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| CHANGE REQUEST |
| Meeting ID:\* | ARC #31 |
| Source:\* | Dale Seed, Convida Wireless, Seed.Dale@ConvidaWireless.comMike Starsinic, Convida Wireless, Starsinic.Michael@ConvidaWireless.comCatalina Mladin, Convida Wireless, Mladin.Catalina@ConvidaWireless.comJames Hu, ATT, james.hu@att.com |
| Date:\* | 2017-09-10 |
|  | See Introduction |
| Reason for Change/s:\* | Rel-3 |
| CR against: Release\* | [x]  Active <WI-0058> - 3GPP & Cellular IoT Interworking[ ]  MNT maintenance / < Work Item number(optional)>Is this a companion CR? Yes [ ]  No [ ] Companion CR number: (Note to Rapporteur - use latest agreed revision)Is this a mirror CR? Yes [ ]  No [ ] Mirror CR number: (Note to Rapporteur - use latest agreed revision)[ ]  STE Small Technical Enhancements / < Work Item number (optional)>Only ONE of the above shall be ticked |
| CR against: WI\* |  WI-0058 - 3GPP & Cellular IoT Interworking |
| CR against: TS/TR\* | TS-0026 Version 0.4.0 |
| Clauses \* | [ ]  Editorial change[ ]  Bug Fix or Correction[ ]  Change to existing feature or functionality[x]  New feature or functionalityOnly ONE of the above shall be ticked |
| Type of change: \* | <TS/TR number>, <Version Number>, and <Description on which aspect should be reflected in this TS/TR> |
| Impacted other TS/TR(s) | This CR contains only essential changes and corrections? YES [x]  NO [ ] This CR may break backwards compatibility with the last approved version of the TS? YES [ ]  NO [x]  |
| Post Freeze checking:\* | This CR contains only essential changes and corrections? YES [x]  NO [ ] This CR may break backwards compatibility with the last approved version of the TS? YES [ ]  NO [x]  |
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GUIDELINES for Change Requests:

Provide an informative introduction containing the problem(s) being solved, and a summary list of proposals.

Each CR should contain changes related to only one particular issue/problem.

In case of a correction, and the change apply to previous releases, a separate “mirror CR” should be posted at the same time of this CR

Mirror CR: applies only when the text, including clause numbering are exactly the same.

Companion CR: applies when the change means the same but the baselines differ in some way (e.g. clause number).

Follow the principle of completeness, where all changes related to the issue or problem within a deliverable are simultaneously proposed to be made E.g. A change impacting 5 tables should not only include a proposal to change only 3 tables. Includes any changes to references, definitions, and acronyms in the same deliverable.

Follow the drafting rules.

All pictures must be editable.

Check spelling and grammar to the extent practicable.

Use Change bars for modifications.

The change should include the current and surrounding clauses to clearly show where a change is located and to provide technical context of the proposed change. Additions of complete clauses need not show surrounding clauses as long as the proposed clause number clearly shows where the new clause is proposed to be located.

Multiple changes in a single CR shall be clearly separated by horizontal lines with embedded text such as, start of change 1, end of change 1, start of new clause, end of new clause.

When subsequent changes are made to content of a CR, then the accepted version should not show changes over changes. The accepted version of the CR should only show changes relative to the baseline approved text.

## Introduction

3GPP Release 13 introduces the ability to send Non-IP data to and from the UE in 3GPP NAS control plane messages. Since no data plane set up is required when sending Non-IP data to / from a UE, this results in optimizations for the both the network and the UE.

3GPP Release 15 introduces the SCEF API that supports Non-IP Data Delivery. This API can be used to exchange Non-IP data between an IN-CSE and an MN-CSE, ADN-AE, or ASN-CSE hosted on a UE.

**This contribution proposes functionality to enable an IN-CSE to send and receive Non-IP data to and from an MN-CSE, ADN-AE, or ASN-CSE hosted on a UE over the SCEF interface.**

### -----------------------Start of change 1-------------------------------------------

## 7.1 Cellular IoT non-IP data delivery (NIDD)

### 7.1.1 SCEF-based NIDD

The 3GPP SCEF Non-IP Data Delivery (NIDD) functionality described in 3GPP TS 23.682 [2] supports an API to allow the exchange of Non-IP data between an IN-CSE and an MN-CSE, ADN-AE, or ASN-CSE hosted on a UE. Via this SCEF NIDD API, an IN-CSE may exchange oneM2M request and response primitives with an MN-CSE, ADN-AE, or ASN-CSE hosted on a UE.

