Content

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.eclassdownload.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 relevant files for the structure of classes, properties and values.

The files' new names are listed below, the file structure is described in 3.1ff:

eClass8_0_CC_en.csv	=	Table of Classification Classes
eClass8_0_KWSY_en.csv	=	Table of Keywords and Synonyms (KW keyword, SY synonym)
eClass8_0_PR_en.csv	=	Table of Properties
eClass8_0_VA_en.csv	=	Table of Values
eClass8_0_UN_en.csv	=	Einheitentabelle (Unit, UN)
eClass8_0_CC_PR_en.csv	=	Relations Classes-Properties
eClass8_0_PR_VA_en.csv	=	Restricted Value Lists, Relations Properties-Values
eClass8_0_CC_PR_VA_suggested_ incl_constraint_en.csv	=	Suggested Value Lists, Relations Classes-Properties-Values

Content of the data sets:
eCl@ss Release 8.0 BASIC 01 - English

Format of data sets:
CSV, data sets separated by semicolon (1st line = field titles), Codepage: UTF-8
A mask is not necessary. The semicolon is exclusively used as a separator and not in the data fields themselves.

3.1 Classification structure

3.1.1 eClass8_0_CC_en.csv (Class table)

No.	Attribute Name	Description	Length
1	Supplier**	International Code Designator (0173-1 for eCl@ss)	CHAR(6)
2	IdCC**	Identifier + VersionNumber	CHAR(9)
3	Identifier**	Identifier (unique within the structure element type: class)	CHAR(6)
4	VersionNumber**	Version number	CHAR(3)
5	VersionDate	Publication date of version	CHAR(10)
6	RevisionNumber	Revision number	CHAR(2)
7	CodedName	eCl@ss class code	CHAR(8)
8	PreferredName	Name	CHAR(80)
9	Definition	Definition	CHAR(1023)
10	ISOLanguageCode	Language code according to ISO 639-1 / ISO 639-2, e.g. „en“	CHAR(2)
11	ISOCountryCode	Country code according to ISO 3166-1 / ISO 3166-2, e.g. “US”	CHAR(2)
12	Note	Note on definition	CHAR(1023)
13	Remark	Remark on usage of the class	CHAR(1023)
14	Level	Hierarchichal level in class tree	CHAR(1)
15	MKSubclass	Flag subgroup (0=no/1=yes)	CHAR(1)
16	MKKeyword	Flag, if keywords exist for class (0=no/1=yes)	CHAR(1)
17	MKBSA	Flag standard set of properties (2= Standard set of properties (SSP))*	CHAR(1)
18	IrdiCC	Primary key of the class; globally unique International Registration Data Identifier (Supplier+TypeOfSE+Identifier+VersionNumber)	CHAR(20)

* eCl@ss differentiates between standard sets of properties (SSP) and basic sets of properties (BSP). SSP are individually developed for specific classes. The BSP (one for each segment) is automatically assigned to every single eCl@ss class, i.e. each eCl@ss class has at least the BSP. The segments' BSPs are listed in 3.3. The entries in the field "mkbsa" have the following meaning:

No entry = The property contains only the basic set of properties (BSP), see 3.3
2 = The property contains a standard set of properties, i.e. the BSP plus specific properties for the product class

3.1.2 eClass8_0_KWSY_en.csv (Keyword table)

No.	Attribute Name	Description	Length
1	SupplierKW/SupplierSY**	International Code Designator of the keyword/synonym	CHAR(6)
2	Identifier**	Identifier (unique within the structure element type: keyword/synonym)	CHAR(6)
3	VersionNumber**	Version number	CHAR(3)
4	IdCC/IdPR**	Primary key of the related class/property	CHAR(9)
5	KeywordValue/ SynonymValue	Name of keyword/synonym	CHAR(80)
6	Explanation	Description of keyword/synonym	CHAR(255)
7	ISOLanguageCode	Language code according to ISO 639-1 / ISO 639-2, e.g. „en“	CHAR(2)
8	ISOCountryCode	Country code according to ISO 3166-1 / ISO 3166-2, e.g. “US”	CHAR(2)
9	TypeOfTargetSE	Identifier of target element type (CC=class, PR=property)	CHAR(2)
10	IrdiTarget	Primary key of target; globally unique International Registration Data Identifier (Supplier+TypeOfSE+Identifier+VersionNumber)	CHAR(20)
11	IrdiKW/IrdiSY	Primary key of the keyword/synonym; globally unique International Registration Data Identifier (Supplier+TypeOfSE+Identifier+VersionNumber)	CHAR(20)
12	TypeOfSE	Identifier of structure element type (KW=keyword, SY=synonym). Note: keywords can only be assigned to classes, synonyms can only be assigned to properties (see TypeOfTargetSE)	CHAR(2)

