**SA WG2 Meeting SA2#166S2-24xxxx**

**18-22, Nov 2024, Orlando, USA (Revision of S2-2411073, 2411055, 2410800, 2410751, 2410194)**

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| *CR-Form-v12.2* |
| **CHANGE REQUEST** |
|  |
|  | **501** | **CR** | **5740** | **rev** | **5** | **Current version:** | **19.1.0** |  |
|  |
| *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:***  | Functional Description of Energy Efficiency Control Functionality |
|  |  |
| ***Source to WG:*** | NEC [OPPO, Samsung, China Mobile, Rakuten Mobile, NEC, ZTE] |
| ***Source to TSG:*** | SA2 |
|  |  |
| ***Work item code:*** | EnergySys |  | ***Date:*** | 2024-11-01 |
|  |  |  |  |  |
| ***Category:*** | **B** |  | ***Release:*** | Rel-19 |
|  | *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-16 (Release 16)Rel-17 (Release 17)Rel-18 (Release 18)Rel-19 (Release 19)* |
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| ***Reason for change:*** | 01/11/24 – Further updates by NEC to CR5740 (S2-2411073) agreed at SA2#165 to address an Editor’s Note and to reflect the conclusions in TR23.700-66.New WID on Energy Efficieny and Energy Saving and KI#1 conclusion have been approved in SP-241388, and S2-2409296 respectively.A functional description of Energy Information Function (EIF) should be provided to support new functionality of collection and calculation of energy related information. |
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| ***Summary of change:*** | Functional description of EIF. |
|  |  |
| ***Consequences if not approved:*** | Cannot support this new functionality |
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| ***Clauses affected:*** | 6.2.x (new clause) |
|  |  |
|  | **Y** | **N** |  |  |
| ***Other specs*** |  | **X** |  Other core specifications  |  |
| ***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 \*\*\*\*\*

### 6.2.x EIF

The Energy Information Function (EIF) includes support for the following functionalities:

* Collect data from OAM and 5GC NF(s) to assist the calculation of energy related information.
* Calculate the energy related information (including energy consumption information and renewable energy information) of user plane communication.
* Expose the calculated energy related information to authorized consumers.
* NF discovery and (re-)selection enhancements based on the energy related information.
* Energy saving strategies and decisions based on the energy saving subscription information per UE.

Editor’s Note: It is FFS whether this NF performs other functionalities.

Editor's Note: It is FFS whether or not EIF will use network data analytics framework as defined in TS 23.288 [86].

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