**3GPP TSG-CT WG4 Meeting #96eC4-200818**

**E-Meeting, 17th – 28th February 2020**

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| *CR-Form-v12.0* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **29.272** | **CR** | **0814** | **rev** | **1** | **Current version:** | **16.1.0** |  |
|  | | | | | | | | |
| *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:*** | Subscription data for NR V2X | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Huawei | | | | | | | | | |
| ***Source to TSG:*** | CT4 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | eV2XARC | | | | |  | ***Date:*** | | | 2020-02-12 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **B** |  | | | | | ***Release:*** | | | Rel-16 |
|  | *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-12 (Release 12)* *Rel-13 (Release 13) Rel-14 (Release 14) Rel-15 (Release 15) Rel-16 (Release 16)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | In SA2 TS23.285, TS23.287, the NR V2X related user’s subscription information including the UE-PC5-AMBR and authorization information is introduced.  In RAN2 #105 meeting, it was agreed to support NR V2X in the LTE connected to EPC scenarios.  In RAN3#106 meeting, it has been agreed to introduce PC5 QoS related parameters from MME to eNB for the network scheduled NR sidelink communication, see R3-197797.  It is proposed to transfer the NR V2X related subscription data on S6a interface from HSS to the MME. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | Add authorization information, UE-PC5-AMBR information subscription data for NR V2X in s6 and add some clarification in V2X-Subscription-Data. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | Misalignment with RAN3. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 7.3.1, 7.3.2, 7.3.212, 7.3.xxx(new) | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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's revision history:*** | | Rev1:  Add new AVP V2X-Subscription-Data-Nr in Table 7.3.1/1 | | | | | | | | |

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*The start of changes\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

### 7.3.1 General

The following table specifies the Diameter AVPs defined for the S6a/S6d interface protocol, the S7a/S7d interface protocol and the S13/S13' interface protocol, their AVP Code values, types, possible flag values and whether or not the AVP may be encrypted. The Vendor-ID header of all AVPs defined in this specification shall be set to 3GPP (10415).

For all AVPs which contain bit masks and are of the type Unsigned32, e.g., ULR-Flags, DSR-Flags, PUA-Flags, etc., bit 0 shall be the least significant bit. For example, to get the value of bit 0, a bit mask of 0x0001 should be used.