3.1.3 eClass8_0_CC_PR_en.csv (relations eClass8_0_CC_en / eClass8_0_PR_en)

No.	Attribute Name	Description	Length
1	SupplierIdCC*	International Code Designator of the class (0173-1 für eCl@ss)	CHAR(6)
2	IdCC**	Identifier+VersionNumber of the target class	CHAR(9)
3	ClassCodedName	eCl@ss class code of the target class	CHAR(8)
4	SupplierIdPR**	International Code Designator of the property (0173-1 for eCl@ss)	CHAR(6)
5	IdPR**	Identifier+VersionNumber of the assigned property	CHAR(9)
6	IrdiCC	Primary key of the target; globally unique International Registration Data Identifier (Supplier+TypeOfSE+Identifier+VersionNumber)	CHAR(20)
7	IrdiPR	Primary key of the assigned property; globally unique International Registration Data Identifier (Supplier+TypeOfSE+Identifier+VersionNumber)	CHAR(20)

3.1.4 eClass8_0_PR_en.csv (Property table)

No.	Attribute Name	Description	Length
1	Supplier**	International Code Designator of the property (0173-1 for eCl@ss)	CHAR(6)
2	IdPR**	Identifier + VersionNumber	CHAR(9)
3	Identifier**	Identifier (unique within the structure element type: property)	CHAR(6)
4	VersionNumber**	Version number	CHAR(3)
5	VersionDate	Publication date of version	CHAR(10)
6	RevisionNumber	Revision number	CHAR(2)
7	PreferredName	Name	CHAR(80)
8	ShortName	Short name	CHAR(17)
9	Definition	Definition	CHAR(1023)
10	Note	Note on definition	CHAR(1023)
11	Remark	Remark on usage of the property	CHAR(1023)
12	FormularSymbol	Preferred formular symbol	CHAR(17)
13	IrdiUN	Primary key of the assigned unit; globally unique International Registration Data Identifier (Supplier+TypeOfSE+Identifier+VersionNumber)	CHAR(3)
14	ISOLanguageCode	Language code according to ISO 639-1 / ISO 639-2, e.g. „en“	CHAR(2)
15	ISOCountryCode	Country code according to ISO 3166-1 / ISO 3166-2, e.g. “US”	CHAR(2)
16	Category	Type class of property according to IEC 61360	CHAR(3)
17	AttributeType	Flag for existing value list (direct= free entry, no value list existing; indirect= chose from a defined value list)	CHAR(8)
18	Reference	Source of definition	CHAR(1023)
19	DefinitionClass	ICS class	CHAR(255)
20	DataType	Data type of the property (STRING | STRING_TRANSLATABLE | REAL_MEASURE | REAL_COUNT | REAL_CURRENCY | INTEGER_MEASURE | INTEGER_COUNT | INTEGER_CURRENCY | BOOLEAN | URL | RATIONAL | RATIONAL_MEASURE | TIME | TIMESTAMP | DATE), see 3.1.8	CHAR(19)
21	DigitsBeforeComma	Number of digits before comma (REAL_COUNT / REAL_MEASURE / REAL_CURRENCY / INTEGER_COUNT / INTEGER_MEASURE / INTEGER_CURRENCY)	INTEGER
22	DigitsAfterComma	Number of digits after comma (Real_COUNT / REAL_MEASURE / REAL_CURRENCY)	INTEGER
23	NumberOfCharacters	For properties of data types STRING / STRING_TRANSLATEABLE/ URL / RATIONAL / RATIONAL_MEASURE / TIME / TIMESTAMP / DATE it specifies the maximum character length of the value. For properties of data types URL / RATIONAL / RATIONAL_MEASURE / TIME / TIMESTAMP / DATE special characters can be included (e.g. http, //, :, / etc.))	INTEGER
24	IrdiPR	Primary key of the property; globally unique International Registration Data Identifier (Supplier+TypeOfSE+Identifier+VersionNumber)	CHAR(20)
25	CurrencyAlphaCode	Specifies the property’s currency (INTEGER_CURRENCY, REAL_CURRENCY) according to ISO 4217, e.g. EUR, USD	CHAR(3)

