Specification BMEcat® 2005

Module Product Configuration

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Legal notices

Expression of thanks

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1 Introduction

1.1 Overview

The BMEcat® format has been developed with the purpose of standardizing the exchange of product catalogs between suppliers and purchasing companies and thus simplifying it. In the underlying model the supplier creates a catalog in electronic form corresponding to the BMEcat® standard. In the following this catalog will be named catalog document. The catalog document enables additionally the integration of multimedia product data, for example illustrations, charts, technical documents, operating instructions etc.

BMEcat® supports multilingual catalog content as well as multiple languages. The BMEcat® format is not limited to tangible products, but can also be used for the description of software, services, rights, information goods, digital products etc. Therefore, in the following the term 'product' respectively 'product catalog' will be expanded to all kinds of commercial goods as far as they are suitable for being represented in a catalog.

Typically the supplier transmits the BMEcat® catalog document to a purchasing organization that processes the contents of the catalog document and, for example, imports it into an e-procurement or catalog management system. This procedure is called catalog data exchange. The BMEcat® format does not only enable the supplier the transfer of the complete product data, but also for example the update of price data or individual products.

BMEcat® catalog documents, however, are not limited to the mere use for transmission to purchasing companies. Rather they are suitable just the same for the update of on-line shops administered by the suppliers, for sales support, for the supply of electronic market places, and quite generally for the transmission of product data - either externally between different companies or internally within a single company.

The use of BMEcat® represents an important step on the way to standardized business-to-business e-commerce. Companies which place BMEcat® catalogs at their customers' disposal or are able to process their suppliers' BMEcat® catalogs, are complying with an important requirement for electronic business transactions, the participation in new trading platforms and the automation of their sales respectively procurement processes. Additionally to BMEcat®, openTRANS (see **www.opentrans.org**), a transaction standard based on BMEcat® can be employed for the data exchange within the context of order processing.

BMEcat® is being developed unter the umbrella of the Bundesverband Materialwirtschaft, Einkauf und Logistik e.V. (BME), which is the German Association of Purchasing Managers. The BME is a service provider for its about 6,000 members, which represent more than 80 percent of the purchasing volume of the German industry (about 700 Billion Euros). More information on the BMEcat® organization and possibilites to contribute to the standard is available at **www.bmecat.org** .

1.2 Application of XML

BMEcat® catalog documents are coded in XML, the "eXtensible Markup Language". XML is the de-facto standard for data exchange in the internet and is being developed by the World Wide Web Consortium (see **http://www.w3.org/XML**). XML enables the simultaneous codification of structures and data in a catalog document as opposed to, for instance, conventional, less efficient formats like MS Excel files or comma-separated value lists (CSV files). The structure of BMEcat® catalog documents is formally very exactly described by use of the language XML Schema (XSDL); this formal specification is published in an accompanying separate document in the form of XSD files and can be accessed via the website **www.bmecat.org**.

1.3 Supplementary activities and standards

BMEcat® standardizes the exchange of electronic product catalogs. Another, though supplementing area of standardization concerns the classification and description of products (and services). For this purpose, product classes and classification hierarchies are being defined for various applications and branches of industry. In addition, the standardized description of products is enabled by product features assigned to the classes. Both are subject of product classification systems such as eCl@ss, ETIM, profiCl@ss, and UNSPSC. The BMEcat® standard is not committed to any one of these classification systems and does not in any case recommend any specific BMEcat® classifications. Rather the BMEcat® standard is conceived in such a way that almost all classification systems known at present can be used for the classification and description of products in BMEcat® catalogs.

1.4 Implementation support

The BMEcat® standard is meanwhile being supported by numerous software providers and systems. In particular, this applies to e-procurement systems, sell-side shop systems, electronic market places, service providers taking care of content supply and content maintenance as well as product data and catalog management systems. BMEcat® catalogs can be created and processed with the help of these systems. In addition, special software tools for the production and evaluation of BMEcat® catalogs as well as the conversion of data into the BMEcat® format are offered. For supplementary information, please refer to **www.bmecat.org**.

The BMEnet GmbH (daughter of BME) offers the certification of BMEcat® catalogs. Target group for the certification are suppliers who receive a test seal for their catalog. Thus they can prove that their catalog fulfills the BMEcat® standard up to 100 %; this information is helpful for customers, operators of procurement portals, market places, electronic procurement systems, and clearing centres. With the presentation of the certified catalogs in the BME portal and the on-line position of the certified catalogs, an efficient research tool for the purchase is provided, and thus a target group-specific marketing and sales platform for the suppliers. For further information please refer to **www.bmenet.de**.

1.5 Website www.bmecat.org

Inter alia, the following information is provided in German and English on the website www.bmecat.org:

- Download of the specification in different formats
- Download of the specification in form of XML DTD and XML Schema
- Download of example catalogs

Error messages and change messages as well as known errors respectively their corrections can be accessed via the website.

Furthermore, also information about the participation in the BMEcat® development via the BMEcat® change forum can be found.

2 Specification

2.1 Specification structure

The BMEcat® format is described in detail in a total by five documents. These are:

- Specification BMEcat ®
- Specification BMEcat ® - Module Price Formulas
- Specification BMEcat ® - Module Integrated Procurement Point
- Specification BMEcat ® - Module Product Configuration
- Specification BMEcat ® - Module Classification Systems, Catalog Groups Systems, and Feature Systems

In the module specifications, functions and data areas are described that can be used optionally in each case. For the facilitation of the handling, these have been stored outside in separate partial specifications which are needed only in case the extended functions are used. Wherever necessary in the specification, the module specifications are referred to. The module specifications have been arranged in such a way that they describe a range exclusively within themselves, without having to fall back upon the other modules. This signifies that the module specifications are not non-overlapping. There are for example also formula specifications in the module product configuration, since formulas take care of both the price calculation as well as the calculation of feature values in the course of the configuration.

The detailed specification is supplemented by the technical specification in the form of XSD files as well as example files of BMEcat catalogs®.

In order to facilitate the navigation within the specification documents, relevant key terms (e.g., element names) with cross references are provided that allow the direct jump to the respective place in the document. The cross references are clearly marked in green letters.

References to external resources in the World Wide Web are likewise available (e.g., for definitions of standardized data types) and are shown as blue hyperlinks to enable the direct jump to the relating website.

The **reference of elements** is the main part of the specification. Herein, all elements are defined in the order

they can appear in a BMEcat® catalog document. The **alphabetical index of BMEcat® elements** allows the quick jump to individual elements. This index as well as the **table of contents** is made of cross references with immediate hyperlinks to the elements.

The appendix is subdivided into three areas: The list of data types describes in detail all data types defined in BMEcat®(i.e., base data types, enumeration data types, and special data types). The change history gives an overview in alphabetical order of the elements changed in BMEcat® 2005. Last but not least, there are two additional lists of all BMEcat® elements (illustration of the document hierarchy, and a-z list).

2.2 Description of elements

Each element is described according to the same scheme. The description is structured as follows:

- the **designation: descriptive element name**,
- the **element name** for the use in XML documents,
- the **explanation** describes the function respectively meaning of the element,
- a chart for the visualization of the sub elements of the element as well as the structural context:

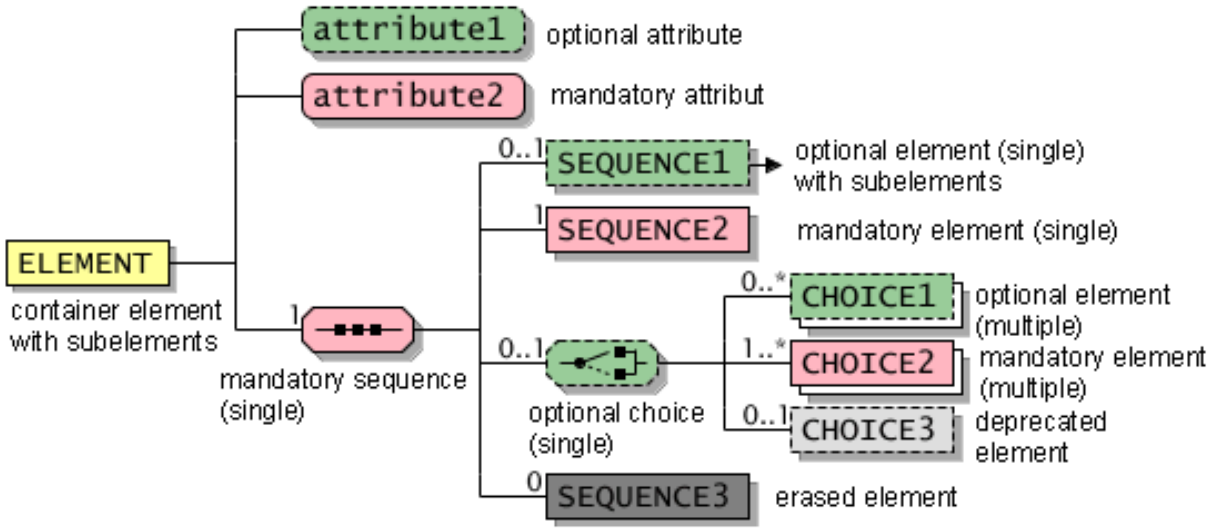
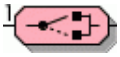
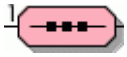


Figure 2-1: Visualization of elements and sub elements

The described element always appears on the left side and is yellow (light); the sub elements appear on the right side one beneath the other; the elements have angular edges, XML attributes have round edges; if a sub element is red (respectively dark), it is a mandatory field; if it is green (respectively light), then it is optionally usable (optional field, also refer to section **mandatory and optional fields**); elements omitted in the next BMEcat® version are light grey, elements that are already no longer permitted in the current version are dark grey; the symbols and abbreviations connected with the elements have the following meaning:

- **"0...1"** as well as a dotted border indicate an optional element that can appear, but does not have to appear;
- **"1"** as well as a continuous border indicate an element that has to appear exactly once in this place;
- **"0...*x*"** as well as a dotted border indicate that the element can appear *x* times in this place, but it is not required to appear; an "*" (asterisk) stands for an infinite number of appearances;
- **"1...*x*"** as well as a continuous border indicate that the element can appear *x* times in this place, however, it has to appear at least once, an "*" (asterisk) stands for an infinite number of appearances;
- the -symbol indicates that the element can have at least one sub element; if this character is missing, it refers to a leaf element, i.e. a data type has to be indicated in this case.
- the  -symbol indicates that exactly one of the following elements has to appear;
- the  -symbol indicates that the following elements can appear in the given order; mandatory elements have to, optional elements can appear;

- the **table "general"** describes briefly the following characteristics of the element: the column "Used in" demonstrates in which superior elements the respective element can be used; the column "Default value" indicates which value is assigned, if the element is not existing (also refer to section **mandatory**

and optional fields); the column “Data type“ indicates the domain of values for the element (if it has no sub elements); the column “Field length” indicates the maximal number of characters that can be assigned to the element (also refer to **symbol codification in XML**); the column "Lang.specific" indicates whether the field contents is dependendt on the language; the column “l.chg. in ver.” indicates the BMEcat® version in which the element has been changed last,

- the **table "attributes“** lists the attributes used in the element: the column "Designation" contains the name describing the attribute, if possible, in one single word; the column “Attribute name“ indicates the XML attribute; the column “Mandatory/optional“ indicates, whether the attribute is mandatory or optional (also refer to section **mandatory and optional fields**); the column “Explanation" describes the use of the attribute; the columns "Default value", "Data type", "Field length", "Lang.specific", and "L.chg. in ver." are used like in table "general"; rows with light grey background indicate attributes that will be omitted in the next BMEcat® version; attributes that are already no longer permitted in the current version are further listed for the sake of completeness, however, the respective row has a dark grey background,
- if it is further specified how values are to be assigned to an attribute, for each attribute a **table with a list of values** can follow; thereby it is to be differentiated whether the list containes predefined values (i.e., these values are suggested, but also other values can be used in accordance with the description of the attribute), or whether the list contains all permitted values (i.e., only values from this list, no others may be used); the column "Attribute value" indicates the values which can or which have to be assigned to the attribute; the columns "Designation", "Explanation", and "l.chg. in ver." are used like in table "Attributes",
- in the **table "elements"** the sub elements of the respective element are listed in their order; the sub elements are described by the following columns: the column "Element name" contains the notation which has to be used in the XML document; if the sub element itself has no more sub elements, in this column the attributes of the sub element are listed additionally; the columns "Designation", "Mandatory/optional", "Default value", "Data type", "Field length", "Lang.specific", and "l.chg. in ver." are used like in the table "Attributes" respectively "General"; rows with light grey background indicate elements, which are omitted in the next BMEcat® versions; attributes which are already no longer permitted in the current BMEcat® version are further listed for the sake of completeness, however, the respective row has a dark grey background,
- an **example** complements the element specification; in these examples, all BMEcat® elements are black and its values as well as attribute values are blue.

