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| CHANGE REQUEST |
| Meeting ID:\* | SDS 48 |
| Source:\* | Bob Flynn, Convida Wireless , Bob.Flynn@convidawireless.comAndreas Kraft, Deutsche Telekom, Andreas.Kraft@t-systems.com Miguel Angel Reina Ortega, ETSI, MiguelAngel.ReinaOrtega@etsi.org  |
| Date:\* | 2020-11-02 |
| Reason for Change/s:\* | Announcement Procedure - Update |
| CR against: Release\* | Rel-3 |
| CR against: WI\* | [x]  Active < WI-0077> [ ]  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-0004 v3.18.0 |
| Clauses \* | 6.3.4.2.1, 6.5.5.3, 7.3.3.10, 7.4.3.1, 7.4.26.1, 8.2.4 |
| 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

While working on announcement development / test cases, there were some issues that we wanted to highlight for discussion and propose a solution for those issues.

Consider the scenario where <aResource> is to be announced to CSE1, CSE2, and CSE5.



First thing to point out is that the announced resource is in different locations depending on the “registration” status/relationship to Hosting CSE.

The second thing to point out is that when CSE1 deregisters from Hosting CSE then all of the announced resources are DELETED. Whereas if CSE2 de-registers from CSE1, the announced resources remain intact (for example until re-registration). This is a consequence of the first issue above.

The third thing to point out is the specification wording of the announce procedure. Specifically, from 10.2.13.2-1:

The original resource Hosting CSE shall first check if it is a Registree or the Registrar of the announcement target CSE. If that is the case, the announced resource shall be created as a direct child of the Hosting CSE’s <*remoteCSE*> resource hosted by the announcement target CSE. If that is not the case, the Hosting CSE shall next check if its <*remoteCSE*> resource has been announced to the announcement target CSE. The Hosting CSE shall perform this check by checking the *announceTo* attribute of its <*remoteCSE*> resource hosted on its Registrar CSE if the announcement target CSE is not a descendent CSE, or the corresponding Registree CSE if the announcement target CSE is a descendent CSE. If it is not announced, **the Hosting CSE shall request that its Registrar CSE (If the target CSE is not its descendant CSE) or Registree CSE (if the target CSE is its descendant CSE) to create a <*remoteCSEAnnc*> resource representing the Hosting CSE as a direct child of the <*CSEBase*> of the announcement target CSE.** The announced resource shall then be created by the Hosting CSE as a direct child resource of the <*remoteCSEAnnc*> resource.

This requires the Hosting CSE to update the ‘announceTo’ attribute of its <remoteCSE> to include the announcement target CSE. At this point, the proper execution become unclear:

It is intended that CSE1 would send a CREATE <remoteCSEAnnc> to the announcement target CSE.

Because the announced resource is a <remoteCSE> CSE1 is NOT supposed to follow the FULL procedure described above, i.e. check if CSE1 is registered to the announcement target CSE. This is not described clearly (perhaps a TS-0004 level of detail).

A proposed solution to simplify the procedure, eliminate the inconsistent parent resource type and address the deleted announced resources during de-registration is:

* to make <cseBase> announceable
* Then, to remove the registration check to determine the target of the announcement as target of the announcement will always be a cseBaseAnnc
* remove the decendent cse check because normal retargeting rules will apply.
* keep original resource tree structure for the announced resources if possible, otherwise announced resources are created under <CSEBaseAnnc>





The benefits of these proposed changes are:

There is a consistent location for announced resources (always under <CSEBaseAnnc>)

The newly defined announce procedure applies with no exceptions.

The original resource hosting CSE is able to self manage the target of the announced resources (CSEBaseAnnc)

Separates registration and announcement concerns

 Now announced resource will remain after deregistration of a CSE

R02 – Small improvements on the procedure wording

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

7.3.3.10 Announce the resource or attribute

If either a CREATE Request that contains an *announceTo* attribute or an UPDATE Request that adds a URI or CSE-ID in the *announceTo* attribute that are not already stored into the *announceTo* attribute of the resource is received:

1. Compose the CREATE Request primitive as follows:

The *link* attribute is set to the URI of the original resource.

