**3GPP TSG-SA5 Meeting #154 *S5-241829***

Changsha, China, 15 - 19 April 2024 (revision of S5-241744)

**Source: Ericsson AB**

**Title: New WID on charging enhancement for disaster roaming**

**Document for: Agreement**

**Agenda Item: 7.2**

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: Charging enhancement for disaster roaming

Acronym: CHMINT

Unique identifier: TBD

Potential target Release: Rel-19

# 1 Impacts

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Affects: | UICC apps | ME | AN | CN | Others (specify) |
| Yes |  |  |  | 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 …

|  |  |
| --- | --- |
|  | Study  |
|  | Normative – Stage 1 |
| X | 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) |
| N/A |  |  |  |

### 2.3 Other related Work Items and dependencies

|  |
| --- |
| Other related Work /Study Items (if any) |
| Unique ID | Title | Nature of relationship |
| N/A |  |  |

# 3 Justification

3GPP SA2 has specified support of Disaster Roaming with Minimization of Service Interruption for 5G systems in TS 23.501 clause 5.40. This may under a disaster condition, as defined in TS 22.261, allow a UE to select PLMNs than it is normally not allowed to access. This can be done by a combination of procedures, where the UE is enabled for disaster roaming by the HPLMN, and that the NG-RAN in the PLMN that provides Disaster Roaming service, broadcasts an indication of accessibility for Disaster Roaming service. The visited PLMN will then have UEs that it may not have roaming agreements for or special disaster roaming agreements. The usage for theses inbound roaming UEs will indicate which PLMN they belong to and that they are inbound roamer.

There is currently no indication on that a UE is disaster inbound roamer towards charging.

# 4 Objective

The objective of this work item is to allow the visited PLMN to get an indication the roaming condition for charging purposes:

- WT-1: adding disaster inbound roaming indication for convergent charging

## TU estimates and dependencies

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Work Task ID | TU Estimate(Study) | TU Estimate(Normative) | RAN Dependency(Yes/No/Maybe)  | SA Dependency(Yes/No/Maybe) | Non-3GPP Dependency(Yes/No/Maybe) |
| WT-1 | 0 | 1 | No | No | No |

Total TU estimates for the study phase: 0

Total TU estimates for the normative phase: 1

Total TU estimates: 1

# 5 Expected Output and Time scale

|  |
| --- |
| New specifications |
| Type  | TS/TR number | Title | For info at TSG#  | For approval at TSG# | Rapporteur |
|  |  |  |  |  |  |

|  |
| --- |
| Impacted existing TS/TR |
| TS/TR No. | Description of change  | Target completion plenary# | Remarks |
| 32.255 | New roaming condition | TSG SA#106 (Dec 2024) |  |
| 32.256 | New roaming condition | TSG SA#106 (Dec 2024) |  |
| 32.291 | Update Nchf\_ConvergedCharging service API with definitions with roaming condition | TSG SA#107 (Mar 2025) |  |
| 32.298 | Update CHF CDR(s) definition and ASN.1 with definitions with roaming condition | TSG SA#106 (Mar 2025) |  |

# 6 Work item Rapporteur(s)

# 7 Work item leadership

SA5

# 8 Aspects that involve other WGs

# 9 Supporting Individual Members

|  |
| --- |
| Supporting IM name |
| Ericsson AB |
| MATRIXX Software |
|  |
|  |
|  |
|  |