**3GPP SA3LI#88-e-a S3i230092**

**eMeeting; January 23-27, 2023**

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| *CR-Form-v12.2* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
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|  | **33.127** | **CR** | **200** | **rev** | **1** | **Current version:** | **18.2.0** |  |
|  | | | | | | | | |
| *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 |  | Radio Access Network |  | Core Network | **X** |

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| ***Title:*** | Corrections to the diagrams – Part IV (5GC\_EPC) | | | | | | | | | |
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| ***Source to WG:*** | SA3-LI (Nokia, Nokia Shanghai Bell, OTD) | | | | | | | | | |
| ***Source to TSG:*** | SA3 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | LI18 | | | | |  | ***Date:*** | | | 2023-01-25 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | ***F*** |  | | | | | ***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-16 (Release 16) Rel-17 (Release 17) Rel-18 (Release 18) Rel-19 (Release 19)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | In figure 6.6-1 (EPC/5G Interworking LI architecture), the control plane line is not shown to the SGW. That is an error. While fixing that, few other anomalies were found: In the same figure, the control plane line is shown to the PGW-U/UPF. But, in figuure 6.2-2, the control plane line is not shown to the UPF. In figure 6.2-2, a control plane line is shown to the NR/5G (R) AN.  But, a control plane line is not shown to the the NR/5G (R)AN in figure 6.2-1.  Having control plane line to the network nodes that handle the user plane data can be viewed as an error or it can be perceived to be correct. Error because those nodes presumed to handle the user plane packets, or correct because those nodes still have interfaces (e.g. N4 between SMF and UPF). | | | | | | | | |
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| ***Summary of change:*** | | Control plane lines were added in the figures 6.2-1 NR/5G (R) AN. The control plane line is added in the figure 6.2-2 to UPF. The control plane line is added to SGW in figure 6.6-1. Other alternative is: remove the control plane line shown to PGW-U/UPF in figure 6.6-1 and shown to NR/5G (R)AN in figure 6.2-2. The addition of control plane line to SGW in figure 6.6-2 is needed in either case. | | | | | | | | |
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| ***Consequences if not approved:*** | | Inconsistent drawing strategies. | | | | | | | | |
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| ***Clauses affected:*** | | 6.2.1, 6.6 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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:*** | | S3i230021 | | | | | | | | |

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

### 6.2.1 General

Figure 6.2-1 depicts the 5G EPC-anchored LI architecture. The network functions are depicted in grey, while the LI elements are depicted in blue.

Figure 6.2-1: 5G EPC-anchored LI architecture

Figure 6.2-2 depicts the 5G core-anchored LI architecture. The network functions are depicted in grey, while the LI elements are depicted in blue.

Figure 6.2-2: 5G core-anchored LI architecture

NOTE: A CC-POI may also be present in the SMF for roaming NIDD interception, which is not shown in figure 6.2-2.

### \*\* Next Change \*\*

## 6.6 4G/5G Interworking

Figure 6.6-1 depicts interworking between EPC and the 5G architecture. The network functions are depicted in grey, while the LI elements are depicted in blue.

Figure 6.6-1: EPC/5G Interworking LI architecture

NOTE: A CC-POI may also be present in the MME and SMF for roaming NIDD interception, which are not shown in figure 6.6-1.

### \*\* End of all Changes \*\*