### 7.1.1.2 SCEF Configuration for NIDD

The SCEF NIDD API supports an NIDD Configuration procedure that may be used by the IN-CSE to inform the SCEF that it expects Non-IP Data from a UE hosting an MN-CSE, ADN-AE, or ASN-CSE. Figure 7.1.1.2-1 illustrates this procedure. If the NIDD Configuration procedure is performed, the IN-CSE should perform the procedure before a UE attaches and attempts to establish a Non-IP PDN connection to the SCEF. This procedure is optional as the parameters may be pre-provisioned at the SCEF.



**Figure 7.1.1.2-1: NIDD Configuration Request**

**Pre-conditions:**

The IN-CSE is configured with the *M2M-Ext-ID* of a UE and an indication that the ASN/MN-CSE or ADN-AE hosted on this UE uses NIDD to exchange oneM2M primitives with the IN-CSE. This information is configured in the *deviceIdentifier* and *niddRequired* attributes of the <*serviceSubscribedNode*> resource corresponding to the UE.

There is a relationship in place between the Service Provider and MNO allowing the IN-CSE to perform NIDD Configuration Requests to the underlying 3GPP network. The method for establishing this relationship is outside the scope of the present document.

**Step 1: IN-CSE determines to issue NIDD Configuration Request**

If the *niddRequired* attribute of a <*serviceSubscribedNode*> resource associated with a UE hosting an ASN/MN-CSE or ADN-AE is set to TRUE, then the IN-CSE shall issue a NIDD Configuration Request to the proper SCEF.

**Step 2 (Optional): DNS Query/Response**

To determine which SCEF to contact, an IN-CSE may determine the IP address(es)/port(s) of the proper SCEF by performing a DNS query using the M2M-Ext-ID (M2M External Identifier) of the UE hosting the ASN/MN-CSE or ADN-AE. This M2M-Ext-ID shall be configured in the *deviceIdentifier* attribute of the <*serviceSubscribedNode*> resource associated with the UE. Alternatively, an IN-CSE may use a pre-configured SCEF identifier. The method for pre-configuring a SCEF identifier into the IN-CSE is outside the scope of the present document.

**Step 3: NIDD Configuration Request**

The IN-CSE issues a NIDD Configuration Request for a particular ASN/MN-CSE or ADN-AE hosted on a UE. The fields of the API are populated as follows.

* *External Identifier* shall be set to the M2M-Ext-ID of the UE hosting the targeted ASN/MN-CSE or ADN-AE.
* *SCS Identifier* shall be set to a value that is prearranged between the Service Provider and MNO.
* *T8 Destination Address* shall be set to a URI of the IN-CSE that the SCEF will deliver MO NIDD data to.
* *TTRI* is used to correlate this request with future responses. It shall be assigned based on internal IN-CSE policies.
* *TLTRI* is used to identify the NIDD Configuration Request. It shall be assigned based on internal IN-CSE policies. The TLTRI is used in NIDD Configuration Update or Cancel requests.
* *NIDD Duration* specifies the lifetime of the NIDD Configuration and shall be set per SLA between the Service Provider and MNO. The SCEF may change the NIDD Duration value.
* *Requested Action* shall be set to “New” for a request to configure a new NIDD Configuration, or “Update” for a request to update the parameters associated with an existing NIDD Configuration indicated by the TLTRI, or “Cancel” to cancel the NIDD Configuration Request indicated by the TLTRI.
* *PDN Connection Establishment Option* may be used to indicate the IN-CSE’s default preference for how the SCEF should process a MT NIDD Submit Request from the IN-CSE if the UE has not yet established a Non-IP PDN connection to the SCEF. The valid values include “wait for the UE to establish the PDN connection”, “respond with an error cause”, or “send a device trigger”. This value shall be set based on SLA with the MNO.
* *Reliable Data Service Configuration* shall be set to indicate that Reliable Data Service is enabled and it shall include the source and destination ports used for MO and MT NIDD between the IN-CSE and the ASN/MN-CSE or ADN-AE hosted on the UE.

**Step 4: Process NIDD Configuration Request**

The SCEF processes the request.

**Step 5: NIDD Configuration Response**

The SCEF responds to the request with a *Cause* value that indicates if the request was accepted and the TTRI that was provided in the NIDD Configuration Request so that the IN-CSE can correlate the response with the original request.

The message includes the following information.

