



# Nsmf EventExposure

---

- [OpenAPI, on page 1](#)
- [Info, on page 1](#)
- [Servers, on page 1](#)
- [Security, on page 1](#)
- [Paths, on page 2](#)
- [Components, on page 6](#)

## OpenAPI

OpenAPI Version: 3.0.0

## Info

**Description:** Session Management Event Exposure Service API

**Version:** "1.0.0"

**Title:** Nsmf\_EventExposure

## Servers

**URL:** '{apiRoot}/nsmf\_event-exposure/v1'

**Variables:**

**API Root:**

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

**Description:** apiRoot as defined in subclause 4.4 of 3GPP TS 29.501

## Security

- {}

```
- oAuth2ClientCredentials:  
  - nsmf-event-exposure
```

# Paths

## /subscriptions

```
Method: Post  
Request Body:  
  Required/Optional: true  
  Content:  
    Application/JSON:  
      Schema:  
        Reference: '#/components/schemas/NsmfEventExposure'  
  
Responses:  
  '201':  
    Description: Success  
    Content:  
      Application/JSON:  
        Schema:  
          Reference: '#/components/schemas/NsmfEventExposure'  
  '400':  
    Reference: 'TS29571_CommonData.yaml#/components/responses/400'  
  '401':  
    Reference: 'TS29571_CommonData.yaml#/components/responses/401'  
  '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'  
Callbacks:  
  myNotification:  
    '{ $request.body#/notifUri }':  
      Method: Post  
      Request Body:
```

```
Required/Optional: true
Content:
  Application/JSON:
    Schema:
      Reference: '#/components/schemas/NsmfEventExposureNotification'

Responses:
  '204':
    Description: No Content, Notification was successful
  '307':
    Description: temporary redirect
  '400':
    Reference: 'TS29571_CommonData.yaml#/components/responses/400'
  '401':
    Reference: 'TS29571_CommonData.yaml#/components/responses/401'
  '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'
```

## /subscriptions/{subId}

get:

Parameters:

```
- Name: subId
  In: path
  Description: Event Subscription ID
  Required/Optional: true
  Schema:
    Type: string
```

Responses:

```
'200':
  Description: OK. Resource representation is returned
  Content:
    Application/JSON:
```

```

    Schema:
      Reference: '#/components/schemas/NsmfEventExposure'
  Headers:
    Location:
      description: 'Contains the URI of the newly created resource,
according to the structure: {apiRoot}/npcf-event-exposure/v1/subscriptions/{subId}'
      Required/Optional: true
      Schema:
        Type: string
  '400':
    Reference: 'TS29571_CommonData.yaml#/components/responses/400'
  '401':
    Reference: 'TS29571_CommonData.yaml#/components/responses/401'
  '403':
    Reference: 'TS29571_CommonData.yaml#/components/responses/403'
  '404':
    Reference: 'TS29571_CommonData.yaml#/components/responses/404'
  '406':
    Reference: 'TS29571_CommonData.yaml#/components/responses/406'
  '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'
put:
  Request Body:
    Required/Optional: true
    Content:
      Application/JSON:
        Schema:
          Reference: '#/components/schemas/NsmfEventExposure'

  Parameters:
    - Name: subId
      In: path
      Description: Event Subscription ID
      Required/Optional: true
      Schema:
        Type: string

  Responses:
    '200':
      Description: OK. Resource was succesfully modified and representation is returned

      Content:
        Application/JSON:
          Schema:
            Reference: '#/components/schemas/NsmfEventExposure'
    '204':

```

**Description:** No Content. Resource was succesfully modified

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

'401':  
**Reference:** 'TS29571\_CommonData.yaml#/components/responses/401'

'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'

**delete:**

**Parameters:**

- **Name:** subId  
**In:** path  
**Description:** Event Subscription ID  
**Required/Optional:** true  
**Schema:**  
**Type:** string

**Responses:**

'204':  
**Description:** No Content. Resource was succesfully deleted

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

'401':  
**Reference:** 'TS29571\_CommonData.yaml#/components/responses/401'

