**3GPP TSG SA WG4#121 S4-221311**

**Toulouse, 14th – 18th November 2022**

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| *CR-Form-v12.0* | | | | | | | | |
| **PSEUDO CHANGE REQUEST** | | | | | | | | |
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|  | **26**.**857** | **CR** | **psycho** | **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:*** | **[FS\_5G\_MSE] Writing MSE Specifications: Style Guides and Tools** | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Qualcomm Incorporated | | | | | | | | | |
| ***Source to TSG:*** |  | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | **FS\_5G\_MSE** | | | | |  | ***Date:*** | | | 08/11/2022 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **B** |  | | | | | ***Release:*** | | | 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-12 (Release 12)* *Rel-13 (Release 13) Rel-14 (Release 14) Rel-15 (Release 15) Rel-16 (Release 16)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | |  | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | |  | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | |  | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | |  | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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:*** | |  | | | | | | | | |

**===== CHANGE =====**

# 2 References

[X] Ryan Pavlik, Kaye Mason, Jon Leech, Tobias Hector: "Open XR Style Guide", https://registry.khronos.org/OpenXR/specs/1.0/styleguide.html

[Y] Dan Allen, Sarah White: "AsciiDoc Language Documentation", https://docs.asciidoctor.org/asciidoc/latest/

# 7 Writing MSE Specifications: Style Guides and Tools

The primary goal is to achieve consistency across the API, as well as across all specifications. Consistency makes it easier for developers, editors, reviewers, and users of the documentation to understand and modify it. While each organization and specification may and should have its own look and feel, it is considered appropriate to establish a style guide convention. As an example, the Style Guide of the OpenXR Documentation has been branched from the Vulkan documentation and is hence considered a broadly adopted and established convention. In addition, 3GPP uses OpenAPI for the API definition towards the network.

Hence, it is proposed to align with the following style guide and documentation conventions:

1. Develop APIs for the relevant reference points in an Internet-accessible source code repository (e.g. 3GPP Forge) and only port agreements or full specifications to 3GPP specifications. The development of the formal APIs is also done in an Internet-accessible source code repository.

2. For device-internal API definitions, align with the OpenXR style guide [X]as follows:

a) Use Asciidoc [Y]to the extent possible to define formal APIs.

b) For API naming conventions, it is proposed that the rules defined in [https://registry.khronos.org/OpenXR/specs/1.0/styleguide.html#naming](https://registry.khronos.org/OpenXR/specs/1.0/styleguide.html" \l "naming) apply with the following adaptation:

- Each MSE is assigned a prefix (for example MSE). In similar way as XR is used in the OpenXR specification, an equivalent usage of MSE is expected for an MSE specification. Prefixes are used in the API to denote specific semantic meaning of MSE names, or as a label to avoid name clashes, and are explained here:

* + MSE/Mse/mse
  + All types, commands, enumerates and C macro definitions in the specification are prefixed with these characters, according to the rules defined above.

c) For the mark-up style, it is proposed that the ETSI/3GPP documentation rules as well as the rules defined in section 4 of [X] apply. In particular, section 5.7 of [X] on writing reference pages is expected to apply.

d) Provide reference pages for the MSE according to the OpenXR principle https://registry.khronos.org/OpenXR/specs/1.0/man/html/openxr.html

3. For the network-based APIs and reference points, define RESTful APIs using OpenAPI YAML according to the rules and conventionsdefined by 3GPP in TS 29.501 [16].

4. For regular User Plane data communication reference existing protocols and formats.

NOTE: Support for workflows and automation is considered by providing a workflow and tools based on the Khronos OpenXR specification [?].**===== END CHANGES =====**