**3GPP TSG-CT WG4 Meeting #111-eC4-224abc**

**E-Meeting, 18th – 26th August 2022 *was C4-224254***

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| *CR-Form-v12.2* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  |  | **CR** |  | **rev** | **1** | **Current version:** |  |  |
|  | | | | | | | | |
| *For* [***HE******LP***](http://www.3gpp.org/3G_Specs/CRs.htm#_blank)*on using this form: comprehensive instructions can be found at* [*http://www.3gpp.org/Change-Requests*](http://www.3gpp.org/Change-Requests)*.* | | | | | | | | |
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| ***Proposed change affects:*** | UICC apps |  | ME |  | Radio Access Network |  | Core Network | **X** |

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|  | | | | | | | | | | |
| ***Title:*** | SMSF Set and Binding Info in UE Context | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Ericsson, Verizon, Mavenir | | | | | | | | | |
| ***Source to TSG:*** | CT4 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** |  | | | | |  | ***Date:*** | | | 2022-08-24 |
|  |  | | | |  | |  | | |  |
| ***Category:*** |  |  | | | | | ***Release:*** | | |  |
|  | *Use one of the following categories:* ***F*** *(correction)* ***A*** *(mirror corresponding to a change in an earlier release)* ***B*** *(addition of feature),* ***C*** *(functional modification of feature)* ***D*** *(editorial modification)*  Detailed explanations of the above categories can be found in 3GPP [TR 21.900](http://www.3gpp.org/ftp/Specs/html-info/21900.htm). | | | | | | | | *Use one of the following releases: Rel-8 (Release 8) Rel-9 (Release 9) Rel-10 (Release 10) Rel-11 (Release 11) … Rel-16 (Release 16) Rel-17 (Release 17) Rel-18 (Release 18) Rel-19 (Release 19)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | When the UE supports SMS over NAS, the AMF will select an SMSF and activate the UE context in the SMSF. If the SMSF becomes unavailable and the SMSF belongs to an NF set, the AMF can reselect another SMSF instance within the SMSF set in subsequent operation. When the SMSF supports binding indication mechanism, the SMSF may return a binding indication when the AMF activates the UE context. The AMF/SCP can use the binding indication for future SMSF instance selection/re-selection when needed.  When the UE has moved, a N2 handover or mobility registrationmay happen and the source AMF passes the SMSF ID to the target AMF in the UeContext. The target AMF will most likely reuse the same SMSF. If the source AMF knows the Set ID (Service Set ID) of the SMSF or received a binding indication from the SMSF, the source AMF should pass the information to the target AMF. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | 1/ Add new IEs in UeContext to allow the source AMF to pass the SMSF Set ID, SMSF Service Set ID, SMSF Binding Infofor the UE Context for SMS resource in SMSF.  2/ Update OpenAPI accordingly. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | SMSF Set ID, Service Set ID and Binding indication for UE Context for SMS in SMSF cannot be passed between AMFs. During AMF changes; the target AMF (or SCP) may not be able to select another SMSF (service) instance to serve the UE e.g. if the previous SMSF is no longer reachable | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 6.1.6.2.25, A.2 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **Y** | **N** |  | | | |  | | |
| ***Other specs*** | |  | **X** | Other core specifications | | | | TS/TR ... CR ... | | |
| ***affected:*** | |  | **X** | Test specifications | | | | TS/TR ... CR ... | | |
| ***(show related CRs)*** | |  | **X** | O&M Specifications | | | | TS/TR ... CR ... | | |
|  | |  | | | | | | | | |
| ***Other comments:*** | | This CR introduces backward compatible corrections in OpenAPI file of Namf\_Communication API. | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | | Rev1:  Editorial Corrections | | | | | | | | |

