



# Nsmf PDUSession

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## OpenAPI

OpenAPI Version: 3.0.0

## Info

**Version:** '1.0.0'  
**Title:** 'Nsmf\_PDUSession'  
**Description:** 'SMF PDU Session Service'

## Servers

**URL:** '{apiRoot}/nsmf-pdusession/v1'

**Variables:**

**API Root:**

**Default:** https://example.com

**Description:** apiRoot as defined in subclause 4.4 of 3GPP TS 29.501. The sm-contexts and pdu-sessions resources can be distributed on different processing instances or hosts. Thus the authority and/or deployment-specific string of the apiRoot of the created individual sm context and pdu-session resources' URIs may differ from the authority and/or deployment-specific string of the apiRoot of the sm-contexts and pdu-sessions collections' URIs.

# Security

```
- {}
- oAuth2Clientcredentials:
  - nsmf-pdusession
```

## Paths

### /sm-contexts

**Method:** Post

**Summary:** Create SM Context

**Tags:**

- SM contexts collection

**Operation ID:** PostSmContexts

**Request Body:**

**Description:** representation of the SM context to be created in the SMF

**Required/Optional:** true

**Content:**

**Multipart/Related:**

**Schema:**

**Type:** object

**Properties:** # Request parts

**JSON Data:**

**Reference:** '#/components/schemas/SmContextCreateData'

**binaryDataN1SmMessage:**

**Type:** string

**Format:** binary

**Encoding:**

**JSON Data:**

**Content Type:** application/json

**binaryDataN1SmMessage:**

**Content Type:** application/vnd.3gpp.5gnas

**Headers:**

**Content ID:**

**Schema:**

**Type:** string

**Callbacks:**

**smContextStatusNotification:**

'{\$request.body#/smContextStatusUri}':

**Method:** Post

**Request Body:** # contents of the callback message

**Required/Optional:** true

**Content:**

**Application/JSON:**

**Schema:**

**Reference:** '#/components/schemas/SmContextStatusNotification'

**Responses:**

'204':  
**Description:** successful notification

'307':  
**Description:** temporary redirect

'400':  
**Reference:** 'TS29571\_CommonData.yaml#/components/responses/400'

'403':  
**Reference:** 'TS29571\_CommonData.yaml#/components/responses/403'

'404':  
**Reference:** 'TS29571\_CommonData.yaml#/components/responses/404'

'411':  
**Reference:** 'TS29571\_CommonData.yaml#/components/responses/411'

'413':  
**Reference:** 'TS29571\_CommonData.yaml#/components/responses/413'

'415':  
**Reference:** 'TS29571\_CommonData.yaml#/components/responses/415'

'429':  
**Reference:** 'TS29571\_CommonData.yaml#/components/responses/429'

'500':  
**Reference:** 'TS29571\_CommonData.yaml#/components/responses/500'

'503':  
**Reference:** 'TS29571\_CommonData.yaml#/components/responses/503'

**Responses:**

'201':  
**Description:** successful creation of an SM context

**Content:**

**Application/JSON:** # message without binary body part

**Schema:**  
**Reference:** '#/components/schemas/SmContextCreatedData'

**Multipart/Related:** # message with binary body part(s)

**Schema:**  
**Type:** object  
**Properties:** # Request parts

**JSON Data:**  
**Reference:** '#/components/schemas/SmContextCreatedData'

**binaryDataN2SmInformation:**  
**Type:** string  
**Format:** binary

**Encoding:**

**JSON Data:**  
**Content Type:** application/json

**binaryDataN2SmInformation:**  
**Content Type:** application/vnd.3gpp.ngap

**Headers:**  
**Content ID:**  
**Schema:**  
**Type:** string

**Headers:**

**Location:**  
**description:** 'Contains the URI of the newly created resource, according to the structure: {apiRoot}/nsmf-pdusession/v1/sm-contexts/{smContextRef}'

**Required/Optional:** true

**Schema:**  
**Type:** string

'307':  
**Description:** temporary redirect

'308':  
**Description:** permanent redirect

'400':  
**Description:** unsuccessful creation of an SM context - bad request

**Content:**  
**Application/JSON:** # message without binary body part  
**Schema:**  
**Reference:** '#/components/schemas/SmContextCreateError'

**Multipart/Related:** # message with binary body part(s)  
**Schema:**  
**Type:** object  
**Properties:** # Request parts  
**JSON Data:**  
**Reference:** '#/components/schemas/SmContextCreateError'

**binaryDataN1SmMessage:**  
**Type:** string  
**Format:** binary

**Encoding:**  
**JSON Data:**  
**Content Type:** application/json  
**binaryDataN1SmMessage:**  
**Content Type:** application/vnd.3gpp.5gnas  
**Headers:**  
**Content ID:**  
**Schema:**  
**Type:** string

'403':  
**Description:** unsuccessful creation of an SM context - forbidden

**Content:**  
**Application/JSON:** # message without binary body part  
**Schema:**  
**Reference:** '#/components/schemas/SmContextCreateError'

**Multipart/Related:** # message with binary body part(s)  
**Schema:**  
**Type:** object  
**Properties:** # Request parts  
**JSON Data:**  
**Reference:** '#/components/schemas/SmContextCreateError'

**binaryDataN1SmMessage:**  
**Type:** string  
**Format:** binary

**Encoding:**  
**JSON Data:**

```

        Content Type: application/json
    binaryDataN1SmMessage:
        Content Type: application/vnd.3gpp.5gnas
        Headers:
            Content ID:
            Schema:
            Type: string
'404':
    Description: unsuccessful creation of an SM context - not found
    Content:
        Application/JSON: # message without binary body part
        Schema:
            Reference: '#/components/schemas/SmContextCreateError'
        Multipart/Related: # message with binary body part(s)
        Schema:
            Type: object
            Properties: # Request parts
            JSON Data:
                Reference: '#/components/schemas/SmContextCreateError'
            binaryDataN1SmMessage:
                Type: string
                Format: binary
        Encoding:
            JSON Data:
                Content Type: application/json
            binaryDataN1SmMessage:
                Content Type: application/vnd.3gpp.5gnas
            Headers:
                Content ID:
                Schema:
                Type: string
'411':
    Reference: 'TS29571_CommonData.yaml#/components/responses/411'
'413':
    Reference: 'TS29571_CommonData.yaml#/components/responses/413'
'415':
    Reference: 'TS29571_CommonData.yaml#/components/responses/415'
'429':
    Reference: 'TS29571_CommonData.yaml#/components/responses/429'
'500':
    Description: unsuccessful creation of an SM context - internal server error
    Content:
        Application/JSON: # message without binary body part
        Schema:
            Reference: '#/components/schemas/SmContextCreateError'
        Multipart/Related: # message with binary body part(s)
        Schema:
            Type: object
            Properties: # Request parts
            JSON Data:
                Reference: '#/components/schemas/SmContextCreateError'

```

```

        binaryDataN1SmMessage:
            Type: string
            Format: binary
    Encoding:
    JSON Data:
        Content Type: application/json
    binaryDataN1SmMessage:
        Content Type: application/vnd.3gpp.5gnas
    Headers:
        Content ID:
        Schema:
        Type: string
'503':
    Description: unsuccessful creation of an SM context - service unavailable
    Content:
        Application/JSON: # message without binary body part
        Schema:
            Reference: '#/components/schemas/SmContextCreateError'
        Multipart/Related: # message with binary body part(s)
        Schema:
            Type: object
            Properties: # Request parts
            JSON Data:
                Reference: '#/components/schemas/SmContextCreateError'
            binaryDataN1SmMessage:
                Type: string
                Format: binary
    Encoding:
    JSON Data:
        Content Type: application/json
    binaryDataN1SmMessage:
        Content Type: application/vnd.3gpp.5gnas
    Headers:
        Content ID:
        Schema:
        Type: string
'504':
    Description: unsuccessful creation of an SM context - gateway timeout
    Content:
        Application/JSON: # message without binary body part
        Schema:
            Reference: '#/components/schemas/SmContextCreateError'
        Multipart/Related: # message with binary body part(s)
        Schema:
            Type: object
            Properties: # Request parts
            JSON Data:
                Reference: '#/components/schemas/SmContextCreateError'
            binaryDataN1SmMessage:
                Type: string
                Format: binary

