

Guideline for suppliers to providing product data according to BMEcat[®] Version 2005

Version 2.2
ETIM Germany e.V.
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With publication of the ETIM version 5.0 on 05/18/2011 also this guideline has been revised and updated. Basis remains BMEcat[®] version 2005.

With effect from February 11, 2013 minor modifications were made on the subject of packaging units. All changes to the guideline version 2.1 were marked in red.

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1. Providing product data

Due to the ever-increasing quantity of product data with constantly diminishing product lifecycles, the consideration and use of standards is an absolute necessity for providing and processing product information of high quality.

With progressing globalization, there is a growing requirement from all the participants of the trade chain for quality of information. Especially the supplier will meet these requirements by using standards, because all product information concerning the product will be provided in a unique way and structured uniformly. This information will be used by all those participating in all levels of trade so that the exchange of information in both directions is always based on the same original data and can provide customers with high-quality product data via different media – in printed catalogues or brochures, on CD-ROMs, as well as in eProcurement solutions and online shops.

To ensure that the standardized ETIM data is provided on a long term scale, wholesalers of ETIM Deutschland have created this guideline to provide electronic product data. For the integration of electronic product catalogues in the product master data the XML (Extensible Markup Language) based standard BMEcat Version 2005 is being used.

This guideline / version **2.2** is intended as a support while applying standards (BMEcat 2005, ETIM 5.0), however it does in no way replace the latest relevant valid documentation.

Applied Standards:

- **BMEcat® Version 2005**
Website: <http://www.bmecat.org>
or Bundesverband Materialwirtschaft, Einkauf und Logistik
(Association Materials Management, Purchasing and Logistics, AMMPL)
Bolongarostraße 82
D-65929 Frankfurt

- **ETIM Version 5.0**
Website: <http://www.etim.de>
or ETIM Deutschland e.V.
(Electro Technical Information Model, ETIM Germany)
Mr. Jung
Lyoner Str. 9
D-60528 Frankfurt/Main

2. Supported Transactions

Currently the systems of the wholesalers only support the transaction method
T_NEW_CATALOG

Each data supplier (manufacturer) usually should inform the data receiver (wholesaler) with each transfer of an ETIM BMEcat, why a new file is delivered (new prices, new pictures, new products ...).

3. Requirements for suppliers catalogues

a. File name

The name of the BMEcat-XML-file must be as follows:

Short name of the supplier with generation date and file extension XML. Embodied spaces are to be replaced by underscoring. The date is to be specified in the format YYYY-MM-DD.

The length of the file name should not exceed 40 characters.

Example: **Smith_Switches_2011-08-01.xml**

b. General guidelines for catalogue content

To guarantee a high data quality and a consistency of the catalogues, it must be ensured that the supplier can provide the necessary quality of the catalogue content (content quality). Does a wholesaler change a classification of the supplier, the supplier should be informed and it should be agreed.

Criteria are listed as follows:

- Catalogue data standard: BMEcat[®] Version 2005
- Classification standard: ETIM Version 5.0
- Language of the catalogue content: German (respectively another agreed)
- Currency: all prices should be given in Euro

Notice: Some fields are declared different to the BMEcat specification as “Must” and “Should” fields. The “Should” field is a field that has to be filled if a unique value is possible when creating the catalogue. (e.g.: customs tariff number, country of origin, EAN-Code/GTIN). These fields are marked with “**+Must**” or “**+Should**”.

In additional processing difficulties can appear without the specification of an EAN-Code/GTIN (e.g. EDIFACT).

All mandatory fields have to be filled, even when they are explicit not listed afterwards. All standard fields of the BMEcat should be filled when the necessary data is available (e.g.: product reference to follow up, accessory or other product). BMEcat 2005 is required also in fields, which are not explicit mentioned in this guideline (no mixture of field descriptions between BMEcat 1.2 and BMEcat 2005). **Fields which are self-designed by the supplier are not supported in manufacturer’s systems.**

To present the catalogue or product data in the data base, **at least the following elements (fields) of the BMEcat Version 2005 are required.** The field lengths are defined by BMEcat and are understood to be a maximum value.

Separator in all numeric fields is a „.“ (dot). For example: 124.90 and not 124,90. To use thousands separators is not allowed (e.g. 1250.90 and not 1.250.90).

The text fields (short description, long description, keywords, ...) may not include formatting (bold, line breaks, bullet characters, ...). Allowed are all characters of the German character set, without semicolon, quotation marks, dash and apostrophe (language deviations are possible when agreed between the partners).

The current spelling rules are generally observed. Particularly the use of capital letters/chapters generally should be avoided (e.g. JUNCTION BOX). Furthermore, sequences of blanks or information about the date of delivery are not allowed. The indication of a product number or a manufacturer name in the fields “short description”, “long description” and “keywords” should also be avoided.

The specification BMEcat 2005 allows in a lot of cases the possibility to place information direct or via a reference (IDREF) on another place at the BMEcat file. For this guideline, the data have to be given directly; a reference is not permitted.

4. Specification of the most important BMEcat parts

a. Instructions for header fields (HEADER)

The HEADER is on the beginning of the catalogue document and contains global data that applies for all kind of catalogue data exchange, e.g. information on the supplier or information on a framework agreement (AGREEMENT). Some fields have to be filled with a predefined content, usage of small and capital letters has to be attended. These fields are listed below.

BMEcat Element	Content	Must / Should
GENERATOR_INFO	The certification of the catalogue: ETIM e.V. zertifiziert ETIM 5.0 with bmecat_new_catalog_2_2_etim.dtd The record of this term is only possible if the ETIM BMEcat catalogue complies 100% to the German Guideline for suppliers. The certification software is not suitable for language versions of an ETIM BMEcat except German. But in this case, you get information about the conformity to the rules of the guideline.	Can
LANGUAGE	deu (acc. ISO 639-2:1998) keep in mind the remarks in the field „GENERATOR_INFO“	Must
CATALOG_ID	Supplier short description – supplier number You will receive your supplier number and ID from the respective wholesaler by request. (Example: BJ4711)	Must
CATALOG_VERSION	Version of the product catalogue; can only be reset new in the target system at transaction T_NEW_CATALOG but not at updates (updates are in generally not permitted for ETIM). Format: „MajorVersion“.“MinorVersion“, maximum however (xxx.yyy) (Example: 7.1 or 001.001)	Must
CATALOG_NAME	Please agree the supplier's catalogue name with your wholesaler	+Must
DATETIME type="generation_date"	Time stamp, when the catalogue document is generated. Example: 2011-07-01	+Must
TERRITORY	DE (acc. ISO 3166-1:2007)	+Must
CURRENCY	EUR (acc. ISO 4217:2001)	+Must
MIME_ROOT	An index (or URL) can be indicated, on which the relative path in MIME_SOURCE is related to.	Can
BUYER_ID	Please agree with your wholesaler	+Must
BUYER_NAME	Please agree with your wholesaler	Must
SUPPLIER_ID type="duns"	The D-U-N-S® number (Data Universal Numbering System - http://www.dnb.com) is a 9-digit numeric code to indicate companies all over the world clearly. It was developed and introduced by Dun & Bradstreet in 1962. The number has to be delivered without formatting.	+Must
SUPPLIER_ID type="iln"	ILN (I nternational- L ocation- N umber) of the supplier (respectively new designation is G lobal- L ocation- N umber GLN)	Should
SUPPLIER_NAME	Name of the supplier	Must
ADDRESS_REMARKS	Information on the creator of the catalogue. Do not enter the software name here. Please fill in whether you created the catalogue by yourself or which service provider worked for you.	+Must

MIME_INFO	Supplementary multimedia file with the logo of the supplier; the element MIME_INFO should assume the value "logo" in the sub element "MIME_PURPOSE". Wholesalers expect always the current logo of the supplier in black-and-white and coloured in the catalogue part header. An additional reference in the catalogue part product is not necessary.	Can
Sub tree »USER_DEFINED_EXTENSIONS«		
UDX.EDXF.VERSION	Version of the applied BMEcat-ETIM-Data exchange format Field content: 2.2 (Data type STRING, Length 20)	+Must

All Must fields of the BMEcat standard must be complied with!

Example for the Header

```
<?xml version="1.0" encoding="ISO-8859-1"?>
<!DOCTYPE BMECAT SYSTEM "bmecat_new_catalog_2_2_etim.dtd">
<BMECAT version="2005">
  <HEADER>
    <GENERATOR_INFO>ETIM e.V. zertifiziert ETIM 5.0 mit
      bmecat_new_catalog_2_2_etim.dtd</GENERATOR_INFO>
  <CATALOG>
    <LANGUAGE>deu</LANGUAGE>
    <CATALOG_ID>sample-7045839</CATALOG_ID>
    <CATALOG_VERSION>001.001</CATALOG_VERSION>
    <CATALOG_NAME>sample company-7045839</CATALOG_NAME>
    <DATETIME type="generation_date">
      <DATE>2012-01-02</DATE>
    </DATETIME>
    <TERRITORY>DE</TERRITORY>
    <CURRENCY>EUR</CURRENCY>
  </CATALOG>
  <BUYER>
    <BUYER_ID>sample buyer</BUYER_ID>
    <BUYER_NAME>Sample buyer name</BUYER_NAME>
  </BUYER>
  <SUPPLIER>
    <SUPPLIER_ID type="duns">316011725</SUPPLIER_ID>
    <SUPPLIER_ID type="iln">4012345000001</SUPPLIER_ID>
    <SUPPLIER_NAME>Sample company ltd.</SUPPLIER_NAME>
    <ADDRESS type="supplier">
      <NAME>Sample company ltd.</NAME>
      <STREET>Sample road</STREET>
      <CITY>Sample city</CITY>
      <COUNTRY>DE</COUNTRY>
      <PHONE>+49 2222 555 0</PHONE>
      <FAX>+49 2222 555 2222</FAX>
      <EMAIL>info@sample-company.de</EMAIL>
      <URL>http://www.sample-company.de</URL>
      <ADDRESS_REMARKS>Sample service provider from nowhere</ADDRESS_REMARKS>
    </ADDRESS>
  <MIME_INFO>
    <MIME>
```

```
<MIME_TYPE>image/jpeg</MIME_TYPE>
<MIME_SOURCE>sample company_logo.jpg</MIME_SOURCE>
<MIME_DESCR>logo of the sample company, coloured</MIME_DESCR>
<MIME_PURPOSE>logo</MIME_PURPOSE>
</MIME>
</MIME_INFO>
</SUPPLIER>
<USER_DEFINED_EXTENSIONS>
  <UDX.EDXF.VERSION>2.2</UDX.EDXF.VERSION>
</USER_DEFINED_EXTENSIONS>
</HEADER>
```

b. Fields for product presentation

Designation	Description	BMEcat element	Length	Must / Should / Can
The element PRODUCT contains the unique product number of the supplier and further sub elements for description, price, packing and multimedia supplementary information				Must
Processing	Mode, how the product is read in. At the moment, only the transaction type T_NEW_CATALOG is supported.	PRODUCT mode=new if none exists „new“ is assumed	6	Can
Supplier's product ID	Unique product number of the supplier. A coded character sequence that is assigned by the supplier. It represents the product (or service) in the catalogue and ordering system and is therefore the meaningful unit of the business processing.	SUPPLIER_PID	32	Must
The element PRODUCT_DETAILS contains elements, which identify and describe a product verbal.				Must
Short description	Short, concise product description (capitalization rules, see explanation 5a)	DESCRIPTION_SHORT	150	Must
Long description	Extensive and detailed product description (see explanation 5a)	DESCRIPTION_LONG	64000	+Must
EAN-Code/GTIN	European Article Number with regard to the smallest ordering unit. Problems can occur in the further process without indication of the EAN code (e.g. EDIFACT).	EAN	14	+Should
Alternative product number	additional internal product identifier of the supplier if different to the SUPPLIER_PID	SUPPLIER_ALT_PID	50	Can
Product ID of the buying company	product number used by the buying company	BUYER_PID	50	Can
Product ID of the manufacturer	product number of the manufacturer	MANUFACTURER_PID	50	+Must
Name of manufacturer	Name of the manufacturer	MANUFACTURER_NAME	50	+Must
Manufacturer type description	product type description of the manufacturer (product type)	MANUFACTURER_TYPE_DESCR	50	+Must
Special treatment class	Supplementary classification of a product for dangerous goods, hazardous substances, drugs precursors, radioactive measurement devices etc. Labelling, if the product requires a safety data sheet or not. As well the code for ECCN is transmitted; the attribute "type" sets the special treatment regulation; the value sets the class within the order. Example: (Hazardous Goods Ordinance - Road, heating oil) <SPECIAL_TREATMENT_CLASS	SPECIAL_TREATMENT_CLASS type =	20	+Must

