"type\": \"number\", \"format\":
\"double\", \"maximum\": 90, \"minimum\": -90}, \"lon\": {\"type\":
\"number\", \"format\": \"double\", \"maximum\": 180, \"minimum\":
-180}}}}], {\"allof\": [{\"type\": \"object\", \"required\": [\"shape\"],
\"properties\": {\"shape\": {\"anyOf\": [{\"enum\": [\"POINT\",
\"POINT_UNCERTAINTY_CIRCLE\", \"POINT_UNCERTAINTY_ELLIPSE\", \"POLYGON\",
\"POINT_ALTITUDE\", \"POINT_ALTITUDE_UNCERTAINTY\", \"ELLIPSOID_ARC\"],
\"type\": \"string\"}, {\"type\": \"string\"}]}], \"discriminator\":
{\"mapping\": {\"POINT\": \"#/components/schemas/Point\", \"POLYGON\": \"#/
components/schemas/Polygon\", \"ELLIPSOID_ARC\": \"#/components/schemas/
EllipsoidArc\", \"POINT_ALTITUDE\": \"#/components/schemas/PointAltitude\",
\"POINT_UNCERTAINTY_CIRCLE\": \"#/components/schemas/
PointUncertaintyCircle\", \"POINT_UNCERTAINTY_ELLIPSE\": \"#/components/
schemas/PointUncertaintyEllipse\", \"POINT_ALTITUDE_UNCERTAINTY\": \"#/
components/schemas/PointAltitudeUncertainty\"}, \"propertyName\":
\"shape\"}}, {\"type\": \"object\", \"required\": [\"point\",
\"uncertainty\"], \"properties\": {\"point\": {\"type\": \"object\",
\"required\": [\"lat\", \"lon\"], \"properties\": {\"lat\": {\"type\":
\"number\", \"format\": \"double\", \"maximum\": 90, \"minimum\": -90},
\"lon\": {\"type\": \"number\", \"format\": \"double\", \"maximum\": 180,
\"minimum\": -180}}}, \"uncertainty\": {\"type\": \"number\", \"format\":
\"float\", \"minimum\": 0}}}], {\"allof\": [{\"type\": \"object\",
\"required\": [\"shape\"], \"properties\": {\"shape\": {\"anyOf\":
[{\"enum\": [\"POINT\", \"POINT_UNCERTAINTY_CIRCLE\",
\"POINT_UNCERTAINTY_ELLIPSE\", \"POLYGON\", \"POINT_ALTITUDE\",
\"POINT_ALTITUDE_UNCERTAINTY\", \"ELLIPSOID_ARC\"], \"type\": \"string\"},
{\"type\": \"string\"}]}], \"discriminator\": {\"mapping\": {\"POINT\": \"#/
components/schemas/Point\", \"POLYGON\": \"#/components/schemas/Polygon\",
\"ELLIPSOID_ARC\": \"#/components/schemas/EllipsoidArc\", \"POINT_ALTITUDE\":
\"#/components/schemas/PointAltitude\", \"POINT_UNCERTAINTY_CIRCLE\": \"#/

```

```

components/schemas/PointUncertaintyCircle\", \"POINT_UNCERTAINTY_ELLIPSE\":
\"#/components/schemas/PointUncertaintyEllipse\",
\"POINT_ALTITUDE_UNCERTAINTY\": \"#/components/schemas/
PointAltitudeUncertainty\"}, \"propertyName\": \"shape\"}}, {\"type\":
\"object\", \"required\": [\"confidence\", \"point\",
\"uncertaintyEllipse\"], \"properties\": {\"point\": {\"type\": \"object\",
\"required\": [\"lat\", \"lon\"], \"properties\": {\"lat\": {\"type\":
\"number\", \"format\": \"double\", \"maximum\": 90, \"minimum\": -90},
\"lon\": {\"type\": \"number\", \"format\": \"double\", \"maximum\": 180,
\"minimum\": -180}}}, \"confidence\": {\"type\": \"integer\", \"maximum\":
100, \"minimum\": 0}, \"uncertaintyEllipse\": {\"type\": \"object\",
\"required\": [\"orientationMajor\", \"semiMajor\", \"semiMinor\"],
\"properties\": {\"semiMajor\": {\"type\": \"number\", \"format\": \"float\",
\"minimum\": 0}, \"semiMinor\": {\"type\": \"number\", \"format\": \"float\",
\"minimum\": 0}, \"orientationMajor\": {\"type\": \"integer\", \"maximum\":
180, \"minimum\": 0}}}}}}, {\"allOf\": [{\"type\": \"object\", \"required\":
[\"shape\"], \"properties\": {\"shape\": {\"anyOf\": [{\"enum\": [\"POINT\",
\"POINT_UNCERTAINTY_CIRCLE\", \"POINT_UNCERTAINTY_ELLIPSE\", \"POLYGON\",
\"POINT_ALTITUDE\", \"POINT_ALTITUDE_UNCERTAINTY\", \"ELLIPSOID_ARC\"],
\"type\": \"string\"}, {\"type\": \"string\"}]}}}, \"discriminator\":
{\"mapping\": {\"POINT\": \"#/components/schemas/Point\", \"POLYGON\": \"#/
components/schemas/Polygon\", \"ELLIPSOID_ARC\": \"#/components/schemas/
EllipsoidArc\", \"POINT_ALTITUDE\": \"#/components/schemas/PointAltitude\",
\"POINT_UNCERTAINTY_CIRCLE\": \"#/components/schemas/
PointUncertaintyCircle\", \"POINT_UNCERTAINTY_ELLIPSE\": \"#/components/
schemas/PointUncertaintyEllipse\", \"POINT_ALTITUDE_UNCERTAINTY\": \"#/
components/schemas/PointAltitudeUncertainty\"}, \"propertyName\":
\"shape\"}}, {\"type\": \"object\", \"required\": [\"pointList\"],
\"properties\": {\"pointList\": {\"type\": \"array\", \"items\": {\"type\":
\"object\", \"required\": [\"lat\", \"lon\"], \"properties\": {\"lat\":
{\"type\": \"number\", \"format\": \"double\", \"maximum\": 90, \"minimum\":
-90}, \"lon\": {\"type\": \"number\", \"format\": \"double\", \"maximum\":
180, \"minimum\": -180}}}, \"maxItems\": 15, \"minItems\": 3}}}},
{\"allOf\": [{\"type\": \"object\", \"required\": [\"shape\"],
\"properties\": {\"shape\": {\"anyOf\": [{\"enum\": [\"POINT\",
\"POINT_UNCERTAINTY_CIRCLE\", \"POINT_UNCERTAINTY_ELLIPSE\", \"POLYGON\",
\"POINT_ALTITUDE\", \"POINT_ALTITUDE_UNCERTAINTY\", \"ELLIPSOID_ARC\"],
\"type\": \"string\"}, {\"type\": \"string\"}]}}}, \"discriminator\":
{\"mapping\": {\"POINT\": \"#/components/schemas/Point\", \"POLYGON\": \"#/
components/schemas/Polygon\", \"ELLIPSOID_ARC\": \"#/components/schemas/
EllipsoidArc\", \"POINT_ALTITUDE\": \"#/components/schemas/PointAltitude\",
\"POINT_UNCERTAINTY_CIRCLE\": \"#/components/schemas/
PointUncertaintyCircle\", \"POINT_UNCERTAINTY_ELLIPSE\": \"#/components/
schemas/PointUncertaintyEllipse\", \"POINT_ALTITUDE_UNCERTAINTY\": \"#/
components/schemas/PointAltitudeUncertainty\"}, \"propertyName\":
\"shape\"}}, {\"type\": \"object\", \"required\": [\"altitude\", \"point\"],
\"properties\": {\"point\": {\"type\": \"object\", \"required\": [\"lat\",
\"lon\"], \"properties\": {\"lat\": {\"type\": \"number\", \"format\":
\"double\", \"maximum\": 90, \"minimum\": -90}, \"lon\": {\"type\":
\"number\", \"format\": \"double\", \"maximum\": 180, \"minimum\": -180}}},
\"altitude\": {\"type\": \"number\", \"format\": \"double\", \"maximum\":
32767, \"minimum\": -32767}}}}, {\"allOf\": [{\"type\": \"object\",
\"required\": [\"shape\"], \"properties\": {\"shape\": {\"anyOf\":
[{\"enum\": [\"POINT\", \"POINT_UNCERTAINTY_CIRCLE\",
\"POINT_UNCERTAINTY_ELLIPSE\", \"POLYGON\", \"POINT_ALTITUDE\",
\"POINT_ALTITUDE_UNCERTAINTY\", \"ELLIPSOID_ARC\"], \"type\": \"string\"},

```

```

{"type": "string"}, {"discriminator": {"mapping": {"POINT": "#/components/schemas/Point", "POLYGON": "#/components/schemas/Polygon", "ELLIPSOID_ARC": "#/components/schemas/EllipsoidArc", "POINT_ALTITUDE": "#/components/schemas/PointAltitude", "POINT_UNCERTAINTY_CIRCLE": "#/components/schemas/PointUncertaintyCircle", "POINT_UNCERTAINTY_ELLIPSE": "#/components/schemas/PointUncertaintyEllipse", "POINT_ALTITUDE_UNCERTAINTY": "#/components/schemas/PointAltitudeUncertainty"}, "propertyName": "shape"}, {"type": "object", "required": ["altitude", "confidence", "point", "uncertaintyAltitude", "uncertaintyEllipse"], "properties": {"point": {"type": "object", "required": ["lat", "lon"], "properties": {"lat": {"type": "number", "format": "double", "maximum": 90, "minimum": -90}, "lon": {"type": "number", "format": "double", "maximum": 180, "minimum": -180}}, "altitude": {"type": "number", "format": "double", "maximum": 32767, "minimum": -32767}, "confidence": {"type": "integer", "maximum": 100, "minimum": 0}, "uncertaintyEllipse": {"type": "object", "required": ["orientationMajor", "semiMajor", "semiMinor"], "properties": {"semiMajor": {"type": "number", "format": "float", "minimum": 0}, "semiMinor": {"type": "number", "format": "float", "minimum": 0}, "orientationMajor": {"type": "integer", "maximum": 180, "minimum": 0}}, "uncertaintyAltitude": {"type": "number", "format": "float", "minimum": 0}}}}, {"allOf": [{"type": "object", "required": ["shape"], "properties": {"anyOf": [{"enum": ["POINT", "POINT_UNCERTAINTY_CIRCLE", "POINT_UNCERTAINTY_ELLIPSE", "POLYGON", "POINT_ALTITUDE", "POINT_ALTITUDE_UNCERTAINTY", "ELLIPSOID_ARC"], "type": "string"}, {"type": "string"}]}}, {"discriminator": {"mapping": {"POINT": "#/components/schemas/Point", "POLYGON": "#/components/schemas/Polygon", "ELLIPSOID_ARC": "#/components/schemas/EllipsoidArc", "POINT_ALTITUDE": "#/components/schemas/PointAltitude", "POINT_UNCERTAINTY_CIRCLE": "#/components/schemas/PointUncertaintyCircle", "POINT_UNCERTAINTY_ELLIPSE": "#/components/schemas/PointUncertaintyEllipse", "POINT_ALTITUDE_UNCERTAINTY": "#/components/schemas/PointAltitudeUncertainty"}, "propertyName": "shape"}, {"type": "object", "required": ["confidence", "includedAngle", "innerRadius", "offsetAngle", "point", "uncertaintyRadius"], "properties": {"point": {"type": "object", "required": ["lat", "lon"], "properties": {"lat": {"type": "number", "format": "double", "maximum": 90, "minimum": -90}, "lon": {"type": "number", "format": "double", "maximum": 180, "minimum": -180}}, "confidence": {"type": "integer", "maximum": 100, "minimum": 0}, "innerRadius": {"type": "integer", "format": "int32", "maximum": 327675, "minimum": 0}, "offsetAngle": {"type": "integer", "maximum": 360, "minimum": 0}, "includedAngle": {"type": "integer", "maximum": 360, "minimum": 0}, "uncertaintyRadius": {"type": "number", "format": "float", "minimum": 0}}}}}], "minItems": 1, "privacyCheckRelatedAction": {"anyOf": [{"enum": ["LOCATION_NOT_ALLOWED", "LOCATION_ALLOWED_WITH_NOTIFICATION", "LOCATION_ALLOWED_WITHOUT_NOTIFICATION", "LOCATION_ALLOWED_WITHOUT_RESPONSE", "LOCATION_RESTRICTED_WITHOUT_RESPONSE"], "type": "string"}, {"type": "string"}]}}, {"minItems": 1}}, {"serviceTypeUnrelatedClasses": {"type": "array", "items": {"type": "object", "required": ["serviceType"], "properties": {"codeWordInd": {"anyOf": [{"enum": ["CODEWORD_CHECK_IN_UE", "CODEWORD_CHECK_IN_GMLC"], "type":

```

```

\"string\"}, {\"type\": \"string\"}}}, \"serviceType\": {\"type\":
\"integer\", \"maximum\": 127, \"minimum\": 0}, \"codeWordList\": {\"type\":
\"array\", \"items\": {\"type\": \"string\"}, \"minItems\": 1},
\"validTimePeriod\": {\"type\": \"object\", \"properties\": {\"endTime\":
{\"type\": \"string\", \"format\": \"date-time\"}, \"startTime\": {\"type\":
\"string\", \"format\": \"date-time\"}}}, \"allowedGeographicArea\":
{\"type\": \"array\", \"items\": {\"anyOf\": [{\"allOf\": [{\"type\":
\"object\", \"required\": [\"shape\"], \"properties\": {\"shape\":
{\"anyOf\": [{\"enum\": [\"POINT\", \"POINT_UNCERTAINTY_CIRCLE\",
\"POINT_UNCERTAINTY_ELLIPSE\", \"POLYGON\", \"POINT_ALTITUDE\",
\"POINT_ALTITUDE_UNCERTAINTY\", \"ELLIPSOID_ARC\"], \"type\": \"string\"},
{\"type\": \"string\"}]}]}, \"discriminator\": {\"mapping\": {\"POINT\": \"#/
components/schemas/Point\", \"POLYGON\": \"#/components/schemas/Polygon\",
\"ELLIPSOID_ARC\": \"#/components/schemas/EllipsoidArc\", \"POINT_ALTITUDE\":
\"#/components/schemas/PointAltitude\", \"POINT_UNCERTAINTY_CIRCLE\": \"#/
components/schemas/PointUncertaintyCircle\", \"POINT_UNCERTAINTY_ELLIPSE\":
\"#/components/schemas/PointUncertaintyEllipse\",
\"POINT_ALTITUDE_UNCERTAINTY\": \"#/components/schemas/
PointAltitudeUncertainty\"}, \"propertyName\": \"shape\"}}, {\"type\":
\"object\", \"required\": [\"point\"], \"properties\": {\"point\": {\"type\":
\"object\", \"required\": [\"lat\", \"lon\"], \"properties\": {\"lat\":
{\"type\": \"number\", \"format\": \"double\", \"maximum\": 90, \"minimum\":
-90}, \"lon\": {\"type\": \"number\", \"format\": \"double\", \"maximum\":
180, \"minimum\": -180}}}}}}, {\"allOf\": [{\"type\": \"object\",
\"required\": [\"shape\"], \"properties\": {\"shape\": {\"anyOf\":
[{\"enum\": [\"POINT\", \"POINT_UNCERTAINTY_CIRCLE\",
\"POINT_UNCERTAINTY_ELLIPSE\", \"POLYGON\", \"POINT_ALTITUDE\",
\"POINT_ALTITUDE_UNCERTAINTY\", \"ELLIPSOID_ARC\"], \"type\": \"string\"},
{\"type\": \"string\"}]}]}, \"discriminator\": {\"mapping\": {\"POINT\": \"#/
components/schemas/Point\", \"POLYGON\": \"#/components/schemas/Polygon\",
\"ELLIPSOID_ARC\": \"#/components/schemas/EllipsoidArc\", \"POINT_ALTITUDE\":
\"#/components/schemas/PointAltitude\", \"POINT_UNCERTAINTY_CIRCLE\": \"#/
components/schemas/PointUncertaintyCircle\", \"POINT_UNCERTAINTY_ELLIPSE\":
\"#/components/schemas/PointUncertaintyEllipse\",
\"POINT_ALTITUDE_UNCERTAINTY\": \"#/components/schemas/
PointAltitudeUncertainty\"}, \"propertyName\": \"shape\"}}, {\"type\":
\"object\", \"required\": [\"point\", \"uncertainty\"], \"properties\":
{\"point\": {\"type\": \"object\", \"required\": [\"lat\", \"lon\"],
\"properties\": {\"lat\": {\"type\": \"number\", \"format\": \"double\",
\"maximum\": 90, \"minimum\": -90}, \"lon\": {\"type\": \"number\",
\"format\": \"double\", \"maximum\": 180, \"minimum\": -180}}},
\"uncertainty\": {\"type\": \"number\", \"format\": \"float\", \"minimum\":
0}}}}, {\"allOf\": [{\"type\": \"object\", \"required\": [\"shape\"],
\"properties\": {\"shape\": {\"anyOf\": [{\"enum\": [\"POINT\",
\"POINT_UNCERTAINTY_CIRCLE\", \"POINT_UNCERTAINTY_ELLIPSE\", \"POLYGON\",
\"POINT_ALTITUDE\", \"POINT_ALTITUDE_UNCERTAINTY\", \"ELLIPSOID_ARC\"],
\"type\": \"string\"}, {\"type\": \"string\"}]}]}, \"discriminator\":
{\"mapping\": {\"POINT\": \"#/components/schemas/Point\", \"POLYGON\": \"#/
components/schemas/Polygon\", \"ELLIPSOID_ARC\": \"#/components/schemas/
EllipsoidArc\", \"POINT_ALTITUDE\": \"#/components/schemas/PointAltitude\",
\"POINT_UNCERTAINTY_CIRCLE\": \"#/components/schemas/
PointUncertaintyCircle\", \"POINT_UNCERTAINTY_ELLIPSE\": \"#/components/
schemas/PointUncertaintyEllipse\", \"POINT_ALTITUDE_UNCERTAINTY\": \"#/
components/schemas/PointAltitudeUncertainty\"}, \"propertyName\":
\"shape\"}}, {\"type\": \"object\", \"required\": [\"confidence\", \"point\",
\"uncertaintyEllipse\"], \"properties\": {\"point\": {\"type\": \"object\",

```