3.1.5 eClass8_0_PR_VA_restricted_en.csv (Relations eClass8_0_PR_en / eClass8_0_VA_en)

No.	Attribute Name	Description	Length
1	IrdiPR	Primary key of the target property; globally unique International Registration Data Identifier (Supplier+TypeOfSE+Identifier+VersionNumber)	CHAR(20)
2	IrdiVA	Primary key of the assigned value; globally unique International Registration Data Identifier (Supplier+TypeOfSE+Identifier+VersionNumber)	CHAR(20)

Note:
eCl@ss interpretes its value lists as open, i.e. as suggestions that cannot guarantee exhaustiveness. As the ISO defines value lists as restrictive and exclusive, i.e. only those values of a value list are valid for a property and no others, eCl@ss had to change its structure to be ISO-compliant. Therefore eCl@ss distinguishes now between restrictive value lists (in the ISO-sense, see 3.1.5) that include **only BOOLEAN property-value-relations** and suggested lists (proposed "open" lists that are neither exclusive nor exhaustive and only in the context of a class, see 3.1.6).

3.1.6 eClass8_0_CC_PR_VA_suggested_incl_constraint_en.csv (Relations eClass8_0_CC_en / eClass8_0_PR_en / eClass8_0_VA_en)

No.	Attribute Name	Description	Length
1	IrdiCC	Primary key of the target class; globally unique International Registration Data Identifier (Supplier+TypeOfSE+Identifier+VersionNumber)	CHAR(20)
2	IrdiPR	Primary key of the target property; globally unique International Registration Data Identifier (Supplier+TypeOfSE+Identifier+VersionNumber)	CHAR(20)
3	IrdiVA	Primary key of the assigned value; globally unique International Registration Data Identifier (Supplier+TypeOfSE+Identifier+VersionNumber)	CHAR(20)
4	Constraint	Flag whether on the property-value list-relation in this class a constraint was applied (TRUE=not all values of the properties' value list are valid, but only the valid values are listed here) or not (FALSE=the properties' value list is not limited in this class, i.e. all values are valid and listed here)	CHAR(5)

Note:
With release 8.0 eCl@ss introduces constraints, i.e. the limitation of a set of values of a property in the context of a class. E.g. a property "colour" might have the value list [red;yellow;green]. For a class "traffic light" all colours are valid (CONSTRAINT=FALSE), but for class "pedestrian traffic light" only [red;green] might be valid (CONSTRAINT=TRUE), i.e. a constraint is created for the value "yellow". Therefore **all values** (except restricted values, see 3.1.5) **are to be seen in the context of a class**.

3.1.7 eClass8_0_VA_en.csv (Value table)

No.	Attribute Name	Description	Length
1	Supplier*	International Code Designator (0173-1 for eCl@ss)	CHAR(6)
2	IdVA**	Identifier + VersionNumber	CHAR(9)
3	Identifier**	Identifier (unique within the structure element type: property)	CHAR(6)
4	VersionNumber**	Version number	CHAR(3)
5	RevisionNumber	Revision Number	CHAR(2)
6	VersionDate	Publication date of version	CHAR(10)
7	PreferredName	Name	CHAR(80)
8	ShortName	Short name	CHAR(17)
9	Definition	Definition	CHAR(1023)
10	Reference	Source of definition	CHAR(1023)
11	ISOLanguageCode	Language code according to ISO 639-1 / ISO 639-2, e.g. „en"	CHAR(2)
12	ISOCountryCode	Country code according to ISO 3166-1 / ISO 3166-2, e.g. "US"	CHAR(2)
13	IrdiVA	Primary key of the value; globally unique International Registration Data Identifier (Supplier+TypeOfSE+Identifier+VersionNumber)	CHAR(20)
14	DataType	Data type of the value (STRING | STRING_TRANSLATABLE | REAL_MEASURE | REAL_COUNT | REAL_CURRENCY | INTEGER_MEASURE | INTEGER_COUNT | INTEGER_CURRENCY | BOOLEAN | URL | RATIONAL | RATIONAL_MEASURE | TIME | TIMESTAMP | DATE), see 3.1.9	

