**3GPP TSG- Meeting #**

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| *CR-Form-v12.3* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
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|  |  | **CR** |  | **rev** |  | **Current version:** |  |  |
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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:*** |  | | | | | | | | | |
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| ***Source to WG:*** |  | | | | | | | | | |
| ***Source to TSG:*** | S5 | | | | | | | | | |
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| ***Work item code:*** |  | | | | |  | ***Date:*** | | |  |
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| ***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-17 (Release 17) Rel-18 (Release 18) Rel-19 (Release 19)  Rel-20 (Release 20)* | |
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| ***Reason for change:*** | | Solution for use case “ML entity selection” and its requirements have not been specified in Rel-18 and therefore this contribution proposed the correct it. | | | | | | | | |
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| ***Summary of change:*** | | This contribution proposes to correct clause 6.2a.1.2.3  Void REQ-ML\_SELECT-01, it is already included in REQ- ML\_SELECT-02, which is a more general Requirement.Contexts in Uses case do have a solution.  Correct REQ-ML\_SELECT-03 is not for selection use case, it is a duplication of Training requirements.  Void REQ-ML\_SELECT-04 and REQ-ML\_SELECT-05 due to lack of solution for model complexity. | | | | | | | | |
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| ***Consequences if not approved:*** | | leads to incorrect implementation. | | | | | | | | |
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| ***Clauses affected:*** | | 6.2.2.3 and 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:*** | |  | | | | | | | | |
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| ***This CR's revision history:*** | |  | | | | | | | | |

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| **Start of modification** |

#### 6.2.2.3 ML model and ML entity selection

For a given machine learning-based use case, different entities or AI/ML inference function may have different requirements. For example, one consumer may wish to have an ML entity trained for city central business district where mobile users move at speeds not exceeding 30 km/hr. While, another consumer, for the same use case may support a rural environment and amy wish to have an ML enity supporting that type of environment. The different consumers need to know the available versions of ML entities and to select appropriate one.

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| **Next modification** |

### 6.2.3 Requirements for ML training

Table 6.2.3-1

| Requirement label | Description | Related use case(s) |
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| **REQ-ML\_TRAIN-FUN-01** | The ML training MnS producer shall have a capability allowing the consumer to request ML training. | ML training requested by consumer (clause 6.2.2.1) |
| **REQ- ML\_TRAIN-FUN-02** | The ML training MnS producer shall have a capability allowing the consumer to specify the data sources containing the candidate training data for ML training. | ML training requested by consumer (clause 6.2.2.1) |
| **REQ- ML\_TRAIN-FUN-03** | The ML training MnS producer shall have a capability allowing the consumer to specify the inference type of the ML model entity to be trained. | ML training requested by consumer (clause 6.2.2.1) |
| **REQ- ML\_TRAIN-FUN-04** | The ML training MnS producer shall have a capability to provide the training result to the consumer. | ML training requested by consumer (clause 6.2.2.1), /ML training initiated by producer (clause 6.2.2.2) |
| **REQ-ML\_SELECT-01** | VOID | VOID |
| **REQ-ML\_SELECT-02** | 3GPP management system shall have the capability to enable an authorized consumer to select an ML model. | ML models and ML entity selection (clause 6.2.2.3) |
| **REQ-ML\_SELECT-03** | VOID | VOID |
| **REQ-ML\_SELECT-04** | VOID | VOID |
| **REQ-ML\_SELECT-05** | VOID | VOID |
| **REQ-ML\_SELECT-06** | The 3GPP management system shall have a capability to provide a selected ML entity to the consumer. | ML model and ML entity selection (clause 6.2.2.3) |
| **REQ-ML\_TRAIN- MGT-01** | The ML training MnS producer shall have a capability allowing an authorized consumer to manage and configure one or more requests for the training of specific ML models or ML entities, e.g. to modify the characteristics of the request or to delete a request. | ML training requested by consumer (clause 6.2.2.1),Managing ML Training Processes (clause 6.2.2.4) |
| **REQ-ML\_TRAIN- MGT-02** | The ML training MnS producer shall have a capability allowing 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. | ML training requested by consumer (clause 6.2.2.1),  Managing ML training processes (clause 6.2.2.4) |
| **REQ-ML\_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 ML model/entity training) to request for a report on the outcomes of a specific training instance. | Managing ML training processes (clause 6.2.2.4) |
| **REQ-ML\_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 ML training processes (clause 6.2.2.4) |
| **REQ-ML\_TRAIN- MGT-05** | 3GPP management system shall have the capability to enable the 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 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 training 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 AI/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 an AI/ML-inference 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 TRAINING 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 AI/ML inference function) to provide to an authorized consumer of AI/ML decisions (e.g. a controller) an AI/ML decision confidence score which is the numerical value that represents the dependability/quality of a given decision generated by the inference function. | Handling errors in data and ML decisions (clause 6.2.2.5) |

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| **End of modification** |