* *TTRI* is set to the same TTRI value that was provided in the request.
* *Maximum Packet Size* is set to the maximum NIDD packet size that is associated with this APN. This value is configured per SLA with the MNO.
* *Reliable Data Service Indication* indicates the Reliable Data Service is enabled in the APN configuration
* *Cause* is set to a value that indicates if the request was accepted or not

If the Cause field indicates that the request was accepted, the IN-CSE shall use the *Maximum Packet Size* as a limit on the maximum size MT NIDD Submit Request it shall initiate towards the corresponding UE specified in the NIDD Configuration Request.

### 7.1.1.3 SCEF-based Mobile Terminated NIDD

The SCEF API supports a Mobile Terminated (MT) NIDD procedure that may be used by the IN-CSE to send non-IP data to a UE hosting an MN-CSE, ADN-AE, or ASN-CSE. Figure 7.1.1.3-1 illustrates this procedure.



**Figure 7.1.1.3-1: SCEF-based Mobile Terminated NIDD**

**Pre-conditions:**

The NIDD Configuration procedure defined in clause 7.1.1.2 completes successfully.

**Step 1 (Optional): Application issues oneM2M Request Primitive**

An AE (e.g. IN-AE) may issue a oneM2M request targeting a ASN/MN-CSE or ADN-AE.

**Step 2: IN-CSE determines to issue a SCEF-based Mobile Terminated NIDD Request**

The IN-CSE shall only issue a SCEF-based Mobile Terminated (MT) NIDD Submit Request if the NIDD Configuration Request for the targeted ASN/MN-CSE or ADN-AE hosted on a UE was successful and the size the oneM2M request primitive to be sent in the MT NIDD Submit Request is less than or equal to the Max Packet Size defined in the NIDD Configuration response.

**Step 3: MT NIDD Submit Request**

The IN-CSE issues a MT NIDD Submit Request for a particular ASN/MN-CSE or ADN-AE hosted on a UE. The fields of the API are populated as follows.

* *External Identifier* shall be set to the M2M-Ext-ID of the UE hosting the targeted ASN/MN-CSE or ADN-AE.
* *TTRI* is used to correlate this request with future responses. It shall be assigned based on internal IN-CSE policies.
* *TLTRI* is used to identify the MT NIDD Submit Request. It shall be assigned based on internal IN-CSE policies. The TLTRI is used in MT NIDD Submit Update or Cancel requests.
* *Maximum Latency* may be set to indicate the maximum delay acceptable for MT data and used to configure the buffer duration in the underlying 3GPP network; a Maximum Latency of 0 indicates that buffering is not allowed. If Maximum Latency is not provided, the SCEF determines the acceptable delay based on local policies.
* *Priority* may be set to indicate the priority of the non-IP data packet relative to other non-IP data packets. If Priority is not provided, the SCEF determines the acceptable delay based on local policies*.*
* *PDN Connection Establishment Option* may be used to indicate the IN-CSE’s default preference for how the SCEF should process a MT NIDD request from the IN-CSE if the UE has not yet established a Non-IP PDN connection to the SCEF. The valid values include “wait for the UE to establish the PDN connection”, “respond with an error cause”, or “send a device trigger”. If a PDN Connection Establishment Option is not provided with the non-IP packet, the SCEF uses the PDN Connection Establishment Option that was provided during NIDD Configuration to decide how to handle the absence of a PDN connection*.*
* *Reliable Data Service Configuration* (optional) indicates the source and destination ports for the MT packet and includes an indication that a reliable data service acknowledgment is requested. The port numbers shall match the port numbers that were provided during NIDD configuration.
* *Non-IP Data* shall be configured with a oneM2M primitive to send to the UE hosting the targeted ASN/MN-CSE or ADN-AE.

**Step 4: MT NIDD Submit Response**

If the targeted UE does not have an active NIDD PDN connection to the SCEF, the SCEF may buffer the request until the UE establishes the connection. The SCEF may also trigger the UE to establish a NIDD PDN connection to the SCEF. Alternatively, the SCEF may generate an error.

The SCEF may return a MT NIDD Submit Response to the IN-CSE to indicate if the request is buffered, a trigger has been generated, or an error has occurred. The fields of the response are populated as follows.

* *TTRI* is configured with the TTRI of the corresponding MT NIDD Submit Request.
* *Buffered Indication* is used to indicate whether the SCEF has buffered the MT NIDD Submit Request.
* *Trigger Indication* is used to indicate whether the SCEF has triggered the UE targeted by the MT NIDD Submit Request to establish an NIDD PDN connection to the SCEF.
* *Cause* is used to indicate a success or an appropriate error cause value.

