

HubBroker iPaaS CostObjectInformation Specification

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1. Introduction

The HubBroker iPaaS provides functionality where costobject information data can be transferred from the customers' backend via IHubBroker iPaaS to the client's HubBroker iPaaS eProcurement account.

Instead of manually maintaining and uploading lists with costobject information customers can choose to submit this masterdata in XML format via a standard SOAP webservice interface to the HubBroker iPaaS integration platform. From there it will be uploaded to HubBroker iPaaS e-Procurement where after successful validation costobject information becomes deleted & inserted or updated.

The CostObjectInformation document is wrapped into a SOAP envelope and submitted via HTTPs/POST or FTP to HubBroker iPaaS. The HubBroker iPaaS's standard SOAP envelope version is SOAP 1.2.

2. Purpose

The purpose of this document is to provide details about the HubBroker iPaaS CostObjectInformation document type.

In addition to this document there is an XML schema file (XSD) and a structured spreadsheet providing the structure of the CostObjectInformation document in a collapsible format with xPaths, cardinality and datatype.

3. Validation

3.1 Schema Validation

Any CostObjectInformation sent to HubBroker iPaaS must be valid according to its XML schema.

A successful web service call means that the provided SOAP-message is valid according to the XML-schema. In this case a standard HTTP response code 200 OK is returned to the sending server including a SOAP Success response.

Documents which do not comply with this specification might automatically be rejected by the HubBroker iPaaS.

In case of inbound validation failures HubBroker iPaaS will respond synchronously with a HTTP 400 response code back to the sender's server.

3.2 Business Logic Validation

The actual updates in the HubBroker iPaaS e-Procurement system will be done asynchronously after a validation based on business logic and consistency of data has been passed successfully.

3.3 Error handling

If business logic inconsistency leads to a failing upload of costobject information then the customer will be notified via email automatically. The customer will in this case have to correct the error and re-post the message with a new document-ID in the SOAP envelope.

4. CostObjectInformation

The CostObjectInformation message/interface defines 1:n cost objects and supports their creation, update and/or deletion in HubBroker iPaaS eProcurement within one call.

4.1 Document header

4.1.1 Purpose code

//CostObjectInformationHeader/CostObjectInformationPurpose/CostObjectInformationPurposeCode indicates the type of update. The allowed values are:

- "FullUpdate"
- "DeltaUpdate"

FullUpdate is the scenario for initial cost object uploads. The file contains all the organization's cost objects meaning a "delete-insert" operation is executed in HubBroker iPaaS eProcurement by this transaction.

DeltaUpdate is the strongly recommended scenario for maintenance and additional costobjects to be uploaded to HubBroker iPaaS eProcurement. Fewer amounts of data with a higher frequency and a faster upload are the advantages.

4.1.2 Document number and sequence number

Each CostObjectInformation document needs to have an identifier to be stored in *//CostObjectInformationHeader/CostObjectInformationNumber*.

Optionally a sequence number

(*//CostObjectInformationHeader/CostObjectInformationSequenceNumber*) can be added.

4.1.3 Issue date

The document's issue date is expressed as date plus timestamp with optional offset from GMT in *//CostObjectInformationHeader/CostObjectInformationIssueDate*. (Format: YYYY-MM-DDTHH:MM:SS [[+-]HH:MM]).

Example: 2011-03-12T06:35:03-06:00

4.1.4 Organization identifier

The customer organization issuing the cost object information is identified by the *Ident* in the element *//CostObjectInformationHeader/CostObjectIssuingOrganizationIdentifier* with appropriate agency code = "AssignedByBuyerOrBuyersAgent" or "AssignedByMarketPlace".

The organization identifier in the document has to match a valid value maintained in HubBroker iPaaS eProcurement.

4.2 Cost object items

Each cost object item contains information about the cost allocation object. Each combination of type and ID must be unique per document.

