**3GPP TSG-CT WG3 Meeting #119e C3-216277**

**E-Meeting, 11th – 19th November 2021 (Revision of C3-21xxxx)**

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| *CR-Form-v12.1* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **29.549** | **CR** | **0040** | **rev** | **-** | **Current version:** | **17.2.0** |  |
|  | | | | | | | | |
| *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:*** | Support Discover\_TSC\_Stream\_Availability service operation | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Ericsson | | | | | | | | | |
| ***Source to TSG:*** | CT3 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | eSEAL | | | | |  | ***Date:*** | | | 2021-10-25 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **B** |  | | | | | ***Release:*** | | | Rel-17 |
|  | *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:*** | | TS 23.434 defines TSC\_Stream\_Availability\_Discovery service operation in clause 14.4.2.7 and the related procedure in clause 14.3.7.2, hence need to support in this specification. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | Support the Discover\_TSC\_Stream\_Availability service operation in the SS\_NetworkResourceAdaptation API. | | | | | | | | |
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| ***Consequences if not approved:*** | | Missing the Discover\_TSC\_Stream\_Availability service operation definition which is not aligned with stage 2. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 5.5.1.2.m (new) | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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 does not impact the OpenAPI file. | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | |  | | | | | | | | |

**Additional discussion(if needed):**

**Proposed changes:**

\*\*\* 1st Change \*\*\*

##### 5.5.1.2.m Discover\_TSC\_Stream\_Availability

###### 5.5.1.2.m.1 General

This service operation is used by a VAL server to request the NRM server to retrieve the connectivity and available QoS characteristics between the source and destination DS-TT ports, prior to creating the stream.

###### 5.5.1.2.m.2 VAL server discovering TSC stream availability using Discover\_TSC\_Stream\_Availability service operation

In order to discover the connectivity and available QoS characteristics between the source and destination DS-TT ports, the VAL server shall send an HTTP GET message to the NRM server, with the VAL server as the requestor identity and the stream specification in the query parameters.

Upon reception of the HTTP GET message, the NRM server shall:

1. verify the requestor identity and check if the VAL server is authorized to discover the TSC stream availability;

2. if the VAL server is authorized, the NRM server shall validate the connectivity between the DS-TTs ports indicated in the requested TSC stream definition. Based on the collected 5GS TSC bridge management and port management information, the NRM server identifies the traffic classes supported by the DS-TTs and calculates the end-to-end latency (including the UE-DS-TT residence times, UPF residence time, and propagation delays) per traffic class; and

3. if the discovery result is successful upon the connectivity between the DS-TTs discovered, the NRM server shall return an HTTP GET response message to the VAL server with a 200 OK status code with the "TscStreamAvailability" data structure as the response body which shall include the stream specification matching with the query parameters and the corresponding list of traffic specifications, otherwise the NRM server shall respond to the VAL server with a proper error status code as the unsuccessful result.

Editor's note: Error responses are FFS.

Editor's note: It is FFS whether HTTP GET method should be changed to custom operation POST method.

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