Nudm_SDM

This service is used by Consumer NFs (AMF, SMF, SMSF) to retrieve the UE's individual subscription data relevant to the consumer NF from the UDM.

Reference: 3GPP TS 29.503 Unified Data Management Services, version 15.3.0

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OpenAPI

OpenAPI Version: 3.0.0

Info

```
Version: '2.1.0.alpha-4'
Title: 'Nudm_SDM'
Description: |
  Nudm Subscriber Data Management Service.
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```

Servers

```
  URL: '{apiRoot}/nudm-sdm/v2'
  Variables:
    API Root:
      Default: https://example.com
      Description: apiRoot as defined in clause clause 4.4 of 3GPP TS 29.501.
```

Security

```
- oAuth2ClientCredentials:
  - nudm-sdm
- {}
```

Paths

/{supi}

```
get:
  Summary: retrieve multiple data sets
  Operation ID: GetDataSets

  Tags:
    - Retrieval of multiple data sets

  Parameters:
    - Name: supi
      In: path
      Description: Identifier of the UE
      Required/Optional: true
      Schema:
        Reference: 'TS29571_CommonData.yaml#/components/schemas/Supi'
    - Name: dataset-names
      In: query
      Style: form
      Explode: false
      Description: List of dataset names
      Required/Optional: true
      Schema:
         Reference: '#/components/schemas/DatasetNames'
    - Name: plmn-id
      In: query
      Description: serving PLMN ID
      Content:
        Application/JSON:
          Schema:
            Reference: 'TS29571_CommonData.yaml#/components/schemas/PlmnId'
    - Name: supported-features
      In: query
      Description: Supported Features
      Schema:
         Reference: 'TS29571_CommonData.yaml#/components/schemas/SupportedFeatures'
    - Name: If-None-Match
      In: header
      Description: Validator for conditional requests, as described in RFC 7232, 3.2
```

```
      Schema:
        Type: string
    - Name: If-Modified-Since
      In: header
      Description: Validator for conditional requests, as described in RFC 7232, 3.3
      Schema:
        Type: string

  Responses:
    '200':
      Description: Expected response to a valid request
      Content:
        Application/JSON:
          Schema:
            Reference: '#/components/schemas/SubscriptionDataSets'
      Headers:
        Cache-Control:
         Description: Cache-Control containing max-age, as described in RFC 7234, 5.2

          Schema:
            Type: string
        ETag:
          Description: Entity Tag, containing a strong validator, as described in RFC
7232, 2.3
          Schema:
            Type: string
        Last-Modified:
          Description: Timestamp for last modification of the resource, as described
in RFC 7232, 2.2
          Schema:
            Type: string
    '400':
      Reference: 'TS29571_CommonData.yaml#/components/responses/400'
    '404':
      Reference: 'TS29571_CommonData.yaml#/components/responses/404'
    '500':
      Reference: 'TS29571_CommonData.yaml#/components/responses/500'
    '503':
      Reference: 'TS29571_CommonData.yaml#/components/responses/503'
    Default:
      Description: Unexpected error
```

/{supi}/nssai

```
get:
  Summary: retrieve a UE's subscribed NSSAI
  Operation ID: GetNSSAI

  Tags:
    - Slice Selection Subscription Data Retrieval
```

```
Parameters:
  - Name: supi
    In: path
    Description: Identifier of the UE
    Required/Optional: true
    Schema:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/Supi'
  - Name: supported-features
    In: query
    Description: Supported Features
    Schema:
       Reference: 'TS29571_CommonData.yaml#/components/schemas/SupportedFeatures'
  - Name: plmn-id
    In: query
    Description: serving PLMN ID
    Content:
      Application/JSON:
        Schema:
          Reference: 'TS29571_CommonData.yaml#/components/schemas/PlmnId'
  - Name: If-None-Match
    In: header
    Description: Validator for conditional requests, as described in RFC 7232, 3.2
    Schema:
      Type: string
  - Name: If-Modified-Since
    In: header
    Description: Validator for conditional requests, as described in RFC 7232, 3.3
    Schema:
      Type: string

Responses:
  '200':
    Description: Expected response to a valid request
    Content:
      Application/JSON:
        Schema:
          Reference: '#/components/schemas/Nssai'
    Headers:
      Cache-Control:
       Description: Cache-Control containing max-age, as described in RFC 7234, 5.2

        Schema:
          Type: string
      ETag:
        Description: Entity Tag, containing a strong validator, as described in RFC
7232, 2.3
        Schema:
          Type: string
      Last-Modified:
        Description: Timestamp for last modification of the resource, as described
in RFC 7232, 2.2
        Schema:
```

```
        Type: string
    '400':
      Reference: 'TS29571_CommonData.yaml#/components/responses/400'
    '404':
      Reference: 'TS29571_CommonData.yaml#/components/responses/404'
    '500':
      Reference: 'TS29571_CommonData.yaml#/components/responses/500'
    '503':
      Reference: 'TS29571_CommonData.yaml#/components/responses/503'
    Default:
      Description: Unexpected error
```

/{supi}/am-data

```
get:
  Summary: retrieve a UE's Access and Mobility Subscription Data
  Operation ID: GetAmData

  Tags:
    - Access and Mobility Subscription Data Retrieval

  Parameters:
    - Name: supi
      In: path
      Description: Identifier of the UE
      Required/Optional: true
      Schema:
        Reference: 'TS29571_CommonData.yaml#/components/schemas/Supi'
    - Name: supported-features
      In: query
      Description: Supported Features
      Schema:
         Reference: 'TS29571_CommonData.yaml#/components/schemas/SupportedFeatures'
    - Name: plmn-id
      In: query
      Description: serving PLMN ID
      Content:
        Application/JSON:
          Schema:
            Reference: 'TS29571_CommonData.yaml#/components/schemas/PlmnId'
    - Name: If-None-Match
      In: header
      Description: Validator for conditional requests, as described in RFC 7232, 3.2
      Schema:
        Type: string
    - Name: If-Modified-Since
      In: header
      Description: Validator for conditional requests, as described in RFC 7232, 3.3
      Schema:
        Type: string
```

```
    Responses:
      '200':
        Description: Expected response to a valid request
        Content:
          Application/JSON:
            Schema:
              Reference: '#/components/schemas/AccessAndMobilitySubscriptionData'
        Headers:
          Cache-Control:
           Description: Cache-Control containing max-age, as described in RFC 7234, 5.2

            Schema:
              Type: string
          ETag:
            Description: Entity Tag, containing a strong validator, as described in RFC
 7232, 2.3
            Schema:
              Type: string
          Last-Modified:
            Description: Timestamp for last modification of the resource, as described
in RFC 7232, 2.2
            Schema:
              Type: string
      '400':
        Reference: 'TS29571_CommonData.yaml#/components/responses/400'
      '404':
        Reference: 'TS29571_CommonData.yaml#/components/responses/404'
      '500':
        Reference: 'TS29571_CommonData.yaml#/components/responses/500'
      '503':
        Reference: 'TS29571_CommonData.yaml#/components/responses/503'
      Default:
        Description: Unexpected error
```

/{supi}/am-data/ecr-data

```
  get:
    Summary: retrieve a UE's subscribed Enhanced Coverage Restriction Data
    Operation ID: GetEcrData

    Tags:
      - Enhanced Coverage Restriction Data Retrieval

    Parameters:
      - Name: supi
        In: path
        Description: Identifier of the UE
        Required/Optional: true
        Schema:
          Reference: 'TS29571_CommonData.yaml#/components/schemas/Supi'
      - Name: supported-features
```

```
        In: query
        Description: Supported Features
        Schema:
          Reference: 'TS29571_CommonData.yaml#/components/schemas/SupportedFeatures'
      - Name: If-None-Match
        In: header
        Description: Validator for conditional requests, as described in RFC 7232, 3.2
        Schema:
          Type: string
      - Name: If-Modified-Since
        In: header
        Description: Validator for conditional requests, as described in RFC 7232, 3.3
        Schema:
          Type: string

    Responses:
      '200':
        Description: Expected response to a valid request
        Content:
          Application/JSON:
            Schema:
              Reference: '#/components/schemas/EnhancedCoverageRestrictionData'
        Headers:
          Cache-Control:
            Description: Cache-Control containing max-age, as described in RFC 7234, 5.2

            Schema:
              Type: string
          ETag:
            Description: Entity Tag, containing a strong validator, as described in RFC
7232, 2.3
            Schema:
              Type: string
          Last-Modified:
            Description: Timestamp for last modification of the resource, as described
in RFC 7232, 2.2
            Schema:
              Type: string
      '400':
        Reference: 'TS29571_CommonData.yaml#/components/responses/400'
      '404':
        Reference: 'TS29571_CommonData.yaml#/components/responses/404'
      '500':
        Reference: 'TS29571_CommonData.yaml#/components/responses/500'
      '503':
        Reference: 'TS29571_CommonData.yaml#/components/responses/503'
      Default:
        Description: Unexpected error
```

/{supi}/smf-select-data

```
get:
  Summary: retrieve a UE's SMF Selection Subscription Data
  Operation ID: GetSmfSelData

  Tags:
    - SMF Selection Subscription Data Retrieval

  Parameters:
    - Name: supi
      In: path
      Description: Identifier of the UE
      Required/Optional: true
      Schema:
        Reference: 'TS29571_CommonData.yaml#/components/schemas/Supi'
    - Name: supported-features
      In: query
      Description: Supported Features
      Schema:
         Reference: 'TS29571_CommonData.yaml#/components/schemas/SupportedFeatures'
    - Name: plmn-id
      In: query
      Description: serving PLMN ID
      Content:
        Application/JSON:
          Schema:
            Reference: 'TS29571_CommonData.yaml#/components/schemas/PlmnId'
    - Name: If-None-Match
      In: header
      Description: Validator for conditional requests, as described in RFC 7232, 3.2
      Schema:
        Type: string
    - Name: If-Modified-Since
      In: header
      Description: Validator for conditional requests, as described in RFC 7232, 3.3
      Schema:
        Type: string