3.1.8 eClass8_0_UN_en.csv (Unit table)

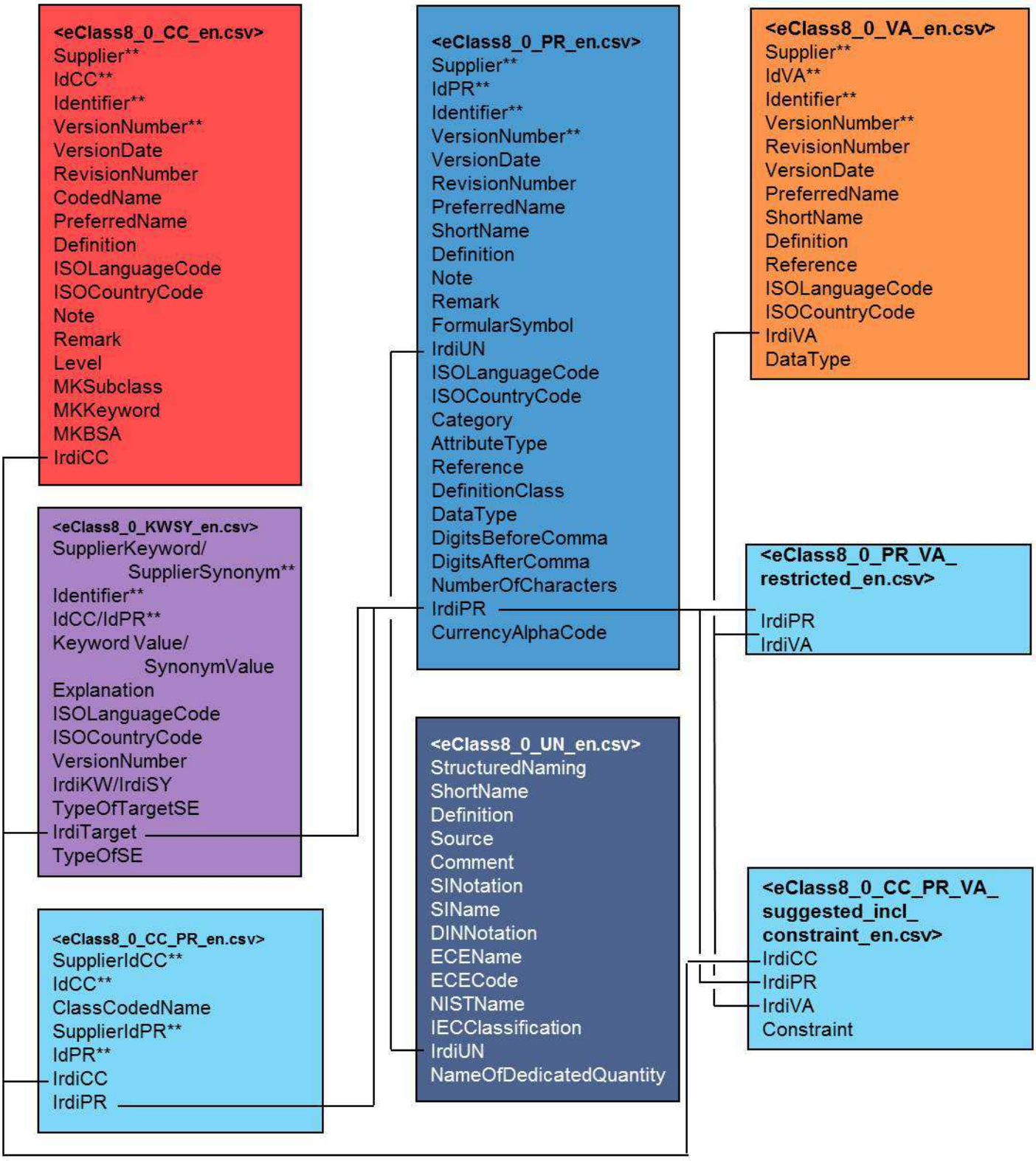
No.	Attribute Name	Description	Length
1	StructuredNaming	Structured Naming of the unit, e.g. "volt litre^-1 minute^-1"	CHAR(1000)
2	ShortName	Short name	CHAR(1000)
3	Definition	Definition	CHAR(1000)
4	Source	Source of definition	CHAR(1000)
5	Comment	Comment on definition	CHAR(1000)
6	SINotation	Notation (STRING) according to the International System of Units, e.g. "V/(l•min)"	CHAR(1000)
7	SIName	Name (STRING) according to the International System of Units	CHAR(1000)
8	DINNotation	Notation (STRING) according to DIN (Deutsches Institut für Normung)	CHAR(1000)
9	ECEName	ECE Name (STRING), e.g. "volt per liter minute"	CHAR(1000)
10	ECECode	ECE Code (STRING) according to ECE, e.g. " F87"	CHAR(3)
11	NISTName	Name (STRING) according to NIST	CHAR(1000)
12	IECClassification	Classification of the unit according to IEC	CHAR(1000)
13	IrdiUN	Primary key of the unit; globally unique International Registration Data Identifier (Supplier+TypeOfSE+Identifier+VersionNumber)	CHAR(20)
14	NameOfDedicatedQuantity	Name of the superordinate quantity according to DIN	CHAR(1000)