Designation	Description	BMEcat element	Length	Must / Should / Can
	type="GGVS">1201 </SPECIAL_TREATMENT_CLASS> (see explanation 5h)			
Keyword	Keyword that makes it easier to find the product (see explanation 5b)	KEYWORD	50	+Must
Remarks	Supplementary remarks of the supplier (e.g. vertically stackable up to 8 units)	REMARKS	64000	Can
Special product status	<p>The sub element PRODUCT_STATUS helps to assign supplementary special attributes to a product. The status type is specified by the "type" attribute. The value of the element reflects the text description of the special characteristics.</p> <p>If a product cannot be mapped to any of the predefined status types (see BMEcat specification), „others“ must be used.</p> <p>This field is in connection with the field product expiration date (UDX.EDXF.EXPIRATION_DATE). If a product is a discontinued line with expiration date, the value „others“ will be set for the element PRODUCT_STATUS. For the element UDX.EDXF.EXPIRATION_DATE the expiration date has to be indicated additionally.</p> <p>Among others, allowed combinations for ETIM are: <PRODUCT_STATUS type="others">discontinued</PRODUCT_STATUS> <PRODUCT_STATUS type="core_product">core_assortment</PRODUCT_STATUS> (e.g. household appliances)</p>	PRODUCT_STATUS type = ...	50	Can
The element PRODUCT_FEATURES contains elements for the classification of products. Supplementary to the rules specified in the exchange format BMEcat 2005, some points were tightened up for the transfer of the ETIM product classification. This tightening is only valid for ETIM. (see explanation 5c)				+Must
Classification system	The indication is mandatory in case of ETIM, the used version has to correspond to the version mentioned in number 1	REFERENCE_FEATURE_SYSTEM_NAME	50	+Must

Designation	Description	BMEcat element	Length	Must / Should / Can
Group reference	ID of the referenced group within the classification/feature group system, e.g. „EC001234“ for ETIM	REFERENCE_FEATURE_GROUP_ID	60	+Must
The element FEATURE contains elements for the transfer of product features. The indication of an ETIM-feature is related to the defined classes of the used ETIM version corresponding to the feature identifiers (see explanation 5c).				+Must
Feature name	Unique feature name as an identifier	FNAME	60	Must
Feature value	Defined feature values according to the classification system	FVALUE	60	Must
Feature unit	Defined feature values according to the ETIM version	FUNIT	20	Can
Supplementary details about the feature value	Explanation of the feature characteristics. A manufacturer specific colour can be transmitted here: (polar white, magenta, ash-grey, ..., see explanation 5c)	FVALUE_DETAILS	250	Can
The element PRODUCT_ORDER_DETAILS contains elements that make statements on the order conditions und packing modality of the product. See section „Orders“. (Explanation 5d)				Must
Order unit	Unit in which the product can be ordered and the price refers to	ORDER_UNIT	3	Must
Content of the unit	Unit of the product related to the order unit	CONTENT_UNIT	3	+Must
Packing quantity	Number of content units per order unit of the product. If order unit and content unit are identical, the value is always „1“.	NO_CU_PER_OU	Number	+Must
Price quantity	A multiple of the order unit indicating to which quantity all the specified prices refer to. The value is always integer for ETIM catalogues. general designation in the ETIM-environment: "price unit" (e.g. 1, 100, 1000)	PRICE_QUANTITY	Number	+Must
Minimum quantity	Minimum order quantity with respect to the order unit. The value should always be integer because of compatibility to the systems of the wholesalers. This minimum order quantity (QUANTITY_MIN) is not the same to the minimum quantity in the sub tree of the packing units (UDX.EDXF.QUANTITY_MIN), even if the numerical value can be the same!	QUANTITY_MIN	dtFLOAT	+Must

Designation	Description	BMEcat element	Length	Must / Should / Can
Quantity interval	Number indicating the quantity steps in which the product can be ordered, e.g. »5« The value should furthermore be integer because of compatibility to the systems of the wholesalers. This information doesn't have to be the same to the packing unit in the sub tree packing units, even if the numerical value can be the same!	QUANTITY_INTERVAL	dtFLOAT	+Must
The sub tree PACKING_UNITS is not used at the standard place for ETIM purpose because BMEcat 2005 do not allow multiple appearance of sizes like volume, weight, length etc. The whole sub tree is presented as a UDX element.				

Designation	Description	BMEcat element	Length	Must / Should / Can
The element PRODUCT_PRICE_DETAILS and its sub elements specify the price data (see explanation 5e).				+Must
Valid start date	Date for the beginning of the period of validity	DATETIME type="valid_start_date"	Date Time	+Must
Valid end date	Date for the end of the period of validity	DATETIME type="valid_end_date"	Date Time	Can
Product price, every sub element PRODUCT_PRICE can specify a different price for the product (see explanation 5e). Price formulas (FORMULA) are not allowed here.				Must
Daily price	Is used in the ETIM BMEcat to transmit, that a product has no fixed price (prices on request). In this case "true" has to be transmitted. If products have a fixed price this field is not required.	DAILY_PRICE see also 5e "Prices"	dtBOOLEAN	Should
Price type	Attribute, which specifies the type of price, e.g. „net_list“ discountable list(gross)price, „net_customer“ net purchase price without sales tax or „nrp“ suggested retail price incl. sales tax	PRODUCT_PRICE see also 5e "Prices"	20	Must
Price	Amount of the price (0.00 is no valid price, except products without list price, see explanation 5e)	PRICE_AMOUNT	Number	Must
Tax rate	Factor for tax applicable to this price »0.19« (is »19%«)	TAX	Number	+Must
Lower quantity limit	Lower quantity limit for graduated prices. The unit for the graduated price limit is the order unit (ORDER_UNIT), default value = 1.	LOWER_BOUND	Number	+Must

Designation	Description	BMEcat element	Length	Must / Should/ Can
Territory	Territory in which the product price is valid. If not specified, the value from the element TERRITORY of the HEADER is taken.	TERRITORY	Countries	Can

Example for the illustration of several prices

```

<PRODUCT_PRICE_DETAILS>
  <DATETIME type="valid_start_date">
    <DATE>2011-01-01</DATE>
  </DATETIME>
  <PRODUCT_PRICE price_type="net_list">
    <PRICE_AMOUNT>61.1</PRICE_AMOUNT>
    <PRICE_CURRENCY>EUR</PRICE_CURRENCY>
    <TAX>0.19</TAX>
    <LOWER_BOUND>1</LOWER_BOUND>
  </PRODUCT_PRICE>
  <PRODUCT_PRICE price_type="net_list">
    <PRICE_AMOUNT>53.8</PRICE_AMOUNT>
    <PRICE_CURRENCY>EUR</PRICE_CURRENCY>
    <TAX>0.19</TAX>
    <LOWER_BOUND>10</LOWER_BOUND>
  </PRODUCT_PRICE>
  <PRODUCT_PRICE price_type="net_customer">
    <PRICE_AMOUNT>48.7</PRICE_AMOUNT>
    <PRICE_CURRENCY>EUR</PRICE_CURRENCY>
    <TAX>0.19</TAX>
    <LOWER_BOUND>1</LOWER_BOUND>
  </PRODUCT_PRICE>
</PRODUCT_PRICE_DETAILS>

```

Designation	Description	BMEcat element	Length	Must / Should/ Can
With the element MIME_INFO references to multimedia supplementary documents of a product can be specified. An infinite number of sub elements MIME can contain. The MIME element refers to a file that is transmitted on a separate way (see explanation 5f).				+Should
MIME type	Type of the supplementary document. The element is based on MIME types that are common on the internet (see explanation 5f).	MIME_TYPE	30	+Must
Source	The relative path and the file name or URL address. The MIME_SOURCE string is combined with the base path (MIME_ROOT) in the HEADER (see explanation 5f).	MIME_SOURCE	250	Must
Designation	Describes the kind and usage of the MIME document (see explanation 5f).	MIME_DESCR	250	+Must
Purpose	Desired purpose of the MIME document on the target system. Guideline wholesalers: at least one picture as MIME_PURPOSE = "normal" has to be delivered (see explanation 5f).	MIME_PURPOSE	20	+Must
Alternative text	Alternative text used if the file cannot be represented (e.g. by the browser) in the target system.	MIME_ALT	50	Can

Designation	Description	BMEcat element	Length	Must / Should/ Can
The element USER_DEFINED_EXTENSIONS specifies special requirements of the electrical wholesale business				+Muss
Short name	Short description of the manufacturer	UDX.EDXF.MANUFACTURER_ACRONYM	10	Should
Expiration date product	Is given when in the field PRODUCT_STATUS an expiration mark is delivered. Example: 2011-10-24, which means, that this is the last day, the product can be ordered regular.	UDX.EDXF.EXPIRATION_DATE	10	Can
Discount group of the manufacturer	Discount group key of the manufacturer. At least one group of the manufacturer or the supplier has to be specified; also both discount groups can be given. (a list of all included discount groups with factors and possibly descriptions has to be agreed separately.)	UDX.EDXF.DISCOUNT_GROUP_MANUFACTURER	10	Must (or)
Discount group of the supplier	Discount group key of the supplier. At least one group of the supplier or the manufacturer has to be specified; also both discount groups can be given. (a list of all included discount groups with factors and possibly descriptions has to be agreed separately.)	UDX.EDXF.DISCOUNT_GROUP_SUPPLIER	10	Must (or)
Product series	Indication to which product series (e.g. switch program) a product belongs. Since a product can belong to multiple series, this field is defined as "Multiple" in the sense of the Specification BMEcat 2005. Further details at the end of this table.	UDX.EDXF.PRODUCT_SERIES	50	Should
Due to the fact that BMEcat 2005 do not allow multiple appearance of sizes like volume, weight, length ... the sub tree is illustrated completely via UDX elements. The UDX sub tree PACKING_UNITS contains information about the different packing units. The sub element PACKING_UNIT can occur multiple. For each product at least the smallest regular PACKING_UNIT has to be indicated. The indication of all additional existing packing units is certainly also important, to enable the wholesaler a useful disposition (also in the interest of the manufacturer). Please be sure to observe the "Examples of packing variants" and the corresponding information at 5i.				+Must
Minimum quantity	Minimum quantity with respect to the order unit (ORDER_UNIT), beginning with this order quantity, the respective packing unit is used.	UDX.EDXF.QUANTITY_MIN	FLOAT	Must

Designation	Description	BMEcat element	Length	Must / Should / Can
Maximum quantity	Maximum quantity with respect to the order unit (ORDER_UNIT), up to this order quantity, the respective packing unit is used.	UDX.EDXF.QUANTITY_MAX	FLOAT	Must
Packing unit code	Code for the packing unit; has to be selected from the list of predefined values (see point 8).	UDX.EDXF.PACKING_UNIT_CODE	PUNIT	Muss
Volume	Volume of the packing unit in cubic metre (m ³)	UDX.EDXF.VOLUME	Number	Can
Gross weight	Gross weight of the packing unit in kilogram (kg)	UDX.EDXF.WEIGHT	Number	Should
Length	Length of the packing unit in metres (m)	UDX.EDXF.LENGTH	Number	Should
Width	Width of the packing unit in metres (m)	UDX.EDXF.WIDTH	Number	Should
Depth	Depth of the packing unit in metres (m)	UDX.EDXF.DEPTH	Number	Should
EAN-Code/GTIN	EAN-Code/GTIN of packing unit	UDX.EDXF.EAN	14	Should

The predefined units (cubic metre, kilogram, metre) must be strictly observed. An indication of another unit (e.g. litre, gram, millimetre) is not allowed.

Explanation to the field “Product series” <UDX.EDXF.PRODUCT_SERIES>

If a product belongs to a program or a series, this of course should be transmitted also in the BMEcat ETIM. Especially in the sphere of switches this is important but today this is also important for Small Domestic Appliances or Luminaries. Furthermore the program name may appear in the long description additionally.