Table 7.3.1/1: S6a/S6d, S7a/S7d and S13/S13' specific DiameterAVPs

|  | | | | AVP Flag rules | | | |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Attribute Name | AVP Code | Clause defined | Value Type | Must | May | Should not | Must not | May Encr. |
| Subscription-Data | 1400 | 7.3.2 | Grouped | M, V |  |  |  | No |
| Terminal-Information | 1401 | 7.3.3 | Grouped | M, V |  |  |  | No |
| IMEI | 1402 | 7.3.4 | UTF8String | M, V |  |  |  | No |
| Software-Version | 1403 | 7.3.5 | UTF8String | M, V |  |  |  | No |
| QoS-Subscribed | 1404 | 7.3.77 | OctetString | M, V |  |  |  | No |
| ULR-Flags | 1405 | 7.3.7 | Unsigned32 | M, V |  |  |  | No |
| ULA-Flags | 1406 | 7.3.8 | Unsigned32 | M, V |  |  |  | No |
| Visited-PLMN-Id | 1407 | 7.3.9 | OctetString | M, V |  |  |  | No |
| Requested-EUTRAN-Authentication-Info | 1408 | 7.3.11 | Grouped | M, V |  |  |  | No |
| Requested-UTRAN- GERAN-Authentication-Info | 1409 | 7.3.12 | Grouped | M, V |  |  |  | No |
| Number-Of-Requested-Vectors | 1410 | 7.3.14 | Unsigned32 | M, V |  |  |  | No |
| Re-Synchronization-Info | 1411 | 7.3.15 | OctetString | M, V |  |  |  | No |
| Immediate-Response-Preferred | 1412 | 7.3.16 | Unsigned32 | M, V |  |  |  | No |
| Authentication-Info | 1413 | 7.3.17 | Grouped | M, V |  |  |  | No |
| E-UTRAN-Vector | 1414 | 7.3.18 | Grouped | M, V |  |  |  | No |
| UTRAN-Vector | 1415 | 7.3.19 | Grouped | M, V |  |  |  | No |
| GERAN-Vector | 1416 | 7.3.20 | Grouped | M, V |  |  |  | No |
| Network-Access-Mode | 1417 | 7.3.21 | Enumerated | M, V |  |  |  | No |
| HPLMN-ODB | 1418 | 7.3.22 | Unsigned32 | M, V |  |  |  | No |
| Item-Number | 1419 | 7.3.23 | Unsigned32 | M, V |  |  |  | No |
| Cancellation-Type | 1420 | 7.3.24 | Enumerated | M, V |  |  |  | No |
| DSR-Flags | 1421 | 7.3.25 | Unsigned32 | M, V |  |  |  | No |
| DSA-Flags | 1422 | 7.3.26 | Unsigned32 | M, V |  |  |  | No |
| Context-Identifier | 1423 | 7.3.27 | Unsigned32 | M, V |  |  |  | No |
| Subscriber-Status | 1424 | 7.3.29 | Enumerated | M, V |  |  |  | No |
| Operator-Determined-Barring | 1425 | 7.3.30 | Unsigned32 | M, V |  |  |  | No |
| Access-Restriction-Data | 1426 | 7.3.31 | Unsigned32 | M, V |  |  |  | No |
| APN-OI-Replacement | 1427 | 7.3.32 | UTF8String | M, V |  |  |  | No |
| All-APN-Configurations-Included-Indicator | 1428 | 7.3.33 | Enumerated | M, V |  |  |  | No |
| APN-Configuration-Profile | 1429 | 7.3.34 | Grouped | M, V |  |  |  | No |
| APN-Configuration | 1430 | 7.3.35 | Grouped | M, V |  |  |  | No |
| EPS-Subscribed-QoS-Profile | 1431 | 7.3.37 | Grouped | M, V |  |  |  | No |
| VPLMN-Dynamic-Address-Allowed | 1432 | 7.3.38 | Enumerated | M, V |  |  |  | No |
| STN-SR | 1433 | 7.3.39 | OctetString | M, V |  |  |  | No |
| Alert-Reason | 1434 | 7.3.83 | Enumerate | M, V |  |  |  | No |
| AMBR | 1435 | 7.3.41 | Grouped | M, V |  |  |  | No |
| CSG-Subscription-Data | 1436 | 7.3.78 | Grouped | M. V |  |  |  | No |
| CSG-Id | 1437 | 7.3.79 | Unsigned32 | M, V |  |  |  | No |
| PDN-GW-Allocation-Type | 1438 | 7.3.44 | Enumerated | M, V |  |  |  | No |
