**3GPP TSG-SA4 Meeting #127 *S4-230134***

**Sophia-Antipolis, FR, 29 Jan - 02 Feb 2024**

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| *CR-Form-v12.2* | | | | | | | | |
| **PSEUDO CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **26.119** | **CR** | 0058 | **rev** |  | **Current version:** | 1.0.0 |  |
|  | | | | | | | | |
| *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 | **X** | Radio Access Network |  | Core Network | **X** |

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|  | | | | | | | | | | |
| ***Title:*** | Capability Exchange | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Tencent Cloud, Qualcomm, Xiaomi | | | | | | | | | |
| ***Source to TSG:*** | S4 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | MeCAR | | | | |  | ***Date:*** | | | 1-20-2024 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **B** |  | | | | | ***Release:*** | | | Rel-18 |
|  | *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:*** | | Clause 7.4 capability exchange is empty. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | 1. 6.2.5: The device capability data object to carry the device capabilities 2. 7.4: How the device uses the capability data object to communicate its capabilities | | | | | | | | |
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| ***Consequences if not approved:*** | | Lack of discovery of the UE capabilities by the network services and other UEs | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 6.2.5 (new), 7.4 (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:*** | |  | | | | | | | | |

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| **1st Change** |

## 6.2.5 Device capabilities signalling

Device capabilities may be signalled using the format defined in Table 6.2.5-1.

Table 6.2.5-1 – Device capabilities exchange format

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Type** | **Cardinality** | **Description** |
| deviceCapabilities | Object | 0..1 | Provides the supported device capabilities. |
| deviceType | string | 1...N | A list of device type identifiers formatted as URN defined in table X-1 in Annex X.  For each signalled device type identifier, the associated capabilities are supported by the sending device. |
| additionalCapabilities | string | 0...N | A list of additional media capability identifiers formatted as URN defined in table X-2 in Annex X  For each signalled media capability identifier, the associated capabilities are supported by the sending device. |

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| **2nd Change** |

## 7.4 Capability exchange

The capabiilities of the device is captured in the data structure defined in 6.2.5 and is communicated with the network.

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| **3rd Change** |

Annex X (informative):  
Registration Information

# X.1 3GPP Registered URIs

The clause documents the registered URIs in this specification following the process in https://www.3gpp.org/3gpp-groups/core-network-terminals-ct/ct-wg1/uniform-resource-identifier-uri-list

Table X-1 lists all registered URN values for deice type identifiers as well as

- a brief description of its functionality;

- a reference to the specification or other publicly available document (if any) containing the definition;

- the name and email address of the person making the application; and

- any supplementary information considered necessary to support the application.

Table X-1: 3GPP Registered URNs for device type identifiers

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **URN** | **Description** | **Reference** | **Contact** | **Remarks** |
| urn:3GPP:26119:17:device-type-1 | An identifier for the device type 1 defined in this specification. | TS 26.119, clause 4.X | Thomas Stockhammer  tsto@qti.qualcomm.com | none |
| urn:3GPP:26119:17:device-type-2 | An identifier for the device type 1 defined in this specification. | TS 26.119, clause 4.X | Thomas Stockhammer  tsto@qti.qualcomm.com | none |
| urn:3GPP:26119:17:device-type-3 | An identifier for the device type 1 defined in this specification. | TS 26.119, clause 4.X | Thomas Stockhammer  tsto@qti.qualcomm.com | none |
| urn:3GPP:26119:17:device-type-4 | An identifier for the device type 1 defined in this specification. | TS 26.119, clause 4.X | Thomas Stockhammer  tsto@qti.qualcomm.com | none |

Table X-2 lists all registered URN values for video capability identifiers as well as

- a brief description of its functionality;

- a reference to the specification or other publicly available document (if any) containing the definition;

- the name and email address of the person making the application; and

- any supplementary information considered necessary to support the application.