```

```

    Encoding:
      JSON Data:
        Content Type: application/json
      binaryDataN1SmMessage:
        Content Type: application/vnd.3gpp.5gnas
      Headers:
        Content ID:
          Schema:
            Type: string
  Default:
    Reference: 'TS29571_CommonData.yaml#/components/responses/default'

```

## /sm-contexts/{smContextRef}/retrieve

```

Method: Post
Summary: Retrieve SM Context

Tags:
- Individual SM context
Operation ID: RetrieveSmContext

Parameters:
- Name: smContextRef
  In: path
  Description: SM context reference
  Required/Optional: true
  Schema:
    Type: string
Request Body:
Description: parameters used to retrieve the SM context
Required/Optional: false
Content:
  Application/JSON:
    Schema:
      Reference: '#/components/schemas/SmContextRetrieveData'

Responses:
'200':
  Description: successful retrieval of an SM context
  Content:
    Application/JSON:
      Schema:
        Reference: '#/components/schemas/SmContextRetrievedData'
'400':
  Reference: 'TS29571_CommonData.yaml#/components/responses/400'
'403':
  Reference: 'TS29571_CommonData.yaml#/components/responses/403'
'404':
  Reference: 'TS29571_CommonData.yaml#/components/responses/404'
'411':
  Reference: 'TS29571_CommonData.yaml#/components/responses/411'

```

```

'413':
  Reference: 'TS29571_CommonData.yaml#/components/responses/413'
'415':
  Reference: 'TS29571_CommonData.yaml#/components/responses/415'
'429':
  Reference: 'TS29571_CommonData.yaml#/components/responses/429'
'500':
  Reference: 'TS29571_CommonData.yaml#/components/responses/500'
'503':
  Reference: 'TS29571_CommonData.yaml#/components/responses/503'
Default:
  Reference: 'TS29571_CommonData.yaml#/components/responses/default'

```

## /sm-contexts/{smContextRef}/modify

**Method:** Post

**Summary:** Update SM Context

**Tags:**

- Individual SM context

**Operation ID:** UpdateSmContext

**Parameters:**

- **Name:** smContextRef

**In:** path

**Description:** SM context reference

**Required/Optional:** true

**Schema:**

**Type:** string

**Request Body:**

**Description:** representation of the updates to apply to the SM context

**Required/Optional:** true

**Content:**

**Application/JSON:** # message without binary body part

**Schema:**

**Reference:** '#/components/schemas/SmContextUpdateData'

**Multipart/Related:** # message with binary body part(s)

**Schema:**

**Type:** object

**Properties:** # Request parts

**JSON Data:**

**Reference:** '#/components/schemas/SmContextUpdateData'

**binaryDataN1SmMessage:**

**Type:** string

**Format:** binary

**binaryDataN2SmInformation:**

**Type:** string

**Format:** binary

**Encoding:**

**JSON Data:**

**Content Type:** application/json



```
binaryDataN1SmMessage:
  Content Type: application/vnd.3gpp.5gnas
  Headers:
    Content ID:
      Schema:
        Type: string
binaryDataN2SmInformation:
  Content Type: application/vnd.3gpp.ngap
  Headers:
    Content ID:
      Schema:
        Type: string
```

**Responses:****'200':****Description:** successful update of an SM context with content in the response**Content:****Application/JSON:** # message without binary body part**Schema:****Reference:** '#/components/schemas/SmContextUpdatedData'**Multipart/Related:** # message with binary body part(s)**Schema:****Type:** object**Properties:** # Request parts**JSON Data:****Reference:** '#/components/schemas/SmContextUpdatedData'**binaryDataN1SmMessage:****Type:** string**Format:** binary**binaryDataN2SmInformation:****Type:** string**Format:** binary**Encoding:****JSON Data:****Content Type:** application/json**binaryDataN1SmMessage:****Content Type:** application/vnd.3gpp.5gnas**Headers:****Content ID:****Schema:****Type:** string**binaryDataN2SmInformation:****Content Type:** application/vnd.3gpp.ngap**Headers:****Content ID:****Schema:****Type:** string**'204':****Description:** successful update of an SM context without content in the response**'400':****Description:** unsuccessful update of an SM context - bad request**Content:**

```

Application/JSON: # message without binary body part
  Schema:
    Reference: '#/components/schemas/SmContextUpdateError'
Multipart/Related: # message with binary body part(s)
  Schema:
    Type: object
    Properties: # Request parts
    JSON Data:
      Reference: '#/components/schemas/SmContextUpdateError'
    binaryDataN1SmMessage:
      Type: string
      Format: binary
    binaryDataN2SmInformation:
      Type: string
      Format: binary
  Encoding:
    JSON Data:
      Content Type: application/json
    binaryDataN1SmMessage:
      Content Type: application/vnd.3gpp.5gnas
    Headers:
      Content ID:
        Schema:
          Type: string
      binaryDataN2SmInformation:
        Content Type: application/vnd.3gpp.ngap
    Headers:
      Content ID:
        Schema:
          Type: string
'403':
  Description: unsuccessful update of an SM context - forbidden
  Content:
    Application/JSON: # message without binary body part
    Schema:
      Reference: '#/components/schemas/SmContextUpdateError'
    Multipart/Related: # message with binary body part(s)
    Schema:
      Type: object
      Properties: # Request parts
      JSON Data:
        Reference: '#/components/schemas/SmContextUpdateError'
      binaryDataN1SmMessage:
        Type: string
        Format: binary
      binaryDataN2SmInformation:
        Type: string
        Format: binary
    Encoding:
      JSON Data:
        Content Type: application/json

```

```

    binaryDataN1SmMessage:
      Content Type: application/vnd.3gpp.5gnas
      Headers:
        Content ID:
          Schema:
            Type: string
    binaryDataN2SmInformation:
      Content Type: application/vnd.3gpp.ngap
      Headers:
        Content ID:
          Schema:
            Type: string
'404':
  Description: unsuccessful update of an SM context - not found
  Content:
    Application/JSON: # message without binary body part
    Schema:
      Reference: '#/components/schemas/SmContextUpdateError'
    Multipart/Related: # message with binary body part(s)
    Schema:
      Type: object
      Properties: # Request parts
      JSON Data:
        Reference: '#/components/schemas/SmContextUpdateError'
      binaryDataN1SmMessage:
        Type: string
        Format: binary
      binaryDataN2SmInformation:
        Type: string
        Format: binary
    Encoding:
      JSON Data:
        Content Type: application/json
      binaryDataN1SmMessage:
        Content Type: application/vnd.3gpp.5gnas
        Headers:
          Content ID:
            Schema:
              Type: string
      binaryDataN2SmInformation:
        Content Type: application/vnd.3gpp.ngap
        Headers:
          Content ID:
            Schema:
              Type: string
'411':
  Reference: 'TS29571_CommonData.yaml#/components/responses/411'
'413':
  Reference: 'TS29571_CommonData.yaml#/components/responses/413'
'415':
  Reference: 'TS29571_CommonData.yaml#/components/responses/415'

