**3GPP TSG-CT3 Meeting #137 *C3-245482***

**Hefei, China, 14th Oct 2024 - 18th Oct 2024 revision of C3-245236**

**Source: Nokia**

**Title: New WID on Common API Framework (CAPIF) Phase 3**

**Document for: Approval**

**Agenda Item: 19.2**

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: Common API Framework (CAPIF) Phase 3

Acronym: CAPIF\_Ph3

Unique identifier: xxx

Potential target Release: Rel-19

# 1 Impacts

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

# 2 Classification of the Work Item and linked work items

## 2.1 Primary classification

### This work item is a …

|  |  |
| --- | --- |
|  | Study  |
|  | Normative – Stage 1 |
|  | Normative – Stage 2 |
| X | Normative – Stage 3 |
|  | Normative – Other\* |

**\* Other = e.g. testing**

## 2.2 Parent Work Item

|  |
| --- |
| Parent Work / Study Items  |
| Acronym | Working Group | Unique ID | Title (as in 3GPP Work Plan) |
| CAPIF\_Ph3 | SA6 | 1050035 | CAPIF Phase 3 |

### 2.3 Other related Work Items and dependencies

|  |
| --- |
| Other related Work /Study Items (if any) |
| Unique ID | Title | Nature of relationship |
| 1020025 | Study on security aspects of CAPIF Phase 3 | Security aspects of CAPIF\_Ph3 |
| 960012 | Application enablement aspects for subscriber-aware northbound API access (SNAAPP) | Addressing left-overs of SNAAPP and further enhancements. |
| 990048 | Security aspects of SNAPP (SNAAPPY) | Security procedures to support RNAA which will be considered as baseline for the study. |
| 1040015 | Study on Charging Aspects of CAPIF | Charging aspects of CAPIF |
| 1020022 | Enhanced OAM for management exposure to external consumers (MExpo) | SA5 gap analysis of CAPIF to support exposure of management services. |

**Dependency on non-3GPP (draft) specification: none**

# 3 Justification

The stage-2 work of CAPIF\_Ph3 started at SA#102 with the SA6 new study item on CAPIF Phase 3 (FS\_CAPIF\_Ph3). The key issues, solutions, and conclusions of the SA6 study are captured in TR 23.700-22. The conclusions specified in TR 23.700-22 will be the base for the normative stage-2 work in SA6.

In addition, a new SA6 work item "Common API Framework (CAPIF) Phase 3" was approved by TSG at SA#105, see SP-241381.

Considering the above, impacts on protocols, services and interfaces under CT WGs' responsibilities are foreseen and the related work in CT WGs should be carried out within Rel-19.

Based on normative progress of stage 2, this WID will be updated as needed.

# 4 Objective

The objective of this work item is to specify the Common API Framework (CAPIF) Phase 3. The stage-3 work shall be started after the applicable normative stage-2 requirements are available.

The stage-3 aspects will include the following (CT WGs impact areas will be identified based on the progress in the normative stage-2 work):

**CT3:**

For CT3, based on Rel-19 normative stage-2 work expected to be developed in 3GPP TS 23.222, the expected work includes:

1. CAPIF protocol enhancements for alignment of updated CAPIF stage 2 requirements (e.g. new IEs of new or existing CAPIF APIs).
	* 1. Potential impacts to the CAPIF\_Publish\_Service\_API, CAPIF\_Discover\_Service\_API and CAPIF\_Security\_API to support service operation level and resource level access control to service APIs.
		2. Potential impacts to the CAPIF\_Security\_API to support more granular information on the API Invoker in the context of RNAA, the purpose of data processing and nested API invocation.
		3. Potential enhancements of CAPIF-8 for alignment of updated CAPIF stage 2 requirements.
		4. Potential enhancements to enable instantiation for service API/AEF.
		5. Potential enhancements to CAPIF event notifications and onboarding procedures related to API invokers.

**CT1:**

Editor’s Note: Whether CT1 is impacted and expected work to be done, based on Rel-19 normative stage-2 work expected to be developed in 3GPP TS 23.222, is FFS.

# 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 |
|  |  |  |  |  |  |

|  |
| --- |
| Impacted existing TS/TR {One line per specification. Create/delete lines as needed} |
| TS/TR No. | Description of change  | Target completion plenary# | Remarks |
| 29.222 | See section 4 on objective | TSG CT#109 (September 2025) | CT3 |

# 6 Work item Rapporteur(s)

Paul, Bhaskar, Nokia, bhaskar.paul@nokia.com

# 7 Work item leadership

CT3

# 8 Aspects that involve other WGs

SA3 on aspects related to security and privacy for CAPIF and API exposure.

# 9 Supporting Individual Members

|  |
| --- |
| Supporting IM name |
| Nokia |
| Ericsson |
| Verizon |
| Huawei |
| ZTE |
| China Telecom |
| NTT DOCOMO |
| InterDigital |
| AT&T |
| China Mobile |