\* \* \* First Change \* \* \* \*

##### 6.1.6.2.25 Type: UeContext

Table 6.1.6.2.25-1: Definition of type UeContext

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description | Applicability |
| supi | Supi | C | 0..1 | This IE shall be present if available. When present, this IE contains SUPI of the UE. |  |
| supiUnauthInd | boolean | C | 0..1 | This IE shall be present if SUPI is present. When present, it shall indicate whether the SUPI is unauthenticated. |  |
| gpsiList | array(Gpsi) | C | 1..N | This IE shall be present if available and if it is not case b) specified in clause 5.2.2.2.1.1 step 2a. When present, this IE shall contain the GPSI(s) of the UE. |  |
| pei | Pei | C | 0..1 | This IE shall be present if available and if it is not case b) specified in clause 5.2.2.2.1.1 step 2a. When present, this IE shall contain Mobile Equipment Identity of the UE. |  |
| udmGroupId | NfGroupId | O | 0..1 | When present, it shall indicate the identity of the UDM Group serving the UE. |  |
| ausfGroupId | NfGroupId | O | 0..1 | When present, it shall indicate the identity of the AUSF Group serving the UE. |  |
| pcfGroupId | NfGroupId | O | 0..1 | When present, it shall indicate the identity of the PCF Group serving the UE. |  |
| routingIndicator | string | O | 0..1 | When present, it shall indicate the Routing Indicator of the UE. |  |
| hNwPubKeyId | integer | O | 0..1 | When present, it shall indicate the Home Network Public Key Identifier of the UE. (NOTE X). |  |
| groupList | array(GroupId) | C | 1..N | This IE shall be present if the UE belongs to any subscribed internal group(s) and if it is not case b) specified in clause 5.2.2.2.1.1 step 2a. When present, this IE shall list the subscribed internal group(s) to which the UE belongs to. |  |
| drxParameter | DrxParameter | C | 0..1 | This IE shall be present if available and if it is not case b) specified in clause 5.2.2.2.1.1 step 2a. When present, this IE shall contain the DRX parameter of the UE. |  |
| subRfsp | RfspIndex | C | 0..1 | This IE shall be present if available and if it is not case b) specified in clause 5.2.2.2.1.1 step 2a. When present, it shall indicate the subscribed RFSP Index of the UE. |  |
| usedRfsp | RfspIndex | C | 0..1 | This IE shall be present if available and if it is not case b) specified in clause 5.2.2.2.1.1 step 2a. When present, it shall indicate the used RFSP Index of the UE. |  |
| subUeAmbr | Ambr | C | 0..1 | This IE shall be present if subscribed UE-AMBR has been retrieved from UDM and if it is not case b) specified in clause 5.2.2.2.1.1 step 2a.  When present, this IE shall indicate the value of subscribed UE AMBR of the UE. |  |
| subUeSliceMbrList | map(SliceMbr) | C | 1..N | Map of SliceMbr, where the S-NSSAI shall be used as the key of the map.  This IE shall be present if the list of subscribed UE-Slice-MBR(s) has been retrieved from UDM and if it is not case b) specified in clause 5.2.2.2.1.1 step 2a.  When present, this IE shall indicate the list of subscribed UE-Slice-MBR(s) per S-NSSAI for the UE. |  |
| smsfId | NfInstanceId | C | 0..1 | This IE shall be present if the SMS service for UE is activated and if it is not case b) specified in clause 5.2.2.2.1.1 step 2a. When present, it indicates the identifier of the SMSF network function instance serving the UE. The NF service consumer (e.g. target AMF) may use this information to identify the SMSF NF service profile from among the SMSF NF service profiles it received from the NRF. |  |
| seafData | SeafData | C | 0..1 | This IE shall be present if available and if it is not case b) specified in clause 5.2.2.2.1.1 step 2a or the case specified in clause 5.2.2.2.1.2. When present, this IE contains the security data derived from data received from AUSF of the UE. |  |
