Data model

ETIM Classification system
Version 5.0

1. Introduction

The ETIM classification model version 5.0 is available in 2 ways:

- as Microsoft Access 2003 database and as
- txt/CSV-files (only local, country specific)

This document describes the underlying logical ETIM data model and the database scheme for the releases as Access database or as txt/CSV -files.

The field lengths indicated in the following explanation of the database scheme relate to the publication of the ETIM 5.0 model as Access database.

In the txt/CSV -files the single field contents are semi-colon separated. As text separation character quotation marks are used. The first row of each table contains the field names.
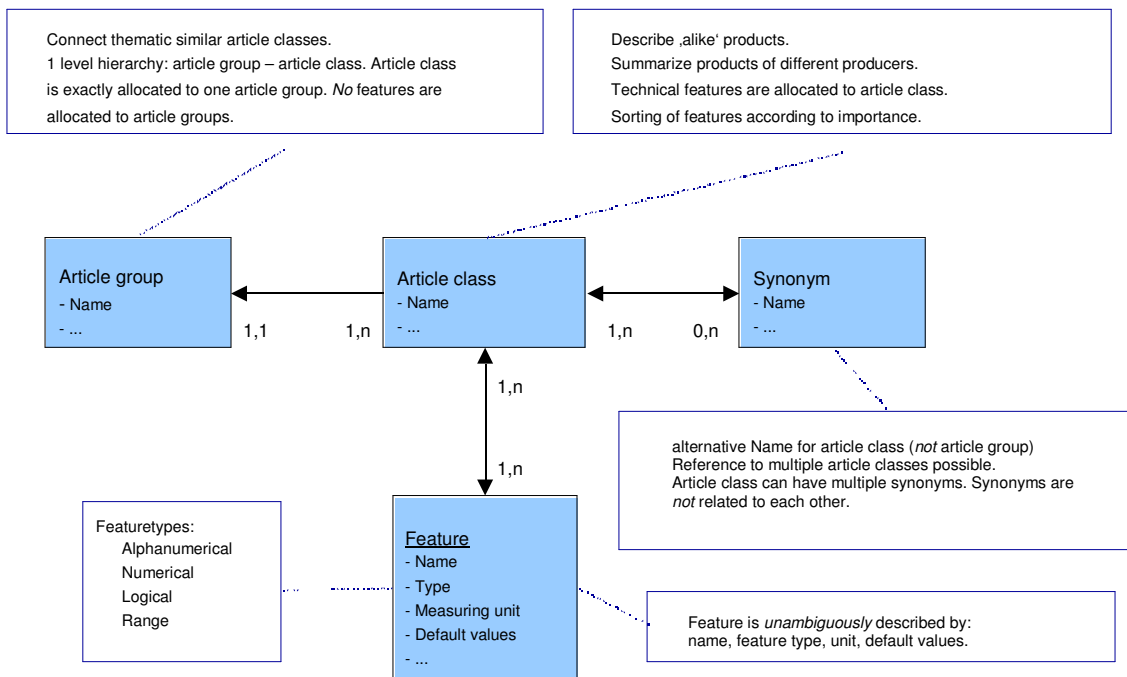
2. Logical data model

Picture 1 describes the ETIM underlying logical data model.

The fundamental entities are:

- Article group
- Article class
- Synonym
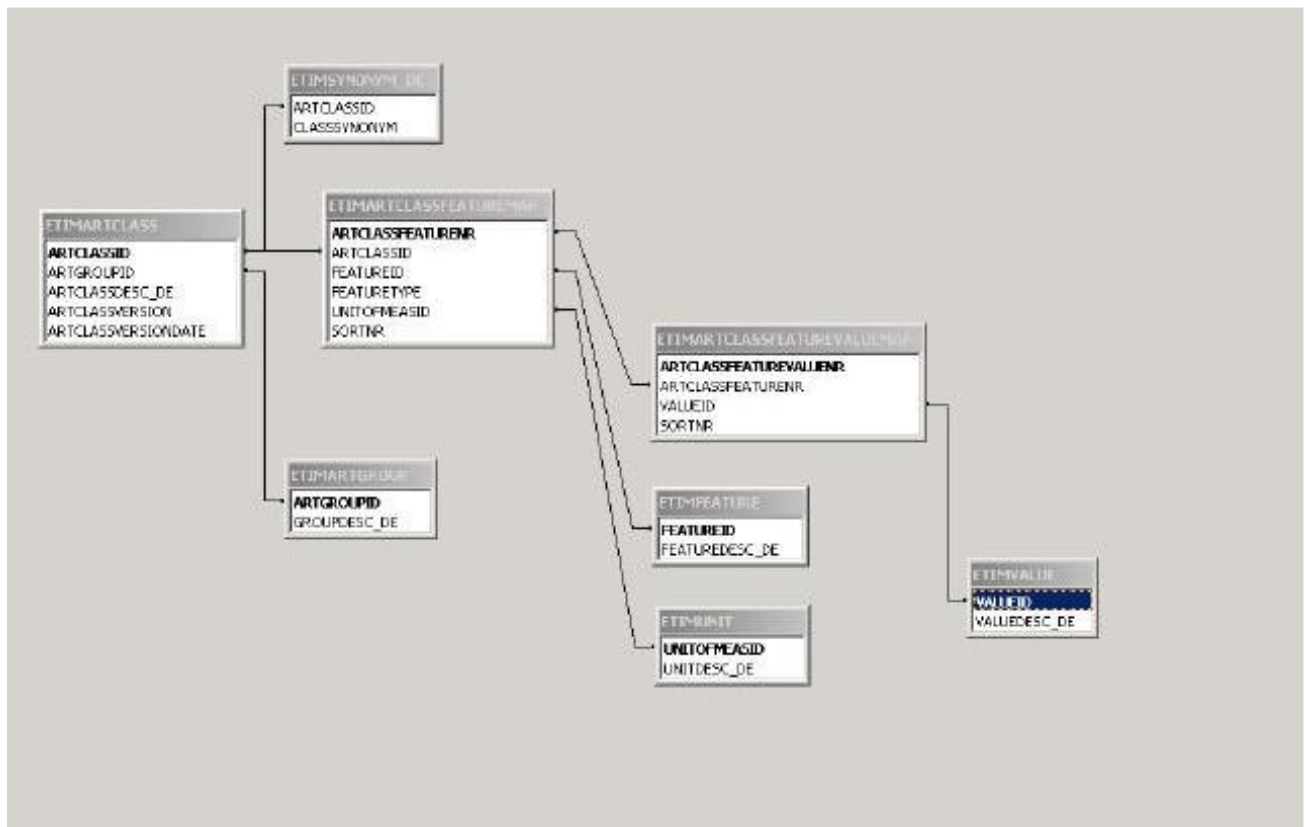- Feature (including data type, default value and unit)