3.1.9 Description of the data types

No.	Data Type	Definition	Examples
1	BOOLEAN	Allowed values: (YES | NO)	YES
2	TIME	Format hh:mm according ISO 8601:2004	12:45
3	TIMESTAMP	Format yyyy-mm-dd hh:mm according ISO 8601:2004	1979-01-15 12:45
4	DATE	Format yyyy-mm-dd according ISO 8601:2004	1979-01-15
5	URL	According to ISO 13584-24:2003	http://www.eclass-serviceportal.com
6	RATIONAL	to represent rational numbers like 1/3 and -11/17 without rounding (http://en.wikipedia.org/wiki/Rational_data_type)	1/3, 1 2/3
7	RATIONAL_MEASURE	to represent rational numbers like 1/3 and -11/17 without rounding (http://en.wikipedia.org/wiki/Rational_data_type). Used for measuring in a specific unit of measure.	1/3, 1 2/3
8	INTEGER_COUNT	data type which represents some finite subset of the mathematical integers. These are also known as integral data types. Used only for counting. (http://en.wikipedia.org/wiki/Integer_(computer_science)).	1 ; 10 ; 111
9	INTEGER_MEASURE	data type which represents some finite subset of the mathematical integers. These are also known as integral data types. Used for measuring in a specific unit of measure. (http://en.wikipedia.org/wiki/Integer_(computer_science)).	1 ; 10 ; 111
10	INTEGER_CURRENCY	data type which represents some finite subset of the mathematical integers. These are also known as integral data types. Used for measuring in a specific currency. (http://en.wikipedia.org/wiki/Integer_(computer_science)).	1 ; 10 ; 111
11	REAL_COUNT	a rational number expressed in decimal representation (http://en.wikipedia.org/wiki/Real_number). Used only for counting.	1.5 ; 102.35
12	REAL_MEASURE	a rational number expressed in decimal representation (http://en.wikipedia.org/wiki/Real_number). Used for measuring in a specific unit of measure.	1.5 ; 102.35
13	REAL_CURRENCY	a rational number expressed in decimal representation (http://en.wikipedia.org/wiki/Real_number). Used for measuring in a specific currency.	1.5 ; 102.35
14	STRING	A finite sequence of symbols that are chosen from a set or BETAbet […] a sequence of characters (http://en.wikipedia.org/wiki/String_(computer_science)). Cannot be translated into other languages.	0173-1#01-ADG629#001 ; DN 700 ; 10 Mbps
15	STRING_TRANSLATABLE	A finite sequence of symbols that are chosen from a set or BETAbet […] a sequence of characters (http://en.wikipedia.org/wiki/String_(computer_science)). Can be translated into other languages.	Red ; Green ; Aluminum

Note on data types:
eCl@ss has introduced with release 7.0 many new data types that might not be interpretable by every system. In this case, eCl@ss recommends to distinguish between at least BOOLEAN, REAL, INTEGER (including count, measure and currency) and STRING properties. eCl@ss sees STRING as a suitable substitute for all other data types that are not interpretable by a system (STRING_TRANSLATABLE, URL, DATE, TIME, TIMESTAMP, RATIONAL, RATIONAL_MEASURE). This is restricted to the internal usage. When exchanging data they should be transferred according to these datatypes as otherwise receiving systems might not be able to interpret them correctly.

