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# M5.22 Revised CDM frozen and documented for Platform release 2

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Dissemination Level		
PU	Public	X
PP	Restricted to other programme participants (including the Commission Services)	
RE	Restricted to a group specified by the consortium (including the Commission Services)	
CO	Confidential, only for members of the consortium (including the Commission Services)	

## M5.22 Revised CDM frozen and documented for Platform release 2

In January 2008, the first Version of the Common Data Model (CDM) was frozen and documented at <a href="http://wp5.e-taxonomy.eu/cdm/v1/">http://wp5.e-taxonomy.eu/cdm/v1/</a>. This first version is based primarily on experiences using existing data models and formats. It attempts to cover all fields related to taxonomy, so that data coming from different applications can be stored and accessed via a single database.

Over the past year, a Java based library (CDM Library) was built using the CDM (see http://dev.e-taxonomy.eu/trac/wiki/CdmLibrary and

http://wp5.e-taxonomy.eu/cdmlib/site/index.html) and much experience was gained. Most CDM concepts proved to be well elaborated. However, a handful of changes to the Model were necessary in order to meet new requirements and to improve ease of use. Most changes were immediately implemented in the CDM Library, sometimes even before revising the Model.

### The main sources for input were:

- 1) Development of the EDIT Data Portals and the EDIT Taxonomic Editor
- 2) Import of data from standard or quasi standard formats (TCS, SDD, ABCD, ...), as well as from other sources (Berlin Model, TaxonX, internal formats)
- 3) Import of data from the WP6 exemplar groups
- 4) Import from other sources (mainly Berlin Model-based data)
- 5) Import from GBIF data into the CDM using the EDIT Specimen Explorer
- 6) Integration of CATE project (<a href="http://www.cate-project.org/">http://www.cate-project.org/</a>) into the CDM. This integration introduced a substantial amount of new functionality into the CDM Library and classes and attributes into the Model.

### Different types of changes undertaken include:

- 1) Additional classes and attributes: In the course of working with the CDM, it became clear that certain information was still missing. Some was information necessary to flesh out an object (new attributes), but whole objects were also lacking and had to be created (new classes).
- 2) Restructuring: In some cases, the structure of classes had to be remodelled to either better reflect taxonomic reality or to make the CDM easier to use. An example for this kind of restructuring is the media part (<a href="http://wp5.e-taxonomy.eu/cdm/v20/EARoot/EA5/EA161.htm">http://wp5.e-taxonomy.eu/cdm/v20/EARoot/EA5/EA161.htm</a>), where the old two level approach (Media MediaInstance) was replaced by a three level approach (Media MediaRepresentation MediaRepresentationPart). At the same time, the media classes were moved from the common package to a newly created explicit media package.
- 3) Renaming: Some classes were renamed to make them more consistent with either the overall CDM naming strategy and/or the naming convention of communities that usually handle this data. A typical example is the descriptive data part (<a href="http://wp5.e-taxonomy.eu/cdm/v20/EARoot/EA3/EA111.htm">http://wp5.e-taxonomy.eu/cdm/v20/EARoot/EA3/EA111.htm</a>), where FeatureBase was renamed DescriptionElementBase and FeatureType was renamed Feature.

These changes to the Model are reflected in the new version 2.0 of the CDM at <a href="http://wp5.e-taxonomy.eu/cdm/v20/">http://wp5.e-taxonomy.eu/cdm/v20/</a>. The most thorough class documentation is the Java documentation of

the Model part of the library at  $\underline{\text{http://wp5.e-taxonomy.eu/cdmlib/site/cdmlib-model/apidocs/index.html}}$  .

Some but unfortunately not all changes to the Model have been documented at  $\frac{http://dev.e-taxonomy.eu/trac/wiki/CdmChanges}{http://dev.e-taxonomy.eu/trac/wiki/CdmChanges}$ .

The CDM is under constant development. Further development will go into version 3, due next year in May (month 50).