**3GPP TSG-S4 Meeting #129e*****S4-241391r01***

**Electronic, , 19th–23rd August 2024** revision of S4aI240109

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| *CR-Form-v12.0* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **26.510** | **CR** | **0002** | **rev** | **1** | **Current version:** | **18.0.2** |  |
|  | | | | | | | | |
| *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 | **X** |

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|  | | | | | | | | | | |
| ***Title:*** | [5GMS\_Pro\_Ph2] Network Assistance Client API completion | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | BBC | | | | | | | | | |
| ***Source to TSG:*** | S4 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | 5GMS\_Pro\_Ph2 | | | | |  | ***Date:*** | | | 2024-07-29 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **F** |  | | | | | ***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-15 (Release 15) Rel-16 (Release 16) Rel-17 (Release 17) Rel-18 (Release 18)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | 1. The specification of the Dynamic Policies Client API in the baseline specification contains technical errors. 2. Methods for obtaining **bit rate recommendations** and for requesting a **delivery boost** are not yet specified for the Network Assistance Client API in this release. [*https://github.com/5G-MAG/Standards/issues/45*](https://github.com/5G-MAG/Standards/issues/45) | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | 1. Errors in Dynamic Policies Client API corrected. 2. Missing methods in Network Assistance Client API specified. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | The media session handling client API is incorrectly/incompletely specified in this release. | | | | | | | | |
| ***Q*** | |  | | | | | | | | |
| ***Clauses affected:*** | | 11.3.1.1, 11.3.1.2, 11.4.1.1, 11.4.1.2 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **Y** | **N** |  | | | |  | | |
| ***Other specs*** | |  | **X** | Other core specifications | | | |  | | |
| ***affected:*** | |  | **X** | Test specifications | | | |  | | |
| ***(show related CRs)*** | |  | **X** | O&M Specifications | | | |  | | |
|  | |  | | | | | | | | |
| ***Other comments:*** | |  | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | | CR0002 [S4aI240109]: Submitted for WG *ad hoc* endorsement.  CR0002r1 [S4-241391]: Resubmitted for WG agreement. | | | | | | | | |

First change

### 11.3.1 Dynamic Policy methods

#### 11.3.1.1 Retrieve Background Data Transfer information

The getBDTInfo() method is invoked to retrieve information about the next Background Data Transfer opportunity window at one of the Service Operation Points that are available in the context of a particular media delivery session.

The input parameters of the method are specified in tables 11.3.1.1-1.

Table 11.3.1.1-1: Input parameters for getBDTInfo() method

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Type | O | Description |
| sessionId | string | M | The media delivery session identifier (as specified in clause 7.3.2) of an initialised media delivery session in the Media Session Handler. |
| serviceOperationPointReference | string | M | The external reference identifier of a Service Operation Point that uniquely identifies a Policy Template within the context of sessionId. |

The anonymous return value of the method is specified in table 11.3.1.2-1.

Table 11.3.1.2-1: Return value for getBDTInfo() method

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | | Type | O | Description |
| — | | object | C | Information about a Background Data Transfer opportunity.  Null if the method invocation is unsuccessful. |
|  | windowStart | DateTime | M | The start date–time of the Background Data Transfer window. |
|  | windowEnd | DateTime | M | The end date–time of the Background Data Transfer window. |
|  | maximumDataTransferVolume | integer | M | The maximum volume of data (expressed in bytes) that a Media Access Function is permitted to transfer during the Background Data Transfer window. |

#### 11.3.1.2 Activate Dynamic Policy

The activatePolicy() method is invoked to request the application of a dynamic policy to a media delivery session that is configured at the Media Session Handler. The scope of the dynamic policy is all application flows that match the Media AS domain name declared when the media delivery session was created (see table 11.2.2.1‑1). The application may also provide the estimated transfer volume if the media delivery session is expected to be within the bounds of a Background Data Transfer time window. The Media Session Handler convey the request to the Media AF and provides the corresponding response to the invoker of the method.

The input parameters of the method are specified in table 11.3.1.2‑1.