| Expiration-Date | 1439 | 7.3.80 | Time | M, V |  |  |  | No |
| RAT-Frequency-Selection-Priority-ID | 1440 | 7.3.46 | Unsigned32 | M, V |  |  |  | No |
| IDA-Flags | 1441 | 7.3.47 | Unsigned32 | M, V |  |  |  | No |
| PUA-Flags | 1442 | 7.3.48 | Unsigned32 | M, V |  |  |  | No |
| NOR-Flags | 1443 | 7.3.49 | Unsigned32 | M, V |  |  |  | No |
| User-Id | 1444 | 7.3.50 | UTF8String | V |  |  | M | No |
| Equipment-Status | 1445 | 7.3.51 | Enumerated | M, V |  |  |  | No |
| Regional-Subscription-Zone-Code | 1446 | 7.3.52 | OctetString | M, V |  |  |  | No |
| RAND | 1447 | 7.3.53 | OctetString | M, V |  |  |  | No |
| XRES | 1448 | 7.3.54 | OctetString | M, V |  |  |  | No |
| AUTN | 1449 | 7.3.55 | OctetString | M, V |  |  |  | No |
| KASME | 1450 | 7.3.56 | OctetString | M, V |  |  |  | No |
| Trace-Collection-Entity | 1452 | 7.3.98 | Address | M, V |  |  |  | No |
| Kc | 1453 | 7.3.59 | OctetString | M, V |  |  |  | No |
| SRES | 1454 | 7.3.60 | OctetString | M, V |  |  |  | No |
| PDN-Type | 1456 | 7.3.62 | Enumerated | M, V |  |  |  | No |
| Roaming-Restricted-Due-To-Unsupported-Feature | 1457 | 7.3.81 | Enumerated | M, V |  |  |  | No |
| Trace-Data | 1458 | 7.3.63 | Grouped | M, V |  |  |  | No |
| Trace-Reference | 1459 | 7.3.64 | OctetString | M, V |  |  |  | No |
| Trace-Depth | 1462 | 7.3.67 | Enumerated | M, V |  |  |  | No |
| Trace-NE-Type-List | 1463 | 7.3.68 | OctetString | M, V |  |  |  | No |
| Trace-Interface-List | 1464 | 7.3.69 | OctetString | M, V |  |  |  | No |
| Trace-Event-List | 1465 | 7.3.70 | OctetString | M, V |  |  |  | No |
| OMC-Id | 1466 | 7.3.71 | OctetString | M, V |  |  |  | No |
| GPRS-Subscription-Data | 1467 | 7.3.72 | Grouped | M, V |  |  |  | No |
| Complete-Data-List-Included-Indicator | 1468 | 7.3.73 | Enumerated | M, V |  |  |  | No |
| PDP-Context | 1469 | 7.3.74 | Grouped | M, V |  |  |  | No |
| PDP-Type | 1470 | 7.3.75 | OctetString | M, V |  |  |  | No |
| 3GPP2-MEID | 1471 | 7.3.6 | OctetString | M, V |  |  |  | No |
| Specific-APN-Info | 1472 | 7.3.82 | Grouped | M, V |  |  |  | No |
| LCS-Info | 1473 | 7.3.84 | Grouped | M, V |  |  |  | No |
| GMLC-Number | 1474 | 7.3.85 | OctetString | M, V |  |  |  | No |
| LCS-PrivacyException | 1475 | 7.3.86 | Grouped | M, V |  |  |  | No |
| SS-Code | 1476 | 7.3.87 | OctetString | M, V |  |  |  | No |
| SS-Status | 1477 | 7.3.88 | OctetString | M, V |  |  |  | No |
| Notification-To-UE-User | 1478 | 7.3.89 | Enumerated | M, V |  |  |  | No |
| External-Client | 1479 | 7.3.90 | Grouped | M, V |  |  |  | No |
| Client-Identity | 1480 | 7.3.91 | OctetString | M, V |  |  |  | No |
| GMLC-Restriction | 1481 | 7.3.92 | Enumerated | M, V |  |  |  | No |
| PLMN-Client | 1482 | 7.3.93 | Enumerated | M, V |  |  |  | No |
| Service-Type | 1483 | 7.3.94 | Grouped | M, V |  |  |  | No |
| ServiceTypeIdentity | 1484 | 7.3.95 | Unsigned32 | M, V |  |  |  | No |
| MO-LR | 1485 | 7.3.96 | Grouped | M, V |  |  |  | No |
| Teleservice-List | 1486 | 7.3.99 | Grouped | M, V |  |  |  | No |