  Responses:
    '200':
      Description: Expected response to a valid request
      Content:
        Application/JSON:
          Schema:
            Reference: '#/components/schemas/SmfSelectionSubscriptionData'
      Headers:
        Cache-Control:
          Description: Cache-Control containing max-age, as described in RFC 7234, 5.2

          Schema:
```

```
            Type: string
          ETag:
            Description: Entity Tag, containing a strong validator, as described in RFC
 7232, 2.3
            Schema:
              Type: string
          Last-Modified:
            Description: Timestamp for last modification of the resource, as described
in RFC 7232, 2.2
            Schema:
              Type: string
      '400':
        Reference: 'TS29571_CommonData.yaml#/components/responses/400'
      '404':
        Reference: 'TS29571_CommonData.yaml#/components/responses/404'
      '500':
        Reference: 'TS29571_CommonData.yaml#/components/responses/500'
      '503':
        Reference: 'TS29571_CommonData.yaml#/components/responses/503'
      Default:
        Description: Unexpected error
```

/{supi}/ue-context-in-smf-data

```
  get:
    Summary: retrieve a UE's UE Context In SMF Data
    Operation ID: GetUeCtxInSmfData

    Tags:
      - UE Context In SMF Data Retrieval

    Parameters:
      - Name: supi
        In: path
        Description: Identifier of the UE
        Required/Optional: true
        Schema:
          Reference: 'TS29571_CommonData.yaml#/components/schemas/Supi'
      - Name: supported-features
        In: query
        Description: Supported Features
        Schema:
           Reference: 'TS29571_CommonData.yaml#/components/schemas/SupportedFeatures'

    Responses:
      '200':
        Description: Expected response to a valid request
        Content:
          Application/JSON:
            Schema:
              Reference: '#/components/schemas/UeContextInSmfData'
```

```
      '400':
        Reference: 'TS29571_CommonData.yaml#/components/responses/400'
      '404':
        Reference: 'TS29571_CommonData.yaml#/components/responses/404'
      '500':
        Reference: 'TS29571_CommonData.yaml#/components/responses/500'
      '503':
        Reference: 'TS29571_CommonData.yaml#/components/responses/503'
      Default:
        Description: Unexpected error
```

/{supi}/ue-context-in-smsf-data

```
get:
  Summary: retrieve a UE's UE Context In SMSF Data
  Operation ID: GetUeCtxInSmsfData

  Tags:
    - UE Context In SMSF Data Retrieval

  Parameters:
    - Name: supi
      In: path
      Description: Identifier of the UE
      Required/Optional: true
      Schema:
        Reference: 'TS29571_CommonData.yaml#/components/schemas/Supi'
    - Name: supported-features
      In: query
      Description: Supported Features
      Schema:
         Reference: 'TS29571_CommonData.yaml#/components/schemas/SupportedFeatures'

  Responses:
    '200':
      Description: Expected response to a valid request
      Content:
        Application/JSON:
          Schema:
            Reference: '#/components/schemas/UeContextInSmsfData'
    '400':
      Reference: 'TS29571_CommonData.yaml#/components/responses/400'
    '404':
      Reference: 'TS29571_CommonData.yaml#/components/responses/404'
    '500':
      Reference: 'TS29571_CommonData.yaml#/components/responses/500'
    '503':
      Reference: 'TS29571_CommonData.yaml#/components/responses/503'
    Default:
      Description: Unexpected error
```

/{supi}/trace-data

```
get:
  Summary: retrieve a UE's Trace Configuration Data
  Operation ID: GetTraceConfigData

  Tags:
    - Trace Configuration Data Retrieval

  Parameters:
    - Name: supi
      In: path
      Description: Identifier of the UE
      Required/Optional: true
      Schema:
        Reference: 'TS29571_CommonData.yaml#/components/schemas/Supi'
    - Name: supported-features
      In: query
      Description: Supported Features
      Schema:
         Reference: 'TS29571_CommonData.yaml#/components/schemas/SupportedFeatures'
    - Name: plmn-id
      In: query
      Description: serving PLMN ID
      Content:
        Application/JSON:
          Schema:
            Reference: 'TS29571_CommonData.yaml#/components/schemas/PlmnId'
    - Name: If-None-Match
      In: header
      Description: Validator for conditional requests, as described in RFC 7232, 3.2
      Schema:
        Type: string
    - Name: If-Modified-Since
      In: header
      Description: Validator for conditional requests, as described in RFC 7232, 3.3
      Schema:
        Type: string

  Responses:
    '200':
      Description: Expected response to a valid request
      Content:
        Application/JSON:
          Schema:
            Reference: '#/components/schemas/TraceDataResponse'
      Headers:
        Cache-Control:
          Description: Cache-Control containing max-age, as described in RFC 7234, 5.2

          Schema:
```

```
            Type: string
          ETag:
            Description: Entity Tag, containing a strong validator, as described in RFC
 7232, 2.3
            Schema:
              Type: string
          Last-Modified:
            Description: Timestamp for last modification of the resource, as described
in RFC 7232, 2.2
            Schema:
              Type: string
      '400':
        Reference: 'TS29571_CommonData.yaml#/components/responses/400'
      '404':
        Reference: 'TS29571_CommonData.yaml#/components/responses/404'
      '500':
        Reference: 'TS29571_CommonData.yaml#/components/responses/500'
      '503':
        Reference: 'TS29571_CommonData.yaml#/components/responses/503'
      Default:
        Description: Unexpected error
```

/{supi}/sm-data

```
  get:
    Summary: retrieve a UE's Session Management Subscription Data
    Operation ID: GetSmData

    Tags:
      - Session Management Subscription Data Retrieval

    Parameters:
      - Name: supi
        In: path
        Description: Identifier of the UE
        Required/Optional: true
        Schema:
          Reference: 'TS29571_CommonData.yaml#/components/schemas/Supi'
      - Name: supported-features
        In: query
        Description: Supported Features
        Schema:
           Reference: 'TS29571_CommonData.yaml#/components/schemas/SupportedFeatures'
      - Name: single-nssai
        In: query
        Content:
          Application/JSON:
            Schema:
             Reference: 'TS29571_CommonData.yaml#/components/schemas/Snssai'
      - Name: dnn
        In: query
```

```
        Schema:
          Reference: 'TS29571_CommonData.yaml#/components/schemas/Dnn'
      - Name: plmn-id
        In: query
        Content:
          Application/JSON:
            Schema:
              Reference: 'TS29571_CommonData.yaml#/components/schemas/PlmnId'
      - Name: If-None-Match
        In: header
        Description: Validator for conditional requests, as described in RFC 7232, 3.2
        Schema:
          Type: string
      - Name: If-Modified-Since
        In: header
        Description: Validator for conditional requests, as described in RFC 7232, 3.3
        Schema:
          Type: string

    Responses:
      '200':
        Description: Expected response to a valid request
        Content:
          Application/JSON:
            Schema:
              Type: array
              Items:
                Reference: '#/components/schemas/SessionManagementSubscriptionData'
              Min Items: 1
        Headers:
          Cache-Control:
            Description: Cache-Control containing max-age, as described in RFC 7234, 5.2

            Schema:
              Type: string
          ETag:
            Description: Entity Tag, containing a strong validator, as described in RFC
7232, 2.3
            Schema:
              Type: string
          Last-Modified:
            Description: Timestamp for last modification of the resource, as described
in RFC 7232, 2.2
            Schema:
              Type: string
      '400':
        Reference: 'TS29571_CommonData.yaml#/components/responses/400'
      '404':
        Reference: 'TS29571_CommonData.yaml#/components/responses/404'
      '500':
        Reference: 'TS29571_CommonData.yaml#/components/responses/500'
      '503':
```

```
      Reference: 'TS29571_CommonData.yaml#/components/responses/503'
    Default:
      Description: Unexpected error
```

/{supi}/sms-data

```
get:
  Summary: retrieve a UE's SMS Subscription Data
  Operation ID: GetSmsData

  Tags:
    - SMS Subscription Data Retrieval

  Parameters:
    - Name: supi
      In: path
      Description: Identifier of the UE
      Required/Optional: true
      Schema:
        Reference: 'TS29571_CommonData.yaml#/components/schemas/Supi'
    - Name: supported-features
      In: query
      Description: Supported Features
      Schema:
         Reference: 'TS29571_CommonData.yaml#/components/schemas/SupportedFeatures'
    - Name: plmn-id
      In: query
      Content:
        Application/JSON:
          Schema:
            Reference: 'TS29571_CommonData.yaml#/components/schemas/PlmnId'
    - Name: If-None-Match
      In: header
      Description: Validator for conditional requests, as described in RFC 7232, 3.2
      Schema:
        Type: string
    - Name: If-Modified-Since
      In: header
      Description: Validator for conditional requests, as described in RFC 7232, 3.3
      Schema:
        Type: string

  Responses:
    '200':
      Description: Expected response to a valid request
      Content:
        Application/JSON:
          Schema:
            Reference: '#/components/schemas/SmsSubscriptionData'
      Headers:
        Cache-Control:
```

```
          Description: Cache-Control containing max-age, as described in RFC 7234, 5.2

          Schema:
            Type: string
        ETag:
          Description: Entity Tag, containing a strong validator, as described in RFC
 7232, 2.3
          Schema:
            Type: string
        Last-Modified:
          Description: Timestamp for last modification of the resource, as described
in RFC 7232, 2.2
          Schema:
            Type: string
    '400':
      Reference: 'TS29571_CommonData.yaml#/components/responses/400'
    '404':
      Reference: 'TS29571_CommonData.yaml#/components/responses/404'
    '500':
      Reference: 'TS29571_CommonData.yaml#/components/responses/500'
    '503':
      Reference: 'TS29571_CommonData.yaml#/components/responses/503'
    Default:
      Description: Unexpected error
```

/{supi}/sms-mng-data

```
  get:
    Summary: retrieve a UE's SMS Management Subscription Data
    Operation ID: GetSmsMngtData

    Tags:
      - SMS Management Subscription Data Retrieval

    Parameters:
      - Name: supi
        In: path
        Description: Identifier of the UE
        Required/Optional: true
        Schema:
          Reference: 'TS29571_CommonData.yaml#/components/schemas/Supi'
      - Name: supported-features
        In: query
        Description: Supported Features
        Schema:
           Reference: 'TS29571_CommonData.yaml#/components/schemas/SupportedFeatures'
      - Name: plmn-id
        In: query
        Content:
          Application/JSON:
            Schema:
```