**Step 5: Process MT NIDD Submit Request**

If the UE targeted by the MT NIDD Submit Request has an active NIDD PDN connection to the SCEF, the SCEF interacts with the 3GPP Core Network to process the request and deliver it to the targeted UE.

Note, If an MT NIDD Submit Request is received with non-IP data and a TTRI that is equal to a request that is already buffered, then the buffered data is replaced by the SCEF. If an MT NIDD Submit Request is received with no non-IP data and a TTRI that is equal to a request that is already buffered, then the buffered data is purged by the SCEF.

**Step 6: MT NIDD Submit Response**

After completing the processing of the MT NIDD Submit Request, the SCEF returns a MT NIDD Submit Response with the following fields.

* *TTRI* is configured with the TTRI of the corresponding MT NIDD Submit Request
* *Reliable Data Service Acknowledgement Indication* may be included and indicates if an acknowledgement was received from the UE for the MT NIDD. If the Reliable Data Service was requested in the MT NIDD Submit Request, then the MT NIDD Submit Response shall be sent to the SCS/AS after the acknowledgement is received from the UE or, if no acknowledgment is received, then the MT NIDD Submit Response shall be returned with a cause value indicating that no acknowledgement was received.
* *Hop-by-Hop Acknowledgment Indication* may be included when the Reliable Data Service was not requested in the MT NIDD Submit Request and shall have a value of 'Success Acknowledged Delivery', 'Success Unacknowledged Delivery' or 'Unsuccessful delivery'.
* *Cause* is set to a value of 'Success Acknowledged Delivery', 'Success Unacknowledged Delivery' or 'Unsuccessful delivery' to indicate if the request was accepted or not.

**Step 7: Process oneM2M Request Primitive**

The ASN/MN-CSE or ADN-AE hosted on the UE targeted by the MT NIDD Request processes the oneM2M request primitive delivered within the MT NIDD Request.

**Step 8: MO NIDD Request**

The UE acknowledges the RDS packet and the ASN/MN-CSE or ADN-AE generates a oneM2M response primitive and issues a MO NIDD Request to deliver the response primitive back to the Originator. The MO NIDD Request to deliver the oneM2M response primitive shall be addressed to the same port numbers that were received in step 5 and the request shall indicate that an RDS acknowledgement is desired.

**Step 9: MO NIDD Indication**

When the SCEF receives the MO NIDD Submit Request, it finds the corresponding T8 Destination Address (URI) of the IN-CSE based on the NIDD Configuration that has been successfully performed. The SCEF then forwards the oneM2M primitive carried in the MO NIDD Submit Request to the IN-CSE via a MO NIDD Indication with the following fields.

* *External Identifier* is set to the M2M-Ext-ID of the UE hosting the targeted ASN/MN-CSE or ADN-AE that originated the MO NIDD Request.
* *TTRI* is used to correlate this request with future responses. It is assigned by the SCEF.
* *TLTRI* is assigned by the SCEF.
* *Reliable Data Service Configuration* indicates the source and destination ports that were provided in the MO NIDD packet
* *Non-IP Data* is configured with a oneM2M primitive sent by the UE hosting the Originator ASN/MN-CSE or ADN-AE.

**Step 10: MO NIDD Acknowledgement**

When the IN-CSE receives the MO NIDD Indication, it responds with a MO NIDD Acknowledgement with the following fields.

* *TTRI* shall be configured with the TTRI of the corresponding MO NIDD Indication
* *Cause* shall be set to a value of indicating a value of 'Success Acknowledged Delivery', 'Success Unacknowledged Delivery' or 'Unsuccessful delivery' to indicate if the request was accepted or not.

**Step 11: MO NIDD Submit Response**

The SCEF sends an RDS Acknowledgement to the UE and processes the MO NIDD Acknowledgement from the IN-CSE.

**Step 12 (Optional): Return oneM2M Response Primitive to Application**

If an AE (e.g. IN-AE) was the Originator of the corresponding oneM2M request primitive, the IN-CSE shall return the oneM2M response primitive to the AE.

### 7.1.1.4 SCEF-based Mobile Originated NIDD

The SCEF API supports a Mobile Originated (MO) NIDD procedure that may be used by a UE hosting an ASN/MN-CSE or ADN-AE to send non-IP data to an IN-CSE. Figure 7.1.1.4-1 illustrates this procedure.