| 5gMmCapability | 5GMmCapability | C | 0..1 | This IE shall be present if the UE had provided this IE during Registration Procedure and if it is not case b) specified in clause 5.2.2.2.1.1 step 2a. When present, this IE shall contain 5G MM capability of the UE. |  |
| pcfId | NfInstanceId | C | 0..1 | This IE shall be present if available and if it is not case b) specified in clause 5.2.2.2.1.1 step 2a. When present, this IE indicates the identity of the PCF for AM Policy and/or UE Policy. |  |
| pcfSetId | NfSetId | C | 0..1 | This IE shall be present, if available. When present, it shall contain the NF Set ID of the PCF for AM Policy and/or UE Policy. |  |
| pcfAmpServiceSetId | NfServiceSetId | C | 0..1 | This shall be present, if available. When present, it shall contain the NF Service Set ID of the PCF's AM Policy service. |  |
| pcfUepServiceSetId | NfServiceSetId | C | 0..1 | This shall be present, if available. When present, it shall contain the NF Service Set ID of the PCF's UE Policy service. |  |
| pcfBindingLevel | SbiBindingLevel | C | 0..1 | This IE shall be present if available. When present, this IE shall contain the SBI binding level of the PCF's AM policy and UE Policy association resources. (NOTE 6) |  |
| pcfAmPolicyUri | Uri | C | 0..1 | This IE shall be present if available and if it is not case b) specified in clause 5.2.2.2.1.1 step 2a. When present this IE shall contain the URI of the individual AM policy resource (see 3GPP TS 29.507 [32] clause 5.3.3.2) used by the AMF. |  |
| amPolicyReqTriggerList | array(PolicyReqTrigger) | C | 1..N | This IE shall be present if available and if it is not case b) specified in clause 5.2.2.2.1.1 step 2a. When present this IE shall indicate the AM policy request triggers towards the PCF. The NF Service Consumer (e.g. target AMF) shall use these triggers to request AM policy from the PCF whenever these triggers are met.  The possible AM policy control request triggers are specified in clause 6.1.2.5 of 3GPP TS 23.503 [7]. |  |
| pcfUePolicyUri | Uri | C | 0..1 | This IE shall be present if available and if it is not case b) specified in clause 5.2.2.2.1.1 step 2a. When present this IE shall contain the URI of the individual UE policy resource (see 3GPP TS 29.507 [32] clause 5.3.3.2) used by the AMF. |  |
| uePolicyReqTriggerList | array(PolicyReqTrigger) | C | 1..N | This IE shall be present if available and if it is not case b) specified in clause 5.2.2.2.1.1 step 2a. When present this IE shall indicate the UE policy request triggers towards the PCF. The NF Service Consumer (e.g. target AMF) shall use these triggers to request UE policy from the PCF whenever these triggers are met.  The possible UE policy control request triggers are specified in clause 6.1.2.5 of 3GPP TS 23.503 [7]. |  |
| hpcfId | NfInstanceId | O | 0..1 | This IE indicates the identity of PCF for UE Policy in home PLMN, when the UE is roaming. |  |
| hpcfSetId | NfSetId | O | 0..1 | When present, this IE shall contain the NF Set ID of the PCF for UE Policy in home PLMN, when the UE is roaming. |  |
| restrictedRatList | array(RatType) | O | 1..N | When present, this IE shall indicate the list of RAT types that are restricted for the UE; see 3GPP TS 29.571 [6] (NOTE 1) |  |
| forbiddenAreaList | array(Area) | O | 1..N | When present, this IE shall indicate the list of forbidden areas of the UE. |  |
| serviceAreaRestriction | ServiceAreaRestriction | O | 0..1 | When present, this IE shall indicate subscribed Service Area Restriction for the UE. |  |
| restrictedCnList | array(CoreNetworkType) | O | 1..N | When present, this IE shall indicate the list of Core Network Types that are restricted for the UE. |  |
