

## 1. Nonwarranty and conditions of use

No liability whatsoever will be accepted for the eCl@ss standard, its numbering system, keywords or property lists. This particularly applies to the use and any damage that may result from this. The classification in no way claims to be complete, particularly as it is subject to a continuous updating process due to the industry's innovation processes. eCl@ss is being published on the eCl@ss DownloadPortal. The use of eCl@ss is only permitted in acceptance of the eCl@ss Terms of Use. These can be found at <http://www.eclasseownload.com/catalog/conditions.php?language=en>.

## 2. General information about eCl@ss

Using a „common language“, which is understandable for both man and machine, is mandatory for a successful electronic and automated communication.

With eCl@ss a common language available: a global, cross-industry standard for classification and unambiguous description of products and services, which is conform to international and national standards. By using eCl@ss within the entire supply chain – from development to disposal - internal business processes as well as data exchange with business partners are optimized in a much more efficient way.

eCl@ss is developed by the association eCl@ss e.V., a non-profit organization, which is supported by ordinary and sponsoring members from companies, associations and institutions. Their common goal is to enhance eCl@ss in accordance with current and future market requirements as well as to promote its international use. Members of the eCl@ss association come from international companies from different industries (e.g. automotive, chemical and electrical engineering, utilities, service and trade).

You can find up-to-date information on <http://www.eclass.eu>.

## 3. Description of the files

The ZIP-file contains all available files for the semi-automatic upgrade from a previous eCl@ss release (SourceRelease) to the current eCl@ss release (TargetRelease).

*List of all contained files:*

eClass7.0_Classification_Update.xml	=	Classification Update File (Class-Update-Table)
eClass7.0_Structure_Difference.xml	=	Structure Difference File (Class Successors)
eClass7.0_Transaction_Update.xml	=	Transaction Update File (Property-Update-Table)

*Format of the data sets:*

eCl@ss XML 2.0 (contains OntoML, see ISO 13584-32:2010, with a few optional enhancements), Encoding: UTF-8, Read-Me-File/Terms of use: PDF

*XML-Scheme:*

The description of the used XML scheme is available here

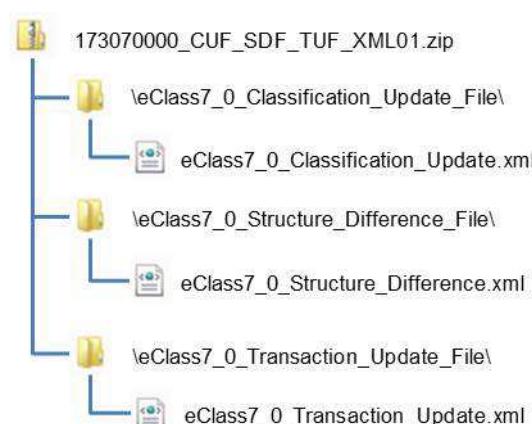
<http://www.eclass.eu/static/eClassXML/2.0/eCl@ssXML/dictionary.xsd>

or to be found in the eCl@ss wiki: [http://wiki.eclass.eu/wiki/ISO\\_13584-32\\_ontoML](http://wiki.eclass.eu/wiki/ISO_13584-32_ontoML)

*Content of the data sets:*

eCl@ss Release 7.0 Update Files (Transaction Update Files (TUF), Classification Update Files (CUF), Structure Difference Files (SDF))

*Structure of the data sets:*



### 3.1 About the use of the files

You can only use these update files, if you possess both a source release (6.x) and the target release 7.x and if you are a registered user of the eCI@ss standard.

The CUF contains the predecessor-successor-relationship of changed classes due to structural changes (MOVE/SPLIT/JOIN). The TUF contains the predecessor-successor-path of changed properties. The SDF contains all absolute changes of elements, i.e. the type of change for each single element, but not the content of the change. The following sections give some examples.

**PLEASE NOTE:** These files have not been tested with productive data yet. They were tested against all existing check routines, business rules and other automatic database checks of the eCI@ss ContentDevelopmentPlatform (<http://www.eclass-cdp.com>), which processed the files. We therefore publish them as a BETA version and include them into the existing mapping table file without extra charges.

### 3.2 Structure of the Classification Update File (CUF)

The file contains all structural changes of classes that were done by a MOVE, a JOIN or a SPLIT function. All predecessors and successors are listed in the file.