Since it is possible that the description of a product series is country-related or language-specific, the data type dtMLSTRING is assigned to the field (according to the Specification BMEcat 2005). The attribute “lang” need not be indicated, if the standard language for the element CATALOG was set to German.

Example for monolingual indication of a product series (norm):

<UDX.EDXF.PRODUCT_SERIES>Pentacolor<UDX.EDXF.PRODUCT_SERIES>

Example for multilingual indication of a product series:

<UDX.EDXF.PRODUCT_SERIES lang=“deu”>Flächenprogramm<UDX.EDXF.PRODUCT_SERIES>
<UDX.EDXF.PRODUCT_SERIES lang=“eng”>Surface Program<UDX.EDXF.PRODUCT_SERIES>

Designation	Description	BMEcat element	Length	Must / Should / Can
Element: UDX.EDXF.PRODUCT_LOGISTIC_DETAILS Any field information can only be delivered once per product (so for example not 2 origin regions for the same product).				Can
Net weight	Net weight of the product in kilograms in reference to the price and order unit, e.g. cable kg per 1000 m.	UDX.EDXF.NETWEIGHT	Number	Can
Preference key	Key in accordance with German tax code (Art. 20, paragraph 4 customs code; Status: 4. February 1999) or special agreement for participants outside Germany.	UDX.EDXF.PREFERENC E_KEY	10	Can
Region of origin	Description of the region according to >>ISO-3166-2<< (Country Sub-division Codes). Region codes must be written in capital letters.	UDX.EDXF.REGION_OF_ ORIGIN	10	Can
Element: UDX.EDXF.REACH This is mandatory for each product. If this is not possible for particular products (at the creation time of the BMEcat), exceptionally the information "no data" can be transmitted.				Must
Date	Date, on which the product was checked by the manufacturer for REACH (if "no data" is delivered in the following field UDX.EDXF.REACH.INFO the date of the catalogue production has to be given here)	UDX.EDXF.REACH.LIST DATE	10	Must
REACH info	Indication, if the product contains a "SVHC = substance of very high concern" in a concentration of more than 0.1 mass percentage (referring to the candidates/substances that were published by ECHA at the previous given date) possible values: - true (contains substances > 0.1 mass percentage) - false (do not contain substances >0.1 mass percentage) - no data If "true" is given, a deep link at MIME info is mandatory (see 5g). The indication only refers to the check at the given date and says explicit nothing about products that were already delivered to the wholesaler or about products that will be the delivered in the future (valid is always the indication on	UDX.EDXF.REACH.INFO	10	Must

Designation	Description	BMEcat element	Length	Must / Should / Can
	the delivery note)			
<p>The sub element UDX.EDXF.SURCHARGE_LIST specifies the transmission of surcharge data of a product (e.g. primary materials like copper, brass, WEEE-charge etc.). The surcharge data can be given multiple if a product contains several metals. Please note the additional examples and further explanations that are listed below. This section is „Must“ if surcharges should be calculated.</p>				Can / Must
Type of surcharge	When indicating the allowed values pay attention on the usage of small letters. Example for primary materials: copper, aluminium, lead, silver, brass, gold, platinum. Example for other surcharges: packaging, insurance, dearness, recycling, recycling WEEE	UDX.EDXF.SURCHARGE_TYPE	20	Must
Manner of surcharge	Manner of surcharge base / cumulated. Allowed values: „base“ or „cumulated“. „base“ is the value calculated by the PRODUCT_PRICE. „cumulated“ is suitable when an up- or down stroke is already made by an additional UDX.EDXF.SURCHARGE_LIST	UDX.EDXF.SURCHARGE_MANNER	10	Must
Surcharge factor	Example: 0.05 (corresponds to 5%) This must not be given if material weight is specified. If a step size is specified either the surcharge factor or the surcharge price amount must be indicated.	UDX.EDXF.SURCHARGE_PERCENTAGE	Number	Must (or)
Surcharge price amount	Example: 0.02 (corresponds to 2 cents) This must not be given if material weight is specified. If a step size is specified either the surcharge price amount or the surcharge factor must be indicated.	UDX.EDXF.SURCHARGE_PRICE_AMOUNT	Number	Must (or)
Material basis	Material basis must be specified for calculating primary material surcharges. This element is „Must“ if a material basis is given. An amount in €/100 kg, basic quotation of the primary material is already included in the price. Example: Flexible cable CU 150€/100kg Medium voltage power cable CU 000€/100kg	UDX.EDXF.MATERIAL_BASIS	Number	(Must)

Designation	Description	BMEcat element	Length	Must / Should/ Can
Material weight	Material weight for the surcharge in gram/price reference quantity (PRICE_QUANTITY). This must not be given if step size is specified.	UDX.EDXF.MATERIAL_BASIS_WEIGHT	Number	Must (or)
Step size	Step size as triggering moment for the calculation of the surcharge with surcharge factor or amount. This must not be given material weight is specified. If this value is indicated, UDX.EDXF.SURCHARGE_ - PERCENTAGE or UDX.EDXF.- SURCHARGE_PRICE_AMOUNT must be specified.	UDX.EDXF.MATERIAL_BASIS_SURCHARGE_THRESHOLD	Number	Must (or)
Step triggering	description at which point the step is triggered: 1 = per started 2 = per finished if no value is indicated, finished step (2) will be assumed	UDX.EDXF.MATERIAL_BASIS_SURCHARGE_SHUTTER	Number	Should
Surcharge/credit	describes if only a surcharge or a surcharge/credit takes place: 1 = only surcharge 2 = surcharge/credit if no value is indicated, surcharge (1) will be assumed	UDX.EDXF.MATERIAL_BASIS_SURCHARGE_CREDIT	Number	Should
Type of calculation	describes if the surcharge that is indicated at UDX.EDXF.SURCHARGE_PERCENTAGE, must be calculated on base of the gross list price (net_list) or the net price (net_customer respectively gross price /. discount): 1 = gross price 2 = net price if no value is given, the gross price (1) will be assumed. This only has to be given if UDX.EDXF.SURCHARGE_PERCENTAGE is given.	UDX.EDXF.SURCHARGE_CALCULATION	Number	Should

Examples of surcharge types

Surcharge in percentage with step sizes (e.g. 5 %)

Surcharge takes place, if the silver price rises by more than 50 € by comparison to the mentioned price in the material basis (finished step).

This means, at a basis of 150 and 5% surcharge per finished step of 50,00 €:

- starting from 200 = 5% surcharge
- starting from 250 = 10% surcharge
- starting from 300 = 15% surcharge
- starting from 350 = 20% surcharge etc.

```
<UDX.EDXF.SURCHARGE_LIST>
<UDX.EDXF.SURCHARGE>
  <UDX.EDXF.SURCHARGE_TYPE>silver</UDX.EDXF.SURCHARGE_TYPE>
  <UDX.EDXF.SURCHARGE_MANNER>base</UDX.EDXF.SURCHARGE_MANNER>
  <UDX.EDXF.SURCHARGE_PERCENTAGE>0.05</UDX.EDXF.SURCHARGE_PERCENTAGE>
  <UDX.EDXF.MATERIAL_BASIS>150</UDX.EDXF.MATERIAL_BASIS>
  <UDX.EDXF.MATERIAL_BASIS_SURCHARGE_THRESHOLD>50</UDX.EDXF.MATERIAL_BASIS_
SURCHARGE_THRESHOLD>
  <UDX.EDXF.MATERIAL_BASIS_SURCHARGE_SHUTTER>2</UDX.EDXF.MATERIAL_BASIS_SURCHA
RGE_SHUTTER>
  <UDX.EDXF.MATERIAL_BASIS_SURCHARGE_CREDIT>1</UDX.EDXF.MATERIAL_BASIS_SURCHAR
GE_CREDIT>
  <UDX.EDXF.SURCHARGE_CALCULATION>1</UDX.EDXF.SURCHARGE_CALCULATION>
</UDX.EDXF.SURCHARGE>
</UDX.EDXF.SURCHARGE_LIST>
```

Surcharge weight with basis

According to BMEcat 2005 metal figures have to be indicated as “gram per PRICE_QUANTITY of the ORDER_UNIT”. An unusual size within the cable industry as a result of Eldanorm.

Example for PRICE_QUANTITY = 1.000 (ORDER_UNIT = metre)

```
<UDX.EDXF.SURCHARGE_LIST>
<UDX.EDXF.SURCHARGE>
  <UDX.EDXF.SURCHARGE_TYPE>copper</UDX.EDXF.SURCHARGE_TYPE>
  <UDX.EDXF.SURCHARGE_MANNER>base</UDX.EDXF.SURCHARGE_MANNER>
  <UDX.EDXF.MATERIAL_BASIS>150</UDX.EDXF.MATERIAL_BASIS>
  <UDX.EDXF.MATERIAL_BASIS_WEIGHT>43000</UDX.EDXF.MATERIAL_BASIS_WEIGHT>
</UDX.EDXF.SURCHARGE>
</UDX.EDXF.SURCHARGE_LIST>
```

Example for PRICE_QUANTITY = 100 (ORDER_UNIT = metre)

```
<UDX.EDXF.SURCHARGE_LIST>
<UDX.EDXF.SURCHARGE>
  <UDX.EDXF.SURCHARGE_TYPE>copper</UDX.EDXF.SURCHARGE_TYPE>
  <UDX.EDXF.SURCHARGE_MANNER>base</UDX.EDXF.SURCHARGE_MANNER>
  <UDX.EDXF.MATERIAL_BASIS>150</UDX.EDXF.MATERIAL_BASIS>
  <UDX.EDXF.MATERIAL_BASIS_WEIGHT>4300</UDX.EDXF.MATERIAL_BASIS_WEIGHT>
</UDX.EDXF.SURCHARGE>
</UDX.EDXF.SURCHARGE_LIST>
```

Percentage surcharge to the list price net_list for packing (e.g. 1%)

```

<UDX.EDXF.SURCHARGE_LIST>
  <UDX.EDXF.SURCHARGE>
    <UDX.EDXF.SURCHARGE_TYPE>packaging</UDX.EDXF.SURCHARGE_TYPE>
    <UDX.EDXF.SURCHARGE_MANNER>base</UDX.EDXF.SURCHARGE_MANNER>
    <UDX.EDXF.SURCHARGE_PERCENTAGE>0.01</UDX.EDXF.SURCHARGE_PERCENTAGE>
  </UDX.EDXF.SURCHARGE>
</UDX.EDXF.SURCHARGE_LIST>

```

Surcharge in percentage with step sizes and weight with basis

Surcharge takes place, if the silver price rises by 1.00 € (started step) by comparison to the mentioned price in the material basis. If it declines 1.00 € below, a credit will be made.