```

```

'429':
  Reference: 'TS29571_CommonData.yaml#/components/responses/429'
'500':
  Description: unsuccessful update of an SM context - Internal server error
  Content:
    Application/JSON: # message without binary body part
    Schema:
      Reference: '#/components/schemas/SmContextUpdateError'
    Multipart/Related: # message with binary body part(s)
    Schema:
      Type: object
      Properties: # Request parts
      JSON Data:
        Reference: '#/components/schemas/SmContextUpdateError'
      binaryDataN1SmMessage:
        Type: string
        Format: binary
      binaryDataN2SmInformation:
        Type: string
        Format: binary
    Encoding:
      JSON Data:
        Content Type: application/json
      binaryDataN1SmMessage:
        Content Type: application/vnd.3gpp.5gnas
      Headers:
        Content ID:
          Schema:
            Type: string
      binaryDataN2SmInformation:
        Content Type: application/vnd.3gpp.ngap
      Headers:
        Content ID:
          Schema:
            Type: string
'503':
  Description: unsuccessful update of an SM context - Service Unavailable
  Content:
    Application/JSON: # message without binary body part
    Schema:
      Reference: '#/components/schemas/SmContextUpdateError'
    Multipart/Related: # message with binary body part(s)
    Schema:
      Type: object
      Properties: # Request parts
      JSON Data:
        Reference: '#/components/schemas/SmContextUpdateError'
      binaryDataN1SmMessage:
        Type: string
        Format: binary
      binaryDataN2SmInformation:

```

```

        Type: string
        Format: binary
    Encoding:
        JSON Data:
            Content Type: application/json
        binaryDataN1SmMessage:
            Content Type: application/vnd.3gpp.5gnas
            Headers:
                Content ID:
                    Schema:
                        Type: string
        binaryDataN2SmInformation:
            Content Type: application/vnd.3gpp.ngap
            Headers:
                Content ID:
                    Schema:
                        Type: string
    Default:
        Reference: 'TS29571_CommonData.yaml#/components/responses/default'

```

## /sm-contexts/{smContextRef}/release

**Method:** Post

**Summary:** Release SM Context

**Tags:**

- Individual SM context

**Operation ID:** ReleaseSmContext

**Parameters:**

- **Name:** smContextRef

**In:** path

**Description:** SM context reference

**Required/Optional:** true

**Schema:**

**Type:** string

**Request Body:**

**Description:** representation of the data to be sent to the SMF when releasing the SM context

**Required/Optional:** false

**Content:**

**Application/JSON:** # message without binary body part

**Schema:**

**Reference:** '#/components/schemas/SmContextReleaseData'

**Multipart/Related:** # message with binary body part(s)

**Schema:**

**Type:** object

**Properties:** # Request parts

**JSON Data:**

**Reference:** '#/components/schemas/SmContextReleaseData'

**binaryDataN2SmInformation:**

```

        Type: string
        Format: binary
    Encoding:
    JSON Data:
        Content Type: application/json
    binaryDataN2SmInformation:
        Content Type: application/vnd.3gpp.ngap
    Headers:
        Content ID:
        Schema:
        Type: string

Responses:
  '204':
    Description: successful release of an SM context without content in the response

  '400':
    Reference: 'TS29571_CommonData.yaml#/components/responses/400'
  '403':
    Reference: 'TS29571_CommonData.yaml#/components/responses/403'
  '404':
    Reference: 'TS29571_CommonData.yaml#/components/responses/404'
  '411':
    Reference: 'TS29571_CommonData.yaml#/components/responses/411'
  '413':
    Reference: 'TS29571_CommonData.yaml#/components/responses/413'
  '415':
    Reference: 'TS29571_CommonData.yaml#/components/responses/415'
  '429':
    Reference: 'TS29571_CommonData.yaml#/components/responses/429'
  '500':
    Reference: 'TS29571_CommonData.yaml#/components/responses/500'
  '503':
    Reference: 'TS29571_CommonData.yaml#/components/responses/503'
  Default:
    Reference: 'TS29571_CommonData.yaml#/components/responses/default'

```

## /pdu-sessions

**Method:** Post

**Summary:** Create

**Tags:**

- PDU sessions collection

**Operation ID:** PostPduSessions

**Request Body:**

**Description:** representation of the PDU session to be created in the H-SMF

**Required/Optional:** true

**Content:**

**Application/JSON:** # message without binary body part

**Schema:**

```

Reference: '#/components/schemas/PduSessionCreateData'
Multipart/Related: # message with binary body part(s)
Schema:
  Type: object
  Properties: # Request parts
    JSON Data:
      Reference: '#/components/schemas/PduSessionCreateData'
      binaryDataN1SmInfoFromUe:
        Type: string
        Format: binary
      binaryDataUnknownN1SmInfo:
        Type: string
        Format: binary
    Encoding:
      JSON Data:
        Content Type: application/json
      binaryDataN1SmInfoFromUe:
        Content Type: application/vnd.3gpp.5gnas
      Headers:
        Content ID:
          Schema:
            Type: string
        binaryDataUnknownN1SmInfo:
          Content Type: application/vnd.3gpp.5gnas
          Headers:
            Content ID:
              Schema:
                Type: string
Callbacks:
  statusNotification:
    '{$request.body#/vsmfPduSessionUri}':
      Method: Post
      Summary: Notify Status

      Tags:
        - Individual PDU session (V-SMF)
      Operation ID: NotifyStatus
      Request Body:
        Description: representation of the status notification
        Required/Optional: true
        Content:
          Application/JSON:
            Schema:
              Reference: '#/components/schemas/StatusNotification'

Responses:
  '204':
    Description: successful notification of the status change
  '400':
    Reference: 'TS29571_CommonData.yaml#/components/responses/400'
  '403':
    Reference: 'TS29571_CommonData.yaml#/components/responses/403'

```

```

'404':
  Reference: 'TS29571_CommonData.yaml#/components/responses/404'
'411':
  Reference: 'TS29571_CommonData.yaml#/components/responses/411'
'413':
  Reference: 'TS29571_CommonData.yaml#/components/responses/413'
'415':
  Reference: 'TS29571_CommonData.yaml#/components/responses/415'
'429':
  Reference: 'TS29571_CommonData.yaml#/components/responses/429'
'500':
  Reference: 'TS29571_CommonData.yaml#/components/responses/500'
'503':
  Reference: 'TS29571_CommonData.yaml#/components/responses/503'
Default:
  Reference: 'TS29571_CommonData.yaml#/components/responses/default'
update:
  '{$request.body#/vsmfPduSessionUri}/modify':
    Method: Post
    Summary: Update (initiated by H-SMF)

    Tags:
      - Individual PDU session (V-SMF)
    Operation ID: ModifyPduSession
    Request Body:
      Description: representation of updates to apply to the PDU session
      Required/Optional: true
      Content:
        application/+json: # message without binary body part
          Schema:
            Reference: '#/components/schemas/VsmfUpdateData'
        Multipart/Related: # message with binary body part(s)
          Schema:
            Type: object
            Properties: # Request parts
              JSON Data:
                Reference: '#/components/schemas/VsmfUpdateData'
              binaryDataN1SmInfoToUe:
                Type: string
                Format: binary
            Encoding:
              JSON Data:
                Content Type: application/json
              binaryDataN1SmInfoToUe:
                Content Type: application/vnd.3gpp.5gnas
            Headers:
              Content ID:
                Schema:
                  Type: string

    Responses:
      '200':

```



response

**Description:** successful update of a PDU session with content in the

**Content:**

**Application/JSON:** # message without binary body part

**Schema:**

**Reference:** '#/components/schemas/VsmfUpdatedData'

**Multipart/Related:** # message with binary body part(s)

**Schema:**

**Type:** object

**Properties:** # Request parts

**JSON Data:**

**Reference:** '#/components/schemas/VsmfUpdatedData'

**binaryDataN1SmInfoFromUe:**

**Type:** string

**Format:** binary

**binaryDataUnknownN1SmInfo:**

**Type:** string

**Format:** binary

**Encoding:**

**JSON Data:**

**Content Type:** application/json

**binaryDataN1SmInfoFromUe:**

**Content Type:** application/vnd.3gpp.5gnas

**Headers:**

**Content ID:**

**Schema:**

**Type:** string

**binaryDataUnknownN1SmInfo:**

**Content Type:** application/vnd.3gpp.5gnas

**Headers:**

**Content ID:**

**Schema:**

**Type:** string

'204':