| eventSubscriptionList | array(ExtAmfEventSubscription) | C | 1..N | This IE shall be present if available and if it is not case b) specified in clause 5.2.2.2.1.1 step 2a. When present, it shall indicate the event subscription(s) targeting the UE or the group the UE is part of.  If the source AMF supports binding procedures and if it received binding indications for event notifications (i.e. with "callback" scope) or for subscription change event notifications (i.e. with "subscription-events" scope) for certain subscriptions, these binding indications should also be included.  If the source AMF knows the NF type of the NF that created the subscription, this information should also be indicated. |  |
| mmContextList | array(MmContext) | C | 1..2 | This IE shall be present if available and if it is not case b) specified in clause 5.2.2.2.1.1 step 2a. When present, this IE contains the MM Contexts of the UE. |  |
| sessionContextList | array(PduSessionContext) | C | 1..N | This IE shall be present if available and if it is neither case a) nor case b) specified in clause 5.2.2.2.1.1 step 2a. When present, this IE contains the PDU Session Contexts of the UE.  (NOTE 2) |  |
| traceData | TraceData | C | 0..1 | This IE shall be present if signalling based trace has been activated (see 3GPP TS 32.422 [30]) and if it is not case b) specified in clause 5.2.2.2.1.1 step 2a. |  |
| serviceGapExpiryTime | DateTime | C | 0..1 | This IE shall be present if Service Gap Control is enabled and if the AMF has started a Service Gap Timer which has not expired yet (see clause 5.31.16 of 3GPP TS 23.501 [2]).  The value of the IE shall indicate the expiry time of the active Service Gap Timer for the UE. |  |
| stnSr | StnSr | O | 0..1 | This IE shall be present if available, for UE supporting 5G-SRVCC (see clause 5.2.2.2.11 of 3GPP TS 23.502 [3]).  When present, this IE contains STN-SR of the UE. |  |
| cMsisdn | CMsisdn | O | 0..1 | This IE shall be present if available, for UE supporting 5G-SRVCC (see clause 5.2.2.2.11 of 3GPP TS 23.502 [3]).  When present, this IE contains C-MSISDN of the UE. |  |
| msClassmark2 | MSClassmark2 | O | 0..1 | This IE shall be present if available, for UE supporting 5G-SRVCC (see clause 5.2.2.2.11 of 3GPP TS 23.502 [3]).  When present, this IE contains Mobile Station Classmark 2 of the UE. |  |
| supportedCodecList | array(SupportedCodec) | O | 1..N | This IE shall be present if available, for UE supporting 5G-SRVCC (see clause 5.2.2.2.11 of 3GPP TS 23.502 [3]).  When present, this IE shall indicate the list of speech codecs supported by the UE. |  |
| smallDataRateStatusInfos | array(SmallDataRateStatusInfo) | O | 1..N | List of Small Data Rate Control Statuses for released PDU Sessions, see clause 5.31.14.3 of TS 23.501 [2]. | CIOT |
| restrictedPrimaryRatList | array(RatType) | O | 1..N | When present, this IE shall indicate the list of RAT types that are restricted for use as primary RAT for the UE; see 3GPP TS 29.571 [6] (NOTE 1) |  |
| restrictedSecondaryRatList | array(RatType) | O | 1..N | When present, this IE shall indicate the list of RAT types that are restricted for use as secondary RAT for the UE; see 3GPP TS 29.571 [6] (NOTE 1) |  |
| v2xContext | V2xContext | O | 0..1 | This IE shall be present if available (see clause 6.5.4 of 3GPP TS 23.287 [47]).  When present, this IE shall indicate the parameters related to the V2X services. |  |
| lteCatMInd | boolean | C | 0..1 | This IE shall be present with value "true" if the UE is a LTE Category M UE based on indication provided by the NG-RAN or by the MME at EPS to 5GS handover, as specified in 3GPP TS 23.502 [3].  When present, this IE shall be set as following:  - true: the UE is a Category M UE  - false (default): this UE is not a Category M UE. |  |