```
          Reference: 'TS29571_CommonData.yaml#/components/schemas/PlmnId'
      - Name: If-None-Match
        In: header
        Description: Validator for conditional requests, as described in RFC 7232, 3.2
        Schema:
          Type: string
      - Name: If-Modified-Since
        In: header
        Description: Validator for conditional requests, as described in RFC 7232, 3.3
        Schema:
          Type: string

    Responses:
      '200':
        Description: Expected response to a valid request
        Content:
          Application/JSON:
            Schema:
              Reference: '#/components/schemas/SmsManagementSubscriptionData'
        Headers:
          Cache-Control:
           Description: Cache-Control containing max-age, as described in RFC 7234, 5.2

            Schema:
              Type: string
          ETag:
            Description: Entity Tag, containing a strong validator, as described in RFC
 7232, 2.3
            Schema:
              Type: string
          Last-Modified:
            Description: Timestamp for last modification of the resource, as described
in RFC 7232, 2.2
            Schema:
              Type: string
      '400':
        Reference: 'TS29571_CommonData.yaml#/components/responses/400'
      '404':
        Reference: 'TS29571_CommonData.yaml#/components/responses/404'
      '500':
        Reference: 'TS29571_CommonData.yaml#/components/responses/500'
      '503':
        Reference: 'TS29571_CommonData.yaml#/components/responses/503'
      Default:
        Description: Unexpected error
```

/{ueId}/lcs-privacy-data

```
  get:
    Summary: retrieve a UE's LCS Privacy Subscription Data
    Operation ID: GetLcsPrivacyData
```

```
  Tags:
    - LCS Privacy Data Retrieval

  Parameters:
    - Name: ueId
      In: path
      Description: Identifier of the UE
      Required/Optional: true
      Schema:
        Reference: 'TS29571_CommonData.yaml#/components/schemas/VarUeId'
    - Name: supported-features
      In: query
      Description: Supported Features
      Schema:
         Reference: 'TS29571_CommonData.yaml#/components/schemas/SupportedFeatures'
    - Name: If-None-Match
      In: header
      Description: Validator for conditional requests, as described in RFC 7232, 3.2
      Schema:
        Type: string
    - Name: If-Modified-Since
      In: header
      Description: Validator for conditional requests, as described in RFC 7232, 3.3
      Schema:
        Type: string

  Responses:
    '200':
      Description: Expected response to a valid request
      Content:
        Application/JSON:
          Schema:
            Reference: '#/components/schemas/LcsPrivacyData'
      Headers:
        Cache-Control:
          Description: Cache-Control containing max-age, as described in RFC 7234, 5.2

          Schema:
            Type: string
        ETag:
          Description: Entity Tag, containing a strong validator, as described in RFC
7232, 2.3
          Schema:
            Type: string
        Last-Modified:
          Description: Timestamp for last modification of the resource, as described
in RFC 7232, 2.2
          Schema:
            Type: string
    '400':
      Reference: 'TS29571_CommonData.yaml#/components/responses/400'
    '404':
```

```
      Reference: 'TS29571_CommonData.yaml#/components/responses/404'
    '500':
      Reference: 'TS29571_CommonData.yaml#/components/responses/500'
    '503':
      Reference: 'TS29571_CommonData.yaml#/components/responses/503'
    Default:
      Description: Unexpected error
```

/{supi}/lcs-mo-data

```
get:
  Summary: retrieve a UE's LCS Mobile Originated Subscription Data
  Operation ID: GetLcsMoData

  Tags:
    - LCS Mobile Originated Data Retrieval

  Parameters:
    - Name: supi
      In: path
      Description: Identifier of the UE
      Required/Optional: true
      Schema:
        Reference: 'TS29571_CommonData.yaml#/components/schemas/Supi'
    - Name: supported-features
      In: query
      Description: Supported Features
      Schema:
         Reference: 'TS29571_CommonData.yaml#/components/schemas/SupportedFeatures'
    - Name: plmn-id
      In: query
      Content:
        Application/JSON:
          Schema:
            Reference: 'TS29571_CommonData.yaml#/components/schemas/PlmnId'
    - Name: If-None-Match
      In: header
      Description: Validator for conditional requests, as described in RFC 7232, 3.2
      Schema:
        Type: string
    - Name: If-Modified-Since
      In: header
      Description: Validator for conditional requests, as described in RFC 7232, 3.3
      Schema:
        Type: string

  Responses:
    '200':
      Description: Expected response to a valid request
      Content:
        Application/JSON:
```

```
          Schema:
            Reference: '#/components/schemas/LcsMoData'
        Headers:
          Cache-Control:
           Description: Cache-Control containing max-age, as described in RFC 7234, 5.2

          Schema:
            Type: string
          ETag:
            Description: Entity Tag, containing a strong validator, as described in RFC
 7232, 2.3
          Schema:
            Type: string
          Last-Modified:
            Description: Timestamp for last modification of the resource, as described
in RFC 7232, 2.2
          Schema:
            Type: string
      '400':
        Reference: 'TS29571_CommonData.yaml#/components/responses/400'
      '404':
        Reference: 'TS29571_CommonData.yaml#/components/responses/404'
      '500':
        Reference: 'TS29571_CommonData.yaml#/components/responses/500'
      '503':
        Reference: 'TS29571_CommonData.yaml#/components/responses/503'
      Default:
        Description: Unexpected error
```

/{ueId}/sdm-subscriptions

```
  Method: Post
    Summary: subscribe to notifications
    Operation ID: Subscribe

    Tags:
      - Subscription Creation

    Parameters:
      - Name: ueId
        In: path
        Description: Identity of the user
        Required/Optional: true
        Schema:
          Reference: 'TS29571_CommonData.yaml#/components/schemas/VarUeId'
    Request Body:
      Content:
        Application/JSON:
          Schema:
            Reference: '#/components/schemas/SdmSubscription'
      Required/Optional: true
```

```
    Responses:
      '201':
        Description: Expected response to a valid request
        Content:
          Application/JSON:
            Schema:
              Reference: '#/components/schemas/SdmSubscription'
        Headers:
          Location:
              description: 'Contains the URI of the newly created resource,
 according to the structure:
{apiRoot}/nudm-sdm/<apiVersion>/{supi}/sdm-subscriptions/{subscriptionId}'
            Required/Optional: true
            Schema:
              Type: string
      '400':
        Reference: 'TS29571_CommonData.yaml#/components/responses/400'
      '404':
        Reference: 'TS29571_CommonData.yaml#/components/responses/404'
      '500':
        Reference: 'TS29571_CommonData.yaml#/components/responses/500'
      '501':
        Reference: 'TS29571_CommonData.yaml#/components/responses/501'
      '503':
        Reference: 'TS29571_CommonData.yaml#/components/responses/503'
      Default:
        Description: Unexpected error
    Callbacks:
      datachangeNotification:
        '{request.body#/callbackReference}':
          Method: Post
            Request Body:
              Required/Optional: true
              Content:
                Application/JSON:
                  Schema:
                    Reference: '#/components/schemas/ModificationNotification'

            Responses:
              '204':
                Description: Successful Notification response
              '307':
                Description: Temporary Redirect
                Content:
                  application/problem+json:
                    Schema:
                      Reference:
'TS29571_CommonData.yaml#/components/schemas/ProblemDetails'
                Headers:
                  Location:
                    Description: 'Contains the new Callback URI of the target NF Service
```

```
 Consumer (e.g. AMF) to which the request is redirected'
                  Required/Optional: true
                  Schema:
                    Type: string
              '308':
                Description: Permanent Redirect
                Content:
                  application/problem+json:
                    Schema:
                      Reference:
'TS29571_CommonData.yaml#/components/schemas/ProblemDetails'
                Headers:
                  Location:
                    Description: 'Contains the new Callback URI of the target NF Service
 Consumer (e.g. AMF) to which the request is redirected'
                      Required/Optional: true
                      Schema:
                        Type: string
              '400':
                Reference: 'TS29571_CommonData.yaml#/components/responses/400'
              '404':
                Reference: 'TS29571_CommonData.yaml#/components/responses/404'
              '500':
                Reference: 'TS29571_CommonData.yaml#/components/responses/500'
              '503':
                Reference: 'TS29571_CommonData.yaml#/components/responses/503'
              Default:
                Description: Unexpected error
```

/{ueId}/sdm-subscriptions/{subscriptionId}

```
 delete:
   Summary: unsubscribe from notifications
   Operation ID: Unsubscribe

   Tags:
     - Subscription Deletion

   Parameters:
     - Name: ueId
       In: path
       Description: Identity of the user
       Required/Optional: true
       Schema:
         Reference: 'TS29571_CommonData.yaml#/components/schemas/VarUeId'
     - Name: subscriptionId
       In: path
       Description: Id of the SDM Subscription
       Required/Optional: true
       Schema:
         Type: string
```

```
  Responses:
    '204':
      Description: Successful response
    '400':
      Reference: 'TS29571_CommonData.yaml#/components/responses/400'
    '404':
      Reference: 'TS29571_CommonData.yaml#/components/responses/404'
    '500':
      Reference: 'TS29571_CommonData.yaml#/components/responses/500'
    '503':
      Reference: 'TS29571_CommonData.yaml#/components/responses/503'
    Default:
      Description: Unexpected error
patch:
  Summary: modify the subscription
  Operation ID: Modify

  Tags:
    - Subscription Modification

  Parameters:
    - Name: ueId
      In: path
      Description: Identity of the user
      Required/Optional: true
      Schema:
        Reference: 'TS29571_CommonData.yaml#/components/schemas/VarUeId'
    - Name: subscriptionId
      In: path
      Description: Id of the SDM Subscription
      Required/Optional: true
      Schema:
        Type: string
    - Name: supported-features
      In: query
      Description: Features required to be supported by the target NF
      Schema:
        Reference: 'TS29571_CommonData.yaml#/components/schemas/SupportedFeatures'
  Request Body:
    Content:
      application/merge-patch+json:
        Schema:
          Reference: '#/components/schemas/SdmSubsModification'
    Required/Optional: true

