**3GPP TSG-CT3 Meeting #112eC3-205082-r1(C3-205378)**

**Online, , 4th Nov 2020 - 13th Nov 2020 (revision of …)**

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| *CR-Form-v12.1* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **29.514** | **CR** | **0263** | **rev** | **-** | **Current version:** | **16.6.0** |  |
|  | | | | | | | | |
| *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)*.* | | | | | | | | |
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| ***Proposed change affects:*** | UICC apps |  | ME |  | Radio Access Network |  | Core Network | **X** |

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| ***Title:*** | SBI Message Priority mechanism for emergency session | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Nokia, Nokia Shanghai Bell | | | | | | | | | |
| ***Source to TSG:*** | C3 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | eIMS5G\_SBA | | | | |  | ***Date:*** | | | 2020-11-06 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **F** |  | | | | | ***Release:*** | | | Rel-16 |
|  | *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:*** | | Although 3GPP TS 29.514 generally supports the "3gpp‑Sbi‑Message‑Priority" custom HTTP header via the reference to 3GPP TS 29.500 in clause 5.2.3 (HTTP custom headers), the usage of this custom header should be detailed (similar as in the MPS case). | | | | | | | | |
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| ***Summary of change:*** | | Clarify the AF/P-CSCF handling of the "3gpp‑Sbi‑Message‑Priority" custom HTTP header. | | | | | | | | |
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| ***Consequences if not approved:*** | | Ambiguous specification leads to interoperability issues. | | | | | | | | |
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| ***Clauses affected:*** | | 4.2.2.18, B.5 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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 does not change the OpenAPI file. | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | |  | | | | | | | | |

1st Change \*\*\*

#### 4.2.2.18 Indication of Emergency traffic

When the "IMS\_SBI" feature is supported, this procedure allows an AF to indicate that the new AF session context relates to emergency traffic.

The AF may include the "servUrn" attribute to indicate that the new AF session context relates to emergency traffic. Additionally, the AF may include the "afReqData" attribute to indicate the additional information requested for the AF session context.

When the PCF receives the "servUrn" attribute indicating an emergency session, the PCF may apply special policies, for instance prioritising service flows relating to the new AF session context or allowing these service flows free of charge.

If the "servUrn" attribute indicates that the new AF session context relates to emergency traffic and the "afReqData" attribute is received, the PCF shall reply to the AF as described in subclause 4.2.2.2 and shall provide the requested available user information in the "ueIds" attribute included within the "ascRespData" attribute in the HTTP "201 Created" response.

If the AF supports the SBI Message Priority mechanism for an emergency session, it shall include the "3gpp‑Sbi‑Message‑Priority" custom HTTP header towards the PCF as described in subclause 6.8.2 of 3GPP TS 29.500 [5].

NOTE: If the AF supports the SBI Message Priority mechanism for an emergency session, the AF includes the "3gpp-Sbi-Message-Priority" custom HTTP header based on AF policies in relation to valid values of the "servUrn" attribute. The highest user priority value is mapped to the corresponding lowest value of the "3gpp-Sbi-Message-Priority" custom HTTP header.

When the new AF session context does not indicate emergency traffic and the session binding function detects that the binding is to a PDU session established to the Emergency DNN, the PCF shall reject the HTTP POST request and shall indicate in an HTTP "403 Forbidden" response message the cause for the rejection including the "cause" attribute set to "UNAUTHORIZED\_NON\_EMERGENCY\_SESSION".

Next Change \*\*\*

# B.5 Indication of Emergency Registration and Session Establishment

When the P-CSCF receives an initial REGISTER SIP message for an IMS emergency registration or an INVITE SIP message for an emergency session and the P-CSCF determines that there are no IMS-level roaming interfaces, and the "IMS\_SBI" feature is supported the P-CSCF may request the PCF to provide the 5GS-Level UE identities (GPSI, SUPI, PEI) available for that PDU session using the procedure as specified in this subclause (for an IMS emergency registration) or B.5.1 (for an IMS emergency session establishment).

A P-CSCF may request the PCF to provide the 5GS-level identities (GPSI, SUPI, PEI) available for that PDU session when no service information is available in the AF. To do so, the P-CSCF shall create an "Individual Application Session Context" resource in the PCF for the AF signalling using an Npcf\_PolicyAuthorization\_Create service operation. The P-CSCF shall provide the UE’s IP address (using either the "ueIpv4" attribute or the "ueIpv6" attribute) and the "afReqData" attribute set to "UE\_IDENTITY". The AF shall include the "servUrn" attribute set to the value "sos", in order to indicate that the new AF session context relates to emergency traffic that is not related to a specific emergency service.

If the P-CSCF supports the SBI Message Priority mechanism for an emergency session, it shall include the "3gpp‑Sbi‑Message‑Priority" custom HTTP header towards the PCF as described in subclause 6.8.2 of 3GPP TS 29.500 [5].

NOTE: If the P-CSCF supports the SBI Message Priority mechanism for an emergency session, the P-CSCF includes the "3gpp-Sbi-Message-Priority" custom HTTP header based on P-CSCF policies in relation to valid values of the "servUrn" attribute. The highest user priority value is mapped to the corresponding lowest value of the "3gpp-Sbi-Message-Priority" custom HTTP header.

When the PCF receives an Npcf\_PolicyAuthorization\_Create service operation as described in the preceding paragraphs from the P-CSCF, the PCF shall perform session binding as described in 3GPP TS 29.513 [7]. When the PCF receives the "servUrn" attribute indicating an emergency session, the PCF may apply special policies, for instance prioritising service flows relating to the AF session context or allowing these service flows free of charge.

When the "servUrn" attribute indicates that the AF session context relates to emergency traffic and the "afReqData" attribute is received indicating "UE\_IDENTITY", the PCF shall provide the requested available user information (GPSI, SUPI, PEI) for the PDU session within "ueIds" attribute within the "ascRespData" in the HTTP "201 Created" response.

When the P-CSCF receives the HTTP "201 Created" response with the 5GS-level UE identities from the PCF, the P-CSCF stores the "ueIds" received within "Individual Application Session Context" resource returned in the HTTP "201 Created" response and behaves as defined in 3GPP TS 24.229 [32].

NOTE: The user information received within the "ueIds" attribute can be used to support PSAP callback functionality for anonymous IMS emergency sessions. See 3GPP TS 23.167 [40] for further information.

The P-CSCF may decide to delete the "Individual Application Session Context" resource at any time. In that case, the Npcf\_PolicyAuthorization\_Delete service operation, as described in subclause 4.2.4.2.

A SIP INVITE request can contain a service URN as defined in IETF RFC 5031 [34] within the request URI. If the service within this URN is "sos", possibly with additional sub-service information, the P-CSCF shall provision this service and sub-service information within the "servUrn" attribute towards the PCF. The P-CSCF may also provision possible information about other services received within the service URN.

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