**3GPP TSG-CT WG1 Meeting #131-eC1-21xxxx**

**E-meeting, 19-27 August 2021was C1-214271**

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *CR-Form-v12.1* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **24.539** | **CR** | **0001** | **rev** | **1** | **Current version:** | **17.1.0** |  |
|  | | | | | | | | |
| *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 | **X** | Radio Access Network |  | Core Network | **X** |

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|  | | | | | | | | | | |
| ***Title:*** |  | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | ZTE | | | | | | | | | |
| ***Source to TSG:*** | C1 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | IIoT | | | | |  | ***Date:*** | | | 2021-08-24 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **F** |  | | | | | ***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:*** | | The field of length of port parameter value in port management list is 2 octet size. However, the field of length of port parameter value in port update result information element is 1 octet size which needs to be modified to 2 octet size.  There is similar issue with the length of user plane node parameter value in user plane node update result information element. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | Modify the size of length of port parameter value field to 2 octets.  Modify the size of length of user plane node parameter value field to 2 octets.  **Backward compatibility analysis:**  This CR is not backwards compatible with previous versions of this specification:   1. The TSN AF compliant with TS 24.519 (v17.0.0 and previous versions) and TS 24.539 v17.1.0 interworking with the DS-TT/NW-TT compliant with this CR:   The DS-TT/NW-TT would indicate the “Length of Port parameter value” of the *Port parameter update 1* using 2 octets while the TSN AF expects this paramter to be indicating by using 1 octet as well as the TSN AF will decode incorrectly all the parameters following the “Length of Port parameter value” of Port parameter update because of the octet shift..   1. The TSN AF compliant with this CR interworking with DS-TT/NW-TT compliant with TS 24.519 (v17.0.0 and previous versions) and TS 24.539 v17.1.0:   The DS-TT/NW-TT would indicate the “Length of Port parameter value” of the *Port parameter update 1* using 1 octet when the TSN AF expects to be indicated by 2 octets as well as the TSN AF will decode incorrectly all the parameters following “Length of Port parameter value” of the *Port parameter update 1* because of the octet shift. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | No sufficient space in port update result IE or user plane node update result IE if the parameter value exceeds to 255. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 9.5, 9.5E | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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:*** | |  | | | | | | | | |

\* \* \* First Change \* \* \* \*

9.5 Port update result

The purpose of the port update result information element is to report to the TSN AF the outcome of the request from the TSN AF to set one or more port parameters to a specific value.

The port update result information element is coded as shown in figure 9.5.1, figure 9.5.2, figure 9.5.3, figure 9.5.4, figure 9.5.5, and table 9.5.1.

The port update result information element has a minimum length of 5 octets and a maximum length of 65534 octets.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 |  |
| Port update result IEI | | | | | | | | octet 1 |
| Length of port update and update error contents | | | | | | | | octet 2  octet 3 |
| Port update contents | | | | | | | | octet 4  octet a |
| Port update error contents | | | | | | | | octet a+1  octet z |

**Figure 9.5.1: Port update result information element**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 |  |
| Number of port parameters successfully updated | | | | | | | | octet 4 |
| Port parameter update 1 | | | | | | | | octet 5\*  octet b\* |
| Port parameter update 2 | | | | | | | | octet b+1\*  octet c\* |
| … | | | | | | | | octet c+1\*  …  octet d\* |
| Port parameter update N | | | | | | | | octet d+1\*  octet a\* |

**Figure 9.5.2: Port update contents**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 |  |
| Port parameter name | | | | | | | | octet e  octet e+1 |
| Length of Port parameter value | | | | | | | | octet e+2  octet e+3 |
| Port parameter value | | | | | | | | octet e+4  octet f |

**Figure 9.5.3: Port parameter update**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 |  |
| Number of port parameters not updated successfully | | | | | | | | octet a+1 |
| Port parameter error 1 | | | | | | | | octet a+2\*  octet a+3\* |
| Port parameter error 2 | | | | | | | | octet a+4\*  octet a+5\* |
| **…** | | | | | | | | octet a+6\*  …  octet z-2\* |
| Port parameter error N | | | | | | | | octet z-1\*  octet z\* |

**Figure 9.5.4: Port update error contents**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 |  |
| Port parameter name | | | | | | | | octet i  octet i+1 |
| Port management service cause | | | | | | | | octet i+2 |