**Figure 7.1.1.4-1: SCEF-based Mobile Originated NIDD**

**Pre-conditions:**

The NIDD Configuration procedure defined in clause 7.1.1.2 completes successfully.

**Step 1: oneM2M Request Primitive Generation**

The ASN/MN-CSE or ADN-AE hosted on a UE generates a oneM2M request primitive targeting the IN-CSE.

**Step 2: MO NIDD Submit Request**

The ASN/MN-CSE or ADN-AE issues a MO NIDD Request to deliver the primitive to the IN-CSE. When the request is sent, the UE shall indicate that an RDS acknowledgment is requested. The RDS source and destination port numbers shall be set to the same values that were provided to the SCEF by the IN-CSE during NIDD Configuration. The port numbers are pre-provisioned in the ASN/MN-CSE or ADN-AE.

Note: It is FFS whether oneM2M will reserve port numbers that will be used by default and weather the port numbers can be provided to the ASN/MN-CSE or ADN-AE in a trigger message.

**Step 3: MO NIDD Indication**

When the SCEF receives the MO NIDD Submit Request, it finds the corresponding T8 Destination Address of the IN-CSE based on the NIDD Configuration that has been successfully performed. The SCEF then forwards the oneM2M primitive carried in the MO NIDD Submit Request to the IN-CSE via a MO NIDD Indication with the following fields.

* *External Identifier* is set to the M2M-Ext-ID of the UE hosting the targeted ASN/MN-CSE or ADN-AE that originated the MO NIDD Request.
* *TTRI* is used to correlate this request with future responses. It is assigned by the SCEF.
* *TLTRI* is assigned by the SCEF.
* *Reliable Data Service Configuration* includes the source and destination ports that were provided in the MO packet.
* *Mobile Originated Non-IP Data* is configured with a oneM2M request primitive sent by the UE hosting the Originator ASN/MN-CSE or ADN-AE.

**Step 4: MO NIDD Acknowledgement**

When the IN-CSE receives the MO NIDD Indication, it shall respond with a MO NIDD Acknowledgement with the following fields.

* *TTRI* shall be configured with the TTRI of the corresponding MO NIDD Indication
* *Cause* shall be set to a value of indicating a value of 'Success Acknowledged Delivery', 'Success Unacknowledged Delivery' or 'Unsuccessful delivery' to indicate if the request was accepted or not.

**Step 5: MO NIDD Submit Response**

The SCEF sends an RDS acknowledgment to the UE and the SCEF processes the MO NIDD Acknowledgement from the IN-CSE.

**Step 6: Process oneM2M Request Primitive**

The IN-CSE processes the oneM2M request primitive that was delivered in the MO NIDD Indication.

**Step 7: Return oneM2M Response Primitive**

The IN-CSE may generate a oneM2M response primitive if a response is required. If a response is required, the IN-CSE shall issue a MT NIDD Submit Request to deliver it to the ASN/MN-CSE or ADN-AE hosted on the UE that originated the corresponding oneM2M request primitive.

Note, the IN-CSE shall only issue a SCEF-based Mobile Terminated (MT) NIDD Submit Request if the size of the oneM2M response primitive to be sent in the MT NIDD Submit Request is less than or equal to the NIDD Max Packet Size established during the corresponding the NIDD Configuration procedure for the UE.

The fields of the API are populated as follows.

* *External Identifier* shall be set to the M2M-Ext-ID of the UE hosting the targeted ASN/MN-CSE or ADN-AE.
* *TTRI* is used to correlate this request with future responses. It shall be assigned based on internal IN-CSE policies.
* *TLTRI* is used to identify the MT NIDD Submit request. It shall be assigned based on internal IN-CSE policies. The TLTRI is used in MT NIDD Submit Update or Cancel requests.
* *Maximum Latency* may be set to indicate the maximum delay acceptable for MT data and used to configure the buffer duration in the underlying 3GPP network; a Maximum Latency of 0 indicates that buffering is not allowed. If Maximum Latency is not provided, the SCEF determines the acceptable delay based on local policies.
* *Priority* may be set to indicate the priority of the non-IP data packet relative to other non-IP data packets. If Priority is not provided, the SCEF determines the acceptable delay based on local policies*.*
* *PDN Connection Establishment Option* may be used to indicate the IN-CSE’s default preference for how the SCEF should process a MT NIDD request from the IN-CSE if the UE has not yet established a Non-IP PDN connection to the SCEF. The valid values include “wait for the UE to establish the PDN connection”, “respond with an error cause”, or “send a device trigger”. If PDN Connection Establishment Option is not provided with the non-IP packet, the SCEF uses the PDN Connection Establishment Option that was provided during NIDD Configuration to decide how to handle the absence of a PDN connection*.*
* *Reliable Data Service Configuration* includes the source and destination ports that should be populated in the RDS header. The same port numbers that were received in step 3 shall be used. The Reliable Data Service Configuration shall also indicate that an RDS acknowledgment should be requested.
* *Mobile Terminated Non-IP Data* shall be configured with a oneM2M primitive to send to the UE hosting the targeted ASN/MN-CSE or ADN-AE.

