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

**, , – Revision of S5-253472**

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

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| ***Title:*** | Input to draftCR Rel-19 TS 28.105 Correct pre-specialized training | | | | | | | | | |
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| ***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 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:*** | | 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. | | | | | | | | |
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| ***Summary of change:*** | | Update pre-specialized training use case. | | | | | | | | |
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| ***Consequences if not approved:*** | | Use case description is confusing, likely leading to incorrect implementations. | | | | | | | | |
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| ***Clauses affected:*** | | 6.2b.2.X3 | | | | | | | | |
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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:*** | | No stage 3 | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | |  | | | | | | | | |

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| **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.

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| **End of Changes** |