The XML examples show the BMEcat® application on the basis of cut-outs from a catalog document. Partly because of space restrictions, the more complex elements are not shown with their complete contents, but only schematically by opening and closing tags, e.g., `<BUYER>...</BUYER>` .

In the describing texts the following symbols are used for giving important information:

Symbol	Meaning
	Attention: reference to possible source of error
	Note: describing note containing additional information
	New from BMEcat® 1.2 to BMEcat® 2005 final draft

Figure 2-1: Symbols in the BMEcat® specification

2.3 Mandatory and optional fields

The BMEcat® format makes a distinction between mandatory und optional fields. Mandatory fields are XML elements that have to appear in an XML file adhering to BMEcat® within the encompassing context. Optional fields are XML elements that can appear in an XML file adhering to BMEcat® within its context. Optional fields in the tables of this specification are green (respectively light), and mandatory fields are red (respectively dark).

A catalog document is adhering to the BMEcat® format, if it contains all mandatory fields, and no other than the optional fields defined in the specification are used in the given order and with the specified cardinality.

For example, in BMEcat® the short description **DESCRIPTION_SHORT** of a product is a mandatory field within the context **PRODUCT_DETAILS**, whereas the long description **DESCRIPTION_LONG** is an optional field in the same context.

Therefore, if the parent element **PRODUCT_DETAILS** appears in a catalog document, the element **DESCRIPTION_SHORT** has to be existing and must not be empty, whereas the element **DESCRIPTION_LONG** can follow **DESCRIPTION_SHORT**. The next examples illustrate this requirement.

Example 1: Short description only (mandatory field):

```
<PRODUCT_DETAILS>
    <DESCRIPTION_SHORT>File</DESCRIPTION_SHORT>
</PRODUCT_DETAILS>
```

Example 2: Not permitted - Empty short description (mandatory field):

```
<PRODUCT_DETAILS>
    <DESCRIPTION_SHORT></DESCRIPTION_SHORT>
</PRODUCT_DETAILS>
```

Example 3: Short description (mandatory field) and long description (optional field)

```
<PRODUCT_DETAILS>
    <DESCRIPTION_SHORT>File</DESCRIPTION_SHORT>
    <DESCRIPTION_LONG>This file is made of very solid material.</DESCRIPTION_LONG>
</PRODUCT_DETAILS>
```

Determining whether an element has to be used in its context can be resolved by parsing from the outside to the inside. The following example is to illustrate this: The element for skeleton agreement information **AGREEMENT** is an optional field in the context of **HEADER**. Thus, information on skeleton agreements can be stored in the catalog header, though it is not required to provide this information at all. If the decision is made, however, to use the element **AGREEMENT**, in this element the sub elements **AGREEMENT_ID** for the contract number and **DATETIME** have to be indicated for the end date of the contract, since both elements are mandatory in the context of **AGREEMENT**.

The two following examples illustrate this fact.

Example 4 (HEADER without skeleton agreement information):

```
<HEADER>
    <CATALOG>...</CATALOG>
    <BUYER>...</BUYER>
    <SUPPLIER>...</SUPPLIER>
</HEADER>
```

Example 5 (HEADER with skeleton agreement information):

```
<HEADER>
    <CATALOG>...</CATALOG>
    <BUYER>...</BUYER>
    <!-- Here AGREEMENT can be indicated (optional field) -->
    <AGREEMENT>
        <!-- Here AGREEMENT_ID has to be indicated (mandatory field) -->
        <AGREEMENT_ID>21312</AGREEMENT_ID>
        <!-- Here DATETIME (or AGREEMENT_END_DATE) has to be indicated (mandatory field) -->
        <DATETIME type="agreement_end_date">
            <!-- Here DATE has to be indicated (mandatory field) -->
            <DATE>2002-05-31</DATE>
        </DATETIME>
        <!-- Here AGREEMENT_DESCR could be indicated (optional field) -->
    </AGREEMENT>
    <SUPPLIER>...</SUPPLIER>
</HEADER>
```

2.4 Data types

Data types determine the format and the range of values for the elements defined in BMEcat®. Exactly one data type is assigned to each atomic element. The use of data types enables a detailed description of the way how to use an element correctly.

In the BMEcat® format a distinction is made between basic data types, enumeration data types, and special data types.

The **basic data types** define current and frequently used data formats, e.g., character strings, integers, yes/no values etc. Refer to the **Table of basic data types** in the appendix.

Furthermore, **enumeration data types** are used that are based on international standards. An enumeration data type is defined by a set of permissible values being character strings. If an enumeration data type is assigned to an element, then this element can only take on a value from the set of the permissible values. All enumeration data types are indicated in the **table of enumeration data types**.

In the **table of special data types** in the appendix some **special data types** with dedicated functions can be found. For the time being these data types are empty in BMEcat®, thus defined without contents and do not have to be taken further into account by the user. Only in the case of the user specific or module based extension of the BMEcat® format, these data types are defined and concretized anew.

2.5 Character codification in XML

The codification of the individual characters in the XML elements should be indicated in each BMEcat® file. This takes place in the attribute "encoding" of the XML text declaration, e.g., `<?xml version="1.0" encoding="UTF-8"?>` .

BMEcat® supports all sets of characters mentioned in the XML specification (i.e., ISO-8859-1, UTF-8, and UTF-16). Concerning the UTF sets, each character is usually stored in one or more bytes.

It is important to note that the field length in the column "Field length" refers to the individual character and not to the number of bytes used by the set of characters. For example the "Ü" codified as "Ü" represents a single character.

Concerning this, also refer to **Chapter: Multilingual catalog documents**.

2.6 Version history

Version	Date	Description
1.0	1999-11-08	First version
1.01	2000-01-02	Elimination of individual inconsistencies and revision of the examples
1.2 final draft	2000-12-19	Error corrections, smaller extensions and a general improvement of the documentation
1.2	2001-03-27	Translation of the feedback received on version 1.2 final draft
2005 final draft	2005-05-10	Revision and extension of the functionality; revised form and content of the specification
2005	2005-11-14	Translation of the feedback received on version 2005 final draft

Table 2-1: Version history of BMEcat®

3 Product configuration

In BMEcat® 2005 the product model has been extended to be able to describe configurable products. The new **PRODUCT_CONFIG_DETAILS** element takes care of this. In BMEcat® 1.2, only feature-based variants of a base product could be described; all variants were required to have the same price. These restrictions do not exist any longer: The product configuration can take place both feature-based as well as component-based, or in a combined way. Now it can be described in detail, in which order and under which rules the configuration is to be processed and in which way the product price and the order number respectively configuration code are created.

The description of the product configuration takes place via one or several configuration steps (**CONFIG_STEP**). In case of the feature-based configuration, each feature, which has to be filled with a value, leads to such a configuration step. In case of the component-based configuration, each component is represented by a configuration step.

At least one configuration step has to be defined (e.g., a single variant feature, or component). Besides that, it is possible to define one or several default configurations (**PREDEFINED_CONFIG**), i.e. in order to show particularly current variants already in the catalog, without the user having to complete configuration steps beforehand. Furthermore configuration rules can be defined (**CONFIG_RULES**), which reduce the variant space to the permissible variants, or describe interdependences between configuration steps. Finally, configuration formulas (**CONFIG_FORMULAS**) take care of the automatic deduction of product characteristics.

3.1 Configuration steps

A configuration step represents a completed action within itself, which the user in the course of the configuration process has to complete, in order to finally arrive at a permissible configuration, which can be ordered via the determined order number or the created configuration code. The definition is made by the

container element **CONFIG_STEP**, which contains inter alia the following information:

- Identificator, in order to be able to refer to the step in the configuration rules,
- Description, which is presented to the user in the target system; it is subdivided in heading, short description and long description,
- Detailed information on the feature (**CONFIG_FEATURE**) or component (**CONFIG_PARTS**), which is determined by the configuration step,
- Number of the feature values respectively components, which have to be or may be selected by the user,
- Order of the step in the entire configuration process,
- Addition to order number, which is attached to the product number,
- Price, which is added to the base price of the product.

3.2 Feature-based configuration

In case of the feature-based configuration, the user fills a feature with a value (e.g., width and length of cuts). Usually the permissible values are subject to pre-defined restrictions, be it by numeric intervals or a value list, from which a value has to be selected (enumerations).

The respective feature (**CONFIG_FEATURE**) has to be defined either completely or a pre-defined feature given by a feature system respectively classification system can be referenced (given in the same BMEcat® catalog document in the **CLASSIFICATION_SYSTEM** element. The feature definition can get very detailed and extensive, in order to supply the user in the target system with detailed information for the value selection. Inter alia the following can be indicated:

- Feature name, short name, and description,
- Identificator and version,
- Feature group (e.g., "measurement" for feature "length"),
- Value range.

The value range depends on the data type: Thus an interval can be indicated for numeric data types, the minimum and maximum length for character strings, and a value list for enumerations. Further information may be:

- Feature symbol (e.g., a formula symbol),
- Illustration (e.g., graphic with emphasis on the measure, which represents the feature),
- Source (e.g., reference to standard).

3.3 Component-based configuration

In case of the component-based configuration, one or several components are selected by the user (e.g., CPU for basic product PC mainboard). Usually the permissible components are subject to pre-defined restrictions, be it by a fixed list of components or by definition subordinations administered by the user in other configuration steps.

The available components have to be defined in the **CONFIG_PARTS** element. Here also the case has to be considered that several components can be selected by the user at the same time (e.g., memory slots of a PC mainboard). The components have to be products (**PRODUCT**) in the same BMEcat® catalog document, and they are allocated to the configuration step via their product number.

3.4 Calculation of the order number (configuration code)

The configuration code is the basis for ordering the configured product. It is formed by the product number (**SUPPLIER_PID**) as well as the user input of all configuration steps in codified form. Whether the target system processes the configuration code completely as order number or processes the product number and the configuration information separately, is not specified by the BMEcat® format and depends substantially on how the order is transferred to the supplier.

The configuration code starts with the product number (**SUPPLIER_PID**). Eventually, all configuration steps are codified successively. Each configuration step starts with its **CONFIG_CODE**. Afterwards depending upon cardinality (**MIN_OCCURANCE** / **MAX_OCCURANCE**) the entered characteristics are codified. If it is a component-based configuration step the respective code (**CONFIG_CODE**) of the selected component

PART_ALTERNATIVE) is attached, or if it is empty, the product number (**SUPPLIER_PID**) of the component is attached. If it is a feature-based configuration step, the selected value of the feature is codified. For a selected value (**FT_VALUE**) again its **CONFIG_CODE** is attached. All other values (numeric values, symbol series) are indicated in quotation marks (").

A configuration code is thus structured for example as follows (the & symbols only in this case take care of the optical separation; the different codifications are indicated one after the other without separators or blanks):

$CONFIG\_CODE_{step1}$ & $SUPPLIER\_PID_{component1}$ & $SUPPLIER\_PID_{component2}$ & $CONFIG\_CODE_{step2}$ & $CONFIG\_CODE_{selectedfeature1}$ & $CONFIG\_CODE_{step3}$ & "3.54"

The following figure shows the structure of the configuration code.