In *//CostObjectInformationDetail/ListOfCostObjects* multiple *CostObject* items can be listed. The element *<CostObject>* as such is empty. The necessary information is provided as attributes:

4.2.1 @subtype

In the subtype attribute the type of object for cost allocation is specified. Standard cost object types are:

- AS = Asset number
- CC = CostCenter
- OR = Order
- STR = Generic Cost Object
- WBS = Project number
- ACCNO = GL account

Whether they are valid in HubBroker iPaaS eProcurement depends on the customer's setup.

(A difference when upgrading from SRM 4 to SRM 7 is the usage of the *@type* attribute which was optional when uploading *CostobjectInformation* to HubBroker iPaaS SRM 4 but becomes obsolete with the upgrade to HubBroker iPaaS SRM 7.)

4.2.2 @subtype-id

The identifier for the costobject in the customer's ERP system is maintained in the *subtype-id* attribute.

4.2.3 @subtype-description

Cost object description in clear text.

Note: the description for a cost object is only visible in HubBroker iPaaS eProcurement for users who are logged on in the same language that is sent in subtype-language for that cost object.

4.2.4 @subtype-language

Language of the cost object description in ISO 639 code.

4.2.5 @responsible-user

HubBroker iPaaS eProcurement User-ID (login) of the user responsible for the cost object, usually the approver.

4.2.6 @parent-id

Cost object parent identifier as used by the customer.

4.2.7 @parent-subtype

Cost object parent type. See list of generally allowed types as for *@subtype*.

(A difference when upgrading from SRM 4 to SRM 7 is the usage of the *@parent-type* attribute which was optional when uploading CostobjectInformation to HubBroker iPaaS SRM 4 but becomes obsolete with the upgrade to HubBroker iPaaS SRM 7.)

4.2.8 @subtype-totalbudget

Total budget allocated for the cost object. This value must be greater than the value in attribute *subtype-spentbudget*. Format: Numerical decimal. Decimal designator is a dot (“.”).

Must be present, if *subtype-spentbudget* is present.

4.2.9 @subtype-spentbudget

Already spent budget amount of the cost object. Format: Numerical decimal. Decimal designator is a dot (“.”).

Must be present, if *subtype-totalbudget* is present.

4.2.10 @subtype-budgetcurrency

Currency of the budget for the cost object. ISO 4217 codes, such as EUR, USD, etc.

Must be present, if *subtype-totalbudget* is present.

4.2.11 @actioncode

Code indicating whether the costobject shall be created, updated or deleted:

- CREATE
- UPDATE
- DELETE.

The attribute *actioncode* must be present if

//CostObjectInformationHeader/CostObjectInformationPurpose/CostObjectInformationPurposeCoded = “DeltaUpdate”.

If a *CostObject* is sent with *actioncode* “CREATE” but the *subtype-id* already exists, the existing *CostObject* will be updated with the new information.

If a *CostObject* is sent with *actioncode* UPDATE but the *CostObject* does not exist, the *CostObject* will be created.

The attribute *actioncode* is not needed if //CostObjectInformationPurposeCoded = “FullUpdate” since in this case all cost objects of the issuing organization will first be deleted and then the ones provided in the document will be created.

4.2.12 @no-load-attest

Indicator telling if the *attest_acc table* explicitly should not be updated. Format: X = Do not update.

(Only applicable for customers on SRM 7.)

4.2.13 @no-load-acc

Indicator telling if the *zbbp_std_acc* and *zbbp_std_accd* tables explicitly should not be updated. Format: X = Do not update.

(Only applicable for customers on SRM 7.)

4.2.14 @no-load-budget

Indicator telling if the *zbudget_status* table explicitly should not be updated. Format: X = Do not update.

(Only applicable for customers on SRM 7.)

4.2.15 @valid-from

The date from which the cost object is valid. This is optional and the logic in the HubBroker iPaaS eProcurement system is to put it to the current date if not provided. Format: Date in format YYYYMMDD.