```

\"required\": [\"lat\", \"lon\"], \"properties\": {\"lat\": {\"type\":
\"number\", \"format\": \"double\", \"maximum\": 90, \"minimum\": -90},
\"lon\": {\"type\": \"number\", \"format\": \"double\", \"maximum\": 180,
\"minimum\": -180}}}, \"confidence\": {\"type\": \"integer\", \"maximum\":
100, \"minimum\": 0}, \"uncertaintyEllipse\": {\"type\": \"object\",
\"required\": [\"orientationMajor\", \"semiMajor\", \"semiMinor\"],
\"properties\": {\"semiMajor\": {\"type\": \"number\", \"format\": \"float\",
\"minimum\": 0}, \"semiMinor\": {\"type\": \"number\", \"format\": \"float\",
\"minimum\": 0}, \"orientationMajor\": {\"type\": \"integer\", \"maximum\":
180, \"minimum\": 0}}}}}, {\"allOf\": [{\"type\": \"object\", \"required\":
[\"shape\", \"properties\": {\"shape\": {\"anyOf\": [{\"enum\": [\"POINT\",
\"POINT_UNCERTAINTY_CIRCLE\", \"POINT_UNCERTAINTY_ELLIPSE\", \"POLYGON\",
\"POINT_ALTITUDE\", \"POINT_ALTITUDE_UNCERTAINTY\", \"ELLIPSOID_ARC\"],
\"type\": \"string\"}, {\"type\": \"string\"}]}}, \"discriminator\":
{\"mapping\": {\"POINT\": \"#/components/schemas/Point\", \"POLYGON\": \"#/
components/schemas/Polygon\", \"ELLIPSOID_ARC\": \"#/components/schemas/
EllipsoidArc\", \"POINT_ALTITUDE\": \"#/components/schemas/PointAltitude\",
\"POINT_UNCERTAINTY_CIRCLE\": \"#/components/schemas/
PointUncertaintyCircle\", \"POINT_UNCERTAINTY_ELLIPSE\": \"#/components/
schemas/PointUncertaintyEllipse\", \"POINT_ALTITUDE_UNCERTAINTY\": \"#/
components/schemas/PointAltitudeUncertainty\"}, \"propertyName\":
\"shape\"}}, {\"type\": \"object\", \"required\": [\"pointList\"],
\"properties\": {\"pointList\": {\"type\": \"array\", \"items\": {\"type\":
\"object\", \"required\": [\"lat\", \"lon\"], \"properties\": {\"lat\":
{\"type\": \"number\", \"format\": \"double\", \"maximum\": 90, \"minimum\":
-90}, \"lon\": {\"type\": \"number\", \"format\": \"double\", \"maximum\":
180, \"minimum\": -180}}}, \"maxItems\": 15, \"minItems\": 3}}}},
{\"allOf\": [{\"type\": \"object\", \"required\": [\"shape\"],
\"properties\": {\"shape\": {\"anyOf\": [{\"enum\": [\"POINT\",
\"POINT_UNCERTAINTY_CIRCLE\", \"POINT_UNCERTAINTY_ELLIPSE\", \"POLYGON\",
\"POINT_ALTITUDE\", \"POINT_ALTITUDE_UNCERTAINTY\", \"ELLIPSOID_ARC\"],
\"type\": \"string\"}, {\"type\": \"string\"}]}}, \"discriminator\":
{\"mapping\": {\"POINT\": \"#/components/schemas/Point\", \"POLYGON\": \"#/
components/schemas/Polygon\", \"ELLIPSOID_ARC\": \"#/components/schemas/
EllipsoidArc\", \"POINT_ALTITUDE\": \"#/components/schemas/PointAltitude\",
\"POINT_UNCERTAINTY_CIRCLE\": \"#/components/schemas/
PointUncertaintyCircle\", \"POINT_UNCERTAINTY_ELLIPSE\": \"#/components/
schemas/PointUncertaintyEllipse\", \"POINT_ALTITUDE_UNCERTAINTY\": \"#/
components/schemas/PointAltitudeUncertainty\"}, \"propertyName\":
\"shape\"}}, {\"type\": \"object\", \"required\": [\"altitude\", \"point\"],
\"properties\": {\"point\": {\"type\": \"object\", \"required\": [\"lat\",
\"lon\"], \"properties\": {\"lat\": {\"type\": \"number\", \"format\":
\"double\", \"maximum\": 90, \"minimum\": -90}, \"lon\": {\"type\":
\"number\", \"format\": \"double\", \"maximum\": 180, \"minimum\": -180}}},
\"altitude\": {\"type\": \"number\", \"format\": \"double\", \"maximum\":
32767, \"minimum\": -32767}}}}, {\"allOf\": [{\"type\": \"object\",
\"required\": [\"shape\"], \"properties\": {\"shape\": {\"anyOf\":
[{\"enum\": [\"POINT\", \"POINT_UNCERTAINTY_CIRCLE\",
\"POINT_UNCERTAINTY_ELLIPSE\", \"POLYGON\", \"POINT_ALTITUDE\",
\"POINT_ALTITUDE_UNCERTAINTY\", \"ELLIPSOID_ARC\"], \"type\": \"string\"},
{\"type\": \"string\"}]}}, \"discriminator\": {\"mapping\": {\"POINT\": \"#/
components/schemas/Point\", \"POLYGON\": \"#/components/schemas/Polygon\",
\"ELLIPSOID_ARC\": \"#/components/schemas/EllipsoidArc\", \"POINT_ALTITUDE\":
\"#/components/schemas/PointAltitude\", \"POINT_UNCERTAINTY_CIRCLE\": \"#/
components/schemas/PointUncertaintyCircle\", \"POINT_UNCERTAINTY_ELLIPSE\":
\"#/components/schemas/PointUncertaintyEllipse\",

```



```

\"POINT_ALTITUDE_UNCERTAINTY\": \"#/components/schemas/
PointAltitudeUncertainty\"}, \"propertyName\": \"shape\"}}, {\"type\":
\"object\", \"required\": [\"altitude\", \"confidence\", \"point\",
\"uncertaintyAltitude\", \"uncertaintyEllipse\"], \"properties\": {\"point\":
{\"type\": \"object\", \"required\": [\"lat\", \"lon\"], \"properties\":
{\"lat\": {\"type\": \"number\", \"format\": \"double\", \"maximum\": 90,
\"minimum\": -90}, \"lon\": {\"type\": \"number\", \"format\": \"double\",
\"maximum\": 180, \"minimum\": -180}}}, \"altitude\": {\"type\": \"number\",
\"format\": \"double\", \"maximum\": 32767, \"minimum\": -32767},
\"confidence\": {\"type\": \"integer\", \"maximum\": 100, \"minimum\": 0},
\"uncertaintyEllipse\": {\"type\": \"object\", \"required\":
[\"orientationMajor\", \"semiMajor\", \"semiMinor\"], \"properties\":
{\"semiMajor\": {\"type\": \"number\", \"format\": \"float\", \"minimum\":
0}, \"semiMinor\": {\"type\": \"number\", \"format\": \"float\", \"minimum\":
0}, \"orientationMajor\": {\"type\": \"integer\", \"maximum\": 180,
\"minimum\": 0}}}, \"uncertaintyAltitude\": {\"type\": \"number\",
\"format\": \"float\", \"minimum\": 0}}}}, {\"allOf\": [{\"type\":
\"object\", \"required\": [\"shape\"], \"properties\": {\"shape\":
{\"anyOf\": [{\"enum\": [\"POINT\", \"POINT_UNCERTAINTY_CIRCLE\",
\"POINT_UNCERTAINTY_ELLIPSE\", \"POLYGON\", \"POINT_ALTITUDE\",
\"POINT_ALTITUDE_UNCERTAINTY\", \"ELLIPSOID_ARC\"], \"type\": \"string\"},
{\"type\": \"string\"}]}}, \"discriminator\": {\"mapping\": {\"POINT\": \"#/
components/schemas/Point\", \"POLYGON\": \"#/components/schemas/Polygon\",
\"ELLIPSOID_ARC\": \"#/components/schemas/EllipsoidArc\", \"POINT_ALTITUDE\":
\"#/components/schemas/PointAltitude\", \"POINT_UNCERTAINTY_CIRCLE\": \"#/
components/schemas/PointUncertaintyCircle\", \"POINT_UNCERTAINTY_ELLIPSE\":
\"#/components/schemas/PointUncertaintyEllipse\",
\"POINT_ALTITUDE_UNCERTAINTY\": \"#/components/schemas/
PointAltitudeUncertainty\"}, \"propertyName\": \"shape\"}}, {\"type\":
\"object\", \"required\": [\"confidence\", \"includedAngle\",
\"innerRadius\", \"offsetAngle\", \"point\", \"uncertaintyRadius\"],
\"properties\": {\"point\": {\"type\": \"object\", \"required\": [\"lat\",
\"lon\"], \"properties\": {\"lat\": {\"type\": \"number\", \"format\":
\"double\", \"maximum\": 90, \"minimum\": -90}, \"lon\": {\"type\":
\"number\", \"format\": \"double\", \"maximum\": 180, \"minimum\": -180}}},
\"confidence\": {\"type\": \"integer\", \"maximum\": 100, \"minimum\": 0},
\"innerRadius\": {\"type\": \"integer\", \"format\": \"int32\", \"maximum\":
327675, \"minimum\": 0}, \"offsetAngle\": {\"type\": \"integer\",
\"maximum\": 360, \"minimum\": 0}, \"includedAngle\": {\"type\": \"integer\",
\"maximum\": 360, \"minimum\": 0}, \"uncertaintyRadius\": {\"type\":
\"number\", \"format\": \"float\", \"minimum\": 0}}}}}], \"minItems\": 1},
\"privacyCheckRelatedAction\": {\"anyOf\": [{\"enum\":
[\"LOCATION_NOT_ALLOWED\", \"LOCATION_ALLOWED_WITH_NOTIFICATION\",
\"LOCATION_ALLOWED_WITHOUT_NOTIFICATION\",
\"LOCATION_ALLOWED_WITHOUT_RESPONSE\",
\"LOCATION_RESTRICTED_WITHOUT_RESPONSE\"], \"type\": \"string\"}, {\"type\":
\"string\"}]}}, {\"minItems\": 1}}}, {\"plmnOperatorClasses\": {\"type\":
\"array\", \"items\": {\"type\": \"object\", \"required\":
[\"lcsClientClass\", \"lcsClientIds\"], \"properties\": {\"lcsClientIds\":
{\"type\": \"array\", \"items\": {\"type\": \"string\"}, \"minItems\": 1},
\"lcsClientClass\": {\"anyOf\": [{\"enum\": [\"BROADCAST_SERVICE\",
\"OM_IN_HPLMN\", \"OM_IN_VPLMN\", \"ANONYMOUS_LOCATION_SERVICE\",
\"SPECIFIC_SERVICE\"], \"type\": \"string\"}, {\"type\": \"string\"}]}},
\"minItems\": 1}}}, {\"lcsBroadcastAssistanceTypesData\": {\"type\":
\"object\", \"required\": [\"locationAssistanceType\"], \"properties\":
{\"locationAssistanceType\": {\"type\": \"string\", \"format\":

```

```

    \"byte\\\"}}}}}, \"expires\\\": {\\\"type\\\": \\\"string\\\", \\\"format\\\": \\\"date-
time\\\", \\\"contextInfo\\\": {\\\"type\\\": \\\"object\\\", \\\"properties\\\":
{\\\"origHeaders\\\": {\\\"type\\\": \\\"array\\\", \\\"items\\\": {\\\"type\\\": \\\"string\\\",
\\\"minItems\\\": 1}}}, \\\"singleNssai\\\": {\\\"type\\\": \\\"object\\\", \\\"required\\\":
[\\\"sst\\\", \\\"properties\\\": {\\\"sd\\\": {\\\"type\\\": \\\"string\\\", \\\"pattern\\\": \\\"^[A-
Fa-f0-9]{6}$\\\", \\\"sst\\\": {\\\"type\\\": \\\"integer\\\", \\\"maximum\\\": 255,
\\\"minimum\\\": 0}}}, \\\"nfInstanceId\\\": {\\\"type\\\": \\\"string\\\", \\\"format\\\":
\\\"uuid\\\", \\\"amfServiceName\\\": {\\\"anyOf\\\": [{\\\"enum\\\": [\\\"nnrf-nfm\\\", \\\"nnrf-
disc\\\", \\\"nnrf-oauth2\\\", \\\"nudm-sdm\\\", \\\"nudm-uecm\\\", \\\"nudm-ueau\\\", \\\"nudm-
ee\\\", \\\"nudm-pp\\\", \\\"nudm-niddau\\\", \\\"nudm-mt\\\", \\\"namf-comm\\\", \\\"namf-
evts\\\", \\\"namf-mt\\\", \\\"namf-loc\\\", \\\"nsmf-pdusession\\\", \\\"nsmf-event-
exposure\\\", \\\"nsmf-nidd\\\", \\\"nausf-auth\\\", \\\"nausf-sorprotection\\\", \\\"nausf-
upuprotection\\\", \\\"nnef-pfdmanagement\\\", \\\"nnef-smcontext\\\", \\\"nnef-
eventexposure\\\", \\\"3gpp-cp-parameter-provisioning\\\", \\\"3gpp-device-
triggering\\\", \\\"3gpp-bdt\\\", \\\"3gpp-traffic-influence\\\", \\\"3gpp-chargeable-
party\\\", \\\"3gpp-as-session-with-qos\\\", \\\"3gpp-msisd- less-mo-sms\\\", \\\"3gpp-
service-parameter\\\", \\\"3gpp-monitoring-event\\\", \\\"3gpp-nidd-configuration-
trigger\\\", \\\"3gpp-nidd\\\", \\\"3gpp-analyticsexposure\\\", \\\"3gpp-racs-parameter-
provisioning\\\", \\\"3gpp-ecr-control\\\", \\\"3gpp-applying-bdt-policy\\\", \\\"3gpp-mo-
lcs-notify\\\", \\\"npcf-am-policy-control\\\", \\\"npcf-smpolicycontrol\\\", \\\"npcf-
policyauthorization\\\", \\\"npcf-bdtpolicycontrol\\\", \\\"npcf-eventexposure\\\",
\\\"npcf-ue-policy-control\\\", \\\"nsmsf-sms\\\", \\\"nnsf-nsselection\\\", \\\"nnsf-
nssaiavailability\\\", \\\"nudr-dr\\\", \\\"nudr-group-id-map\\\", \\\"nlmf-loc\\\", \\\"n5g-
eir-eic\\\", \\\"nbsf-management\\\", \\\"nchf-spendinglimitcontrol\\\", \\\"nchf-
convergedcharging\\\", \\\"nchf-offlineonlycharging\\\", \\\"nnwda-
eventssubscription\\\", \\\"nnwda-analyticinfo\\\", \\\"ngmlc-loc\\\", \\\"nucmf-
provisioning\\\", \\\"nucmf-uecapabilitymanagement\\\", \\\"nhss-sdm\\\", \\\"nhss-
uecm\\\", \\\"nhss-ueau\\\", \\\"nhss-ee\\\", \\\"nhss-ims-sdm\\\", \\\"nhss-ims-uecm\\\",
\\\"nhss-ims-ueau\\\", \\\"nsepp-telescopic\\\", \\\"nsoraf-sor\\\", \\\"nspaf-secured-
packet\\\", \\\"nuds-dr\\\", \\\"nnsaaf-nssaa\\\", \\\"type\\\": \\\"string\\\", {\\\"type\\\":
\\\"string\\\"}], \\\"description\\\": \\\"Service names known to NRF\\\",
\\\"subscriptionId\\\": {\\\"type\\\": \\\"string\\\", \\\"immediateReport\\\": {\\\"type\\\":
\\\"boolean\\\", \\\"default\\\": false}, \\\"callbackReference\\\": {\\\"type\\\":
\\\"string\\\", \\\"supportedFeatures\\\": {\\\"type\\\": \\\"string\\\", \\\"pattern\\\": \\\"^[A-
Fa-f0-9]*$\\\", \\\"uniqueSubscription\\\": {\\\"type\\\": \\\"boolean\\\",
\\\"implicitUnsubscribe\\\": {\\\"type\\\": \\\"boolean\\\", \\\"monitoredResourceUris\\\":
{\\\"type\\\": \\\"array\\\", \\\"items\\\": {\\\"type\\\": \\\"string\\\", \\\"minItems\\\": 1}}}}
    },
    {
        \"defaultId\": 49,
        \"resourceURI\": \"/nudm-uecm/v1/{ueId}/registrations/amf-non-3gpp-access\",
        \"httpMethod\": \"PUT\",
        \"schemaValue\": \"{\\\"type\\\": \\\"object\\\", \\\"required\\\": [\\\"amfInstanceId\\\",
\\\"deregCallbackUri\\\", \\\"guami\\\", \\\"imsVoPs\\\", \\\"ratType\\\", \\\"properties\\\":
{\\\"pei\\\": {\\\"type\\\": \\\"string\\\", \\\"pattern\\\": \\\"^(imei-[0-9]{15}|imeisv-[0-9]
{16}|mac((-[0-9a-fA-F]{2}){6})(-untrusted)?|eui((-[0-9a-fA-F]{2}){8})|.+)$
\\\", \\\"supi\\\": {\\\"type\\\": \\\"string\\\", \\\"pattern\\\": \\\"^(imsi-[0-9]{5,15}|
nai-.+|gci-.+|gli-.+|.+)\\\", \\\"guami\\\": {\\\"type\\\": \\\"object\\\", \\\"required\\\":
[\\\"amfId\\\", \\\"plmnId\\\", \\\"properties\\\": {\\\"amfId\\\": {\\\"type\\\": \\\"string\\\",
\\\"pattern\\\": \\\"^[A-Fa-f0-9]{6}$\\\", \\\"plmnId\\\": {\\\"type\\\": \\\"object\\\",
\\\"required\\\": [\\\"mcc\\\", \\\"mnc\\\", \\\"properties\\\": {\\\"mcc\\\": {\\\"type\\\":
\\\"string\\\", \\\"pattern\\\": \\\"^\\\\\\\\d{3}$\\\", \\\"mnc\\\": {\\\"type\\\": \\\"string\\\",
\\\"pattern\\\": \\\"^\\\\\\\\d{2,3}$\\\", \\\"nid\\\": {\\\"type\\\": \\\"string\\\", \\\"pattern\\\":
\\\"^[A-Fa-f0-9]{11}$\\\"}}}}}, \\\"imsVoPs\\\": {\\\"anyOf\\\": [{\\\"enum\\\":
[\\\"HOMOGENEOUS_SUPPORT\\\", \\\"HOMOGENEOUS_NON_SUPPORT\\\",
\\\"NON_HOMOGENEOUS_OR_UNKNOWN\\\", \\\"type\\\": \\\"string\\\", {\\\"type\\\":

```