| TS-Code | 1487 | 7.3.100 | OctetString | M, V |  |  |  | No |
| Call-Barring-Info | 1488 | 7.3.101 | Grouped | M, V |  |  |  | No |
| SGSN-Number | 1489 | 7.3.102 | OctetString | M, V |  |  |  | No |
| IDR-Flags | 1490 | 7.3.103 | Unsigned32 | M, V |  |  |  | No |
| ICS-Indicator | 1491 | 7.3.104 | Enumerated | V |  |  | M | No |
| IMS-Voice-Over-PS-Sessions-Supported | 1492 | 7.3.106 | Enumerated | V |  |  | M | No |
| Homogeneous-Support-of-IMS-Voice-Over-PS-Sessions | 1493 | 7.3.107 | Enumerated | V |  |  | M | No |
| Last-UE-Activity-Time | 1494 | 7.3.108 | Time | V |  |  | M | No |
| EPS-User-State | 1495 | 7.3.110 | Grouped | V |  |  | M | No |
| EPS-Location-Information | 1496 | 7.3.111 | Grouped | V |  |  | M | No |
| MME-User-State | 1497 | 7.3.112 | Grouped | V |  |  | M | No |
| SGSN-User-State | 1498 | 7.3.113 | Grouped | V |  |  | M | No |
| User-State | 1499 | 7.3.114 | Enumerated | V |  |  | M | No |
| MME-Location Information | 1600 | 7.3.115 | Grouped | V |  |  | M | No |
| SGSN-Location-Information | 1601 | 7.3.116 | Grouped | V |  |  | M | No |
| E-UTRAN-Cell-Global-Identity | 1602 | 7.3.117 | OctetString | V |  |  | M | No |
| Tracking-Area-Identity | 1603 | 7.3.118 | OctetString | V |  |  | M | No |
| Cell-Global-Identity | 1604 | 7.3.119 | OctetString | V |  |  | M | No |
| Routing-Area-Identity | 1605 | 7.3.120 | OctetString | V |  |  | M | No |
| Location-Area-Identity | 1606 | 7.3.121 | OctetString | V |  |  | M | No |
| Service-Area-Identity | 1607 | 7.3.122 | OctetString | V |  |  | M | No |
| Geographical-Information | 1608 | 7.3.123 | OctetString | V |  |  | M | No |
| Geodetic-Information | 1609 | 7.3.124 | OctetString | V |  |  | M | No |
| Current-Location-Retrieved | 1610 | 7.3.125 | Enumerated | V |  |  | M | No |
| Age-Of-Location-Information | 1611 | 7.3.126 | Unsigned32 | V |  |  | M | No |
| Active-APN | 1612 | 7.3.127 | Grouped | V |  |  | M | No |
| Error-Diagnostic | 1614 | 7.3.128 | Enumerated | V |  |  | M | No |
| Ext-PDP-Address | 1621 | 7.3.129 | Address | V |  |  | M | No |
|  |  |  |  |  |  |  |  |  |
| UE-SRVCC-Capability | 1615 | 7.3.130 | Enumerated | V |  |  | M | No |
| MPS-Priority | 1616 | 7.3.131 | Unsigned32 | V |  |  | M | No |
| VPLMN-LIPA-Allowed | 1617 | 7.3.132 | Enumerated | V |  |  | M | No |
| LIPA-Permission | 1618 | 7.3.133 | Enumerated | V |  |  | M | No |
| Subscribed-Periodic-RAU-TAU-Timer | 1619 | 7.3.134 | Unsigned32 | V |  |  | M | No |
| Ext-PDP-Type | 1620 | 7.3.75A | OctetString | V |  |  | M | No |
| SIPTO-Permission | 1613 | 7.3.135 | Enumerated | V |  |  | M | No |
| MDT-Configuration | 1622 | 7.3.136 | Grouped | V |  |  | M | No |
| Job-Type | 1623 | 7.3.137 | Enumerated | V |  |  | M | No |
| Area-Scope | 1624 | 7.3.138 | Grouped | V |  |  | M | No |
| List-Of-Measurements | 1625 | 7.3.139 | Unsigned32 | V |  |  | M | No |
| Reporting-Trigger | 1626 | 7.3.140 | Unsigned32 | V |  |  | M | No |
| Report-Interval | 1627 | 7.3.141 | Enumerated | V |  |  | M | No |
| Report-Amount | 1628 | 7.3.142 | Enumerated | V |  |  | M | No |