This means, at a basis of 150 and 5 % surcharge per started step of 50.00 €:

- starting from 151 = 5% surcharge
- starting from 201 = 10% surcharge
- starting from 251 = 15% surcharge
- starting from 301 = 20% surcharge etc. (credit corresponding)

```

<UDX.EDXF.SURCHARGE_LIST>
  <UDX.EDXF.SURCHARGE>
    <UDX.EDXF.SURCHARGE_TYPE>silver</UDX.EDXF.SURCHARGE_TYPE>
    <UDX.EDXF.SURCHARGE_MANNER>base</UDX.EDXF.SURCHARGE_MANNER>
    <UDX.EDXF.SURCHARGE_PERCENTAGE>0.05</UDX.EDXF.SURCHARGE_PERCENTAGE>
    <UDX.EDXF.MATERIAL_BASIS>150</UDX.EDXF.MATERIAL_BASIS>
    <UDX.EDXF.MATERIAL_BASIS_SURCHARGE_THRESHOLD>50</UDX.EDXF.MATERIAL_BASIS_ -
    SURCHARGE_THRESHOLD>
    <UDX.EDXF.MATERIAL_BASIS_SURCHARGE_SHUTTER>1</UDX.EDXF.MATERIAL_BASIS_SURCHA
    RGE_SHUTTER>
    <UDX.EDXF.MATERIAL_BASIS_SURCHARGE_CREDIT>2</UDX.EDXF.MATERIAL_BASIS_SURCHAR
    GE_CREDIT>
    <UDX.EDXF.SURCHARGE_CALCULATION>1</UDX.EDXF.SURCHARGE_CALCULATION>
  </UDX.EDXF.SURCHARGE>
  <UDX.EDXF.SURCHARGE>
    <UDX.EDXF.SURCHARGE_TYPE>copper</UDX.EDXF.SURCHARGE_TYPE>
    <UDX.EDXF.SURCHARGE_MANNER>base</UDX.EDXF.SURCHARGE_MANNER>
    <UDX.EDXF.MATERIAL_BASIS>150</UDX.EDXF.MATERIAL_BASIS>
    <UDX.EDXF.MATERIAL_BASIS_WEIGHT>110</UDX.EDXF.MATERIAL_BASIS_WEIGHT>
  </UDX.EDXF.SURCHARGE>
</UDX.EDXF.SURCHARGE_LIST>

```

Transmission of information to WEEE (Waste Electrical and Electronic Equipment)

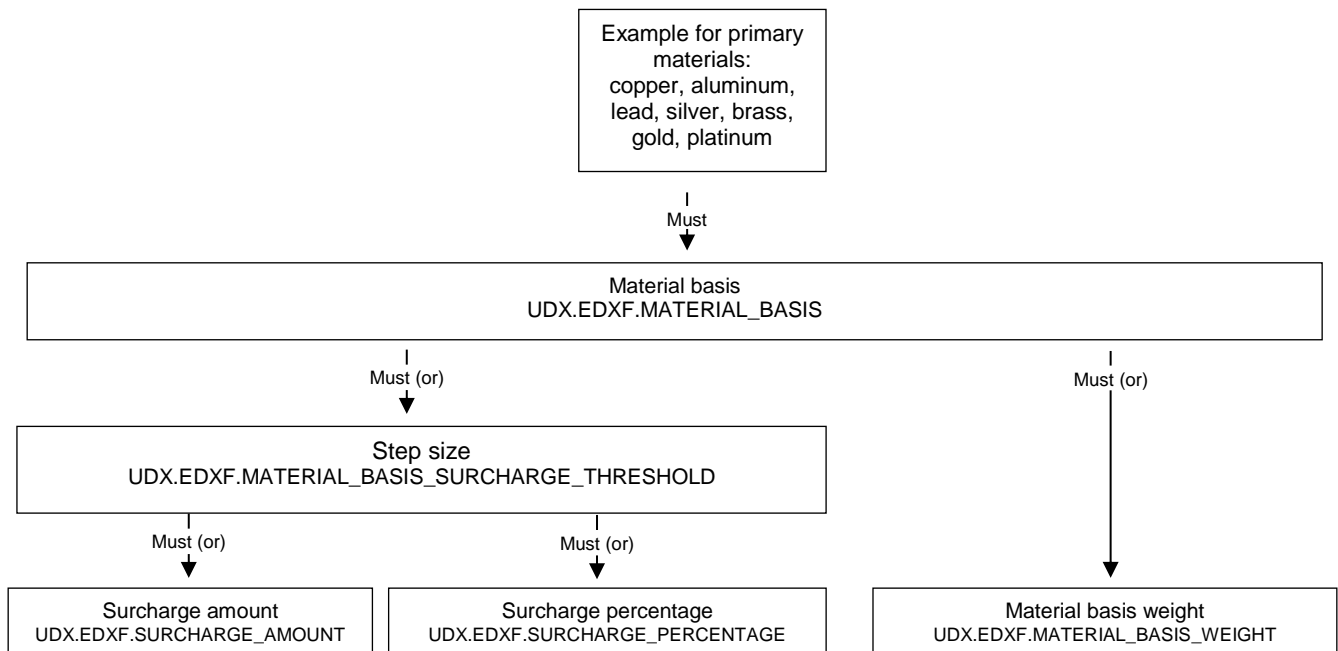
```

<UDX.EDXF.SURCHARGE_LIST>
  <UDX.EDXF.SURCHARGE>
    <UDX.EDXF.SURCHARGE_TYPE>recycling WEEE</UDX.EDXF.SURCHARGE_TYPE>
    <UDX.EDXF.SURCHARGE_MANNER>base</UDX.EDXF.SURCHARGE_MANNER>
    <UDX.EDXF.SURCHARGE_PRICE_AMOUNT>0.28</UDX.EDXF.SURCHARGE_PRICE_AMOUNT>
  </UDX.EDXF.SURCHARGE>
</UDX.EDXF.SURCHARGE_LIST>

```

This guideline in the original German version handles the data exchange between manufactures and wholesalers in Germany, so be care, in which country the given WEEE charge is valid.

Graphical illustration of the metal surcharges and the following “Must fields”



The diagram illustrates the dependency of the fields, but does not correspond to the order of the tags in BMEcat!

Designation	Description	BMEcat element	Length	Must / Should/ Can
With the element PRODUCT_LOGISTIC_DETAILS among others the transmission of origin data is specified. Every field information can be delivered only once per product (that means for example not 2 customs numbers for one and the same product).				+Should
Customs number	Product number for the index of goods of the foreign trade statistics. It matches with the first 8 digits of the code number of the German user customs tariff of the applicable trade item. Only current custom numbers are allowed (acc. to SOVA master file).	CUSTOMS_NUMBER	60	+Should
Statistics factor	Conversion factor of the order unit to the significant unit of the foreign trade statistic. Example: pipes that are 3 metres long should be ordered as units/pieces (order unit = one/C62). The foreign trade statistic requires the unit metre; the conversion	STATISTICS_FACTOR	Number	Can

Designation	Description	BMEcat element	Length	Must / Should/ Can
	factor is then 3. On the basis of this factor and the order unit, conversion factors for other sales units can be calculated.			
Country of origin	Country codes acc. to >>ISO-3166-1<< e.g.: >>DE<< (for Germany) >>US<< (for USA) Ensure the usage of capital letters. The indication >>CE<< (European Union) is not allowed.	COUNTRY_OF_ORIGIN	2	+Should

Designation	Description	BMEcat element	Length	Must / Should/ Can
Optional: References to other products (PRODUCT_REFERENCE) Only in the case of usage "Reference type" and "Reference product" are "must fields".				Can
Reference type	Describes the relationship between the two products.	PRODUCT_REFERENCE type = ...	20	Must
Quantity	Describes how many products are being referenced.	PRODUCT_REFERENCE quantity = ...	Integer	Can
Reference product	Unique number of the product to which a reference is made.	PROD_ID_TO	32	Must
Product catalogue	Unique catalogue identification, if the referenced product is not listed in the same catalogue	CATALOG_ID	20	Can
Version	Version number of the referenced product catalogue	CATALOG_VERSION	7	Can

Example for the reference to a followup product

```
<PRODUCT_REFERENCE type="followup"
  <PROD_ID_TO>4711</PROD_ID_TO>
</PRODUCT_REFERENCE>
```

Further details you'll find in the specification BMEcat 2005.

5. Explanation

a. Product description

The short description (DESCRIPTION_SHORT) describes the product short and concise to recognize in its kind and function among a large quantity of products. It is not used to characterize it technically unique or highlight it among similar products. Unclear abbreviations or codes should be avoided.

BMEcat 2005 allows here 150 characters (versus max. 80 characters in BMEcat 1.2). If a data supplier wants to provide more than 80 characters, it should be noticed that the text can be automatically cut off by the data receiver after 80 characters (depending on the data receiver's requirements of the target system).

Examples for desired short descriptions:

Surge arrester 1-pole 180 V AC
Junction box S-Colour grey
Feed-through terminal block 2.5 mm² blue

Examples for undesired short descriptions:

- Junct. box. gr. S-Colour
- Leakage-circuit breaker F374-25/0.03/400Hz
- Normline HV150

The long description (DESCRIPTION_LONG) is used to present product features that are not presentable by the structured data. (DESCRIPTION_SHORT, Type, ETIM).

Here is also the possibility to communicate manufacturer specific benefits of a product.

Example for a desired long description:

Automatic luminaire with integrated movement sensor and 200° detection range, 360° creep-under protection for a gap free detection, weather-proof, painted surface, glass with semi-gloss optic, additional switching output for the connection of further luminaries, covered connection socket with large wiring space, double pipe-in lead for an easy and fast assembly, adjustment of the detection range by rotating lens and electronic calibration.

For the text fields that are used in the BMEcat ETIM the given targets in no. 3b) of this guideline (General guidelines for catalogue content) must be strictly observed!

b. Keywords

Keywords (also search term or synonym) are alternative terms for the short description and are used to find products easier in electronic search systems. The wholesalers expect here short and concise terms that are used by the customers customary to declare exactly the single product. They must be supplied in singular form. It is not allowed to transmit the short description (DESCRIPTION_ SHORT) here again. Manufacturer specific terms that are well known on the market are permitted here. It is desired that several keywords (if possible) per product are supplied in separated tags. Punctuation marks should not be used in the tags. Keywords should consist of one word, sentence constructions are not allowed.

It is not desired to transmit the ETIM class keywords here again as manufacturer specific product keywords. If individual ETIM class keywords match to the particular product, they can be used nevertheless in the BMEcat. Important is, that the keywords specified per product are suitable to the particular product (the keyword "Combination pliers" would be not correct for the product "Grip pliers").

Examples for desired keywords:

Cross switch
Bulb
Dulux-Lamp
Levelled pipe wrench

Examples for undesired keywords:

EIB, lamps
EV-240
Aurora-Line
Tongs for treating thick-walled corrugated steel conduit

c. Classification und features

Using the element PRODUCT_FEATURES a product is classified, i.e. assigned to a group in various classification or feature group systems (in our case e.g. ETIM version 5.0). Furthermore in the element PRODUCT_FEATURES features of a product are specified. Features are data objects that can be used to describe features of a product like colour, nominal voltage, type of socket etc. These features are determined partially by so-called feature strips by the referenced classification and feature group system. In this case, the elements FEATURE are embedded in the corresponding element PRODUCT_FEATURES of the related classification and feature group system. In addition to the rules specified in the BMEcat Version 2005, the following tightening is made for the transmission of the ETIM product classification.

ETIM Tightening/Explanation:

Please note that empty tags are not accepted for the providing of ETIM values. If a value cannot be assigned due to the fact that it makes no sense in product relation (e.g. diameter of a rectangular product), the minus sign (-) for „not relevant“ is valid.

If no value of a list box of an alphanumeric feature in a class is correct, the specification “-“ is permitted (e.g. the product is red, the value list contains only blue, grey and green but not others).

The indication of logical features can only be made by „true“ or „false“ (lowercase!), „yes“ and „no“ are not permitted.

With range fields, two tags for the both values should be given in accordance to the BMEcat specification:

```
<FVALUE>-15</FVALUE>
```

```
<FVALUE>100</FVALUE>,
```

the presentment

```
<FVALUE>-15 to 100</FVALUE> or
```

```
<FVALUE>-15 - 100</FVALUE>
```

is incorrect.

If both values are identical, they are also indicated in two separate tags.

e.g. frequency 50Hz fix

```
<FVALUE>50</FVALUE>
```

```
<FVALUE>50</FVALUE>
```

The fields type „Alphanumeric“ defines a feature for which a value list exists in the ETIM model. Only the indication of codes that are part of this particular ETIM list are allowed (e.g. “EV000123”), the indication of free text is not possible here.

Recommendation to set articles:

For set articles consisting of a number of individual articles and therefore not clearly related to an ETIM-class, the set can be assigned to the class of the main article (reasonably the manufacturer of the set article takes this decision).

Indication of manufacturer specific colours in the ETIM BMEcat

With the field FVALUE_DETAILS, more precise information to the colour of a product defined in the ETIM model should be made if necessary and useful. Especially in the product ranges Domestic switching devices, Luminaries, Cable ducts or Small household appliances the indication is important and should be transmitted by the manufacturer in the BMEcat ETIM.

So here are meant all alphanumeric features in ETIM that have the word “colour” in their names.

e.g. Colour of a Cover frame for domestic switching devices

```
<FEATURE>
  <FNAME>EF000007</FNAME>
  <FVALUE>EV000080</FVALUE>
  <FVALUE_DETAILS>azure blue</FVALUE_DETAILS>
</FEATURE>
```

EF000007 = „Colour“

EV000080 = „Blue“

Except of the classification according to ETIM, in principal other classifications can be transferred in a BMEcat in addition (e.g. eCl@ss, proficl@ss, UNSPSC, company specific classifications).

d. Order

The element PRODUCT_ORDER_DETAILS contains elements which indicate details of the order conditions and packing modalities. At the moment, order information in the BMEcat can only be transferred clearly and save by the fields ORDER_UNIT and PRICE_QUANTITY in the way described below.