3.2 Structure & Relations



** Note: The official and internationally unique eCl@ss primary key is the IRDI (International Registration Data Identifier), a globally unambiguous identifier that comprises Supplier+TypeOfSE+Identifier+VersionNumber. The separate export of Supplier, ID, VersionNumber and the Identifier (ID+ VersionNumber) is therefore redundant. Starting with eCl@ss Release 9.0 this redundant information will no longer be additionally exported, because it is already contained in the IRDI which is the only valid primary key in eCl@ss.

3.3 List of basic sets of properties (BSP) per segment

The following table contains all basic properties per segment.

PR_ID	PR PreferredName EN	SG 14	SG 15	SG 16	SG 17	SG 18	SG 19	SG 20	SG 21	SG 22	SG 23	SG 24	SG 25	SG 26	SG 27	SG 28	SG 29	SG 30	SG 31	SG 32	SG 33	SG 34	SG 35	SG 36	SG 37	SG 38	SG 39	SG 40	SG 41	SG 42	SG 90
AAR845	USP information											x																			
AAP794	Offerer/supplier	x	x																												
AAP796	Offerer/supplier ID	x	x																												
AAR718	Accession time		x																												
AAR849	Quantity of layers per pallet											x																			
AAR850	Quantity of products per pallet layer											x																			
AAR848	Quantity of products per pallet											x																			
AAP805	Product name			x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
AAR705	Performance frequency		x																												
AAR716	Fulfillment time period		x																												
AAR719	Attendance period		x																												
BAF368	gross weight																			x											
AAE319	dual use mark																			x											
AAR517	ergonomic design											x																			
AAR714	Size of expert staff, craft specific		x																												
AAO663	GTIN	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
AAO676	Manufacturer product number			x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
AAO677	Manufacturer name			x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
AAR708	Class number		x																												
AAR709	Classification system		x																												
BAF577	Performance unit	x	x																												
BAF578	Short description of performance	x	x																												
AAO736	Supplier product number			x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
AAO735	Supplier name			x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
BAF153	Material for rendition of service		x																												
AAR712	Materials provision		x																												
AAR713	Media provision		x																												
AAR706	Batch		x																												
BAD875	Net weight											x																			
AAF040	net weight																			x											
BAF162	Object of provision		x																												
AAR846	Pallet dimension - Gross weight											x																			
AAR847	Pallet dimension - volume											x																			
BAF831	Personnel qualification	x	x																												
AAO847	Product type description			x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
AAR717	Response time		x																												
BAB678	Safety data sheet obligatory											x																			
AAO995	country of origin																			x											
AAE665	county of origin																			x											
AAP002	Guidelines, norms	x	x																												
AAR710	Version of classification system		x																												
AAR707	Contract period		x																												
AAR715	Handling time		x																												
AAR711	Tools provision		x																												
BAB392	Certificates and permits	x	x					x				x																			
AAD931	customs tariff number (TARIC)			x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
AAQ326	additional link address			x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
AAR923	ecofriendly feature											x																			

4. Support: Authorized eCl@ss IT Service Providers

During the introduction of eCl@ss, questions frequently occur on the concrete implementation of eCl@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 eCl@ss-service-providers and the eCl@ss e.V. support companies with consulting and offer software solutions for the introduction of eCl@ss in the company and thus sustainably promote the distribution of eCl@ss.

All service providers assigned with implementing tasks defined by the eCl@ss association, guarantee to observe the current rules, guidelines and requirements of the eCl@ss e.V. regarding the eCl@ss data model based on international standards. All information concerning the eCl@ss-service-providers is available on www.eclass.de.

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

http://wiki.eclass.de/wiki/Category:IT_Service_Providers