| redCapInd | boolean | C | 0..1 | This IE shall be present with value "true" if the UE is a NR RedCap UE based on indication provided by the NG-RAN, as specified in 3GPP TS 23.502 [3].  When present, this IE shall be set as following:  - true: the UE is a NR RedCap UE  - false (default): this UE is not a NR RedCap UE. |  |
| moExpDataCounter | MoExpDataCounter | C | 0..1 | This IE shall be present if a non-zero MO Exception counter has not been reported yet to SMF.  When present, this IE shall contain the MO Exception Data Counter, as specified in clause 5.31.14.3 of 3GPP TS 23.501 [2]. |  |
| cagData | CagData | O | 0..1 | Closed Access Group Data  When present, the provisioningTime attribute (from the CagData data type) shall be absent. | NPN |
| managementMdtInd | boolean | C | 0..1 | This flag shall be present with value "true" if Management Based Minimization of Drive Tests (MDT) is allowed, as specified in 3GPP TS 32.422 [30].  When present, this IE shall be set as following:  - true: management based MDT is allowed.  - false (default): management based MDT is not allowed. |  |
| immediateMdtConf | ImmediateMdtConf | C | 0..1 | This IE shall be sent by the source AMF to the target AMF, if the Job Type indicates Immediate MDT. See clause 4.10 of 3GPP TS 32.422 [30]. |  |
| ecRestrictionDataWb | EcRestrictionDataWb | C | 0..1 | This IE shall be present if the AMF determines whether Enhanced Coverage is restricted or not for the UE for WB-N1 mode.  If absent, this IE indicates Enhanced Coverage is not restricted for WB-N1 mode.  (NOTE 3) |  |
| ecRestrictionDataNb | boolean | C | 0..1 | This IE shall be present if the AMF determines whether Enhanced Coverage is restricted or not for the UE for NB-N1 mode.  If present, this IE shall indicate whether Enhanced Coverage for NB-N1 mode is restricted or not.  true: Enhanced Coverage for NB-N1 mode is restricted.  false or absent: Enhanced Coverage for NB-N1 mode is allowed. (NOTE 3) |  |
| iabOperationAllowed | boolean | O | 0..1 | This IE shall be present if the UE is allowed for IAB operation. It may be present otherwise.  When present, it shall indicate whether the UE is allowed for IAB operation, as follows:  - true: indicates that the UE is allowed for IAB operation.  - false: indicates that the UE is not allowed for IAB operation. |  |
| proseContext | ProseContext | O | 0..1 | This IE shall be present if available (see clause 6.7 of 3GPP TS 23.304 [51]).  When present, this IE shall indicate the parameters related to the ProSe services. | ProSe |
| analyticsSubscriptionList | array(AnalyticsSubscription) | C | 1..N | This IE shall be present if the AMF has created analytics subscription(s) towards NWDAF related to the UE.  If present, this IE shall include the list of analytics subscriptions, as specified in clauses 5.2.2.2.2 and 5.2.2.2.11 of 3GPP TS 23.502 [3]. |  |
| pcfUepBindingInfo | string | C | 0..1 | This IE shall be present if Binding Indication was received for UE Policy Association resource from the PCF. When present, this IE shall contain the Binding indication of the PCF's UE Policy Association resource and shall be set to the value of the 3gpp-Sbi-Binding header defined in clause 5.2.3.2.6 of 3GPP TS 29.500 [4], without the header name. |  |
| pcfAmpBindingInfo | string | C | 0..1 | This IE shall be present if Binding Indication was received for AM Policy Association resource from the PCF. When present, this IE shall contain the Binding indications of the PCF's AM policy Association resource and shall be set to the value of the 3gpp-Sbi-Binding header defined in clause 5.2.3.2.6 of 3GPP TS 29.500 [4], without the header name. |  |