Table X-1: 3GPP Registered URNs for video capability identifiers

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **URN** | **Description** | **Reference** | **Contact** | **Remarks** |
| urn:3GPP:26119:17:AVC-FullHD-Dec | An identifier for the capability **AVC-FullHD-Dec** defined this specification. | TS 26.119, clause 7:X | Thomas Stockhammer  tsto@qti.qualcomm.com | none |
| urn:3GPP:26119:17:AVC-UHD-Dec | An identifier for the capability **AVC-UHD-Dec** defined this specification. | TS 26.119, clause 7:X | Thomas Stockhammer  tsto@qti.qualcomm.com | none |
| urn:3GPP:26119:17:AVC-8K-Dec | An identifier for the capability **AVC-8K-Dec** defined this specification. | TS 26.119, clause 7:X | Thomas Stockhammer  tsto@qti.qualcomm.com | none |
| urn:3GPP:26119:17: HEVC-FullHD-Dec | An identifier for the capability **HEVC-FullHD-Dec** defined this specification. | TS 26.119, clause 7:X | Thomas Stockhammer  tsto@qti.qualcomm.com | none |
| urn:3GPP:26119:17:AVC-UHD-Dec | An identifier for the capability **AVC-UHD-Dec** defined this specification. | TS 26.119, clause 7:X | Thomas Stockhammer  tsto@qti.qualcomm.com | none |
| urn:3GPP:26119:17:HEVC-UHD-Dec | An identifier for the capability **HEVC-UHD-Dec** defined this specification. | TS 26.119, clause 7:X | Thomas Stockhammer  tsto@qti.qualcomm.com | none |
| urn:3GPP:26119:17: HEVC-8K-Dec | An identifier for the capability **HEVC-8K-Dec** defined this specification. | TS 26.119, clause 7:X | Thomas Stockhammer  tsto@qti.qualcomm.com | none |
| urn:3GPP:26119:17:AVC-FullHD-Dec-2 | An identifier for the capability **AVC-FullHD-Dec-2** defined this specification. | TS 26.119, clause 7:X | Thomas Stockhammer  tsto@qti.qualcomm.com | none |
| urn:3GPP:26119:17:AVC-UHD-Dec-4 | An identifier for the capability **AVC-UHD-Dec-4** defined this specification. | TS 26.119, clause 7:X | Thomas Stockhammer  tsto@qti.qualcomm.com | none |
| urn:3GPP:26119:17:HEVC-UHD-Dec-4 | An identifier for the capability **HEVC-UHD-Dec-4** defined this specification. | TS 26.119, clause 7:X | Thomas Stockhammer  tsto@qti.qualcomm.com | none |
| urn:3GPP:26119:17:UHD-Dec-4 | An identifier for the capability **UHD-Dec-4** defined this specification. | TS 26.119, clause 7:X | Thomas Stockhammer  tsto@qti.qualcomm.com | none |
| urn:3GPP:26119:17:AVC-8K-Dec-8 | An identifier for the capability **AVC-8K-Dec-8** defined this specification. | TS 26.119, clause 7:X | Thomas Stockhammer  tsto@qti.qualcomm.com | none |
| urn:3GPP:26119:17:HEVC-8K-Dec-8 | An identifier for the capability **HEVC-8K-Dec-8** defined this specification. | TS 26.119, clause 7:X | Thomas Stockhammer  tsto@qti.qualcomm.com | none |
| urn:3GPP:26119:17:8K-Dec-8 | An identifier for the capability **8K-Dec-8** defined this specification. | TS 26.119, clause 7:X | Thomas Stockhammer  tsto@qti.qualcomm.com | none |
| urn:3GPP:26119:17:AVC-FullHD-Enc | An identifier for the capability **AVC-FullHD-Enc** defined this specification. | TS 26.119, clause 7:X | Thomas Stockhammer  tsto@qti.qualcomm.com | none |
| urn:3GPP:26119:17:HEVC-FullHD-Enc | An identifier for the capability **HEVC-FullHD-Enc** defined this specification. | TS 26.119, clause 7:X | Thomas Stockhammer  tsto@qti.qualcomm.com | none |
| urn:3GPP:26119:17:HEVC-UHD-Enc | An identifier for the capability **HEVC-UHD-Enc** defined this specification. | TS 26.119, clause 7:X | Thomas Stockhammer  tsto@qti.qualcomm.com | none |

Table X-3 lists all registered URN values for audio capability identifiers as well as

- a brief description of its functionality;

- a reference to the specification or other publicly available document (if any) containing the definition;

- the name and email address of the person making the application; and

- any supplementary information considered necessary to support the application.

