**Post SA2#148E e-meeting Email Discussion**

**Source: China Mobile, vivo**

**Title: Email discussion on Rel-18 FS\_eNA\_Ph3**

# 1. Work Tasks for Rel-18 FS\_eNA\_Ph3

## 1.1 Importance of Work Tasks

### 1.1.1 Work Tasks Description

The “ Study on Enablers for Network Automation for 5G - phase 3” (FS\_eNA\_Ph3) was approved at SA2#148E e-meeting in S2-2109361, which contains the following Work Tasks and TU estimation.

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| --- | --- | --- | --- | --- |
| **Work Task ID** | **Work Task Description** | **RAN Dependency****(Yes/No/Maybe)**  | **TU Estimate****(14 + 9 )** | **Inter Work Tasks Dependency**  |
| WT#1.1 | whether and how new types of output need to be provided by NWDAF and how would those outputs be defined  | NO | 0.5+0.5 | WT#1.1 is self-contained |
| WT#1.2 | Study possible mechanisms for improved correctness of NWDAF analytics | NO | 0.5+0.5 | WT#1.2 is self-contained |
| WT#2.1 | Whether and how NWDAF can assist application detection | NO | 1+0.5 | WT#2.1 is self-contained |
| WT#2.2 | Whether and how to support data and analytics exchange in roaming case (including network sharing) | NO | 1+0.5 | WT#2.2 is self-contained |
| WT#3.1 | data collection and data storage enhancements (including DCCF and ADRF enhancements, e.g., DCCF relocation, ADRF selection, ML model storage) | NO | 0.5+0.5 | WT#3.1 is self-contained |
| WT#3.2 | Whether and how to enhance trained ML Model sharing for different vendors | NO | 1+0.5 | WT#3.2 is self-contained |
| WT#3.3 | UPF data report to NWDAF to support UPF data report for analytics as specified in R16/R17 and additional UPF data identified in R18 | NO | 0.5+0.5 | WT#3.3 is self-contained, but may coordinate with SID FS\_UPCAS |
| WT#3.4 | Study whether and how interactions between NWDAF can leverage MDAS/MDAF functionality for data collection and analytics | NO | 1+0.5 | WT#3.4 is self-contained |
| WT#3.5 | Enhancements related to analytics subscription transfer between NWDAFs (i.e. when analytics are for a group of UEs) | NO | 0.5+0.5 | WT#3.5 is self-contained |
| WT#3.6 | Impact of non-typical situations (e.g. un-scheduled events, disaster) on data collection and analytics | NO | 0.5+0.5 | WT#3.6 is self-contained |
| WT#3.7 | NWDAF-assisted URSP | NO | 1+0.5 | WT#3.7 is self-contained |
| WT#3.8 | enhancements on QoS Sustainability analytics | NO | 1+0.5 | WT#3.8 is self-contained except that “Investigate QoS prediction in Multi-MNO/Cross-border environments” is related with WT#2.2. |
| WT#4.1 | Study whether and how to enhance architecture to support federated learning in the 5GC | NO | 2+1 | WT#4.1 is self-contained |
| WT#4.2 | NWDAF enhancements considering the finer granularity of location information than TA and cell level | NO | 0. 5+0.5 | WT#4.2 is self-contained  |
| WT#4.3 | NWDAF enhancements considering inputs from SCP | NO | 0.5+0.5 | WT#4.3 is self-contained  |
| WT#4.4 | Study whether and how UE consume data analytics from NWDAF | NO | 1+0.5 | WT#4.4 is self-contained |
| WT#4.5 | Study whether and how to enhance architecture to support online learning in the 5GC | NO | 1+0.5 | WT#4.5 is self-contained |

### 1.1.2 Companies View for the Work Tasks

**Question 1: Whether or not WT#X is essential to be included in Rel-18 FS\_eNA\_Ph3 SID?**

**Please indicate the reason why you think the corresponding WT is not essential in case that Company View is marked as “NO”.**

#### 1.1.2.1 WT#1.1

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| --- | --- | --- |
| Company Name  | Company View(Yes/No) | Notes(View on importance of the particular Work Task and whether this task is required to be included in Rel-18. Provide the rationale and justification for the proposal e.g. deployment scenarios, design choices, etc.) |
| CMCC | Yes | Beyond current types of output, new type of output can be investigated to improve the network automation. |
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#### 1.1.2.2 WT#1.2

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| --- | --- | --- |
| Company Name  | Company View(Yes/No) | Notes(View on importance of the particular Work Task and whether this task is required to be included in Rel-18. Provide the rationale and justification for the proposal e.g. deployment scenarios, design choices, etc.) |
| CMCC | No | This WT is not urgent in R18 and could be studied in the future Release. |
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#### 1.1.2.3 WT#2.1

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| Company Name  | Company View(Yes/No) | Notes(View on importance of the particular Work Task and whether this task is required to be included in Rel-18. Provide the rationale and justification for the proposal e.g. deployment scenarios, design choices, etc.) |
| CMCC | Yes | NWDAF can assist to improve the performance of application detection. More service flow are encrypted e.g. based on HTTPS, which lead to the result that the DPI (Deep Packet Inspection) becomes not valid for the application detection. We see the use case and propose to have a prediction from NWDAF. The consumer could be PFDF or SMF. |
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#### 1.1.2.4 WT#2.2