```

"string\"]]}, "ratType": {"anyOf": [{"enum": ["NR", "EUTRA",
"WLAN", "VIRTUAL", "NB-IOT", "WIRELINE", "WIRELINE_CABLE",
"WIRELINE_BBF", "LTE-M", "NR-U", "EUTRA-U", "TRUSTED_N3GA",
"TRUSTED_WLAN", "UTRA", "GERA"]}, {"type": "string"}], {"type":
"string\"]]}, "purgeFlag": {"type": "boolean"}, "contextInfo":
{"type": "object", "properties": {"origHeaders": {"type":
"array", "items": {"type": "string"}, "minItems": 1}},
"vgmlcAddress": {"type": "object", "properties": {"vgmlcFqdn":
{"type": "string", "description": "Fully Qualified Domain Name"},
"vgmlcAddressIpv4": {"type": "string", "example": "198.51.100.1",
"pattern": "^([0-9]|[1-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5])\\.([0-9]
|[1-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5])$"}, "vgmlcAddressIpv6":
{"type": "string", "allOf": [{"pattern": "^((0?|([1-9a-f][0-9a-f]
{0,3})))((0?|([1-9a-f][0-9a-f]{0,3}))){0,6}(:|0?|([1-9a-f][0-9a-f]
{0,3}))$"}, {"pattern": "^((([^\:]+\:){7}([^\:]+))|((([^\:]+\:)*[^\:]+)?::
(([^\:]+\:)*[^\:]+?))$"}], "example": "2001:db8:85a3::8a2e:370:7334"}},
"amfInstanceId": {"type": "string", "format": "uuid"},
"backupAmfInfo": {"type": "array", "items": {"type": "object",
"required": ["backupAmf"], "properties": {"backupAmf": {"type":
"string"}, "guamiList": {"type": "array", "items": {"type":
"object", "required": ["amfId", "plmnId"], "properties":
{"amfId": {"type": "string", "pattern": "^[A-Fa-f0-9]{6}$"},
"plmnId": {"type": "object", "required": ["mcc", "mnc"],
"properties": {"mcc": {"type": "string", "pattern": "^[0-9]{3}$"},
"mnc": {"type": "string", "pattern": "^[0-9]{2,3}$"}, "nid":
{"type": "string", "pattern": "^[A-Fa-f0-9]{11}$"}]}]}}, "minItems":
1}}, "minItems": 1}, "urrrIndicator": {"type": "boolean"},
"deregCallbackUri": {"type": "string", "registrationTime":
{"type": "string", "format": "date-time"}, "supportedFeatures":
{"type": "string", "pattern": "^[A-Fa-f0-9]*$"},
"amfEeSubscriptionId": {"type": "string", "amfServiceNameDereg":
{"anyOf": [{"enum": ["nnrf-nfm", "nnrf-disc", "nnrf-oauth2", "nudm-
sdm", "nudm-uecm", "nudm-ueau", "nudm-ee", "nudm-pp", "nudm-
niddau", "nudm-mt", "namf-comm", "namf-evts", "namf-mt", "namf-
loc", "nsmf-pdusession", "nsmf-event-exposure", "nsmf-nidd", "nausf-
auth", "nausf-sorprotection", "nausf-upuprotection", "nnef-
pfdmanagement", "nnef-smcontext", "nnef-eventexposure", "3gpp-cp-
parameter-provisioning", "3gpp-device-triggering", "3gpp-bdt", "3gpp-
traffic-influence", "3gpp-chargeable-party", "3gpp-as-session-with-qos",
"3gpp-msisdn-less-mo-sms", "3gpp-service-parameter", "3gpp-monitoring-
event", "3gpp-nidd-configuration-trigger", "3gpp-nidd", "3gpp-
analyticsexposure", "3gpp-racs-parameter-provisioning", "3gpp-ecr-
control", "3gpp-applying-bdt-policy", "3gpp-mo-lcs-notify", "npcf-am-
policy-control", "npcf-smpolicycontrol", "npcf-policyauthorization",
"npcf-bdtpolicycontrol", "npcf-eventexposure", "npcf-ue-policy-
control", "nsmf-sms", "nsmf-nsselection", "nsmf-nssaiavailability",
"nudr-dr", "nudr-group-id-map", "nlmf-loc", "n5g-eir-eic", "nbsf-
management", "nchf-spendinglemitcontrol", "nchf-convergedcharging",
"nchf-offlineonlycharging", "nnwdafeventsubscription", "nnwdafe-
analyticsinfo", "ngmlc-loc", "nucmf-provisioning", "nucmf-
uecapabilitymanagement", "nhss-sdm", "nhss-uecm", "nhss-ueau", "nhss-
ee", "nhss-ims-sdm", "nhss-ims-uecm", "nhss-ims-ueau", "nsepp-
telescopic", "nsoraf-sor", "nspaf-secured-packet", "nudsf-dr",
"nssaaaf-nssaaaf"], {"type": "string"}], {"type": "string"}],
"description": "Service names known to NRF"}, "noEeSubscriptionInd":
{"type": "boolean"}, "amfServiceNamePcscfRest": {"anyOf": [{"enum":

```

```

["\nnrf-nfm\", \"nnrf-disc\", \"nnrf-oauth2\", \"nudm-sdm\", \"nudm-uecm\",
 \"nudm-ueau\", \"nudm-ee\", \"nudm-pp\", \"nudm-niddau\", \"nudm-mt\", \"namf-
comm\", \"namf-evts\", \"namf-mt\", \"namf-loc\", \"nsmf-pdusession\", \"nsmf-
event-exposure\", \"nsmf-nidd\", \"nausf-auth\", \"nausf-sorprotection\",
 \"nausf-upuprotection\", \"nnef-pfdmanagement\", \"nnef-smcontext\", \"nnef-
eventexposure\", \"3gpp-cp-parameter-provisioning\", \"3gpp-device-
triggering\", \"3gpp-bdt\", \"3gpp-traffic-influence\", \"3gpp-chargeable-
party\", \"3gpp-as-session-with-qos\", \"3gpp-msisdn-less-mo-sms\", \"3gpp-
service-parameter\", \"3gpp-monitoring-event\", \"3gpp-nidd-configuration-
trigger\", \"3gpp-nidd\", \"3gpp-analyticsexposure\", \"3gpp-racs-parameter-
provisioning\", \"3gpp-ecr-control\", \"3gpp-applying-bdt-policy\", \"3gpp-mo-
lcs-notify\", \"npcf-am-policy-control\", \"npcf-smpolicycontrol\", \"npcf-
policyauthorization\", \"npcf-bdtpolicycontrol\", \"npcf-eventexposure\",
 \"npcf-ue-policy-control\", \"nsmf-sms\", \"nsssf-nssselection\", \"nsssf-
nssaiavailability\", \"nudr-dr\", \"nudr-group-id-map\", \"nlmf-loc\", \"n5g-
eir-eic\", \"nbsf-management\", \"nchf-spendinglimitcontrol\", \"nchf-
convergedcharging\", \"nchf-offlineonlycharging\", \"nnwda-
eventssubscription\", \"nnwda-analyticinfo\", \"ngmlc-loc\", \"nucmf-
provisioning\", \"nucmf-uecapabilitymanagement\", \"nhss-sdm\", \"nhss-
uecm\", \"nhss-ueau\", \"nhss-ee\", \"nhss-ims-sdm\", \"nhss-ims-uecm\",
 \"nhss-ims-ueau\", \"nsepp-telescopic\", \"nsoraf-sor\", \"nspaf-secured-
packet\", \"nudsf-dr\", \"nsssaaf-nssaa\"], \"type\": \"string\"}, {\"type\":
 \"string\"}], \"description\": \"Service names known to NRF\"},
 \"pcscfRestorationCallbackUri\": {\"type\": \"string\"}}
},
{
  \"defaultId\": 50,
  \"resourceURI\": \"/nsmf-pdusession/v1/pdu-sessions/{pduSessionRef}/modify\",
  \"httpMethod\": \"POST\",
  \"schemaValue\": \"{ \"type\": \"object\", \"required\":
[\"requestIndication\", \"properties\": {\"pei\": {\"type\": \"string\",
 \"pattern\": \"^(imei-[0-9]{15}|imeisv-[0-9]{16}|mac((-[0-9a-fA-F]{2}){6})(-
untrusted)?|eui((-[0-9a-fA-F]{2}){8})|.+)$\", \"pti\": {\"type\":
 \"integer\", \"maximum\": 255, \"minimum\": 0}, \"cause\": {\"anyOf\":
 [{\"enum\": [\"REL_DUE_TO_HO\", \"EPS_FALLBACK\", \"REL_DUE_TO_UP_SEC\",
 \"DNN_CONGESTION\", \"S_NSSAI_CONGESTION\", \"REL_DUE_TO_REACTIVATION\",
 \"5G_AN_NOT_RESPONDING\", \"REL_DUE_TO_SLICE_NOT_AVAILABLE\",
 \"REL_DUE_TO_DUPLICATE_SESSION_ID\", \"PDU_SESSION_STATUS_MISMATCH\",
 \"HO_FAILURE\", \"INSUFFICIENT_UP_RESOURCES\", \"PDU_SESSION_HANDED_OVER\",
 \"PDU_SESSION_RESUMED\", \"CN_ASSISTED_RAN_PARAMETER_TUNING\",
 \"ISMF_CONTEXT_TRANSFER\", \"SMF_CONTEXT_TRANSFER\",
 \"REL_DUE_TO_PS_TO_CS_HO\", \"REL_DUE_TO_SUBSCRIPTION_CHANGE\",
 \"HO_CANCEL\", \"REL_DUE_TO_SLICE_NOT_AUTHORIZED\",
 \"PDU_SESSION_HAND_OVER_FAILURE\", \"DDN_FAILURE_STATUS\",
 \"REL_DUE_TO_CP_ONLY_NOT_APPLICABLE\", \"NOT_SUPPORTED_WITH_ISMF\",
 \"CHANGED_ANCHOR_SMF\", \"CHANGED_INTERMEDIATE_SMF\",
 \"REL_DUE_TO_SMF_NOT_SUPPORT_PSETR\"], \"type\": \"string\"}, {\"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.\\n\"}], \"description\":
 \"Possible values are - REL_DUE_TO_HO - EPS_FALLBACK - REL_DUE_TO_UP_SEC -
DNN_CONGESTION - S_NSSAI_CONGESTION - REL_DUE_TO_REACTIVATION -
5G_AN_NOT_RESPONDING - REL_DUE_TO_SLICE_NOT_AVAILABLE -
REL_DUE_TO_DUPLICATE_SESSION_ID - PDU_SESSION_STATUS_MISMATCH - HO_FAILURE -
INSUFFICIENT_UP_RESOURCES - PDU_SESSION_HANDED_OVER - PDU_SESSION_RESUMED -
CN_ASSISTED_RAN_PARAMETER_TUNING - ISMF_CONTEXT_TRANSFER -

```

```

SMF_CONTEXT_TRANSFER - REL_DUE_TO_PS_CS_HO -
REL_DUE_TO_SUBSCRIPTION_CHANGE - HO_CANCEL - REL_DUE_TO_SLICE_NOT_AUTHORIZED
- PDU_SESSION_HAND_OVER_FAILURE - DDN_FAILURE_STATUS -
REL_DUE_TO_CP_ONLY_NOT_APPLICABLE - NOT_SUPPORTED_WITH_ISMF -
CHANGED_ANCHOR_SMF - CHANGED_INTERMEDIATE_SMF -
REL_DUE_TO_SMF_NOT_SUPPORT_PSETR\\n\\n", \\\"guami\\\": {\\\"type\\\": \\\"object\\\",
\\\"required\\\": [\\\"amfId\\\", \\\"plmnId\\\"], \\\"properties\\\": {\\\"amfId\\\": {\\\"type\\\":
\\\"string\\\", \\\"pattern\\\": \\\"^[A-Fa-f0-9]{6}$\\\", \\\"plmnId\\\": {\\\"type\\\":
\\\"object\\\", \\\"required\\\": [\\\"mcc\\\", \\\"mnc\\\"], \\\"properties\\\": {\\\"mcc\\\":
{\\\"type\\\": \\\"string\\\", \\\"pattern\\\": \\\"^\\\\\\\\d{3}$\\\", \\\"mnc\\\": {\\\"type\\\":
\\\"string\\\", \\\"pattern\\\": \\\"^\\\\\\\\d{2,3}$\\\", \\\"nid\\\": {\\\"type\\\": \\\"string\\\",
\\\"pattern\\\": \\\"^[A-Fa-f0-9]{11}$\\\"}}}}}, \\\"anType\\\": {\\\"enum\\\":
[\\\"3GPP_ACCESS\\\", \\\"NON_3GPP_ACCESS\\\", \\\"type\\\": \\\"string\\\", \\\"ismfId\\\":
{\\\"type\\\": \\\"string\\\", \\\"format\\\": \\\"uuid\\\", \\\"n4Info\\\": {\\\"type\\\":
\\\"object\\\", \\\"required\\\": [\\\"n4MessagePayload\\\", \\\"n4MessageType\\\",
\\\"properties\\\": {\\\"n4DnaiInfo\\\": {\\\"type\\\": \\\"object\\\", \\\"required\\\":
[\\\"dnai\\\", \\\"properties\\\": {\\\"dnai\\\": {\\\"type\\\": \\\"string\\\",
\\\"noDnaiChangeInd\\\": {\\\"type\\\": \\\"boolean\\\", \\\"noLocalPsaChangeInd\\\":
{\\\"type\\\": \\\"boolean\\\"}}}, \\\"n4MessageType\\\": {\\\"anyOf\\\": [{\\\"enum\\\":
[\\\"PFCP_SES_EST_REQ\\\", \\\"PFCP_SES_EST_RSP\\\", \\\"PFCP_SES_MOD_REQ\\\",
\\\"PFCP_SES_MOD_RSP\\\", \\\"PFCP_SES_DEL_REQ\\\", \\\"PFCP_SES_DEL_RSP\\\",
\\\"PFCP_SES_REP_REQ\\\", \\\"PFCP_SES_REP_RSP\\\", \\\"type\\\": \\\"string\\\",
{\\\"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.\\\\n\\\\n\\\"}},
\\\"description\\\": \\\"Possible values are\\\\n - PFCP_SES_EST_REQ\\\\n -
PFCP_SES_EST_RSP\\\\n - PFCP_SES_MOD_REQ\\\\n - PFCP_SES_MOD_RSP\\\\n -
PFCP_SES_DEL_REQ\\\\n - PFCP_SES_DEL_RSP\\\\n - PFCP_SES_REP_REQ\\\\n -
PFCP_SES_REP_RSP\\\\n\\\\n\\\", \\\"n4MessagePayload\\\": {\\\"type\\\": \\\"object\\\",
\\\"required\\\": [\\\"contentId\\\", \\\"properties\\\": {\\\"contentId\\\": {\\\"type\\\":
\\\"string\\\"}}}}}, \\\"vsmfId\\\": {\\\"type\\\": \\\"string\\\", \\\"format\\\": \\\"uuid\\\",
\\\"amfNfId\\\": {\\\"type\\\": \\\"string\\\", \\\"format\\\": \\\"uuid\\\", \\\"psaInfo\\\":
{\\\"type\\\": \\\"array\\\", \\\"items\\\": {\\\"type\\\": \\\"object\\\", \\\"properties\\\":
{\\\"psaInd\\\": {\\\"anyOf\\\": [{\\\"enum\\\": [\\\"PSA_INSERTED\\\", \\\"PSA_REMOVED\\\",
\\\"PSA_INSERTED_ONLY\\\", \\\"PSA_REMOVED_ONLY\\\", \\\"type\\\": \\\"string\\\",
{\\\"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.\\\\n\\\\n\\\"}},
\\\"description\\\": \\\"Possible values are\\\\n - PSA_INSERTED\\\\n - PSA_REMOVED\\\\
n - PSA_INSERTED_ONLY\\\\n - PSA_REMOVED_ONLY\\\\n\\\\n\\\", \\\"dnaiList\\\":
{\\\"type\\\": \\\"array\\\", \\\"items\\\": {\\\"type\\\": \\\"string\\\", \\\"minItems\\\": 1},
\\\"psaUpfId\\\": {\\\"type\\\": \\\"string\\\", \\\"format\\\": \\\"uuid\\\", \\\"ueIpv6Prefix\\\":
{\\\"type\\\": \\\"string\\\", \\\"allof\\\": [{\\\"pattern\\\": \\\"^((|0?|([1-9a-f][0-9a-f]
{0,3})))((0?|([1-9a-f][0-9a-f]{0,3})):){0,6}:(|0?|([1-9a-f][0-9a-f]{0,3})))
(\\\\\\\\\\\\\\\\([0-9])|([0-9]{2})|(1[0-1][0-9])|(12[0-8]))$\\\", \\\"pattern\\\":
\\\"^((([\\^:]+):){7}([\\^:]+)|((([\\^:]+):)*[\\^:]+)?::((([\\^:]+):)*[\\^:]+)?)(\\\\\\\\\\\\\\\\.+)$
\\\"}], \\\"example\\\": \\\"2001:db8:abcd:12::0/64\\\"}}}, \\\"minItems\\\": 1},
\\\"ratType\\\": {\\\"anyOf\\\": [{\\\"enum\\\": [\\\"NR\\\", \\\"EUTRA\\\", \\\"WLAN\\\",
\\\"VIRTUAL\\\", \\\"NBIOT\\\", \\\"WIRELINE\\\", \\\"WIRELINE_CABLE\\\", \\\"WIRELINE_BBF\\\",
\\\"LTE-M\\\", \\\"NR_U\\\", \\\"EUTRA_U\\\", \\\"TRUSTED_N3GA\\\", \\\"TRUSTED_WLAN\\\",
\\\"UTRA\\\", \\\"GERA\\\", \\\"type\\\": \\\"string\\\", {\\\"type\\\": \\\"string\\\"}}],
\\\"dnaiList\\\": {\\\"type\\\": \\\"array\\\", \\\"items\\\": {\\\"type\\\": \\\"string\\\",
\\\"minItems\\\": 1}, \\\"vplmnQos\\\": {\\\"type\\\": \\\"object\\\", \\\"properties\\\":
{\\\"5qi\\\": {\\\"type\\\": \\\"integer\\\", \\\"maximum\\\": 255, \\\"minimum\\\": 0}, \\\"arp\\\":
{\\\"type\\\": \\\"object\\\", \\\"required\\\": [\\\"preemptCap\\\", \\\"preemptVuln\\\",
\\\"priorityLevel\\\", \\\"properties\\\": {\\\"preemptCap\\\": {\\\"anyOf\\\": [{\\\"enum\\\":

```