| usedServiceAreaRestriction | ServiceAreaRestriction | O | 0..1 | When present, this IE shall include the Service Area Restriction from PCF. |  |
| praInAmPolicy | map(PresenceInfo) | O | 1..N | When present, this IE shall include the map of PRA Information for the subscribed "PRA\_CHANGE" PolicyReqTrigger in the AM Policy Association.  The key of the map shall be the "praId" attribute within the PresenceInfo data type. The "presenceState" attribute within the PresenceInfo data type shall not be supplied here. |  |
| praInUePolicy | map(PresenceInfo) | O | 1..N | When present, this IE shall include the map of PRA Information for the subscribed "PRA\_CHANGE" PolicyReqTrigger in the UE Policy Association.  The key of the map shall be the "praId" attribute within the PresenceInfo data type. The "presenceState" attribute within the PresenceInfo data type shall not be supplied here. |  |
| updpSubscriptionData | UpdpSubscriptionData | O | 0..1 | When present, this IE shall include the subscription resource in the AMF for a UE policy delivery related N1 message notification. |  |
| smPolicyNotifyPduList | array(PduSessionInfo) | C | 1..N | This IE shall be present if it has been received from the PCF for the UE, i.e. the PCF for the AM Policy Association and possibly the UE Policy Association.  When present, this IE shall contain the information (Slice and DNN combination) of the PDU session(s) applicable for the notification of SM Policy Association Establishment and Termination events.  (NOTE 5) | SPAE |
| pcfUeCallbackInfo | PcfUeCallbackInfo | C | 0..1 | This IE shall be present if the smPolicyNotifyPduList IE is present.  When present, this IE shall contain the callback information of the PCF for the UE to receive SM Policy Association Establishment and Termination events notification from the PCF for the SM Policy.  (NOTE 5) | SPAE |
| uePositioningCap | UePositioningCapabilities | O | 0..1 | When present, this IE shall indicate the positioning capabilities supported by the UE. |  |
| snpnOnboardInd | boolean | C | 0..1 | This IE shall be present if the UE is registered for onboarding in an SNPN.  When present, it shall indicate the following:  - true: indicates that the UE is registered for onboarding in an SNPN.  - false (default): indicates that the UE is not registered for onboarding in an SNPN. | eNPN |
| astiDistributionIndication | boolean | O | 0..1 | When present, this IE shall indicate whether the access stratum time distribution via Uu reference point should be activated or deactivated for the UE.  When present, this IE shall be set as following:  - true: ASTI distribution is activated for the UE.  - false (default): ASTI distribution is deactivated for the UE. |  |
| tsErrorBudget | integer | O | 0..1 | When present, this IE shall indicate the Uu time synchronization error budget for the time synchronization service (as described in clause 5.27.1 in TS 23.501 [2]). It indicates the value in nano seconds. |  |
| smfSelInfo | SmfSelectionData | C | 0..1 | This IE shall be present if conditions for SMF Selection information replacement are received from the PCF for AM Policy.  When present, It shall include the conditions for SMF selection information replacement, as determined by the PCF. |  |
| pcfUeSliceMbrList | map(SliceMbr) | C | 1..N | This IE shall be present when UE Slice MBR(s) were received from the PCF for AM Policy.  When present, this IE shall include one or more UE-Slice-MBR(s) as determined by the PCF for allowed S-NSSAI(s). The key of the map is the S-NSSAI in the allowed NSSAI to which the UE-Slice-MBR belongs. |  |
| smsfSetId | NfSetId | C | 0..1 | This IE shall be present if available.  When present, this IE shall contain the NF Set ID of the SMSF serving the UE. |  |