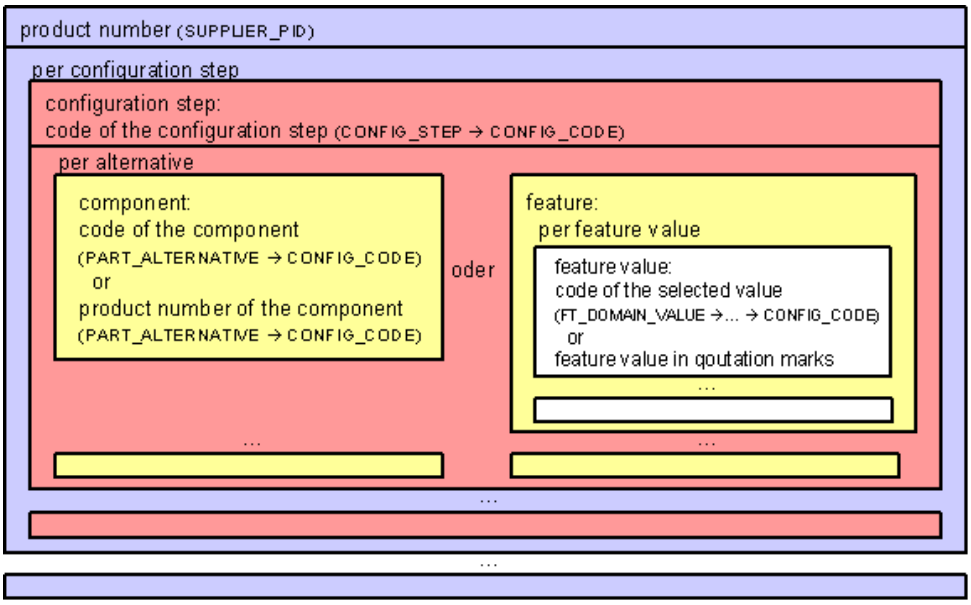


Figure CONFIG-1: Structure of the configuration code

In case pre-defined configurations (**PREDEFINED_CONFIG**) are used, also proper product numbers can be assigned to them directly (also see chapter **Pre-defined configurations**).

3.5 Price calculation

The determination of the price of a configurable product can take place in three different ways:

1. If the basic price (**PRODUCT** -> **PRODUCT_PRICE_DETAILS**) is indicated via the element **PRICE_AMOUNT**, the calculation of the final price is made by summarizing the basic price and all partial prices of the configuration. This procedure is similar to determining the order number.

   The procedure starts with the basic price of the product (**PRODUCT** -> ... -> **PRICE_AMOUNT**), to which subsequently the price of each configuration step is added. The price of a configuration step is composed of its basic price (**PRODUCT** -> **PRODUCT_PRICE_DETAILS**) as well as the prices of all selected/entered alternatives depending upon cardinality (**MIN_OCCURANCE** / **MAX_OCCURANCE**). If it is a component-based configuration step, in each case the price of the component (**PART_ALTERNATIVE** -> **PRODUCT_PRICE_DETAILS**) is added. If it is a feature-based configuration step, the prices of all selected selection features (**FT_VALUE** -> **CONFIG_INFO** -> **PRODUCT_PRICE_DETAILS**) are added. All other values (numeric values, symbol series) can be allocated to individual prices only via price formulas as described in the next section.

2. If the basic price (**PRODUCT** -> **PRODUCT_PRICE_DETAILS**) is indicated via the element **PRICE_FORMULA**, the calculation of the final price takes place within the formula. The reference is made via the **CONFIG_CODE**s in the different levels (also see **example 2 concerning the element PRODUCT_PRICE_DETAILS**) onto the (partial) results of the configuration in the price formula.

3. If pre-defined configurations (**PREDEFINED_CONFIG**) are used, they can be provided with individual prices. These prices then replace the prices, which are indicated via the two methods described above (also see chapter **Pre-defined configurations**).

If the price of a configuration is determined via the basic price of the product (option 1 or option 2) and not via pre-defined configurations, it is multiplied subsequently with the price factor of the product (**PRODUCT** -> ... -> **PRICE_FACTOR**), in order to calculate the total price.

The total price of a configurable product is thus for example calculated as follows (option 1):

Total price = (basic $price_{step1}$+$price_{component1}$+$price_{component2}$ + basic $price_{step2}$+$price_{selectionfeature1}$) * price factor

3.6 Pre-defined configurations

The element **PREDEFINED_CONFIGS** can be used in order to provide the user with configurations pre-defined by the catalog creator. Thus they define default configurations, which the user can select immediately, without travelling through the individual configuration steps. The selection is facilitated for the user by the fact that the pre-defined configuration can be given a name, and that it can additionally be described by an explanation.

Pre-defined configurations can also possess specific prices or product numbers. These then replace all indications made in other places in this connection. The price information under **PRODUCT** -> **PRODUCT_PRICE_DETAILS** (incl. price factor) is then ignored. The order of the pre-defined configuration should be made via the indicated product number (**PREDEFINED_CONFIG** -> **SUPPLIER_PID**) and not via the configuration code.

Since the pre-defined configuration is identified via a complete configuration code, target systems should usually be able to display the list of all selections respectively entries concerning a pre-defined configuration. This is, however, only possible, if the configuration codes are structured in such a way that a redismantling free of doubts is possible.

If all permissible configurations are indicated via **PREDEFINED_CONFIG** elements, this can be specified additionally by the value "**full**" in the element **PREDEFINED_CONFIG_COVERAGE**. In this way, configurations can be restricted without defining configuration rules (**CONFIG_RULES**).

3.7 Configuration rules

If a configuration comprises several configuration steps, interrelations between the entries of the different steps can exist. In order to identify, which configurations are valid, configuration rules (**CONFIG_RULES**) can be used. A rule **TERM** consists thereby of a condition (**TERM_CONDITION**) and an indication "correct" or "incorrect" in the expression of the term (**TERM_EXPRESSION**). In order to facilitate the examination of the validity, all rules within a configuration have to contain “correct" expressions for the restriction of the configuration, or all rules have to contain "wrong" expressions. A mixture of "correct" and "incorrect" expressions is not allowed.

If the value in the expression is "true", the rule indicates that a product configuration in connection with this rule is valid, if the condition of the rule is "correct". If all rules are valid, also the configured product is valid.

If the value in the expression is "false", the rule indicates that a product configuration is invalid, if the condition of the rule is "correct". In case of a correctly configured product, in not even one of such rules the condition section may be “correct”.

The following table shows two examples of rules for the restriction of permissible configurations. These rules are not formally indicated, since they only illustrate the basic principle:

Rule identification **TERM_ID**	Condition **TERM_CONDITION**	Expression **TERM_EXPRESSION**
In the following example it is to be determined for a crayon, which is available in 4 colours and 4 line widths, that the extra-fine crayons are only available in black (also see **example 1 concerning configuration rules**).		
CRAYON1	crayon="extra-fine" AND NOT(crayon="black")	false
In the following example a rectangular wooden plate is only correctly configured, if its edge length does not exceed 5m and if it is at the most 20m² large (also see **example 2 concerning configuration rules**).		
PLATE1	width < 5	true
PLATE2	length < 5	true
PLATE3	(width * length) <= 20	true

Table CONFIG-1: Configuration rules (Examples)

Refer to the element **TERM** for details on the formal structure of the rules.

3.8 Configuration formulas

Within a configuration it can happen that values for features or BMEcat® elements can only be calculated based on user entries during the configuration. For this purpose configuration formulas (**CONFIG_FORMULA**) can be used analogous to price formulas (**PRICE_FORMULA**).

Circumstances permitting, a calculation formula consists of several terms (**TERM**). The expression of the term (**TERM_EXPRESSION**) is applied for the calculation, if the condition in the field **TERM_CONDITION** is true.

The following table shows two examples of formulas for configuration purposes. These formulas are not formally indicated, since they are to describe only the principle:

Term identification **TERM_ID**	Condition **TERM_CONDITION**	Expression **TERM_EXPRESSION**
In the following example the total weight for a wooden plate is to be calculated (also see **example 1 concerning functions of the formulas**).		
PLATE1	true (or omit element)	weight = length * width * 0.3
In the following example the delivery period of the configured product depends on the selected alternative (also see **example 2 concerning functions of the formulas**).		
TERM1	alternative = A1	delivery period = 4
TERM2	alternative = A2	delivery period = 10
TERM3	alternative = A3	delivery period = 14

Table CONFIG-2: Configuration formulas (Examples)

Refer to the element **FORMULA** for details of the formal structure of the calculation formulas.

3.9 Example: Laptop configuration

In the following example a laptop is specified. The configuration consists of three configuration steps (**CONFIG_STEP**) in which the user can select the hard disk, components for the expansion slots as well as an additional bag. The user has the option to omit the configuration steps and to select a pre-defined configuration (**PREDEFINED_CONFIG**). The configuration is valid for all combinations of the three options; therefore no configuration rules (**CONFIG_RULES**) have to be defined.

```
<PRODUCT_CONFIG_DETAILS>
    <CONFIG_STEP>
        ...
    </CONFIG_STEP>
    <CONFIG_STEP>
        ...
```

```
    </CONFIG_STEP>
    <CONFIG_STEP>
        ...
    </CONFIG_STEP>
    <PREDEFINED_CONFIGS>
        ...
    </PREDEFINED_CONFIGS>
</PRODUCT_CONFIG_DETAILS>
```

The first configuration step is a component-based one. The hard disk can be selected out of four different models (**PART_ALTERNATIVE**). These components refer to products via the **SUPPLIER_PID**, which are specified in another place in the catalog. Since at least (**MIN_OCCURANCE**) one and at the most (**MAX_OCCURANCE**) one component can be selected, exactly one component has to be determined. The user is free to decide whether he wants to skip this configuration step (**STEP_INTERACTION_TYPE =take_default**) and accept the default selection (**DEFAULT_FLAG** = "true"). Different surcharges are allocated to the components via **PRODUCT_PRICE_DETAILS** elements.

```
<CONFIG_STEP>
    <STEP_ID>STEP1</STEP_ID>
    <STEP_HEADER>Integrated hard disk</STEP_HEADER>
    <STEP_DESCR_SHORT>We recommend a Furious CD 12.</STEP_DESCR_SHORT>
    <STEP_INTERACTION_TYPE>take_default</STEP_INTERACTION_TYPE>
    <CONFIG_CODE>-HDD</CONFIG_CODE>
    <CONFIG_PARTS>
        <PART_ALTERNATIVE>
            <SUPPLIER_PIDREF>ADGDG55555</SUPPLIER_PIDREF>
            <DEFAULT_FLAG>true</DEFAULT_FLAG>
        </PART_ALTERNATIVE>
        <PART_ALTERNATIVE>
            <SUPPLIER_PIDREF>ADGDG23452</SUPPLIER_PIDREF>
            <PRODUCT_PRICE_DETAILS>
                <PRODUCT_PRICE price_type="net_list">
                    <PRICE_AMOUNT>100</PRICE_AMOUNT>
                    <PRICE_CURRENCY>EUR</PRICE_CURRENCY>
                    <TAX>.16</TAX>
                </PRODUCT_PRICE>
            </PRODUCT_PRICE_DETAILS>
        </PART_ALTERNATIVE>
        <PART_ALTERNATIVE>
            <SUPPLIER_PIDREF>XDD1000</SUPPLIER_PIDREF>
            <PRODUCT_PRICE_DETAILS>
                <PRODUCT_PRICE price_type="net_list">
                    <PRICE_AMOUNT>200</PRICE_AMOUNT>
                    <PRICE_CURRENCY>EUR</PRICE_CURRENCY>
                    <TAX>.16</TAX>
                </PRODUCT_PRICE>
            </PRODUCT_PRICE_DETAILS>
        </PART_ALTERNATIVE>
        <PART_ALTERNATIVE>
            <SUPPLIER_PIDREF>XXX666</SUPPLIER_PIDREF>
            <PRODUCT_PRICE_DETAILS>
                <PRODUCT_PRICE price_type="net_list">
                    <PRICE_AMOUNT>999.99</PRICE_AMOUNT>
                    <PRICE_CURRENCY>EUR</PRICE_CURRENCY>
                    <TAX>.16</TAX>
                </PRODUCT_PRICE>
            </PRODUCT_PRICE_DETAILS>
        </PART_ALTERNATIVE>
    </CONFIG_PARTS>
    <MIN_OCCURANCE>1</MIN_OCCURANCE>
    <MAX_OCCURANCE>1</MAX_OCCURANCE>
</CONFIG_STEP>
```

