3GPP TSG-RAN WG3 #120 R3-233468

**Incheon, Korea, 22nd – 26th May 2023**

Agenda Item: 26.2

Source: Ericsson, CATT, Nokia, Nokia Shanghai Bell, Huawei, ZTE, Samsung

Title: (TP to TRS\_URLLC BLCR for TS 38.423): Introduction of 5G Timing Resiliency and URLLC enhancements

Document for: Discussion, Decision

# 1 Information

This paper contains the text proposal capturing the agreement from RAN3#120.

The track changes are marked with Ericsson-RAN3#120.

# 2 Text Proposal on XnAP

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

#### 9.2.3.115 TSC Assistance Information

Editor’s Note: Encoding of IEs may be further refined.

This IE provides the TSC assistance information for a TSC QoS flow in the uplink or downlink (see TS 23.501 [7]).

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| IE/Group Name | Presence | Range | IE type and reference | Semantics description | Criticality | Assigned Criticality |
| Periodicity | M |  | 9.2.3.116 | Periodicity as specified in TS 23.501 [7]. | – |  |
| Burst Arrival Time | O |  | 9.2.3.117 | Burst Arrival Time as specified in TS 23.501 [7]. | – |  |
| Survival Time | O |  | 9.2.3.152 |  | YES | Ignore |
| CHOICE *RAN feedback type* |  | *0..1* |  |  | YES | ignore |
| >*proactive* |  |  |  |  |  |  |
| >>Burst Arrival Time Window | M |  | 9.2.3.z1 |  | - |  |
| >>Periodicity Range | O |  | 9.2.3.z2 |  | - |  |
| >*reactive* |  |  |  |  |  |  |
| >>Capability for BAT Adaptation | M |  | 9.2.3.z3 |  | - |  |

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#### 9.2.3.153 Time Synchronisation Assistance Information

This IE indicates the 5G access stratum time distribution parameters as specified in TS 23.501 [7].

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| IE/Group Name | Presence | Range | IE type and reference | Semantics description | Criticality | Assigned Criticality |
| Time Distribution indication | M |  | ENUMERATED(enabled, disabled, …) |  | - | - |
| Uu Time Synchronization Error Budget | C-ifEnabled |  | INTEGER (0..1000000, …) | Expressed in units of 1 ns. | - | - |
| Clock Quality Reporting Control Information | O |  | 9.2.3.x1 |  | YES | ignore |

|  |  |
| --- | --- |
| Condition | Explanation |
| ifEnabled | This IE shall be present if the *Time Distribution Indication* IE is set to “enabled”. |

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#### 9.2.3.x1 Clock Quality Reporting Control Information

This IE indicates the clock quality reporting control information as defined in TS 23.501 [7].

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| IE/Group Name | Presence | Range | IE type and reference | Semantics description |
| CHOICE *Clock Quality Detail Level* | M |  |  |  |
| >*clock quality metrics* |  |  |  |  |
| >>[FFS] |  |  |  |  |
| >*acceptance indication* |  |  |  |  |
| >>Clock Quality Acceptance Criteria | M |  | 9.3.1.x2 |  |

#### 9.2.3.x2 Clock Quality Acceptance Criteria

This IE indicates the clock quality acceptance criteria as defined in TS 23.501 [7].

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| IE/Group Name | Presence | Range | IE type and reference | Semantics description |
| [FFS] |  |  |  |  |

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#### 9.2.3.z1 Burst Arrival Time Window

This IE indicates the burst arrival time window of the TSC QoS flow as defined in TS 23.501 [7].

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| IE/Group Name | Presence | Range | IE type and reference | Semantics description |
| [FFS] |  |  |  |  |

#### 9.2.3.z2 Periodicity Range

This IE indicates the periodicity range for the TSC QoS flow as defined in TS 23.501 [7].

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| IE/Group Name | Presence | Range | IE type and reference | Semantics description |
| CHOICE Periodicity Range  | M |  |  |  |
| >*Periodicity Bound* |  |  |  |  |
|  >>Periodicity Lower Bound | M |  | Periodicity9.2.3.116 |  |
|  >>Periodicity Upper Bound | M |  | Periodicity9.2.3.116 |  |
| >*Periodicity List* |  |  |  |  |
|  **>>Allowed Periodicity List** |  | *1* |  |  |
|  >>>Allowed Periodicity Item |  | *1..<maxnoofPeriodicities>* |  |  |
|  >>>>Allowed Periodicity | M |  | Periodicity9.2.3.116 |  |

|  |  |
| --- | --- |
| Range bound | Explanation |
| *maxnoofPeriodicities* | Maximum no. of allowed periodicities. Value is 8 [FFS]. |

#### 9.2.3.z3 Capability for BAT Adaptation

This IE indicates the capability for BAT adaptation for the TSC QoS flow as defined in TS 23.501 [7].

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| IE/Group Name | Presence | Range | IE type and reference | Semantics description |
| [FFS] |  |  |  |  |

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* The End \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***