```

[{"NOT_PREEMPT": {"MAY_PREEMPT": {"type": "string"}, {"type": "string"}}, {"preemptVuln": {"anyOf": [{"enum": ["NOT_PREEMPTABLE", "PREEMPTABLE"], "type": "string"}, {"type": "string"}]}, {"priorityLevel": {"type": "integer", "maximum": 15, "minimum": 1, "nullable": true, "description": "nullable true shall not be used for this attribute"}}, {"guaFbrDl": {"type": "string", "pattern": "\\^\\\\d+(\\\\\\\\.\\\\\\\\d+)? (bps|Kbps|Mbps|Gbps|Tbps)$"}, {"guaFbrUl": {"type": "string", "pattern": "\\^\\\\d+(\\\\\\\\.\\\\\\\\d+)? (bps|Kbps|Mbps|Gbps|Tbps)$"}, {"maxFbrDl": {"type": "string", "pattern": "\\^\\\\d+(\\\\\\\\.\\\\\\\\d+)? (bps|Kbps|Mbps|Gbps|Tbps)$"}, {"maxFbrUl": {"type": "string", "pattern": "\\^\\\\d+(\\\\\\\\.\\\\\\\\d+)? (bps|Kbps|Mbps|Gbps|Tbps)$"}, {"sessionAmbr": {"type": "object", "required": ["downlink", "uplink"], "properties": {"uplink": {"type": "string", "pattern": "\\^\\\\d+(\\\\\\\\.\\\\\\\\d+)? (bps|Kbps|Mbps|Gbps|Tbps)$"}, "downlink": {"type": "string", "pattern": "\\^\\\\d+(\\\\\\\\.\\\\\\\\d+)? (bps|Kbps|Mbps|Gbps|Tbps)$"}}, {"ngApCause": {"type": "object", "required": ["group", "value"], "properties": {"group": {"type": "integer", "minimum": 0}, "value": {"type": "integer", "minimum": 0}}, {"NotifyList": {"type": "array", "items": {"type": "object", "required": ["notificationCause"], "properties": {"notificationCause": {"anyOf": [{"enum": ["QOS_FULFILLED", "QOS_NOT_FULFILLED", "UP_SEC_FULFILLED", "UP_SEC_NOT_FULFILLED"], "type": "string"}, {"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": "Possible values are - QOS_FULFILLED - QOS_NOT_FULFILLED - UP_SEC_FULFILLED - UP_SEC_NOT_FULFILLED\\n\\n"}}, {"minItems": 1}, {"n4InfoExt1": {"type": "object", "required": ["n4MessagePayload", "n4MessageType"], "properties": {"n4DnaiInfo": {"type": "object", "required": ["dnai"], "properties": {"dnai": {"type": "string", "noDnaiChangeInd": {"type": "boolean", "noLocalPsaChangeInd": {"type": "boolean"}}, {"n4MessageType": {"anyOf": [{"enum": ["PFCP_SES_EST_REQ", "PFCP_SES_EST_RSP", "PFCP_SES_MOD_REQ", "PFCP_SES_MOD_RSP", "PFCP_SES_DEL_REQ", "PFCP_SES_DEL_RSP", "PFCP_SES_REP_REQ", "PFCP_SES_REP_RSP"], "type": "string"}, {"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": "Possible values are\\n - PFCP_SES_EST_REQ\\n - PFCP_SES_EST_RSP\\n - PFCP_SES_MOD_REQ\\n - PFCP_SES_MOD_RSP\\n - PFCP_SES_DEL_REQ\\n - PFCP_SES_DEL_RSP\\n - PFCP_SES_REP_REQ\\n - PFCP_SES_REP_RSP\\n\\n"}, {"n4MessagePayload": {"type": "object", "required": ["contentId"], "properties": {"contentId": {"type": "string"}}, {"n4InfoExt2": {"type": "object", "required": ["n4MessagePayload", "n4MessageType"], "properties": {"n4DnaiInfo": {"type": "object", "required": ["dnai"], "properties": {"dnai": {"type": "string", "noDnaiChangeInd": {"type": "boolean", "noLocalPsaChangeInd": {"type": "boolean"}}, {"n4MessageType": {"anyOf": [{"enum": ["PFCP_SES_EST_REQ", "PFCP_SES_EST_RSP", "PFCP_SES_MOD_REQ", "PFCP_SES_MOD_RSP", "PFCP_SES_DEL_REQ", "PFCP_SES_DEL_RSP", "PFCP_SES_REP_REQ", "PFCP_SES_REP_RSP"], "type": "string"}, {"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": "Possible values are\\n - PFCP_SES_EST_REQ\\n - PFCP_SES_EST_RSP\\n - PFCP_SES_MOD_REQ\\n - PFCP_SES_MOD_RSP\\n -

```

```

PCFP_SES_DEL_REQ\\n - PCFP_SES_DEL_RSP\\n - PCFP_SES_REP_REQ\\n -
PCFP_SES_REP_RSP\\n\\n", \\n4MessagePayload\\": {\\n\"type\\\": \\n\"object\\\",
\\n\"required\\\": [\\n\"contentId\\\", \\n\"properties\\\": {\\n\"contentId\\\": {\\n\"type\\\":
\\n\"string\\\"}}}}, \\n\"ueLocation\\\": {\\n\"type\\\": \\n\"object\\\", \\n\"properties\\\":
{\\n\"nrLocation\\\": {\\n\"type\\\": \\n\"object\\\", \\n\"required\\\": [\\n\"ncgi\\\", \\n\"tai\\\",
\\n\"properties\\\": {\\n\"tai\\\": {\\n\"type\\\": \\n\"object\\\", \\n\"required\\\": [\\n\"plmnId\\\",
\\n\"tac\\\", \\n\"properties\\\": {\\n\"nid\\\": {\\n\"type\\\": \\n\"string\\\", \\n\"pattern\\\": \\n\"^[A-
Fa-f0-9]{11}$\\\", \\n\"tac\\\": {\\n\"type\\\": \\n\"string\\\", \\n\"pattern\\\": \\n\"(^[A-Fa-f0-9]
{4}$)|(^[A-Fa-f0-9]{6}$)\\\", \\n\"plmnId\\\": {\\n\"type\\\": \\n\"object\\\", \\n\"required\\\":
[\\n\"mcc\\\", \\n\"mnc\\\", \\n\"properties\\\": {\\n\"mcc\\\": {\\n\"type\\\": \\n\"string\\\",
\\n\"pattern\\\": \\n\"^\\\\\\\\d{3}$\\\", \\n\"mnc\\\": {\\n\"type\\\": \\n\"string\\\", \\n\"pattern\\\":
\\n\"^\\\\\\\\d{2,3}$\\\"}}}}, \\n\"ncgi\\\": {\\n\"type\\\": \\n\"object\\\", \\n\"required\\\":
[\\n\"nrCellId\\\", \\n\"plmnId\\\", \\n\"properties\\\": {\\n\"nid\\\": {\\n\"type\\\": \\n\"string\\\",
\\n\"pattern\\\": \\n\"^[A-Fa-f0-9]{11}$\\\", \\n\"plmnId\\\": {\\n\"type\\\": \\n\"object\\\",
\\n\"required\\\": [\\n\"mcc\\\", \\n\"mnc\\\", \\n\"properties\\\": {\\n\"mcc\\\": {\\n\"type\\\":
\\n\"string\\\", \\n\"pattern\\\": \\n\"^\\\\\\\\d{3}$\\\", \\n\"mnc\\\": {\\n\"type\\\": \\n\"string\\\",
\\n\"pattern\\\": \\n\"^\\\\\\\\d{2,3}$\\\"}}}}, \\n\"nrCellId\\\": {\\n\"type\\\": \\n\"string\\\",
\\n\"pattern\\\": \\n\"^[A-Fa-f0-9]{9}$\\\"}}}}, \\n\"ignoreNcgi\\\": {\\n\"type\\\": \\n\"boolean\\\",
\\n\"default\\\": false}, \\n\"globalGnbId\\\": {\\n\"type\\\": \\n\"object\\\", \\n\"oneOf\\\":
[{\\n\"required\\\": [\\n\"n3IwfId\\\"]}, {\\n\"required\\\": [\\n\"gNbId\\\"]}, {\\n\"required\\\":
[\\n\"ngenNbId\\\"]}, {\\n\"required\\\": [\\n\"wagfId\\\"]}, {\\n\"required\\\": [\\n\"tngfId\\\"]},
{\\n\"required\\\": [\\n\"eNbId\\\"]}], \\n\"required\\\": [\\n\"plmnId\\\", \\n\"properties\\\":
{\\n\"nid\\\": {\\n\"type\\\": \\n\"string\\\", \\n\"pattern\\\": \\n\"^[A-Fa-f0-9]{11}$\\\",
\\n\"eNbId\\\": {\\n\"type\\\": \\n\"string\\\", \\n\"pattern\\\": \\n\"^(MacroenB-[A-Fa-f0-9]{5}|
LMacroenB-[A-Fa-f0-9]{6}|SMacroenB-[A-Fa-f0-9]{5}|HomeenB-[A-Fa-f0-9]{7})$
\\\", \\n\"gNbId\\\": {\\n\"type\\\": \\n\"object\\\", \\n\"required\\\": [\\n\"bitLength\\\",
\\n\"gNBValue\\\", \\n\"properties\\\": {\\n\"gNBValue\\\": {\\n\"type\\\": \\n\"string\\\",
\\n\"pattern\\\": \\n\"^[A-Fa-f0-9]{6,8}$\\\", \\n\"bitLength\\\": {\\n\"type\\\": \\n\"integer\\\",
\\n\"maximum\\\": 32, \\n\"minimum\\\": 22}}}}, \\n\"plmnId\\\": {\\n\"type\\\": \\n\"object\\\",
\\n\"required\\\": [\\n\"mcc\\\", \\n\"mnc\\\", \\n\"properties\\\": {\\n\"mcc\\\": {\\n\"type\\\":
\\n\"string\\\", \\n\"pattern\\\": \\n\"^\\\\\\\\d{3}$\\\", \\n\"mnc\\\": {\\n\"type\\\": \\n\"string\\\",
\\n\"pattern\\\": \\n\"^\\\\\\\\d{2,3}$\\\"}}}}, \\n\"tngfId\\\": {\\n\"type\\\": \\n\"string\\\",
\\n\"pattern\\\": \\n\"^[A-Fa-f0-9]+$\\\", \\n\"wagfId\\\": {\\n\"type\\\": \\n\"string\\\",
\\n\"pattern\\\": \\n\"^[A-Fa-f0-9]+$\\\", \\n\"n3IwfId\\\": {\\n\"type\\\": \\n\"string\\\",
\\n\"pattern\\\": \\n\"^[A-Fa-f0-9]+$\\\", \\n\"ngenNbId\\\": {\\n\"type\\\": \\n\"string\\\",
\\n\"pattern\\\": \\n\"^(MacroNGenB-[A-Fa-f0-9]{5}|LMacroNGenB-[A-Fa-f0-9]{6}|
SMacroNGenB-[A-Fa-f0-9]{5})$\\\"}}}}, \\n\"geodeticInformation\\\": {\\n\"type\\\":
\\n\"string\\\", \\n\"pattern\\\": \\n\"^[0-9A-F]{20}$\\\", \\n\"ueLocationTimestamp\\\":
{\\n\"type\\\": \\n\"string\\\", \\n\"format\\\": \\n\"date-time\\\",
\\n\"geographicalInformation\\\": {\\n\"type\\\": \\n\"string\\\", \\n\"pattern\\\": \\n\"^[0-9A-F]
{16}$\\\", \\n\"ageOfLocationInformation\\\": {\\n\"type\\\": \\n\"integer\\\", \\n\"maximum\\\":
32767, \\n\"minimum\\\": 0}}}}, \\n\"geraLocation\\\": {\\n\"type\\\": \\n\"object\\\", \\n\"oneOf\\\":
[{\\n\"required\\\": [\\n\"cgi\\\"]}, {\\n\"required\\\": [\\n\"sai\\\"]}, {\\n\"required\\\":
[\\n\"rai\\\"]}, {\\n\"required\\\": [\\n\"lai\\\"]}], \\n\"properties\\\": {\\n\"cgi\\\": {\\n\"type\\\":
\\n\"object\\\", \\n\"required\\\": [\\n\"cellId\\\", \\n\"lac\\\", \\n\"plmnId\\\", \\n\"properties\\\":
{\\n\"lac\\\": {\\n\"type\\\": \\n\"string\\\", \\n\"pattern\\\": \\n\"^[A-Fa-f0-9]{4}$\\\",
\\n\"cellId\\\": {\\n\"type\\\": \\n\"string\\\", \\n\"pattern\\\": \\n\"^[A-Fa-f0-9]{4}$\\\",
\\n\"plmnId\\\": {\\n\"type\\\": \\n\"object\\\", \\n\"required\\\": [\\n\"mcc\\\", \\n\"mnc\\\",
\\n\"properties\\\": {\\n\"mcc\\\": {\\n\"type\\\": \\n\"string\\\", \\n\"pattern\\\": \\n\"^\\\\\\\\d{3}$
\\\", \\n\"mnc\\\": {\\n\"type\\\": \\n\"string\\\", \\n\"pattern\\\": \\n\"^\\\\\\\\d{2,3}$\\\"}}}},
\\n\"lai\\\": {\\n\"type\\\": \\n\"object\\\", \\n\"required\\\": [\\n\"lac\\\", \\n\"plmnId\\\",
\\n\"properties\\\": {\\n\"lac\\\": {\\n\"type\\\": \\n\"string\\\", \\n\"pattern\\\": \\n\"^[A-Fa-f0-9]
{4}$\\\", \\n\"plmnId\\\": {\\n\"type\\\": \\n\"object\\\", \\n\"required\\\": [\\n\"mcc\\\", \\n\"mnc\\\",
\\n\"properties\\\": {\\n\"mcc\\\": {\\n\"type\\\": \\n\"string\\\", \\n\"pattern\\\": \\n\"^\\\\\\\\d{3}$
\\\", \\n\"mnc\\\": {\\n\"type\\\": \\n\"string\\\", \\n\"pattern\\\": \\n\"^\\\\\\\\d{2,3}$\\\"}}}},
\\n\"rai\\\": {\\n\"type\\\": \\n\"object\\\", \\n\"required\\\": [\\n\"lac\\\", \\n\"plmnId\\\", \\n\"rac\\\",

```



```

\"properties\": {\"lac\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{4}$\"}, \"rac\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{2}$\"}, \"plmnId\": {\"type\": \"object\", \"required\": [\"mcc\", \"mnc\"], \"properties\": {\"mcc\": {\"type\": \"string\", \"pattern\": \"^[\\d]{3}$\"}, \"mnc\": {\"type\": \"string\", \"pattern\": \"^[\\d]{2,3}$\"}}}}, \"sai\": {\"type\": \"object\", \"required\": [\"lac\", \"plmnId\", \"sac\"], \"properties\": {\"lac\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{4}$\"}, \"sac\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{4}$\"}, \"plmnId\": {\"type\": \"object\", \"required\": [\"mcc\", \"mnc\"], \"properties\": {\"mcc\": {\"type\": \"string\", \"pattern\": \"^[\\d]{3}$\"}, \"mnc\": {\"type\": \"string\", \"pattern\": \"^[\\d]{2,3}$\"}}}}, \"mscNumber\": {\"type\": \"string\"}, \"vlrNumber\": {\"type\": \"string\"}, \"locationNumber\": {\"type\": \"string\"}, \"geodeticInformation\": {\"type\": \"string\", \"pattern\": \"^[0-9A-F]{20}$\"}, \"ueLocationTimestamp\": {\"type\": \"string\", \"format\": \"date-time\"}, \"geographicalInformation\": {\"type\": \"string\", \"pattern\": \"^[0-9A-F]{16}$\"}, \"ageOfLocationInformation\": {\"type\": \"integer\", \"maximum\": 32767, \"minimum\": 0}}, \"n3gaLocation\": {\"type\": \"object\", \"properties\": {\"gci\": {\"type\": \"string\"}, \"gli\": {\"type\": \"string\", \"format\": \"byte\"}, \"tnapId\": {\"type\": \"object\", \"properties\": {\"ssId\": {\"type\": \"string\"}, \"bssId\": {\"type\": \"string\", \"format\": \"byte\"}}, \"twapId\": {\"type\": \"object\", \"required\": [\"ssId\"], \"properties\": {\"ssId\": {\"type\": \"string\"}, \"bssId\": {\"type\": \"string\", \"format\": \"byte\"}}, \"n3IwfId\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]+$\"}, \"n3gppTai\": {\"type\": \"object\", \"required\": [\"plmnId\", \"tac\"], \"properties\": {\"nid\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{11}$\"}, \"tac\": {\"type\": \"string\", \"pattern\": \"^(^([A-Fa-f0-9]{4}$)|(^([A-Fa-f0-9]{6}$)|\"plmnId\": {\"type\": \"object\", \"required\": [\"mcc\", \"mnc\"], \"properties\": {\"mcc\": {\"type\": \"string\", \"pattern\": \"^[\\d]{3}$\"}, \"mnc\": {\"type\": \"string\", \"pattern\": \"^[\\d]{2,3}$\"}}}}, \"protocol\": {\"anyOf\": [{\"enum\": [\"UDP\", \"TCP\"], \"type\": \"string\"}, {\"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.\\n\"}], \"description\": \"Possible values are - UDP: User Datagram Protocol. - TCP: Transmission Control Protocol.\\n\"}, \"hfcNodeId\": {\"type\": \"object\", \"required\": [\"hfcNId\"], \"properties\": {\"hfcNId\": {\"type\": \"string\", \"maxLength\": 6}}, \"portNumber\": {\"type\": \"integer\", \"minimum\": 0}, \"ueIpv4Addr\": {\"type\": \"string\", \"example\": \"198.51.100.1\", \"pattern\": \"^((([0-9]{1-9}[0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5]))\\.){3}([0-9]|[1-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5])$\"}, \"ueIpv6Addr\": {\"type\": \"string\", \"allow\": [{\"pattern\": \"^((:|0?|([1-9a-f][0-9a-f]{0,3})))(0?|([1-9a-f][0-9a-f]{0,3}))(:|0,6|(:|0?|([1-9a-f][0-9a-f]{0,3}))$\"}, {\"pattern\": \"^(((^[^:]+):){7}([^[^:]+))|(((^[^:]+)*^[^:]+)?::((^[^:]+)*^[^:]+)?)$\"}], \"example\": \"2001:db8:85a3::8a2e:370:7334\", \"w5gbanLineType\": {\"anyOf\": [{\"enum\": [\"DSL\", \"PON\"], \"type\": \"string\"}, {\"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.\\n\"}], \"description\": \"Possible values are - DSL: Identifies a DSL line - PON: Identifies a PON line\\n\"}}}, \"utraLocation\": {\"type\": \"object\", \"oneOf\": [{\"required\": [\"cgi\"], \"required\": [\"sai\"], \"required\": [\"rai\"]}], \"properties\": {\"cgi\": {\"type\": \"object\", \"required\":

```



