**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 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)* | |
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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. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | Functional description of EIF. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | Cannot support this new functionality | | | | | | | | |
|  | |  | | | | | | | | |
| ***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 \*\*\*\*\*