(Only applicable for customers on SRM 7.)

4.2.16 @valid-to

The date up until when the cost object is valid. This is optional and the logic in the eProcurement system is to put it to 99991231 if not provided. Format: Date in format YYYYMMDD.

(Only applicable for customers on SRM 7.)

4.2.17 @parentco-code

The company code of the superior cost object.

(Only applicable for customers on SRM 7.)

4.2.18 @approval-limit

The approval limit that the approver should use (overrides the user specific ones). Format: Numerical decimal. Decimal designator is a dot (".").

(Only applicable for customers on SRM 7.)

4.2.19 @approval-curr

Currency of the provided approval limit. ISO 4217 codes, such as EUR, USD, etc.

Must be present if *approval-limit* is present.

(Only applicable for customers on SRM 7.)

5. Examples

5.1 CC – Cost Centre

Sample CC Tag containing optional information *subtype-description*:

```
<CostObject subtype="CC" subtype-id="8200" subtype-description="HOTELEINKAUF I"
  subtype-language="de"/>
```

Sample CC Tag containing optional information *responsible-user* and conditional information *subtype-totalbudget*, *subtype-spentbudget* and *subtype-budgetcurrency*:

```
<CostObject subtype="CC" subtype-id="custAB" subtype-language="sv" responsible-
  user="a53678" subtype-totalbudget="10000.00" subtype-spentbudget="5000.00" subtype-
  budgetcurrency="EUR"/>
```

5.2 OR – Order

Sample OR Tag containing optional information *subtype-description*:

```
<CostObject subtype="OR" subtype-id="VEN005" subtype-description="Aktion
  Venezuela" subtype-language="de"/>
```

Sample OR Tag containing optional information *responsible-user*, *parent-type* and *parent-subtype*:

```
<CostObject subtype="OR" subtype-id="133557" subtype-language="sv" responsible-
  user="a75322" parent-subtype="CC" parent-id="TG-A"/>
```

5.3 WBS - Project Number

Sample WBS Tag containing optional information *subtype-description*:

```
<CostObject subtype="WBS" subtype-id="O900210100" subtype-
  description="Reisekosten" subtype-language="de"/>
```

5.4 STR – Generic Cost Object

Sample STR Tag containing optional information *subtype-description*, *responsible-user*, *parent-id*, *parent-type* and *parent-subtype*:

```
<CostObject subtype="STR" subtype-id="HAMPS/I" subtype-description="Ideenmngmt.
  und Innovationsfoerd." subtype-language="de" responsible-user="U017959" parent-
  id="FRAPS" parent-subtype="STR"/>
```

