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| CHANGE REQUEST | |
| Meeting ID:\* | ARC 32 |
| Source:\* | Dale Seed, Convida Wireless, [Seed.Dale@ConvidaWireless.com](mailto:Seed.Dale@ConvidaWireless.com)  Catalina Mladin, Convida Wireless, [Mladin.Catalina@ConvidaWireless.com](mailto:Mladin.Catalina@ConvidaWireless.com) |
| Date:\* | 2017-10-30 |
| Reason for Change/s:\* | See the introduction |
| CR against: Release\* | Release 3 |
| CR against: WI\* | Active - WI-0058 - 3GPP & Cellular IoT Interworking  MNT maintenance / < Work Item number(optional)>  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: TS/TR\* | TS-0026 Version 0.5.0 |
| Clauses \* |  |
| Type of change: \* | Editorial change  Bug Fix or Correction  Change to existing feature or functionality  New feature or functionality  Only ONE of the above shall be ticked |
| Impacted other TS/TR(s) | <TS/TR number>, <Version Number>, and <Description on which aspect should be reflected in this TS/TR> |
| Post Freeze checking:\* | This CR contains only essential changes and corrections? YES  NO  This CR may break backwards compatibility with the last approved version of the TS? YES  NO |
| Template Version: January 2017 (Do not modify) | |

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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

This is an editorial contribution that changes the format of section 7.6 for Configuration of Traffic Patterns to align it with the format of the rest of the document.

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

## 7.6 Configuration of Traffic Patterns

oneM2M uses the 3GPP MTC feature for Configuration of Device Communication Patterns to configure Node Traffic Patterns in the Underlying Network (see TS-0001 section 8.3.5 Configuration of Node Traffic Patterns).   
To that purpose the IN-CSE translates the oneM2M Node Traffic Pattern (TP) into a 3GPP Device Communication Pattern. The generic oneM2M procedure for configuration of Node traffic Patterns is shown in Figure 7.6-1.

The 3GPP Underling Network signaling sequence for provisioning of CP parameters is described in 3GPP TS 23.682 [i.14].



Figure 7.6-1: General procedure for oneM2M configuration of Traffic Patterns

**Pre-conditions:**

There is a relationship in place between the IN-CSE and MNO allowing the IN-CSE to request Configuration of Device Communication Patterns. The method for establishing this relationship is outside the scope of the present document.

**Step 0: UE Attach and oneM2M Registration Procedures.**

The UE attaches to the 3GPP network and the ADN-AE(s) or ASN/MN-CSE hosted on the UE perform the oneM2M registration procedure, as detailed in clause 6.5. The IN-CSE hosts the corresponding <*AE*> or <*remoteCSE*> resources and an associated <*node*> resource for the registree. During this procedure, the ADN-AE or ASN/MN-CSE can create an *activityPatternElements* attribute indicating the anticipated communication patterns.

The anticipated communication behavior of the ADN-AE or ASN/MN-CSE may also be changed by updating the *activityPatternElements* attribute of either the <*AE*> or <*remoteCSE*> resource, respectively.

**Step 1: IN-CSE (SCS) sends to the SCEF a Communication Patterns Configuration request.**

This step is triggered by the create/update/delete of *activityPatternElements* attribute of either the <*AE*> or <*remoteCSE*> resource. The IN-CSE derives the communication patterns from the *activityPatternElements.*

The IN-CSE selects the SCEF based on the *M2M-Ext-ID*’s of the registree ASN/MN-CSE or ADN-AEs (e.g. either a DNS lookup on the *M2M-Ext-ID* or the based on the domain portion of the *M2M-Ext-ID*’s.). The IN-CSE provides the communication pattern to the SCEF, the fields of the API are populated as follows.

* + *External Identifier* shall be set to M2M-Ext-ID
  + *SCS Identifier* shall be set to a value that is prearranged between the Service Provider and MNO.
  + *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 Communication Pattern request. It shall be assigned based on internal IN-CSE policies. Later, when the IN-CSE decides to change the communication pattern, the value will be used to reference the original request. The SCEF will use this information to identify what communication pattern should be modified.
  + *CPParameterSets* – This is a set of communication/traffic pattern parameters indicating anticipated communication schedule of the AE or CSE. The IN-CSE derives the TP parameters as follows:
* For a Field Node hosting one or more AEs represented with a single <node> resource, using the values provided in all the *activityPatternElements* attributes for the <AE>s on this node.
* For a Field Node hosting an ASN or MN, using the values provided by the *activityPatternElements* attribute of the <*remoteCSE>* resource.
* For a group of Field Nodes, using the values provided by the *activityPatternElements* attribute of each <*group*> member.

IN-CSE uses this parameter to add, change or delete some or all of the CP parameter sets of the UE.

**Step 2 – Step 3: Communication Patterns Configuration Handling in the Underlying Network.**

The underlying network elements stores the new/updated CP parameter set along with the associated SCEF ReferenceID and validity time. The SCEF authorizes the request and responds with a cause value that indicates if the request was accepted and with the TTRI that was provided in step 1, so that the IN-CSE can correlate the response with the original request.

If the SCEF discarded any of the parameters that were provided in step 1 it indicates which values were discarded. The IN-CSE does not need to take any actions to account for discarded values.

### -----------------------End 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.?