**3GPP TSG- WG2 Meeting #154 *S2-2210385***

**Toulouse, 14 - 18 Nov, 2022**

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| *CR-Form-v12.1* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **23.548** | **CR** | **0065** | **rev** |  | **Current version:** | **17.4.0** |  |
|  | | | | | | | | |
| *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:*** | DNAI mapping based on conclusions in TR 23.700-48 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | China Mobile | | | | | | | | | |
| ***Source to TSG:*** | SA2 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | **EDGE\_Ph2** | | | | |  | ***Date:*** | | | 2 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **B** |  | | | | | ***Release:*** | | | Rel-18 |
|  | *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:*** | | This clause contains the description and procedure of DNAI mapping. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | Add the detailed description and procedure of mapping table between EAS IP address and DNAI. | | | | | | | | |
| ***--*** | |  | | | | | | | | |
| ***Consequences if not approved:*** | | Absent of DNAI mapping procedure. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 6.x | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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 (all is new)**

## 6.x Support of mapping table between EAS IP address and DNAI

### 6.x.1 General

For edge computing scenarios, it is important for AF to obtain target DNAI in order to determine the target new EAS for edge relocation. DNAI information implies the proper UPF which should be selected for the UE's PDU Session, and the proper UPF should be located in the same or nearby area to the target EAS. In order to make sure AF obtain target DNAI, the 5GS should help determine proper DNAI(s) and notify the information to AF based on AF request providing EAS IP address/EAS IP range/FQDN.

NEF/UDR is configured by OAM with the mapping information between EAS IP/IP range and DNAI. AF may subscribe the mapping information modification with NEF/UDR. When the configuration information (relationship between DNAI and EAS IP address/IP address range) is changed, the UDR can notify the new mapping information to NEF/AF.

### 6.x.2 AF request for DNAI Procedures



Figure 6.x.2-1: AF request for DNAI based on AF request

1. AF invoke Nnef\_DNAIMapping\_Subscribe service to request the DNAI information. The request includes EAS IP/IP range and/or FQDN and optionally DNN, S-NSSAI, and geographical area.

2. NEF invokes the Nudr\_DM\_Query service to request the suitable DNAI(s) information.

3. The UDR determines the suitable DNAI(s) based on the EAS IP/IP range and/or FQDN and optionally DNN, S-NSSAI, and geographical area. NEF can also subscribe the DNAI information update in UDR.

4-5. UDR notifies the DNAI(s) or the udpated DNAI information to NEF/AF.

## **END of CHANGES**