```

{"cellId": "\lac", "plmnId": "\properties": {"lac": {"type":
"string", "pattern": "\^[A-Fa-f0-9]{4}$"}, "cellId": {"type":
"string", "pattern": "\^[A-Fa-f0-9]{4}$"}, "plmnId": {"type":
"object", "required": ["mcc", "mnc"], "properties": {"mcc":
{"type": "string", "pattern": "\^\d{3}$"}, "mnc": {"type":
"string", "pattern": "\^\d{2,3}$"}}}}, "lai": {"type":
"object", "required": ["lac", "plmnId"], "properties": {"lac":
{"type": "string", "pattern": "\^[A-Fa-f0-9]{4}$"}, "plmnId":
{"type": "object", "required": ["mcc", "mnc"], "properties":
{"mcc": {"type": "string", "pattern": "\^\d{3}$"}, "mnc":
{"type": "string", "pattern": "\^\d{2,3}$"}}}}, "rai":
{"type": "object", "required": ["lac", "plmnId", "rac"],
"properties": {"lac": {"type": "string", "pattern": "\^[A-Fa-f0-9]{4}$"}, "rac": {"type": "string", "pattern": "\^[A-Fa-f0-9]{2}$"}, "plmnId": {"type": "object", "required": ["mcc", "mnc"], "properties": {"mcc": {"type": "string", "pattern": "\^\d{3}$"}, "mnc": {"type": "string", "pattern": "\^\d{2,3}$"}}}}, "sai": {"type": "object", "required": ["lac", "plmnId", "sac"], "properties": {"lac": {"type": "string", "pattern": "\^[A-Fa-f0-9]{4}$"}, "sac": {"type": "string", "pattern": "\^[A-Fa-f0-9]{4}$"}, "plmnId": {"type": "object", "required": ["mcc", "mnc"], "properties": {"mcc": {"type": "string", "pattern": "\^\d{3}$"}, "mnc": {"type": "string", "pattern": "\^\d{2,3}$"}}}}, "geodeticInformation": {"type": "string", "pattern": "\^[0-9A-F]{20}$"}, "ueLocationTimestamp": {"type": "string", "format": "date-time"}, "geographicalInformation": {"type": "string", "pattern": "\^[0-9A-F]{16}$"}, "ageOfLocationInformation": {"type": "integer", "maximum": 32767, "minimum": 0}}, "eutraLocation": {"type": "object", "required": ["ecgi", "tai"], "properties": {"tai": {"type": "object", "required": ["plmnId", "tac"], "properties": {"nid": {"type": "string", "pattern": "\^[A-Fa-f0-9]{11}$"}, "tac": {"type": "string", "pattern": "^(^A-Fa-f0-9){4}$|^A-Fa-f0-9){6}$"}, "plmnId": {"type": "object", "required": ["mcc", "mnc"], "properties": {"mcc": {"type": "string", "pattern": "\^\d{3}$"}, "mnc": {"type": "string", "pattern": "\^\d{2,3}$"}}}}, "ecgi": {"type": "object", "required": ["eutraCellId", "plmnId"], "properties": {"nid": {"type": "string", "pattern": "\^[A-Fa-f0-9]{11}$"}, "plmnId": {"type": "object", "required": ["mcc", "mnc"], "properties": {"mcc": {"type": "string", "pattern": "\^\d{3}$"}, "mnc": {"type": "string", "pattern": "\^\d{2,3}$"}}}}, "eutraCellId": {"type": "string", "pattern": "\^[A-Fa-f0-9]{7}$"}, "ignoreTai": {"type": "boolean", "default": false}, "ignoreEcgi": {"type": "boolean", "default": false}, "globalEcnbId": {"type": "object", "oneOf": [{"required": ["n3IwfId"]}, {"required": ["gNbId"]}, {"required": ["ngeNbId"]}, {"required": ["wagfId"]}, {"required": ["tngfId"]}, {"required": ["eNbId"]}], "required": ["plmnId"], "properties": {"nid": {"type": "string", "pattern": "\^[A-Fa-f0-9]{11}$"}, "eNbId": {"type": "string", "pattern": "\^(MacroNb-[A-Fa-f0-9]{5}|LMacroNb-[A-Fa-f0-9]{6}|SMacroNb-[A-Fa-f0-9]{5}|HomeNb-[A-Fa-f0-9]{7})$"}, "gNbId": {"type": "object", "required": ["bitLength", "gNBValue"], "properties": {"gNBValue": {"type": "string", "pattern": "\^[A-Fa-f0-9]{6,8}$"}, "bitLength": {"type": "integer", "maximum": 32, "minimum": 22}}, "plmnId": {"type": "object", "required": ["mcc", "mnc"], "properties": {"mcc": {"type": "string", "pattern": "\^\d{3}$"}, "mnc": {"type": "string", "pattern":

```

```

\\^\\\\d{2,3}$\\}}}, \\\"tngfId\\\": {\\\"type\\\": \\\"string\\\", \\\"pattern\\\": \\\"^[A-Fa-f0-9]+$\\\"}, \\\"wagfId\\\": {\\\"type\\\": \\\"string\\\", \\\"pattern\\\": \\\"^[A-Fa-f0-9]+$\\\"}, \\\"n3IwfId\\\": {\\\"type\\\": \\\"string\\\", \\\"pattern\\\": \\\"^[A-Fa-f0-9]+$\\\"}, \\\"ngeNbId\\\": {\\\"type\\\": \\\"string\\\", \\\"pattern\\\": \\\"^(MacroNGeNB-[A-Fa-f0-9]{5}|MacroNGeNB-[A-Fa-f0-9]{6}|MacroNGeNB-[A-Fa-f0-9]{5})$\\\"}}, \\\"globalNgenbId\\\": {\\\"type\\\": \\\"object\\\", \\\"oneOf\\\": [{\\\"required\\\": [\\\"n3IwfId\\\"], \\\"required\\\": [\\\"gnNbId\\\"], \\\"required\\\": [\\\"ngeNbId\\\"], \\\"required\\\": [\\\"wagfId\\\"], \\\"required\\\": [\\\"tngfId\\\"], \\\"required\\\": [\\\"eNbId\\\"]}], \\\"required\\\": [\\\"plmnId\\\"], \\\"properties\\\": {\\\"nid\\\": {\\\"type\\\": \\\"string\\\", \\\"pattern\\\": \\\"^[A-Fa-f0-9]{11}$\\\"}, \\\"eNbId\\\": {\\\"type\\\": \\\"string\\\", \\\"pattern\\\": \\\"^(MacroeNB-[A-Fa-f0-9]{5}|MacroeNB-[A-Fa-f0-9]{6}|MacroeNB-[A-Fa-f0-9]{5}|HomeeNB-[A-Fa-f0-9]{7})$\\\"}, \\\"gnNbId\\\": {\\\"type\\\": \\\"object\\\", \\\"required\\\": [\\\"bitLength\\\", \\\"gnNBValue\\\"], \\\"properties\\\": {\\\"gnNBValue\\\": {\\\"type\\\": \\\"string\\\", \\\"pattern\\\": \\\"^[A-Fa-f0-9]{6,8}$\\\"}, \\\"bitLength\\\": {\\\"type\\\": \\\"integer\\\", \\\"maximum\\\": 32, \\\"minimum\\\": 22}}}, \\\"plmnId\\\": {\\\"type\\\": \\\"object\\\", \\\"required\\\": [\\\"mcc\\\", \\\"mnc\\\"], \\\"properties\\\": {\\\"mcc\\\": {\\\"type\\\": \\\"string\\\", \\\"pattern\\\": \\\"^[\\\\\\\\d{3}$\\\"}, \\\"mnc\\\": {\\\"type\\\": \\\"string\\\", \\\"pattern\\\": \\\"^[\\\\\\\\d{2,3}$\\\"}}, \\\"tngfId\\\": {\\\"type\\\": \\\"string\\\", \\\"pattern\\\": \\\"^[A-Fa-f0-9]+$\\\"}, \\\"wagfId\\\": {\\\"type\\\": \\\"string\\\", \\\"pattern\\\": \\\"^[A-Fa-f0-9]+$\\\"}, \\\"n3IwfId\\\": {\\\"type\\\": \\\"string\\\", \\\"pattern\\\": \\\"^[A-Fa-f0-9]+$\\\"}, \\\"ngeNbId\\\": {\\\"type\\\": \\\"string\\\", \\\"pattern\\\": \\\"^(MacroNGeNB-[A-Fa-f0-9]{5}|MacroNGeNB-[A-Fa-f0-9]{6}|MacroNGeNB-[A-Fa-f0-9]{5})$\\\"}}, \\\"geodeticInformation\\\": {\\\"type\\\": \\\"string\\\", \\\"pattern\\\": \\\"^[0-9A-F]{20}$\\\"}, \\\"ueLocationTimestamp\\\": {\\\"type\\\": \\\"string\\\", \\\"format\\\": \\\"date-time\\\"}, \\\"geographicalInformation\\\": {\\\"type\\\": \\\"string\\\", \\\"pattern\\\": \\\"^[0-9A-F]{16}$\\\"}, \\\"ageOfLocationInformation\\\": {\\\"type\\\": \\\"integer\\\", \\\"maximum\\\": 32767, \\\"minimum\\\": 0}}}}, \\\"ueTimeZone\\\": {\\\"type\\\": \\\"string\\\", \\\"ulclBpInfo\\\": {\\\"type\\\": \\\"object\\\", \\\"properties\\\": {\\\"ulclBpUpfId\\\": {\\\"type\\\": \\\"string\\\", \\\"format\\\": \\\"uuid\\\"}}}, \\\"upCnxState\\\": {\\\"anyOf\\\": [{\\\"enum\\\": [\\\"ACTIVATED\\\", \\\"DEACTIVATED\\\", \\\"ACTIVATING\\\", \\\"SUSPENDED\\\"], \\\"type\\\": \\\"string\\\"}, {\\\"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.\\\\\\\\n\\\\\\\\\", \\\"description\\\": \\\"Possible values are - ACTIVATED - DEACTIVATED - ACTIVATING - SUSPENDED\\\\\\\\n\\\\\\\\\", \\\"epsBearerId\\\": {\\\"type\\\": \\\"array\\\", \\\"items\\\": {\\\"type\\\": \\\"integer\\\", \\\"maximum\\\": 15, \\\"minimum\\\": 0}, \\\"minItems\\\": 0}, \\\"maReleaseInd\\\": {\\\"anyOf\\\": [{\\\"enum\\\": [\\\"REL_MAPDU_OVER_3GPP\\\", \\\"REL_MAPDU_OVER_N3GPP\\\"], \\\"type\\\": \\\"string\\\"}, {\\\"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.\\\\\\\\n\\\\\\\\\", \\\"description\\\": \\\"Possible values are\\\\\\\\n - REL_MAPDU_OVER_3GPP\\\\\\\\n - REL_MAPDU_OVER_N3GPP\\\\\\\\n\\\\\\\\\", \\\"maRequestInd\\\": {\\\"type\\\": \\\"boolean\\\", \\\"default\\\": false}, \\\"addUeLocation\\\": {\\\"type\\\": \\\"object\\\", \\\"properties\\\": {\\\"nrLocation\\\": {\\\"type\\\": \\\"object\\\", \\\"required\\\": [\\\"ncgi\\\", \\\"tai\\\"], \\\"properties\\\": {\\\"tai\\\": {\\\"type\\\": \\\"object\\\", \\\"required\\\": [\\\"plmnId\\\", \\\"tac\\\"], \\\"properties\\\": {\\\"nid\\\": {\\\"type\\\": \\\"string\\\", \\\"pattern\\\": \\\"^[A-Fa-f0-9]{11}$\\\"}, \\\"tac\\\": {\\\"type\\\": \\\"string\\\", \\\"pattern\\\": \\\"(^[A-Fa-f0-9]{4}$)|(^[A-Fa-f0-9]{6}$)\\\"}, \\\"plmnId\\\": {\\\"type\\\": \\\"object\\\", \\\"required\\\": [\\\"mcc\\\", \\\"mnc\\\"], \\\"properties\\\": {\\\"mcc\\\": {\\\"type\\\": \\\"string\\\", \\\"pattern\\\": \\\"^[\\\\\\\\d{3}$\\\"}, \\\"mnc\\\": {\\\"type\\\": \\\"string\\\", \\\"pattern\\\": \\\"^[\\\\\\\\d{2,3}$\\\"}}}}, \\\"ncgi\\\": {\\\"type\\\": \\\"object\\\", \\\"required\\\": [\\\"nrCellId\\\", \\\"plmnId\\\"], \\\"properties\\\": {\\\"nid\\\": {\\\"type\\\": \\\"string\\\", \\\"pattern\\\": \\\"^[A-Fa-f0-9]{11}$\\\"}, \\\"plmnId\\\": {\\\"type\\\": \\\"object\\\", \\\"required\\\": [\\\"mcc\\\",

```

```

\"mnc\"], \"properties\": {\"mcc\": {\"type\": \"string\", \"pattern\": \"^\\\\d{3}$\"}, \"mnc\": {\"type\": \"string\", \"pattern\": \"^\\\\d{2,3}$\"}},
\"nrCellId\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{9}$\"}},
\"ignoreNcgi\": {\"type\": \"boolean\", \"default\": false}, \"globalGnbId\":
{\"type\": \"object\", \"oneOf\": [{\"required\": [\"n3IwfId\"],
{\"required\": [\"gNbId\"], {\"required\": [\"ngeNbId\"], {\"required\":
[\"wagfId\"], {\"required\": [\"tngfId\"], {\"required\": [\"eNbId\"]}},
\"required\": [\"plmnId\"], \"properties\": {\"nid\": {\"type\": \"string\",
\"pattern\": \"^[A-Fa-f0-9]{11}$\"}, \"eNbId\": {\"type\": \"string\",
\"pattern\": \"^(MacroNB-[A-Fa-f0-9]{5}|MacroNB-[A-Fa-f0-9]{6}|SMacroNB-
[A-Fa-f0-9]{5}|HomeNB-[A-Fa-f0-9]{7})$\"}, \"gNbId\": {\"type\": \"object\",
\"required\": [\"bitLength\", \"gNBValue\"], \"properties\": {\"gNBValue\":
{\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{6,8}$\"}, \"bitLength\":
{\"type\": \"integer\", \"maximum\": 32, \"minimum\": 22}}, \"plmnId\":
{\"type\": \"object\", \"required\": [\"mcc\", \"mnc\"], \"properties\":
{\"mcc\": {\"type\": \"string\", \"pattern\": \"^\\\\d{3}$\"}, \"mnc\":
{\"type\": \"string\", \"pattern\": \"^\\\\d{2,3}$\"}}, \"tngfId\":
{\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]+$\"}, \"wagfId\":
{\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]+$\"}, \"n3IwfId\":
{\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]+$\"}, \"ngeNbId\":
{\"type\": \"string\", \"pattern\": \"^(MacroGnNB-[A-Fa-f0-9]{5}|MacroGnNB-
[A-Fa-f0-9]{6}|SMacroGnNB-[A-Fa-f0-9]{5})$\"}}, \"geodeticInformation\":
{\"type\": \"string\", \"pattern\": \"^[0-9A-F]{20}$\"},
\"ueLocationTimestamp\": {\"type\": \"string\", \"format\": \"date-time\"},
\"geographicalInformation\": {\"type\": \"string\", \"pattern\": \"^[0-9A-F]
{16}$\"}, \"ageOfLocationInformation\": {\"type\": \"integer\", \"maximum\":
32767, \"minimum\": 0}}, \"geraLocation\": {\"type\": \"object\", \"oneOf\":
[{\"required\": [\"cgi\"], {\"required\": [\"sai\"], {\"required\":
[\"rai\"], {\"required\": [\"lai\"]}}, \"properties\": {\"cgi\": {\"type\":
\"object\", \"required\": [\"cellId\", \"lac\", \"plmnId\"], \"properties\":
{\"lac\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{4}$\"},
\"cellId\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{4}$\"},
\"plmnId\": {\"type\": \"object\", \"required\": [\"mcc\", \"mnc\"],
\"properties\": {\"mcc\": {\"type\": \"string\", \"pattern\": \"^\\\\d{3}$
\"}, \"mnc\": {\"type\": \"string\", \"pattern\": \"^\\\\d{2,3}$\"}}}},
\"lai\": {\"type\": \"object\", \"required\": [\"lac\", \"plmnId\"],
\"properties\": {\"lac\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]
{4}$\"}, \"plmnId\": {\"type\": \"object\", \"required\": [\"mcc\", \"mnc\"],
\"properties\": {\"mcc\": {\"type\": \"string\", \"pattern\": \"^\\\\d{3}$
\"}, \"mnc\": {\"type\": \"string\", \"pattern\": \"^\\\\d{2,3}$\"}}}},
\"rai\": {\"type\": \"object\", \"required\": [\"lac\", \"plmnId\", \"rac\"],
\"properties\": {\"lac\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]
{4}$\"}, \"rac\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{2}$\"},
\"plmnId\": {\"type\": \"object\", \"required\": [\"mcc\", \"mnc\"],
\"properties\": {\"mcc\": {\"type\": \"string\", \"pattern\": \"^\\\\d{3}$
\"}, \"mnc\": {\"type\": \"string\", \"pattern\": \"^\\\\d{2,3}$\"}}}},
\"sai\": {\"type\": \"object\", \"required\": [\"lac\", \"plmnId\", \"sac\"],
\"properties\": {\"lac\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]
{4}$\"}, \"sac\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{4}$\"},
\"plmnId\": {\"type\": \"object\", \"required\": [\"mcc\", \"mnc\"],
\"properties\": {\"mcc\": {\"type\": \"string\", \"pattern\": \"^\\\\d{3}$
\"}, \"mnc\": {\"type\": \"string\", \"pattern\": \"^\\\\d{2,3}$\"}}}},
\"mncNumber\": {\"type\": \"string\"}, \"vlrNumber\": {\"type\": \"string\"},
\"locationNumber\": {\"type\": \"string\"}, \"geodeticInformation\":
{\"type\": \"string\", \"pattern\": \"^[0-9A-F]{20}$\"},
\"ueLocationTimestamp\": {\"type\": \"string\", \"format\": \"date-time\"},

```