If the *accessControlPolicyIDs* attribute of the original resource is not present, the *accessControlPolicyIDs* attribute is set to the same value as the parent resource or is set using the local policy of the original resource.

Attributes marked with MA in oneM2M TS-0001 [6]. Such attributes shall be included if present in the original resource and set to same value as in the original resource.

Attributes marked with OA that are included in the *announcedAttribute* attribute. Such attributes shall be included if present in the original resource and set to same value as in the original resource.

The *resourceType* attribute is set to the announced variant of the original resource (see Table 6.3.4.2.1‑1).

Perform the following steps for each new item (announcement target) in the *announceTo* attribute list:

* 1. If the announcement target is a CSE-ID, check if the parent resource of the original resource is announced to the announcement target CSE.

- If yes, announce the original resource by sending the CREATE Request with To parameter set to the location of the announced parent resource.

- If no, then check if the Hosting CSE created a <CSEBaseAnnc> resource as a child of the <CSEBase> into the announcement target CSE.

- If yes, announce the original resource by sending the CREATE Request with To parameter set to the <CSEBaseAnnc> resource address.

- If no, then the CSE hosting the original resource shall perform the following steps:

* + - * + Create <CSEBaseAnnc> that represents itself at the announcement target CSE. Hosting CSE shall compose the CREATE <CSEBaseAnnc> Request primitive as described for resource announcement above and shall provide a value for the *expirationTime* attribute of the <CSEBaseAnnc> to be created.
				+ Once <CSEBaseAnnc> resource is created, send the CREATE Request with To parameter set to the <CSEBaseAnnc> resource address..
	1. If the announcement target is not a CSE-ID send the CREATE Request to the provided URI in the *announceTo* of the request.
	2. Wait for the Response to the CREATE that was sent in step a or b.
	3. Replace the CSE-ID or URI in the content of the *announceTo* attribute contained in the original request’s resource representation by the URI of the successfully-announced resource from the received Response.

Include the updated *announceTo* attribute in the ***Content*** parameter of the Response to the received request.

If an UPDATE Request that adds the attribute name into the *announcedAttribute* attribute is received:

1. Compose the UPDATE Request primitive. The UPDATE Request shall provide the attribute name for the attribute to be announced, and the initial value for the attribute in the ***Content*** parameter. The initial value shall be the same with the value from the original resource. The attribute that will be announced shall be marked as OA.
2. Send UPDATE Requests to all announced resources listed in the *announceTo* attribute.
3. Wait for Response primitive.
4. Add the attribute name of the successfully announced attribute to the *announcedAttribute* attribute.
5. Include updated *announcedAttribute* attribute in the ***Content*** parameter in the Response to the received UPDATE Request.

If an attribute(s) specified as MA (see oneM2M TS-0001 [6]) or an attribute(s) included in the *announcedAttribute* attribute is updated:

1. Compose an UPDATE Request primitive by including the updated attribute(s) with its associated updated value.

Send the UPDATE Request to all CSE(s) represented by the URI(s) in the *announceTo* attribute of the original resource.

Wait for the Response primitive(s).

