**3GPP TSG-CT WG1 Meeting #137-eC1-224716**

**E-meeting, 18th -26th August 2022**

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| *CR-Form-v12.1* |
| **CHANGE REQUEST** |
|  |
|  | **23.122** | **CR** | **952** | **rev** | **-** | **Current version:** | **17.7.1** |  |
|  |
| *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:***  | Introduction to Signal level enhanced network selection (SENSE) |
|  |  |
| ***Source to WG:*** | Huawei, HiSilicon |
| ***Source to TSG:*** | C1 |
|  |  |
| ***Work item code:*** | SENSE |  | ***Date:*** | 2022-05-04 |
|  |  |  |  |  |
| ***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 canbe 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:*** | SA1 has specified the requirements for the SENSE feature whose aspects are discussed in the CT1 discussion paper CT1-224713.This CR is to introduce the general section for the SENSE feature. |
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| ***Summary of change:*** | Introduction to the SENSE feature. |
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| ***Consequences if not approved:*** | Some of the SA1 requirement are not satisfied. |
|  |  |
| ***Clauses affected:*** | 3.XX |
|  |  |
|  | **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 \* \* \* \*

## 3.XX Signal level enhanced network selection

The MS may support signal level enhanced network selection (SENSE).

If the MS supports SENSE, the MS can be provisioned by the network with an "Operator controlled signal threshold per access technology ", consisting of one or more entries, each containing:

a) operator controlled signal threshold; and

b) an access technology.

Editor's note (WI SENSE, CR 952): How and weather the NW can provide the MS with an "Operator controlled signal threshold per access technology " is FFS.

The MS can be pre-configured with an "Operator controlled signal threshold per access technology" stored in the USIM (see 3GPP TS 31.102 [40]).

Editor's note (WI SENSE, CR 952): Encoding of the "Operator controlled signal threshold per access technology" in the USIM in 3GPP TS 31.102 needs to be specififed by CT6.

In addition, the "Operator controlled signal threshold per access technology" provisioned by the network can also be stored in the non-volatile memory of the ME, as specified in 3GPP TS 24.501 [64] annex C.

Editor's note (WI SENSE, CR 952): How and whether the feature can be enabled based on the "Operator controlled signal threshold per access technology" stored in the NVM is FFS.

3GPP TS 24.501 [64] annex C specifies condition under which the "Operator controlled signal threshold per access technology" stored in the ME is deleted. Additionally, when a USIM is inserted, if:

- no " Operator controlled signal threshold per access technology " is stored in the non-volatile memory of the ME; or

- the SUPI from the USIM does not match the SUPI stored together with the " Operator controlled signal threshold per access technology " in the non-volatile memory of the ME;

and the MS has an "Operator controlled signal threshold per access technology " stored in the USIM (see 3GPP TS 31.102 [22]), the MS shall store the " Operator controlled signal threshold per access technology " from the USIM into the ME, as specified in 3GPP TS 24.501 [64] annex C.

\* \* \* End of Change \* \* \* \*