| smsfServiceSetId | NfServiceSetId | C | 0..1 | This shall be present, if available.  When present, it shall contain the NF Service Set ID of the SMSF's service instance serving the UE. |  |
| smsfBindingInfo | string | C | 0..1 | This IE shall be present if available.  When present, this IE shall contain the binding indication of the UE Context for SMS in SMSF and shall be set to the value of the 3gpp-Sbi-Binding header defined in clause 5.2.3.2.6 of 3GPP TS 29.500 [4], without the header name. |  |
| NOTE 1: If the restrictedPrimaryRatList and restrictedSecondaryRatList attributes are supported by the sender, the sender shall include the list of RAT Types that are restricted, if any, in the restrictedRatList attribute, shall include the list of RAT Types that are restricted for use as primary RAT, if any, in the restrictedPrimaryRatList attribute and shall include the list of RAT Types that are restricted for use as secondary RAT, if any, in the restrictedSsecondaryRatList attribute. If the restrictedPrimaryRatList and restrictedSecondaryRatList attributes are supported by the receiver, the receiver shall use the data in the restrictedPrimaryRatList attribute, if received, as the list of RAT Types that are restricted for use as primary RAT for the UE, and shall use the data in the restrictedSecondaryRatList attribute, if received, as the list of RAT Types that are restricted for use as secondary RAT for the UE, otherwise the receiver shall use the data in the restrictedRatList attribute, if received, as the list of RAT Types that are restricted for the UE.  NOTE 2: A particular PDU session not supported by the target AMF shall not be transferred, e.g. MA-PDU session context shall not be transferred if target AMF does not support ATSSS.  NOTE 3: After ecRestrictionDataWb and/or ecRestrictionDataNb attributes are sent from source AMF to target AMF to build the UeContext in the target AMF, the target AMF shall re-determine the EC restriction information based on the received subscription data from UDM and UE 5GMM capability because EC restriction information may change (e.g. due to that subscription data in UDM is changed but not notified the old AMF yet) and then compare the re-determined EC restriction information with the one received in the UeContext. If the target AMF finds EC restriction information has changed after comparing, the target AMF shall proceed as described in clause 5.31.12, 3GPP TS 23.501 [2].  NOTE 4: If present, this attribute shall be used together with routingIndicator. This attribute is only used by the HPLMN in roaming scenarios.  NOTE 5: If the information as indicated in both IEs were received from the PCF for the UE or from the old AMF in UE Context, the AMF shall identify whether a non-roaming or local breakout PDU session is applicable for SM Policy Association events, i.e, whethe the slice and DNN combination of the PDU session is listed in the smPolicyNotifyPduList IE or not. If the PDU session is applicable for notification of SM Policy Association events , the AMF shall provide the callback information for the PCF of the UE contained in the pcfUeCallbackInfo IE to the SMF of a new PDU session via Create SM Context service operation, or to the SMF for an ongoing PDU session via Update SM Context service operation, together with the indication for notification of SM Policy Association events. See clause 4.3.2.2.1 and clause 4.3.3.2 of 3GPP TS 23.502 [3].  NOTE 6: This IE is deprecated. An AMF complying with this version of specification shall use the pcfAmpBindingInfo IE to carry the Binding indication of the AM Policy Association resource and use the pcfUepBindingInfo IE to carry the binding indication of the UE Policy Association resource. | | | | | |