A detailed description can be found in the eCI@ss wiki: [http://wiki.eclasseu.org/wikis/Classification\\_Update\\_File](http://wiki.eclasseu.org/wikis/Classification_Update_File)

#### Example Move (7.x to 8.0):

The SourceClass 27250580 (eCI@ss SourceRelease 7.1) was moved to the new TargetClasses 19240101 as a sub-class of 19240100 in TargetRelease 8.0:

```
<map:code_to_code_entry designation="move" direction="injective">
  <map:source_code reference="27250580" ref_name="hierarchical_position" irdi_ref="0173-1#01-AGZ365#007" />
  <map:target_code reference="19240100" ref_name="hierarchical_position" irdi_ref="0173-1#01-ACL824#003" />
  <map:new_code reference="19240101" ref_name="hierarchical_position" irdi_ref="0173-1#01-AGZ365#008" />
</map:code_to_code_entry>
```

#### Example Join (7.x to 8.0):

The SourceClasses 27250590 and 27259090 (eCI@ss SourceRelease 7.1) were joined into the TargetClass 19170190 in TargetRelease 8.0:

```
<map:code_to_code_entry designation="join" direction="injective">
  <map:source_code_set>
    <map:code_entry reference="27250590" ref_name="hierarchical_position" irdi_ref="0173-1#01-BAC228#005" />
  </map:source_code_set>
  <map:target_code reference="19170190" ref_name="hierarchical_position" irdi_ref="0173-1#01-ACL979#007" />
</map:code_to_code_entry>
<map:code_to_code_entry designation="join" direction="injective">
  <map:source_code_set>
    <map:code_entry reference="27259090" ref_name="hierarchical_position" irdi_ref="0173-1#01-BAC230#005" />
  </map:source_code_set>
  <map:target_code reference="19170190" ref_name="hierarchical_position" irdi_ref="0173-1#01-ACL979#007" />
</map:code_to_code_entry>
```

#### Example Split (7.x to 8.0):

The SourceClass 32139090 (eCI@ss SourceRelease 7.1) was split into the new TargetClasses 32130190 and 31130290 in TargetRelease 8.0:

```
<map:code_to_code_entry designation="split" direction="injective">
  <map:source_code reference="32139090" ref_name="hierarchical_position" irdi_ref="0173-1#01-ACJ631#007" />
  <map:target_code reference="32130190" ref_name="hierarchical_position" irdi_ref="0173-1#01-ACJ603#008" />
</map:code_to_code_entry>
<map:code_to_code_entry designation="split" direction="injective">
  <map:source_code reference="32139090" ref_name="hierarchical_position" irdi_ref="0173-1#01-ACJ631#007" />
  <map:target_code reference="32130290" ref_name="hierarchical_position" irdi_ref="0173-1#01-ACJ629#008" />
</map:code_to_code_entry>
```

### 3.3 Structure of the Structure Difference File (SDF)

The file contains all absolute changes of elements and the type of change, but not the content of the change. I.e. all elements that are no more part of the TargetRelease are listed as "DEPR" (deprecated), all new ones are listed as "NEW". Those elements marked with "UPD" have been updated, i.e. their version number was raised.  
A detailed description can be found in the eCI@ss wiki: [http://wiki.eclass.eu/wiki/Structure\\_Difference\\_File](http://wiki.eclass.eu/wiki/Structure_Difference_File)

```
<ColumnSet>
  <Column Id="structure-element-id" Use="optional">
    <ShortName>Structure element identifier</ShortName>
    <Data Type="string" />
  </Column>
  <Column Id="structure-element-change" Use="required">
    <ShortName>Structure element change</ShortName>
    <Data Type="string" />
  </Column>
</ColumnSet>
```