  Responses:
    '200':
      Description: Expected response to a valid request
      Content:
        Application/JSON:
          Schema:
```

```
        oneOf:
          - $ref: '#/components/schemas/SdmSubscription'
          - $ref: 'TS29571_CommonData.yaml#/components/schemas/PatchResult'
      '400':
        Reference: 'TS29571_CommonData.yaml#/components/responses/400'
      '403':
        Reference: 'TS29571_CommonData.yaml#/components/responses/403'
      '404':
        Reference: 'TS29571_CommonData.yaml#/components/responses/404'
      '500':
        Reference: 'TS29571_CommonData.yaml#/components/responses/500'
      '503':
        Reference: 'TS29571_CommonData.yaml#/components/responses/503'
      Default:
        Description: Unexpected error
```

/{ueId}/id-translation-result

```
get:
  Summary: retrieve a UE's SUPI or GPSI
  Operation ID: GetSupiOrGpsi

  Tags:
    - GPSI to SUPI Translation

  Parameters:
    - Name: ueId
      In: path
      Description: Identifier of the UE
      Required/Optional: true
      Schema:
        Reference: 'TS29571_CommonData.yaml#/components/schemas/VarUeId'
    - Name: supported-features
      In: query
      Description: Supported Features
      Schema:
         Reference: 'TS29571_CommonData.yaml#/components/schemas/SupportedFeatures'
    - Name: app-port-id
      In: query
      Description: Application port identifier
      Content:
        Application/JSON:
          Schema:
            Reference: '#/components/schemas/AppPortId'
    - Name: If-None-Match
      In: header
      Description: Validator for conditional requests, as described in RFC 7232, 3.2
      Schema:
        Type: string
    - Name: If-Modified-Since
      In: header
```

```
        Description: Validator for conditional requests, as described in RFC 7232, 3.3
        Schema:
          Type: string

    Responses:
      '200':
        Description: Expected response to a valid request
        Content:
          Application/JSON:
            Schema:
              Reference: '#/components/schemas/IdTranslationResult'
        Headers:
          Cache-Control:
           Description: Cache-Control containing max-age, as described in RFC 7234, 5.2

            Schema:
              Type: string
          ETag:
            Description: Entity Tag, containing a strong validator, as described in RFC
 7232, 2.3
            Schema:
              Type: string
          Last-Modified:
            Description: Timestamp for last modification of the resource, as described
in RFC 7232, 2.2
            Schema:
              Type: string
      '400':
        Reference: 'TS29571_CommonData.yaml#/components/responses/400'
      '404':
        Reference: 'TS29571_CommonData.yaml#/components/responses/404'
      '500':
        Reference: 'TS29571_CommonData.yaml#/components/responses/500'
      '503':
        Reference: 'TS29571_CommonData.yaml#/components/responses/503'
      Default:
        Description: Unexpected error
```

/{supi}/am-data/sor-ack

```
  put:
    Summary: Nudm_Sdm Info service operation
    Operation ID: SorAckInfo

    Tags:
      - Providing acknowledgement of Steering of Roaming

    Parameters:
      - Name: supi
        In: path
        Description: Identifier of the UE
```

```
    Required/Optional: true
    Schema:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/Supi'
  Request Body:
    Content:
      Application/JSON:
        Schema:
          Reference: '#/components/schemas/AcknowledgeInfo'

  Responses:
    '204':
      Description: Successful acknowledgement
    '400':
      Reference: 'TS29571_CommonData.yaml#/components/responses/400'
    '500':
      Reference: 'TS29571_CommonData.yaml#/components/responses/500'
    '503':
      Reference: 'TS29571_CommonData.yaml#/components/responses/503'
    Default:
      Description: Unexpected error
```

/{supi}/am-data/upu-ack

```
put:
  Summary: Nudm_Sdm Info for UPU service operation
  Operation ID: UpuAck

  Tags:
    - Providing acknowledgement of UE Parameters Update

  Parameters:
    - Name: supi
      In: path
      Description: Identifier of the UE
      Required/Optional: true
      Schema:
        Reference: 'TS29571_CommonData.yaml#/components/schemas/Supi'
  Request Body:
    Content:
      Application/JSON:
        Schema:
          Reference: '#/components/schemas/AcknowledgeInfo'

  Responses:
    '204':
      Description: Successful acknowledgement
    '400':
      Reference: 'TS29571_CommonData.yaml#/components/responses/400'
    '500':
      Reference: 'TS29571_CommonData.yaml#/components/responses/500'
    '503':
```

```
      Reference: 'TS29571_CommonData.yaml#/components/responses/503'
    Default:
      Description: Unexpected error
```

/{supi}/am-data/subscribed-snssais-ack

```
put:
  Summary: Nudm_Sdm Info operation for S-NSSAIs acknowledgement
  Operation ID: S-NSSAIs Ack

  Tags:
    - Providing acknowledgement of S-NSSAIs Update

  Parameters:
    - Name: supi
      In: path
      Description: Identifier of the UE
      Required/Optional: true
      Schema:
        Reference: 'TS29571_CommonData.yaml#/components/schemas/Supi'
  Request Body:
    Content:
      Application/JSON:
        Schema:
          Reference: '#/components/schemas/AcknowledgeInfo'

  Responses:
    '204':
      Description: Successful acknowledgement
    '400':
      Reference: 'TS29571_CommonData.yaml#/components/responses/400'
    '500':
      Reference: 'TS29571_CommonData.yaml#/components/responses/500'
    '503':
      Reference: 'TS29571_CommonData.yaml#/components/responses/503'
    Default:
      Description: Unexpected error
```

/{supi}/am-data/cag-ack

```
put:
  Summary: Nudm_Sdm Info operation for CAG acknowledgement
  Operation ID: CAG Ack

  Tags:
    - Providing acknowledgement of CAG Update

  Parameters:
    - Name: supi
      In: path
```

```
    Description: Identifier of the UE
    Required/Optional: true
    Schema:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/Supi'
  Request Body:
    Content:
      Application/JSON:
        Schema:
          Reference: '#/components/schemas/AcknowledgeInfo'

  Responses:
    '204':
      Description: Successful acknowledgement
    '400':
      Reference: 'TS29571_CommonData.yaml#/components/responses/400'
    '500':
      Reference: 'TS29571_CommonData.yaml#/components/responses/500'
    '503':
      Reference: 'TS29571_CommonData.yaml#/components/responses/503'
    Default:
      Description: Unexpected error
```

/{supi}/am-data/update-sor

```
Method: Post
  Summary: Nudm_Sdm custom operation to trigger SOR info update
  Operation ID: Update SOR Info

  Tags:
    - Trigger SOR info update

  Parameters:
    - Name: supi
      In: path
      Description: Identifier of the UE
      Required/Optional: true
      Schema:
        Reference: 'TS29571_CommonData.yaml#/components/schemas/Supi'
  Request Body:
    Content:
      Application/JSON:
        Schema:
          Reference: '#/components/schemas/SorUpdateInfo'

  Responses:
    '200':
      Description: Expected response to a valid request
      Content:
        Application/JSON:
          Schema:
            Reference: '#/components/schemas/SorInfo'
```

```
    '400':
      Reference: 'TS29571_CommonData.yaml#/components/responses/400'
    '404':
      Reference: 'TS29571_CommonData.yaml#/components/responses/404'
    '500':
      Reference: 'TS29571_CommonData.yaml#/components/responses/500'
    '503':
      Reference: 'TS29571_CommonData.yaml#/components/responses/503'
    Default:
      Description: Unexpected error
```

/shared-data

```
get:
  Summary: retrieve shared data
  Operation ID: GetSharedData

  Tags:
    - Retrieval of shared data

  Parameters:
    - Name: shared-data-ids
      In: query
      Description: List of shared data ids
      Required/Optional: true
      Style: form
      Explode: false
      Schema:
        Reference: '#/components/schemas/SharedDataIds'
    - Name: supportedFeatures
      In: query
      Description: Supported Features
      Schema:
        Reference: 'TS29571_CommonData.yaml#/components/schemas/SupportedFeatures'
    - Name: If-None-Match
      In: header
      Description: Validator for conditional requests, as described in RFC 7232, 3.2
      Schema:
        Type: string
    - Name: If-Modified-Since
      In: header
      Description: Validator for conditional requests, as described in RFC 7232, 3.3
      Schema:
        Type: string

  Responses:
    '200':
      Description: Expected response to a valid request
      Content:
        Application/JSON:
          Schema:
```

```
            Type: array
            Items:
              Reference: '#/components/schemas/SharedData'
            Min Items: 1
        Headers:
          Cache-Control:
           Description: Cache-Control containing max-age, as described in RFC 7234, 5.2

            Schema:
              Type: string
          ETag:
            Description: Entity Tag, containing a strong validator, as described in RFC
 7232, 2.3
            Schema:
              Type: string
          Last-Modified:
            Description: Timestamp for last modification of the resource, as described
in RFC 7232, 2.2
            Schema:
              Type: string
      '400':
        Reference: 'TS29571_CommonData.yaml#/components/responses/400'
      '404':
        Reference: 'TS29571_CommonData.yaml#/components/responses/404'
      '500':
        Reference: 'TS29571_CommonData.yaml#/components/responses/500'
      '503':
        Reference: 'TS29571_CommonData.yaml#/components/responses/503'
      Default:
        Description: Unexpected error
```

/shared-data-subscriptions

```
  Method: Post
    Summary: subscribe to notifications for shared data
    Operation ID: SubscribeToSharedData

    Tags:
      - Subscription Creation for shared data
    Request Body:
      Content:
        Application/JSON:
          Schema:
            Reference: '#/components/schemas/SdmSubscription'
      Required/Optional: true

    Responses:
      '201':
        Description: Expected response to a valid request
        Content:
          Application/JSON:
```