| Event-Threshold-RSRP | 1629 | 7.3.143 | Unsigned32 | V |  |  | M | No |
| Event-Threshold-RSRQ | 1630 | 7.3.144 | Unsigned32 | v |  |  | M | No |
| Logging-Interval | 1631 | 7.3.145 | Enumerated | V |  |  | M | No |
| Logging-Duration | 1632 | 7.3.146 | Enumerated | V |  |  | M | No |
| Relay-Node-Indicator | 1633 | 7.3.147 | Enumerated | V |  |  | M | No |
| MDT-User-Consent | 1634 | 7.3.148 | Enumerated | V |  |  | M | No |
| PUR-Flags | 1635 | 7.3.149 | Unsigned32 | V |  |  | M | No |
| Subscribed-VSRVCC | 1636 | 7.3.150 | Enumerated | V |  |  | M | No |
| Equivalent-PLMN-List | 1637 | 7.3.151 | Grouped | V |  |  | M | No |
| CLR-Flags | 1638 | 7.3.152 | Unsigned32 | V |  |  | M | No |
| UVR-Flags | 1639 | 7.3.153 | Unsigned32 | M, V |  |  |  | No |
| UVA-Flags | 1640 | 7.3.154 | Unsigned32 | M, V |  |  |  | No |
| VPLMN-CSG-Subscription-Data | 1641 | 7.3.155 | Grouped | M, V |  |  |  | No |
| Time-Zone | 1642 | 7.3.163 | UTF8String | V |  |  | M | No |
| A-MSISDN | 1643 | 7.3.157 | OctetString | V |  |  | M | No |
| MME-Number-for-MT-SMS | 1645 | 7.3.159 | OctetString | V |  |  | M | No |
| SMS-Register-Request | 1648 | 7.3.162 | Enumerated | V |  |  | M | No |
| Local-Time-Zone | 1649 | 7.3.156 | Grouped | V |  |  | M | No |
| Daylight-Saving-Time | 1650 | 7.3.164 | Enumerated | V |  |  | M | No |
| Subscription-Data-Flags | 1654 | 7.3.165 | Unsigned32 | V |  |  | M | No |
| Measurement-Period-LTE | 1655 | 7.3.166 | Enumerated | V |  |  | M | No |
| Measurement-Period-UMTS | 1656 | 7.3.167 | Enumerated | V |  |  | M | No |
| Collection-Period-RRM-LTE | 1657 | 7.3.168 | Enumerated | V |  |  | M | No |
| Collection-Period-RRM-UMTS | 1658 | 7.3.169 | Enumerated | V |  |  | M | No |
| Positioning-Method | 1659 | 7.3.170 | OctetString | V |  |  | M | No |
| Measurement-Quantity | 1660 | 7.3.171 | OctetString | V |  |  | M | No |
| Event-Threshold-Event-1F | 1661 | 7.3.172 | Integer32 | V |  |  | M | No |
| Event-Threshold-Event-1I | 1662 | 7.3.173 | Integer32 | V |  |  | M | No |
| Restoration-Priority | 1663 | 7.3.174 | Unsigned32 | V |  |  | M | No |
| SGs-MME-Identity | 1664 | 7.3.175 | UTF8String | V |  |  | M | No |
| SIPTO-Local-Network-Permission | 1665 | 7.3.176 | Unsigned32 | V |  |  | M | No |
| Coupled-Node-Diameter-ID | 1666 | 7.3.177 | DiameterIdentity | V |  |  | M | No |
| WLAN-offloadability | 1667 | 7.3.181 | Grouped | V |  |  | M | No |
| WLAN-offloadability-EUTRAN | 1668 | 7.3.182 | Unsigned32 | V |  |  | M | No |
| WLAN-offloadability-UTRAN | 1669 | 7.3.183 | Unsigned32 | V |  |  | M | No |
| Reset-ID | 1670 | 7.3.184 | OctetString | V |  |  | M | No |
| MDT-Allowed-PLMN-Id | 1671 | 7.3.185 | OctetString | V |  |  | M | No |
| Adjacent-PLMNs | 1672 | 7.3.186 | Grouped | V |  |  | M | No |
| Adjacent-Access-Restriction-Data | 1673 | 7.3.187 | Grouped | V |  |  | M | No |
| DL-Buffering-Suggested-Packet-Count | 1674 | 7.3.188 | Integer32 | V |  |  | M | No |
| IMSI-Group-Id | 1675 | 7.3.189 | Grouped | V |  |  | M | No |
| Group-Service-Id | 1676 | 7.3.190 | Unsigned32 | V |  |  | M | No |