```

\"geographicalInformation\": {\"type\": \"string\", \"pattern\": \"^[0-9A-F]{16}$\"}, \"ageOfLocationInformation\": {\"type\": \"integer\", \"maximum\": 32767, \"minimum\": 0}}, \"n3gaLocation\": {\"type\": \"object\", \"properties\": {\"gci\": {\"type\": \"string\", \"gli\": {\"type\": \"string\", \"format\": \"byte\"}, \"tnapId\": {\"type\": \"object\", \"properties\": {\"ssId\": {\"type\": \"string\", \"bssId\": {\"type\": \"string\", \"civicAddress\": {\"type\": \"string\", \"format\": \"byte\"}}}, \"twapId\": {\"type\": \"object\", \"required\": [\"ssId\"], \"properties\": {\"ssId\": {\"type\": \"string\", \"bssId\": {\"type\": \"string\", \"civicAddress\": {\"type\": \"string\", \"format\": \"byte\"}}}, \"n3IwfId\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]+$\"}, \"n3gppTai\": {\"type\": \"object\", \"required\": [\"plmnId\", \"tac\"], \"properties\": {\"nid\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{11}$\"}, \"tac\": {\"type\": \"string\", \"pattern\": \"(^([A-Fa-f0-9]{4}$)|(^([A-Fa-f0-9]{6}$)\"}, \"plmnId\": {\"type\": \"object\", \"required\": [\"mcc\", \"mnc\"], \"properties\": {\"mcc\": {\"type\": \"string\", \"pattern\": \"^[0-9]{3}$\"}, \"mnc\": {\"type\": \"string\", \"pattern\": \"^[0-9]{2,3}$\"}}}}, \"protocol\": {\"anyOf\": [{\"enum\": [\"UDP\", \"TCP\"], \"type\": \"string\"}, {\"type\": \"string\", \"description\": \"This string provides forward-compatibility with future extensions to the enumeration but is not used to encode content defined in the present version of this API.\"}], \"description\": \"Possible values are - UDP: User Datagram Protocol. - TCP: Transmission Control Protocol.\"}, \"hfcNodeId\": {\"type\": \"object\", \"required\": [\"hfcNid\"], \"properties\": {\"hfcNid\": {\"type\": \"string\", \"maxLength\": 6}}, \"portNumber\": {\"type\": \"integer\", \"minimum\": 0}, \"ueIpv4Addr\": {\"type\": \"string\", \"example\": \"198.51.100.1\", \"pattern\": \"^([0-9]{1-9}[0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5])\\.\\.\\.\\.){3}([0-9]|1[0-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5])$\"}, \"ueIpv6Addr\": {\"type\": \"string\", \"allof\": [{\"pattern\": \"^((?|(?|([1-9a-f]{0-9a-f}{0,3})))|(?|([1-9a-f]{0-9a-f}{0,3})))|(?|([1-9a-f]{0-9a-f}{0,3})))$\"}, {\"pattern\": \"^(((\\^:|+):){7}((\\^:|+))|(((\\^:|+)*\\^:|+)?::((\\^:|+)*\\^:|+)?))$\"}], \"example\": \"2001:db8:85a3::8a2e:370:7334\"}, \"w5gbanLineType\": {\"anyOf\": [{\"enum\": [\"DSL\", \"PON\"], \"type\": \"string\"}, {\"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\": \"Possible values are - DSL: Identifies a DSL line - PON: Identifies a PON line\"}}, \"utraLocation\": {\"type\": \"object\", \"oneOf\": [{\"required\": [\"cgi\"], \"required\": [\"sai\"], \"required\": [\"rai\"]}], \"properties\": {\"cgi\": {\"type\": \"object\", \"required\": [\"cellId\", \"lac\", \"plmnId\"], \"properties\": {\"lac\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{4}$\"}, \"cellId\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{4}$\"}, \"plmnId\": {\"type\": \"object\", \"required\": [\"mcc\", \"mnc\"], \"properties\": {\"mcc\": {\"type\": \"string\", \"pattern\": \"^[0-9]{3}$\"}, \"mnc\": {\"type\": \"string\", \"pattern\": \"^[0-9]{2,3}$\"}}}}, \"lai\": {\"type\": \"object\", \"required\": [\"lac\", \"plmnId\"], \"properties\": {\"lac\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{4}$\"}, \"plmnId\": {\"type\": \"object\", \"required\": [\"mcc\", \"mnc\"], \"properties\": {\"mcc\": {\"type\": \"string\", \"pattern\": \"^[0-9]{3}$\"}, \"mnc\": {\"type\": \"string\", \"pattern\": \"^[0-9]{2,3}$\"}}}}, \"rai\": {\"type\": \"object\", \"required\": [\"lac\", \"plmnId\", \"rac\"], \"properties\": {\"lac\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{4}$\"}, \"rac\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{2}$\"}, \"plmnId\": {\"type\": \"object\", \"required\": [\"mcc\", \"mnc\"],

```

```

\"properties\": {\"mcc\": {\"type\": \"string\", \"pattern\": \"^\\\\\\\\d{3}$\"},
\"mnc\": {\"type\": \"string\", \"pattern\": \"^\\\\\\\\d{2,3}$\"}}}},
\"sai\": {\"type\": \"object\", \"required\": [\"lac\", \"plmnId\", \"sac\"],
\"properties\": {\"lac\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{4}$\"},
\"sac\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{4}$\"},
\"plmnId\": {\"type\": \"object\", \"required\": [\"mcc\", \"mnc\"],
\"properties\": {\"mcc\": {\"type\": \"string\", \"pattern\": \"^\\\\\\\\d{3}$\"},
\"mnc\": {\"type\": \"string\", \"pattern\": \"^\\\\\\\\d{2,3}$\"}}}},
\"geodeticInformation\": {\"type\": \"string\", \"pattern\": \"^[0-9A-F]{20}$\"},
\"ueLocationTimestamp\": {\"type\": \"string\", \"format\": \"date-time\"},
\"geographicalInformation\": {\"type\": \"string\", \"pattern\": \"^[0-9A-F]{16}$\"},
\"ageOfLocationInformation\": {\"type\": \"integer\", \"maximum\": 32767, \"minimum\": 0}},
\"eutraLocation\": {\"type\": \"object\", \"required\": [\"ecgi\", \"tai\"], \"properties\": {\"tai\": {\"type\": \"object\", \"required\": [\"plmnId\", \"tac\"], \"properties\": {\"nid\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{11}$\"}, \"tac\": {\"type\": \"string\", \"pattern\": \"(^([A-Fa-f0-9]{4}$)|(^([A-Fa-f0-9]{6}$)\\\"), \"plmnId\": {\"type\": \"object\", \"required\": [\"mcc\", \"mnc\"], \"properties\": {\"mcc\": {\"type\": \"string\", \"pattern\": \"^\\\\\\\\d{3}$\"}, \"mnc\": {\"type\": \"string\", \"pattern\": \"^\\\\\\\\d{2,3}$\"}}}}, \"ecgi\": {\"type\": \"object\", \"required\": [\"eutraCellId\", \"plmnId\"], \"properties\": {\"nid\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{11}$\"}, \"plmnId\": {\"type\": \"object\", \"required\": [\"mcc\", \"mnc\"], \"properties\": {\"mcc\": {\"type\": \"string\", \"pattern\": \"^\\\\\\\\d{3}$\"}, \"mnc\": {\"type\": \"string\", \"pattern\": \"^\\\\\\\\d{2,3}$\"}}}}, \"eutraCellId\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{7}$\"}}, \"ignoreTai\": {\"type\": \"boolean\", \"default\": false}, \"ignoreEcgi\": {\"type\": \"boolean\", \"default\": false},
\"globalENbId\": {\"type\": \"object\", \"oneOf\": [{\"required\": [\"n3IwfId\"], \"required\": [\"gnNbId\"], \"required\": [\"ngeNbId\"], \"required\": [\"wagfId\"], \"required\": [\"tngfId\"], \"required\": [\"eNbId\"]}], \"required\": [\"plmnId\"], \"properties\": {\"nid\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{11}$\"}, \"eNbId\": {\"type\": \"string\", \"pattern\": \"^(MacroNB-[A-Fa-f0-9]{5}|MacroNB-[A-Fa-f0-9]{6}|MacroNB-[A-Fa-f0-9]{5}|HomeNB-[A-Fa-f0-9]{7})$\"}, \"gnNbId\": {\"type\": \"object\", \"required\": [\"bitLength\", \"gnBValue\"], \"properties\": {\"gnBValue\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{6,8}$\"}, \"bitLength\": {\"type\": \"integer\", \"maximum\": 32, \"minimum\": 22}}, \"plmnId\": {\"type\": \"object\", \"required\": [\"mcc\", \"mnc\"], \"properties\": {\"mcc\": {\"type\": \"string\", \"pattern\": \"^\\\\\\\\d{3}$\"}, \"mnc\": {\"type\": \"string\", \"pattern\": \"^\\\\\\\\d{2,3}$\"}}}}, \"tngfId\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]+$\"}, \"wagfId\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]+$\"}, \"n3IwfId\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]+$\"}, \"ngeNbId\": {\"type\": \"string\", \"pattern\": \"^(MacroNGeNB-[A-Fa-f0-9]{5}|MacroNGeNB-[A-Fa-f0-9]{6}|MacroNGeNB-[A-Fa-f0-9]{5})$\"}},
\"globalNgenbId\": {\"type\": \"object\", \"oneOf\": [{\"required\": [\"n3IwfId\"], \"required\": [\"gnNbId\"], \"required\": [\"ngeNbId\"], \"required\": [\"wagfId\"], \"required\": [\"tngfId\"], \"required\": [\"eNbId\"]}], \"required\": [\"plmnId\"], \"properties\": {\"nid\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{11}$\"}, \"eNbId\": {\"type\": \"string\", \"pattern\": \"^(MacroNB-[A-Fa-f0-9]{5}|MacroNB-[A-Fa-f0-9]{6}|MacroNB-[A-Fa-f0-9]{5}|HomeNB-[A-Fa-f0-9]{7})$\"}, \"gnNbId\": {\"type\": \"object\", \"required\": [\"bitLength\", \"gnBValue\"], \"properties\": {\"gnBValue\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{6,8}$\"}, \"bitLength\": {\"type\": \"integer\", \"maximum\": 32,

```

```

\"minimum\": 22}}}, \"plmnId\": {\"type\": \"object\", \"required\":
[\"mcc\", \"mnc\"], \"properties\": {\"mcc\": {\"type\": \"string\",
\"pattern\": \"^[\\d]{3}$\"}, \"mnc\": {\"type\": \"string\", \"pattern\":
\"^[\\d]{2,3}$\"}}, \"tngfId\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-
f0-9]+$\"}, \"wagfId\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]+$
\"}, \"n3IwfId\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]+$\"},
\"ngeNbId\": {\"type\": \"string\", \"pattern\": \"^(MacroNGeNB-[A-Fa-f0-9]
{5}|MacroNGeNB-[A-Fa-f0-9]{6}|MacroNGeNB-[A-Fa-f0-9]{5})$\"}},
\"geodeticInformation\": {\"type\": \"string\", \"pattern\": \"^[0-9A-F]{20}$
\"}, \"ueLocationTimestamp\": {\"type\": \"string\", \"format\": \"date-
time\"}, \"geographicalInformation\": {\"type\": \"string\", \"pattern\":
\"^[0-9A-F]{16}$\"}, \"ageOfLocationInformation\": {\"type\": \"integer\",
\"maximum\": 32767, \"minimum\": 0}}}}, \"icnTunnelInfo\": {\"type\":
\"object\", \"required\": [\"gtpTeid\"], \"properties\": {\"anType\":
{\"enum\": [\"3GPP_ACCESS\", \"NON_3GPP_ACCESS\"], \"type\": \"string\"},
\"gtpTeid\": {\"type\": \"string\", \"pattern\": \"^[A-Fa-f0-9]{8}$\"},
\"ipv4Addr\": {\"type\": \"string\", \"example\": \"198.51.100.1\",
\"pattern\": \"^(([0-9]|[1-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5])\\.){3}
([0-9]|[1-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5])$\"}, \"ipv6Addr\":
{\"type\": \"string\", \"allOf\": [{\"pattern\": \"^((0?|([1-9a-f][0-9a-f]
{0,3})))?((0?|([1-9a-f][0-9a-f]{0,3})):){0,6}(:|0?|([1-9a-f][0-9a-f]
{0,3})))$\"}, {\"pattern\": \"^((([^\:]+):){7}([^\:]+))|((([^\:]+):)*[^\:]+)?::
([^\:]+):)*[^\:]+)?$\"}], \"example\": \"2001:db8:85a3::8a2e:370:7334\"}}},
\"pauseCharging\": {\"type\": \"boolean\"}, \"revokeEbiList\": {\"type\":
\"array\", \"items\": {\"type\": \"integer\", \"maximum\": 15, \"minimum\":
0}, \"minItems\": 1}, \"vcnTunnelInfo\": {\"type\": \"object\", \"required\":
[\"gtpTeid\"], \"properties\": {\"anType\": {\"enum\": [\"3GPP_ACCESS\",
\"NON_3GPP_ACCESS\"], \"type\": \"string\"}, \"gtpTeid\": {\"type\":
\"string\", \"pattern\": \"^[A-Fa-f0-9]{8}$\"}, \"ipv4Addr\": {\"type\":
\"string\", \"example\": \"198.51.100.1\", \"pattern\": \"^(([0-9]|[1-9][0-9]|
1[0-9][0-9]|2[0-4][0-9]|25[0-5])\\.){3}([0-9]|[1-9][0-9]|1[0-9][0-9]|2[0-4]
[0-9]|25[0-5])$\"}, \"ipv6Addr\": {\"type\": \"string\", \"allOf\":
[{\"pattern\": \"^((0?|([1-9a-f][0-9a-f]{0,3})))?((0?|([1-9a-f][0-9a-f]
{0,3})):){0,6}(:|0?|([1-9a-f][0-9a-f]{0,3})))$\"}, {\"pattern\": \"^((([^\:]+):){7}([^\:]+))|((([^\:]+):)*[^\:]+)?::
([^\:]+):)*[^\:]+)?$\"}], \"example\":
\"2001:db8:85a3::8a2e:370:7334\"}}}, \"5gMmCauseValue\": {\"type\":
\"integer\", \"minimum\": 0}, \"maNwUpgradeInd\": {\"type\": \"boolean\",
\"default\": false}, \"n1SmInfoFromUe\": {\"type\": \"object\", \"required\":
[\"contentId\"], \"properties\": {\"contentId\": {\"type\": \"string\"}},
\"presenceInLadn\": {\"anyOf\": [{\"enum\": [\"IN_AREA\", \"OUT_OF_AREA\",
\"UNKNOWN\", \"INACTIVE\"], \"type\": \"string\"}, {\"type\": \"string\"}]},
\"securityResult\": {\"type\": \"object\", \"properties\":
{\"integrityProtectionResult\": {\"anyOf\": [{\"enum\": [\"PERFORMED\",
\"NOT_PERFORMED\"], \"type\": \"string\"}, {\"type\": \"string\"},
\"description\": \"This string provides forward-compatibility with future
extensions to the enumeration but is not used to encode content defined in
the present version of this API.\"}}, \"description\": \"Possible values
are\\n - PERFORMED\\n - NOT_PERFORMED\\n\"}},
\"confidentialityProtectionResult\": {\"anyOf\": [{\"enum\": [\"PERFORMED\",
\"NOT_PERFORMED\"], \"type\": \"string\"}, {\"type\": \"string\"},
\"description\": \"This string provides forward-compatibility with future
extensions to the enumeration but is not used to encode content defined in
the present version of this API.\"}}, \"description\": \"Possible values
are\\n - PERFORMED\\n - NOT_PERFORMED\\n\"}}}, \"servingNetwork\":
{\"type\": \"object\", \"required\": [\"mcc\", \"mnc\"], \"properties\":
{\"mcc\": {\"type\": \"string\", \"pattern\": \"^[\\d]{3}$\"}, \"mnc\":

```



