**3GPP SA4#127-bis-eS4-240728**

Online, 08-12 Apr 2024

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| *CR-Form-v12.2* | | | | | | | | |
| **PSEUDO CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **26.510** | **CR** | pseudo | **rev** |  | **Current version:** | 1.1.4 |  |
|  | | | | | | | | |
| *For* [***HELP***](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 | **X** |

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|  | | | | | | | | | | |
| ***Title:*** | Adding BDT management to M6 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Tencent Cloud | | | | | | | | | |
| ***Source to TSG:*** | S4 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | 5GMS\_Pro\_Ph2 | | | | |  | ***Date:*** | | | 2024-04-02 |
|  |  | | | |  | |  | | |  |
| ***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 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:*** | | Adding the BDT method to M6 | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | 10.3.1 (new) | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | Incomplete spec. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 10.3.1 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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:*** | |  | | | | | | | | |

|  |
| --- |
| **1st Change** |

## 10.3 Dynamic Policy client API

### 10.3.1 Dynamic Policy Methods

#### 10.3.1.1 Retrieve Background Data Transfer information

The method getBDTInfo() is used for retrieving the Background Data Transfer resource delivered by the Media AF.

This method has no input parameters.

The return value of the method is specified in table 10.3.1.1-1.

Table 10.3.1.1-1 Return value for getBDTInfo() method

|  |  |  |
| --- | --- | --- |
| Name | Type | Description |
| BDT\_POLICY\_INFO | object | Information about a Background Data Transfer opportunity. |
| BDT\_POLICY\_ACTIVE | string | The status of Background Data Transfer as described in clause 10.3.2.1. |

#### 10.3.1.2 Request Background Data Transfer

The method requestBDT() is employed to request opportunity for Background Data Transfer. The Media Session Handler convey the request to the Media AF and provide the corresponding response. The input and return parameters of the method are specified in tables 10.3.1.2-1 and 10.3.1.2-2.

Table 10.3.1.2-1 Input parameters for requestBDT() method

|  |  |  |
| --- | --- | --- |
| Name | Type | Description |
| estimatedTransferVolume | integer | The estimated volume of data to be transferred, expressed in bytes.  Minimum value 1 byte. |

Table 10.3.1.2-1 Return value for requestBDT() method

|  |  |
| --- | --- |
| Type | Description |
| object | The granted timed window and maximum downlink and uplink bitrates for Background Data Transfer. |

### 10.3.2 Dynamic Policy information

Table 10.3.2-1 specifies the status information relating to Dynamic Policies that can be obtained from the Media Session Handler through reference point M6.

Table 10.3.2-1: Status Information relating to Dynamic Policies

|  |  |  |  |
| --- | --- | --- | --- |
| Status | Type | Parameter | Definition |
| currentBackgroundData TransferPolicies[mediaDeliverySession] | object |  | Descriptions of the Background Data Transfers currently instantiated for each current media delivery session. |

Table 10.3.2-2 provides a list of notification events relating to Dynamic Policies exposed at reference point M6.

Table 10.3.2-2: Notification Events relating to Dynamic Policies

|  |  |  |
| --- | --- | --- |
| Status | Definition | Payload |
| BACKGROUND\_DATA\_TRANSFER\_OPPORTUNITY | Triggered when a new Background Data Transfer opportunity window opens. | Media delivery session identifier, Opportunity windows start date–time, Opportunity windows end date–time, Data volume quota, Maximum uplink bit rate, Maximum downlink bit rate. |
| BACKGROUND\_DATA\_TRANSFER\_WINDOW\_START | Notifies the application of the start of a Background Data Transfer time window. | Media delivery session identifier |
| BACKGROUND\_DATA\_TRANSFER\_WINDOW\_END | Notifies the application of the end of a Background Data Transfer time window. | Media delivery session identifier |

Table 10.3.3-3 provides a list of error events relating to Dynamic Policies exposed at reference point M6.

Table 10.3.2-3: Error Events relating to Dynamic Policies

|  |  |  |
| --- | --- | --- |
| Status | Definition | Payload |
| ERROR\_BACKGROUND\_DATA\_TRANSFER | Triggered when there is an error during a Background Data Transfer, for example if it is cancelled before the end of the advertised opportunity window. | Media delivery session identifier, Error reason. |