**Description:** successful update of a PDU session without content in the

response

'400':

**Reference:** '#/components/responses/VsmfUpdateError'

'403':

**Reference:** '#/components/responses/VsmfUpdateError'

'404':

**Reference:** '#/components/responses/VsmfUpdateError'

'411':

**Reference:** 'TS29571\_CommonData.yaml#/components/responses/411'

'413':

**Reference:** 'TS29571\_CommonData.yaml#/components/responses/413'

'415':

**Reference:** 'TS29571\_CommonData.yaml#/components/responses/415'

'429':

**Reference:** 'TS29571\_CommonData.yaml#/components/responses/429'

'500':

**Reference:** '#/components/responses/VsmfUpdateError'

```

'503':
  Reference: '#/components/responses/VsmfUpdateError'
'504':
  Reference: '#/components/responses/VsmfUpdateError'
Default:
  Reference: 'TS29571_CommonData.yaml#/components/responses/default'

```

**Responses:**

```

'201':
  Description: successful creation of a PDU session
  Content:
    Application/JSON: # message without binary body part
    Schema:
      Reference: '#/components/schemas/PduSessionCreatedData'
    Multipart/Related: # message with binary body part(s)
    Schema:
      Type: object
      Properties: # Request parts
      JSON Data:
        Reference: '#/components/schemas/PduSessionCreatedData'
      binaryDataN1SmInfoToUe:
        Type: string
        Format: binary
    Encoding:
      JSON Data:
        Content Type: application/json
      binaryDataN1SmInfoToUe:
        Content Type: application/vnd.3gpp.5gnas
      Headers:
        Content ID:
          Schema:
            Type: string
    Headers:
      Location:
        description: 'Contains the URI of the newly created resource,
according to the structure: {apiRoot}/nsmf-pdusession/v1/pdu-sessions/{pduSessionRef}'

      Required/Optional: true
      Schema:
        Type: string
'307':
  Description: temporary redirect
'308':
  Description: permanent redirect
'400':
  Reference: '#/components/responses/PduSessionCreateError'
'403':
  Reference: '#/components/responses/PduSessionCreateError'
'404':
  Reference: '#/components/responses/PduSessionCreateError'
'411':
  Reference: 'TS29571_CommonData.yaml#/components/responses/411'

```

```

'413':
  Reference: 'TS29571_CommonData.yaml#/components/responses/413'
'415':
  Reference: 'TS29571_CommonData.yaml#/components/responses/415'
'429':
  Reference: 'TS29571_CommonData.yaml#/components/responses/429'
'500':
  Reference: '#/components/responses/PduSessionCreateError'
'503':
  Reference: '#/components/responses/PduSessionCreateError'
Default:
  Reference: 'TS29571_CommonData.yaml#/components/responses/default'

```

## /pdu-sessions/{pduSessionRef}/modify

**Method:** Post

**Summary:** Update (initiated by V-SMF)

**Tags:**

- Individual PDU session (H-SMF)

**Operation ID:** UpdatePduSession

**Parameters:**

- **Name:** pduSessionRef

**In:** path

**Description:** PDU session reference

**Required/Optional:** true

**Schema:**

**Type:** string

**Request Body:**

**Description:** representation of the updates to apply to the PDU session

**Required/Optional:** true

**Content:**

**Application/JSON:** # message without binary body part

**Schema:**

**Reference:** '#/components/schemas/HsmfUpdateData'

**Multipart/Related:** # message with binary body part(s)

**Schema:**

**Type:** object

**Properties:** # Request parts

**JSON Data:**

**Reference:** '#/components/schemas/HsmfUpdateData'

**binaryDataN1SmInfoFromUe:**

**Type:** string

**Format:** binary

**binaryDataUnknownN1SmInfo:**

**Type:** string

**Format:** binary

**Encoding:**

**JSON Data:**

**Content Type:** application/json

```

binaryDataN1SmInfoFromUe:
  Content Type: application/vnd.3gpp.5gnas
  Headers:
    Content ID:
      Schema:
        Type: string
binaryDataUnknownN1SmInfo:
  Content Type: application/vnd.3gpp.5gnas
  Headers:
    Content ID:
      Schema:
        Type: string

```

**Responses:**

```

'200':
  Description: successful update of a PDU session with content in the response
  Content:
    Application/JSON: # message without binary body part
    Schema:
      Reference: '#/components/schemas/HsmfUpdatedData'
    Multipart/Related: # message with binary body part(s)
    Schema:
      Type: object
      Properties: # Request parts
      JSON Data:
        Reference: '#/components/schemas/HsmfUpdatedData'
      binaryDataN1SmInfoToUe:
        Type: string
        Format: binary
    Encoding:
      JSON Data:
        Content Type: application/json
      binaryDataN1SmInfoToUe:
        Content Type: application/vnd.3gpp.5gnas
      Headers:
        Content ID:
          Schema:
            Type: string
'204':
  Description: successful update of a PDU session without content in the response
'400':
  Reference: '#/components/responses/HsmfUpdateError'
'403':
  Reference: '#/components/responses/HsmfUpdateError'
'404':
  Reference: '#/components/responses/HsmfUpdateError'
'411':
  Reference: 'TS29571_CommonData.yaml#/components/responses/411'
'413':
  Reference: 'TS29571_CommonData.yaml#/components/responses/413'
'415':
  Reference: 'TS29571_CommonData.yaml#/components/responses/415'

```

```

'429':
  Reference: 'TS29571_CommonData.yaml#/components/responses/429'
'500':
  Reference: '#/components/responses/HsmfUpdateError'
'503':
  Reference: '#/components/responses/HsmfUpdateError'
Default:
  Reference: 'TS29571_CommonData.yaml#/components/responses/default'

```

## /pdu-sessions/{pduSessionRef}/release

**Method:** Post

**Summary:** Release

**Tags:**

- Individual PDU session (H-SMF)

**Operation ID:** ReleasePduSession

**Parameters:**

```

- Name: pduSessionRef
  In: path
  Description: PDU session reference
  Required/Optional: true
  Schema:
    Type: string

```

**Request Body:**

**Description:** representation of the data to be sent to H-SMF when releasing the PDU session

**Required/Optional:** false

**Content:**

**Application/JSON:**

```

Schema:
  Reference: '#/components/schemas/ReleaseData'

```

**Responses:**

```

'204':
  Description: successful release of a PDU session
'400':
  Reference: 'TS29571_CommonData.yaml#/components/responses/400'
'403':
  Reference: 'TS29571_CommonData.yaml#/components/responses/403'
'404':
  Reference: 'TS29571_CommonData.yaml#/components/responses/404'
'411':
  Reference: 'TS29571_CommonData.yaml#/components/responses/411'
'413':
  Reference: 'TS29571_CommonData.yaml#/components/responses/413'
'415':
  Reference: 'TS29571_CommonData.yaml#/components/responses/415'
'429':
  Reference: 'TS29571_CommonData.yaml#/components/responses/429'

```

```

'500':
  Reference: 'TS29571_CommonData.yaml#/components/responses/500'
'503':
  Reference: 'TS29571_CommonData.yaml#/components/responses/503'
Default:
  Reference: 'TS29571_CommonData.yaml#/components/responses/default'