Examples

Spray tin 200ml (billing per tin)

```
<ORDER_UNIT>TN</ORDER_UNIT>
<CONTENT_UNIT>MLT</CONTENT_UNIT>
<NO_CU_PER_OU>200</NO_CU_PER_OU>
<PRICE_QUANTITY>1</PRICE_QUANTITY>
<QUANTITY_MIN>6</QUANTITY_MIN>
<QUANTITY_INTERVAL>6</QUANTITY_INTERVAL>

<PRICE_AMOUNT>1.90</PRICE_AMOUNT>
```

Fitting screw (billing per unit)

```
<ORDER_UNIT>C62</ORDER_UNIT>
<CONTENT_UNIT>C62</CONTENT_UNIT>
<NO_CU_PER_OU>1</NO_CU_PER_OU>
<PRICE_QUANTITY>100</PRICE_QUANTITY>
<QUANTITY_MIN>100</QUANTITY_MIN>
<QUANTITY_INTERVAL>100</QUANTITY_INTERVAL>

<PRICE_AMOUNT>5.80</PRICE_AMOUNT>
```

Cable tray (billing per metre)

```
<ORDER_UNIT>MTR</ORDER_UNIT>
<CONTENT_UNIT>MTR</CONTENT_UNIT>
<NO_CU_PER_OU>1</NO_CU_PER_OU>
<PRICE_QUANTITY>1</PRICE_QUANTITY>
<QUANTITY_MIN>3</QUANTITY_MIN>
<QUANTITY_INTERVAL>3</QUANTITY_INTERVAL>

<PRICE_AMOUNT>21.90</PRICE_AMOUNT>
```

**Miniature fuse
(billing per unit)**

<ORDER_UNIT>C62</ORDER_UNIT>
<CONTENT_UNIT>C62</CONTENT_UNIT>
<NO_CU_PER_OU>1</NO_CU_PER_OU>
<PRICE_QUANTITY>100</PRICE_QUANTITY>
<QUANTITY_MIN>10</QUANTITY_MIN>
<QUANTITY_INTERVAL>10</QUANTITY_INTERVAL>

<PRICE_AMOUNT>18.40</PRICE_AMOUNT>

**Steel strip
(billing per metre)**

<ORDER_UNIT>MTR</ORDER_UNIT>
<CONTENT_UNIT>MTR</CONTENT_UNIT>
<NO_CU_PER_OU>1</NO_CU_PER_OU>
<PRICE_QUANTITY>1</PRICE_QUANTITY>
<QUANTITY_MIN>25</QUANTITY_MIN>
<QUANTITY_INTERVAL>25</QUANTITY_INTERVAL>

<PRICE_AMOUNT>5.20</PRICE_AMOUNT>

**Mignon alkaline battery
(billing per blister; the unit "blister" is not part of the ECE list and so cannot be used independently, for this reason, the unit PA = packet must be used)**

<ORDER_UNIT>PA</ORDER_UNIT>
<CONTENT_UNIT>C62</CONTENT_UNIT>
<NO_CU_PER_OU>4</NO_CU_PER_OU>
<PRICE_QUANTITY>1</PRICE_QUANTITY>
<QUANTITY_MIN>1</QUANTITY_MIN>
<QUANTITY_INTERVAL>1</QUANTITY_INTERVAL>

<PRICE_AMOUNT>2.24</PRICE_AMOUNT>

**Cable ties
(billing per unit)**

<ORDER_UNIT>C62</ORDER_UNIT>
<CONTENT_UNIT>C62</CONTENT_UNIT>
<NO_CU_PER_OU>1</NO_CU_PER_OU>
<PRICE_QUANTITY>100</PRICE_QUANTITY>
<QUANTITY_MIN>100</QUANTITY_MIN>
<QUANTITY_INTERVAL>100</QUANTITY_INTERVAL>

<PRICE_AMOUNT>6.75</PRICE_AMOUNT>

Installation duct
(billing per metre)

<ORDER_UNIT>**MTR**</ORDER_UNIT>
<CONTENT_UNIT>**MTR**</CONTENT_UNIT>
<NO_CU_PER_OU>**1**</NO_CU_PER_OU>
<PRICE_QUANTITY>**1**</PRICE_QUANTITY>
<QUANTITY_MIN>**2**</QUANTITY_MIN>
<QUANTITY_INTERVAL>**2**</QUANTITY_INTERVAL>

<PRICE_AMOUNT>**5.60**</PRICE_AMOUNT>

Test badge
(billing per packet)

<ORDER_UNIT>**PA**</ORDER_UNIT>
<CONTENT_UNIT>**ST**</CONTENT_UNIT>
<NO_CU_PER_OU>**10**</NO_CU_PER_OU>
<PRICE_QUANTITY>**1**</PRICE_QUANTITY>
<QUANTITY_MIN>**1**</QUANTITY_MIN>
<QUANTITY_INTERVAL>**1**</QUANTITY_INTERVAL>

<PRICE_AMOUNT>**26.56**</PRICE_AMOUNT>

Chipboard screw countersunk head
(billing per box)

<ORDER_UNIT>**CS**</ORDER_UNIT>
<CONTENT_UNIT>**C62**</CONTENT_UNIT>
<NO_CU_PER_OU>**200**</NO_CU_PER_OU>
<PRICE_QUANTITY>**1**</PRICE_QUANTITY>
<QUANTITY_MIN>**1**</QUANTITY_MIN>
<QUANTITY_INTERVAL>**1**</QUANTITY_INTERVAL>

<PRICE_AMOUNT>**10.80**</PRICE_AMOUNT>

Speaker cable
(billing per metre)

<ORDER_UNIT>**MTR**</ORDER_UNIT>
<CONTENT_UNIT>**MTR**</CONTENT_UNIT>
<NO_CU_PER_OU>**1**</NO_CU_PER_OU>
<PRICE_QUANTITY>**100**</PRICE_QUANTITY>
<QUANTITY_MIN>**100**</QUANTITY_MIN>
<QUANTITY_INTERVAL>**100**</QUANTITY_INTERVAL>

<PRICE_AMOUNT>**39.50**</PRICE_AMOUNT>

**House wiring cable PVC insulated
(100m ring, billing per 1,000 metre)**

<ORDER_UNIT>MTR</ORDER_UNIT>
<CONTENT_UNIT>MTR</CONTENT_UNIT>
<NO_CU_PER_OU>1</NO_CU_PER_OU>
<PRICE_QUANTITY>1000</PRICE_QUANTITY>
<QUANTITY_MIN>100</QUANTITY_MIN>
<QUANTITY_INTERVAL>100</QUANTITY_INTERVAL>

<PRICE_AMOUNT>490.00</PRICE_AMOUNT>

**Heat-shrink tubing
(billing per unit)**

<ORDER_UNIT>C62</ORDER_UNIT>
<CONTENT_UNIT>MTR</CONTENT_UNIT>
<NO_CU_PER_OU>12</NO_CU_PER_OU>
<PRICE_QUANTITY>1</PRICE_QUANTITY>
<QUANTITY_MIN>1</QUANTITY_MIN>
<QUANTITY_INTERVAL>1</QUANTITY_INTERVAL>

<PRICE_AMOUNT>19.35</PRICE_AMOUNT>

e. Prices

With the element `PRODUCT_PRICE_DETAILS` price data of a product are specified. With the attribute `price_type` of the element `PRODUCT_PRICE` it is possible to indicate different prices for a product. Only one single price is permitted per `PRODUCT_PRICE.price_type` and `LOWER_BOUND`. The wholesalers expect here the list(gross)price (attribute `net_list`, discountable) without sales tax and/or a customer specific special purchase price (attribute `net_customer`) for the electrical wholesaler without sales tax and/or the suggested retail price incl. sales tax (attribute `nrp`). A customer specific special purchase price can only be given if it differs from the calculated price `net_list` less discount”.

Example for the transmission of products without prices

If there are no list prices for some products (e.g. price on request), these products can be transmitted in the BMEcat ETIM anyway like described here:

```
<PRODUCT_PRICE_DETAILS>
  <DATETIME type="valid_start_date">
    <DATE>2011-07-01</DATE>
  </DATETIME>
  <DAILY_PRICE>true</DAILY_PRICE>
  <PRODUCT_PRICE price_type="net_list">
    <PRICE_AMOUNT>0</PRICE_AMOUNT>
    <PRICE_CURRENCY>EUR</PRICE_CURRENCY>
    <TAX>0.19</TAX>
    <LOWER_BOUND>1</LOWER_BOUND>
  </PRODUCT_PRICE>
</PRODUCT_PRICE_DETAILS>
```

Greatest care has to be taken that the transmission in the ETIM BMEcat is exactly given as mentioned above. Especially important at this point is the element `DAILY_PRICE` (with the indication `true`) as a mark for a product without a current list price.

f. Pictures and other additional documents

With the element MIME_INFO references to additional multimedia documents of a product can be specified. This makes it possible, for example, to reference images and product data sheets of a product at a catalogue data exchange.

It is assumed that these supplementary data will be transmitted in addition (on a separate path) and can be found relative to the specified directory MIME_ROOT in the HEADER. The file names of the MIME objects may not be distinguishable only by the path statement. They also can not contain special characters. This also includes: „ “ / \ = ? * , < > | ; : ,

The element MIME_INFO contains any number of MIME elements. Each of these elements represents exactly one reference to a supplementary document. The definition of the element MIME is inspired by the MIME format (Multipurpose Internet Mail Extensions). The MIME format is used to standardize data transfer over the internet.

Predefined permitted values for the element MIME_TYPE:

Designation	Attribute value	Explanation
URL	url	Link to a resource on the internet (or intranet); this is not an official MIME type, but should still be used here
PDF document	application/pdf	(local) Acrobat PDF format
JPEG	image/jpeg	(local) picture/graphic in the format JPEG
TIF	image/tif	(local) picture/graphic in the format TIF
GIF	image/gif	(local) picture/graphic in the format GIF
EPS	image/eps	(local) picture/graphic in the format EPS (but only as a <u>supplementary</u> picture)
HTML	text/html	(local) document in the format HTML (within the catalogue file system)
Text	text/plain	(local) unformatted text file

When using URLs, only one link per product is permitted and this link is only permitted to a product related single page.

If a link is referring to a product in the context of REACH, a supplementary link is also allowed e.g. to general product information.

Permitted values for the element MIME_DESCR:

Due to the fact that the predefined fields of the BMEcat do not provide enough MIME_PURPOSEs for the current requirements, the field MIME_DESCR has to deliver the more precise characterization of the document type. Currently possible values are (English translations of the designation in the German Guideline for suppliers):

Designation
Product picture
Similar figure
Safety data sheet
Deep link
Deep link REACH
Product picture detailed view
Product picture front view
Product picture back view
Product picture top view
Product picture bottom view
Product picture view from the right side
Product picture view from the left side
Product picture sloping
Energy label
Environment label
Milieu picture
Product data sheet
Dimensioned drawing
Wiring diagram
Instructions for use
Seal of approval
Calibration certificate
Logo 1c
Logo 4c

The optimal sizes of the pictures are:

Internet pictures	width fix 300 pixels	height variable, max. 300 pixels
Thumbnail	width fix 100 pixels	height variable, max. 100 pixels
Print	width fix 600 pixels	height variable, max. 600 pixels

Formats: Print > tif CMYK / 600dpi Internet > jpeg RGB / 300dpi

Notice: Pictures in the format .tif have to be delivered with the transparency path or masked!

MIME_SOURCE, only permitted is the picture name, without prefixed path.

MIME_PURPOSE could be (acc. to BMEcat 2005):

Designation	Attribute value	Description
Screen view (normal view)	normal	normal picture (for usage on the internet and CD-ROM, 24-Bit, RGB, JPEG)
Small view	thumbnail	Preview picture small (24-Bit, RGB, JPEG)
Print picture (enlarged view)	detail	enlarged picture (for print catalogues, 32-Bit, CMYK, TIF)
Logo	logo	logo to a product or a supplier
Others	others	other purpose. If no other value is suitable, others can be used.
Product data sheet	data_sheet	product data sheet (e.g. a technical drawing)
Symbol	icon	small pictogram e.g. for description of fulfilled norms and standards
Safety data sheet	safety_data_sheet	safety data sheet (e.g. for hazardous materials)

The wholesalers expect at least two pictures for each product according to the following specifications:

Once the combination:

MIME_DESCRIPTION = "Product picture" or "Similar figure"

MIME_PURPOSE = "normal"

MIME_TYPE="image/jpeg"

Exactly this combination represents the "standard picture" of a product and therefore may occur only once per product in the BMEcat.