| Group-PLMN-Id | 1677 | 7.3.191 | OctetString | V |  |  | M | No |
| Local-Group-Id | 1678 | 7.3.192 | OctetString | V |  |  | M | No |
| AIR-Flags | 1679 | 7.3.201 | Unsigned32 | V |  |  | M | No |
| UE-Usage-Type | 1680 | 7.3.202 | Unsigned32 | V |  |  | M | No |
| Non-IP-PDN-Type-Indicator | 1681 | 7.3.204 | Enumerated | V |  |  | M | No |
| Non-IP-Data-Delivery-Mechanism | 1682 | 7.3.205 | Unsigned32 | V |  |  | M | No |
| Additional-Context-ID | 1683 | 7.3.206 | Unsigned32 | V |  |  | M | No |
| SCEF-Realm | 1684 | 7.3.207 | DiameterIdentity | V |  |  | M | No |
| Subscription-Data-Deletion | 1685 | 7.3.208 | Grouped | V |  |  | M | No |
| Preferred-Data-Mode | 1686 | 7.3.209 | Grouped | V |  |  | M | No |
| Emergency-Info | 1687 | 7.3.210 | Grouped | V |  |  | M | No |
| V2X-Subscription-Data | 1688 | 7.3.212 | Grouped | V |  |  | M | No |
| V2X-Permission | 1689 | 7.3.213 | Unsigned32 | V |  |  | M | No |
| PDN-Connection-Continuity | 1690 | 7.3.214 | Unsigned32 | V |  |  | M | No |
| eDRX-Cycle-Length | 1691 | 7.3.215 | Grouped | V |  |  | M | No |
| eDRX-Cycle-Length-Value | 1692 | 7.3.216 | OctetString | V |  |  | M | No |
| UE-PC5-AMBR | 1693 | 7.3.217 | Unsigned32 | V |  |  | M | No |
| MBSFN-Area | 1694 | 7.3.219 | Grouped | V |  |  | M | No |
| MBSFN-Area-ID | 1695 | 7.3.220 | Unsigned32 | V |  |  | M | No |
| Carrier-Frequency | 1696 | 7.3.221 | Unsigned32 | V |  |  | M | No |
| RDS-Indicator | 1697 | 7.3.222 | Enumerated | V |  |  | M | No |
| Service-Gap-Time | 1698 | 7.3.223 | Unsigned32 | V |  |  | M | No |
| Aerial-UE-Subscription-Information | 1699 | 7.3.224 | Unsigned32 | V |  |  | M | No |
| Broadcast-Location-Assistance-Data-Types | 1700 | 7.3.225 | Unsigned64 | V |  |  | M | No |
| Paging-Time-Window | 1701 | 7.3.226 | Grouped | V |  |  | M | No |
| Operation-Mode | 1702 | 7.3.227 | Unsigned32 | V |  |  | M | No |
| Paging-Time-Window-Length | 1703 | 7.3.228 | OctetString | V |  |  | M | No |
| Core-Network-Restrictions | 1704 | 7.3.230 | Unsigned32 | V |  |  | M | No |
| eDRX-Related-RAT | 1705 | 7.3.229 | Grouped | V |  |  | M | No |
| Interworking-5GS-Indicator | 1706 | 7.3.231 | Enumerated | V |  |  | M | No |
| Ethernet-PDN-Type-Indicator | 1707 | 7.3.232 | Enumerated | V |  |  | M | No |
| Subscribed-ARPI | 1708 | 7.3.233 | Unsigned32 | V |  |  | M | No |
| V2X-Subscription-Data-Nr | 17xx | 7.3.xxx | Grouped | V |  |  | M | No |
| NOTE 1: The AVP header bit denoted as "M", indicates whether support of the AVP is required. The AVP header bit denoted as "V", indicates whether the optional Vendor-ID field is present in the AVP header. For further details, see IETF RFC 6733 [61].  NOTE 2: If the M-bit is set for an AVP and the receiver does not understand the AVP, it shall return a rejection. If the M-bit is not set for an AVP, the receiver shall not return a rejection, whether or not it understands the AVP. If the receiver understands the AVP but the M-bit value does not match with the definition in this table, the receiver shall ignore the M-bit. | | | | | | | | |