In the second configuration step at least two products (**MIN_OCCURANCE** = 2) have to be selected for the two expansion slots. Since the element **STEP_INTERACTION_TYPE** is not indicated with the value "**take_default**", the configuration is mandatory. The **PART_SELECTION_TYPE =distinct** element specifies that no component may be selected more than once.

```
<CONFIG_STEP>
    <STEP_ID>STEP32</STEP_ID>
    <STEP_HEADER>slide-in units</STEP_HEADER>
    <STEP_DESCR_SHORT>Please select at least 2 components</STEP_DESCR_SHORT>
    <CONFIG_CODE>-POR</CONFIG_CODE>
    <CONFIG_PARTS>
        <PART_ALTERNATIVE>
            <SUPPLIER_PIDREF>ACCU112</SUPPLIER_PIDREF>
            <DEFAULT_FLAG>true</DEFAULT_FLAG>
        </PART_ALTERNATIVE>
        <PART_ALTERNATIVE>
            <SUPPLIER_PIDREF>DVD121</SUPPLIER_PIDREF>
            <PRODUCT_PRICE_DETAILS>
                <PRODUCT_PRICE price_type="net_list">
                    <PRICE_AMOUNT>110</PRICE_AMOUNT>
```

```
                    <PRICE_CURRENCY>EUR</PRICE_CURRENCY>
                    <TAX>.16</TAX>
                </PRODUCT_PRICE>
            </PRODUCT_PRICE_DETAILS>
        </PART_ALTERNATIVE>
        <PART_ALTERNATIVE>
            <SUPPLIER_PIDREF>DVDRW1</SUPPLIER_PIDREF>
            <PRODUCT_PRICE_DETAILS>
                <PRODUCT_PRICE price_type="net_list">
                    <PRICE_AMOUNT>210</PRICE_AMOUNT>
                    <PRICE_CURRENCY>EUR</PRICE_CURRENCY>
                    <TAX>.16</TAX>
                </PRODUCT_PRICE>
            </PRODUCT_PRICE_DETAILS>
        </PART_ALTERNATIVE>
        <PART_ALTERNATIVE>
            <SUPPLIER_PIDREF>CD121</SUPPLIER_PIDREF>
            <DEFAULT_FLAG>true</DEFAULT_FLAG>
        </PART_ALTERNATIVE>
        <PART_ALTERNATIVE>
            <SUPPLIER_PIDREF>CDRW</SUPPLIER_PIDREF>
            <PRODUCT_PRICE_DETAILS>
                <PRODUCT_PRICE price_type="net_list">
                    <PRICE_AMOUNT>80</PRICE_AMOUNT>
                    <PRICE_CURRENCY>EUR</PRICE_CURRENCY>
                    <TAX>.16</TAX>
                </PRODUCT_PRICE>
            </PRODUCT_PRICE_DETAILS>
        </PART_ALTERNATIVE>
        <PART_SELECTION_TYPE>distinct</PART_SELECTION_TYPE>
    </CONFIG_PARTS>
    <MIN_OCCURANCE>2</MIN_OCCURANCE>
    <MAX_OCCURANCE>5</MAX_OCCURANCE>
</CONFIG_STEP>
```

The last configuration step permits the optional selection of an additional laptop bag. Since the bag is defined as a single product in the catalog, the configuration step is specified as feature-based. The feature is defined in the **CLASSIFICATION_SYSTEM_FEATURE_TEMPLATE** element, which contains two selection values (**FT_VALUE**) for a red and a black bag. Besides the text each selection value contains a surcharge which adds to the total product price as well as a configuration code (**CONFIG_CODE**) for the formation of the order code.

```
<CONFIG_STEP>
    <STEP_ID>STEP11</STEP_ID>
    <STEP_HEADER>Bag</STEP_HEADER>
    <STEP_DESCR_SHORT>Would you like to order a bag in addition? This bag cannot be ordered
independently!</STEP_DESCR_SHORT>
    <STEP_INTERACTION_TYPE>force_userinput</STEP_INTERACTION_TYPE>
    <CONFIG_CODE>-BAG</CONFIG_CODE>
    <CONFIG_FEATURE>
        <CLASSIFICATION_SYSTEM_FEATURE_TEMPLATE>
            <FT_ID>31231</FT_ID>
            <FT_NAME>without any relevance</FT_NAME>
            <FEATURE_CONTENT>
                <FT_DATATYPE>string</FT_DATATYPE>
                <FT_VALUES>
                    <FT_VALUE>
                        <VALUE_TEXT>bag black</VALUE_TEXT>
                        <MIME_INFO>
                            <MIME>
                                <MIME_SOURCE>blackbag.jpg</MIME_SOURCE>
                            </MIME>
                        </MIME_INFO>
                        <CONFIG_INFO>
                            <CONFIG_CODE>09</CONFIG_CODE>
                            <PRODUCT_PRICE_DETAILS>
                                <PRODUCT_PRICE price_type="net_list">
                                <PRICE_AMOUNT>50.29</PRICE_AMOUNT>
                                <PRICE_CURRENCY>EUR</PRICE_CURRENCY>
                                <TAX>.16</TAX>
                                </PRODUCT_PRICE>
                            </PRODUCT_PRICE_DETAILS>
                        </CONFIG_INFO>
                        <VALUE_ORDER>1</VALUE_ORDER>
                        <DEFAULT_FLAG>true</DEFAULT_FLAG>
                    </FT_VALUE>
                    <FT_VALUE>
                        <VALUE_TEXT>bag red</VALUE_TEXT>
                        <MIME_INFO>
                            <MIME>
                                <MIME_SOURCE>redbag.jpg</MIME_SOURCE>
                            </MIME>
                        </MIME_INFO>
                        <CONFIG_INFO>
                            <CONFIG_CODE>49</CONFIG_CODE>
```

```
                            <PRODUCT_PRICE_DETAILS>
                                <PRODUCT_PRICE price_type="net_list">
                                <PRICE_AMOUNT>70.99</PRICE_AMOUNT>
                                <PRICE_CURRENCY>EUR</PRICE_CURRENCY>
                                <TAX>.16</TAX>
                                </PRODUCT_PRICE>
                            </PRODUCT_PRICE_DETAILS>
                        </CONFIG_INFO>
                        <VALUE_ORDER>2</VALUE_ORDER>
                    </FT_VALUE>
                </FT_VALUES>
            </FEATURE_CONTENT>
        </CLASSIFICATION_SYSTEM_FEATURE_TEMPLATE>
    </CONFIG_FEATURE>
    <MIN_OCCURANCE>0</MIN_OCCURANCE>
    <MAX_OCCURANCE>1</MAX_OCCURANCE>
</CONFIG_STEP>
```

Once the user has completed all configuration steps, in this example the end price is determined by addings the basic price **PRODUCT** -> **PRODUCT_PRICE_DETAILS**) as well as the prices of all configuration steps and selected alternatives. Refer to the **PRODUCT_CONFIG_DETAILS** element for examples showing how prices of configurations are calculated via price formulas.

The user can also select one of two pre-defined configurations (**PREDEFINED_CONFIG**) without travelling through all configuration steps. The pre-defined configurations describe a complete configuration by their configuration code (**PREDEFINED_CONFIG_CODE**). The indicated price is the final price, which is not subject to further change. The pre-defined configurations can be ordered directly via the indicated product number (**SUPPLIER_PID**).

```
<PREDEFINED_CONFIGS>
    <PREDEFINED_CONFIG>
        <PREDEFINED_CONFIG_CODE>Lap23-HDDADGDG55555-PORACCU112-PORCD121</PREDEFINED_CONFIG_CODE>
        <PREDEFINED_CONFIG_NAME>model standard</PREDEFINED_CONFIG_NAME>
        <PREDEFINED_CONFIG_DESCR>Our model with basic equipment</PREDEFINED_CONFIG_DESCR>
        <PRODUCT_PRICE_DETAILS>
            <PRODUCT_PRICE price_type="net_list">
                <PRICE_AMOUNT>899.99</PRICE_AMOUNT>
                <PRICE_CURRENCY>EUR</PRICE_CURRENCY>
                <TAX>.16</TAX>
            </PRODUCT_PRICE>
        </PRODUCT_PRICE_DETAILS>
        <SUPPLIER_PID>Laptop23Standard</SUPPLIER_PID>
        <INTERNATIONAL_PID type="ean">1231231231244</INTERNATIONAL_PID>
    </PREDEFINED_CONFIG>
    <PREDEFINED_CONFIG>
        <PREDEFINED_CONFIG_CODE>Lap23-HDDXXX666-PORACCU112-PORDVDRW1-BAG09</PREDEFINED_CONFIG_CODE>
        <PREDEFINED_CONFIG_NAME>model exclusive</PREDEFINED_CONFIG_NAME>
        <PREDEFINED_CONFIG_DESCR>Our top model</PREDEFINED_CONFIG_DESCR>
        <PRODUCT_PRICE_DETAILS>
            <PRODUCT_PRICE price_type="net_list">
                <PRICE_AMOUNT>1499.99</PRICE_AMOUNT>
                <PRICE_CURRENCY>EUR</PRICE_CURRENCY>
                <TAX>.16</TAX>
            </PRODUCT_PRICE>
        </PRODUCT_PRICE_DETAILS>
        <SUPPLIER_PID>Laptop23Exklusiv</SUPPLIER_PID>
        <INTERNATIONAL_PID type="ean">1231231231231</INTERNATIONAL_PID>
    </PREDEFINED_CONFIG>
</PREDEFINED_CONFIGS>
```

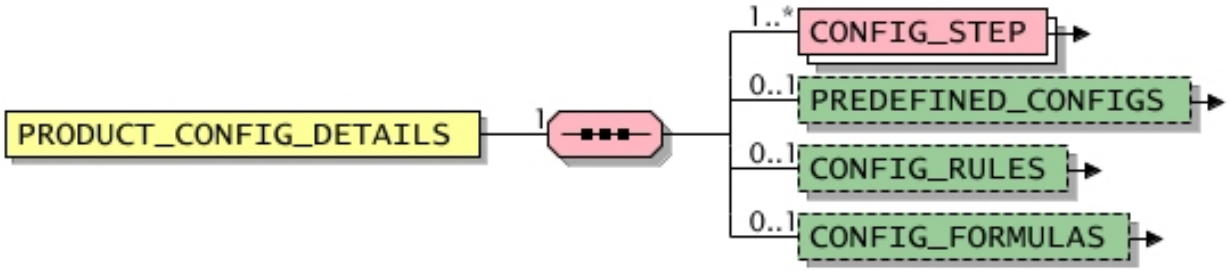
Reference of elements - order by appearance

PRODUCT_CONFIG_DETAILS

(Product configuration information)

This element contains configuration information about the product.

2005fd: New element



General

Used in	Default value	Data type	Field length	Lang. specific	I.chg. in ver.
-	-	-	-	-	2005fd

Elements

Designation	Element name	Mandatory/ Optional	Single/ Multiple	Explanation	Default value	Data type	Field length	Lang. specific	I.chg. in ver.
Configuration step	**CONFIG_STEP**	Mandatory	Multiple	Information on a configuration step	-	-	-	-	2005fd
Predefined configurations	**PREDEFINED_CONFIGS**	Optional	Single	List of predefined configurations	-	-	-	-	2005fd
Configuration rules	**CONFIG_RULES**	Optional	Single	List of terms for calculating configuration values or for restricting valid configurations	-	-	-	-	-
Configuration formulas	**CONFIG_FORMULAS**	Optional	Single	List of configuration formulas	-	-	-	-	2005fd

Example 1
A well documented example can be found in chapter **Example: laptop configuration**.