```
          Schema:
            Reference: '#/components/schemas/SdmSubscription'
        Headers:
          Location:
             description: 'Contains the URI of the newly created resource,
 according to the structure:
{apiRoot}/nudm-sdm/<apiVersion>/shared-data-subscriptions/{subscriptionId}'
          Required/Optional: true
          Schema:
            Type: string
      '400':
        Reference: 'TS29571_CommonData.yaml#/components/responses/400'
      '404':
        Reference: 'TS29571_CommonData.yaml#/components/responses/404'
      Default:
        Description: Unexpected error
    Callbacks:
      datachangeNotification:
        '{request.body#/callbackReference}':
          Method: Post
            Request Body:
              Required/Optional: true
              Content:
                Application/JSON:
                  Schema:
                    Reference: '#/components/schemas/ModificationNotification'

            Responses:
              '204':
                Description: Successful Notification response
              '400':
                Reference: 'TS29571_CommonData.yaml#/components/responses/400'
              '404':
                Reference: 'TS29571_CommonData.yaml#/components/responses/404'
              '500':
                Reference: 'TS29571_CommonData.yaml#/components/responses/500'
              '503':
                Reference: 'TS29571_CommonData.yaml#/components/responses/503'
              Default:
                Description: Unexpected error
```

/shared-data-subscriptions/{subscriptionId}

```
  delete:
    Summary: unsubscribe from notifications for shared data
    Operation ID: UnsubscribeForSharedData

    Tags:
      - Subscription Deletion for shared data

    Parameters:
```

```
    - Name: subscriptionId
      In: path
      Description: Id of the Shared data Subscription
      Required/Optional: true
      Schema:
        Type: string

  Responses:
    '204':
      Description: Successful response
    '400':
      Reference: 'TS29571_CommonData.yaml#/components/responses/400'
    '404':
      Reference: 'TS29571_CommonData.yaml#/components/responses/404'
    '500':
      Reference: 'TS29571_CommonData.yaml#/components/responses/500'
    '503':
      Reference: 'TS29571_CommonData.yaml#/components/responses/503'
    Default:
      Description: Unexpected error
patch:
  Summary: modify the subscription
  Operation ID: ModifySharedDataSubs

  Tags:
    - Subscription Modification

  Parameters:
    - Name: subscriptionId
      In: path
      Description: Id of the SDM Subscription
      Required/Optional: true
      Schema:
        Type: string
    - Name: supported-features
      In: query
      Description: Features required to be supported by the target NF
      Schema:
        Reference: 'TS29571_CommonData.yaml#/components/schemas/SupportedFeatures'
  Request Body:
    Content:
      application/merge-patch+json:
        Schema:
          Reference: '#/components/schemas/SdmSubsModification'
    Required/Optional: true

  Responses:
    '200':
      Description: Expected response to a valid request
      Content:
        Application/JSON:
          Schema:
```

```
        oneOf:
          - $ref: '#/components/schemas/SdmSubscription'
          - $ref: 'TS29571_CommonData.yaml#/components/schemas/PatchResult'
      '400':
        Reference: 'TS29571_CommonData.yaml#/components/responses/400'
      '403':
        Reference: 'TS29571_CommonData.yaml#/components/responses/403'
      '404':
        Reference: 'TS29571_CommonData.yaml#/components/responses/404'
      '500':
        Reference: 'TS29571_CommonData.yaml#/components/responses/500'
      '503':
        Reference: 'TS29571_CommonData.yaml#/components/responses/503'
      Default:
        Description: Unexpected error
```

/group-data/group-identifiers

```
get:
  Summary: Mapping of Group Identifiers
  Operation ID: GetGroupIdentifiers

  Tags:
    - Group Identifiers

  Parameters:
    - Name: ext-group-id
      In: query
      Description: External Group Identifier
      Required/Optional: false
      Schema:
        Reference: '#/components/schemas/ExtGroupId'
    - Name: int-group-id
      In: query
      Description: Internal Group Identifier
      Required/Optional: false
      Schema:
        Reference: 'TS29571_CommonData.yaml#/components/schemas/GroupId'
    - Name: ue-id-ind
      In: query
      Description: Indication whether UE identifiers are required or not
      Required/Optional: false
      Schema:
        Type: boolean
        Default: false
    - Name: supported-features
      In: query
      Description: Supported Features
      Schema:
        Reference: 'TS29571_CommonData.yaml#/components/schemas/SupportedFeatures'
    - Name: If-None-Match
```

```
        In: header
        Description: Validator for conditional requests, as described in RFC 7232, 3.2
        Schema:
          Type: string
      - Name: If-Modified-Since
        In: header
        Description: Validator for conditional requests, as described in RFC 7232, 3.3
        Schema:
          Type: string

    Responses:
      '200':
        Description: Expected response to a valid request
        Content:
          Application/JSON:
            Schema:
              Reference: '#/components/schemas/GroupIdentifiers'
        Headers:
          Cache-Control:
           Description: Cache-Control containing max-age, as described in RFC 7234, 5.2

            Schema:
              Type: string
          ETag:
            Description: Entity Tag, containing a strong validator, as described in RFC
 7232, 2.3
            Schema:
              Type: string
          Last-Modified:
            Description: Timestamp for last modification of the resource, as described
in RFC 7232, 2.2
            Schema:
              Type: string
      '400':
        Reference: 'TS29571_CommonData.yaml#/components/responses/400'
      '404':
        Reference: 'TS29571_CommonData.yaml#/components/responses/404'
      '500':
        Reference: 'TS29571_CommonData.yaml#/components/responses/500'
      '503':
        Reference: 'TS29571_CommonData.yaml#/components/responses/503'
      Default:
        Description: Unexpected error
```

Components

```
securitySchemes:
  oAuth2ClientCredentials:
    Type: oauth2
    Flows:
```

```
      clientCredentials:
        tokenUrl: '{nrfApiRoot}/oauth2/token'
        scopes:
          nudm-sdm: Access to the nudm-sdm API

schemas:
# COMPLEX TYPES:
  DatasetNames:
    Type: array
    Items:
      Reference: '#/components/schemas/DataSetName'
    minItems: 2
    uniqueItems: true
  SubscriptionDataSets:
    Type: object
    Properties:
      amData:
        Reference: '#/components/schemas/AccessAndMobilitySubscriptionData'
      smfSelData:
        Reference: '#/components/schemas/SmfSelectionSubscriptionData'
      uecSmfData:
        Reference: '#/components/schemas/UeContextInSmfData'
      uecSmsfData:
        Reference: '#/components/schemas/UeContextInSmsfData'
      smsSubsData:
        Reference: '#/components/schemas/SmsSubscriptionData'
      smData:
        Type: array
        Items:
          Reference: '#/components/schemas/SessionManagementSubscriptionData'
        minItems: 1
      traceData:
        Reference: 'TS29571_CommonData.yaml#/components/schemas/TraceData'
      smsMngData:
        Reference: '#/components/schemas/SmsManagementSubscriptionData'
      lcsPrivacyData:
        Reference: '#/components/schemas/LcsPrivacyData'
      lcsMoData:
        Reference: '#/components/schemas/LcsMoData'
  UeContextInSmsfData:
    Type: object
    Properties:
      smsfInfo3GppAccess:
        Reference: '#/components/schemas/SmsfInfo'
      smsfInfoNon3GppAccess:
        Reference: '#/components/schemas/SmsfInfo'
  SmsfInfo:
    Type: object
    Required:
      - smsfInstanceId
      - plmnId
    Properties:
```

```
    smsfInstanceId:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/NfInstanceId'
    plmnId:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/PlmnId'
AccessAndMobilitySubscriptionData:
  Type: object
  Properties:
    supportedFeatures:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/SupportedFeatures'
    gpsis:
      Type: array
      Items:
        Reference: 'TS29571_CommonData.yaml#/components/schemas/Gpsi'
    internalGroupIds:
      Type: array
      Items:
        Reference: 'TS29571_CommonData.yaml#/components/schemas/GroupId'
      minItems: 1
    vnGroupInfo:
      Type: object
      additionalProperties:
        Reference: '#/components/schemas/VnGroupData'
      minProperties: 1
    sharedVnGroupDataIds:
      Type: object
      additionalProperties:
        Reference: '#/components/schemas/SharedDataId'
      minProperties: 1
    subscribedUeAmbr:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/AmbrRm'
    nssai:
      Reference: '#/components/schemas/Nssai'
    ratRestrictions:
      Type: array
      Items:
        Reference: 'TS29571_CommonData.yaml#/components/schemas/RatType'
    forbiddenAreas:
      Type: array
      Items:
        Reference: 'TS29571_CommonData.yaml#/components/schemas/Area'
    serviceAreaRestriction:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/ServiceAreaRestriction'
    coreNetworkTypeRestrictions:
      Type: array
      Items:
        Reference: 'TS29571_CommonData.yaml#/components/schemas/CoreNetworkType'
    rfspIndex:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/RfspIndexRm'
    subsRegTimer:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/DurationSecRm'
    ueUsageType:
```

```
  Reference: '#/components/schemas/UeUsageType'
mpsPriority:
  Reference: '#/components/schemas/MpsPriorityIndicator'
mcsPriority:
  Reference: '#/components/schemas/McsPriorityIndicator'
activeTime:
  Reference: 'TS29571_CommonData.yaml#/components/schemas/DurationSecRm'
dlPacketCount:
  Reference: '#/components/schemas/DlPacketCount'
sorInfo:
  Reference: '#/components/schemas/SorInfo'
sorInfoExpectInd:
  Type: boolean
sorafRetrieval:
  Type: boolean
  Default: false
sorUpdateIndicatorList:
  Type: array
  Items:
    Reference: '#/components/schemas/SorUpdateIndicator'
  minItems: 1
upuInfo:
  Reference: '#/components/schemas/UpuInfo'
micoAllowed:
  Reference: '#/components/schemas/MicoAllowed'
sharedAmDataIds:
  Type: array
  Items:
    Reference: '#/components/schemas/SharedDataId'
  minItems: 1
odbPacketServices:
  Reference: 'TS29571_CommonData.yaml#/components/schemas/OdbPacketServices'
subscribedDnnList:
  Type: array
  Items:
    anyOf:
      - $ref: 'TS29571_CommonData.yaml#/components/schemas/Dnn'
      - $ref: 'TS29571_CommonData.yaml#/components/schemas/WildcardDnn'
serviceGapTime:
  Reference: 'TS29571_CommonData.yaml#/components/schemas/DurationSec'
traceData:
  Reference: 'TS29571_CommonData.yaml#/components/schemas/TraceData'
cagData:
  Reference: '#/components/schemas/CagData'
stnSr:
  Reference: 'TS29571_CommonData.yaml#/components/schemas/StnSr'
cMsisdn:
  Reference: 'TS29571_CommonData.yaml#/components/schemas/CMsisdn'
nbIoTUePriority:
  Reference: '#/components/schemas/NbIoTUePriority'
nssaiInclusionAllowed:
  Type: boolean
```

