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| CHANGE REQUEST |
| Meeting ID:\* | SDS 42 |
| Source:\* | Bob Flynn, Convida Wireless , Bob.Flynn@convidawireless.com |
| Date:\* | 2019-09-20 |
| Reason for Change/s:\* | Security related oneM2M for Device Connection Efficiency (DCE) |
| CR against: Release\* | Rel-4 |
| CR against: WI\* | [x]  Active <Work Item number> [ ]  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\* | TR-0024v4\_2\_0 |
| Clauses \* |  |
| Type of change: \* | [ ]  Editorial change[ ]  Bug Fix or Correction[x]  Change to existing feature or functionality[ ]  New feature or functionalityOnly ONE of the above shall be ticked |
| Other TS/TR(s) impacted | None |
| 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 [ ]  |
| Template Version: January 2019 (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

-------------------------------------------------- Start of Change 1--------------------------------------------------

## x.3 Solutions

*Editor's Note: This clause will contain the solutions that address the key issues in this area.*

### x.3.n Solution #y.1: TS.34\_4.2\_004

*Editor's Note: Solutions within the area are not in any particular order but they are added incrementally (n = 1, 2, 3…) when new solution is identified. 'y' refers to the area.*

#### x.3.n.1 Introduction

*Editor's Note: Each solution should list the key issues that it addresses. There may be references to the key issues outside the area.*

TS.34:

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| TS.34\_4.2\_REQ\_004 | The IoT Embedded Service Layer should provide security services to the IoT Device Application so as to provide a secure end-to-end service. For example by following industry guidelines such as those provided by:•   OneM2M – www.onem2m.org |

For this requirement, we need to provide specific details of how e2e security will be supported in a ASN-CSE for this purpose.

#### x.3.n.2 Solution details

*Editor's Note: This clause will describe the solution.*

#### x.3.n.3 Evaluation

*Editor's Note: This clause will contain a variety of evaluations of this solution.*

EDITORS NOTE: Each evaluation will include the requirement ID(s) from GSMA TS.34 that is solved with the proposed solution

-------------------------------------------------- End of Change 1---------------------------------------------------

-------------------------------------------------- Start of Change 2--------------------------------------------------

## x.3 Solutions

*Editor's Note: This clause will contain the solutions that address the key issues in this area.*

### x.3.n Solution #y.1: TS.34\_4.2\_005

*Editor's Note: Solutions within the area are not in any particular order but they are added incrementally (n = 1, 2, 3…) when new solution is identified. 'y' refers to the area.*

#### x.3.n.1 Introduction

*Editor's Note: Each solution should list the key issues that it addresses. There may be references to the key issues outside the area.*

TS.34:

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| TS.34\_4.2\_REQ\_005 | The IoT Embedded Service Layer should enforce appropriate security measures to prevent unauthorized or insecure device management functionality (e.g. diagnostics, firmware updates) of the IoT Device software and firmware. Such security measures shall apply to all local and remote (over the air) device management functionality. |

oneM2M ACPs are the first part of the solution, whereas capabilities that are intended to be available to an IoT application are instead exposed through the ASN-CSE.

This requirement implies that the SL should prevent applications on the UE from access to device APIs.

Requires device to restrict access to appropriate APIs and provide privileged access to the CSE.

For example, UE RPM data may be readable through a MgmtObj but updates will only be allowed based on permissions, which would likely be a MNO based network application.

Spec should describe all of the dev management capabilities that need to be protected. Default ACPs should be restricted to MNO based user or subscriber.

#### x.3.n.2 Solution details

*Editor's Note: This clause will describe the solution.*

#### x.3.n.3 Evaluation

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EDITORS NOTE: Each evaluation will include the requirement ID(s) from GSMA TS.34 that is solved with the proposed solution

-------------------------------------------------- End of Change 2---------------------------------------------------

-------------------------------------------------- Start of Change 3--------------------------------------------------

## x.3 Solutions

*Editor's Note: This clause will contain the solutions that address the key issues in this area.*

### x.3.n Solution #y.1: TS.34\_4.2\_004

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#### x.3.n.1 Introduction

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TS.34:

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#### x.3.n.2 Solution details

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-------------------------------------------------- End of Change 3---------------------------------------------------

-------------------------------------------------- Start of Change 4--------------------------------------------------

## x.3 Solutions

*Editor's Note: This clause will contain the solutions that address the key issues in this area.*

### x.3.n Solution #y.1: TS.34\_4.2\_004

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#### x.3.n.1 Introduction

*Editor's Note: Each solution should list the key issues that it addresses. There may be references to the key issues outside the area.*

TS.34:

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#### x.3.n.2 Solution details

*Editor's Note: This clause will describe the solution.*

#### x.3.n.3 Evaluation

*Editor's Note: This clause will contain a variety of evaluations of this solution.*

EDITORS NOTE: Each evaluation will include the requirement ID(s) from GSMA TS.34 that is solved with the proposed solution

-------------------------------------------------- End of Change 4---------------------------------------------------

-------------------------------------------------- Start of Change 1--------------------------------------------------

-------------------------------------------------- End of Change 1---------------------------------------------------