Example 2
In this example the price of the specified product depends on the the delivery time. The example is divided up into three parts: the definition of the formula within the global formula repository is described here **Example 2 to element FORMULA**; the specification of the required configuration is shown below; the usage of the defined price formulas is described in **Example 2 for element PRODUCT_PRICE_DETAILS**.

The price is structured as follows:

- normal (up to 3 days): without allowance
- short (24 hours): 50 euro allowance
- long (up to 2 weeks): 20 euro discount

Shown here is a feature based configuration step. The user can select one of the three alternative enumeration values. The feature is defined via the element **FTEMPLATE**. The feature must not be described any further because only the specification of the three enumeration values (**FT_VALUE**) are needed.

The user con skip this configuration step as specified in the element **STEP_INTERACTION_TYPE** with the value '**take_default**'.In this case the default value "normal delivery" (with the element **DEFAULT_FLAG** has value "true") is selected automatically.

```
<PRODUCT_CONFIG_DETAILS>
    <CONFIG_STEP>
        <STEP_ID>S1</STEP_ID>
        <STEP_HEADER>Delivery time</STEP_HEADER>
        <STEP_INTERACTION_TYPE>take_default</STEP_INTERACTION_TYPE>
        <CONFIG_CODE>time</CONFIG_CODE>
        <CONFIG_FEATURE>
            <FTEMPLATE>
                <FT_ID>sfssdf</FT_ID>
                <FT_NAME>Duration</FT_NAME>
                <FEATURE_CONTENT>
                    <FT_DATATYPE>string</FT_DATATYPE>
                    <FT_VALUES>
                        <FT_VALUE>
                            <VALUE_TEXT>normal</VALUE_TEXT>
                            <CONFIG_INFO>
                                <CONFIG_CODE>N</CONFIG_CODE>
                            </CONFIG_INFO>
                            <VALUE_ORDER>1</VALUE_ORDER>
                            <DEFAULT_FLAG>true</DEFAULT_FLAG>
                        </FT_VALUE>
                        <FT_VALUE>
                            <VALUE_TEXT>express</VALUE_TEXT>
                            <CONFIG_INFO>
                                <CONFIG_CODE>E</CONFIG_CODE>
                            </CONFIG_INFO>
                            <VALUE_ORDER>2</VALUE_ORDER>
                        </FT_VALUE>
                        <FT_VALUE>
                            <VALUE_TEXT>slow</VALUE_TEXT>
                            <CONFIG_INFO>
                                <CONFIG_CODE>S</CONFIG_CODE>
                            </CONFIG_INFO>
                            <VALUE_ORDER>3</VALUE_ORDER>
                        </FT_VALUE>
                    </FT_VALUES>
```

```
            </FEATURE_CONTENT>
        </FTEMPLATE>
    </CONFIG_FEATURE>
    <MIN_OCCURANCE>1</MIN_OCCURANCE>
    <MAX_OCCURANCE>1</MAX_OCCURANCE>
</CONFIG_STEP>
</PRODUCT_CONFIG_DETAILS>
```

Example 3
In this example the configuration information for a cable with individual length are shown. The order unit should be piece to order any amount of cables with an individual length within one order line. The cable length can be entered from 10 cm up to 1000 m in 1cm steps.

The price fixing is realized via a price formula (see also **Example 3 for element FORMULA**).

```
<PRODUCT_CONFIG_DETAILS>
    <CONFIG_STEP>
        <STEP_ID>CL</STEP_ID>
        <STEP_HEADER>Enter cable length</STEP_HEADER>
        <CONFIG_CODE>sz:</CONFIG_CODE>
        <CONFIG_FEATURE>
            <FTEMPLATE>
                <FT_ID>FF765756</FT_ID>
                <FT_NAME>dlaksjd</FT_NAME>
                <FEATURE_CONTENT>
                    <FT_DATATYPE>float</FT_DATATYPE>
                    <FT_FACETS>
                        <FT_FACET type="minInclusive">.10</FT_FACET>
                        <FT_FACET type="maxInclusive">1000</FT_FACET>
                        <FT_FACET type="fractionDigits">2</FT_FACET>
                    </FT_FACETS>
                    <FT_UNIT>m</FT_UNIT>
                </FEATURE_CONTENT>
            </FTEMPLATE>
        </CONFIG_FEATURE>
        <MIN_OCCURANCE>1</MIN_OCCURANCE>
        <MAX_OCCURANCE>1</MAX_OCCURANCE>
    </CONFIG_STEP>
</PRODUCT_CONFIG_DETAILS>
```

Example 4
This example shows how a pen is specified which a individual text can be printed on. The text is limited to 20 characters.

The length of the text is specified via the element **FT_FACETS**.

The price fixing is realized via a price formula (see also **Example 4 for element FORMULA**).

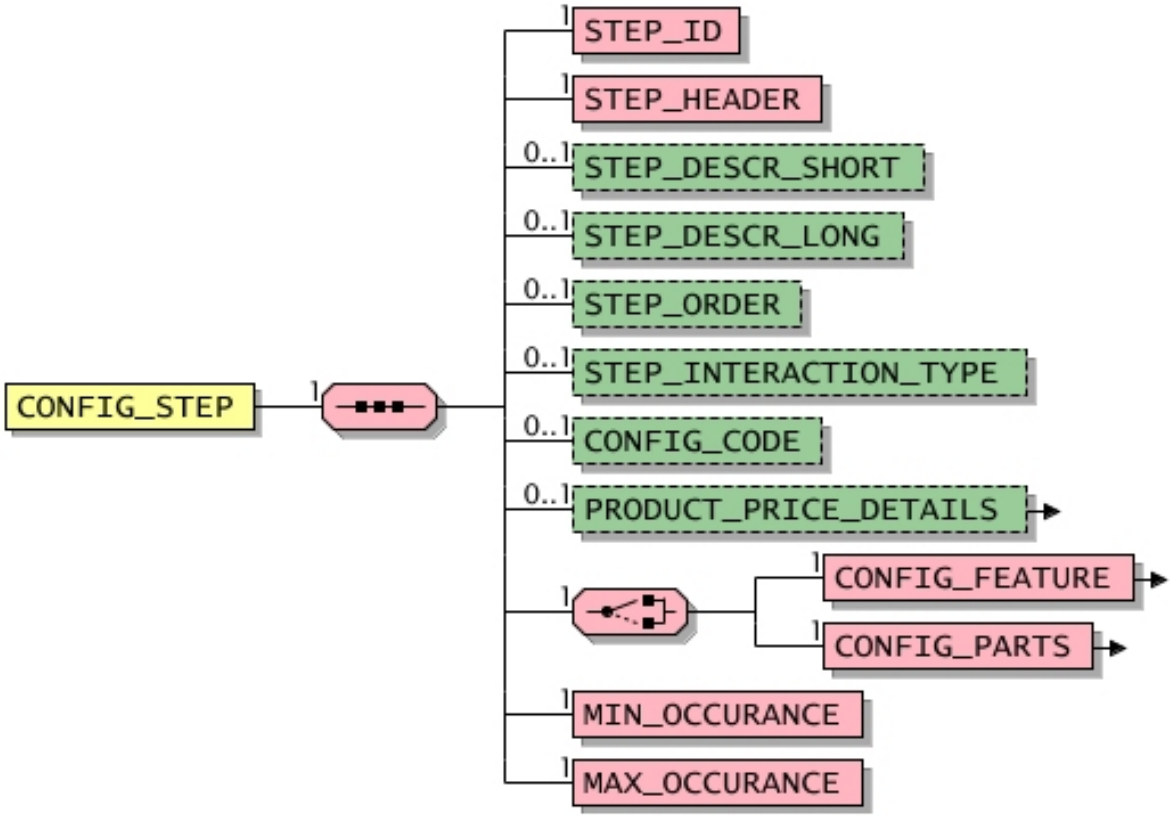
```
<PRODUCT_CONFIG_DETAILS>
    <CONFIG_STEP>
        <STEP_ID>PTEXT</STEP_ID>
        <STEP_HEADER>Print</STEP_HEADER>
        <STEP_DESCR_SHORT>The print is applied on the lower part of the pen. Please enter the text in this step.</STEP_DESCR_SHORT>
        <CONFIG_FEATURE>
            <FTEMPLATE>
                <FT_ID>123</FT_ID>
                <FT_NAME>Print</FT_NAME>
                <FEATURE_CONTENT>
                    <FT_DATATYPE>string</FT_DATATYPE>
                    <FT_FACETS>
                        <FT_FACET type="minLength">1</FT_FACET>
                        <FT_FACET type="maxLength">20</FT_FACET>
                    </FT_FACETS>
                </FEATURE_CONTENT>
            </FTEMPLATE>
        </CONFIG_FEATURE>
        <MIN_OCCURANCE>1</MIN_OCCURANCE>
        <MAX_OCCURANCE>1</MAX_OCCURANCE>
    </CONFIG_STEP>
</PRODUCT_CONFIG_DETAILS>
```

CONFIG_STEP

(Configuration step)

This element contains information on a configuration step.

2005fd: New element



General

Used in	Default value	Data type	Field length	Lang. specific	I.chg. in ver.
PRODUCT_CONFIG_DETAILS	-	-	-	-	2005fd

Elements

Designation	Element name	Mandatory/ Optional	Single/ Multiple	Explanation	Default value	Data type	Field length	Lang. specific	I.chg. in ver.
Identification of the configuration step	**STEP_ID**	Mandatory	Single	This element provides the unique identifier of the configuration step. 2005fd: New element	-	**dtSTRING**	60	-	2005fd
Header of the configuration step	**STEP_HEADER**	Mandatory	Single	This element defines a visible header, thus title of the configuration step 2005fd: New element	-	**dtML-STRING**	250	Yes	2005fd
configuration step short description	**STEP_DESCR_SHORT**	Optional	Single	This element is used to describe the configuration step. 2005fd: New element	-	**dtML-STRING**	3000	Yes	2005fd
Configuration step long description	**STEP_DESCR_LONG**	Optional	Single	This element can be used to describe the configuration step in more detail. 2005fd: New element	-	**dtML-STRING**	64000	Yes	2005fd
Order of configuration step	**STEP_ORDER**	Optional	Single	Order in which the configuration step have be taken in the target system A configuration process starts with the step which has the lowest order number.. 2005fd: New element	-	**dtINTE-GER**	-	-	2005fd
Configuration type	**STEP_INTERACTION_TYPE**	Optional	Single	specifies wether a configuration step has to be run through or the default values can be inserted 2005fd: New element See also: **Permitted values for element STEP_INTERACTION_TYPE**	force_ userin-put	**dtSTRING**	20	-	2005fd
Order number extension	**CONFIG_CODE**	Optional	Single	In order to generate the order number of configurated products, this element can be used for coding the result of each configuration step; the unique code is added to the base order number. By adding these codes for each configuration step a unique order number is created. If the configuration requires more than one configuration step, it should be guaranted that the extensions can be separated. A solution is to standardize the length of each added code; for instance, adding 3 characters, e.g., "003"="black". Another solution is to separate the codes by a hyphen (e.g., "-red"). 2005fd: New element	-	**dtSTRING**	50	-	2005fd

Elements

Designation	Element name	Mandatory/ Optional	Single/ Multiple	Explanation	Default value	Data type	Field length	Lang. specific	I.chg. in ver.
Price details	**PRODUCT_PRICE_DETAILS**	Optional	Single	Price information for the product In this context the element is used to specify the base price of one configuration step. 	-	-	-	-	2005fd
Configuration feature	**CONFIG_FEATURE**	Mandatory	Single	Defines a feature to which product configuration assignes a value, i.e. by selection from a list of allowed value, or user input. 	-	-	-	-	2005
Configuration component	**CONFIG_PARTS**	Mandatory	Single	Defines a component, which can or must be selected in an actual product configuration. 	-	-	-	-	2005fd
Minimum occurence	**MIN_OCCURANCE**	Mandatory	Single	This element contains the minimum number of components respectively feature values which can be selected.  2005fd: New element	-	**dtCOUNT**	-	-	2005fd
Maximum occurence	**MAX_OCCURANCE**	Mandatory	Single	This element contains the maximum number of components respectively feature values which can be selected.  2005fd: New element	-	**dtCOUNT**	-	-	2005fd