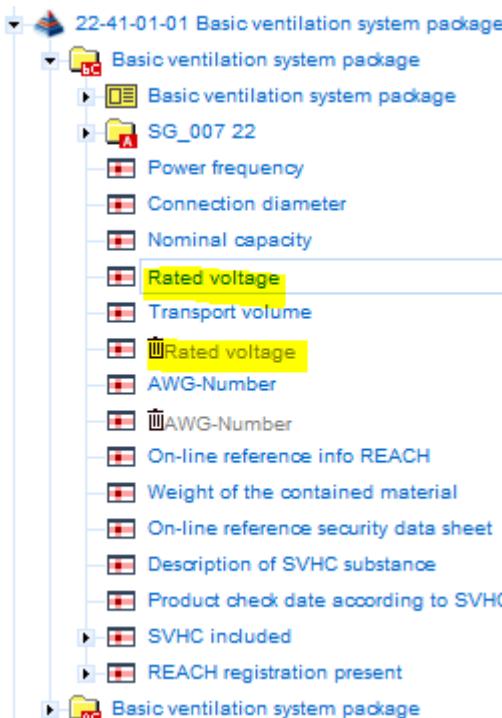
### 3.4 Structure of the Transaction Update File (TUF)

The file contains all successor paths for properties after changes such as a JOIN or a SPLIT of classes or a REPLACE of properties etc. All predecessor and successor property paths are listed in the file.

A detailed description can be found in the eCI@ss wiki: [http://wiki.eclass.eu/wiki/Transaction\\_Update\\_File](http://wiki.eclass.eu/wiki/Transaction_Update_File)

#### Example 1 (7.x to 8.0): Property Replace

The property AAC963 (Rated Voltage, deleted) that was assigned to the BASIC Application Class of SourceClass 22410101 was replaced by Property BAH005 (Rated Voltage):



The corresponding TUF entry is:

```
<map:path_to_path_entry>
  <map:equiv_path>
    <map:source_path ac="0173-1#01-AC0757#007" cc="0173-1#01-AKJ168#008">
      <cmn:property ref="0173-1#02-AAC963#004" />
    </map:source_path>
    <map:target_path ac="0173-1#01-AC0757#008" cc="0173-1#01-AKJ168#009">
      <cmn:property ref="0173-1#02-BAH005#003" />
    </map:target_path>
  </map:equiv_path>
</map:path_to_path_entry>
```

## Example 2 (7.x to 8.0): Join Class

The successor path for property AAO735 (Rated Voltage, deleted) that was assigned to the BASIC Application Class (ABZ689) of SourceClass 40210203 (BAC917) is now the Basic Application Class (AEL649) of TargetClass 34140202, after the Join of the SourceClass into the TargetClass. The TUF entry is:

```
<map:path_to_path_entry>
  <map:equiv_path>
    <map:source_path ac="0173-1#01-ABZ689#007" cc="0173-1#01-BAC917#007">
      <cmn:property ref="0173-1#02-AAO735#002" />
    </map:source_path>
    <map:target_path ac="0173-1#01-AEL649#001" cc="0173-1#01-AFQ882#001">
      <cmn:property ref="0173-1#02-AAO735#002" />
    </map:target_path>
  </map:equiv_path>
</map:path_to_path_entry>
```

## **4. Liability / Compensation / Indemnity**

The update files were produced by eCI@ss with the greatest accuracy using automated systems. Claims for damages and reimbursement (hereafter: "compensation claims") raised against eCI@ss e.V. for whatever legal grounds, especially because of infringement of duties of legal obligations and tort actions, are excluded.

This does not apply to claims in accordance with the product liability law, in cases of intent and gross negligence, for damages because of bodily injury, sickness or disease, or death, and the infringement of fundamental contractual obligations. The claim for compensation for the infringement of fundamental contractual obligations is however restricted to foreseeable damages typical of this type of contract, except in the event of intent or gross negligence or damages being sought for bodily injury, sickness or disease, or death.

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## **5. Support: Authorized eCI@ss IT Service Providers**

During the introduction of eCI@ss, questions frequently occur on the concrete implementation of eCI@ss into various IT systems. Often not all questions can be answered with own resources, so that it turned out to be useful to access external know-how on some issues.

The authorized eCI@ss-service-providers and the eCI@ss e.V. support companies with consulting and offer software solutions for the introduction of eCI@ss in the company and thus sustainably promote the distribution of eCI@ss.

All service providers assigned with implementing tasks defined by the eCI@ss association, guarantee to observe the current rules, guidelines and requirements of the eCI@ss e.V. regarding the eCI@ss data model based on international standards. All information concerning the eCI@ss-service-providers is available on [www.ecl@ss.de](http://www.ecl@ss.de).

The individual service offers can be viewed on the following link:

[http://wiki.ecl@ss.de/wiki/Category:IT\\_Service\\_Providers](http://wiki.ecl@ss.de/wiki/Category:IT_Service_Providers)