```

## Components

```

securitySchemes:
  oAuth2ClientCredentials:
    Type: oauth2
    Flows:
      clientCredentials:
        tokenUrl: '{nrfApiRoot}/oauth2/token'
        scopes:
          nsmf-pdusession: Access to the nsmf-pdusession API

schemas:
# STRUCTURED DATA TYPES
SmContextCreateData:
  Type: object
  Properties:
    supi:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/Supi'
    unauthenticatedSupi:
      Type: boolean
      Default: false
    pei:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/Pei'
    gpsi:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/Gpsi'
    pduSessionId:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/PduSessionId'
    dnn:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/Dnn'
    sNssai:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/Snssai'
    hplmnSnssai:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/Snssai'
    servingNfId:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/NfInstanceId'
    guami:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/Guami'
    serviceName:
      Reference: 'TS29510_Nnrf_NFManagement.yaml#/components/schemas/ServiceName'
    servingNetwork:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/PlmnId'
    requestType:

```

```

    Reference: '#/components/schemas/RequestType'
n1SmMsg:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/RefToBinaryData'
anType:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/AccessType'
ratType:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/RatType'
presenceInLadn:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/PresenceState'
ueLocation:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/UserLocation'
ueTimeZone:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/TimeZone'
addUeLocation:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/UserLocation'
smContextStatusUri:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/Uri'
hSmfUri:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/Uri'
additionalHsmfUri:
    Type: array
    Items:
        Reference: 'TS29571_CommonData.yaml#/components/schemas/Uri'
    minItems: 1
oldPduSessionId:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/PduSessionId'
pduSessionsActivateList:
    Type: array
    Items:
        Reference: 'TS29571_CommonData.yaml#/components/schemas/PduSessionId'
    minItems: 1
ueEpsPdnConnection:
    Reference: '#/components/schemas/EpsPdnCnxContainer'
hoState:
    Reference: '#/components/schemas/HoState'
pcfId:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/NfInstanceId'
nrfUri:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/Uri'
supportedFeatures:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/SupportedFeatures'
selMode:
    Reference: '#/components/schemas/DnnSelectionMode'
backupAmfInfo:
    Type: array
    Items:
        Reference: 'TS29571_CommonData.yaml#/components/schemas/BackupAmfInfo'
    minItems: 1
traceData:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/TraceData'
udmGroupId:

```

```

    Reference: 'TS29571_CommonData.yaml#/components/schemas/NfGroupId'
routingIndicator:
  Type: string
epsInterworkingInd:
  Reference: '#/components/schemas/EpsInterworkingIndication'
indirectForwardingFlag:
  Type: boolean
Required:
- servingNfId
- servingNetwork
- anType
- smContextStatusUri
SmContextCreatedData:
  Type: object
  Properties:
    hSmfUri:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/Uri'
    pduSessionId:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/PduSessionId'
    sNssai:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/Snssai'
    upCnxState:
      Reference: '#/components/schemas/UpCnxState'
    n2SmInfo:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/RefToBinaryData'
    n2SmInfoType:
      Reference: '#/components/schemas/N2SmInfoType'
    allocatedEbiList:
      Type: array
      Items:
        Reference: '#/components/schemas/EbiArpMapping'
      minItems: 1
    hoState:
      Reference: '#/components/schemas/HoState'
    smfServiceInstanceId:
      Type: string
    recoveryTime:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/DateTime'
    supportedFeatures:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/SupportedFeatures'
SmContextUpdateData:
  Type: object
  Properties:
    pei:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/Pei'
    gpsi:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/Gpsi'
    servingNfId:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/NfInstanceId'
    guami:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/Guami'
    servingNetwork:

```



```

    Reference: 'TS29571_CommonData.yaml#/components/schemas/PlmnId'
  backupAmfInfo:
    Type: array
    Items:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/BackupAmfInfo'
    minItems: 1
    nullable: true
  anType:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/AccessType'
  ratType:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/RatType'
  presenceInLadn:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/PresenceState'
  ueLocation:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/UserLocation'
  ueTimeZone:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/TimeZone'
  addUeLocation:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/UserLocation'
  upCnxState:
    Reference: '#/components/schemas/UpCnxState'
  hoState:
    Reference: '#/components/schemas/HoState'
  toBeSwitched:
    Type: boolean
    Default: false
  failedToBeSwitched:
    Type: boolean
  n1SmMsg:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/RefToBinaryData'
  n2SmInfo:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/RefToBinaryData'
  n2SmInfoType:
    Reference: '#/components/schemas/N2SmInfoType'
  targetServingNfId:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/NfInstanceId'
  smContextStatusUri:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/Uri'
  dataForwarding:
    Type: boolean
    Default: false
  epsBearerSetup:
    Type: array
    Items:
      Reference: '#/components/schemas/EpsBearerContainer'
    minItems: 0
  revokeEbiList:
    Type: array
    Items:
      Reference: '#/components/schemas/EpsBearerId'
    minItems: 1

```

```

release:
  Type: boolean
  Default: false
cause:
  Reference: '#/components/schemas/Cause'
ngApCause:
  Reference: 'TS29571_CommonData.yaml#/components/schemas/NgApCause'
5gMmCauseValue:
  Reference: 'TS29571_CommonData.yaml#/components/schemas/5GMmCause'
sNssai:
  Reference: 'TS29571_CommonData.yaml#/components/schemas/Snssai'
traceData:
  Reference: 'TS29571_CommonData.yaml#/components/schemas/TraceData'
epsInterworkingInd:
  Reference: '#/components/schemas/EpsInterworkingIndication'
anTypeCanBeChanged:
  Type: boolean
  Default: false
SmContextUpdatedData:
Type: object
Properties:
  upCnxState:
    Reference: '#/components/schemas/UpCnxState'
  hoState:
    Reference: '#/components/schemas/HoState'
  releaseEbiList:
    Type: array
    Items:
      Reference: '#/components/schemas/EpsBearerId'
    minItems: 1
  allocatedEbiList:
    Type: array
    Items:
      Reference: '#/components/schemas/EbiArpMapping'
    minItems: 1
  modifiedEbiList:
    Type: array
    Items:
      Reference: '#/components/schemas/EbiArpMapping'
    minItems: 1
  n1SmMsg:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/RefToBinaryData'
  n2SmInfo:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/RefToBinaryData'
  n2SmInfoType:
    Reference: '#/components/schemas/N2SmInfoType'
epsBearerSetup:
  Type: array
  Items:
    Reference: '#/components/schemas/EpsBearerContainer'
  minItems: 1

```

```

    dataForwarding:
      Type: boolean
SmContextReleaseData:
  Type: object
  Properties:
    cause:
      Reference: '#/components/schemas/Cause'
    ngApCause:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/NgApCause'
    5gMmCauseValue:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/5GmCause'
    ueLocation:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/UserLocation'
    ueTimeZone:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/TimeZone'
    addUeLocation:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/UserLocation'
    vsmfReleaseOnly:
      Type: boolean
      Default: false
SmContextStatusNotification:
  Type: object
  Properties:
    statusInfo :
      Reference: '#/components/schemas/StatusInfo'
  Required:
    - statusInfo
PduSessionCreateData:
  Type: object
  Properties:
    supi:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/Supi'
    unauthenticatedSupi:
      Type: boolean
      Default: false
    pei:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/Pei'
    pduSessionId:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/PduSessionId'
    dnn:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/Dnn'
    sNssai:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/Snssai'
    vsmfId:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/NfInstanceId'
    servingNetwork:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/PlmnId'
    requestType:
      Reference: '#/components/schemas/RequestType'
    epsBearerId:
      Type: array
      Items:

```

```

    Reference: '#/components/schemas/EpsBearerId'
  minItems: 1
  pgwS8cFteid:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/Bytes'
  vsmfPduSessionUri:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/Uri'
  vcnTunnelInfo:
    Reference: '#/components/schemas/TunnelInfo'
  anType:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/AccessType'
  ratType:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/RatType'
  ueLocation:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/UserLocation'
  ueTimeZone:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/TimeZone'
  addUeLocation:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/UserLocation'
  gpsi:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/Gpsi'
  n1SmInfoFromUe:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/RefToBinaryData'
  unknownN1SmInfo:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/RefToBinaryData'
  supportedFeatures:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/SupportedFeatures'
  hPcfId:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/NfInstanceId'
  hoPreparationIndication:
    Type: boolean
  selMode:
    Reference: '#/components/schemas/DnnSelectionMode'
  alwaysOnRequested:
    Type: boolean
    Default: false
  udmGroupId:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/NfGroupId'
  routingIndicator:
    Type: string
  epsInterworkingInd:
    Reference: '#/components/schemas/EpsInterworkingIndication'
  vSmfServiceInstanceId:
    Type: string
  recoveryTime:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/DateTime'
  roamingChargingProfile:
    Reference:
'TS32291_Nchf_ConvergedCharging.yaml#/components/schemas/RoamingChargingProfile'
  chargingId:
    Type: string
  oldPduSessionId:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/PduSessionId'

```

**Required:**

- dnn
- vsmfId
- servingNetwork
- vsmfPduSessionUri
- vcnTunnelInfo
- anType

**PduSessionCreatedData:****Type:** object**Properties:****pduSessionType:****Reference:** 'TS29571\_CommonData.yaml#/components/schemas/PduSessionType'**sscMode:****Type:** string**Pattern:** '^[0-7]\$'**hcnTunnelInfo:****Reference:** '#/components/schemas/TunnelInfo'**sessionAmbr:****Reference:** 'TS29571\_CommonData.yaml#/components/schemas/Ambr'**qosFlowsSetupList:****Type:** array**Items:****Reference:** '#/components/schemas/QosFlowSetupItem'**minItems:** 1**hSmfInstanceId:****Reference:** 'TS29571\_CommonData.yaml#/components/schemas/NfInstanceId'**pduSessionId:****Reference:** 'TS29571\_CommonData.yaml#/components/schemas/PduSessionId'**sNssai:****Reference:** 'TS29571\_CommonData.yaml#/components/schemas/Snssai'**enablePauseCharging:****Type:** boolean**Default:** false**ueIpv4Address:****Reference:** 'TS29571\_CommonData.yaml#/components/schemas/Ipv4Addr'**ueIpv6Prefix:****Reference:** 'TS29571\_CommonData.yaml#/components/schemas/Ipv6Prefix'**n1SmInfoToUe:****Reference:** 'TS29571\_CommonData.yaml#/components/schemas/RefToBinaryData'**epsPdnCnxInfo:****Reference:** '#/components/schemas/EpsPdnCnxInfo'**epsBearerInfo:****Type:** array**Items:****Reference:** '#/components/schemas/EpsBearerInfo'**minItems:** 1**supportedFeatures:****Reference:** 'TS29571\_CommonData.yaml#/components/schemas/SupportedFeatures'**maxIntegrityProtectedDataRate:****Reference:** '#/components/schemas/MaxIntegrityProtectedDataRate'**alwaysOnGranted:****Type:** boolean**Default:** false

```

upSecurity:
  Reference: 'TS29571_CommonData.yaml#/components/schemas/UpSecurity'
roamingChargingProfile:
  Reference:
'TS32291_Nchf_ConvergedCharging.yaml#/components/schemas/RoamingChargingProfile'
hSmfServiceInstanceId:
  Type: string
recoveryTime:
  Reference: 'TS29571_CommonData.yaml#/components/schemas/DateTime'
Required:
- pduSessionType
- sscMode
- hcnTunnelInfo
- sessionAmbr
- qosFlowsSetupList
- hSmfInstanceId
HsmfUpdateData:
Type: object
Properties:
  requestIndication:
    Reference: '#/components/schemas/RequestIndication'
  pei:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/Pei'
  vcnTunnelInfo:
    Reference: '#/components/schemas/TunnelInfo'
  servingNetwork:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/PlmnId'
  anType:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/AccessType'
  ratType:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/RatType'
  ueLocation:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/UserLocation'
  ueTimeZone:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/TimeZone'
  addUeLocation:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/UserLocation'
  pauseCharging:
    Type: boolean
  pti:
    Reference: '#/components/schemas/ProcedureTransactionId'
  n1SmInfoFromUe:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/RefToBinaryData'
  unknownN1SmInfo:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/RefToBinaryData'
  qosFlowsRelNotifyList:
    Type: array
    Items:
      Reference: '#/components/schemas/QosFlowItem'
    minItems: 1
  qosFlowsNotifyList:
    Type: array
    Items:

```

```

        Reference: '#/components/schemas/QosFlowNotifyItem'
    minItems: 1
    NotifyList:
        Type: array
        Items:
            Reference: '#/components/schemas/PduSessionNotifyItem'
            minItems: 1
    epsBearerId:
        Type: array
        Items:
            Reference: '#/components/schemas/EpsBearerId'
            minItems: 0
    hoPreparationIndication:
        Type: boolean
    revokeEbiList:
        Type: array
        Items:
            Reference: '#/components/schemas/EpsBearerId'
            minItems: 1
    cause:
        Reference: '#/components/schemas/Cause'
    ngApCause:
        Reference: 'TS29571_CommonData.yaml#/components/schemas/NgApCause'
    5gMmCauseValue:
        Reference: 'TS29571_CommonData.yaml#/components/schemas/5GMmCause'
    alwaysOnRequested:
        Type: boolean
        Default: false
    epsInterworkingInd:
        Reference: '#/components/schemas/EpsInterworkingIndication'
    secondaryRatUsageReport:
        Type: array
        Items:
            Reference: 'TS29571_CommonData.yaml#/components/schemas/SecondaryRatUsageReport'

    minItems: 1
    Required:
    - requestIndication
    HsmfUpdatedData:
        Type: object
        Properties:
            n1SmInfoToUe:
                Reference: 'TS29571_CommonData.yaml#/components/schemas/RefToBinaryData'
    ReleaseData:
        Type: object
        Properties:
            cause:
                Reference: '#/components/schemas/Cause'
            ngApCause:
                Reference: 'TS29571_CommonData.yaml#/components/schemas/NgApCause'
            5gMmCauseValue:
                Reference: 'TS29571_CommonData.yaml#/components/schemas/5GMmCause'

```

```

ueLocation:
  Reference: 'TS29571_CommonData.yaml#/components/schemas/UserLocation'
ueTimeZone:
  Reference: 'TS29571_CommonData.yaml#/components/schemas/TimeZone'
addUeLocation:
  Reference: 'TS29571_CommonData.yaml#/components/schemas/UserLocation'
secondaryRatUsageReport:
  Type: array
  Items:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/SecondaryRatUsageReport'

  minItems: 1
ReleasedData:
  Type: object
VsmfUpdateData:
  Type: object
Properties:
  requestIndication:
    Reference: '#/components/schemas/RequestIndication'
  sessionAmbr:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/Ambr'
  qosFlowsAddModRequestList:
    Type: array
    Items:
      Reference: '#/components/schemas/QosFlowAddModifyRequestItem'
    minItems: 1
  qosFlowsRelRequestList:
    Type: array
    Items:
      Reference: '#/components/schemas/QosFlowReleaseRequestItem'
    minItems: 1
  epsBearerInfo:
    Type: array
    Items:
      Reference: '#/components/schemas/EpsBearerInfo'
    minItems: 1
  assignEbiList:
    Type: array
    Items:
      Reference: '#/components/schemas/EpsBearerId'
    minItems: 1
  revokeEbiList:
    Type: array
    Items:
      Reference: '#/components/schemas/EpsBearerId'
    minItems: 1
  modifiedEbiList:
    Type: array
    Items:
      Reference: '#/components/schemas/EbiArpMapping'
    minItems: 1
pti:

```



```

    Reference: '#/components/schemas/ProcedureTransactionId'
n1SmInfoToUe:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/RefToBinaryData'
alwaysOnGranted:
    Type: boolean
    Default: false
cause:
    Reference: '#/components/schemas/Cause'
n1smCause:
    Type: string
backOffTimer:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/DurationSec'
Required:
- requestIndication
VsmfUpdatedData:
Type: object
Properties:
qosFlowsAddModList:
    Type: array
    Items:
        Reference: '#/components/schemas/QosFlowItem'
    minItems: 1
qosFlowsRelList:
    Type: array
    Items:
        Reference: '#/components/schemas/QosFlowItem'
    minItems: 1
qosFlowsFailedtoAddModList:
    Type: array
    Items:
        Reference: '#/components/schemas/QosFlowItem'
    minItems: 1
qosFlowsFailedtoRelList:
    Type: array
    Items:
        Reference: '#/components/schemas/QosFlowItem'
    minItems: 1
n1SmInfoFromUe:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/RefToBinaryData'
unknownN1SmInfo:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/RefToBinaryData'
ueLocation:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/UserLocation'
ueTimeZone:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/TimeZone'
addUeLocation:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/UserLocation'
assignedEbiList:
    Type: array
    Items:
        Reference: '#/components/schemas/EbiArpMapping'
    minItems: 1

```

```

failedToAssignEbiList:
  Type: array
  Items:
    Reference: '#/components/schemas/EpsBearerId'
  minItems: 1
releasedEbiList:
  Type: array
  Items:
    Reference: '#/components/schemas/EpsBearerId'
  minItems: 1
secondaryRatUsageReport:
  Type: array
  Items:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/SecondaryRatUsageReport'
  minItems: 1
StatusNotification:
  Type: object
  Properties:
    statusInfo :
      Reference: '#/components/schemas/StatusInfo'
  Required:
    - statusInfo
QosFlowItem:
  Type: object
  Properties:
    qfi:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/Qfi'
    cause:
      Reference: '#/components/schemas/Cause'
  Required:
    - qfi
QosFlowSetupItem:
  Type: object
  Properties:
    qfi:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/Qfi'
    qosRules:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/Bytes'
    ebi:
      Reference: '#/components/schemas/EpsBearerId'
    qosFlowDescription:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/Bytes'
    qosFlowProfile:
      Reference: '#/components/schemas/QosFlowProfile'
  Required:
    - qfi
    - qosRules
QosFlowAddModifyRequestItem:
  Type: object
  Properties:
    qfi:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/Qfi'

```

```

    ebi:
      Reference: '#/components/schemas/EpsBearerId'
    qosRules:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/Bytes'
    qosFlowDescription:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/Bytes'
    qosFlowProfile:
      Reference: '#/components/schemas/QosFlowProfile'
  Required:
  - qfi
QosFlowReleaseRequestItem:
  Type: object
  Properties:
    qfi:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/Qfi'
    qosRules:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/Bytes'
    qosFlowDescription:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/Bytes'
  Required:
  - qfi
QosFlowProfile:
  Type: object
  Properties:
    5qi:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/5Qi'
    nonDynamic5Qi:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/NonDynamic5Qi'
    dynamic5Qi:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/Dynamic5Qi'
    arp:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/Arp'
    gbrQosFlowInfo:
      Reference: '#/components/schemas/GbrQosFlowInformation'
    rqa:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/ReflectiveQoSAttribute'
    additionalQosFlowInfo:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/AdditionalQosFlowInfo'
  Required:
  - 5qi
GbrQosFlowInformation:
  Type: object
  Properties:
    maxFbrDl:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/BitRate'
    maxFbrUl:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/BitRate'
    guaFbrDl:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/BitRate'
    guaFbrUl:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/BitRate'
    notifControl:

```

```

    Reference: 'TS29571_CommonData.yaml#/components/schemas/NotificationControl'
maxPacketLossRateDl:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/PacketLossRate'
maxPacketLossRateUl:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/PacketLossRate'
Required:
  - maxFbrDl
  - maxFbrUl
  - guaFbrDl
  - guaFbrUl
QosFlowNotifyItem:
Type: object
Properties:
  qfi:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/Qfi'
  notificationCause:
    Reference: '#/components/schemas/NotificationCause'
Required:
  - qfi
  - notificationCause
SmContextRetrieveData:
Type: object
Properties:
  targetMmeCap:
    Reference: '#/components/schemas/MmeCapabilities'
SmContextRetrievedData:
Type: object
Properties:
  ueEpsPdnConnection:
    Reference: '#/components/schemas/EpsPdnCnxContainer'
Required:
  - ueEpsPdnConnection
MmeCapabilities:
Type: object
Properties:
  nonIpSupported:
    Type: boolean
    Default: false
TunnelInfo:
Type: object
Properties:
  ipv4Addr:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/Ipv4Addr'
  ipv6Addr:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/Ipv6Addr'
  gtpTeid:
    Reference: '#/components/schemas/Teid'
Required:
  - gtpTeid
StatusInfo:
Type: object
Properties:
  resourceStatus:

```

```

      Reference: '#/components/schemas/ResourceStatus'
    cause:
      Reference: '#/components/schemas/Cause'
    Required:
      - resourceStatus
  EpsPdnCnxInfo:
    Type: object
    Properties:
      pgwS8cFteid:
        Reference: 'TS29571_CommonData.yaml#/components/schemas/Bytes'
      pgwNodeName:
        Reference: 'TS29571_CommonData.yaml#/components/schemas/Bytes'
    Required:
      - pgwS8cFteid
  EpsBearerInfo:
    Type: object
    Properties:
      ebi:
        Reference: '#/components/schemas/EpsBearerId'
      pgwS8uFteid:
        Reference: 'TS29571_CommonData.yaml#/components/schemas/Bytes'
      bearerLevelQoS:
        Reference: 'TS29571_CommonData.yaml#/components/schemas/Bytes'
    Required:
      - ebi
      - pgwS8uFteid
      - bearerLevelQoS
  PduSessionNotifyItem:
    Type: object
    Properties:
      notificationCause:
        Reference: '#/components/schemas/NotificationCause'
    Required:
      - notificationCause
  EbiArpMapping:
    Type: object
    Properties:
      epsBearerId:
        Reference: '#/components/schemas/EpsBearerId'
      arp:
        Reference: 'TS29571_CommonData.yaml#/components/schemas/Arp'
    Required:
      - epsBearerId
      - arp
  SmContextCreateError:
    Type: object
    Properties:
      error:
        Reference: 'TS29571_CommonData.yaml#/components/schemas/ProblemDetails'
      n1SmMsg:
        Reference: 'TS29571_CommonData.yaml#/components/schemas/RefToBinaryData'
      recoveryTime:
        Reference: 'TS29571_CommonData.yaml#/components/schemas/DateTime'

```

```

Required:
- error
SmContextUpdateError:
Type: object
Properties:
  error:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/ProblemDetails'
  n1SmMsg:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/RefToBinaryData'
  n2SmInfo:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/RefToBinaryData'
  n2SmInfoType:
    Reference: '#/components/schemas/N2SmInfoType'
  upCnxState:
    Reference: '#/components/schemas/UpCnxState'
  recoveryTime:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/DateTime'
Required:
- error
PduSessionCreateError:
Type: object
Properties:
  error:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/ProblemDetails'
  n1smCause:
    Type: string
    Pattern: '^[A-F0-9]{2}$'
  n1SmInfoToUe:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/RefToBinaryData'
  backOffTimer:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/DurationSec'
  recoveryTime:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/DateTime'
Required:
- error
HsmfUpdateError:
Type: object
Properties:
  error:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/ProblemDetails'
  pti:
    Reference: '#/components/schemas/ProcedureTransactionId'
  n1smCause:
    Type: string
    Pattern: '^[A-F0-9]{2}$'
  n1SmInfoToUe:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/RefToBinaryData'
  backOffTimer:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/DurationSec'
  recoveryTime:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/DateTime'
Required:

