**3GPP TSG-CT3 Meeting #130C3-234xxx**

**Xiamen, China, 9th – 13th October 2023 was C3-234124**

**3GPP TSG-CT1 Meeting #144C1-237214**

**Xiamen, China, 9th – 13th October 2023**

(was CP-231284)

**Source: Huawei, HiSilicon**

**Title: Revised WID on CT aspects of SEAL data delivery enabler for vertical applications**

**Document for: Agreement**

**Agenda Item: 18.1.2**

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: CT aspects of SEAL data delivery enabler for vertical applications

Acronym: SEALDD

Unique identifier: 980044

Potential target Release: Rel-18

# 1 Impacts

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

# 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

|  |  |  |  |
| --- | --- | --- | --- |
| Parent Work / Study Items | | | |
| Acronym | Working Group | Unique ID | Title (as in 3GPP Work Plan) |
| SEALDD | SA6 | 970037 | SEAL data delivery enabler for vertical applications |

### 2.3 Other related Work Items and dependencies

|  |  |  |
| --- | --- | --- |
| Other related Work /Study Items (if any) | | |
| Unique ID | Title | Nature of relationship |
| 930013 | Study on SEAL data delivery enabler for vertical applications | SA6 study item |

# 3 Justification

SEAL data delivery enabler for vertical applications (SEALDD) is a Rel-18 SA WG6 work which impacts the CT WGs (see WID in SP-220914).

The SA WG6 are specifying a new SEAL data delivery enabler service to support different types of vertical applications under the SEALDD work item. A new stage-2 specification is being developed (i.e., TS 23.433 on SEAL data delivery enabler for vertical applications) as well as updates are being done to TS 23.434 and TS 23.558.

Additionally, SA WG1 provides the necessary service requirements in TS 22.261 and TS 22.104. Application content/data delivery service can be implemented as an application enabler layer capability, and provided by PLMN/third party to application provider.

The related SA WG6 study item on SEAL data delivery enabler for vertical applications (FS\_SEALDD) is captured in TR 23.700-34.

# 4 Objective

The objective of this building block is to specify the CT aspects of SEAL data delivery enabler for vertical applications in order to define the necessary protocol aspects based on the stage-2 requirements developed by the SA WG6. The stage-3 work shall be started only after the applicable normative stage-2 requirements are available.

The following areas of work will include the following (non-exhaustive, additional areas can be identified based on the progress in the normative stage-2 work in SA WG6).

For CT1, the expected work includes:

a) to define protocol for SEAL data delivery management based on normative stage-2 work developed in 3GPP TS 23.433;

- support for end-to-end redundant transport;

- data delivery enabled data storage;

- data delivery coordination with EEL;

- data delivery service discovery and selection; and

- data delivery distribution.

b) potential enhancements to the service enabler architecture layer for verticals (SEAL) layer protocols for data delivery management;

c) enhancements to MSGin5G service, VAE layer, and UAE layer to use SEAL data delivery management.

For CT3, the expected work includes:

a) the definition of the APIs exposed by the SEALDD server (i.e. protocol for SEALDD-S and SEALDD-E interfaces) for SEAL data delivery management based on normative stage-2 work developed in 3GPP TS 23.433;

b) updates to the SEAL specification to support the new SEAL Server, i.e., SEALDD Server;

c) enhancements to support the SEALDD server (acting as EAS) with seamless transport layer service continuity capability; and

d) enhancements to the N6 interface to support SEAL Data Delivery services.

# 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 |
| TS | 24.543 | Data delivery management - Service Enabler Architecture Layer for Verticals (SEAL); Protocol Specification; | TSG CT #101 (December 2023) | TSG CT #103 (March 2024) | CT1  The TS will define the SEAL protocol specifications for data delivery management.  Rapporteur:  Herrero Veron, Christian (Huawei)  Christian.Herrero at huawei.com |
| TS | 29.548 | Service Enabler Architecture Layer for Verticals (SEAL); SEAL Data Delivery (SEALDD) Server Services; Stage 3 | TSG CT#102 (Dec. 2023) | TSG CT#103 (March 2024) | CT3  This TS will define the APIs exposed by the SEALDD Server.  Rapporteur:  Abdessamad El Moatamid, Huawei, [abdessamad.el.moatamid@huawei.com](mailto:abdessamad.el.moatamid@huawei.com) |

|  |  |  |  |
| --- | --- | --- | --- |
| Impacted existing TS/TR {One line per specification. Create/delete lines as needed} | | | |
| TS/TR No. | Description of change | Target completion plenary# | Remarks |
| 24.548 | Possible update to network resource management SEAL service protocol | TSG CT #103 (March 2024) | CT1 |
| 24.538 | Update to use SEAL data delivery management for MSGin5G service | TSG CT #103 (March 2024) | CT1 |
| 24.486 | Update to use SEAL data delivery management for VAE layer | TSG CT #103 (March 2024) | CT1 |
| 24.527 | Update to use SEAL data delivery management for UAE layer | TSG CT #103 (March 2024) | CT1 |
| 29.549 | Updates to support the new SEAL Server, i.e., the SEALDD Server | TSG CT #103 (March 2024) | CT3 |
| 29.558 | Enhancements to support the SEALDD server (acting as EAS) with transport layer service continuity capability. | TSG CT#103 (March 2024) | CT3 |
| 29.561 | Enhancements to support SEAL Data Delivery services. | TSG CT#103 (March 2024) | CT3 |

# 6 Work item Rapporteur(s)

Herrero Veron, Christian (Huawei)

Christian.Herrero at huawei.com

# 7 Work item leadership

CT1

# 8 Aspects that involve other WGsw

SA6 for the architectural aspects.

# 9 Supporting Individual Members

|  |
| --- |
| Supporting IM name |
| Huawei |
| HiSilicon |
| CATT |
| China Mobile |
| TD-Tech |