**Figure 9.5.5: Port parameter error**

**Table 9.5.1: Port update result information element**

|  |
| --- |
| Value part of the port update result information element (octets 4 to z) |
|  |
| Port update contents (octets 4 to a)  This field consists of zero or several port parameter updates.  Port parameter update  Port parameter name (octets e to e+1) |
|  |
| This field contains the name of the port parameter which could be set successfully, encoded over 2 octets as specified in table 9.2.1 for the DS-TT or NW-TT to TSN AF direction. |
| Length of port parameter value (octets e+2 to e+3) |
|  |
| This field contains the binary encoding of the length of the port parameter value |
|  |
| Port parameter value (octets e+4 to f) |
|  |
| Port error contents (octets a+1 to z)  This field consists of zero or several port parameter errors.  Port parameter error  Port parameter name (octets i to i+1) |
|  |
| This field contains the name of the port parameter whose value could not be set successfully, encoded over 2 octets as specified in table 9.2.1 for the DS-TT or NW-TT to TSN AF direction. |
| Port management service cause (octet i+2)  This field contains the port management service cause indicating the reason why the value of the port parameter could not be set successfully, encoded as follows:  Bits  **8 7 6 5 4 3 2 1**  0 0 0 0 0 0 0 0 Reserved  0 0 0 0 0 0 0 1 port parameter not supported  0 0 0 0 0 0 1 0 Invalid port parameter value  0 1 1 0 1 1 1 1 Protocol error, unspecified  The receiving entity shall treat any other value as 0110 1111, "protocol error, unspecified". |

\* \* \* Next Change \* \* \* \*

9.5E User plane node update result

The purpose of the User plane node update result information element is to report to the TSN AF the outcome of the request from the TSN AF to set one or more User plane node parameters to a specific value.

The User plane node update result information element is coded as shown in figure 9.5E.1, figure 9.5E.2, figure 9.5E.3, figure 9.5E.4, figure 9.5E.5, and table 9.5E.1.

The User plane node update result information element has a minimum length of 5 octets and a maximum length of 65530 octets.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 |  |
| User plane node update result IEI | | | | | | | | octet 1 |
| Length of User plane node update and update error contents | | | | | | | | octet 2  octet 3 |
| User plane node update contents | | | | | | | | octet 4  octet a |
| User plane node update error contents | | | | | | | | octet a+1  octet z |

**Figure 9.5E.1: User plane node update result information element**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 |  |
| Number of User plane node parameters successfully updated | | | | | | | | octet 4 |
| User plane node parameter update 1 | | | | | | | | octet 5\*  octet b\* |
| User plane node parameter update 2 | | | | | | | | octet b+1\*  octet c\* |
| … | | | | | | | | octet c+1\*  …  octet d\* |
| User plane node parameter update N | | | | | | | | octet d+1\*  octet a\* |

**Figure 9.5E.2: User plane node update contents**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 |  |
| User plane node parameter name | | | | | | | | octet e  octet e+1 |
| Length of User plane node parameter value | | | | | | | | octet e+2  octet e+3 |
| User plane node parameter value | | | | | | | | octet e+4  octet f |

**Figure 9.5E.3: User plane node parameter update**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 |  |
| Number of User plane node parameters not updated successfully | | | | | | | | octet a+1 |
| User plane node parameter error 1 | | | | | | | | octet a+2\*  octet a+3\* |
| User plane node parameter error 2 | | | | | | | | octet a+4\*  octet a+5\* |
| … | | | | | | | | octet a+6\*  …  octet z-2\* |
| User plane node parameter error N | | | | | | | | octet z-1\*  octet z\* |

**Figure 9.5E.4: User plane node update error contents**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 |  |
| User plane node parameter name | | | | | | | | octet i  octet i+1 |
| User plane node management service cause | | | | | | | | octet i+2 |

**Figure 9.5E.5: User plane node parameter error**

**Table 9.5E.1: User plane node update result information element**

|  |
| --- |
| Value part of the User plane node update result information element (octets 4 to z) |
|  |
| User plane node update contents (octets 4 to a)  This field consists of zero or several User plane node parameter updates.  User plane node parameter update  User plane node parameter name (octets e to e+1) |
|  |
| This field contains the name of the User plane node parameter which could be set successfully, encoded over 2 octets as specified in table 9.5B.1 for the NW-TT to TSN AF direction. |
| Length of User plane node parameter value (octets e+2 to e+3) |
|  |
| This field contains the binary encoding of the length of the User plane node parameter value |
|  |
| User plane node parameter value (octets e+4 to f) |
|  |
| User plane node error contents (octets a+1 to z)  This field consists of zero or several User plane node parameter errors.  User plane node parameter error  User plane node parameter name (octets i to i+1) |
|  |
| This field contains the name of the User plane node parameter whose value could not be set successfully, encoded over 2 octets as specified in table 9.5B.1 for the NW-TT to TSN AF direction. |
| User plane node management service cause (octet i+2)  This field contains the User plane node management service cause indicating the reason why the value of the User plane node parameter could not be set successfully, encoded as follows:  Bits  **8 7 6 5 4 3 2 1**  0 0 0 0 0 0 0 0 Reserved  0 0 0 0 0 0 0 1 User plane node parameter not supported  0 0 0 0 0 0 1 0 Invalid User plane node parameter value  0 1 1 0 1 1 1 1 Protocol error, unspecified  The receiving entity shall treat any other value as 0110 1111, "protocol error, unspecified". |

\* \* \* Next Change \* \* \* \*