**3GPP TSG-SA WG1 Meeting #97e S1-220107-Samsung**

**Electronic Meeting, 14 – 24 Feb. 2022**

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| *CR-Form-v12.1* |
| **CHANGE REQUEST** |
|  |
|  | **22.261** | **CR** | **0634** | **rev** | **-** | **Current version:** | **18.5.0** |  |
|  |
| *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 | **X** | Radio Access Network | **X** | Core Network | **X** |

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| ***Title:***  | Clarification of 5GC assistance for FL member selection  |
|  |  |
| ***Source to WG:*** | OPPO |
| ***Source to TSG:*** | SA1 |
|  |  |
| ***Work item code:*** | AMMT |  | ***Date:*** | 2021-10-23 |
|  |  |  |  |  |
| ***Category:*** | **B** |  | ***Release:*** | Rel-18 |
|  | *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-15 (Release 15)Rel-16 (Release 16)Rel-17 (Release 17)Rel-18 (Release 18)* |
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| ***Reason for change:*** | For 5GS, it has some data or information which the 3rd party does not have. For example, the 5GS can have some analytics/prediction abour QoS performance, connection lost probability, trajectory information etc. of UEs served by the network, this information from 5GC could assist 3rd party to select suitable member for FL. A proper member selection could improve training performance for any machine learning operation such as accuracy and convergence speed). Therefore, the 5GS can provide 3rd party some valuable information for candidate UE selection.As the FL member selection has been captured in TR22.874 clause “conclusion and recommendations”, it is proposed to add it in TS 22.261 as well. |
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| ***Summary of change:*** | Clarify the requirement of 5GS assisted FL member selection into 22.261 |
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| ***Consequences if not approved:*** | Some requirements are missed  |
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| ***Clauses affected:*** | 6.40 |
|  |  |
|  | **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:*** |  |
|  |  |
| ***This CR's revision history:*** |  |

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Start of Change \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

### 6.40.2 Requirements

Based on operator policy, the 5G system shall be able to provide means to allow an authorized third-party to monitor the resource utilisation of the network service that is associated with the third-party.

NOTE 1: Resource utilization in the preceding requirement refers to measurements relevant to the UE’s performance such as the data throughput provided to the UE.

Based on operator policy, the 5G system shall be able to provide an indication about a planned change of bitrate, latency, or reliability for a QoS flow to an authorized 3rd party so that the 3rd party AI/ML application is able to adjust the application layer behaviour if time allows. The indication shall provide the anticipated time and location of the change, as well as the target QoS parameters.

Based on operator policy, 5G system shall be able to provide means to predict and expose predicted network condition changes (i.e. bitrate, latency, reliability) per UE, to an authorized third party.

Subject to user consent, operator policy and regulatory constraints, the 5G system shall be able to support a mechanism to expose monitoring and status information of an AI-ML session to a 3rd party AI/ML application.

NOTE 2: Such mechanism is needed for AI/ML application to determine an in-time transfer of AI/ML model.

5G system shall be able to provide event alerting to an authorized 3rd party, together with a predicted time of the event (e.g., alerting about traffic congestion or UE moving into/out of a different geographical area).

NOTE 3: A 3rd party AI/ML application may use the prediction information to minimize disturbance in the transfer of learning data and AI/ML model data.

The 5G system shall be able to expose aggregated QoS parameter values for a group of UEs to an authorized service provider.

The 5G system shall be able to support an authorised 3rd party to change aggregated QoS parameter values associated with a group of UEs, e.g. UEs of a FL group.

Subject to user consent, operator policy and regulatory requirements, the 5G system shall be able to expose information (e.g. candidate UEs) to an authorized 3rd party to assist the 3rd party to determine member(s) of a group of UEs, e.g. UEs of a FL group.\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*End of Change\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*