Permitted values for element STEP_INTERACTION_TYPE

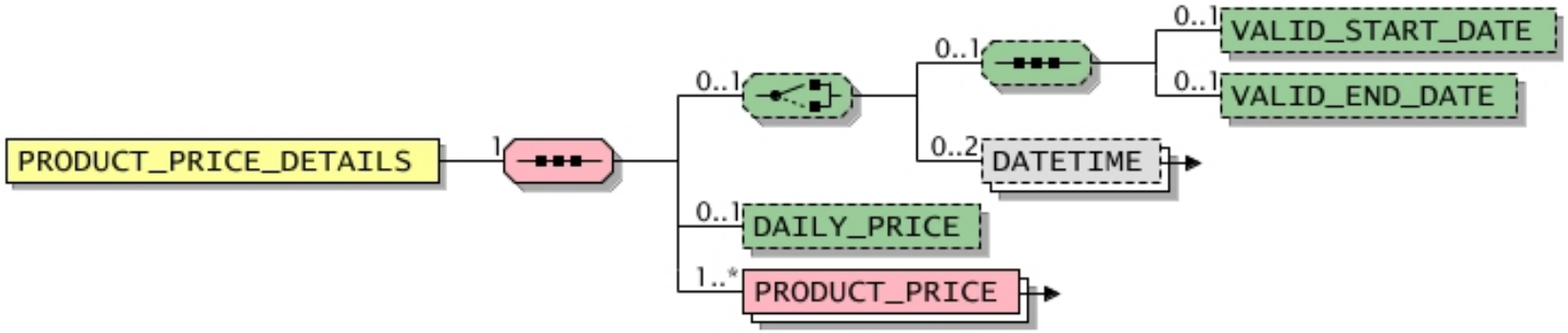
Designation	Element value	Explanation	I.chg. in ver.
User input	**force_userinput**	This value indicates that the user has to run through the configuration step. See also **PRODUCT_TYPE =must_be_configured**.	2005fd
Default values	take_default	This value indicates that a configuration step could be skipped and that then the default values are used. See also **PRODUCT_TYPE =configurable**.	2005fd

PRODUCT_PRICE_DETAILS

(Price details)

This element transfers price information for a product. It is possible to specify more than one price for each product. Doing so, the validity of the price has to be specified (e.g., time-based, geographic, technical). Moreover, graduated prices, discounts and dynamic prices can be defined.

2005fd: This new element replaces with a modified semantics the **ARTICLE_PRICE_DETAILS** element; it has been extended by the following sub-elements: **VALID_START_DATE**, **VALID_END_DATE**



General

Used in	Default value	Data type	Field length	Lang. specific	l.chg. in ver.
CONFIG_INFO, **CONFIG_STEP**, **PART_ALTERNATIVE**, **PREDEFINED_CONFIG**	-	-	-	-	2005fd

Elements

Designation	Element name	Mandatory/ Optional	Single/ Multiple	Explanation	Default value	Data type	Field length	Lang. specific	l.chg. in ver.
Valid start date	**VALID_START_DATE**	Optional	Single	Dates for the beginning of the period of validity 2005fd: This new element replaces with a modified semantics the **DATETIME** in the context of PRODUCT_PRICE_DETAILS element and its attribute type='valid_start_date'.	-	**dtDATETIME**	-	-	2005fd
Valid end date	**VALID_END_DATE**	Optional	Single	Date for the end of the period of validity 2005fd: This new element replaces with a modified semantics the **DATETIME** in the context of PRODUCT_PRICE_DETAILS element and its attribute type='valid_end_date'.	-	**dtDATETIME**	-	-	2005fd

Elements

Designation	Element name	Mandatory/ Optional	Single/ Multiple	Explanation	Default value	Data type	Field length	Lang. specific	I.chg. in ver.
Date	**DATETIME** in the context of PRODUCT_PRICE_DETAILS **- type**	Optional	Multiple (2)	The element is used to precisely define a time. It is made up of the three elements date, time and time zone. The element **DATETIME** in the context of PRODUCT_PRICE_DETAILS with the attributes 'valid_start_date' und 'valid_end_date' will be replaced by the elements **VALID_START_DATE** and **VALID_END_DATE** in future versions and will be omitted then.	-	-	-	-	-
Daily price	**DAILY_PRICE**	Optional	Single	If the value of this field is “true”, the product prices may be subject to considerable daily fluctuations (e.g., additional charges for metals) and must therefore be seen as recommended prices only. The exact prices must then be calculated either using an external system or manually (e.g., by contacting the supplier). If nothing is specified in this field or if “false” is specified, the prices are assumed to be fixed.	-	**dtBOOLEAN**	-	-	-
Product price	**PRODUCT_PRICE** **- price_type**	Mandatory	Multiple	Definition of a price for the product	-	-	-	-	2005

Example 1

In the example 1 prices are specified for the two periods 2005-01-01 to 2005-06-30 and 2005-07-01 to 2005-12-31. For each period there is both a net customer price and a net list price specified for each product. The prices are only valid for Germany and the Netherlands.

```
<PRODUCT_PRICE_DETAILS>
    <VALID_START_DATE>2005-01-01</VALID_START_DATE>
    <VALID_END_DATE>2005-06-30</VALID_END_DATE>
    <PRODUCT_PRICE price_type="net_customer">
        <PRICE_AMOUNT>2.99</PRICE_AMOUNT>
        <PRICE_CURRENCY>EUR</PRICE_CURRENCY>
        <TAX>0.16</TAX>
        <PRICE_FACTOR>0.8</PRICE_FACTOR>
        <LOWER_BOUND>1</LOWER_BOUND>
        <TERRITORY>DE</TERRITORY>
        <TERRITORY>NL</TERRITORY>
    </PRODUCT_PRICE>
</PRODUCT_PRICE_DETAILS>
<PRODUCT_PRICE_DETAILS>
    <VALID_START_DATE>2005-07-01</VALID_START_DATE>
    <VALID_END_DATE>2005-12-31</VALID_END_DATE>
    <PRODUCT_PRICE price_type="net_customer">
        <PRICE_AMOUNT>3.09</PRICE_AMOUNT>
        <PRICE_CURRENCY>EUR</PRICE_CURRENCY>
        <TAX>0.16</TAX>
        <PRICE_FACTOR>0.8</PRICE_FACTOR>
        <LOWER_BOUND>1</LOWER_BOUND>
        <TERRITORY>DE</TERRITORY>
        <TERRITORY>NL</TERRITORY>
    </PRODUCT_PRICE>
</PRODUCT_PRICE_DETAILS>
```

Example 2
The second example represents a product that has not a fix price, but a dynamic price, thus the actual price is calculated on the basis of a price formula.

The example consists of three parts: The formula is defined in the global formula dictionary, see XML code in the **Example 2 for the FORMULA element**; the configuration is specified in the **Example 2 for the PRODUCT_CONFIG_DETAILS** element; the application of the price formula is shown below.

Instead of the element **PRICE_AMOUNT** the element **PRICE_FORMULA** is used here to reference to the formula which is specified in the global formula repository and to fill the parameters with product specific values.

All other subelements of **PRODUCT_PRICE** can be used analog to fix pricing. Especially the price factor (**PRICE_FACTOR**) is multiplied with the result of the calculated price formula to build the final price.

```
<PRODUCT_PRICE price_type="net_list">
    <PRICE_FORMULA>
        <FORMULA_IDREF>33</FORMULA_IDREF>
        <PARAMETERS>
            <PARAMETER>
                <PARAMETER_SYMBOLREF>PP</PARAMETER_SYMBOLREF>
                <PARAMETER_VALUE>300</PARAMETER_VALUE>
            </PARAMETER>
        </PARAMETERS>
    </PRICE_FORMULA>
    <PRICE_CURRENCY>EUR</PRICE_CURRENCY>
    <TAX>.16</TAX>
    <PRICE_FACTOR>0.65</PRICE_FACTOR>
</PRODUCT_PRICE>
```

Example 3
Another example for price formulas can be found in the section **Example: Metal surchage**.

Example 4
The next example defines a daily price, therefore the price amount can be specified in the catalog document.

```
<PRODUCT_PRICE_DETAILS>
    <DAILY_PRICE>TRUE</DAILY_PRICE>
    <PRODUCT_PRICE price_type="on_request"></PRODUCT_PRICE>
</PRODUCT_PRICE_DETAILS>
```

Example 5
This example defines four quantity scale. The final quantity scale, beginning at 100,000 products, results in a price which has to be requested, thus is not fixed in the catalog document.

```
<PRODUCT_PRICE_DETAILS>
    <PRODUCT_PRICE price_type="net_list">
        <PRICE_AMOUNT>.10</PRICE_AMOUNT>
        <PRICE_CURRENCY>EUR</PRICE_CURRENCY>
        <TAX>.16</TAX>
        <PRICE_FACTOR>1</PRICE_FACTOR>
        <LOWER_BOUND>1000</LOWER_BOUND>
    </PRODUCT_PRICE>
    <PRODUCT_PRICE price_type="net_list">
        <PRICE_AMOUNT>.10</PRICE_AMOUNT>
        <PRICE_CURRENCY>EUR</PRICE_CURRENCY>
        <TAX>.16</TAX>
        <PRICE_FACTOR>.7</PRICE_FACTOR>
        <LOWER_BOUND>20000</LOWER_BOUND>
    </PRODUCT_PRICE>
    <PRODUCT_PRICE price_type="net_list">
        <PRICE_AMOUNT>.10</PRICE_AMOUNT>
        <PRICE_CURRENCY>EUR</PRICE_CURRENCY>
        <TAX>.16</TAX>
        <PRICE_FACTOR>.5</PRICE_FACTOR>
        <LOWER_BOUND>50000</LOWER_BOUND>
    </PRODUCT_PRICE>
    <PRODUCT_PRICE price_type="on_request">
        <PRICE_CURRENCY>EUR</PRICE_CURRENCY>
        <TAX>.16</TAX>
        <LOWER_BOUND>100000</LOWER_BOUND>
    </PRODUCT_PRICE>
</PRODUCT_PRICE_DETAILS>
```

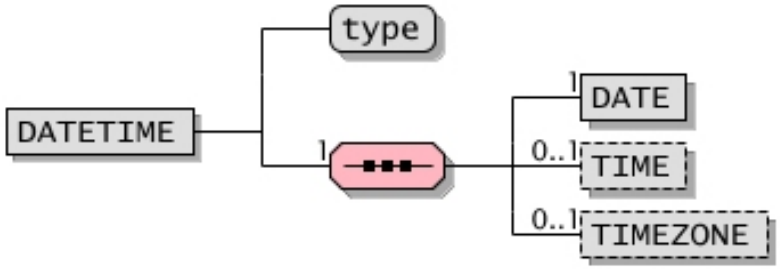
DATETIME in the context of PRODUCT_PRICE_DETAILS

(Date)

The element is used to precisely define a time. It is made up of the three elements date, time and time zone.

DATETIME is used at various places within the BMEcat formats. The description of the time involved is carried out through the attribute '**type**' which can accept various pre-defined values.

This element will not be used in the future.



General

Used in	Default value	Data type	Field length	Lang. specific	I.chg. in ver.
PRODUCT_PRICE_DETAILS	-	-	-	-	-

Attributes

Designation	Attribute name	Mandatory/ optional	Explanation	Default value	Data type	Field length	Lang. specific	I.chg. in ver.
Date type	type	Mandatory	Specifies the date type in more detail.; Value range: depending on context See also: **Permitted values for attribute "type"**	-	**dtSTRING**	20	-	-

Permitted values for attribute "type"

Designation	Attribute value	Explanation	I.chg. in ver.
Valid start date	valid_start_date	Date on which a price becomes valid; is used in the element **PRODUCT_PRICE_DETAILS**	-
Valid end date	valid_end_date	Date on which a price becomes invalid; is used in the element **PRODUCT_PRICE_DETAILS**	-

Elements

Designation	Element name	Mandatory/ Optional	Single/ Multiple	Explanation	Default value	Data type	Field length	Lang. specific	I.chg. in ver.
Date	**DATE**	Mandatory	Single	Date	-	**dtDATE-TYPE**	-	-	-
Time	**TIME**	Optional	Single	Element for time	-	**dtTIMETY-PE**	-	-	-
Time zone	**TIMEZONE**	Optional	Single	Element for timezone	-	**dtTIME-ZONETY-PE**	-	-	-

Example
The skeleton agreement comes into effect on 25 October, 2000 at 23:13 hrs GMT.

