**3GPP TSG-CT WG1 Meeting #136-eC1-223653**

**E-Meeting, 12th – 20th May 2022**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *CR-Form-v12.1* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **24.501** | **CR** | **4350** | **rev** | **1** | **Current version:** | **17.6.1** |  |
|  | | | | | | | | |
| *For* [***HE******LP***](http://www.3gpp.org/3G_Specs/CRs.htm#_blank)*on using this form: comprehensive instructions can be found at* [*http://www.3gpp.org/Change-Requests*](http://www.3gpp.org/Change-Requests)*.* | | | | | | | | |
|  | | | | | | | | |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***Proposed change affects:*** | UICC apps |  | ME | **X** | Radio Access Network |  | Core Network | **X** |

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | | | | | | | | |
| ***Title:*** | The handling of establishing an emergency PDU session after WUS negotiation in 5GS | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | vivo | | | | | | | | | |
| ***Source to TSG:*** | C1 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | 5GProtoc17 | | | | |  | ***Date:*** | | | 2022-04-24 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **F** |  | | | | | ***Release:*** | | | Rel-17 |
|  | *Use one of the following categories:* ***F*** *(correction)* ***A*** *(mirror corresponding to a change in an earlier release)* ***B*** *(addition of feature),* ***C*** *(functional modification of feature)* ***D*** *(editorial modification)*  Detailed explanations of the above categories can be found in 3GPP [TR 21.900](http://www.3gpp.org/ftp/Specs/html-info/21900.htm). | | | | | | | | *Use one of the following releases: Rel-8 (Release 8) Rel-9 (Release 9) Rel-10 (Release 10) Rel-11 (Release 11) … Rel-15 (Release 15) Rel-16 (Release 16) Rel-17 (Release 17) Rel-18 (Release 18)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | 1. The UE and the AMF shall not negotiate the WUS assistance information in the registration procedure when the UE has an emergency PDU session per current specification.   There are two scenarios:   1. the UE is registered for emergency services and has an emergency PDU session; 2. the UE initiates the MRU procedure due to mobility when the UE has an emergency PDU session.   In the above scenarios, the UE and the AMF do not negotiate the WUS assistance information, as a consequence the UE and the AMF are still not able to use the WUS assistance information after the emergency PDU session is released.  Given the above scenario, the UE shall initiate the MRU to request the use of the WUS assistance information after the emergency PDU session is released.   1. TS 24.501 has specified that the UE and the AMF shall not use the WUS assistance information when an emergency PDU session is established after the UE received the Negotiated WUS assistance information IE during the last registration procedure.   In fact, this restriction only applies to the emergency session established over 3GPP access. The UE and the AMF shall be allowed to use the WUS assistance information upon the successful completion of handover of emergency PDU session to non-3GPP access. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | 1. If the UE does not receive the Negotiated WUS assistance information in the REGISTRATION ACCEPT message due to an emergency PDU session, the UE shall initiate the MRU procedure after the emergency PDU session is released to request the use of the WUS assistance information. 2. The UE and the AMF shall not use the WUS assistance information when an emergency PDU session is active over 3GPP access. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | The UE and the AMF mistakely disable the WUS assistance information when the UE has an emergency PDU session. The use of the WUS assistance information will be delayed, which would cause negative impact on the user power consumption. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 5.3.24 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **Y** | **N** |  | | | |  | | |
| ***Other specs*** | |  | **X** | Other core specifications | | | | TS/TR ... CR ... | | |
| ***affected:*** | |  | **X** | Test specifications | | | | TS/TR ... CR ... | | |
| ***(show related CRs)*** | |  | **X** | O&M Specifications | | | | TS/TR ... CR ... | | |
|  | |  | | | | | | | | |
| ***Other comments:*** | |  | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | |  | | | | | | | | |

**\*\*\*\*\*\*\***

\* \* \* First Change \* \* \* \*

### 5.3.24 WUS assistance

A UE supporting reception of WUS assistance information indicates its capability for reception of WUS assistance information during registration procedure (see 3GPP TS 23.501 [8]). The UE supporting WUS assistance information may include its UE paging probability information in the Requested WUS assistance information IE in the REGISTRATION REQUEST message (see 3GPP TS 23.501 [8]). The UE shall not include its UE paging probability information during an initial registration for emergency services.

The UE and the network may negotiate the UE paging probability information during registration procedure when the UE is not registered for emergency services. The UE paging probability information is an assistance information used to determine the WUS group for paging UE (see 3GPP TS 23.501 [8], 3GPP TS 36.300 [25B]).

NOTE: The determination of UE paging probability information is up to UE implementation.

If a UE supporting WUS assistance information did not receive the Negotiated WUS assistance information IE during the last registration procedure due to an active emergency PDU session over 3GPP access, the UE shall initiate a registration procedure for mobility and periodic registration update to request WUS assistance information after the emergency PDU session is released over 3GPP access.

If the UE does not have emergency PDU session and the network accepts the use of the WUS assistance information for the UE, the network determines the negotiated UE paging probability information for the UE based on the requested UE paging probability information, if any, local configuration or previous statistical information for the UE, and then indicates the negotiated UE paging probability information in the Negotiated WUS assistance information IE to the UE in the REGISTRATION ACCEPT message. The network shall store the negotiated UE paging probability information in the 5GMM context of the UE for paging.

The UE shall use WUS assistance information only if the UE received the Negotiated WUS assistance information IE during the last registration procedure. If the UE did not receive the Negotiated WUS assistance information IE during the last registration procedure, the UE shall not use WUS assistance.

If the network did not accept the request to use WUS assistance information, the network shall delete the stored negotiated UE paging probability information for the UE, if available.

When an emergency PDU session is successfully established after the UE received the Negotiated WUS assistance information IE during the last registration procedure, the UE and the AMF shall not use WUS assistance information until:

- the successful completion of the PDU session release procedure of the emergency PDU session;

- the UE receives WUS assistance information during a registration procedure with PDU session status IE or upon successful completion of a service request procedure, if the UE or the network locally releases the emergency PDU session; or

- the successful completion of the handover of the emergency PDU session to non-3GPP access.

\* \* \* End of Changes \* \* \* \*