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| Company Name  | Company View(Yes/No) | Notes(View on importance of the particular Work Task and whether this task is required to be included in Rel-18. Provide the rationale and justification for the proposal e.g. deployment scenarios, design choices, etc.) |
| CMCC | No | This WT is not urgent in R18 and could be studied in the future Release. |
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#### 1.1.2.5 WT#3.1

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| Company Name  | Company View(Yes/No) | Notes(View on importance of the particular Work Task and whether this task is required to be included in Rel-18. Provide the rationale and justification for the proposal e.g. deployment scenarios, design choices, etc.) |
| CMCC | Yes | It is essential to enhance the current mechanism of data collection and data storage. |
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#### 1.1.2.6 WT#3.2

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| --- | --- | --- |
| Company Name  | Company View(Yes/No) | Notes(View on importance of the particular Work Task and whether this task is required to be included in Rel-18. Provide the rationale and justification for the proposal e.g. deployment scenarios, design choices, etc.) |
| CMCC | Yes | It is essential to enhance the current mechanism of trained ML Model so as to share it among different vendors, which is valuable for the operators. |
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#### 1.1.2.7 WT#3.3

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| Company Name  | Company View(Yes/No) | Notes(View on importance of the particular Work Task and whether this task is required to be included in Rel-18. Provide the rationale and justification for the proposal e.g. deployment scenarios, design choices, etc.) |
| CMCC | Yes | It is essential to support UPF data report to NWDAF. |
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#### 1.1.2.8 WT#3.4

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| Company Name  | Company View(Yes/No) | Notes(View on importance of the particular Work Task and whether this task is required to be included in Rel-18. Provide the rationale and justification for the proposal e.g. deployment scenarios, design choices, etc.) |
| CMCC | Neutral | This WT seems not urgent in R18 and could be studied in the future Release. |
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#### 1.1.2.9 WT#3.5

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| Company Name  | Company View(Yes/No) | Notes(View on importance of the particular Work Task and whether this task is required to be included in Rel-18. Provide the rationale and justification for the proposal e.g. deployment scenarios, design choices, etc.) |
| CMCC | Neutral | This WT seems not urgent in R18 and could be studied in the future Release. |
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#### 1.1.2.10 WT#3.6

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| Company Name  | Company View(Yes/No) | Notes(View on importance of the particular Work Task and whether this task is required to be included in Rel-18. Provide the rationale and justification for the proposal e.g. deployment scenarios, design choices, etc.) |
| CMCC | No | This WT seems to address the rare case and not urgent in R18 and could be studied in the future Release. |
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#### 1.1.2.11 WT#3.7

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| Company Name  | Company View(Yes/No) | Notes(View on importance of the particular Work Task and whether this task is required to be included in Rel-18. Provide the rationale and justification for the proposal e.g. deployment scenarios, design choices, etc.) |
| CMCC | Yes | NWDAF-assisted URSP potential solution could help to provide analytics to adjust the UE URSP rules. |
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#### 1.1.2.12 WT#3.8

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| Company Name  | Company View(Yes/No) | Notes(View on importance of the particular Work Task and whether this task is required to be included in Rel-18. Provide the rationale and justification for the proposal e.g. deployment scenarios, design choices, etc.) |
| CMCC | Yes |  |
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#### 1.1.2.13 WT#4.1

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| Company Name  | Company View(Yes/No) | Notes(View on importance of the particular Work Task and whether this task is required to be included in Rel-18. Provide the rationale and justification for the proposal e.g. deployment scenarios, design choices, etc.) |
| CMCC | Yes | To improve the data training efficience and protect data privacy, it would be essential to enhance architecture to support federated learning in the 5GC. |
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#### 1.1.2.14 WT#4.2

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| Company Name  | Company View(Yes/No) | Notes(View on importance of the particular Work Task and whether this task is required to be included in Rel-18. Provide the rationale and justification for the proposal e.g. deployment scenarios, design choices, etc.) |
| CMCC | Neutral | This WT seems not urgent in R18 and could be studied in the future Release. |
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#### 1.1.2.15 WT#4.3

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| Company Name  | Company View(Yes/No) | Notes(View on importance of the particular Work Task and whether this task is required to be included in Rel-18. Provide the rationale and justification for the proposal e.g. deployment scenarios, design choices, etc.) |
| CMCC | Neutral | This WT seems not urgent in R18 and could be studied in the future Release. |
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#### 1.1.2.16 WT#4.4

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| Company Name  | Company View(Yes/No) | Notes(View on importance of the particular Work Task and whether this task is required to be included in Rel-18. Provide the rationale and justification for the proposal e.g. deployment scenarios, design choices, etc.) |
| CMCC | Yes | It is benefitial to extend the current mechanism so that UE can consume data analytics from NWDAF. |
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#### 1.1.2.17 WT#4.5

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| Company Name  | Company View(Yes/No) | Notes(View on importance of the particular Work Task and whether this task is required to be included in Rel-18. Provide the rationale and justification for the proposal e.g. deployment scenarios, design choices, etc.) |
| CMCC | Neutral | This WT is useful to improve correctness of NWDAF analytics. However, it seems not urgent in R18 and could be studied in the future Release if timeframe is not allowed. |
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### 1.x.3 Summary

Editor’s Note: This clause should contain the brief summary of companies view e.g. n# of companies prefer to go with option A vs. m# of companies prefer to go with option B.

### 1.x.4 Proposed Way Forward

Editor’s Note: This clause should contain propose a way forward. For e.g. Given that majority of companies prefer to go with option A, it is proposed that Option A is agreed as way forward.