5.5 Full example of a cost object XML structure with SOAP envelope:

```
<?xml version="1.0" encoding="UTF-8"?>
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://www.w3.org/2003/05/soap-envelope"
  xmlns:nseps="urn:schemas-HubBroker iPaaS:/docs/endpoint.nsendpoint"
  xmlns:nsfst="urn:schemas-HubBroker iPaaS:/docs/manifest.nsmanifest"
  xmlns:nsproc="urn:schemas-HubBroker iPaaS:/docs/process.nsprocess"
  xmlns:nsprop="urn:schemas-HubBroker iPaaS:/docs/property.nsproperty">
  <SOAP-ENV:Header>
```

```

        <nseps:endpoints SOAP-ENV:mustUnderstand="true">
            <nseps:to>
                <nseps:address>receiverID</nseps:address>
            </nseps:to>
            <nseps:from>
                <nseps:address>senderID</nseps:address>
            </nseps:from>
        </nseps:endpoints>
        <nsprop:properties SOAP-ENV:mustUnderstand="true">
            <nsprop:identity>documentID</nsprop:identity>
            <nsprop:sentAt>2001-12-17T09:30:47.0Z</nsprop:sentAt>
            <nsprop:expiresAt>2001-12-17T09:30:47.0Z</nsprop:expiresAt>
        </nsprop:properties>
        <nsprop:topic>CostObjectInformation</nsprop:topic>
        <nsproc:process SOAP-ENV:mustUnderstand="true">
            <nsproc:correlationid>String</nsproc:correlationid>
            <nsproc:relatedDocid>String</nsproc:relatedDocid>
        </nsproc:process>
    </SOAP-ENV:Header>
    <SOAP-ENV:Body>
        <CostObjectInformation xmlns="rrn:org.HubBroker
iPaaS:schemas/CostObjectInformation.xsd">
            <CostObjectInformationHeader>
                <CostObjectInformationPurpose>

                    <CostObjectInformationPurposeCoded>DeltaUpdate</CostObjectInformationPur
poseCoded>

                </CostObjectInformationPurpose>
                <CostObjectInformationNumber>2009-12-
01T01:16:37</CostObjectInformationNumber>

                <CostObjectInformationSequenceNumber>1</CostObjectInformationSequenceN
umber>

                <CostObjectInformationIssueDate>2011-06-
30T01:04:34</CostObjectInformationIssueDate>
                <CostObjectIssuingOrganizationIdentifier>
                    <Identifier>
                        <Agency>

                            <AgencyCoded>AssignedByBuyerOrBuyersAgent</AgencyCoded>
                            </Agency>
                            <Ident>0005</Ident>
                        </Identifier>
                    </CostObjectIssuingOrganizationIdentifier>
                </CostObjectInformationHeader>
                <CostObjectInformationDetail>
                    <ListOfCostObjects>
                        <CostObject subtype="CC" subtype-id="custAB" subtype-
description="Cust cost center AB" subtype-language="en" responsible-user="a53678"
subtype-totalbudget="10000.00" subtype-spentbudget="5000.00" subtype-
budgetcurrency="EUR" actioncode="CREATE"/>

```

```

        <CostObject subtype="CC" subtype-id="C" subtype-
description="Cost center C" subtype-language="sv" responsible-user="a87507" parent-
subtype="CC" parent-id="custAB" subtype-totalbudget="1000.00" subtype-
spentbudget="500.00" subtype-budgetcurrency="EUR" actioncode="CREATE" no-load-
attest="X" no-load-acc="X" no-load-budget="X" valid-from="20110630" valid-
to="20111231" parentco-code="0010" approval-limit="10000.00" approval-
curr="EUR"/>

```

```

        <CostObject subtype="CC" subtype-id="VL" subtype-
language="sv" responsible-user="a84269" parent-subtype="CC" parent-id="C" subtype-
totalbudget="2000.00" subtype-spentbudget="400.00" subtype-budgetcurrency="EUR"
actioncode="CREATE"/>

```

```

        <CostObject subtype="CC" subtype-id="8000" subtype-
description="VERKSTÄLLANDE LEDNING" subtype-language="sv" responsible-
user="a54144" parent-subtype="CC" parent-id="VL" subtype-totalbudget="7500.00"
subtype-spentbudget="990.00" subtype-budgetcurrency="EUR"
actioncode="CREATE"/>

```

```

        <CostObject subtype="OR" subtype-id="133557" subtype-
language="sv" responsible-user="a75322" parent-subtype="CC" parent-id="TG-A"
actioncode="UPDATE"/>

```

```

        <CostObject subtype="OR" subtype-id="133668" subtype-
language="sv" responsible-user="a75322" parent-subtype="CC" parent-id="8000"
actioncode="UPDATE"/>

```

```

        <CostObject subtype="OR" subtype-id="134872" subtype-
language="sv" responsible-user="a54214" parent-subtype="CC" parent-id="8000"
actioncode="DELETE"/>

```

```

        <CostObject subtype="CC" subtype-id="8001" subtype-
description="KONFERENS" subtype-language="sv" responsible-user="a54144" parent-
subtype="CC" parent-id="VL" actioncode="DELETE"/>