\* \* \* Next Change \* \* \* \*

# A.2 Namf\_Communication API

openapi: 3.0.0

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Text Skipped for Clarity \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

UeContext:

description: Represents an individual ueContext resource

type: object

properties:

supi:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Supi'

supiUnauthInd:

type: boolean

gpsiList:

type: array

items:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Gpsi'

minItems: 1

pei:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Pei'

udmGroupId:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/NfGroupId'

ausfGroupId:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/NfGroupId'

pcfGroupId:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/NfGroupId'

routingIndicator:

type: string

hNwPubKeyId:

type: integer

groupList:

type: array

items:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/GroupId'

minItems: 1

drxParameter:

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

subRfsp:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/RfspIndex'

usedRfsp:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/RfspIndex'

subUeAmbr:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Ambr'

subUeSliceMbrList:

type: object

additionalProperties:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/SliceMbr'

minProperties: 1

description: A map(list of key-value pairs) where Snssai serves as key.

smsfId:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/NfInstanceId'

seafData:

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

5gMmCapability:

$ref: '#/components/schemas/5GMmCapability'

pcfId:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/NfInstanceId'

pcfSetId:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/NfSetId'

pcfAmpServiceSetId:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/NfServiceSetId'

pcfUepServiceSetId:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/NfServiceSetId'

pcfBinding:

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

pcfAmPolicyUri:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Uri'

amPolicyReqTriggerList:

type: array

items:

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

minItems: 1

pcfUePolicyUri:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Uri'

uePolicyReqTriggerList:

type: array

items:

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

minItems: 1

hpcfId:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/NfInstanceId'

hpcfSetId:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/NfSetId'

restrictedRatList:

type: array

items:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/RatType'

minItems: 1

forbiddenAreaList:

type: array

items:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Area'

minItems: 1

serviceAreaRestriction:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/ServiceAreaRestriction'

restrictedCoreNwTypeList:

type: array

items:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/CoreNetworkType'

minItems: 1

eventSubscriptionList:

type: array

items:

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

minItems: 1

mmContextList:

type: array

items:

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

minItems: 1

maxItems: 2

sessionContextList:

type: array

items:

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

minItems: 1

traceData:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/TraceData'

serviceGapExpiryTime:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/DateTime'

stnSr:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/StnSr'

cMsisdn:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/CMsisdn'

msClassmark2:

$ref: '#/components/schemas/MSClassmark2'

supportedCodecList:

type: array

items:

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

minItems: 1

smallDataRateStatusInfos:

type: array

items:

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

minItems: 1

restrictedPrimaryRatList:

type: array

items:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/RatType'

minItems: 1

restrictedSecondaryRatList:

type: array

items:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/RatType'

minItems: 1

v2xContext:

$ref: '#/components/schemas/V2xContext'

lteCatMInd:

type: boolean

default: false

redCapInd:

type: boolean

default: false

moExpDataCounter:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/MoExpDataCounter'

cagData:

$ref: 'TS29503\_Nudm\_SDM.yaml#/components/schemas/CagData'

managementMdtInd:

type: boolean

default: false

immediateMdtConf:

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

ecRestrictionDataWb:

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

ecRestrictionDataNb:

type: boolean

default: false

iabOperationAllowed:

type: boolean

proseContext:

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

analyticsSubscriptionList:

type: array

items:

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

minItems: 1

pcfAmpBindingInfo:

type: string

pcfUepBindingInfo:

type: string

usedServiceAreaRestriction:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/ServiceAreaRestriction'

praInAmPolicy:

type: object

additionalProperties:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/PresenceInfo'

minProperties: 1

description: A map(list of key-value pairs) where praId serves as key.

praInUePolicy:

type: object

additionalProperties:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/PresenceInfo'

minProperties: 1

description: A map(list of key-value pairs) where praId serves as key.

updpSubscriptionData:

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

smPolicyNotifyPduList:

type: array

items:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/PduSessionInfo'

minItems: 1

pcfUeCallbackInfo:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/PcfUeCallbackInfo'

uePositioningCap:

$ref: 'TS29572\_Nlmf\_Location.yaml#/components/schemas/UePositioningCapabilities'

astiDistributionIndication:

type: boolean

default: false

tsErrorBudget:

type: integer

snpnOnboardInd:

type: boolean

default: false

smfSelInfo:

$ref: 'TS29507\_Npcf\_AMPolicyControl.yaml#/components/schemas/SmfSelectionData'

pcfUeSliceMbrList:

type: object

additionalProperties:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/SliceMbr'

minProperties: 1

description: A map(list of key-value pairs) where Snssai serves as key.

smsfSetId:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/NfSetId'

smsfServiceSetId:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/NfServiceSetId'

smsfBindingInfo:

type: string

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Text Skipped for Clarity \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

\* \* \* End of Changes \* \* \* \*