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

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

6.3.4.2.1 m2m:resourceType

**Table 6.3.4.2.1‑1: Interpretation of resourceType**

| **Value** | **Interpretation** | **Note** |
| --- | --- | --- |
| 1 | accessControlPolicy |  |
| 2 | AE |  |
| 3 | container |  |
| 4 | contentInstance |  |
| 5 | CSEBase |  |
| 6 | delivery |  |
| 7 | eventConfig |  |
| 8 | execInstance |  |
| 9 | group |  |
| 10 | locationPolicy |  |
| 11 | m2mServiceSubscriptionProfile |  |
| 12 | mgmtCmd |  |
| 13 | mgmtObj |  |
| 14 | node |  |
| 15 | pollingChannel |  |
| 16 | remoteCSE |  |
| 17 | request |  |
| 18 | schedule |  |
| 19 | serviceSubscribedAppRule |  |
| 20 | serviceSubscribedNode |  |
| 21 | statsCollect |  |
| 22 | statsConfig |  |
| 23 | subscription |  |
| 24 | semanticDescriptor |  |
| 25 | notificationTargetMgmtPolicyRef |  |
| 26 | notificationTargetPolicy |  |
| 27 | policyDeletionRules |  |
| 28 | flexContainer |  |
| 29 | timeSeries |  |
| 30 | timeSeriesInstance |  |
| 31 | role |  |
| 32 | token |  |
| 33 | void |  |
| 34 | dynamicAuthorizationConsultation |  |
| 35 | authorizationDecision |  |
| 36 | authorizationPolicy |  |
| 37 | authorizationInformation |  |
| 38 | ontologyRepository |  |
| 39 | ontology |  |
| 40 | semanticMashupJobProfile |  |
| 41 | semanticMashupInstance |  |
| 42 | semanticMashupResult |  |
| 43 | AEContactList |  |
| 44 | AEContactListPerCSE |  |
| 45 | localMulticastGroup |  |
| 46 | multimediaSession |  |
| 47 | triggerRequest |  |
| 48 | crossResourceSubscription |  |
| 49 | backgroundDataTransfer |  |
| 50 | transactionMgmt |  |
| 51 | transaction |  |
| 10001 | accessControlPolicyAnnc |  |
| 10002 | AEAnnc |  |
| 10003 | containerAnnc |  |
| 10004 | contentInstanceAnnc |  |
| 10005 | CSEBaseAnnc |  |
| 10009 | groupAnnc |  |
| 10010 | locationPolicyAnnc |  |
| 10013 | mgmtObjAnnc |  |
| 10014 | nodeAnnc |  |
| 10016 | remoteCSEAnnc |  |
| 10018 | scheduleAnnc |  |
| 10024 | semanticDescriptorAnnc |  |
| 10028 | flexContainerAnnc |  |
| 10029 | timeSeriesAnnc |  |
| 10030 | timeSeriesInstanceAnnc |  |
| 10033 | void |  |
| 10034 | dynamicAuthorizationConsultationAnnc |  |
| 10038 | ontologyRepositoryAnnc |  |
| 10039 | ontologyAnnc |  |
| 10040 | semanticMashupJobProfileAnnc |  |
| 10041 | semanticMashupInstanceAnnc |  |
| 10042 | semanticMashupResultAnnc |  |
| 10046 | multimediaSessionAnnc |  |
| NOTE: See clause 6.4.1 Request primitive parameter data types. |

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

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

6.5.5.3 Usage

This type is used by the following resource types:

<AEAnnc>, <containerAnnc>, <CSEBaseAnnc>, <groupAnnc>, <locationPolicyAnnc>, <nodeAnnc>, <remoteCSEAnnc>, <semanticDescriptorAnnc>, <[flexContainer]Annc>, <timeSeriesAnnc>, <ontologyRepositoryAnnc>, <ontologyAnnc>, <semanticMashupJobProfileAnnc>, <semanticMashupInstanceAnnc>, <semanticMashupResultAnne>, <multimediaSessionAnnc>,<scheduleAnnc>.

It is also used by the xxxAnnc variants of the <mgmtObj> specializations.