```

```

    </ListOfCostObjects>

```

```

  </CostObjectInformationDetail>

```

```

</CostObjectInformation>

```

```

</SOAP-ENV:Body>

```

```

</SOAP-ENV:Envelope>

```

```

CostObjectInformation xmlns="rrn:org.HubBroker

```

```

iPaaS:schemas/CostObjectInformation.xsd">

```

```

  <CostObjectInformationHeader>

```

```

    <CostObjectInformationPurpose>

```

```

  <CostObjectInformationPurposeCoded>DeltaUpdate</CostObjectInformationPurposeCoded>

```

```

    </CostObjectInformationPurpose>

```

```

    <CostObjectInformationNumber>2009-12-01T01:16:37</CostObjectInformationNumber>

```

```

    <CostObjectInformationSequenceNumber>1</CostObjectInformationSequenceNumber>

```

```

    <CostObjectInformationIssueDate>2011-06-
30T01:04:34</CostObjectInformationIssueDate>

```

```

    <CostObjectIssuingOrganizationIdentifier>

```

```

      <Identifier>

```

```

        <Agency>

```

```

    <AgencyCoded>AssignedByBuyerOrBuyersAgent</AgencyCoded>
  </Agency>
  <Ident>0005</Ident>
</Identifier>
</CostObjectIssuingOrganizationIdentifier>
</CostObjectInformationHeader>
<CostObjectInformationDetail>
  <ListOfCostObjects>
    <CostObject subtype="CC" subtype-id="custAB" subtype-description="Cust cost center AB"
      subtype-language="en" responsible-user="a53678" subtype-totalbudget="10000.00" subtype-
      spentbudget="5000.00" subtype-budgetcurrency="EUR" actioncode="CREATE"/>
    <CostObject subtype="CC" subtype-id="C" subtype-description="Cost center C" subtype-
      language="sv" responsible-user="a87507" parent-subtype="CC" parent-id="custAB" subtype-
      totalbudget="1000.00" subtype-spentbudget="500.00" subtype-budgetcurrency="EUR"
      actioncode="CREATE" no-load-attest="X" no-load-acc="X" no-load-budget="X" valid-
      from="20110630" valid-to="20111231" parentco-code="0010" approval-limit="10000.00" approval-
      curr="EUR" />
    <CostObject subtype="CC" subtype-id="VL" subtype-language="sv" responsible-
      user="a84269" parent-subtype="CC" parent-id="C" subtype-totalbudget="2000.00" subtype-
      spentbudget="400.00" subtype-budgetcurrency="EUR" actioncode="CREATE"/>
    <CostObject subtype="CC" subtype-id="8000" subtype-description="VERKSTÄLLANDE
      LEDNING" subtype-language="sv" responsible-user="a54144" parent-subtype="CC" parent-
      id="VL" subtype-totalbudget="7500.00" subtype-spentbudget="990.00" subtype-
      budgetcurrency="EUR" actioncode="CREATE"/>
    <CostObject subtype="OR" subtype-id="133557" subtype-language="sv" responsible-
      user="a75322" parent-subtype="CC" parent-id="TG-A" actioncode="UPDATE"/>
    <CostObject subtype="OR" subtype-id="133668" subtype-language="sv" responsible-
      user="a75322" parent-subtype="CC" parent-id="8000" actioncode="UPDATE"/>
    <CostObject subtype="OR" subtype-id="134872" subtype-language="sv" responsible-
      user="a54214" parent-subtype="CC" parent-id="8000" actioncode="DELETE"/>
    <CostObject subtype="CC" subtype-id="8001" subtype-description="KONFERENS"
      subtype-language="sv" responsible-user="a54144" parent-subtype="CC" parent-id="VL"
      actioncode="DELETE"/>
  </ListOfCostObjects>
</CostObjectInformationDetail>
</CostObjectInformation>
</SOAP-ENV:Body>
</SOAP-ENV:Envelope>

```