```

{"type": "string", "pattern": "^\\d{2,3}$", "nid": {"type": "string", "pattern": "[A-Za-f0-9]{11}$"}, "upSecurityInfo": {"type": "object", "required": ["upSecurity"], "properties": {"upSecurity": {"type": "object", "required": ["upConfid", "upIntegr"], "properties": {"upConfid": {"anyOf": [{"enum": ["REQUIRED", "PREFERRED", "NOT_NEEDED"], "type": "string"}, {"type": "string"}]}, "upIntegr": {"anyOf": [{"enum": ["REQUIRED", "PREFERRED", "NOT_NEEDED"], "type": "string"}, {"type": "string"}]}}, "securityResult": {"type": "object", "properties": {"integrityProtectionResult": {"anyOf": [{"enum": ["PERFORMED", "NOT_PERFORMED"], "type": "string"}, {"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.\n"}]}, "description": "Possible values are\n - PERFORMED\n - NOT_PERFORMED\n"}, "confidentialityProtectionResult": {"anyOf": [{"enum": ["PERFORMED", "NOT_PERFORMED"], "type": "string"}, {"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.\n"}]}, "description": "Possible values are\n - PERFORMED\n - NOT_PERFORMED\n"}}, "maxIntegrityProtectedDataRateDl": {"anyOf": [{"enum": ["64_KBPS", "MAX_UE_RATE"], "type": "string"}, {"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.\n"}]}, "description": "Possible values are\n - 64_KBPS\n - MAX_UE_RATE\n"}, "maxIntegrityProtectedDataRateUl": {"anyOf": [{"enum": ["64_KBPS", "MAX_UE_RATE"], "type": "string"}, {"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.\n"}]}, "description": "Possible values are\n - 64_KBPS\n - MAX_UE_RATE\n"}}, "unknownN1SmInfo": {"type": "object", "required": ["contentId"], "properties": {"contentId": {"type": "string"}}, "additionalAnType": {"enum": ["3GPP_ACCESS", "NON_3GPP_ACCESS"], "type": "string"}, "moExpDataCounter": {"type": "object", "required": ["counter"], "properties": {"counter": {"type": "integer"}, "timeStamp": {"type": "string", "format": "date-time"}}, "alwaysOnRequested": {"type": "boolean", "default": false}, "ismfPduSessionUri": {"type": "string"}, "requestIndication": {"anyOf": [{"enum": ["UE_REQ_PDU_SES_MOD", "UE_REQ_PDU_SES_REL", "PDU_SES_MOB", "NW_REQ_PDU_SES_AUTH", "NW_REQ_PDU_SES_MOD", "NW_REQ_PDU_SES_REL", "EBI_ASSIGNMENT_REQ", "REL_DUE_TO_5G_AN_REQUEST"], "type": "string"}, {"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.\n"}]}, "description": "Possible values are - UE_REQ_PDU_SES_MOD - UE_REQ_PDU_SES_REL - PDU_SES_MOB - NW_REQ_PDU_SES_AUTH - NW_REQ_PDU_SES_MOD - NW_REQ_PDU_SES_REL - EBI_ASSIGNMENT_REQ - REL_DUE_TO_5G_AN_REQUEST\n"}, "supportedFeatures": {"type": "string", "pattern": "[A-Za-f0-9]*$"}, "vsmfPduSessionUri": {"type": "string"}, "anTypeCanBeChanged": {"type": "boolean", "default": false}, "epsInterworkingInd": {"anyOf": [{"enum": ["NONE", "WITH_N26", "WITHOUT_N26", "IWK_NON_3GPP"], "type": "string"}, {"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.\n\n"}], "description": "Possible values
are - NONE - WITH_N26 - WITHOUT_N26 - IWK_NON_3GPP\n\n"},
"qosFlowsNotifyList": {"type": "array", "items": {"type":
"object", "required": ["notificationCause", "qfi"], "properties":
{"qfi": {"type": "integer", "maximum": 63, "minimum": 0},
"notificationCause": {"anyOf": [{"enum": ["QOS_FULFILLED",
"QOS_NOT_FULFILLED", "UP_SEC_FULFILLED", "UP_SEC_NOT_FULFILLED"],
"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.\n\n"}], "description": "Possible values are - QOS_FULFILLED -
QOS_NOT_FULFILLED - UP_SEC_FULFILLED - UP_SEC_NOT_FULFILLED\n\n"},
"nullQoSProfileIndex": {"type": "boolean"}, "currentQoSProfileIndex":
{"type": "integer", "maximum": 8, "minimum": 1}}, "minItems": 1},
"dlServingPlmnRateCtl": {"type": "integer", "minimum": 10,
"nullable": true}, "unavailableAccessInd": {"anyOf": [{"enum":
["3GA_UNAVAILABLE", "N3GA_UNAVAILABLE"], "type": "string"},
{"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.\n\n"}],
"description": "Possible values are\n - 3GA_UNAVAILABLE\n -
N3GA_UNAVAILABLE\n\n"}, "iSmfServiceInstanceId": {"type": "string"},
"qosFlowsRelNotifyList": {"type": "array", "items": {"type":
"object", "required": ["qfi"], "properties": {"qfi": {"type":
"integer", "maximum": 63, "minimum": 0}, "cause": {"anyOf":
[{"enum": ["REL_DUE_TO_HO", "EPS_FALLBACK", "REL_DUE_TO_UP_SEC",
"DNN_CONGESTION", "S_NSSAI_CONGESTION", "REL_DUE_TO_REACTIVATION",
"5G_AN_NOT_RESPONDING", "REL_DUE_TO_SLICE_NOT_AVAILABLE",
"REL_DUE_TO_DUPLICATE_SESSION_ID", "PDU_SESSION_STATUS_MISMATCH",
"HO_FAILURE", "INSUFFICIENT_UP_RESOURCES", "PDU_SESSION_HANDED_OVER",
"PDU_SESSION_RESUMED", "CN_ASSISTED_RAN_PARAMETER_TUNING",
"ISMF_CONTEXT_TRANSFER", "SMF_CONTEXT_TRANSFER",
"REL_DUE_TO_PS_TO_CS_HO", "REL_DUE_TO_SUBSCRIPTION_CHANGE",
"HO_CANCEL", "REL_DUE_TO_SLICE_NOT_AUTHORIZED",
"PDU_SESSION_HAND_OVER_FAILURE", "DDN_FAILURE_STATUS",
"REL_DUE_TO_CP_ONLY_NOT_APPLICABLE", "NOT_SUPPORTED_WITH_ISMF",
"CHANGED_ANCHOR_SMF", "CHANGED_INTERMEDIATE_SMF",
"REL_DUE_TO_SMF_NOT_SUPPORT_PSETR"], "type": "string"}, {"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.\n\n"}], "description":
"Possible values are - REL_DUE_TO_HO - EPS_FALLBACK - REL_DUE_TO_UP_SEC -
DNN_CONGESTION - S_NSSAI_CONGESTION - REL_DUE_TO_REACTIVATION -
5G_AN_NOT_RESPONDING - REL_DUE_TO_SLICE_NOT_AVAILABLE -
REL_DUE_TO_DUPLICATE_SESSION_ID - PDU_SESSION_STATUS_MISMATCH - HO_FAILURE -
INSUFFICIENT_UP_RESOURCES - PDU_SESSION_HANDED_OVER - PDU_SESSION_RESUMED -
CN_ASSISTED_RAN_PARAMETER_TUNING - ISMF_CONTEXT_TRANSFER -
SMF_CONTEXT_TRANSFER - REL_DUE_TO_PS_TO_CS_HO -
REL_DUE_TO_SUBSCRIPTION_CHANGE - HO_CANCEL - REL_DUE_TO_SLICE_NOT_AUTHORIZED
- PDU_SESSION_HAND_OVER_FAILURE - DDN_FAILURE_STATUS -
REL_DUE_TO_CP_ONLY_NOT_APPLICABLE - NOT_SUPPORTED_WITH_ISMF -
CHANGED_ANCHOR_SMF - CHANGED_INTERMEDIATE_SMF -
REL_DUE_TO_SMF_NOT_SUPPORT_PSETR\n\n"}, "nullQoSProfileIndex": {"type":
"boolean"}, "currentQoSProfileIndex": {"type": "integer",
"maximum": 8, "minimum": 1}}}, "minItems": 1},

```



```

\secondaryRatUsageInfo\": {\"type\": \"array\", \"items\": {\"type\":  

\"object\", \"required\": [\"secondaryRatType\"], \"properties\":  

{\"secondaryRatType\": {\"anyOf\": [{\"enum\": [\"NR\", \"EUTRA\", \"WLAN\",  

\"VIRTUAL\", \"NB-IOT\", \"WIRELINE\", \"WIRELINE_CABLE\", \"WIRELINE_BBF\",  

\"LTE-M\", \"NR-U\", \"EUTRA-U\", \"TRUSTED_N3GA\", \"TRUSTED_WLAN\",  

\"UTRA\", \"GERA\"], \"type\": \"string\"}, {\"type\": \"string\"}}},  

\"qosFlowsUsageData\": {\"type\": \"array\", \"items\": {\"type\":  

\"object\", \"required\": [\"downlinkVolume\", \"endTimeStamp\", \"qfi\",  

\"startTimeStamp\", \"uplinkVolume\"], \"properties\": {\"qfi\": {\"type\":  

\"integer\", \"maximum\": 63, \"minimum\": 0}, \"endTimeStamp\": {\"type\":  

\"string\", \"format\": \"date-time\"}, \"uplinkVolume\": {\"type\":  

\"integer\", \"format\": \"int64\"}, \"downlinkVolume\": {\"type\":  

\"integer\", \"format\": \"int64\"}, \"startTimeStamp\": {\"type\":  

\"string\", \"format\": \"date-time\"}}}, \"minItems\": 1},  

\"pduSessionUsageData\": {\"type\": \"array\", \"items\": {\"type\":  

\"object\", \"required\": [\"downlinkVolume\", \"endTimeStamp\",  

\"startTimeStamp\", \"uplinkVolume\"], \"properties\": {\"endTimeStamp\":  

{\"type\": \"string\", \"format\": \"date-time\"}, \"uplinkVolume\":  

{\"type\": \"integer\", \"format\": \"int64\"}, \"downlinkVolume\":  

{\"type\": \"integer\", \"format\": \"int64\"}, \"startTimeStamp\":  

{\"type\": \"string\", \"format\": \"date-time\"}}}, \"minItems\": 1}}},  

\"minItems\": 1}, \"vSmfServiceInstanceId\": {\"type\": \"string\"},  

\"additionalCnTunnelInfo\": {\"type\": \"object\", \"required\":  

[\"gtpTeid\"], \"properties\": {\"anType\": {\"enum\": [\"3GPP_ACCESS\",  

\"NON_3GPP_ACCESS\"], \"type\": \"string\"}, \"gtpTeid\": {\"type\":  

\"string\", \"pattern\": \"^[A-Fa-f0-9]{8}$\"}, \"ipv4Addr\": {\"type\":  

\"string\", \"example\": \"198.51.100.1\", \"pattern\": \"^([0-9]|[1-9][0-9]  

1[0-9][0-9]|2[0-4][0-9]|25[0-5])\\\\\\\\.){3}([0-9]|[1-9][0-9]|1[0-9][0-9]|2[0-4]  

[0-9]|25[0-5])$\"}, \"ipv6Addr\": {\"type\": \"string\", \"allOf\":  

[{\"pattern\": \"^((|0?|([1-9a-f][0-9a-f]{0,3})))(0?|([1-9a-f][0-9a-f]  

{0,3}))){0,6}(:|0?|([1-9a-f][0-9a-f]{0,3}))$\"}, {\"pattern\": \"^([[:  

+:{7}([[:+)]|((([:+)*[:+)??:(([:+)*[:+)?])$\"}], \"example\":  

\"2001:db8:85a3::8a2e:370:7334\"}}}, \"roamingChargingProfile\": {\"type\":  

\"object\", \"properties\": {\"triggers\": {\"type\": \"array\", \"items\":  

{\"type\": \"object\", \"required\": [\"triggerCategory\", \"triggerType\"],  

\"properties\": {\"timeLimit\": {\"type\": \"integer\"}, \"eventLimit\":  

{\"type\": \"integer\", \"maximum\": 4294967295, \"minimum\": 0},  

\"triggerType\": {\"anyOf\": [{\"enum\": [\"QUOTA_THRESHOLD\", \"QHT\",  

\"FINAL\", \"QUOTA_EXHAUSTED\", \"VALIDITY_TIME\", \"OTHER_QUOTA_TYPE\",  

\"FORCED_REAUTHORISATION\", \"UNUSED_QUOTA_TIMER\",  

\"UNIT_COUNT_INACTIVITY_TIMER\", \"ABNORMAL_RELEASE\", \"QOS_CHANGE\",  

\"VOLUME_LIMIT\", \"TIME_LIMIT\", \"EVENT_LIMIT\", \"PLMN_CHANGE\",  

\"USER_LOCATION_CHANGE\", \"RAT_CHANGE\", \"SESSION_AMBR_CHANGE\",  

\"UE_TIMEZONE_CHANGE\", \"TARIFF_TIME_CHANGE\",  

\"MAX_NUMBER_OF_CHANGES_IN_CHARGING_CONDITIONS\",  

\"MANAGEMENT_INTERVENTION\",  

\"CHANGE_OF_UE_PRESENCE_IN_PRESENCE_REPORTING_AREA\",  

\"CHANGE_OF_3GPP_PS_DATA_OFF_STATUS\", \"SERVING_NODE_CHANGE\",  

\"REMOVAL_OF_UPF\", \"ADDITION_OF_UPF\", \"INSERTION_OF_ISMF\",  

\"REMOVAL_OF_ISMF\", \"CHANGE_OF_ISMF\", \"START_OF_SERVICE_DATA_FLOW\",  

\"ECGI_CHANGE\", \"TAI_CHANGE\", \"HANDOVER_CANCEL\", \"HANDOVER_START\",  

\"HANDOVER_COMPLETE\", \"GFB_R_GUARANTEED_STATUS_CHANGE\",  

\"ADDITION_OF_ACCESS\", \"REMOVAL_OF_ACCESS\",  

\"START_OF_SDF_ADDITIONAL_ACCESS\"], \"type\": \"string\"}, {\"type\":  

\"string\"}}}, \"volumeLimit\": {\"type\": \"integer\", \"maximum\":  

4294967295, \"minimum\": 0}, \"volumeLimit64\": {\"type\": \"integer\",

```

```

\"maximum\": 18446744073709551615, \"minimum\": 0}, \"maxNumberOfccc\":
{\"type\": \"integer\", \"maximum\": 4294967295, \"minimum\": 0},
\"triggerCategory\": {\"anyOf\": [{\"enum\": [\"IMMEDIATE_REPORT\",
\"DEFERRED_REPORT\"], \"type\": \"string\"}, {\"type\": \"string\"}]},
\"tariffTimeChange\": {\"type\": \"string\", \"format\": \"date-time\"}},
\"minItems\": 0}, \"partialRecordMethod\": {\"anyOf\": [{\"enum\":
[\"DEFAULT\", \"INDIVIDUAL\"], \"type\": \"string\"}, {\"type\":
\"string\"}]}, \"hoPreparationIndication\": {\"type\": \"boolean\"},
\"secondaryRatUsageReport\": {\"type\": \"array\", \"items\": {\"type\":
\"object\", \"required\": [\"qosFlowsUsageData\", \"secondaryRatType\"],
\"properties\": {\"secondaryRatType\": {\"anyOf\": [{\"enum\": [\"NR\",
\"EUTRA\", \"WLAN\", \"VIRTUAL\", \"NBIOT\", \"WIRELINE\",
\"WIRELINE_CABLE\", \"WIRELINE_BBF\", \"LTE-M\", \"NR_U\", \"EUTRA_U\",
\"TRUSTED_N3GA\", \"TRUSTED_WLAN\", \"UTRA\", \"GERA\"], \"type\":
\"string\"}, {\"type\": \"string\"}]}, \"qosFlowsUsageData\": {\"type\":
\"array\", \"items\": {\"type\": \"object\", \"required\":
[\"downlinkVolume\", \"endTimeStamp\", \"qfi\", \"startTimeStamp\",
\"uplinkVolume\", \"properties\": {\"qfi\": {\"type\": \"integer\",
\"maximum\": 63, \"minimum\": 0}, \"endTimeStamp\": {\"type\": \"string\",
\"format\": \"date-time\"}, \"uplinkVolume\": {\"type\": \"integer\",
\"format\": \"int64\"}, \"downlinkVolume\": {\"type\": \"integer\",
\"format\": \"int64\"}, \"startTimeStamp\": {\"type\": \"string\",
\"format\": \"date-time\"}}}, \"minItems\": 1}}}, \"minItems\": 1},
\"maxIntegrityProtectedDataRateDl\": {\"anyOf\": [{\"enum\": [\"64_KBPS\",
\"MAX_UE_RATE\"], \"type\": \"string\"}, {\"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.\\n\\n\"}], \"description\": \"Possible values
are\\n - 64_KBPS\\n - MAX_UE_RATE\\n\\n\"},
\"maxIntegrityProtectedDataRateUl\": {\"anyOf\": [{\"enum\": [\"64_KBPS\",
\"MAX_UE_RATE\"], \"type\": \"string\"}, {\"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.\\n\\n\"}], \"description\": \"Possible values
are\\n - 64_KBPS\\n - MAX_UE_RATE\\n\\n\"}}}
}
]

```

Sample Response body structure for GET operations

Resource API : /sepp-configuration/v1/message-validation-api-config/{id}

Resource Method : GET

Content Type : application/json