The following table specifies the Diameter AVPs re-used by the S6a/S6d interface protocol from existing Diameter Applications, including a reference to their respective specifications and when needed, a short description of their use within S6a and S6d.

Any other AVPs from existing Diameter Applications, except for the AVPs from Diameter base protocol specified in IETF RFC 6733 [61], do not need to be supported. The AVPs from the Diameter base protocol specified in IETF RFC 6733 [61] are not included in table 7.3.1/2, but they may be re-used for the S6a/S6d protocol, the S7a/S7protocol and the S13/S13' protocol.

Table 7.3.1/2: S6a/S6d, S7a/S7d and S13/S13' re-used Diameter AVPs

| Attribute Name | Reference | Comments | M-bit |
| --- | --- | --- | --- |
| Service-Selection | IETF RFC 5778 [20] | See clause 7.3.36 |  |
| 3GPP-Charging-Characteristics | 3GPP TS 29.061 [21] | See 3GPP TS 32.251 [33] Annex A and 3GPP TS 32.298 [22] clause 5.1.2.2.7  This attribute holds the EPS PDN Connection Charging Characteristics data for an EPS APN Configuration, or the PDP context Charging Characteristics for GPRS PDP context, or the Subscribed Charging Characteristics data for the subscriber level 3GPP Charging Characteristics; refer to 3GPP TS 23.008 [30]. |  |
| Supported-Features | 3GPP TS 29.229 [9] |  |  |
| Feature-List-ID | 3GPP TS 29.229 [9] |  |  |
| Feature-List | 3GPP TS 29.229 [9] | See clause 7.3.10 |  |
| Served-Party-IP-Address | 3GPP TS 32.299 [8] | holds the PDN IP Address of the user |  |
| QoS-Class-Identifier | 3GPP TS 29.212 [10] |  |  |
| Allocation-Retention-Priority | 3GPP TS 29.212 [10] | See clause 7.3.40 |  |
| Priority-Level | 3GPP TS 29.212 [10] |  |  |
| Pre-emption-Capability | 3GPP TS 29.212 [10] |  |  |
| Pre-emption-Vulnerability | 3GPP TS 29.212 [10] |  |  |
| Max-Requested-Bandwidth-DL | 3GPP TS 29.214 [11] |  |  |
| Max-Requested-Bandwidth-UL | 3GPP TS 29.214 [11] |  |  |
| Extended-Max-Requested-BW-DL | 3GPP TS 29.214 [11] |  |  |
| Extended-Max-Requested-BW-UL | 3GPP TS 29.214 [11] |  |  |
| RAT-Type | 3GPP TS 29.212 [10] | See clause 7.3.13 | Must set |
| MSISDN | 3GPP TS 29.329 [25] |  |  |
| MIP6-Agent-Info | IETF RFC 5447 [26] |  |  |
| MIP-Home-Agent-Address | IETF RFC 4004 [27] |  |  |
| MIP-Home-Agent-Host | IETF RFC 4004 [27] |  |  |
| PDP-Address | 3GPP TS 32.299 [8] |  |  |
| Confidentiality-Key | 3GPP TS 29.229 [9] | See clause 7.3.57 |  |
| Integrity-Key | 3GPP TS 29.229 [9] | See clause 7.3.58 |  |
| Visited-Network-Identifier | 3GPP TS 29.229 [9] | See clause 7.3.105 | Must not set |
| GMLC-Address | 3GPP TS 29.173 [37] | See clause 7.3.109 | Must not set |
| User-CSG-Information | 3GPP TS 32.299 [8] |  | Must not set |
| ProSe-Subscription-Data | 3GPP TS 29.344 [49] | See clause 7.3.180 | Must not set |
| OC-Supported-Features | IETF RFC 7683 [50] | See clause 7.3.178 | Must not set |
| OC-OLR | IETF RFC 7683 [50] | See clause 7.3.179 | Must not set |
| SCEF-Reference-ID | 3GPP TS 29.336 [54] |  | Must not set |
| SCEF-ID | 3GPP TS 29.336 [54] |  | Must not set |
| AESE-Communication-Pattern | 3GPP TS 29.336 [54] | see clause 7.3.193 | Must not set |
| Communication-Pattern-set | 3GPP TS 29.336 [54] | see clause 7.3.194 | Must not set |
| Monitoring-Event-Configuration | 3GPP TS 29.336 [54] | See clause 7.3.195 | Must not set |
| Monitoring-Event-Report | 3GPP TS 29.336 [54] | See clause 7.3.196 | Must not set |
| UE-Reachability-Configuration | 3GPP TS 29.336 [54] | See clause 7.3.197 | Must not set |
| eNodeB-ID | 3GPP TS 29.217 [56] | See clause 7.3.198 | Must not set |
| SCEF-Reference-ID-for-Deletion | 3GPP TS 29.336 [54] |  | Must not set |
| Monitoring-Type | 3GPP TS 29.336 [54] |  | Must not set |
| Maximum-Number-of-Reports | 3GPP TS 29.336 [54] |  | Must not set |
| Monitoring-Duration | 3GPP TS 29.336 [54] |  | Must not set |
| Charged-Party | 3GPP TS 29.336 [54] |  | Must not set |
| UE-Reachability-Configuration | 3GPP TS 29.336 [54] |  | Must not set |
| Location-Information-Configuration | 3GPP TS 29.336 [54] |  | Must not set |
| Reachability-Type | 3GPP TS 29.336 [54] |  | Must not set |
| Maximum-Response-Time | 3GPP TS 29.336 [54] |  | Must not set |
| Reachability-Information | 3GPP TS 29.336 [54] |  | Must not set |
| Monitoring-Event-Config-Status | 3GPP TS 29.336 [54] |  | Must not set |
| Supported-Services | 3GPP TS 29.336 [54] | See clause 7.3.199 | Must not set |
| Supported-Monitoring-Events | 3GPP TS 29.336 [54] | See clause 7.3.200 | Must not set |
| DRMP | IETF RFC 7944 [57] | See clause 7.3.203 | Must not set |
| Reference-ID-Validity-Time | 3GPP TS 29.336 [54] |  | Must not set |
| Maximum-UE-Availability-Time | 3GPP TS 29.338 [48] | See clause 5.3.3.22 | Must not set |
| Emergency-Services | 3GPP TS 29.273 [59] |  |  |
| Load | IETF RFC 8583 [60] | See clause 7.3.211 | Must not set |
| Extended-eNodeB-ID | 3GPP TS 29.217 [56] | See clause 7.3.218 | Must not set |
| External-Identifier | 3GPP TS 29.336 [54] |  | Must not set |
| Loss-Of-Connectivity-Reason | 3GPP TS 29.336 [54] |  | Must not set |
| Active-Time | 3GPP TS 29.128 [63] |  | Must not set |
| Idle-Status-Indication | 3GPP TS 29.128 [63] |  | Must not set |
| MTC-Provider-Info | 3GPP TS 29.336 [54] |  | Must not set |
| Traffic-Profile | 3GPP TS 29.336 [54] |  | Must not set |
| PDN-Connectivity-Status-Configuration | 3GPP TS 29.336 [54] | See clause 7.3.195 | Must not set |
| PDN-Connectivity-Status-Report | 3GPP TS 29.336 [54] | See clause 7.3.196 | Must not set |
| Battery-Indicator | 3GPP TS 29.336 [54] |  | Battery-Indicator |
| NOTE 1: The M-bit settings for re-used AVPs override those of the defining specifications that are referenced. Values include: "Must set", "Must not set". If the M-bit setting is blank, then the defining specification applies.  NOTE 2: If the M-bit is set for an AVP and the receiver does not understand the AVP, it shall return a rejection. If the M-bit is not set for an AVP, the receiver shall not return a rejection, whether or not it understands the AVP. If the receiver understands the AVP but the M-bit value does not match with the definition in this table, the receiver shall ignore the M-bit. | | | |