```
      Default: false
    rgWirelineCharacteristics:
     Reference: 'TS29571_CommonData.yaml#/components/schemas/RgWirelineCharacteristics'

    rgTMBR:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/Tmbr'
    ecRestrictionData:
      Reference: '#/components/schemas/EcRestrictionData'
    expectedUeBehaviourList:
      Reference: '#/components/schemas/ExpectedUeBehaviourData'
    maximumResponseTimeList:
      Type: array
      Items:
        Reference: '#/components/schemas/MaximumResponseTime'
      minItems: 1
    maximumLatencyList:
      Type: array
      Items:
        Reference: '#/components/schemas/MaximumLatency'
      minItems: 1
    primaryRatRestrictions:
      Type: array
      Items:
        Reference: 'TS29571_CommonData.yaml#/components/schemas/RatType'
    secondaryRatRestrictions:
      Type: array
      Items:
        Reference: 'TS29571_CommonData.yaml#/components/schemas/RatType'
    edrxParametersList:
      Type: array
      Items:
        Reference: '#/components/schemas/EdrxParameters'
      minItems: 1
    ptwParametersList:
      Type: array
      Items:
        Reference: '#/components/schemas/PtwParameters'
      minItems: 1
    iabOperationAllowed:
      Type: boolean
      Default: false
    nrV2xServicesAuth:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/NrV2xAuth'
    lteV2xServicesAuth:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/LteV2xAuth'
    nrUePc5Ambr:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/BitRate'
    ltePc5Ambr:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/BitRate'
CagData:
  Type: object
  Required:
```

```
    - cagInfos
  Properties:
    cagInfos:
     Description: A map (list of key-value pairs where PlmnId serves as key) of CagInfo

      Type: object
      additionalProperties:
        Reference: '#/components/schemas/CagInfo'
    provisioningTime:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/DateTime'
CagInfo:
  Type: object
  Required:
    - allowedCagList
  Properties:
    allowedCagList:
      Type: array
      Items:
        Reference: 'TS29571_CommonData.yaml#/components/schemas/CagId'
    cagOnlyIndicator:
      Type: boolean
SmfSelectionSubscriptionData:
  Type: object
  Properties:
    supportedFeatures:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/SupportedFeatures'
    subscribedSnssaiInfos:
      Type: object
      additionalProperties:
        Reference: '#/components/schemas/SnssaiInfo'
    sharedSnssaiInfosId:
      Reference: '#/components/schemas/SharedDataId'
SnssaiInfo:
  Type: object
  Required:
    - dnnInfos
  Properties:
    dnnInfos:
      Type: array
      Items:
        Reference: '#/components/schemas/DnnInfo'
      minItems: 1
DnnInfo:
  Type: object
  Required:
    - dnn
  Properties:
    dnn:
      anyOf:
        - $ref: 'TS29571_CommonData.yaml#/components/schemas/Dnn'
        - $ref: 'TS29571_CommonData.yaml#/components/schemas/WildcardDnn'
    defaultDnnIndicator:
      Reference: '#/components/schemas/DnnIndicator'
```

```
    lboRoamingAllowed:
      Reference: '#/components/schemas/LboRoamingAllowed'
    iwkEpsInd:
      Reference: '#/components/schemas/IwkEpsInd'
    dnnBarred:
      Type: boolean
Nssai:
  Type: object
  Required:
   - defaultSingleNssais
  Properties:
    supportedFeatures:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/SupportedFeatures'
    defaultSingleNssais:
      Type: array
      Items:
        Reference: 'TS29571_CommonData.yaml#/components/schemas/Snssai'
      minItems: 1
    singleNssais:
      Type: array
      Items:
        Reference: 'TS29571_CommonData.yaml#/components/schemas/Snssai'
      minItems: 1
    provisioningTime:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/DateTime'
    additionalSnssaiData:
      Type: object
      additionalProperties:
        Reference: '#/components/schemas/AdditionalSnssaiData'
      minProperties: 1
  nullable: true
UeContextInSmfData:
  Type: object
  Properties:
    pduSessions:
      Description: A map (list of key-value pairs where PduSessionId serves as key) of
PduSessions
      Type: object
      additionalProperties:
        Reference: '#/components/schemas/PduSession'
    pgwInfo:
      Type: array
      Items:
        Reference: '#/components/schemas/PgwInfo'
      minItems: 1
    emergencyInfo:
      Reference: '#/components/schemas/EmergencyInfo'
EmergencyInfo:
  Type: object
  oneOf:
    - required:
      - pgwFqdn
```

```
    - required:
      - pgwIpAddress
  Properties:
    pgwFqdn:
      Type: string
    pgwIpAddress:
      Reference: '#/components/schemas/IpAddress'
    smfInstanceId:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/NfInstanceId'
 PduSession:
  Type: object
  Required:
    - dnn
    - smfInstanceId
    - plmnId
  Properties:
    dnn:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/Dnn'
    smfInstanceId:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/NfInstanceId'
    plmnId:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/PlmnId'
 PgwInfo:
  Type: object
  Required:
    - dnn
    - pgwFqdn
  Properties:
    dnn:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/Dnn'
    pgwFqdn:
      Type: string
    plmnId:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/PlmnId'
 SessionManagementSubscriptionData:
  Type: object
  Required:
    - singleNssai
  Properties:
    singleNssai:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/Snssai'
    dnnConfigurations:
     Description: A map (list of key-value pairs where Dnn, or optionally the Wildcard
DNN, serves as key) of DnnConfigurations
      Type: object
      additionalProperties:
        Reference: '#/components/schemas/DnnConfiguration'
    internalGroupIds:
      Type: array
      Items:
        Reference: 'TS29571_CommonData.yaml#/components/schemas/GroupId'
      minItems: 1
    vnGroupInfo:
```

```
      Type: object
      additionalProperties:
        Reference: '#/components/schemas/VnGroupData'
      minProperties: 1
    sharedVnGroupDataIds:
      Type: object
      additionalProperties:
        Reference: '#/components/schemas/SharedDataId'
      minProperties: 1
    sharedDnnConfigurationsId:
      Reference: '#/components/schemas/SharedDataId'
    odbPacketServices:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/OdbPacketServices'
    traceData:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/TraceData'
    sharedTraceDataId:
      Reference: '#/components/schemas/SharedDataId'
    expectedUeBehavioursList:
      Type: object
      additionalProperties:
        Reference: '#/components/schemas/ExpectedUeBehaviourData'
      minProperties: 1
    suggestedPacketNumDlList:
      Type: object
      additionalProperties:
        Reference: '#/components/schemas/SuggestedPacketNumDl'
      minProperties: 1
    3gppChargingCharacteristics:
      Reference: '#/components/schemas/3GppChargingCharacteristics'
DnnConfiguration:
  Type: object
  Required:
    - pduSessionTypes
    - sscModes
  Properties:
    pduSessionTypes:
      Reference: '#/components/schemas/PduSessionTypes'
    sscModes:
      Reference: '#/components/schemas/SscModes'
    iwkEpsInd:
      Reference: '#/components/schemas/IwkEpsInd'
    5gQosProfile:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/SubscribedDefaultQos'
    sessionAmbr:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/Ambr'
    3gppChargingCharacteristics:
      Reference: '#/components/schemas/3GppChargingCharacteristics'
    staticIpAddress:
      Type: array
      Items:
        Reference: '#/components/schemas/IpAddress'
      minItems: 1
```

```
      maxItems: 2
    upSecurity:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/UpSecurity'
    pduSessionContinuityInd:
      Reference: '#/components/schemas/PduSessionContinuityInd'
    invokeNefSelection:
      Type: boolean
    niddNefId:
      Reference: 'TS29510_Nnrf_NFManagement.yaml#/components/schemas/NefId'
    niddInfo:
      Reference: '#/components/schemas/NiddInformation'
    redundantSessionAllowed:
      Type: boolean
    acsInfo:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/AcsInfo'
    ipv4FrameRouteList:
      Type: array
      Items:
        Reference: '#/components/schemas/FrameRouteInfo'
      minItems: 1
    ipv6FrameRouteList:
      Type: array
      Items:
        Reference: '#/components/schemas/FrameRouteInfo'
      minItems: 1
    atsssAllowed:
      Type: boolean
      Default: false
NiddInformation:
  Type: object
  Required:
    - afId
  Properties:
    afId:
      Type: string
    gpsi:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/Gpsi'
    extGroupId:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/ExternalGroupId'
IpAddress:
  Type: object
  oneOf:
    - required:
      - ipv4Addr
    - required:
      - ipv6Addr
    - required:
      - ipv6Prefix
  Properties:
    ipv4Addr:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/Ipv4Addr'
    ipv6Addr:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/Ipv6Addr'
```

```
    ipv6Prefix:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/Ipv6Prefix'
PduSessionTypes:
  Type: object
  Required:
    - defaultSessionType
  Properties:
    defaultSessionType:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/PduSessionType'
    allowedSessionTypes:
      Type: array
      Items:
        Reference: 'TS29571_CommonData.yaml#/components/schemas/PduSessionType'
      minItems: 1
SscModes:
  Type: object
  Required:
    - defaultSscMode
  Properties:
    defaultSscMode:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/SscMode'
    allowedSscModes:
      Type: array
      Items:
        Reference: 'TS29571_CommonData.yaml#/components/schemas/SscMode'
      minItems: 1
      maxItems: 2
SmsSubscriptionData:
  Type: object
  Properties:
    smsSubscribed:
      Reference: '#/components/schemas/SmsSubscribed'
    sharedSmsSubsDataId:
      Reference: '#/components/schemas/SharedDataId'
SmsManagementSubscriptionData:
  Type: object
  Properties:
    supportedFeatures:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/SupportedFeatures'
    mtSmsSubscribed:
      Type: boolean
    mtSmsBarringAll:
      Type: boolean
    mtSmsBarringRoaming:
      Type: boolean
    moSmsSubscribed:
      Type: boolean
    moSmsBarringAll:
      Type: boolean
    moSmsBarringRoaming:
      Type: boolean
    sharedSmsMngDataIds:
```