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

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

**Table 7.4.3.1‑4: Child resources of <CSEBase> resource**

|  |  |  |  |
| --- | --- | --- | --- |
| **Child Resource Type** | **Child Resource Name** | **Multiplicity** | **Ref. to Resource Type Definition** |
| <CSEBaseAnnc> | [variable] | 0..n | Clause 7.4.3 |
| <remoteCSE> | [variable] | 0..n | Clause 7.4.4 |
| <remoteCSEAnnc> | [variable] | 0..n | Clause 7.4.4 |
| <node> | [variable] | 0..n | Clause 7.4.18 |
| <AE> | [variable] | 0..n | Clause 7.4.5 |
| <container> | [variable] | 0..n | Clause 7.4.6 |
| <group> | [variable] | 0..n | Clause 7.4.13 |
| <accessControlPolicy> | [variable] | 0..n | Clause 7.4.2 |
| <subscription> | [variable] | 0..n | Clause 7.4.8 |
| <mgmtCmd> | [variable] | 0..n | Clause 7.4.16 |
| <locationPolicy> | [variable] | 0..n | Clause 7.4.10 |
| <statsConfig> | [variable] | 0..n | Clause 7.4.23 |
| <statsCollect> | [variable] | 0..n | Clause 7.4.25 |
| <request> | [variable] | 0..n | Clause 7.4.12 |
| <delivery> | [variable] | 0..n | Clause 7.4.11 |
| <schedule> | [variable] | 0..1 | Clause 7.4.9 |
| <m2mServiceSubscriptionProfile> | [variable] | 0..n | Clause 7.4.19 |
| <serviceSubscribedAppRule> | [variable] | 0..n | Clause 7.4.29 |
| <notificationTargetPolicy> | [variable] | 0..n | Clause 7.4.31 |
| <dynamicAuthorizationConsultation> | [variable] | 0..n | Clause 7.4.36 |
| <flexContainer> | [variable] | 0..n | Clause 7.4.37 |
| <timeSeries> | [variable] | 0..n | Clause 7.4.38 |
| <role> | [variable] | 0..n | Clause 7.4.40 |
| <token> | [variable] | 0..n | Clause 7.4.41 |
| <authorizationDecision> | [variable] | 0..n | Clause 7.4.43 |
| <authorizationPolicy> | [variable] | 0..n | Clause 7.4.44 |
| <authorizationInformation> | [variable] | 0..n | Clause 7.4.45 |
| <ontologyRepository> | [variable] | 0..1 | Clause 7.4.46 |
| <semanticMashupJobProfile> | [variable] | 0..n | Clause 7.4.49 |
| <semanticMashupInstance> | [variable] | 0..n | Clause 7.4.50 |
| <AEContactList> | [variable] | 0..1 | Clause 7.4.53 |
| <localMulticastGroup> | [variable] | 0..n | Clause 7.4.55 |
| <crossResourceSubscription> | [variable] | 0..n | Clause 7.4.58 |
| <backgroundDataTransfer> | [variable] | 0..n | Clause 7.4.59 |
| <transactionMgmt> | [variable] | 0..n | Clause 7.4.60 |
| <transaction> | [variable] | 0..n | Clause 7.4.61 |