Table 11.3.1.2-1: Input parameters for activatePolicy() method

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Type | O | Description |
| sessionId | string | M | The media delivery session identifier (as specified in clause 7.3.2) of an initialised media delivery session in the Media Session Handler. |
| serviceOperationPointReference | string | M | The external reference identifier of a Service Operation Point that uniquely identifies a Policy Template within the context of sessionId. |
| estimatedTransferVolume | integer | C | The estimated volume of data to be transferred, expressed in bytes.  Minimum value 1 byte.  Required to be populated when the Policy Template corresponding to the referenced Service Operation Point declares a Background Data Transfer policy. |

The anonymous return value of the method is specified in table 11.3.1.2‑2.

Table 11.3.1.2-2: Return value for activatePolicy() method

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | | Type | O | Description |
| — | | object | C | Information about the activated Dynamic Policy.  Null if the method invocation is unsuccessful. |
|  | recommendedDownlinkBitRate | BitRate | M | The recommended downlink bit rate for the requested Service Operation Point. |
|  | recommendedUplinkBitRate | BitRate | M | The recommended uplink bit rate for the requested Service Operation Point. |
|  | grantedBackgroundDataTransferWindows | array(TimeWindow) | M | Indicates the time window(s) for which Background Data Transfer has been successfully activated. |

Next change

### 11.4.1 Network Assistance methods

#### 11.4.1.1 Bit rate recommendation request

The requestBitRateRecommendation() method is invoked to request a recommended bit rate for a service component of a media delivery session that is known to the Media Session Handler.

The input parameters of the method are specified in table 11.4.1.1‑1.

Table 11.4.1.1-1: Input parameters for requestBitRateRecommendation() method

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Type | O | Description |
| sessionId | string | M | The media delivery session identifier (as specified in clause 7.3.2) of an initialised media delivery session in the Media Session Handler. |
| componentReference | string | M | Identifying a service component of the media delivery session indicated by sessionId. |

If it has not already done so, the Media Session Handler shall first create a Network Assistance Session for the application flow corresponding to the indicated service component using the operation specified in clause 5.3.4.2, citing the relevant Policy Template identifier and service component reference if a dynamic QoS policy has been activated for the media delivery session using the method specified in clause 11.3.1.2.

The Media Session Handler shall then invoke the operation specified in clause 5.3.4.4 to obtain the bit rate recommendation from the Media AF.

The anonymous return value of the method is specified in table 11.4.1.1‑2.

Table 11.4.1.1-2: Return value for requestBitRateRecommendation() method

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | | Type | O | Description |
| — | | object | C | A recommended bit rate for the media delivery session  Null if the method invocation is unsuccessful. |
|  | recommendedDownlinkBitRate | BitRate | M | The recommended downlink bit rate for the requested media delivery session. |
|  | recommendedUplinkBitRate | BitRate | M | The recommended uplink bit rate for the requested media delivery session. |

#### 11.4.1.2 Delivery boost request

The requestDeliveryBoost() method is invoked to request a temporary boost to the bit rate of a service component of a media delivery session that is known to the Media Session Handler.

NOTE: The duration and network QoS of the delivery boost is at the discretion of the Media Delivery System.

The input parameters of the method are specified in table 11.4.1.2‑1.

Table 11.4.1.2-1: Input parameters for requestDeliveryBoost() method

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Type | O | Description |
| sessionId | string | M | The media delivery session identifier (as specified in clause 7.3.2) of an initialised media delivery session in the Media Session Handler. |
| componentReference | string | M | Identifying a service component of the media delivery session indicated by sessionId. |

If it has not already done so, the Media Session Handler shall first create a Network Assistance Session for the application flow corresponding to the indicated service component using the operation specified in clause 5.3.4.2, citing the relevant Policy Template identifier and service component reference if a dynamic QoS policy has been activated for the media delivery session using the method specified in clause 11.3.1.2.

The Media Session Handler shall then invoke the operation specified in clause 5.3.4.5 to request the delivery boost from the Media AF.

The return value of the method is specified in table 11.4.1.2‑2.

Table 11.4.1.2-2: Return value for requestDeliveryBoost() method

|  |  |
| --- | --- |
| Type | Description |
| Boolean | Set to true if the delivery boost is granted. |

End of changes