**3GPP TSG-RAN WG3 Meeting #120R3-23xxxx**

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

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| *CR-Form-v12.2* |
| **CHANGE REQUEST** |
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|  |  | **CR** |  | **rev** |  | **Current version:** |  |  |
|  |
| *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 | **X** | Core Network | **X** |

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|  |
| ***Title:***  |  |
|  |  |
| ***Source to WG:*** |  |
| ***Source to TSG:*** |  |
|  |  |
| ***Work item code:*** |  |  | ***Date:*** | 2023-05-22 |
|  |  |  |  |  |
| ***Category:*** | **A** |  | ***Release:*** |  |
|  | *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)****S*** *(adding to the sourcing companies’ CR statistics)*Detailed explanations of the above categories canbe 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-16 (Release 16)Rel-17 (Release 17)Rel-18 (Release 18)Rel-19 (Release 19)* |
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| ***Reason for change:*** | Some elementary procedures of NGAP specify the “Unsuccessful Operation” by means of procedural text contained in the “Successful Operation” section of that elementary procedure. Such elementary procedures are defined without a message with the *Type of Message* IE set to "Unsuccessful Outcome" Discussions at RAN3#120 revealed that there is the possibility to interpret the statement “The unsuccessful operation is specified in the successful operation section.” such, that the message with the *Type of Message* IE set to "Successful Outcome" defined for that elementary procedure reports any unsuccessful operation of the respective elementary procedure, including protocol errors, for which the nodal behaviour is specified in Chapter 10 of NGAP and which content would contradict such interpretation, as Chapter 10 specifies for these elementary procedures that the ERROR INDICATION to be used for protocol errors. |
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| ***Summary of change:*** | Introduce explicit statements in chapter 10 that protocol errors are either reported by the message used to report the unsuccessful outcome of a procedure or by the Error Indication procedure. Impact Analysis:Impact assessment towards the previous version of the specification (same release): - This CR has isolated impact with the previous version of the specification (same release) because it only corrects the unsuccessful operation of elementary procedures for which no message is defined to report the unsuccessful outcome for protocol errors and for which the unsuccessful operation is specified in the successful operation section of that procedure.- The change can be considered backwards compatible from a functionsal point of view to those implementations that follow the explicit statements introduced by this CR. |
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| ***Consequences if not approved:*** | The possbility to interpret the statement “The unsuccessful operation is specified in the successful operation section.” in “Unsuccessful Operation” sections such that the message with the *Type of Message* IE set to "Successful Outcome" defined for the respective elementary procedure reports any unsuccessful operation of the elementary procedure, including protocol errors, would still remain. |
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| ***Clauses affected:*** | 10.1 |
|  |  |
|  | **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:*** |  |

<<<<<<<<<<<<<<<<<<<< First Change >>>>>>>>>>>>>>>>>>>>

# 10 Handling of Unknown, Unforeseen and Erroneous Protocol Data

## 10.1 General

Protocol Error cases can be divided into three classes:

- Transfer Syntax Error.

- Abstract Syntax Error.

- Logical Error.

Protocol errors can occur in the following functions within a receiving node:



Figure 10.1-1: Protocol Errors in NGAP.

The information stated in subclauses 10.2, 10.3 and 10.4, to be included in the message used when reporting an error, is what at minimum shall be included. Other optional information elements within the message may also be included, if available. This is also valid for the case when the reporting is done with a response message. The latter is an exception to what is stated in subclause 4.1.

If an elementary procedure has defined a message with the *Message Type* IE set to "Unsuccessful Outcome", this message is used to report protocol errors, otherwise the Error Indication procedure is triggered.

<<<<<<<<<<<<<<<<<<<< End of Changes >>>>>>>>>>>>>>>>>>>>