**3GPP TSG-SA WG2 Meeting #141E S2-2007485r02**

**October 12th -23rd 2020, Online**

**Title: [draft] LS on restricting the rate per UE per network slice**

**Release:** **Rel-17**

**Work Item: FS\_eNS\_Ph2**

**Source:** SA2

**To:** RAN2, RAN3

**Cc:**

**Contact Person:**

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**Attachments:**

**1. Overall Description:**

SA2 has been working on the FS\_eNS\_Ph2 for some time and documented its progress in [TR 23.700-40](http://ftp.3gpp.org/Specs/archive/23_series/23.700-40/23700-40-100.zip). As part of this study, a KI#3 has been studied on how to rate limit the aggregate of all the QoS flows/PDU sessions associated with a specific network slice for a single UE, irrespective of the resource type of the QoS flows.

Within the study and among the solutions, there are 3 solutions which have RAN impacts

1. Solution 22 propose to send maximum rate UL/DL for the UE(identified as SMBR) over NG when the UE context is passed to the RAN. The RAN uses this parameters for two simultaneous purposes:
2. Rate limit the aggregate of the UL/DL traffic for an S-NSSAI. During the rate-limit enforcement no GBR traffic shall be dropped or delayed.
3. Ensure that the sum of all the admitted QoS flows GFBR of GBR resource type QoS flows is not exceeding the maximum rate per slice UL/DL for the UE. So, the admission control takes this parameter into account.

In addition, SA2 would like to obtain feedback as to whether such approach in Solution 22 could be feasible when Dual Connectivity is enabled.

1. Solution #37 proposes to signal Slice-MBR to RAN, not for enforcement but may be used to calculate the UE-AMBR value. This solution seems to impact existing UE-AMBR definition, and also interfere with the existing one if one is provided for the UE, but SA2 would like to obtain feedback as to whether such approach should be considered.
2. Solution #43, related to solution #22, proposes that RAN notifies the AMF (for notification purposes only) when the Slice-MBR is reached. SA2 would like to know whether this is an infrequent event or can be frequent and cause excessive load. SA2 has not determined if this solution should be considered or not for further development.

SA2 asks RAN WG2 and RAN WG3 to check the impacts on RAN for the solution above and inform on their feasibility and any feedback on SA2 questions.

**2. Actions:**

**To RAN2, RAN3:**

**ACTION:**

SA2 kindly requests to provide us your feedback on the solution above, ideally early during the next SA2 meeting.

**3. Date of Next TSG-SA2 Meetings:**

3GPP TSG SA2#142E 16th – 20th November 2020 eMeeting