Once the combination:

MIME_DESCRIPTION = "Product picture" or "Similar figure"

MIME_PURPOSE = "detail"

MIME_TYPE="image/tif"

It is important to ensure that the supplied picture fits to the product content wise. In exceptional cases, if product can only be represented by the picture of a related product, the MIME description "Similar figure" can be used generally.

Further pictures and documents can and should be delivered in addition, however, not with the indications used for the standard picture.

If there is no picture available for a product, this part of the MIME part is to skip. Not permitted is the delivery of picture data that contains written or graphical information “Picture not available”.

If safety data sheets are mandatory to certain products, they have to be delivered on this way.

MIME_PURPOSE = safety_data_sheet

MIME_DESCR = Safety data sheet

g. Deep linking

Manufacturer specific, product related information should be available for direct access by „deep linking“ via a provided URL. Navigation elements are not allowed on the target page. A price orientation should be avoided.

In the BMEcat ETIM there should be a reference via deep link to the homepage of the manufacturer about REACH „Registration, Evaluation und Authorization in the European Community (EC) used Chemicals“, i.e. not only to the general homepage, but directly to the REACH information (ideally directly to the REACH information of the single product).

Starting with version 2.1 of this Guideline for suppliers, further information has to be made directly in the BMEcat.

```
<UDX.EDXF.REACH.PRODUCT>  
  <UDX.EDXF.REACH.LISTDATE>2011-12-01</UDX.EDXF.REACH.LISTDATE>  
  <UDX.EDXF.REACH.INFO>false</UDX.EDXF.REACH.INFO>  
</UDX.EDXF.REACH.PRODUCT>
```

A deep link is of course still be specified, to allow detailed information (in particular, what specific substances are in the product).

This solution does not cover all aspects of the REACH regulation:

- there is a current discussion at European level that REACH the REACH should also refer to relate on partial products
- the candidate list is updated regularly, i.e. supplemented with further substances; the list will take effect immediately with publication
- in different batches, a clear statement to the product is not possible
- also the manufacturer has to rely on the statements of its suppliers

Further information about REACH can be found on the websites of ZVEI, VEG, ZVEH or at <http://www.reach-info.de/>

h. Safety data sheet and ECCN codes

Safety data sheet

In the catalogue, all products must be labelled, as determined in § 14 of the Hazardous Substances Act, a safety data sheet (Material Safety Data Sheet - MSDS) in accordance with Directive 91/155/EEC. In addition, all MSDS have to be deposited under the relevant product at other documents in the respective language as a PDF file (a link to the suppliers website is not allowed). Furthermore, all suppliers have to submit the MSDS to the applicable wholesaler after any revision or modification, especially if a product is classified different due to a recipe modification or a statutory change. Thereby, the supplier's product ID and the catalogue have to be given for an unambiguously assignment of the MSDS. The transmitted MSDS have to be deposited as a PDF file with the next catalogue update. The suppliers have to mark altered MSDS by the annual catalogue update. This obligation can be fulfilled e.g. by attaching a list with all changed products. The new version of the MSDS must be annotated with the words "Reviewed: ... (date)". The changes that were made in the revision of an MSDS have to be indicated. In addition, make sure that the description of the Multipurpose Internet Message Extension (MIME) for safety data sheets must be "Safety data sheet".

USA - Export Control Classification Number (ECCN)

The ECCN is an alphanumeric product classification that is issued by the Bureau of Industry and Security (BIS), a division of the US Department of Commerce. The ECCN is used in the "Commerce Control List" to identify different products at the export control.

Such a number is required by a company, if the U.S. importer re-exports the goods. The suitable ECCN for a specific product can be found in the Commerce Control List that in turn is located in the Export Administration Regulations. Alternatively you can inquire for the suitable ECCN at the following website:

http://www.bis.doc.gov/Licensing/Do_I_NeedAnECCN.html

Notice: see also Manual of the German export control HADDEEX, National and international export control regulations Volume 1 Comments, part 12. Main elements of the US export control regulations (respectively the regulations of the specified country of the catalogue).

Data transfer:

The information on the MSDS and ECCN codes in the ETIM BMEcat are given as SPECIAL_TREATMENT_CLASS. The type for the relevance of an MSDS is the attribute „MSDS“ and the associated information „true“ or „false“. The safety data sheet is then passed as MIME. The type for the ECCN code is the attribute „ECCN“ and the associated value is the ECCN.

As the Guideline for suppliers declares the field SPECIAL_TREATMENT_CLASS as mandatory, always a value has to be supplied. If a product is not subject to the labelling obligation, the fields mentioned in the example below have to be filled with the text „NOT_RELEVANT“ and „NONE“.

Example safety data sheet MSDS, ECCN codes and Labelling obligation Export list number AL (rider to the German foreign trade regulations AWW)

```
<PRODUCT>
<SUPPLIER_PID>108014</SUPPLIER_PID>
<PRODUCT_DETAILS>
  <DESCRIPTION_SHORT>Flat nose pliers short 160mm</DESCRIPTION_SHORT>
  <DESCRIPTION_LONG>Flat nose pliers short 160mm with two coloured, ergonomic plastic
  shell. Good grip also when wet and dirty, isolating at extreme temperatures, electric hits and vi-
  brations. DESCRIPTION_LONG>
  <EAN>4012345108014</EAN>
  <MANUFACTURER_PID>108014</MANUFACTURER_PID>
  <MANUFACTURER_NAME>Sample company ltd.</MANUFACTURER_NAME>
  <MANUFACTURER_TYPE_DESCR>108014</MANUFACTURER_TYPE_DESCR>
  <SPECIAL_TREATMENT_CLASS type="MSDS">true</SPECIAL_TREATMENT_CLASS>
  <SPECIAL_TREATMENT_CLASS type="ECCN">3A001</SPECIAL_TREATMENT_CLASS>
  <SPECIAL_TREATMENT_CLASS type="AL">N</SPECIAL_TREATMENT_CLASS>
</PRODUCT_DETAILS>
```

That message here is that there is a safety data sheet, the Export Control Classification Number is 3A001 and a category of the German export list does not exist.

Example if a product is not subject to the labelling obligation

```
<PRODUCT>
<SUPPLIER_PID>108030</SUPPLIER_PID>
<PRODUCT_DETAILS>
  <DESCRIPTION_SHORT>Screwdriver PZ 2</DESCRIPTION_SHORT>
  <DESCRIPTION_LONG> Screwdriver PZ 2 with plastic handle</DESCRIPTION_LONG>
  <EAN>4012345108030</EAN>
  <MANUFACTURER_PID>108030</MANUFACTURER_PID>
  <MANUFACTURER_NAME>Sample company ltd.</MANUFACTURER_NAME>
  <MANUFACTURER_TYPE_DESCR>108030</MANUFACTURER_TYPE_DESCR>
  <SPECIAL_TREATMENT_CLASS type="NOT_RELEVANT">NONE
  </SPECIAL_TREATMENT_CLASS>
</PRODUCT_DETAILS>
```


i. Examples of packing variants

If possible, only actual packing units should be used for the packing variants, in other words, not piece (C62), metre (MTR), kilogram (KGM) or litre (LTR) for example.

However, in the environment of the electrical wholesale, the units piece, metre and kilogram play a role insofar as articles are delivered partially also in general unpacked by the manufacturer to the wholesaler (however, piece, metre and kilogram are no packing units in the proper meaning of the word).

That means, if a manufacturer delivers a single product (as a piece, metre goods or by kilogram) unpacked to the wholesaler, the information about this smallest unpacked unit has to be transmitted.

For one individual packing quantity (QUANTITY_MIN and QUANTITY_MAX) of a product, not more than one packing unit code (PACKING_UNIT_CODE) is allowed.

Therefore, the following configurations are not allowed for an article:

```
<USER_DEFINED_EXTENSIONS>
  <UDX.EDXF.PACKING_UNITS>
    <UDX.EDXF.PACKING_UNIT>
      <UDX.EDXF.QUANTITY_MIN>1</UDX.EDXF.QUANTITY_MIN>
      <UDX.EDXF.QUANTITY_MAX>1</UDX.EDXF.QUANTITY_MAX>
      <UDX.EDXF.PACKING_UNIT_CODE>C62</UDX.EDXF.PACKING_UNIT_CODE>
    </UDX.EDXF.PACKING_UNIT>
    <UDX.EDXF.PACKING_UNIT>
      <UDX.EDXF.QUANTITY_MIN>1</UDX.EDXF.QUANTITY_MIN>
      <UDX.EDXF.QUANTITY_MAX>1</UDX.EDXF.QUANTITY_MAX>
      <UDX.EDXF.PACKING_UNIT_CODE>PA</UDX.EDXF.PACKING_UNIT_CODE>
    </UDX.EDXF.PACKING_UNIT>
  </UDX.EDXF.PACKING_UNITS>
</USER_DEFINED_EXTENSIONS>
```

The code of the packing unit (UDX.EDXF.PACKING_UNIT_CODE) of the different packing levels must be assigned the same for each product. So allowed would be e.g.:

```
<USER_DEFINED_EXTENSIONS>
  <UDX.EDXF.PACKING_UNITS>
    <UDX.EDXF.PACKING_UNIT>
      <UDX.EDXF.QUANTITY_MIN>10</UDX.EDXF.QUANTITY_MIN>
      <UDX.EDXF.QUANTITY_MAX>10</UDX.EDXF.QUANTITY_MAX>
      <UDX.EDXF.PACKING_UNIT_CODE>PA</UDX.EDXF.PACKING_UNIT_CODE>
    </UDX.EDXF.PACKING_UNIT>
    <UDX.EDXF.PACKING_UNIT>
      <UDX.EDXF.QUANTITY_MIN>100</UDX.EDXF.QUANTITY_MIN>
      <UDX.EDXF.QUANTITY_MAX>100</UDX.EDXF.QUANTITY_MAX>
      <UDX.EDXF.PACKING_UNIT_CODE>PA</UDX.EDXF.PACKING_UNIT_CODE>
    </UDX.EDXF.PACKING_UNIT>
  </UDX.EDXF.PACKING_UNITS>
</USER_DEFINED_EXTENSIONS>
```

But of course this is not allowed for the units piece, metre and kilogram:

- packing unit 1 = 1 piece and
- packing unit 2 = 10 pieces would not be allowed!