```

```

- error
VsmfUpdateError:
  Type: object
  Properties:
    error:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/ProblemDetails'
    pti:
      Reference: '#/components/schemas/ProcedureTransactionId'
    n1smCause:
      Type: string
      Pattern: '^[A-F0-9]{2}$'
    n1smInfoFromUe:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/RefToBinaryData'
    unknownN1smInfo:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/RefToBinaryData'
    failedToAssignEbiList:
      Type: array
      Items:
        Reference: '#/components/schemas/EpsBearerId'
      minItems: 1
    ngApCause:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/NgApCause'
    5gMmCauseValue:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/5GMmCause'
    recoveryTime:
      Reference: 'TS29571_CommonData.yaml#/components/schemas/DateTime'
  Required:
    - error
# SIMPLE DATA TYPES
ProcedureTransactionId:
  Type: integer
  Minimum: 0
  Maximum: 255
EpsBearerId:
  Type: integer
  Minimum: 0
  Maximum: 15
EpsPdnCnxContainer:
  Type: string
EpsBearerContainer:
  Type: string
Teid:
  Type: string
  Pattern: '^[A-F0-9]{8}$'
# ENUMERATIONS
UpCnxState:
  anyOf:
    - type: string
    enum:
      - ACTIVATED
      - DEACTIVATED
      - ACTIVATING
    - 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

- ACTIVATED
- DEACTIVATED
- ACTIVATING

**HoState:****anyOf:**

- type: string

**enum:**

- NONE
- PREPARING
- PREPARED
- COMPLETED
- CANCELLED

- 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

- NONE
- PREPARING
- PREPARED
- COMPLETED
- CANCELLED

**RequestType:****anyOf:**

- type: string

**enum:**

- INITIAL\_REQUEST
- EXISTING\_PDU\_SESSION
- INITIAL\_EMERGENCY\_REQUEST
- EXISTING\_EMERGENCY\_PDU\_SESSION

- 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

- INITIAL\_REQUEST
- EXISTING\_PDU\_SESSION
- INITIAL\_EMERGENCY\_REQUEST
- EXISTING\_EMERGENCY\_PDU\_SESSION

**RequestIndication:****anyOf:**

- type: string

**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

- 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

- 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

**NotificationCause:****anyOf:**

- type: string
  - 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.

**Description:**

Possible values are

- QOS\_FULFILLED
- QOS\_NOT\_FULFILLED
- UP\_SEC\_FULFILLED
- UP\_SEC\_NOT\_FULFILLED

**Cause:****anyOf:**

- type: string
  - 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

- 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

- 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

**ResourceStatus:****anyOf:**

- type: string

**enum:**

- RELEASED

- 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

- RELEASED

**DnnSelectionMode:****anyOf:**

- type: string

**enum:**

- VERIFIED
- UE\_DNN\_NOT\_VERIFIED
- NW\_DNN\_NOT\_VERIFIED

- 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

- VERIFIED
- UE\_DNN\_NOT\_VERIFIED
- NW\_DNN\_NOT\_VERIFIED

**EpsInterworkingIndication:****anyOf:**

- type: string

**enum:**

- NONE
- WITH\_N26
- WITHOUT\_N26

- 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

- NONE
- WITH\_N26
- WITHOUT\_N26

**N2SmInfoType:****anyOf:**

- type: string

**enum:**

- PDU\_RES\_SETUP\_REQ
- PDU\_RES\_SETUP\_RSP
- PDU\_RES\_SETUP\_FAIL
- PDU\_RES\_REL\_CMD
- PDU\_RES\_REL\_RSP

```

- PDU_RES_MOD_REQ
- PDU_RES_MOD_RSP
- PDU_RES_MOD_FAIL
- PDU_RES_NTY
- PDU_RES_NTY_REL
- PDU_RES_MOD_IND
- PDU_RES_MOD_CFM
- PATH_SWITCH_REQ
- PATH_SWITCH_SETUP_FAIL
- PATH_SWITCH_REQ_ACK
- PATH_SWITCH_REQ_FAIL
- HANDOVER_REQUIRED
- HANDOVER_CMD
- HANDOVER_PREP_FAIL
- HANDOVER_REQ_ACK
- HANDOVER_RES_ALLOC_FAIL
- 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
- PDU_RES_SETUP_REQ
- PDU_RES_SETUP_RSP
- PDU_RES_SETUP_FAIL
- PDU_RES_REL_CMD
- PDU_RES_REL_RSP
- PDU_RES_MOD_REQ
- PDU_RES_MOD_RSP
- PDU_RES_MOD_FAIL
- PDU_RES_NTY
- PDU_RES_NTY_REL
- PDU_RES_MOD_IND
- PDU_RES_MOD_CFM
- PATH_SWITCH_REQ
- PATH_SWITCH_SETUP_FAIL
- PATH_SWITCH_REQ_ACK
- PATH_SWITCH_REQ_FAIL
- HANDOVER_REQUIRED
- HANDOVER_CMD
- HANDOVER_PREP_FAIL
- HANDOVER_REQ_ACK
- HANDOVER_RES_ALLOC_FAIL

```

#### MaxIntegrityProtectedDataRate:

```

anyOf:
- type: string
enum:
- 64_KBPS
- MAX_UE_RATE
- 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
- 64_KBPS
- MAX_UE_RATE

```

# HTTP responses

```

responses:
  'PduSessionCreateError':

```

**Description:** unsuccessful creation of a PDU session

**content:**

- application/json:** # message without binary body part
  - schema:**
    - Reference:** '#/components/schemas/PduSessionCreateError'
- multipart/related:** # message with binary body part(s)
  - schema:**
    - Type:** object
    - Properties:** # Request parts
      - jsonData:**
        - Reference:** '#/components/schemas/PduSessionCreateError'
      - binaryDataN1SmInfoToUe:**
        - Type:** string
        - format:** binary

**encoding:**

- jsonData:**
  - contentType:** application/json
- binaryDataN1SmInfoToUe:**
  - contentType:** application/vnd.3gpp.5gnas
- headers:**
  - Content-Id:**
    - schema:**
      - Type:** string

**'HsmfUpdateError':**

**Description:** unsuccessful update of a PDU session

**content:**

- application/json:** # message without binary body part
  - schema:**
    - Reference:** '#/components/schemas/HsmfUpdateError'
- multipart/related:** # message with binary body part(s)
  - schema:**
    - Type:** object
    - Properties:** # Request parts
      - jsonData:**
        - Reference:** '#/components/schemas/HsmfUpdateError'
      - binaryDataN1SmInfoToUe:**
        - Type:** string
        - format:** binary

**encoding:**

- jsonData:**
  - contentType:** application/json
- binaryDataN1SmInfoToUe:**
  - contentType:** application/vnd.3gpp.5gnas
- headers:**
  - Content-Id:**
    - schema:**
      - Type:** string

**'VsmfUpdateError':**

**Description:** unsuccessful update of a PDU session

**content:**

- application/json:** # message without binary body part

```
schema:
  Reference: '#/components/schemas/VsmfUpdateError'
multipart/related: # message with binary body part(s)
schema:
  Type: object
  Properties: # Request parts
  jsonData:
    Reference: '#/components/schemas/VsmfUpdateError'
  binaryDataN1SmInfoFromUe:
    Type: string
    format: binary
  binaryDataUnknownN1SmInfo:
    Type: string
    format: binary
encoding:
  jsonData:
    contentType: application/json
  binaryDataN1SmInfoFromUe:
    contentType: application/vnd.3gpp.5gnas
  headers:
    Content-Id:
      schema:
        Type: string
  binaryDataUnknownN1SmInfo:
    contentType: application/vnd.3gpp.5gnas
  headers:
    Content-Id:
      schema:
        Type: string
```

