**3GPP TSG-CT WG1 Meeting #136-eC1-223832**

**E-Meeting, 12th – 20th May 2022**

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| *CR-Form-v12.1* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
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|  | **24.554** | **CR** | **0103** | **rev** | **-** | **Current version:** | **17.0.0** |  |
|  | | | | | | | | |
| *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:*** | Clairification on performing 5G ProSe direct discovery over PC5 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | vivo | | | | | | | | | |
| ***Source to TSG:*** | C1 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | 5G\_ProSe | | | | |  | ***Date:*** | | | 2022-04-27 |
|  |  | | | |  | |  | | |  |
| ***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:*** | | In CT1#135e, it is discussed in C1-222745 that in some scenarios when UE fails to interact with 5G DDNMF (e.g. UE not in NG-RAN coverage) and hence does not have any valid ProSe application code, ProSe restricted code, ProSe query code, or ProSe response code from 5G DDNMF, the UE is not allowed to perform 5G ProSe direct discovery procedure even though the UE has valid authorized parameters/policy in UICC or ME for 5G ProSe direct discovery over PC5.  This paper propose to clarify that to perform 5G ProSe direct discovery procedure over PC5 interface, the UE shall interact with 5G DDNMF at least once as specified in clause 6.2 to obtain one or more of the following codes: ProSe application code, ProSe restricted code, ProSe query code, or ProSe response code. | | | | | | | | |
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| ***Summary of change:*** | | Clarifying that to perform 5G ProSe direct discovery procedure over PC5 interface, the UE shall interact with 5G DDNMF at least once as specified in clause 6.2 to obtain one or more of the following codes: ProSe application code, ProSe restricted code, ProSe query code, or ProSe response code. | | | | | | | | |
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| ***Consequences if not approved:*** | | No explicit normaltive text to clarify when UE plans to use parameters in UICC or ME, the UE shall obtain a valid ProSe application code, ProSe restricted code, ProSe query code, or ProSe response code from 5G DDNMF. | | | | | | | | |
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| ***Clauses affected:*** | | 6.2.14.1 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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:*** | |  | | | | | | | | |

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

#### 6.2.14.1 General

This clause describes the procedures for 5G ProSe direct discovery procedure over PC5 interface. The purpose of the 5G ProSe direct discovery procedure over PC5 interface is to enable a ProSe-enabled UE to detect and identify another ProSe-enabled UE over PC5 interface.

To perform 5G ProSe direct discovery procedure over PC5 interface, the UE is configured with the related information as described in clause 5.2.3, and the UE interacts with 5G DDNMF as specified in clause 6.2 when it is in coverage to obtain the related parameters (e.g. ProSe application code, ProSe restricted code).

The following models for 5G ProSe direct discovery procedure over PC5 interface as specified in 3GPP TS 23.304 [2] are supported:

a) Model A uses a single discovery protocol message (Announcement); and

b) Model B uses two discovery protocol messages (Solicitation and Response).

NOTE: If the UE is authorized to perform both 5G ProSe direct discovery Model A and 5G ProSe direct discovery Model B, it is up to UE implementation to select which model to perform or perform both models simultaneously.

The following procedures are defined for 5G ProSe direct discovery procedure over PC5 interface:

a) 5G ProSe direct discovery procedure over PC5 interface with Model A:

1) Announcing UE procedure for 5G ProSe direct discovery initiation;

2) Announcing UE procedure for 5G ProSe direct discovery completion;

3) Monitoring UE procedure for 5G ProSe direct discovery initiation; and

4) Monitoring UE procedure for 5G ProSe direct discovery completion; and

b) 5G ProSe direct discovery procedure over PC5 interface with Model B:

1) Discoverer UE procedure for 5G ProSe direct discovery initiation;

2) Discoverer UE procedure for 5G ProSe direct discovery completion;

3) Discoveree UE procedure for 5G ProSe direct discovery initiation; and

4) Discoveree UE procedure for 5G ProSe direct discovery completion.

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