The same refers to the units metre and kilogram

Example for the correct indication of the packing units of a product:

packing unit 1 = 1 unit in a packet (= PA)

packing unit 2 = 10 units = carton (= CT)

packing unit 3 = 40 units = 1 pallet (= PF)

```

<USER_DEFINED_EXTENSIONS>
  <UDX.EDXF.PACKING_UNITS>
    <UDX.EDXF.PACKING_UNIT>
      <UDX.EDXF.QUANTITY_MIN>1</UDX.EDXF.QUANTITY_MIN>
      <UDX.EDXF.QUANTITY_MAX>1</UDX.EDXF.QUANTITY_MAX>
      <UDX.EDXF.PACKING_UNIT_CODE>PA</UDX.EDXF.PACKING_UNIT_CODE>
      <UDX.EDXF.VOLUME>0.0323</UDX.EDXF.VOLUME>
      <UDX.EDXF.WEIGHT>0.67</UDX.EDXF.WEIGHT>
      <UDX.EDXF.LENGTH>0.38</UDX.EDXF.LENGTH>
      <UDX.EDXF.WIDTH>0.10</UDX.EDXF.WIDTH>
      <UDX.EDXF.DEPTH>0.85</UDX.EDXF.DEPTH>
      <UDX.EDXF.EAN>4012345678901</UDX.EDXF.EAN>
    </UDX.EDXF.PACKING_UNIT>
    <UDX.EDXF.PACKING_UNIT>
      <UDX.EDXF.QUANTITY_MIN>10</UDX.EDXF.QUANTITY_MIN>
      <UDX.EDXF.QUANTITY_MAX>10</UDX.EDXF.QUANTITY_MAX>
      <UDX.EDXF.PACKING_UNIT_CODE>CT</UDX.EDXF.PACKING_UNIT_CODE>
      <UDX.EDXF.VOLUME>0.425</UDX.EDXF.VOLUME>
      <UDX.EDXF.WEIGHT>6.7</UDX.EDXF.WEIGHT>
      <UDX.EDXF.LENGTH>1.0</UDX.EDXF.LENGTH>
      <UDX.EDXF.WIDTH>0.5</UDX.EDXF.WIDTH>
      <UDX.EDXF.DEPTH>0.85</UDX.EDXF.DEPTH>
      <UDX.EDXF.EAN>4012345678002</UDX.EDXF.EAN>
    </UDX.EDXF.PACKING_UNIT>
    <UDX.EDXF.PACKING_UNIT>
      <UDX.EDXF.QUANTITY_MIN>40</UDX.EDXF.QUANTITY_MIN>
      <UDX.EDXF.QUANTITY_MAX>40</UDX.EDXF.QUANTITY_MAX>
      <UDX.EDXF.PACKING_UNIT_CODE>PF</UDX.EDXF.PACKING_UNIT_CODE>
      <UDX.EDXF.VOLUME>0.96</UDX.EDXF.VOLUME>
      <UDX.EDXF.WEIGHT>28</UDX.EDXF.WEIGHT>
      <UDX.EDXF.LENGTH>1.2</UDX.EDXF.LENGTH>
      <UDX.EDXF.WIDTH>0.8</UDX.EDXF.WIDTH>
      <UDX.EDXF.DEPTH>1.0</UDX.EDXF.DEPTH>
      <UDX.EDXF.EAN>4012345643901</UDX.EDXF.EAN>
    </UDX.EDXF.PACKING_UNIT>
  </UDX.EDXF.PACKING_UNITS>
</USER_DEFINED_EXTENSIONS>

```

Explanation to the product 4012345678901

This is only one single product that is delivered in the packing unit packet (PA), so the QUANTITY_MIN and the QUANTITY_MAX is always 1.

The packing dimensions of this single packed product are:

volume 0.0323 m³ (the ETIM BMEcat requires m³)

weight 0.67 kg (the ETIM BMEcat requires kg)

length 0.38 m (the ETIM BMEcat requires m)
width 0.1 m (the ETIM BMEcat requires m)
depth 0.85 m (the ETIM BMEcat requires m)

The EAN number (GTIN) of this product in this packing unit is 4012345678901.

The fields, designations and units have been taken from the specification BMEcat 2005 to ensure a very high compatibility.

Explanation to the product 4012345678002

This is a product that is delivered in the packing unit carton (CT). QUANTITY_MIN and QUANTITY_MAX are 10. That means, in one carton there are 10 products.

The packing dimensions of this carton are:

volume 0.425 m³ (the ETIM BMEcat requires m³)
weight 6.7 kg (the ETIM BMEcat requires kg)
length 1.0 m (the ETIM BMEcat requires m)
width 0.5 m (the ETIM BMEcat requires m)
depth 0.85 m (the ETIM BMEcat requires m)

The EAN number (GTIN) of this product in this packing unit is 4012345678002.

delivered in the packing unit pallet (PF = pallet). QUANTITY_MIN and QUANTITY_MAX are 40. That means, on one pallet there are 40 products.

The packing dimensions of this pallet are:

volume 0.96

Explanation to the product 4012345643901

This is a product that is m³ (the ETIM BMEcat requires m³)
weight 28 kg (the ETIM BMEcat requires kg)
length 1.2 m (the ETIM BMEcat requires m)
width 0.8 m (the ETIM BMEcat requires m)
depth 1.0 m (the ETIM BMEcat requires m)

The EAN number (GTIN) of the product in this packing unit is 4012345643901

Product with the only packing unit pallet:

Machines or similar products can have the pallet as the only packing unit. Therefore this would be then the smallest packing unit and has to be transmitted accordingly in the BMEcat ETIM also by this way.

Excursion:

The indication "MIN" and "MAX" result from the specification BMEcat 2005. At this point, it is for example possible for the product "lemonade" to declare, that at a maximum 12 bottles are always delivered in one crate. That means if 1 to 12 bottles are ordered always a crate will be delivered. The element QUANTITY_MIN would be 1 and the element QUANTITY_MAX will be 12.

In the environment of the electrical wholesalers this possibility usually does not play a role, which means the value QUANTITY_MIN and QUANTITY_MAX is for the packing unit of one product always identical.

An exception to this rule is found at cables and wires. It could be possible that the values for QUANTITY_MIN and QUANTITY_MAX for one packing unit of a product are not identical (see explanation on page 45).

Further specific product examples explaining the packing units

Installation duct

The installation duct is usually sold in a carton to 96 metres. If required, the article is also delivered separately, but then delivered unpacked. The single canal (length 2 m) is plastered at the front ends with foil to protect it from soiling and scratching but is not shrink-wrapped (thus no bag), that means, the first packing unit will be metre.

```

<USER_DEFINED_EXTENSIONS>
  <UDX.EDXF.PACKING_UNITS>
    <UDX.EDXF.PACKING_UNIT>
      <UDX.EDXF.QUANTITY_MIN>2<\UDX.EDXF.QUANTITY_MIN>
      <UDX.EDXF.QUANTITY_MAX>2<\UDX.EDXF.QUANTITY_MAX>
      <UDX.EDXF.PACKING_UNIT_CODE>MTR<\UDX.EDXF.PACKING_UNIT_CODE>
      <UDX.EDXF.VOLUME>0.0004<\UDX.EDXF.VOLUME>
      <UDX.EDXF.WEIGHT>0.220<\UDX.EDXF.WEIGHT>
      <UDX.EDXF.LENGTH>2.000<\UDX.EDXF.LENGTH>
      <UDX.EDXF.WIDTH>0.020<\UDX.EDXF.WIDTH>
      <UDX.EDXF.DEPTH>0.010<\UDX.EDXF.DEPTH>
      <UDX.EDXF.EAN>4012196097814<\UDX.EDXF.EAN>
    </UDX.EDXF.PACKING_UNIT>
    <UDX.EDXF.PACKING_UNIT>
      <UDX.EDXF.QUANTITY_MIN>96</UDX.EDXF.QUANTITY_MIN>
      <UDX.EDXF.QUANTITY_MAX>96</UDX.EDXF.QUANTITY_MAX>
      <UDX.EDXF.PACKING_UNIT_CODE>CT</UDX.EDXF.PACKING_UNIT_CODE>
      <UDX.EDXF.VOLUME>0.0252</UDX.EDXF.VOLUME>
      <UDX.EDXF.WEIGHT>11.335</UDX.EDXF.WEIGHT>
      <UDX.EDXF.LENGTH>2.012</UDX.EDXF.LENGTH>
      <UDX.EDXF.WIDTH>0.146</UDX.EDXF.WIDTH>
      <UDX.EDXF.DEPTH>0.086</UDX.EDXF.DEPTH>
      <UDX.EDXF.EAN>4012196097821</UDX.EDXF.EAN>
    </UDX.EDXF.PACKING_UNIT>
  </UDX.EDXF.PACKING_UNITS>
</USER_DEFINED_EXTENSIONS>

```

Cable tray

The cable tray is sold only unpacked and separately in the first packing stage with a length of 3 m. According to the size of the article (long property) the cost of the packing would exceed the effective benefit. In addition, a cable tray is made of steel and therefore relatively insensitive. The tray is marked by a lateral Inkjet printing. Likewise, a marking by a by an attached label would be conceivable.

```

<USER_DEFINED_EXTENSIONS>
  <UDX.EDXF.PACKING_UNITS>
    <UDX.EDXF.PACKING_UNIT>
      <UDX.EDXF.QUANTITY_MIN>3<\UDX.EDXF.QUANTITY_MIN>
      <UDX.EDXF.QUANTITY_MAX>3<\UDX.EDXF.QUANTITY_MAX>
      <UDX.EDXF.PACKING_UNIT_CODE>MTR<\UDX.EDXF.PACKING_UNIT_CODE>
      <UDX.EDXF.VOLUME>0.0180<\UDX.EDXF.VOLUME>
      <UDX.EDXF.WEIGHT>4.95<\UDX.EDXF.WEIGHT>
      <UDX.EDXF.LENGTH>3.0<\UDX.EDXF.LENGTH>
      <UDX.EDXF.WIDTH>0.100<\UDX.EDXF.WIDTH>
      <UDX.EDXF.DEPTH>0.060<\UDX.EDXF.DEPTH>
      <UDX.EDXF.EAN>4012195829553<\UDX.EDXF.EAN>
    </UDX.EDXF.PACKING_UNIT>
  </UDX.EDXF.PACKING_UNITS>
</USER_DEFINED_EXTENSIONS>

```

Bend for mesh cable tray

The formed component “bend” is only sold unpacked and separately as one piece. The cost of a packing would exceed the effective benefit. Concerning to the unusual format and size, a packing of such an article would be difficult to implement as well as too sophisticated. In addition, the bend is made of steel and therefore relatively insensitive. This article is marked with all required information by a label.

```
<USER_DEFINED_EXTENSIONS>
  <UDX.EDXF.PACKING_UNITS>
    <UDX.EDXF.PACKING_UNIT>
      <UDX.EDXF.QUANTITY_MIN>1<\UDX.EDXF.QUANTITY_MIN>
      <UDX.EDXF.QUANTITY_MAX>1<\UDX.EDXF.QUANTITY_MAX>
      <UDX.EDXF.PACKING_UNIT_CODE>C62<\UDX.EDXF.PACKING_UNIT_CODE>
      <UDX.EDXF.VOLUME>0.0012<\UDX.EDXF.VOLUME>
      <UDX.EDXF.WEIGHT>0.627<\UDX.EDXF.WEIGHT>
      <UDX.EDXF.LENGTH>0.150<\UDX.EDXF.LENGTH>
      <UDX.EDXF.WIDTH>0.125<\UDX.EDXF.WIDTH>
      <UDX.EDXF.DEPTH>0.065<\UDX.EDXF.DEPTH>
      <UDX.EDXF.EAN>4012196050482<\UDX.EDXF.EAN>
    </UDX.EDXF.PACKING_UNIT>
  </UDX.EDXF.PACKING_UNITS>
</USER_DEFINED_EXTENSIONS>
```

Fire partitioning

A fire partitioning is usually sold in a carton of 10 pieces. If required, the article is also delivered separately, but then delivered unpacked. The single article is marked by a lateral printing.

```
<USER_DEFINED_EXTENSIONS>
  <UDX.EDXF.PACKING_UNITS>
    <UDX.EDXF.PACKING_UNIT>
      <UDX.EDXF.QUANTITY_MIN>1<\UDX.EDXF.QUANTITY_MIN>
      <UDX.EDXF.QUANTITY_MAX>1<\UDX.EDXF.QUANTITY_MAX>
      <UDX.EDXF.PACKING_UNIT_CODE>C62<\UDX.EDXF.PACKING_UNIT_CODE>
      <UDX.EDXF.VOLUME>0.0024<\UDX.EDXF.VOLUME>
      <UDX.EDXF.WEIGHT>0.66<\UDX.EDXF.WEIGHT>
      <UDX.EDXF.LENGTH>0.250<\UDX.EDXF.LENGTH>
      <UDX.EDXF.WIDTH>0.120<\UDX.EDXF.WIDTH>
      <UDX.EDXF.DEPTH>0.080<\UDX.EDXF.DEPTH>
      <UDX.EDXF.EAN>4012195428213<\UDX.EDXF.EAN>
    </UDX.EDXF.PACKING_UNIT>
    <UDX.EDXF.PACKING_UNIT>
      <UDX.EDXF.QUANTITY_MIN>10</UDX.EDXF.QUANTITY_MIN>
      <UDX.EDXF.QUANTITY_MAX>10</UDX.EDXF.QUANTITY_MAX>
      <UDX.EDXF.PACKING_UNIT_CODE>CT</UDX.EDXF.PACKING_UNIT_CODE>
      <UDX.EDXF.VOLUME>0.0419</UDX.EDXF.VOLUME>
      <UDX.EDXF.WEIGHT>7.25</UDX.EDXF.WEIGHT>
      <UDX.EDXF.LENGTH>0.471</UDX.EDXF.LENGTH>
      <UDX.EDXF.WIDTH>0.316</UDX.EDXF.WIDTH>
      <UDX.EDXF.DEPTH>0.282</UDX.EDXF.DEPTH>
      <UDX.EDXF.EAN>4012195454359</UDX.EDXF.EAN>
    </UDX.EDXF.PACKING_UNIT>
  </UDX.EDXF.PACKING_UNITS>
</USER_DEFINED_EXTENSIONS>
```