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Next change\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

### 7.3.2 Subscription-Data

The Subscription-Data AVP is of type Grouped. It shall contain the information related to the user profile relevant for EPS and GERAN/UTRAN.

AVP format:

Subscription-Data ::= <AVP header: 1400 10415>

[ Subscriber-Status ]

[ MSISDN ]

[ A-MSISDN ]

[ STN-SR ]

[ ICS-Indicator ]

[ Network-Access-Mode ]

[ Operator-Determined-Barring ]

[ HPLMN-ODB ]

\*10[ Regional-Subscription-Zone-Code ]

[ Access-Restriction-Data ]

[ APN-OI-Replacement ]

[ LCS-Info ]

[ Teleservice-List ]

\*[ Call-Barring-Info ]

[ 3GPP-Charging-Characteristics ]

[ AMBR ]

[ APN-Configuration-Profile ]

[ RAT-Frequency-Selection-Priority-ID ]

[ Trace-Data]

[ GPRS-Subscription-Data ]

\*[ CSG-Subscription-Data ]

[ Roaming-Restricted-Due-To-Unsupported-Feature ]

[ Subscribed-Periodic-RAU-TAU-Timer ]

[ MPS-Priority ]

[ VPLMN-LIPA-Allowed ]

[ Relay-Node-Indicator ]

[ MDT-User-Consent ]

[ Subscribed-VSRVCC ]

[ ProSe-Subscription-Data ]

[ Subscription-Data-Flags ]

\*[ Adjacent-Access-Restriction-Data ]

[ DL-Buffering-Suggested-Packet-Count ]

\*[ IMSI-Group-Id ]

[ UE-Usage-Type ]

\*[ AESE-Communication-Pattern ]

\*[ Monitoring-Event-Configuration ]

[ Emergency-Info ]

[ V2X-Subscription-Data ]

[ V2X-Subscription-Data-Nr ]

\*[ eDRX-Cycle-Length ]

[ External-Identifier ]

[ Active-Time ]

[ Service-Gap-Time ]

[ Broadcast-Location-Assistance-Data-Types ]

[ Aerial-UE-Subscription-Information ]

[ Core-Network-Restrictions ]

\*[ Paging-Time-Window ]

[ Subscribed-ARPI ]

\*[ AVP ]

The AMBR included in this grouped AVP shall include the AMBR associated to the user's subscription (UE-AMBR); Max-Requested-Bandwidth-UL and Max-Requested-Bandwidth-DL within this AVP shall not both be set to "0".

The APN-OI-Replacement included in this grouped AVP shall include the UE level APN-OI-Replacement associated to the user's subscription.

When multiple External Identifiers are defined for the same subscription, the External-Identifier in this grouped AVP shall contain a default External Identifier determined by the HSS.

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Next change\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

### 7.3.212 V2X-Subscription-Data

The V2X-Subscription-Data AVP is of type Group. It shall contain the V2X related subscription data for the network scheduled LTE sidelink communication..

AVP format:

V2X-Subscription-Data ::= <AVP header: 1688 10415>

[ V2X-Permission ]

[UE-PC5-AMBR ]

\*[AVP]

The UE-PC5-AMBR AVP within the V2X-Subscription-Data AVP indicates the UE AMBR used for LTE PC5 interface.

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Next change\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

### 7.3.xxx V2X-Subscription-Data-Nr

The V2X-Subscription-Data-Nr AVP is of type Group. It shall contain the V2X related subscription data for the network scheduled NR sidelink communication.

AVP format:

V2X-Subscription-Data-Nr ::= <AVP header: 17xx 10415>

[ V2X-Permission ]

[UE-PC5-AMBR ]

\*[AVP]

The UE-PC5-AMBR AVP within the V2X-Subscription-Data AVP indicates the UE AMBR used for NR PC5 interface.

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*The end of changes\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*