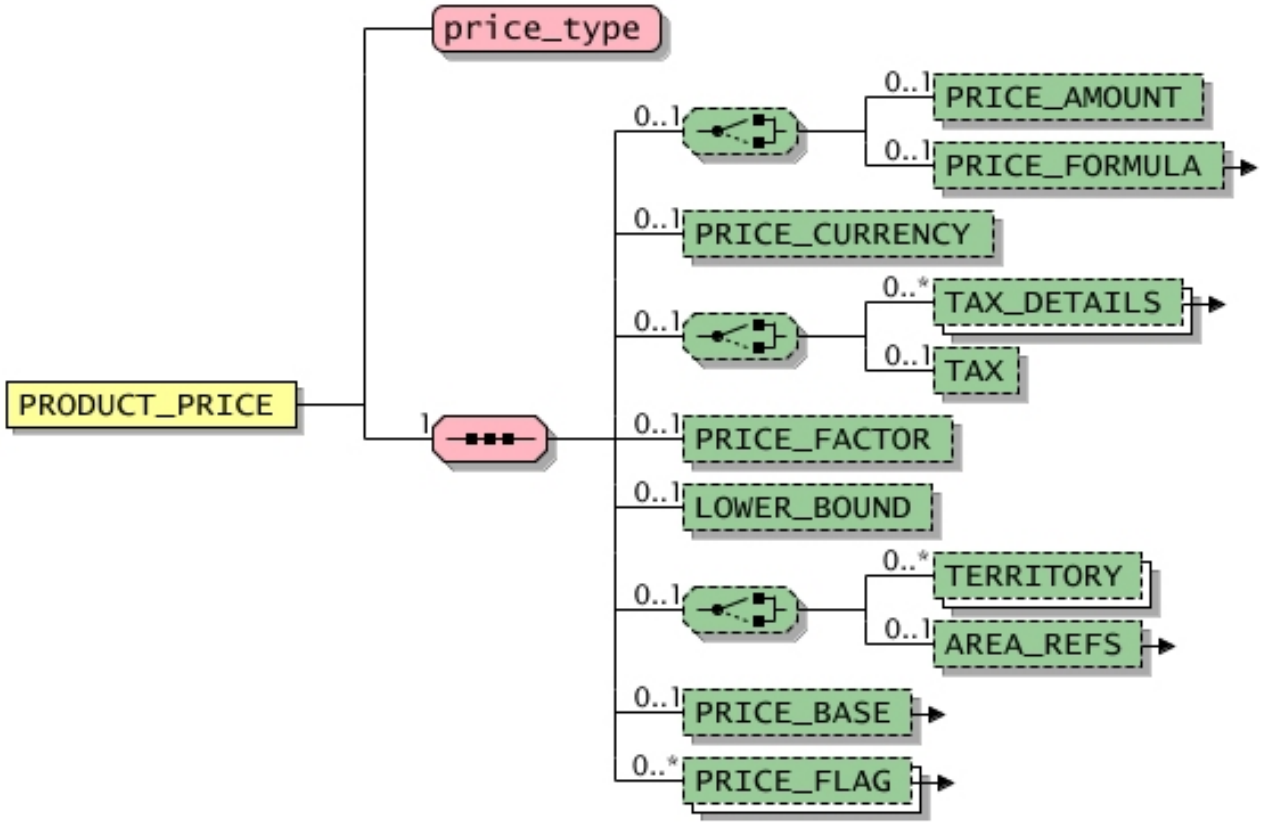
```
<DATETIME type="agreement_start_date">
    <DATE>2000-10-25</DATE>
    <TIME>23:13:00</TIME>
    <TIMEZONE>GMT</TIMEZONE>
</DATETIME>
```

PRODUCT_PRICE

(Product price)

This element defines a price for the product.

2005fd: This new element replaces with a modified semantics the **ARTICLE_PRICE** element; it has been extended by the following sub-elements: **PRICE_FORMULA**, **AREA_REFS**, **PRICE_BASE**, **PRICE_FLAG**.
2005: This element has been extended by the sub-element **TAX_DETAILS**.



General

Used in	Default value	Data type	Field length	Lang. specific	I.chg. in ver.
PRODUCT_PRICE_DETAILS	-	-	-	-	2005

Attributes

Designation	Attribute name	Mandatory/ optional	Explanation	Default value	Data type	Field length	Lang. specific	I.chg. in ver.
Price type	price_type	Mandatory	Attribute which specifies the type of price. See also: **Predefined values for attribute "price_type"**	-	**dtSTRING**	20	-	-

Predefined values for attribute "price_type"

Designation	Attribute value	Explanation	I.chg. in ver.
List price	gros_list	(Purchasing) list price including sales tax	-
Customer price	net_customer	Customer-specific end price excluding sales tax	-
Price for express delivery	net_customer_exp	Customer-specific end price for express delivery excluding sales tax  This price type is not clearly defined enough. If it is to be used regardless, the supplier and the customer must clarify the exact meaning of the price and fix it.	-
List price	net_list	(Purchasing) list price excluding sales tax	-
Nonbinding recommended price	nrp	Nonbinding recommended (retail) price	1.2_fd
Price on request	on_request	The price is not given and has to be requested.	2005fd
User-defined type	User defined value, format: udp_\w{1,16}	Any other user-defined prices with own price types are allowed to be transferred. These types must then have a type description beginning with "udp". User-defined types are likewise only allowed to be specified once per article. Example: udp_aircargo_price  It is essential to clarify beforehand whether or not the target systems are able to process user-defined price types. Furthermore, the exact meaning of the prices must be clarified and fixed between the supplier and the customer.	-

Elements

Designation	Element name	Mandatory/ Optional	Single/ Multiple	Explanation	Default value	Data type	Field length	Lang. specific	I.chg. in ver.
Price amount	**PRICE_AMOUNT**	Optional	Single	Amount of the price	-	**dtNUMBER**	-	-	-

Elements

Designation	Element name	Mandatory/ Optional	Single/ Multiple	Explanation	Default value	Data type	Field length	Lang. specific	I.chg. in ver.
Price formula	**PRICE_FORMULA**	Optional	Single	Formel for price calculation 	-	-	-	-	2005fd
Price currency	**PRICE_CURRENCY**	Optional	Single	Currency of the price If nothing is specified in this field, the currency defined in the document header (**HEADER**) in the element **CURRENCY** is used for all prices.	-	**dtCUR-RENCIES**	-	-	-
Tax details	**TAX_DETAILS**	Optional	Multiple	Specification of one applicapable tax 	-	-	-	-	2005
Tax rate	**TAX**	Optional	Single	Factor for tax applicable to this price. Example: "0.16", corresponds to 16 percent.	-	**dtNUM-BER**	-	-	-
Price factor	**PRICE_FACTOR**	Optional	Single	The (discount) factor always multiplied by the price specified in this element in order to determine the end price. The value of this element overwrites the default price factor, if such a default has been defined in the context of **CATALOG**.  2005: A default value was added.	1	**dtNUM-BER**	-	-	2005
Lower quantity limit	**LOWER_BOUND**	Optional	Single	Lower quantity limit for graduated prices. The unit for the graduated price limit is the order unit (**ORDER_UNIT**). Note: the upper graduated price limit is determined by the **LOWER_BOUND** value of the next price. If there are no more graduations, the price applies to all quantities which are higher than the lower graduated price limit.	-	**dtNUM-BER**	-	-	-
Territory	**TERRITORY**	Optional	Multiple	Territory (i.e. country, state, region) coded according to ISO 3166 The element specifies in which territories (regions, states, countries, continents) the prices are vaild which means that the products from the catalog are available.	-	**dtCOUN-TRIES**	-	-	1.2_fd
Area references	**AREA_REFS**	Optional	Single	List of references to areas Areas, where the prices are valid which means that the products from the catalog are available. 	-	-	-	-	2005fd
Price basis	**PRICE_BASE**	Optional	Single	Contains the price basis consisting of price unit and price factor, it defines the basis of a price. 	-	-	-	-	2005fd

Elements

Designation	Element name	Mandatory/ Optional	Single/ Multiple	Explanation	Default value	Data type	Field length	Lang. specific	I.chg. in ver.
Price flag	**PRICE_FLAG - type**	Optional	Multiple	Base of a price (e.g. with/without freight)	-	**dtBOO-LEAN**	-	-	-

Example 1
In the example a net customer price is specified in Euro and valid for Germany and the Netherlands.

```
<ARTICLE_PRICE price_type="net_customer">
    <PRICE_AMOUNT>1.04</PRICE_AMOUNT>
    <PRICE_CURRENCY>EUR</PRICE_CURRENCY>
    <TAX>0.16</TAX>
    <PRICE_FACTOR>0.8</PRICE_FACTOR>
    <LOWER_BOUND>1</LOWER_BOUND>
    <TERRITORY>DE</TERRITORY>
    <TERRITORY>NL</TERRITORY>
</ARTICLE_PRICE>
```

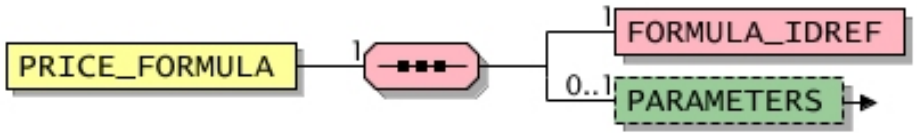
Example 2
Refer also to the examples in the element **PRODUCT_PRICE_DETAILS**.

PRICE_FORMULA

(Price formula)

This element defines a formula for price calculation based on parameters.

2005fd: New element



General

Used in	Default value	Data type	Field length	Lang. specific	I.chg. in ver.
PRODUCT_PRICE	-	-	-	-	2005fd

Elements

Designation	Element name	Mandatory/ Optional	Single/ Multiple	Explanation	Default value	Data type	Field length	Lang. specific	I.chg. in ver.
Reference to a formula	**FORMULA_IDREF**	Mandatory	Single	Reference to the unique identifier of a formula. The reference must point to a formula defined in the document (**FORMULA** element identified by **FORMULA_ID**). 2005fd: New element	-	**dtSTRING**	60	-	2005fd
Paramters	**PARAMETERS**	Optional	Single	List of paramters which are used in a price formula	-	-	-	-	2005fd

Example

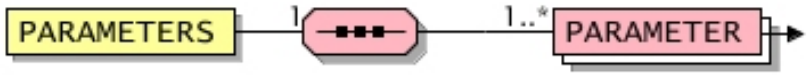
Refer also to the examples in the **PRODUCT_PRICE_DETAILS** element .

PARAMETERS

(Paramters)

This element contains a list of parameters, which can be used in formulas.

2005fd: New element



General

Used in	Default value	Data type	Field length	Lang. specific	l.chg. in ver.
CONFIG_FORMULA, **PRICE_FORMULA**	-	-	-	-	2005fd

Elements

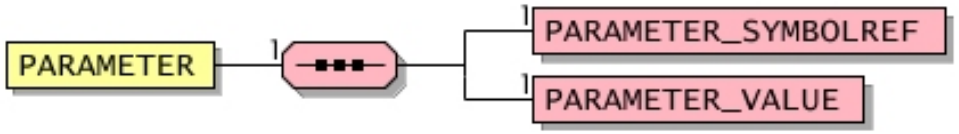
Designation	Element name	Mandatory/ Optional	Single/ Multiple	Explanation	Default value	Data type	Field length	Lang. specific	l.chg. in ver.
Parameter	**PARAMETER**	Mandatory	Multiple	Used on the product level to set the value of a parameter. If the parameter has a default value, then this value is replaced by the new one.	-	-	-	-	2005fd

PARAMETER

(Parameter)

This element is used on the product level to set the value of a parameter. If the parameter has a default value, then this value is replaced by the new one.