Table X-3: 3GPP Registered URNs for audio capability identifiers

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **URN** | **Description** | **Reference** | **Contact** | **Remarks** |
| urn:3GPP:26119:17:EVS-Dec | An identifier for the capability **EVS-Dec** defined this specification. | TS 26.119, clause 8:X | Thomas Stockhammer  tsto@qti.qualcomm.com | none |
| urn:3GPP:26119:17:IVAS-[Editor’s note: IVAS level TBD]-Dec | An identifier for the capability **IVAS-[Editor’s note: IVAS level TBD]-Dec** defined this specification. | TS 26.119, clause 8:X | Thomas Stockhammer  tsto@qti.qualcomm.com | none |
| urn:3GPP:26119:17:EVS-Dec-2 | An identifier for the capability **EVS-Dec-2** defined this specification. | TS 26.119, clause 8:X | Thomas Stockhammer  tsto@qti.qualcomm.com | none |
| urn:3GPP:26119:17:EVS-Dec-4 | An identifier for the capability **EVS-Dec-4** defined this specification. | TS 26.119, clause 8:X | Thomas Stockhammer  tsto@qti.qualcomm.com | none |
| urn:3GPP:26119:17:AAC-ELDv2-Dec | An identifier for the capability **AAC-ELDv2-Dec** defined this specification. | TS 26.119, clause 8:X | Thomas Stockhammer  tsto@qti.qualcomm.com | none |
| urn:3GPP:26119:17:AAC-ELDv2-Dec-2 | An identifier for the capability **AAC-ELDv2-Dec-2** defined this specification. | TS 26.119, clause 8:X | Thomas Stockhammer  tsto@qti.qualcomm.com | none |
| urn:3GPP:26119:17:EVS-Enc | An identifier for the capability **EVS-Enc** defined this specification. | TS 26.119, clause 8:X | Thomas Stockhammer  tsto@qti.qualcomm.com | none |
| urn:3GPP:26119:17:IVAS-[Editor’s note: IVAS level TBD]-Enc | An identifier for the capability **IVAS-[Editor’s note: IVAS level TBD]-Dec** defined this specification. | TS 26.119, clause 8:X | Thomas Stockhammer  tsto@qti.qualcomm.com | none |
| urn:3GPP:26119:17:AAC-ELDv2-Enc | An identifier for the capability **AAC-ELDv2-Enc** defined this specification. | TS 26.119, clause 8:X | Thomas Stockhammer  tsto@qti.qualcomm.com | none |

Table X-4 lists all registered URN values for scene processing capability identifiers as well as

- a brief description of its functionality;

- a reference to the specification or other publicly available document (if any) containing the definition;

- the name and email address of the person making the application; and

- any supplementary information considered necessary to support the application.

Table X-4: 3GPP Registered URNs for scene processing capability identifiers

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **URN** | **Description** | **Reference** | **Contact** | **Remarks** |
| urn:3GPP:26119:17:SD-Rendering-glTF-Core | An identifier for the capability **SD-Rendering-glTF-Core** defined this specification. | TS 26.119, clause 7:X | Thomas Stockhammer  tsto@qti.qualcomm.com | none |
| urn:3GPP:26119:17:SD-Rendering-glTF-Ext1 | An identifier for the capability **SD-Rendering-glTF-Ext1** defined this specification. | TS 26.119, clause 7:X | Thomas Stockhammer  tsto@qti.qualcomm.com | none |
| urn:3GPP:26119:17:SD-Rendering-glTF-Ext2 | An identifier for the capability **SD-Rendering-glTF-Ext2** defined this specification. | TS 26.119, clause 7:X | Thomas Stockhammer  tsto@qti.qualcomm.com | none |
| urn:3GPP:26119:17:SD-Rendering-glTF-Interactive | An identifier for the capability **SD-Rendering-glTF-Interactive** defined this specification. | TS 26.119, clause 7:X | Thomas Stockhammer  tsto@qti.qualcomm.com | none |