**3GPP TSG-SA5 Meeting #145-e *S5-225568rev1***

e-meeting, 15 - 24 August 2022

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| *CR-Form-v12.1* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
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|  | **28.105** | **CR** | **0007** | **rev** | **-** | **Current version:** | **17.0.0** |  |
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| *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 | **X** | Core Network | **X** |

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| ***Title:*** | Rel-17 CR TS 28.105 Correction and clarifications of the Requirements | | | | | | | | | |
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| ***Source to WG:*** | NEC, Intel | | | | | | | | | |
| ***Source to TSG:*** | S5 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | eMDAS | | | | |  | ***Date:*** | | | 2022-08-01 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **F** |  | | | | | ***Release:*** | | | Rel-17 |
|  | *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-15 (Release 15) Rel-16 (Release 16) Rel-17 (Release 17) Rel-18 (Release 18)* | |
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| ***Reason for change:*** | | Clarifications and correction of the Requirements for AI/ML training. | | | | | | | | |
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| ***Summary of change:*** | | Corrections of requirements for AI/ML training and selection. | | | | | | | | |
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| ***Consequences if not approved:*** | | Ambiguties leading to misunderstanding in the specification and may result in wrong and non-interoperable implementation. | | | | | | | | |
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| ***Clauses affected:*** | | 6.2.3 | | | | | | | | |
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|  | | **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** |

### 6.2.3 Requirements for AI/ML training

Table 6.2.3-1

| Requirement label | Description | Related use case(s) |
| --- | --- | --- |
| **REQ-AIML\_TRAIN-FUN-01** | The AIMLT MnS producer shall have a capability allowing the consumer to request AI/ML training. | AI/ML training requested by consumer (clause 6.2.2.1) |
| **REQ- AIML\_TRAIN-FUN-02** | The AIMLT MnS producer shall have a capability allowing the consumer to specify the data sources containing the candidate training data for AI/ML training. | AI/ML training requested by consumer (clause 6.2.2.1) |
| **REQ- AIML\_TRAIN-FUN-03** | The AIMLT MnS producer shall have a capability allowing the consumer to specify the inference type of the AI/ML Entity to be trained. | AI/ML training requested by consumer (clause 6.2.2.1) |
| **REQ- AIML\_TRAIN-FUN-04** | The AIMLT MnS producer shall have a capability to provide the training result (including the location of the trained AI/ML Entity) to the consumer. | AI/ML training requested by consumer (clause 6.2.2.1), and AI/ML training initiated by producer (clause 6.2.2.2) |
| **REQ-AIML\_SELECT-01** | 3GPP management system shall have the capability for authorized consumer to discover the characteristics of available models including the contexts under which each of the models was trained. | Selecting AI/ML models and AI/ML-enabled Functions (clause 6.2.2.3) |
| **REQ-AIML\_SELECT-02** | 3GPP management system shall have the capability to enable an authorized consumer to select an AI/ML model. | Selecting AI/ML models and AI/ML-enabled Functions (clause 6.2.2.3) |
| **REQ-AIML\_SELECT-03** | The MLT MnS producer shall have the capability to enable an authorized consumer to request for a model to be trained to satisfy the consumer's expectations. | Selecting AI/ML models and AI/ML-enabled Functions (clause 6.2.2.3) |
| **REQ-AIML\_SELECT-04** | 3GPP management system shall have the capability to enable an authorized consumer to request for information and be informed about the available alternative models of differing complexity and performance. | Selecting AI/ML models and AI/ML-enabled Functions (clause 6.2.2.3) |
| **REQ-AIML\_SELECT- -05** | 3GPP management system shall have the capability to enable an authorized consumer to request one of the known or available alternative models of differing complexity and performance to be used for inference. | Selecting AI/ML models and AI/ML-enabled Functions (clause 6.2.2.3) |
| **REQ-AIML\_SELECT-06** | The 3GPP management system shall have a capability to provide a selected AI/ML enabled function to the consumer. | Selecting AI/ML models and AI/ML-enabled Functions (clause 6.2.2.3) |
| **REQ-AIML\_TRAIN- MGT\_01** | 3GPP management system shall have the capability to enable an authorized consumer to manage and configure one or more requests for the training of specific AI/ML models or AI/ML enabled functions, e.g. to modify the characteristics of the request or to delete a request. | Managing AI/ML Training Processes (clause 6.2.2.4) |
| **REQ-AIML\_TRAIN- MGT\_02** | 3GPP management system shall have the capability to enable an authorized consumer to manage and configure one or more training processes, e.g. to start, suspend or restart the training; or to adjust the training conditions and/or characteristics. | Managing AI/ML Training Processes (clause 6.2.2.4) |
| **REQ-AIML\_TRAIN- MGT\_03** | 3GPP management system shall have the capability to enable an authorized consumer (e.g. the function/entity different from the function that generated a request for AI/ML enabled function training) to request for a report on the outcomes of a specific training instance. | Managing AI/ML Training Processes (clause 6.2.2.4) |
| **REQ-AIML\_TRAIN- MGT\_04** | 3GPP management system shall have the capability to enable an authorized consumer to define the reporting characteristics related to a specific training request or training instance. | Managing AI/ML Training Processes (clause 6.2.2.4) |
| **REQ-AIML\_TRAIN- MGT\_05** | 3GPP management system shall have the capability to enable the AI/ML Training function to report to any authorized consumer about specific ML Training process and/or report about the outcomes of any such ML Training process. | Managing AI/ML Training Processes (clause 6.2.2.4) |
| **REQ-ML\_ERROR\_01** | The 3GPP management system shall enable an authorized consumer of data services (e.g. an ML-enabled function) to request from a producer of data services a Value Quality Score of the data, which is the numerical value that represents the dependability/quality of a given observation and measurement type. | Handling errors in data and ML decisions (clause 6.2.2.5) |
| **REQ-ML\_ERROR\_02** | The 3GPP management system shall enable an authorized consumer of ML decisions (e.g. a controller) to request ML decision confidence score which is the numerical value that represents the dependability/quality of a given decision generated by the ML-based function. | Handling errors in data and ML decisions (clause 6.2.2.5) |
| **REQ-ML\_ERROR\_03** | The 3GPP management system shall enable a producer of data services (e.g. a gNB) to provide to an authorized consumer (e.g. an ML-enabled function) a Value Quality Score of the data, which is the numerical value that represents the dependability/quality of a given observation and measurement type. | Handling errors in data and ML decisions (clause 6.2.2.5) |
| **REQ-ML\_ERROR\_04** | The 3GPP management system shall enable a producer of ML decisions (e.g. an ML-enabled function) to provide to an authorized consumer of ML decisions (e.g. a controller) an ML decision confidence score which is the numerical value that represents the dependability/quality of a given decision generated by the ML-based function. | Handling errors in data and ML decisions (clause 6.2.2.5) |

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| **End of Change** |