The AIML\_CN WID is [SP-240991](https://www.3gpp.org/ftp/tsg_sa/TSG_SA/TSGS_104_Shanghai_2024-06/Docs/SP-240991.zip).

The conclusions related to the AIML\_CN WID are in [TR 23.700-84](https://www.3gpp.org/ftp/Specs/archive/23_series/23.700-84/23700-84-100.zip), section 8.

This document is meant to be an initial list of the clauses that will be impacted by the CRs that are needed to implement the objectives of the AIML\_CN WID.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Topic** | **Specification** | **Impacted Clause** | **Reason for Change** | **Interested Companies** |
| **KI#1: Enhancements to LCS to support Direct AI/ML based Positioning** |
| **High Level feature**  | 23.273 | New clause 5.X | The AI based positioning is a new feature for LMF, introduce the AI based positioning and how to use it.  | vivo, CATT |
| **LMF supports AI positioning** | 23.273 | 4.3.8, 4.3.12, 5.1 | Proposes to enhance the NF profile of the LMF by adding its AI/ML-based positioning capability. | ZTE, vivo, CATT |
| **MTLF supports model training for AI/ML positioning** | 23.288 | 5.2, 6.2A (or new clause 6.x), 7.1, 7.5, 7.6 | MTLF should supports AI/ML based positioning model training and model provisioning for LMF to retrieve ML model.  | vivo, CATT，CMCC |
| **LMF retrieves ML models** | 23.27323.288 | New clause 6.X | Introduce how LMF retrieve ML Model to perform inference and determine location.  | vivo, |
| **Data collection from LMF** | 23.27323.288 | New clause 6.X | Introduce how MTLF/LMF collect data for Model training.  | vivo, |
| **Performance monitoring** | 23.273;23.288 | New clause 6.X | Clarify that performance monitoring is aligned with R18. | vivo, CMCC |
| **LMF event exposure to support data collection from LMF** | 23.273 | 8.3.1, new clause 8.3.x | Define LMF service that is used by the MTLF to collect data from the LMF to train ML model(s) for AI/ML based positioning. | CATT |
| **NWDAF discovery and selection for AIML based positioning** | 23.501 | 6.3.13, 6.2.6.2 | Add the capability of ML model training for AI/ML based positioning for NWDAF discovery and selection. | CATT |
| **NWDAF discovery for AIML based positioning via NRF** | 23.502 | 5.2 | Modify the NRF services to support discovering MTLF capable of provisioning trained ML model for AI/ML based positioning. | CATT |
| **KI#2: 5GC Support for Vertical Federated Learning** |
| **High level feature for VFL** | 23.288 | New clause 5.X | High level introduces the VFL.  | vivo,CMCC |
| **NWDAF supports VFL** | 23.288 | 5.2, new clause 6.2X | Proposes to enhance the NF profile of the NWDAF by adding its VFL capability.  | vivo,  |
| **AF supports VFL** | 23.502 | 4.15, 5.2.7.2,  | Introduce that NEF may help AF to register its VFL capability.  | vivo, |
| **NWDAF register feature info for feature alignment** | 23.288  | 5.2, new clause 6.2X | Proposes to enhance the NF profile of the NWDAF by adding its supporting feature info for feature alignment. | vivo, |
| **Sample alignment (NWDAF as Server)** | 23.288 | new clause 6.2X | Introduce the procedure of how to perform sample alignment when the NWDAF is VFL Server.  | vivo, |
| **Sample alignment (AF as Server)** | 23.288 | new clause 6.2X | Introduce the procedure of how to perform sample alignment when the AF is VFL Server. | vivo, |
| **VFL training (NWDAF as Server)** | 23.288 | new clause 6.2X | Introduce the procedure of how to perform VFL training when the NWDAF is VFL Server. | vivo, CMCC |
| **VFL training (AF as Server)** | 23.288 | new clause 6.2X | Introduce the procedure of how to perform VFL training when the AF is VFL Server. | vivo, |
| **VFL Inference (NWDAF as Server)** | 23.288 | new clause 6.2X | Introduce the procedure of how to perform VFL inference when the NWDAF is VFL Server. | vivo, CMCC |
| **VFL Inference (AF as Server)** | 23.288 | new clause 6.2X | Introduce the procedure of how to perform VFL inference when the AF is VFL Server. | vivo, |
| **Performance monitoring** | 23.288 | new clause 6.2X | Clarify that performance monitoring is aligned with R18. | vivo, CMCC |
| **KI#3: NWDAF-assisted policy control and QoS enhancement** |
| **NWDAF provides assistance info analytics** | 23.288 | New clause 6.X | Enhancement or new analytics for NWDAF to provide assistance information to assist Policy control and QoS enhancement.  | CATT |
| **New feature introduction**  | 23.503 | 6.1.1.3 | Introduce the new feature information. | CATT |
| **Model provisioning** | 23.288 | 6.2A.2 | Add QoS policy assistance information specific parameters for ML model provisioning. | CATT |
| **Performance monitoring** | 23.288 | Subclause of new clause 6.X | Add descriptions on accuracy monitoring for QoS policy assistance information analytics and ML model. | CATT |
| **NWDAF service enhancements** | 23.288 | 7.2.2, 7.3.2, 7.5.2, 7.6.2 | Modify NWDAF service operations to support QoS policy assistance information analytics and ML model provisioning. | CATT |
| **KI#4: NWDAF-assisted Network Abnormal Behaviour Mitigation and Prevention** |
| **New analytics ID to support Signalling storm Mitigation and Prevention** | 23.288 | New clause 6.X | New analytics ID to support Signalling storm Mitigation and Prevention | SK Telecom, vivo, CMCC |
| **New feature introduction** | 23.501 |  | Introduce the new feature information.  | vivo,  |
| **New NF Service Discovery** | 23.502 | 5.2.7 | Introduce the influence of the new Service.  | vivo,  |
|  |  |  |  |  |