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| CHANGE REQUEST | |
| Meeting ID:\* | SDS #57 |
|  | Andreas Kraft, DT, [A.Kraft@telekom.de](mailto:A.Kraft@telekom.de)  Andreas Neubacher, DT, [Andreas.Neubacher@magenta.at](mailto:Andreas.Neubacher@magenta.at)  Bob Flynn, Exacta GSS, [Bob.Flynn@exactagss.com](mailto:Bob.Flynn@exactagss.com)  Miguel Angel Reina Ortega, ETSI, [MiguelAngel.ReinaOrtega@etsi.org](mailto:MiguelAngel.ReinaOrtega@etsi.org) |
| Date:\* | 2022-11-30 |
| Reason for Change/s:\* | Adding time retrieval method for constrained devices |
| CR against: Release\* | Release 5 |
| CR against: WI\* | Active WI-xxxx  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-0001, V4.16.1 |
| Clauses \* | 10.2.10.27 |
| 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) |  |
| 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 CR proposes an additional method for TS-0001, clause 10.2.24 “Time Management”. The already specified methods in this clause define methods to handle timewise out-of-sync devices, how a CSE may compensate time differences, and how a device could get the current time and date from a CSE.

However, even the simple method specified in clause 10.2.24.4, “currentTime Retrieval”, requires the retrieval of an additional resource from the CSE, namely the <CSEBase>. Beside the extra communication overhead (a device may not need to implement a RETRIEVE operation) and knowledge about this resource type necessary on the constraint device, it also has some impact on a CSE installation, because the requesting entity needs to have RETRIEVE access rights to the <CSEBase> resource.

The proposed new method will work without any extra RETRIEVE operation and will work in fact with any of the request operations sent to a CSE: If the **Originating Timestamp** message parameter is present in a request to a CSE, then the CSE must also set the **Originating Timestamp** message parameter (with the current CSE time) in the response. Also, no extra configuration of access control is necessary.

### \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Start of Change 1 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

#### 10.2.24.4 Current Time Retrieval using Originating Timestamp

A Hosting CSE may support the capability for other entities to retrieve its current time by supporting to send the **Originating Timestamp** message attribute in responses. If this procedure is supported, then other entities (e.g. a Registree AE) may get the current time by sending any request with the **Originating Timestamp** message parameter present in the request. If this message parameter is present in the request the hosting CSE then shall include the **Originating Timestamp** with a current value in its response. If the Originating Timestamp is missing in the request, then the CSE may not set the **Originating Timestamp** in the response.

Upon receiving the response an entity may compare the received current time of the Hosting CSE against its own current time and compute a time offset, if any. Based on this time offset, the entity may adjust its current time to synchronize it with the current time of the Hosting CSE.

### \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* End of Change 1 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*