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

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

'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_event-exposure: Access to the Nsmf_EventExposure API

schemas:
  NsmfEventExposure:
    Type: object
    Properties:
      supi:
        Reference: 'TS29571_CommonData.yaml#/components/schemas/Supi'
      gpsi:
        Reference: 'TS29571_CommonData.yaml#/components/schemas/Gpsi'
      anyUeInd:
        Type: boolean
        Description: Any UE indication. This IE shall be present if the event subscription
is applicable to any UE. Default value "FALSE" is used, if not present.
      groupId:
        Reference: 'TS29571_CommonData.yaml#/components/schemas/GroupId'
      pduSeId:
        Reference: 'TS29571_CommonData.yaml#/components/schemas/PduSessionId'
      subId:
        Reference: '#/components/schemas/SubId'
      notifId:
        Type: string
        Description: Notification Correlation ID assigned by the NF service consumer.
      notifUri:
        Reference: 'TS29571_CommonData.yaml#/components/schemas/Uri'
      altNotifIpv4Addrs:
        Type: array
        Items:
          Reference: 'TS29571_CommonData.yaml#/components/schemas/Ipv4Addr'
          Description: Alternate or backup IPv4 Address(es) where to send Notifications.
          minItems: 1
      altNotifIpv6Addrs:
        Type: array
        Items:
          Reference: 'TS29571_CommonData.yaml#/components/schemas/Ipv6Addr'
          Description: Alternate or backup IPv6 Address(es) where to send Notifications.
          minItems: 1
      eventSubs:
        Type: array
        Items:

```

```

    Reference: '#/components/schemas/EventSubscription'
    minItems: 1
    Description: Subscribed events
ImmeRep:
    Type: boolean
notifMethod:
    Reference: '#/components/schemas/NotificationMethod'
maxReportNbr:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/Uinteger'
expiry:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/DateTime'
repPeriod:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/DurationSec'
guami:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/Guami'
serviveName:
    Type: string
    Description: If the NF service consumer is an AMF, it should provide the name of
a service produced by the AMF that makes use of notifications about subscribed events.
supportedFeatures:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/SupportedFeatures'
Required:
- notifId
- notifUri
- eventSubs
NsmfEventExposureNotification:
Type: object
Properties:
  notifId:
    Type: string
    Description: Notification correlation ID
  eventNotifs:
    Type: array
    Items:
      Reference: '#/components/schemas/EventNotification'
    minItems: 1
    Description: Notifications about Individual Events
Required:
- notifId
- eventNotifs
EventSubscription:
Type: object
Properties:
  event:
    Reference: '#/components/schemas/SmfEvent'
  dnaiChgType:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/DnaiChangeType'
Required:
- event
EventNotification:
Type: object
Properties:
  event:

```

```

    Reference: '#/components/schemas/SmfEvent'
  timeStamp:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/DateTime'
  supi:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/Supi'
  gpsi:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/Gpsi'
  sourceDnai:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/Dnai'
  targetDnai:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/Dnai'
  dnaiChgType:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/DnaiChangeType'
  sourceUeIpv4Addr:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/Ipv4Addr'
  sourceUeIpv6Prefix:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/Ipv6Prefix'
  targetUeIpv4Addr:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/Ipv4Addr'
  targetUeIpv6Prefix:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/Ipv6Prefix'
  sourceTraRouting:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/RouteToLocation'
  targetTraRouting:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/RouteToLocation'
  ueMac:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/MacAddr48'
  adIpv4Addr:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/Ipv4Addr'
  adIpv6Prefix:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/Ipv6Prefix'
  reIpv4Addr:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/Ipv4Addr'
  reIpv6Prefix:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/Ipv6Prefix'
  plmnId:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/PlmnId'
  accType:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/AccessType'
  pduSeId:
    Reference: 'TS29571_CommonData.yaml#/components/schemas/PduSessionId'
  Required:
    - event
    - timeStamp
  SubId:
    Type: string
    format: SubId
  Description: Identifies an Individual SMF Notification Subscription. To enable that
    the value is used as part of a URI, the string shall only contain characters allowed
    according to the "lower-with-hyphen" naming convention defined in 3GPP TS 29.501 [2]. In
    an OpenAPI [10] schema, the format shall be designated as "SubId".
  SmfEvent:

```



**anyOf:**

- type: string

**enum:**

- AC\_TY\_CH
- UP\_PATH\_CH
- PDU\_SES\_REL
- PLMN\_CH
- UE\_IP\_CH

- 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

- AC\_TY\_CH: Access Type Change
- UP\_PATH\_CH: UP Path Change
- PDU\_SES\_REL: PDU Session Release
- PLMN\_CH: PLMN Change
- UE\_IP\_CH: UE IP address change

**NotificationMethod:****anyOf:**

- type: string

**enum:**

- PERIODIC
- ONE\_TIME
- ON\_EVENT\_DETECTION

- 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

- PERIODIC
- ONE\_TIME
- ON\_EVENT\_DETECTION