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

## ----------------------- Start of Change 5--------------------------------------------

**Table 7.4.26.1-1: Data type definition of announced Resource types**

|  |  |  |
| --- | --- | --- |
| **Data Type ID** | **File Name** | **Note** |
| CSEBaseAnnc | CDT-CSEBase-v3\_18\_0.xsd |  |
| accessControlPolicyAnnc | CDT-accessControlPolicy-v3\_18\_0.xsd |  |
| remoteCSEAnnc | CDT-remoteCSE-v3\_18\_0.xsd |  |
| AEAnnc | CDT-AE-v3\_18\_0.xsd |  |
| containerAnnc | CDT-container-v3\_18\_0.xsd |  |
| [flexContainer]Annc | See Annex J and oneM2M TS-0023 [40] | Announced variants of flexContainer specializations |
| contentInstanceAnnc | CDT-contentInstance-v3\_18\_0.xsd |  |
| scheduleAnnc | CDT-schedule-v3\_18\_0.xsd |  |
| locationPolicyAnnc | CDT-locationPolicy-v3\_18\_0.xsd |  |
| groupAnnc | CDT-group-v3\_18\_0.xsd |  |
| nodeAnnc | CDT-node-v3\_18\_0.xsd |  |
| semanticDescriptorAnnc | CDT-semanticDescriptor-v3\_18\_0.xsd |  |
| timeSeriesAnnc | CDT-timeSeries-v3\_18\_0.xsd |  |
| timeSeriesInstanceAnnc | CDT-timeSeriesInstance-v3\_18\_0.xsd |  |
| ontologyRepositoryAnnc | CDT-ontologyRepository-v3\_18\_0.xsd |  |
| ontologyAnnc | CDT-ontology-v3\_18\_0.xsd |  |
| semanticMashupJobProfileAnnc | CDT-semanticMashupJobProfile-v3\_18\_0.xsd |  |
| semanticMashupInstanceAnnc | CDT-semanticMashupInstance-v3\_18\_0.xsd |  |
| semanticMashupResultAnnc | CDT-semanticMashupResult-v3\_18\_0.xsd |  |
| genericInterworkingServiceAnnc | CDT-genericInterworkingService-v3\_18\_0.xsd |  |
| genericInterworkingOperationInstanceAnnc | CDT-genericInterworkingOperationInstance-v3\_18\_0.xsd |  |
| svcObjWrapperAnnc | CDT-svcObjWrapper-v3\_18\_0.xsd |  |
| svcFwWrapperAnnc | CDT-svcFwWrapper-v3\_18\_0.xsd |  |
| allJoynAppAnnc | CDT-allJoynApp-v3\_18\_0.xsd |  |
| allJoynSvcObjectAnnc | CDT-allJoynSvcObject-v3\_18\_0.xsd |  |
| allJoynInterfaceAnnc | CDT-allJoynInterface-v3\_18\_0.xsd |  |
| allJoynMethodAnnc | CDT-allJoynMethod-v3\_18\_0.xsd |  |
| allJoynMethodCallAnnc | CDT-allJoynMethodCall-v3\_18\_0.xsd |  |
| allJoynPropertyAnnc | CDT-allJoynProperty-v3\_18\_0.xsd |  |
| multimediaSessionAnnc | CDT-multimediaSession-v3\_18\_0.xsd |  |

-------------------------------------------------- End of Change 5---------------------------------------