```
      Type: array
      Items:
        Reference: '#/components/schemas/SharedDataId'
      minItems: 1
    traceData:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/TraceData'
SdmSubscription:
  Type: object
  Required:
    - nfInstanceId
    - callbackReference
    - monitoredResourceUris
  Properties:
    nfInstanceId:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/NfInstanceId'
    implicitUnsubscribe:
      Type: boolean
    expires:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/DateTime'
    callbackReference:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/Uri'
    amfServiceName:
      Reference: 'TS29510_Nnrf_NFManagement.yaml#/components/schemas/ServiceName'
    monitoredResourceUris:
      Type: array
      Items:
        Reference: 'TS29571_CommonData.yaml#/components/schemas/Uri'
      minItems: 1
    singleNssai:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/Snssai'
    dnn:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/Dnn'
    subscriptionId:
      Type: string
    plmnId:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/PlmnId'
    immediateReport:
      Type: boolean
      Default: false
    report:
      Reference: '#/components/schemas/SubscriptionDataSets'
SdmSubsModification:
  Type: object
  Properties:
    expires:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/DateTime'
    monitoredResourceUris:
      Type: array
      Items:
        Reference: 'TS29571_CommonData.yaml#/components/schemas/Uri'
      minItems: 1
ModificationNotification:
```

```
    Type: object
    Required:
      - notifyItems
    Properties:
      notifyItems:
        Type: array
        Items:
          Reference: 'TS29571_CommonData.yaml#/components/schemas/NotifyItem'
        minItems: 1
  IdTranslationResult:
    Type: object
    Required:
      - supi
    Properties:
      supportedFeatures:
        Reference: 'TS29571_CommonData.yaml#/components/schemas/SupportedFeatures'
      supi:
        Reference: 'TS29571_CommonData.yaml#/components/schemas/Supi'
      gpsi:
        Reference: 'TS29571_CommonData.yaml#/components/schemas/Gpsi'
  AcknowledgeInfo:
    Type: object
    Required:
      - provisioningTime
    Properties:
      sorMacIue:
        Reference: 'TS29509_Nausf_SoRProtection.yaml#/components/schemas/SorMac'
      upuMacIue:
        Reference: 'TS29509_Nausf_UPUProtection.yaml#/components/schemas/UpuMac'
      securedPacket:
        Reference: '#/components/schemas/SecuredPacket'
      provisioningTime:
        Reference: 'TS29571_CommonData.yaml#/components/schemas/DateTime'
  SorInfo:
    Type: object
    Properties:
      steeringContainer:
        Reference: '#/components/schemas/SteeringContainer'
      ackInd:
        Reference: 'TS29509_Nausf_SoRProtection.yaml#/components/schemas/AckInd'
      sorMacIausf:
        Reference: 'TS29509_Nausf_SoRProtection.yaml#/components/schemas/SorMac'
      countersor:
        Reference: 'TS29509_Nausf_SoRProtection.yaml#/components/schemas/CounterSor'
      provisioningTime:
        Reference: 'TS29571_CommonData.yaml#/components/schemas/DateTime'
    Required:
      - ackInd
      - provisioningTime
  SharedDataIds:
    Type: array
    Items:
```

```
      Reference: '#/components/schemas/SharedDataId'
    minItems: 1
    uniqueItems: true
  UpuInfo:
    Type: object
    Properties:
      upuDataList:
        Type: array
        Items:
          Reference: 'TS29509_Nausf_UPUProtection.yaml#/components/schemas/UpuData'
        minItems: 1
      upuRegInd:
        Reference: '#/components/schemas/UpuRegInd'
      upuAckInd:
        Reference: 'TS29509_Nausf_UPUProtection.yaml#/components/schemas/UpuAckInd'
      upuMacIausf:
        Reference: 'TS29509_Nausf_UPUProtection.yaml#/components/schemas/UpuMac'
      counterUpu:
        Reference: 'TS29509_Nausf_UPUProtection.yaml#/components/schemas/CounterUpu'
      provisioningTime:
        Reference: 'TS29571_CommonData.yaml#/components/schemas/DateTime'
    Required:
      - upuDataList
      - upuAckInd
      - upuRegInd
      - provisioningTime
  SharedData:
    Type: object
    Required:
      - sharedDataId
    Properties:
      sharedDataId:
        Reference: '#/components/schemas/SharedDataId'
      sharedAmData:
        Reference: '#/components/schemas/AccessAndMobilitySubscriptionData'
      sharedSmsSubsData:
        Reference: '#/components/schemas/SmsSubscriptionData'
      sharedSmsMngSubsData:
        Reference: '#/components/schemas/SmsManagementSubscriptionData'
      sharedDnnConfigurations:
        Type: object
        additionalProperties:
          Reference: '#/components/schemas/DnnConfiguration'
      sharedTraceData:
        Reference: 'TS29571_CommonData.yaml#/components/schemas/TraceData'
      sharedSnssaiInfos:
        Type: object
        additionalProperties:
          Reference: '#/components/schemas/SnssaiInfo'
      sharedVnGroupDatas:
        Type: object
        additionalProperties:
```

```
        Reference: '#/components/schemas/VnGroupData'
      minProperties: 1
TraceDataResponse:
  Type: object
  Properties:
    traceData:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/TraceData'
    sharedTraceDataId:
      Reference: '#/components/schemas/SharedDataId'
SteeringContainer:
  oneOf:
    - type: array
      Items:
        Reference: 'TS29509_Nausf_SoRProtection.yaml#/components/schemas/SteeringInfo'

      minItems: 1
    - $ref: '#/components/schemas/SecuredPacket'
GroupIdentifiers:
  Type: object
  Properties:
    extGroupId:
      Reference: '#/components/schemas/ExtGroupId'
    intGroupId:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/GroupId'
    ueIdList:
      Type: array
      Items:
        Reference: '#/components/schemas/UeId'
      minItems: 1
VnGroupData:
  Type: object
  Properties:
    pduSessionTypes:
      Reference: '#/components/schemas/PduSessionTypes'
    dnn:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/Dnn'
    singleNssai:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/Snssai'
    appDescriptors:
      Type: array
      Items:
        Reference: '#/components/schemas/AppDescriptor'
      minItems: 1
AppDescriptor:
  Type: object
  Properties:
    osId:
      Reference: 'TS29519_Policy_Data.yaml#/components/schemas/OsId'
    appId:
      Type: string
AdditionalSnssaiData:
  Type: object
```

```
    Properties:
      requiredAuthnAuthz:
        Type: boolean
  AppPortId:
    Type: object
    Properties:
      destinationPort:
        Reference: 'TS29571_CommonData.yaml#/components/schemas/Uint16'
      originatorPort:
        Reference: 'TS29571_CommonData.yaml#/components/schemas/Uint16'
  LcsPrivacyData:
    Type: object
    Properties:
      lpi:
        Reference: '#/components/schemas/Lpi'
      unrelatedClasses:
        Type: array
        Items:
          Reference: '#/components/schemas/UnrelatedClass'
        minItems: 1
      plmnOperatorClasses:
        Type: array
        Items:
          Reference: '#/components/schemas/PlmnOperatorClass'
        minItems: 1
  Lpi:
    Type: object
    Required:
      - locationPrivacyInd
    Properties:
      locationPrivacyInd:
        Reference: '#/components/schemas/LocationPrivacyInd'
      validTimePeriod:
        Reference: '#/components/schemas/ValidTimePeriod'
  UnrelatedClass:
    Type: object
    Required:
      - nonExternalUnrelatedClass
    Properties:
      nonExternalUnrelatedClass:
        Reference: '#/components/schemas/NonExternalUnrelatedClass'
      externalUnrelatedClass:
        Reference: '#/components/schemas/ExternalUnrelatedClass'
      serviceTypeUnrelatedClasses:
        Type: array
        Items:
          Reference: '#/components/schemas/ServiceTypeUnrelatedClass'
        minItems: 1
  PlmnOperatorClass:
    Type: object
    Required:
      - lcsClientClass
```

```
    - lcsClientIds
  Properties:
    lcsClientClass:
      Reference: '#/components/schemas/LcsClientClass'
    lcsClientIds:
      Type: array
      Items:
        Reference: '#/components/schemas/LcsClientId'
      minItems: 1
ValidTimePeriod:
  Type: object
  Properties:
    startTime:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/DateTime'
    endTime:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/DateTime'
NonExternalUnrelatedClass:
  Properties:
    lcsClientNonExternals:
      Type: array
      Items:
        Reference: '#/components/schemas/LcsClientNonExternal'
      minItems: 1
    afNonExternals:
      Type: array
      Items:
        Reference: '#/components/schemas/AfNonExternal'
      minItems: 1
LcsClientNonExternal:
  Type: object
  Required:
    - lcsClientId
  Properties:
    lcsClientId:
      Reference: '#/components/schemas/LcsClientId'
    allowedGeographicArea:
      Type: array
      Items:
        Reference: 'TS29572_Nlmf_Location.yaml#/components/schemas/GeographicArea'
      minItems: 1
    privacyCheckRelatedAction:
      Reference: '#/components/schemas/PrivacyCheckRelatedAction'
    codeWordInd:
      Reference: '#/components/schemas/CodeWordInd'
    validTimePeriod:
      Reference: '#/components/schemas/ValidTimePeriod'
AfNonExternal:
  Type: object
  Required:
    - afId
  Properties:
    afId:
```