The cardinalities of the links follow from picture 1:

Connect thematic similar article classes.
1 level hierarchy: article group – article class. Article class is exactly allocated to one article group. *No* features are allocated to article groups.

Describe ‚alike‘ products.
Summarize products of different producers.
Technical features are allocated to article class.
Sorting of features according to importance.

Article group
- Name
- ...

1,1   1,n

Article class
- Name
- ...

1,n   0,n

Synonym
- Name
- ...

1,n

alternative Name for article class (*not* article group)
Reference to multiple article classes possible.
Article class can have multiple synonyms. Synonyms are *not* related to each other.

1,n

Featuretypes:
    Alphanumerical
    Numerical
    Logical
    Range

Feature
- Name
- Type
- Measuring unit
- Default values
- ...

Feature is *unambiguously* described by:
    name, feature type, unit, default values.

Picture 1: Logical data model for ETIM

3. Database scheme

Picture 2 shows the database scheme of the Access database for ETIM 5.0

Picture 2: Database scheme (Access) for ETIM Version 5.0

Subsequent the tables of the database scheme are further described.

In the table **ETIMARTGROUP** the ETIM article groups are described:

Fieldname	Contents	Field length
ARTGROUPID	Unambiguous identifier of the article group	10 characters
GROUPDESC_EN	English description of the article group	80 characters

In the table **ETIMARTCLASS** the ETIM article classes are described:

Fieldname	Contents	Field length
ARTCLASSID	Unambiguous identifier of the article class	10 characters
ARTGROUPID	Identifier of the superordinate group	10 characters
ARTCLASSDESC_EN	English description of the article class	80 characters
ARTCLASSVERSION	Version of the class	03 characters
ARTCLASSVERSIONDATE	Date of the last change	-

In the table **ETIMSYNONYM_EN** the English ETIM synonyms are described:

Fieldname	Contents	Field length
ARTCLASSID	Unambiguous identifier of the corresponding article class	10 characters
CLASSSYNONYM	Description of the synonym/keyword	80 characters

In the table **ETIMFEATURE** the ETIM features are described:

Fieldname	Contents	Field length
FEATUREID	Unambiguous identifier of the feature	10 characters
FEATUREDESC_EN	English description of the feature	80 characters

In the table **ARTCLASSFEATUREMAP** the allocations of the features to the article classes are described (n:m-relationship between ETIMARTCLASS and ETIMFEATURE as well as between ETIMARTCLASS and ETIMUNIT):

Fieldname	Contents	Field length
ARTCLASSFEATURENR	Identifier of the allocation of a feature to an article class	Long Integer
ARTCLASSID	Unambiguous identifier of the article class	10 characters
FEATUREID	Unambiguous identifier of the feature	10 characters
FEATURETYPE	Type of feature	1 characters
UNITOFMEASID	Unambiguous identifier of the unit	10 characters
SORTNR	Sorting number for the features of an article class	Long Integer

In the table **ETIMARTCLASSFEATUREVALUEMAP** the default values for features with alphanumerical data type are described (n:m-relationship between ARTCLASSFEATUREMAP and ETIMVALUE):

Fieldname	Contents	Field length
ARTCLASSFEATUREVALUENR	Identifier of the allocation of a value to a feature-article class allocation	Long Integer
ARTCLASSFEATURENR	Identifier of the allocation of a feature to an article class	Long Integer
VALUEID	Unambiguous identifier of the default value	10 characters
SORTNR	Sorting number for the default value of a feature-article class allocation	Long Integer

In the table **ETIMVALUE** the default values for alphanumerical features are described:

Fieldname	Contents	Field length
VALUEID	Unambiguous identifier of the default value	10 characters
VALUEDESC_EN	English description of the default value	80 characters

In the table **ETIMUNIT** the ETIM measuring units are described:

Fieldname	Contents	Field length
UNITOFMEASID	Unambiguous identifier of the measuring unit	10 characters
UNITDESC_EN	English description of the measuring unit	80 characters