**TSG-SA5 Meeting #162 *S5-253840***

**, , – Revision of S5-253472**

|  |
| --- |
| *CR-Form-v12.3* |
| **CHANGE REQUEST** |
|  |
|  |  | **CR** | **draftCR** | **rev** | **-** | **Current version:** | **19.2.0** |  |
|  |
| *For* [***HE******LP***](http://www.3gpp.org/3G_Specs/CRs.htm#_blank)*on using this form: compr**ehensive instructions can be found at* [*http://www.3gpp.org/Change-Requests*](http://www.3gpp.org/Change-Requests)*.* |
|  |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***Proposed change affects:*** | UICC apps |  | ME |  | Radio Access Network | **X** | Core Network | **X** |

|  |
| --- |
|  |
| ***Title:***  | Input to draftCR Rel-19 TS 28.105 Correct pre-specialized training |
|  |  |
| ***Source to WG:*** |  |
| ***Source to TSG:*** | SA5 |
|  |  |
| ***Work item code:*** | AIML\_MGT\_Ph2 |  | ***Date:*** | 2025-08-14 |
|  |  |  |  |  |
| ***Category:*** | **F** |  | ***Release:*** | Rel-19 |
|  | *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 canbe 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)* |
|  |  |
| ***Reason for change:*** | The use case description and solution for pre-specialized training use case is not aligned with the definition of SA5#161. It is made clearer that a pre-specialized trained ML model has more than one inference type; otherwise, it is a regular ML model.Some redundancies and non-clear sentences need to be removed. |
|  |  |
| ***Summary of change:*** | Update pre-specialized training use case. |
|  |  |
| ***Consequences if not approved:*** | Use case description is confusing, likely leading to incorrect implementations. |
|  |  |
| ***Clauses affected:*** | 6.2b.2.X3 |
|  |  |
|  | **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:*** | No stage 3 |
|  |  |
| ***This CR's revision history:*** |  |

|  |
| --- |
| **1st Change** |

6.2b.2.X3 ML Pre-specialised training

ML model pre-specialised training refers to the process of training an ML Model using a dataset that is not specific to one single type of inference. This means that this type of ML model training leverages commonalities among multiple use cases. ML model pre-specialised training can be applied to AI/ML-based use cases specified in [2], and [3]. For example, an ML model could be pre-specialised trained using dataset from SLS analysis capability group covering type of inference including ServiceExperienceAnalysis, NetworkSliceThroughputAnalysis, NetworkSliceTrafficAnalysis, NetworkSliceLoadAnalysis and E2ElatencyAnalysis (see TS 28.104 []).

A pre-specialised trained ML model supports more than one inference type (i.e., it is not designed to conduct inference for a specific inference type), but this does not preclude the possibility for a pre-specialised model to conduct inference once it achieved performance requirement for a specific inference type.

A pre-specialised trained ML model can be fine-tuned to narrow down its inference scope, evolving into a new ML model with a single inference type.

|  |
| --- |
| **End of Changes** |