**3GPP TSG-CT WG1 Meeting #139C1-226825**

**Toulouse, France, 14th – 18th November 2022**

**3GPP TSG-CT WG3 Meeting #125C3-225042**

**Toulouse, France, 14th – 18th November 2022**

**3GPP TSG-CT WG4 Meeting #113 C4-225133**

**Toulouse, France, 14th – 18th November 2022**

**Source: Nokia, Nokia Shanghai Bell**

**Title:** **New WID on support for 5WWC, Phase 2**

**Document for: Approval**

**Agenda Item:** **18.1.1 (CT1) / 18.1.1 (CT3) / 5 (CT4)**

3GPP™ Work Item Description

Information on Work Items can be found at <http://www.3gpp.org/Work-Items>
See also the [3GPP Working Procedures](http://www.3gpp.org/specifications-groups/working-procedures), article 39 and the TSG Working Methods in [3GPP TR 21.900](http://www.3gpp.org/ftp/Specs/html-info/21900.htm)

Title: Support for 5WWC Phase 2

Acronym: 5WWC\_Ph2

Unique identifier: XXXXX

Potential target Release: Rel-18

# 1 Impacts

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Affects: | UICC apps | ME | AN | CN | Others (specify) |
| Yes |  | X |  | X |  |
| No | X |  | X |  | X |
| Don't know |  |  |  |  |  |

# 2 Classification of the Work Item and linked work items

## 2.1 Primary classification

### This work item is a …

|  |  |
| --- | --- |
|  | Feature |
| X | Building Block |
|  | *Work Task* |
|  | Study Item |

## 2.2 Parent Work Item

For a brand-new topic, use “N/A” in the table below. Otherwise indicate the parent Work Item.

|  |
| --- |
| Parent Work / Study Items  |
| Acronym | Working Group | Unique ID | Title (as in 3GPP Work Plan) |
| 5WWC\_Ph2 | SA2 | 970010 | Support for 5WWC Phase 2 |

### 2.3 Other related Work Items and dependencies

|  |
| --- |
| Other related Work /Study Items (if any) |
| Unique ID | Title | Nature of relationship |
| 830015 | CT aspects of wireless and wireline convergence for the 5G system architecture | CT Rel-16 normative work for supporting Trusted Non-3GPP access network and Wireline Access network  |

# 3 Justification

As part of TEI17\_N3SLICE it has not been possible to work on how to select a N3IWF that supports the S-NSSAI(s) requested by the UE during registration via trusted or untrusted non-3GPP access network because TEI17\_N3SLICE had the constraint not to impact the UE.

SA2 has initiated the normative work for wireless and wireline convergence for the 5G system, phase 2 (5WWC\_Ph2). The SA2 work item intends to cover how to select a N3IWF that supports the S-NSSAI(s) requested by the UE during registration via untrusted non-3GPP access network.

This CT work item intends to address the stage-3 normative work for 5WWC\_Ph2.

# 4 Objective

The objective of this work item is to specify the CT aspects of the wireless and wireline convergence for the 5G system, phase 2, to support the stage 2 requirements developed by the SA WGs for 5WWC\_Ph2 work item.

The CT work shall be started only after the applicable normative SA2 requirements are available.

Editor's note: Possible additional impacts on the CT WID due to SA2 progress of normative work are FFS.

Editor's note: Any impact on the CT WID due to SA3 aspects is FFS and is waiting for SA3 conclusion.

The expected work per the TSG CT working group includes:

For CT1:

1- Updates related to selection of N3IWF that supports the S-NSSAI(s) needed by the UE. That includes:

1a- Updating the ANDSP sent from the PCF to the UE with information related to slice-based N3IWF selection.

1b- Updating 5GS NAS registration procedure and signalling to allow the UE to indicate to the network its support of slice-based N3IWF selection and to allow the network to reject the registration request over non-3GPP access when the selected N3IWF is not appropriate for the requested slices, with optionally providing target N3IWF information.

1c- Updates related to N3IWF selection procedure performed by the UE based on the received N3IWF information from the network to support slice-based N3IWF selection.

For CT3:

1- Enhance UE Policy Association API to pass the Configured NSSAI from the AMF to the V-PCF to be considered for ANDSP policies that may contain slicing-related N3IWF information.

Editor's note: It is FFS if the above applies also for TNGF selection and if it is needed to enhance UE Policy Association API and/or procedures to enable the PCF to inform the AMF about the status of the deployment of UE policies.

For CT4:

1- Definition of the Prefixed N3IWF OI FQDN and the Prefixed N3IWF TA FQDN for Slice-specific N3IWF address resolution.

# 5 Expected Output and Time scale

|  |
| --- |
| New specifications {One line per specification. Create/delete lines as needed} |
| Type  | TS/TR number | Title | For info at TSG#  | For approval at TSG# | Rapporteur |
| N/A |  |  |  |  |  |

|  |
| --- |
| Impacted existing TS/TR {One line per specification. Create/delete lines as needed} |
| TS/TR No. | Description of change  | Target completion plenary# | Remarks |
| TS 24.501 | -Updating 5GS NAS registration procedure and signalling to support slice-based N3IWF selection | TSG CT#102 (Dec 2023) | CT1 responsibility |
| TS 24.502 | -Updates related to N3IWF selection procedure performed by the UE based on the received N3IWF information from the network to support slice-based N3IWF selection | TSG CT#102 (Dec 2023) | CT1 responsibility |
| TS 24.526 | -Updating the ANDSP sent from the PCF to the UE with information related to slice-based N3IWF selection | TSG CT#102 (Dec 2023) | CT1 responsibility |
| TS 29.513 | Potential updates to UE Policy Association related procedures | TSG CT#102 (Dec 2023) | CT3 responsibility |
| TS 29.525 | Updates to provide the Configured NSSAI from the AMF to the PCF | TSG CT#102 (Dec 2023) | CT3 responsibility |
| TS 23.003 | Definition of the Prefixed N3IWF OI FQDN and the Prefixed N3IWF TA FQDN for Slice-specific N3IWF address resolution | TSG CT#102 (Dec 2023) | CT4 responsibility |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

# 6 Work item Rapporteur(s)

Nassar, Mohamed A. (Nokia)

mohamed.a.nassar@nokia.com

# 7 Work item leadership

CT1.

# 8 Aspects that involve other WGs

SA3 for security aspects.

SA5 for management aspects.

# 9 Supporting Individual Members

|  |
| --- |
| Supporting IM name |
| Nokia |
| Nokia Shanghai Bell |
| Charter Communications |
| Lenovo |
| Deutsche Telekom |
| Qualcomm Incorporated |
| Huawei |
| CableLabs |
|  |