j. Example for the product group cables and wires

	NYM-J 3x1.5 100m ring	NYJ-J 3x1.5 exact 500 m non- returnable reel	NYJ-J 3x1.5 exact 3,000 m returna- ble drum	NAYCWY 3x120 approx. 500 m returna- ble drum	NAYCWY 3x120 cutting length
Element: PRODUCT_DETAILS					
Short description (DESCRIPTION_SHORT)	see be- low	see below	see below	see below	see below
Long description (DESCRIPTION_LONG)	see be- low	see below	see below	see below	see below
EAN-Code/GTIN (EAN)	n14	n14	n14	n14	n14
Manufacturer type description (MANUFACTURER_TYPE_DESCRIPTION)	see be- low	see below	see below	see below	see below
Element: PRODUCT_ORDER_DETAILS					
Order unit (ORDER_UNIT)	MTR	MTR	MTR	MTR	MTR
Content unit (CONTENT_UNIT)	MTR	MTR	MTR	MTR	MTR
Packing quantity (NO_CU_PER_OU)	1	1	1	1	1
Price quantity (PRICE_QUANTITY)	1000	1000	1000	1000	1000
Quantity interval (QUANTITY_INTERVAL)	100	500	3000	500	1
Element: PRODUCT_PRICE					
Price type (PRICE_TYPE)	net_list	net_custom er	net_customer	net_customer	net_customer
Price currency (PRICE_CURRENCY)	EUR	EUR	EUR	EUR	EUR
Price amount (PRICE_AMOUNT)	490.00	152.00	152.00	5300.00	5300.00
Tax rate (TAX)	0.19	0.19	0.19	0.19	0.19
Territory (TERRITORY)	DE	DE	DE	DE	DE
Element: UDX.EDXF.PRODUCT_LOGISTIC_DETAILS					
Net weight (UDX.EDXF.NETWEIGHT)	110	110	176	2660	2660
Element: UDX_EDXF_SURCHARGE_LIST					
Surcharge type (U..._TYPE)	copper base	copper base	copper base	aluminium base	aluminium base
Surcharge manner (U..._MANNER)					
Surcharge percentage (U..._PERCENTAGE)					
Surcharge price amount (U..._PRICE_AMOUNT)					
Material basis (U..._MATERIAL_BASIS)	150	0	0	0	0
Material basis weight (U..._MATERIAL_BASIS_WEIGHT)	43000	43000	43000	1044000	1044000
Quantity unit (U..._MATERIAL_BASIS_PRICE_UNIT)	MTR	MTR	MTR	MTR	MTR
Surcharge type (U..._TYPE)				copper	copper

Surcharge manner (U..._MANNER)				base	base
Surcharge percentage (U..._PERCENTAGE)					
Surcharge price amount (U..._PRICE_AMOUNT)					
Material basis (U..._MATERIAL_BASIS)				0	0
Material basis weight (U..._MATERIAL_BASIS_WEIGHT)				800000	800000
Quantity unit (U..._MATERIAL_BASIS_PRICE_UNIT)				MTR	MTR
Element: UDX.EDXF.PACKING_UNITS (1 of n)					
Minimum quantity (UDX.EDXF.QUANTITY_MIN)	100	500	3000	450	1
Maximum quantity (UDX.EDXF.QUANTITY_MAX)	100	500	3000	550	15
Packing unit code (UDX.EDXF.PACKING_UNIT_CODE)	RG	CL	DR	DR	RG
Element: UDX.EDXF.PACKING_UNITS (2 of n)					
Minimum quantity (UDX.EDXF.QUANTITY_MIN)	4800	2000		900	16
Maximum quantity (UDX.EDXF.QUANTITY_MAX)	4800	2000		1100	1500
Packing unit code (UDX.EDXF.PACKING_UNIT_CODE)	PF	PF		PF	DR

Explanation on the separate sample data:

Element: PRODUCT_DETAILS	
Short description (DESCRIPTION_SHORT) max. 150 characters BMEcat2005 allows 150 characters (versus max. 80 characters in BMEcat 1.2). If a data supplier wants to provide more than 80 characters, it should be noticed that the text can be automatically cut off by the data receiver after 80 characters (depending on the data receiver's requirements of the target system)	In this field a textual description of the product is to enter. In catalogues it can be used as a headline of a product type. Examples: House wiring cable, PVC insulated Medium voltage power cable, VPE insulated with Cu conductor, longitudinal water blocking screen and PE sheath
Long description (DESCRIPTION_LONG) max. 64,000 characters	In this field a textual description of the application and the usage of the product is to enter. It can be related as an explaining text to a product type. Example: According to VDE 0298, part 3 – installation on top, on, in and under plaster in dry, humid and wet rooms and also in brickwork and concrete, except for direct embedding in shaking-, vibratory or tamped concrete. As well suitable for outdoor usage if protected from direct sunlight, however not in the soil.

Manufacturer type description (MANUFACTURER_TYPE_DESCR) max. 50 characters	Construction type, number of cores and nominal cross section should be filled in. Examples: J-Y(ST)Y 5x2x0.6 or NYM-J 3x1.5 or NAYCWY 3x120
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Element: PRODUCT_ORDER_DETAILS	
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Quantity interval (QUANTITY_INTERVAL)	Shows the interval in which the product can be ordered. For cutting length it is usually "1" (1 metre). For a stock length of e.g. 500 m with permitted length tolerance of maybe 450 m to 550 m it is "500" (500 metres). The length tolerances are specified by the maximum and minimum quantity. (UDX.EDXF.QUANTITY_MIN / UDX.EDXF.QUANTITY_MAX), see below
--	---

Element: PRODUCT_PRICE	
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Price type (PRICE_TYPE)	net_list Discountable list(gross)price without sales tax. net_customer Net purchase price without sales tax.
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Surcharge data: UDX.EDXF.SURCHARGE_LIST (See also documentation ELDANORM 2000).	
Surcharge type (UDX.EDXF.SURCHARGE_TYPE)	<p>Indication on the metal which is related to all further data:</p> <p style="text-align: center;">aluminium copper lead silver</p> <p>The surcharge data can be given multiple if a product has several metals (see example NAYCWY).</p>
Surcharge manner (UDX.EDXF.SURCHARGE_MANNER)	In this field the value "base" has to be specified.
Surcharge percentage (UDX.EDXF.SURCHARGE_PERCENTAGE)	No value has to be entered.
Surcharge price amount (UDX.EDXF.SURCHARGE_PRICE_AMOUNT)	No value has to be entered.
Material basis (UDX.EDXF.MATERIAL_BASIS)	<p>The metal quotation that is already charged in the price has to be given, e.g.:</p> <p>"000" for hollow prices "100" for prices that include already the charge of the belonging metal with 100.00 €/100 kg "150" for prices that include already the charge of the belonging metal with 150.00 €/100 kg</p> <p>Notice: With so-called full prices, all data on metal surcharges can be omitted.</p>
Material basis weight (UDX.EDXF.MATERIAL_BASIS_WEIGHT)	Material weight (Individual metal number) has to be given in „grams per price reference quantity of the order unit" (grams per PRICE_QUANTITY of the ORDER_UNIT) i.e. usually grams / 1,000 metre
Quantity unit	MTR
Step size (UDX.EDXF.MATERIAL_BASIS_SURCHARGE_THRESHOLD)	Usually no information is required for this field

Element: UDX.EDXF.PACKING_UNITS (1 of n)	
	Depending on the different packing sizes the element can appear multiple, e.g. also to describe the content of a pallet (see example above „NYM-J 3x1.5 as 100 m ring“).
Minimum quantity / Maximum quantity (UDX.EDXF.QUANTITY_MIN / UDX.EDXF.QUANTITY_MAX)	<ol style="list-style-type: none"> (1) If “Minimum quantity” and “Maximum quantity” are equal, the product is invariably in its length (length fix). (2) If “Minimum quantity” and “Maximum quantity” are different, the product is variable in its length (length variable). Length variable products are in addition to cutting lengths also so-called stock lengths with approximately lengths. Example: a 500 m stock length – depending on the product – can vary between 450 and 550 m for manufacturing reasons. (3) Cutting lengths (length variable product) can be identified by the fact that the quantity interval is always filled in with the value “1” (metre). (4) For cutting lengths (length variable product) the largest specified “Maximum quantity” corresponds to the maximum production-technical admissible single length.
Packing unit code (UDX.EDXF.PACKING_UNIT_CODE)	<p>The following definition is the base to avoid misinterpretation:</p> <p>Coil (CL): The coil is a light storage and transport container for cables and wires that generally can be used only once. Colloquially it is often also called “One-way coil”. A coil has no identification “trading unit number“ to identify the coil unambiguously.</p> <p>Drum (DR): The drum is a fix storage and transport container for cable and wires that generally can be used several times. This will also include returnable drums. Colloquially in Germany it is also often called “KTG drum - Cable drum organization”. A drum has an identification “trading unit / drum number” to identify the drum unambiguously.</p>

6. Link compilation:

- **BMEcat Version 2005** (<http://www.bmecat.org>), you will get the documentation after a free registration
- **ETIM Germany e.V.** (<http://www.etim.de>), The standard of the electro technical industry. **ETIM classification model version 5.0 (csv)**
- **UN/ECE Recommendation 20** (<http://www.unece.org>)
Codes for Units of Measure Used in International Trade (PDF-Files)
- **D-U-N-S® Number** (<http://dnb.com>), the (**D**ata **U**niversal **N**umbering **S**ystem) a 9-digit numeric code which was developed and regulated by Dun & Bradstreet in 1962 for identifying companies clearly worldwide.
- **Information on ECCN** (<http://www.trade.gov/>)
- **The SOVA master file** (edition 2007) is a list of all statistic product numbers with a detailed description of goods in txt format (text with fixed width) that is valid in the issuing year. It is especially suitable for the usage in computer assisted ERP systems.
(<http://www.destatis.de> = Federal Statistical Office of Germany)

7. ISO - International Organization for Standardization

- **ISO 3166-1:2007**

<http://www.iso.org>

Codes for the representation of names of countries and their subdivisions

Part 1: Country codes

- **ISO 3166-2:2007**

<http://www.iso.org>

Codes for the representation of names of countries and their subdivisions

Part 2: Country subdivision code

- **ISO 639-2:1998**

<http://www.loc.gov>

Codes for the representation of names of languages

Part 2: Language Alpha-3 code

- **ISO 4217:2008**

<http://www.currency-iso.org/>

Codes for the representation of currencies and funds

8. Allowed order-, quantity- and packing units

A subset of the UN/ECE recommendation 20 is used:

<http://www.unece.org/>

The following table shows, which units are used in the catalogue system. For this reason, all units in the catalogue have to be encoded according to the UN/ECE-codes or quantity units which are deposited in this table.

With the version 1.2 of this guideline, further restrictions of the previously permitted values were made.

Further definitions/specifications to the units are not given and are selected by the data supplier meaningful and consistent/uniform for equal products or product packing.

Designation	Code	Packing unit
Bag	BG	yes
Sheet	SS	no
Box	BX	yes
Bundle	BE	yes
Tin	TN	yes
Pail	PL	yes
Keg	KG	yes
Bottle	BO	yes
Set	SET	yes
Cask	Z3	yes
Gram	GRM	no
Can	CA	yes
Carton	CT	yes
Cartridge	CQ	yes
Kilogram	KGM	yes
Chest	Z2	yes
Litre	LTR	no
Metre	MTR	yes
Milligram	MGM	no
Millilitre	MLT	no
Millimetre	MMT	no
Pair	PR	yes
Pack	PK	yes
Packet	PA	yes
Pallet (lift)	PF	yes
Ring	RG	yes
Roll	RO	yes
Coil	CL	yes
Sack	SA	yes
Case	CS	yes
Reel	RL	yes
One (unit)	C62	yes
Tray / tray pack	PU	yes
Drum	DR	yes
Tube	TU	yes
Centimetre	CMT	no