```
      Type: string
    allowedGeographicArea:
      Type: array
      Items:
        Reference: 'TS29572_Nlmf_Location.yaml#/components/schemas/GeographicArea'
      minItems: 1
    privacyCheckRelatedAction:
      Reference: '#/components/schemas/PrivacyCheckRelatedAction'
    codeWordInd:
      Reference: '#/components/schemas/CodeWordInd'
    validTimePeriod:
      Reference: '#/components/schemas/ValidTimePeriod'
ExternalUnrelatedClass:
  Properties:
    lcsClientExternals:
      Type: array
      Items:
        Reference: '#/components/schemas/LcsClientExternal'
      minItems: 1
    afExternals:
      Type: array
      Items:
        Reference: '#/components/schemas/AfExternal'
      minItems: 1
    lcsClientGroupExternals:
      Type: array
      Items:
        Reference: '#/components/schemas/LcsClientGroupExternal'
      minItems: 1
AfExternal:
  Type: object
  Properties:
    afId:
      Type: string
    allowedGeographicArea:
      Type: array
      Items:
        Reference: 'TS29572_Nlmf_Location.yaml#/components/schemas/GeographicArea'
      minItems: 1
    privacyCheckRelatedAction:
      Reference: '#/components/schemas/PrivacyCheckRelatedAction'
    validTimePeriod:
      Reference: '#/components/schemas/ValidTimePeriod'
LcsClientExternal:
  Type: object
  Properties:
    allowedGeographicArea:
      Type: array
      Items:
        Reference: 'TS29572_Nlmf_Location.yaml#/components/schemas/GeographicArea'
      minItems: 1
```

```
    privacyCheckRelatedAction:
      Reference: '#/components/schemas/PrivacyCheckRelatedAction'
    validTimePeriod:
      Reference: '#/components/schemas/ValidTimePeriod'
LcsClientGroupExternal:
  Type: object
  Properties:
    lcsClientGroupId:
      Reference: '#/components/schemas/ExtGroupId'
    allowedGeographicArea:
      Type: array
      Items:
        Reference: 'TS29572_Nlmf_Location.yaml#/components/schemas/GeographicArea'
      minItems: 1
    privacyCheckRelatedAction:
      Reference: '#/components/schemas/PrivacyCheckRelatedAction'
    validTimePeriod:
      Reference: '#/components/schemas/ValidTimePeriod'
ServiceTypeUnrelatedClass:
  Type: object
  Required:
    - serviceType
  Properties:
    serviceType:
      Reference: 'TS29572_Nlmf_Location.yaml#/components/schemas/LcsServiceType'
    allowedGeographicArea:
      Type: array
      Items:
        Reference: 'TS29572_Nlmf_Location.yaml#/components/schemas/GeographicArea'
      minItems: 1
    privacyCheckRelatedAction:
      Reference: '#/components/schemas/PrivacyCheckRelatedAction'
    codeWordInd:
      Reference: '#/components/schemas/CodeWordInd'
    validTimePeriod:
      Reference: '#/components/schemas/ValidTimePeriod'
LcsMoData:
  Type: object
  Required:
    - allowedServiceClasses
  Properties:
    allowedServiceClasses:
      Type: array
      Items:
        Reference: '#/components/schemas/LcsMoServiceClass'
      minItems: 1
EcRestrictionData:
  Type: object
  Properties:
    ecModeARestricted:
      Type: boolean
    ecModeBRestricted:
```

```
      Type: boolean
  ExpectedUeBehaviourData:
    Type: object
    Properties:
      stationaryIndication:
        Reference: 'TS29571_CommonData.yaml#/components/schemas/StationaryIndication'
      communicationDurationTime:
        Reference: 'TS29571_CommonData.yaml#/components/schemas/DurationSec'
      periodicTime:
        Reference: 'TS29571_CommonData.yaml#/components/schemas/DurationSec'
      scheduledCommunicationTime:
       Reference: 'TS29571_CommonData.yaml#/components/schemas/ScheduledCommunicationTime'

      scheduledCommunicationType:
       Reference: 'TS29571_CommonData.yaml#/components/schemas/ScheduledCommunicationType'

      expectedUmts:
        Type: array
        Items:
          Reference: 'TS29503_Nudm_PP.yaml#/components/schemas/LocationArea'
        minItems: 1
        Description: Identifies the UE's expected geographical movement. The attribute
is only applicable in 5G.
      trafficProfile:
        Reference: 'TS29571_CommonData.yaml#/components/schemas/TrafficProfile'
      batteryIndication:
        Reference: 'TS29571_CommonData.yaml#/components/schemas/BatteryIndication'
      validityTime:
        Reference: 'TS29571_CommonData.yaml#/components/schemas/DateTime'
  MaximumResponseTime:
    Type: object
    Required:
      - maximumResponseTime
    Properties:
      maximumResponseTime:
        Reference: 'TS29571_CommonData.yaml#/components/schemas/DurationSec'
      snssai:
        Reference: 'TS29571_CommonData.yaml#/components/schemas/Snssai'
      dnn:
        Reference: 'TS29571_CommonData.yaml#/components/schemas/Dnn'
      validityTime:
        Reference: 'TS29571_CommonData.yaml#/components/schemas/DateTime'
  MaximumLatency:
    Type: object
    Required:
      - maximumLatency
    Properties:
      maximumLatency:
        Reference: 'TS29571_CommonData.yaml#/components/schemas/DurationSec'
      snssai:
        Reference: 'TS29571_CommonData.yaml#/components/schemas/Snssai'
      dnn:
```

```
      Reference: 'TS29571_CommonData.yaml#/components/schemas/Dnn'
    validityTime:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/DateTime'
SuggestedPacketNumDl:
  Type: object
  Required:
    - suggestedPacketNumDl
  Properties:
    suggestedPacketNumDl:
      Type: integer
      Minimum: 1
    validityTime:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/DateTime'
FrameRouteInfo:
  Type: object
  Properties:
    ipv4Mask:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/Ipv4AddrMask'
    ipv6Prefix:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/Ipv6Prefix'
SorUpdateInfo:
  Type: object
  Required:
    - vplmnId
  Properties:
    vplmnId:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/PlmnId'
EnhancedCoverageRestrictionData:
  Type: object
  Properties:
    plmnEcInfoList:
      Type: array
      Items:
        Reference: 'TS29503_Nudm_PP.yaml#/components/schemas/PlmnEcInfo'
      minItems: 1
EdrxParameters:
  Type: object
  Required:
    - ratType
    - edrxValue
  Properties:
    ratType:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/RatType'
    edrxValue:
      Type: string
      Pattern: '^([0-1]{4})$'
PtwParameters:
  Type: object
  Required:
    - operationMode
    - ptwValue
  Properties:
    operationMode:
```

```
        Reference: '#/components/schemas/OperationMode'
      ptwValue:
        Type: string
        Pattern: '^([0-1]{4})$'
  UeId:
    Type: object
    Required:
      - supi
    Properties:
      supi:
        Reference: 'TS29571_CommonData.yaml#/components/schemas/Supi'
      gpsiList:
        Type: array
        Items:
          Reference: 'TS29571_CommonData.yaml#/components/schemas/Gpsi'
        minItems: 1
# SIMPLE TYPES:
  UeUsageType:
    Type: integer
  MpsPriorityIndicator:
    Type: boolean
  McsPriorityIndicator:
    Type: boolean
  DnnIndicator:
    Type: boolean
  LboRoamingAllowed:
    Type: boolean
  SmsSubscribed:
    Type: boolean
  3GppChargingCharacteristics:
    Type: string
  DlPacketCount:
    Type: integer
    Minimum: -1
  MicoAllowed:
    Type: boolean
  SharedDataId:
    Type: string
    Pattern: '^[0-9]{5,6}-.+$'
  IwkEpsInd:
    Type: boolean
  SecuredPacket:
    Type: string
    format: base64
  UpuRegInd:
    Type: boolean
  ExtGroupId:
    Type: string
    Pattern: '^extgroupid-[^@]+@[^@]+$'
  NbIoTUePriority:
    Type: integer
  CodeWord:
```

```
    Type: string
  AfId:
    Type: string
  LcsClientId:
    Type: string
# ENUMS:
  DataSetName:
    anyOf:
      - type: string
        enum:
        - AM
        - SMF_SEL
        - UEC_SMF
        - UEC_SMSF
        - SMS_SUB
        - SM
        - TRACE
        - SMS_MNG
        - LCS_PRIVACY
        - LCS_MO
      - type: string
  PduSessionContinuityInd:
    anyOf:
      - type: string
        enum:
        - MAINTAIN_PDUSESSION
        - RECONNECT_PDUSESSION
        - RELEASE_PDUSESSION
      - type: string
  LocationPrivacyInd:
    anyOf:
      - type: string
        enum:
        - LOCATION_DISALLOWED
        - LOCATION_ALLOWED
      - type: string
  PrivacyCheckRelatedAction:
    anyOf:
      - type: string
        enum:
        - LOCATION_NOT_ALLOWED
        - LOCATION_ALLOWED_WITH_NOTIFICATION
        - LOCATION_ALLOWED_WITHOUT_NOTIFICATION
        - LOCATION_ALLOWED_WITHOUT_RESPONSE
        - LOCATION_RESTRICTED_WITHOUT_RESPONSE
      - type: string
  LcsClientClass:
    anyOf:
      - type: string
        enum:
        - BROADCAST_SERVICE
        - OM_IN_HPLMN
        - OM_IN_VPLMN
        - ANONYMOUS_LOCATION_SERVICE
        - SPECIFIC_SERVICE
      - type: string
  LcsMoServiceClass:
    anyOf:
      - type: string
```

```
      enum:
      - BASIC_SELF_LOCATION
      - AUTONOMOUS_SELF_LOCATION
      - TRANSFER_TO_THIRD_PARTY
    - type: string
OperationMode:
  anyOf:
    - type: string
      enum:
      - WB_S1
      - NB_S1
      - WB_N1
      - NB_N1
    - type: string
SorUpdateIndicator:
  anyOf:
    - type: string
      enum:
      - INITIAL_REGISTRATION
      - EMERGENCY_REGISTRATION
    - type: string
CodeWordInd:
  anyOf:
    - type: string
      enum:
      - CODEWORD_CHECK_IN_UE
      - CODEWORD_CHECK_IN_GMLC
    - type: string
```

External Docs

```
Description: 3GPP TS 29.503 Unified Data Management Services, version 16.3.0
URL: 'http://www.3gpp.org/ftp/Specs/archive/29_series/29.503/'
```