```

{
  \"defaultId\": 1,
  \"resourceURI\": \"/nudm-uecm/v1/{ueId}/registrations/smsf-non-3gpp-access\",
  \"httpMethod\": \"DELETE\",
  \"schemaValue\": \"[{\\\"in\\\": \\\"query\\\", \\\"name\\\": \\\"smsf-set-id\\\", \\\"schema\\\":
{\\\"type\\\": \\\"string\\\", \\\"required\\\": false}}]\"
}

```

Sample Response body structure for PUT operations

Resource API : /sepp-configuration/v1/message-validation-api-config/{id}

Resource Method : PUT

Content Type : application/json

201 CREATED

Sample Response body structure for POST operations

Resource API : /sepp-configuration/v1/message-validation-api-config/{id}

Resource Method : POST

Content Type : application/json

201 CREATED

Sample Response body structure for DELETE operations

Resource API : /sepp-configuration/v1/message-validation-api-config/{id}

Resource Method : DELETE

Content Type : application/json

204

3

HTTP Response Codes and Error Codes

The following are the HTTP Response Codes:

Table 3-1 HTTP Response Codes and Error Codes

Data Type	Mandatory(M)/Optional(O)/Conditional(C)	Cardinality	Response Code	Description
ProblemDetails	C	1	400 - BAD REQUEST	SEPP config-mgr-svc shall send the response when the Request body received is not as per defined Data Model.
ProblemDetails	C	1	500 - INTERNAL SERVER ERROR	SEPP config-mgr-svc shall send the response when an internal error has occurred.
Response Body as per Data Model defined	C	1	200 - OK	SEPP config-mgr-svc shall send the response when the request is successful.
ProblemDetails	C	1	404 -NOT FOUND	SEPP config-mgr-svc shall send the response when the requested entry is not present in the database.

Error Codes and Recovery Steps

The following tables list the various SEPP error codes and the recovery steps:

Table 3-2 Error Codes and Recovery Steps

Error Code	Error Text	Command/Method	Description	Recovery Steps
SEPP-COM-DB-ERROR-0002	Remote Sepp record not found	GET remotesepp/{name} DELETE remotesepp/{name} PATCH remotesepp/{name}	This error is observed if the provided name in the request is not present.	Verify that Remote SEPP name given in request parameter is present.
SEPP-COM-DB-ERROR-0003	N32F Context not found record not found	GET handshakestatus /fqdn/{fqdn} GET handshakestatus /name/{name}	This error is observed if the context with given name or fqdn in the request parameter is not found.	Verify that context with given name or fqdn in request parameter is present in DB.

Table 3-2 (Cont.) Error Codes and Recovery Steps

Error Code	Error Text	Command/ Method	Description	Recovery Steps
SEPP-COM-DB-ERROR-0005	Database connection is down	Can be thrown from any Method (Generic Exception if application is unable to connect with Database)	This error is observed if the application is unable to make the connection with Database.	Verify that DB is up and running.
SEPP-COM-DB-ERROR-0007	SQL Grammer exception	PUT remoteseppset/{name}	This error is observed if there is some corruption in the Database related to Remote SEPP Set table (This error gets generated for all the commands that is trying to access corrupted table or Database).	Recheck the corruption in database and re-install SEPP
SEPP-COM-DB-ERROR-0008	Constraint violation exception of database table columns	PUT {remoteSepp}	This error is observed when one of the mandatory parameters required for remote SEPP are not present.	Verify that mandatory parameter like name, seppfqdn are present.
SEPP-COM-DB-ERROR-0009	Unsupported security capability list exception	POST / remotesepp PUT remotesepp/{name} PATCH remotesepp/{name}	This error is observed if unsupported securityCapabilityList is provided in request.	Make sure securityCapabilityList provided is supported by SEPP. Allowed security capability list is 'TLS' and 'TLS and PRINS.
SEPP-COM-DB-ERROR-0010	Update not allowed on table entry exception	PUT remotesepp/{name} PATCH remotesepp/{name}	This error is observed if given parameter to update is same as configured one or trying to update mandatory parameter.	Verify that the parameter provided in the request to update is different from the configured one or not while updating any mandatory parameter like name, seppfqdn etc.
SEPP-COM-DB-ERROR-0011	Remote Sepp already present	POST / remotesepp	This error is observed if Remote SEPP with same seppfqdn is already present in DB.	Verify that seppfqdn provided in configuration request is not already present in DB.
SEPP-COM-DB-ERROR-0012	Mandatory Parameter Update Not Allowed	PUT remotesepp/{name} PATCH remotesepp/{name}	This error is observed if the user is trying to update the value of mandatory parameter which is not allowed.	Verify that some of the mandatory parameters are not allowed to be updated. Those allowed should match with the value in the request.

Table 3-2 (Cont.) Error Codes and Recovery Steps

Error Code	Error Text	Command/ Method	Description	Recovery Steps
SEPP-COM-ERROR-0013	Invalid PLMN List in Request	POST / remotessepp PUT / remotessepp	This error is observed if the user has configured PLMN in incorrect format in PLMNID List.	Verify the entered PLMN (mcc and mnc) in PLMNID List while configuring Remote Sepp.
SEPP-COM-DB-ERROR-0020	Remote Sepp Set not found	GET RemoteSeppSet/ {name}	This error is observed if the Remote Sepp Set is not present	Give the Remote SEPP Set name that exist in the database
SEPP-COM-DB-ERROR-0021	Remote Sepp Set associated with Remote SEPP	DELETE RemoteSepp/ {name} PUT RemoteSepp/ {name} PATCH RemoteSepp/ {name}	This error is observed if Remote SEPP is associated with Remote Sepp Set, it gives this error on deletion.	Disassociate the Remote Sepp from Remote SEPP Set by executing the Remote SEPP Set PUT command. Or Do the following: • Delete the Remote Sepp Set • Delete the Remote Sepp • Create Remote Sepp Set again
SEPP-COM-DB-ERROR-0022	Remote Sepp Set already exists	POST RemoteSeppSet/ {name}	This error is observed if Remote Sepp Set already exists and same entry is added again.	Use a unique name in Remote Sepp Set

Table 3-2 (Cont.) Error Codes and Recovery Steps

Error Code	Error Text	Command/Method	Description	Recovery Steps
SEPP-COM-DB-ERROR-0023	Remote Sepp Set configuration error	PUT RemoteSeppSet/{name} POST RemoteSeppSet/{name}	- Remote Sepp Set does not exists - Requested Remote Sepp does not exists - At least one Remote Sepp should be associated with Remote Sepp Set - Configured Domains are different between peers - Remote Sepp Set exists with same domain - Configured PLMNs are different between peers - Remote Sepp Set exists with same PLMN - Configured PLMNs/Domains are different between peers - Associating Remote Sepp should be unique for Remote Sepp Set	- Give the Remote SEPP Set name that exists in the database - Give the Remote SEPP name that exists in the database - Give at least a single Remote Sepp name while creating a Remote Sepp Set - Check that each Remote Sepp has same Domain when creating a Remote Sepp Set - Check that each Remote Sepp has same PLMN when creating a Remote Sepp Set - Check that each Remote Sepp name is unique while creating a Remote Sepp Set
SEPP-COM-xx-ERROR-0101	Config Not Acceptable	PUT POST PATCH /v1/remotesep/	This error is observed if PLMNidList is empty or PLMNidList size is greater than max size allowed or if domain is null.	Verify that PLMNidList is not empty or PLMNidList size is not greater than max size allowed or if domain is not null.
SEPP-COM-xx-ERROR-0102	Mandatory Parameter Missing	POST /remotesep POST /remotesepset	This error is observed if mandatory parameter is missing in request.	Verify that all mandatory parameter for configuration of Remote SEPP or Remote SEPP Set is present

Table 3-2 (Cont.) Error Codes and Recovery Steps

Error Code	Error Text	Command/Method	Description	Recovery Steps
SEPP-COM-xx-ERROR-0103	Connection could not be established on N32c interface	POST / remotesepp DELETE remotesepp/{name} PUT remotesepp/{name} PATCH remotesepp/{name}	This error is observed if n32c service is down or not up and running.	Verify that n32c service is up and running
SEPP-COM-xx-ERROR-0104	Invalid Value for Parameter		This Error occurs when user enters the invalid value for Enum Field in SEPP.	
SEPP-COM-SVR-ERROR-0404	Unable to connect to EGW to sync config	PUT peerconfiguration / peersetconfiguration / routesconfiguration	This error is observed if config mgr is not able to update peer/peersest/routes configurations at EGW.	Verify that common configuration server is up and running.
SEPP-CN32FSEPP-ERROR-0013	PLMN ID Validation In Header Failed	NA	This error is observed if PLMN ID is not matched in header of the incoming request on CN32F microservice.	- Verify if correct regex is configured against the header identifier in Header Configuration. - Verify if MCC & MNC combination is present in the Remote PLMN ID List.
SEPP-CN32FSEPP-ERROR-0014	PLMN ID Validation In Body Failed	NA	This error is observed if PLMN ID is not matched in body of the incoming request on CN32F microservice.	- Verify if correct regex is configured against the body IE in Body IE Configuration. - Verify if MCC & MNC combination is present in the Remote PLMN ID List.
SEPP-PN32FSEPP-ERROR-0016	PLMN ID Validation In Header Failed	NA	This error is observed if PLMN ID is not matched in header of the incoming request on PN32F microservice.	- Verify if correct regex is configured against the header identifier in Header Configuration. - Verify if MCC & MNC combination is present in the helm based local PLMN ID list.

Table 3-2 (Cont.) Error Codes and Recovery Steps

Error Code	Error Text	Command/Method	Description	Recovery Steps
SEPP-PN32FSEPP-ERROR-0017	PLMN ID Validation In Body Failed	NA	This error is observed if PLMN ID is not matched in body of the incoming request on PN32F microservice.	- Verify if correct regex is configured against the body IE in Body IE Configuration. - Verify if MCC & MNC combination is present in the helm based local PLMN ID list.
SEPP-SECURITY-PLMN-HEADER-ERROR-0015	PLMN ID Validation In Header Failed	NA	- Verify if correct regex is configured against the header in header Configuration. - Verify if MCC & MNC combination is present in the helm based local PLMN ID list.	if PLMN ID is not matched in the header of the incoming request. Metrics can be checked for the details for which it has failed.
SEPP-SECURITY-PLMN-BODY-ERROR-0016	PLMN ID Validation in body failed	NA	- Verify if correct regex is configured against the body IE in Body IE Configuration. - Verify if MCC and MNC combination is present in the helm based local PLMN ID list.	if PLMN ID is not matched in the body of the incoming request. Metrics can be checked for the details for which it has failed.

The following are the error codes of Mediation feature:

Table 3-3 Mediation Error Codes and Recovery Steps

Error Code	Error Text	Command/Method	Description	Recovery Steps
SEPP-MEDIATION-ERROR-001	Mediation Trigger Rule Not Found.	GET x`/sepp-mediation-trigger-rule-list/{triggerRuleListName} DELETE /sepp-mediation-trigger-rule-list/{triggerRuleListName}	Requested Trigger Rule List does not exist.	Give the Trigger Rule List Name that exist in Database.

Table 3-3 (Cont.) Mediation Error Codes and Recovery Steps

Error Code	Error Text	Command/ Method	Description	Recovery Steps
SEPP-MEDIATION-ERROR-002	Unsupported Trigger Points	PUT /sepp-mediation-trigger-rule-list/{triggerRuleListName}	Trigger Points provided in configuration request body is not supported.	Provide valid Trigger Points in Configuration Request. Valid Trigger Points : N32_Egress_Request N32_Ingress_Response N32_Ingress_Request N32_Egress_Response
SEPP-MEDIATION-ERROR-003	Mediation Trigger Mandatory Parameter Update Not Allowed.	PUT /sepp-mediation-trigger-rule-list/{triggerRuleListName}	Trigger Rule List mandatory parameter like TriggerRuleListName can not be updated.	Make sure TriggerRuleListName you are providing in configuration request url is same as name in request url path.
SEPP-MEDIATION-ERROR-004	Trigger Rule is Mandatory Parameter.	PUT /sepp-mediation-trigger-rule-list/{triggerRuleListName}	If MediationAllEnabled is false and there is no TriggerRules or empty TriggerRules in request.	If MediationAllEnabled is false, then make sure there is TriggerRules Provided in Request.
SEPP-MEDIATION-ERROR-005	Invalid Error Status Code	PUT /mediation/feature	Invalid Http Status Code is provided in Error Configuration Request.	Make sure to provide valid HTTP Status Code in statusCode field in Error Configuration Request
SEPP-MEDIATION-ERROR-006	Invalid ResourceURI and HTTPMethod Error	PUT /sepp-mediation-trigger-rule-list/{triggerRuleListName}	ResourceURI and HttpMethod provided in Request is not valid.	Make sure to provide ResourceURI and HttpMethod combination that is configuration for SEPP, already present in Database.
SEPP-MEDIATION-ERROR-007	DELETE Not Allowed	DELETE /sepp-mediation-trigger-rule-list/{triggerRuleListName}	Trigger Rule List Delete Not Allowed.	Ensure you are deleting only that Trigger Rule List that is not associated with Remote SEPP Set.

Table 3-3 (Cont.) Mediation Error Codes and Recovery Steps

Error Code	Error Text	Command/Method	Description	Recovery Steps
SEPP-MEDIATION-ERROR-008	Trigger Rule Configuration Error	PUT /sepp-mediation-trigger-rule-list/{triggerRuleListName}	Error in Configuration of Trigger Rule List.	Ensure there is no duplicated ResourceURI and Method in request body.
SEPP-MEDIATION-ERROR-009	Mediation Trigger Rules Configuration Mandatory Parameter Missing Error	PUT /sepp-mediation-trigger-rule-list/{triggerRuleListName}	Mediation Trigger Rules Configuration Mandatory Parameter Missing in configuration request.	Ensure all mandatory parameters are present in Mediation Trigger Rule Configuration request.
SEPP-MEDIATION-ERROR-010	Multiple Local Trigger Rule List Configuration Error	PUT /sepp-mediation-trigger-rule-list/{triggerRuleListName}	Multiple Local Trigger Rule List Configuration is Not Allowed.	Make sure we are not configuring another Local Trigger Rule List if there is already one configured in DB. Only one Local Trigger Rule List can be configured for SEPP.
SEPP-MEDIATION-ERROR-011	Mediation Feature Mandatory Parameter Error	PUT /mediation/feature	Mediation Feature Configuration Mandatory Parameter is missing.	Make sure if FeatureEnabled is true in request then all field Error Configuration is present in request.
SEPP-MEDIATION-ERROR-012	Mediation Local Trigger Rule IPX Mode Error	PUT /sepp-mediation-trigger-rule-list/{triggerRuleListName}	In IPX Mode SEPP allow only 2 Trigger Points (N32 Ingress Request, N32 Egress Response) in local TRL configuration.	Make sure there is not any invalid Trigger Points like N32 Egress Request or N32 Ingress Response in Local Trigger Rule Configuration Request.
SEPP-MEDIATION-ERROR-013	Mediation service is not available	PUT /mediation/feature	Mediation Service Not deployed.	Before Enabling Mediation Feature through API , make sure Mediation Service is being deployed for SEPP.
SEPP-MEDIATION-ERROR-014	Invalid Error Action	PUT /mediation/feature	Invalid Error Action in Mediation Feature Configuration request.	Make sure to provide valid ErrorAction in Mediation Feature Configuration request in ErrorConfiguration section.

The following are the error codes of Cat-1 feature:

Table 3-4 Cat-1 Error Codes and Recovery Steps

Error Code	Error Text	Description	Recovery
SEPP-SECURITY-ERROR-001	Service API not in allowed list	If resource URI and Http Method is not matched as per the configured allowed list on SEPP.	Verify whether the proper Resource URI and HTTP method is configured in the CNC Console GUI. Go to the Security Countermeasure section, check under the Service API Allowed List for that particular Allowed list name for N32 Egress or N32 Ingress Direction.
SEPP-CN32FSEPP-ERROR-0012	Service API Validation Failed	This error occurs on CN32F microservice. If resource URI and Http Method is not matched as per the configured allowed list on SEPP.	Verify whether the proper Resource URI and HTTP method is configured in the CNC Console GUI. Go to the Security Countermeasure section, check under the Service API Allowed List for that particular Allowed list name for N32 Egress or N32 Ingress Direction.
SEPP-PN32FSEPP-ERROR-0015	Service API Validation Failed	This error occurs on PN32F microservice. If resource URI and Http Method is not matched as per the configured allowed list on SEPP.	Verify whether the proper Resource URI and HTTP method is configured in the CNC Console GUI. Go to the Security Countermeasure section, check under the Service API Allowed List for that particular Allowed list name for N32 Egress or N32 Ingress Direction.

The following are the error codes of Cat-2 Network ID Validation feature:

Table 3-5 Cat-2 Network ID Error Codes and Recovery Steps

Error Code	Error Text	Description	Recovery
SEPP-CN32FSEPP-ERROR-0013	Network ID Validation In Header Failed	Check whether PLMN ID is not matched in header of the incoming request on CN32F microservice.	1. Verify if correct regex is configured against the header identifier in Header Configuration. 2. Verify if MCC and MNC combination is present in the visitor or target PLMN ID List based on the associated SEPP configuration

Table 3-5 (Cont.) Cat-2 Network ID Error Codes and Recovery Steps

Error Code	Error Text	Description	Recovery
SEPP-CN32FSEPP-ERROR-0014	Network ID Validation In Body Failed	Check whether PLMN ID is not matched in body of the incoming request on CN32F microservice.	1. Verify if correct regex is configured against the body IE in Body IE Configuration. 2. Verify if MCC and MNC combination is present in the home or visitor PLMN ID List based on configuration of associated SEPP.
SEPP-PN32FSEPP-ERROR-0016	Network ID Validation In Header Failed	Check whether PLMN ID is not matched in header of the incoming request on PN32F microservice.	1. Verify if correct regex is configured against the header identifier in Header Configuration. 2. Verify if MCC and MNC combination is present in the target or visitor PLMN ID list based on the associated SEPP configuration.
SEPP-PN32FSEPP-ERROR-0017	Network ID Validation In Body Failed	Check whether PLMN ID is not matched in body of the incoming request on PN32F microservice.	1. Verify if correct regex is configured against the body IE in Body IE Configuration. 2. Verify if MCC and MNC combination is present in the target or visitor PLMN ID list based on the associated SEPP configuration.

Table 3-6 Cat-3 Previous Location Check Error Codes

Error Code	Error Text	Description	Recovery
SEPP-PREVIOUS-LOCATION-CHECK-VALIDATION-ERROR-0019 or SEPP-PN32FSEPP-ERROR-0018	Previous Location Check Validation Failed	This error code is observed only on PN32F microservice. If Serving Network ID is not matching against the serving network ID coming from UDR response, to check whether UE authentication is success. This error also occurs if the authentication from UDR is false.	1. Verify whether the correct regex is configured against the serving network identifier in either Header or Body Configuration. 2. Verify whether the MCC and MNC combination is present in the Serving Network ID. 3. Verify whether the identifier coming in the ingress request on PN32F microservice is also same as the serving Network name coming as part of the UDR response if UE authentication is successful.
SEPP-PREVIOUS-LOCATION-CHECK-VALIDATION-EXCEPTION-0020	Previous Location Check Validation Failed Due To Exception	This error will occur if the system is not able to extract the SUPI, or if the incoming message doesn't contain SUPI, or if there are any sort of connectivity issues with NRF or UDR.	1. Verify if correct regex for UE ID in Header or Body configuration screen is configured due to which correct UE ID value is extracted. 2. Verify if the incoming message has SUPI. 3. Verify whether the FQDN or IP fetched for the UDR as part of NRF discovery call is reachable. 4. Verify if UDR discovery procedure from NRF is successful. 5. Verify if the SUPI received in the Ingress request message is part of the SUPI range received in UDR profile from discovery response from NRF.