**Step 8: MT NIDD Submit Response**

If the targeted UE does not have an active NIDD PDN connection to the SCEF, the SCEF may buffer the request until the UE establishes the connection. The SCEF may also trigger the UE to establish a NIDD PDN connection to the SCEF. Alternatively, the SCEF may generate an error.

The SCEF may return a MT NIDD Submit Response to the IN-CSE to indicate if the request is buffered, a trigger has been generated, or an error has occurred. The fields of the response are populated as follows.

* *TTRI* is configured with the TTRI of the corresponding MT NIDD Submit Request
* *Buffered Indication* is used to indicate whether the SCEF has buffered the MT NIDD Submit Request
* *Trigger Indication* is used to indicate whether the SCEF has triggered the UE targeted by the MT NIDD Submit Request to establish an NIDD PDN connection to the SCEF.
* *Cause* is used to indicate a success or an appropriate error cause value.

**Step 9: Process MT NIDD Submit Request**

If the UE targeted by the MT NIDD Submit Request has an active NIDD PDN connection to the SCEF, the SCEF interacts with the 3GPP Core Network to process the request and deliver it to the targeted UE. The UE responds with an RDS acknowledgment.

Note, If an MT NIDD Submit Request is received with non-IP data and a TTRI that is equal to a request that is already buffered, then the buffered data is replaced by the SCEF. If an MT NIDD Submit Request is received with no non-IP data and a TTRI that is equal to a request that is already buffered, then the buffered data is purged by the SCEF.

**Step 10: MT NIDD Submit Response**

After completing the processing of the MT NIDD Submit Request, the SCEF returns a MT NIDD Submit Response with the following fields.

* *TTRI* is configured with the TTRI of the corresponding MT NIDD Submit Request
* *Reliable Data Service Acknowledgement Indication* may be included and indicates if an acknowledgement was received from the UE for the MT NIDD. If the Reliable Data Service was requested in the MT NIDD Submit Request, then the MT NIDD Submit Response shall be sent to the SCS/AS after the acknowledgement is received from the UE or, if no acknowledgment is received, then the MT NIDD Submit Response is returned with a cause value indicating that no acknowledgement was received.
* *Hop-by-Hop Acknowledgment Indication* may be included when the Reliable Data Service was not requested in the MT NIDD Submit Request and will have a value of 'Success Acknowledged Delivery', 'Success Unacknowledged Delivery' or 'Unsuccessful delivery'.
* *Cause* is set to a value of 'Success Acknowledged Delivery', 'Success Unacknowledged Delivery' or 'Unsuccessful delivery' to indicate if the request was accepted or not.

**Step 11: Process oneM2M Request Primitive**

The ASN/MN-CSE or ADN-AE hosted on the UE targeted by the MT NIDD Request processes the oneM2M response primitive delivered within the MT NIDD Request.

### -----------------------Start of change 1---------------------------------------------

CHECK LIST

* Does this Change Request include an informative introduction containing the problem(s) being solved, and a summary list of proposals.?
* Does this CR contain changes related to only one particular issue/problem?
* Have any mirror CRs been posted?
* Does this Change Request make **all** the changes necessary to address the issue or problem? E.g. A change impacting 5 tables should not include a proposal to change only 3 tables?Does this Change Request follow the drafting rules?
* Are all pictures editable?
* Have you checked the spelling and grammar?
* Have you used change bars for all modifications?
* Does the change include the current and surrounding clauses to clearly show where a change is located and to provide technical context of the proposed change? (Additions of complete clauses need not show surrounding clauses as long as the proposed clause number clearly shows where the new clause is proposed to be located.)
* Are multiple changes in this CR clearly separated by horizontal lines with embedded text such as, start of change 1, end of change 1, start of new clause, end of new clause.?