**3GPP TSG-CT WG1 Meeting #129-eC1-212406**

**Electronic meeting, 19-23 April 2021**

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| *CR-Form-v12.1* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
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|  | **24.229** | **CR** | **6520** | **rev** | **1** | **Current version:** | **17.2.0** |  |
|  | | | | | | | | |
| *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 | **x** | Radio Access Network |  | Core Network |  |

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| ***Title:*** | Coding of phone-context for SNPN | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Ericsson | | | | | | | | | |
| ***Source to TSG:*** | C1 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | eNPN | | | | |  | ***Date:*** | | | 2021-04-21 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **B** |  | | | | | ***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)* | |
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| ***Reason for change:*** | | When the UE is using a non-global number in an SNPN, the UE needs to set the phone-context tel URI parameter appropriately. | | | | | | | | |
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| ***Summary of change:*** | | Define a coding rule for the phone-context when an SNPN is used. | | | | | | | | |
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| ***Consequences if not approved:*** | | Missing specification how to set the phone-context. The call might be misrouted | | | | | | | | |
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| ***Clauses affected:*** | | 7.2A.10.3 | | | | | | | | |
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|  | | **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 \* \* \* \*

#### 7.2A.10.3 Additional coding rules for "phone-context" tel URI parameter

In case the access network information is available, the entities inserting the "phone-context" tel URI parameter shall populate the "phone-context" tel URI parameter with the following contents:

1) if the IP-CAN is GPRS, then the "phone-context" tel URI parameter is a domain name. It is constructed from the MCC, the MNC and the home network domain name by concatenating the MCC, MNC, and the string "gprs" as domain labels before the home network domain name;

EXAMPLE: If MCC = 216, MNC = 01, then the "phone-context" tel URI parameter is set to '216.01.gprs.home1.net'.

2) if the IP-CAN is Evolved Packet Core (EPC) via WLAN or 5GCN via WLAN, then the "phone-context" tel URI parameter is a domain name.

a) if all characters of the SSID are allowed by domainlabel syntax definition of clause 3 of RFC 3966 [22], the domain name is constructed from the SSID, AP's MAC address, and the home network domain name by concatenating the SSID, AP's MAC address, and the string "i-wlan" as domain labels before the home network domain name; and

b) otherwise, the domain name is constructed from AP's MAC address, and the home network domain name by concatenating AP's MAC address, and the string "i-wlan" as domain labels before the home network domain name.

NOTE: The AP's MAC address is provided in the BSSID information element.

EXAMPLE: If SSID = BU-Airport, AP's MAC = 00-0C-F1-12-60-28, and home network domain name is "home1.net", then the "phone-context" tel URI parameter is set to the string "bu-airport.000cf1126028.i-wlan.home1.net".

EXAMPLE: If SSID = <BU Airport>, AP's MAC = 00-0C-F1-12-60-28, and home network domain name is "home1.net", then the "phone-context" tel URI parameter is set to the string "000cf1126028.i-wlan.home1.net".

3) if the IP-CAN is xDSL, then the "phone-context" tel URI parameter is a domain name. It is constructed from the dsl-location (see subclause 7.2A.4) and the home network domain name by concatenating the dsl-location and the string "xdsl" as domain labels before the home network domain name;

4) if the IP-CAN is DOCSIS, then the "phone-context" tel URI parameter is based on data configured locally in the UE;

5) if the IP-CAN is EPS, then the "phone-context" tel URI parameter is a domain name. It is constructed from the MCC, the MNC and the home network domain name by concatenating the MCC, MNC, and the string "eps" as domain labels before the home network domain name;

6) if the IP-CAN is Ethernet, then the "phone-context" parameter is a domain name. It is constructed from the eth-location (see subclause 7.2A.4) and the home network domain name by concatenating the eth-location and the string "ethernet" as domain labels before the home network domain name;

7) if the IP-CAN is Fiber, then the "phone-context" parameter is a domain name. It is constructed from the fiber-location (see subclause 7.2A.4) and the home network domain name by concatenating the fiber-location and the string "fiber" as domain labels before the home network domain name;

8) if the IP-CAN is cdma2000®, then the "phone-context" parameter is a domain name. It is constructed from the subnet id and the home network domain name by concatenating the subnet id as the domain label before the home network domain name;

9) if the IP-CAN is DVB-RCS2, then the "phone-context" tel URI parameter is based on data configured locally in the UE;

10) if the IP-CAN is 5GS via 3GPP access and the serving network is a PLMN, then the "phone-context" tel URI parameter is a domain name. It is constructed from the MCC, the MNC and the home network domain name by concatenating the MCC, MNC, and the string "5gs" as domain labels before the home network domain name; and

11) if the IP-CAN is 5GS via 3GPP access and the serving network is an SNPN, then the "phone-context" tel URI parameter is a domain name. It is constructed from the MCC, the MNC, the NID and the home network domain name by concatenating the MCC, MNC, the SNPN Network Identifier (NID) (11 hexadecimal digits) as specified in 3GPP TS 23.003 [3] and the string "5gs-snpn" as domain labels before the home network domain name.

If the access network information is not available in the UE, then the "phone-context" tel URI parameter is set to the home network domain name preceded by the string "geo-local.".

In case the home domain is indicated in the "phone-context" tel URI parameter, the "phone-context" tel URI parameter is set to the home network domain name (as it is used to address the SIP REGISTER request, see subclause 5.1.1.1A or subclause 5.1.1.1B).

In case the "phone-context" tel URI parameter indicates a network other than the home network or the visited access network, the "phone-context" tel URI parameter is set according to RFC 3966 [22].

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