## ----------------------- Start of Change 6 --------------------------------------------

**Table 8.2.4‑1: Resource and specialization type short names**

| **Resource Type Name** | **Short Name** |
| --- | --- |
| accessControlPolicy | ***acp*** |
| accessControlPolicyAnnc | ***acpA*** |
| AE | ***ae*** |
| AEAnnc | ***aeA*** |
| container | ***cnt*** |
| containerAnnc | ***cntA*** |
| contentInstance | ***cin*** |
| contentInstanceAnnc | ***cinA*** |
| CSEBase | ***cb*** |
| CSEBaseAnnc | ***cbA*** |
| delivery | ***dlv*** |
| eventConfig | ***evcg*** |
| execInstance | ***exin*** |
| group | ***grp*** |
| groupAnnc | ***grpA*** |
| locationPolicy | ***lcp*** |
| locationPolicyAnnc | ***lcpA*** |
| m2mServiceSubscriptionProfile | ***mssp*** |
| mgmtCmd | ***mgc*** |
| node | ***nod*** |
| nodeAnnc | ***nodA*** |
| pollingChannel | ***pch*** |
| remoteCSE | ***csr*** |
| remoteCSEAnnc | ***csrA*** |
| request | ***req*** |
| schedule | ***sch*** |
| scheduleAnnc | ***schA*** |
| serviceSubscribedAppRule | ***asar*** |
| serviceSubscribedNode | ***svsn*** |
| statsCollect | ***stcl*** |
| statsConfig | ***stcg*** |
| subscription | ***sub*** |
| firmware | ***fwr*** |
| firmwareAnnc | ***fwrA*** |
| software | ***swr*** |
| softwareAnnc | ***swrA*** |
| memory | ***mem*** |
| memoryAnnc | ***memA*** |
| areaNwkInfo | ***ani*** |
| areaNwkInfoAnnc | ***aniA*** |
| areaNwkDeviceInfo | ***andi*** |
| areaNwkDeviceInfoAnnc | ***andiA*** |
| battery | ***bat*** |
| batteryAnnc | ***batA*** |
| deviceInfo | ***dvi*** |
| deviceInfoAnnc | ***dviA*** |
| deviceCapability | ***dvc*** |
| deviceCapabilityAnnc | ***dvcA*** |
| reboot | ***rbo \**** |
| rebootAnnc | ***rboA*** |
| eventLog | ***evl*** |
| eventLogAnnc | ***evlA*** |
| cmdhPolicy | ***cmp*** |
| activeCmdhPolicy | ***acmp*** |
| cmdhDefaults | ***cmdf*** |
| cmdhDefEcValue | ***cmdv*** |
| cmdhEcDefParamValues | ***cmpv*** |
| cmdhLimits | ***cml*** |
| cmdhNetworkAccessRules | ***cmnr*** |
| cmdhNwAccessRule | ***cmwr*** |
| cmdhBuffer | ***cmbf*** |
| notificationTargetMgmtPolicyRef | ***ntpr*** |
| notificationTargetPolicy | ***ntp*** |
| policyDeletionRules | ***pdr*** |
| *dynamicAuthorizationConsultation* | ***dac*** |
| *semanticDescriptor* | ***smd*** |
| *semanticDescriptorAnnc* | ***smdA*** |
| *timeSeries* | ***ts*** |
| *timeSeriesAnnc* | ***tsA*** |
| timeSeriesInstance | ***tsi*** |
| *timeSeriesInstanceAnnc* | ***tsiA*** |
| role | ***rol*** |
| token | ***tk*** |
| genericInterworkingService | ***gis*** |
| genericInterworkingService*Annc* | ***gisA*** |
| genericInterworkingOperationInstance | ***gio*** |
| genericInterworkingOperationInstance*Annc* | ***gioA*** |
| svcObjWrapper | ***ajsw*** |
| svcObjWrapper*Annc* | ***ajswA*** |
| svcFwWrapper | ***ajfw*** |
| svcFwWrapper*Annc* | ***ajfwA*** |
| allJoynApp | ***ajap*** |
| allJoynApp*Annc* | ***ajapA*** |
| allJoynSvcObject | ***ajso*** |
| allJoynSvcObject*Annc* | ***ajsoA*** |
| allJoynInterface | ***ajif*** |
| allJoynInterface*Annc* | ***ajifA*** |
| allJoynMethod | ***ajmd*** |
| allJoynMethod*Annc* | ***ajmdA*** |
| allJoynMethodCall | ***ajmc*** |
| allJoynMethodCall*Annc* | ***ajmcA*** |
| allJoynProperty | ***ajpr*** |
| allJoynProperty*Annc* | ***ajprA*** |
| authorizationDecision | ***auds*** |
| authorizationPolicy | ***aupy*** |
| authorizationInformation | ***auif*** |
| ontologyRepository | ***ontr*** |
| ontologyRepositoryAnnc | ***ontrA*** |
| ontology | ***ont*** |
| ontologyAnnc | ***ontA*** |
| semanticMashupJobProfile | ***smjp*** |
| semanticMashupJobProfile*Annc* | ***smjpA*** |
| semanticMashupInstance | ***smi*** |
| semanticMashupInstance*Annc* | ***smiA*** |
| semanticMashupResult | ***smr*** |
| semanticMashupResult*Annc* | ***smrA*** |
| AEContactList | ***alst*** |
| AEContactListPerCSE | ***alpc*** |
| localMulticastGroup | ***lmg*** |
| multimediaSession | ***mms*** |
| multimediaSessionAnnc | ***mmsA*** |
| triggerRequest | ***tgr*** |
| crossResourceSubscription | ***crs*** |
| backgroundDataTransfer | ***bdt*** |
| *transaction* | ***trac*** |
| *transactionMgmt* | ***tram*** |
| NOTE: \* marked short names have been already assigned in attribute Tables 8.2.3-1 to 8.2.3-5. |

-------------------------------------------------- End of Change 6---------------------------------------