**3GPP TSG-SA5 Meeting #157 *S5-246003d1***

**Hyderabad, India, 14 - 18 October 2024** revision of S5-245274

**Source: CATT**

**Title: Rel-19 pCR TR 28.858 Add possible solutions on ML model distributed training**

**Document for: Approval**

**Agenda Item: 6.19.1**

# 1 Decision/action requested

***Approval***

# 2 References

[1] Draft TR 28.858 v0.2.0: Study on AI/ML management phase 2

[2] SP-231780: "New SID: Study on AI/ML management - phase 2 "

# 3 Rationale

It is proposed to add potential solution on ML entity distributed training.

# 4 Detailed proposal

This contribution proposes to make the following changes in [1].

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| **1st change** |

### 5.1.9 ML model distributed training

#### 5.1.9.4 Possible solutions

This solution uses the instances of following IOCs for interaction between ML Training MnS producer and consumer to support the management of ML model distributed training.

1. New attribute name “isDistributedTraningSupported” for MLTrainingFunction IOC (see TS 28.105 [x]) to indicate whether the ML Training function could support ML model distributed training.
2. Introduce a new datatype for MLTrainingRequest IOC to capture the requirement from the consumer which may contain the following attributes:

- attributes which indicate the requirement for distributed training, e.g. total training time, computing resources etc.

- “suggestedTrainingNode” list which indicate suggested training nodes.

NOTE: The suggested NRM fragment structure may need to be refactored and aligned with other solutions in normative phase.

#### 5.1.x.5 Evaluation

TBD

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| **End of change** |