2005fd: New element



General

Used in	Default value	Data type	Field length	Lang. specific	I.chg. in ver.
PARAMETERS	-	-	-	-	2005fd

Elements

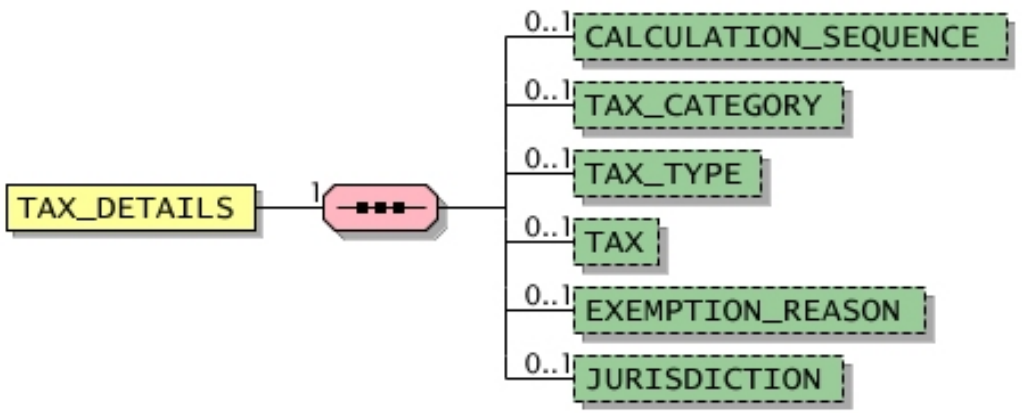
Designation	Element name	Mandatory/ Optional	Single/ Multiple	Explanation	Default value	Data type	Field length	Lang. specific	I.chg. in ver.
Reference to a parameter	**PARAMETER_SYMBOLREF**	Mandatory	Single	Reference to the unique identifier of a parameter. The reference must point to a parameter defined in the document (**PARAMETER_DEFINITION** element identified by **PARAMETER_SYMBOL**). 2005fd: New element	-	**dtSTRING**	60	-	2005fd
Parameter value	**PARAMETER_VALUE**	Mandatory	Single	This element contains the value of the parameter. If the **PARAMETER_DEFAULT_VALUE** element has been used for setting a default value, this value is replaced by the new one. 2005fd: New element	-	**dtSTRING**	250	-	2005fd

TAX_DETAILS

(Tax details)

This element contains information of one applicable tax.

2005: New element



General

Used in	Default value	Data type	Field length	Lang. specific	l.chg. in ver.
PRODUCT_PRICE	-	-	-	-	2005

Elements

Designation	Element name	Mandatory/ Optional	Single/ Multiple	Explanation	Default value	Data type	Field length	Lang. specific	l.chg. in ver.
Calculation sequence	**CALCULATION_SEQUENCE**	Optional	Single	This element determines the sequence for applying multiple taxes to a basis. The taxes must be applied beginning with the lowest value in **CALCULATION_SEQUENCE**. Therefore, the tax with the lowest sequence will be calculated first, then follows the tax with the next higher sequence, and so on. If two taxes have the same sequence, both tax factors must be added prior to calculation. 2005: New element	1	**dtCOUNT**	-	-	2005

Elements

Designation	Element name	Mandatory/ Optional	Single/ Multiple	Explanation	Default value	Data type	Field length	Lang. specific	I.chg. in ver.
Tax category	**TAX_CATEGORY**	Optional	Single	This element specifies the tax category as a code. By this it is possible to define the tax not as an absolute value, but as the currently valid percentage (**TAX**). The specification should take place, if possible, by using a common code. The list of predefined values contains codes that should be used within the European Union (see also **http://europa.eu.int/comm/taxation_customs/taxation/vat/how_vat_works/rates/index_en.htm**).  2005: New element See also: **Predefined values for element TAX_CATEGORY**	-	**dtSTRING**	80	-	2005
Tax type	**TAX_TYPE**	Optional	Single	This element specifies the tax type; it should take place by using internationally accepted terms, such as VAT for value added tax.  2005: New element	vat	**dtSTRING**	250	-	2005
Tax rate	**TAX**	Optional	Single	Factor for tax applicable to this price. Example: "0.16", corresponds to 16 percent.	-	**dtNUMBER**	-	-	-
Exemption reason	**EXEMPTION_REASON**	Optional	Single	This element gives the reason why the tax is an exemption from the norm.  2005: New element	-	**dtMLSTRING**	250	Yes	2005
Jurisdiction	**JURISDICTION**	Optional	Single	Tax jurisdiction  2005: New element	-	**dtMLSTRING**	250	Yes	2005

Predefined values for element TAX_CATEGORY

Designation	Element value	Explanation	I.chg. in ver.
Exemption	exemption	The item is free of tax.	2005
Parking rate	parking_rate	The tax is a parking rate.	2005
Reduced rate	reduced_rate	The tax is a reduced rate.	2005
Standard rate	standard_rate	The tax is the standard rate.	2005
Super reduced rate	super_reduced_rate	The tax is a super reduced rate.	2005
Zero rate	zero_rate	The tax is the zero rate.	2005

Predefined values for element TAX_CATEGORY

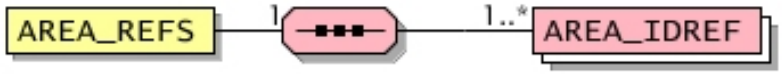
Designation	Element value	Explanation	l.chg. in ver.
Other, user-defined category	User defined value, format: [\w\-\.]{1,80}	The specification of the tax category should take place by commonly used codes. The code should have at least 1 character and 80 characters at the maximum.	2005

AREA_REFS

(Area references)

This element contains a list of area. The areas are not defined here, but referenced by their identifier.

2005fd: New element



General

Used in	Default value	Data type	Field length	Lang. specific	l.chg. in ver.
PRODUCT_PRICE	-	-	-	-	2005fd

Elements

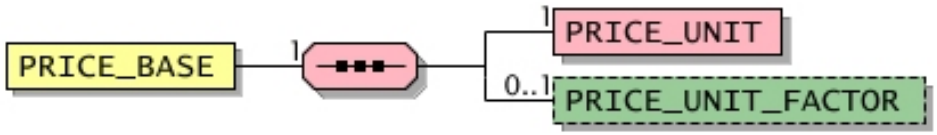
Designation	Element name	Mandatory/ Optional	Single/ Multiple	Explanation	Default value	Data type	Field length	Lang. specific	l.chg. in ver.
Reference to an area	**AREA_IDREF**	Mandatory	Multiple	Reference to the unique identifier of an area. The reference must point to an area defined in the document (element **AREA** identified by **AREA_ID**). 2005fd: New element	-	**dtSTRING**	60	-	2005fd

PRICE_BASE

(Price basis)

This element contains the price basis consisting of price unit and price factor, it defines the basis of a price.

2005fd: New element



General

Used in	Default value	Data type	Field length	Lang. specific	I.chg. in ver.
PRODUCT_PRICE	-	-	-	-	2005fd

Elements

Designation	Element name	Mandatory/ Optional	Single/ Multiple	Explanation	Default value	Data type	Field length	Lang. specific	I.chg. in ver.
Price unit	**PRICE_UNIT**	Mandatory	Single	Unit of measurement on which the price is calculated 2005fd: New element	-	**dtPUNIT**	-	-	2005fd
Price unit factor	**PRICE_UNIT_FACTOR**	Optional	Single	The price factor is the conversion factor for price unit and order unit. The underlying formula is: PRICE_UNIT equals **PRICE_UNIT_FACTOR** * **ORDER_UNIT** 2005fd: New element 2005: A default value was added.	1	**dtFLOAT**	-	-	2005

PRICE_FLAG

(Price flag)

This element is used to specify the base of a price (e.g. with/without freight)

Where these fields have not been filled out, no statement on the various components of the price base will be made.

Example: `<PRICE_FLAG type="incl_freight">true</PRICE_FLAG>` means that freight costs are included in the related price. `<PRICE_FLAG type="incl_freight">false</PRICE_FLAG>` means that the freight costs are not included in the related price. Where the element PRICE_FLAG does not occur with the attribute "incl_freight", there is no indication of whether the prices are with or without freight. This must therefore be stipulated elsewhere (e.g. in the skeleton agreement).

General

Used in	Default value	Data type	Field length	Lang. specific	l.chg. in ver.
PRODUCT_PRICE	-	**dtBOO-LEAN**	-	-	-

Attributes

Designation	Attribute name	Mandatory/ optional	Explanation	Default value	Data type	Field length	Lang. specific	l.chg. in ver.
Type of costs included	type	Mandatory	This attribute specifies the pool of costs which have an indication of whether or not they contribute to price formation. * 2005fd: The list of values can now be extended. The list here contains only the predefined values. See also: **Predefined values for attribute "type"**	-	**dtSTRING**	20	-	2005fd

Predefined values for attribute "type"

Designation	Attribute value	Explanation	l.chg. in ver.
Including insurance	incl_assurance	Price includes insurance This value has been replaced by the new value **PRICE_FLAG -->type =incl_insurance**, it will be become obsolete.	-
Including duty	incl_duty	Price includes duty	-
Including freight	incl_freight	Price includes freight costs	-
Including insurance	incl_insurance	Price includes insurance	2005fd

Predefined values for attribute "type"

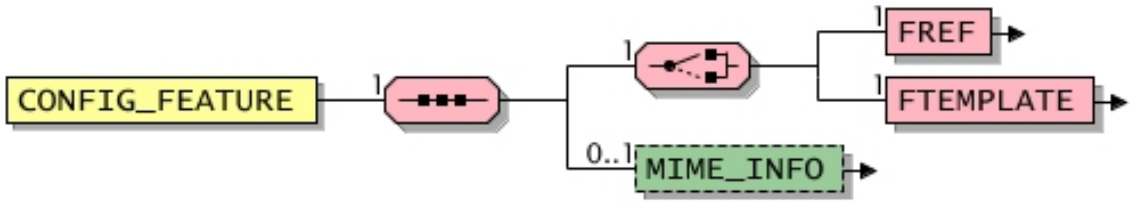
Designation	Attribute value	Explanation	l.chg. in ver.
Including packing	incl_packing	Price includes packing costs	-
User defined type	User defined value, format: \w{1,20}	User defined type identification. "\w{1,20}" means that the type identification has to be at least 1 chraracter long up to a maximum of 20 characters.	2005fd

CONFIG_FEATURE

(Configuration feature)

This element defines a feature to which product configuration assignes a value, i.e. by selection from a list of allowed value, or user input.

2005fd: New element
2005: The sub-element **CLASSIFICATION_FEATURE_REF** was renamed to **FREF**. The sub-element **CLASSIFICATION_SYSTEM_FEATURE_TEMPLATE** was replaced with the fully identical element **FTEMPLATE**. The sequence of **FREF** and **FTEMPLATE** was switched.



General

Used in	Default value	Data type	Field length	Lang. specific	l.chg. in ver.
CONFIG_STEP	-	-	-	-	2005

Elements

Designation	Element name	Mandatory/ Optional	Single/ Multiple	Explanation	Default value	Data type	Field length	Lang. specific	l.chg. in ver.
Reference to a feature	**FREF**	Mandatory	Single	Reference to a feature which is defined in a classification system	-	-	-	-	2005
Feature definition	**FTEMPLATE**	Mandatory	Single	Definition of the feature	-	-	-	-	2005
Additional multimedia information	**MIME_INFO**	Optional	Single	Information about multimedia files For example an illustration which clarifies the measurements relevant for the feature or any other feature related document could be added here.	-	-	-	-	-

FREF

(Reference to a feature)

This element contains a reference to a feature, which is defined in a classification system.

2005fd: New element
2005: This element was named **CLASSIFICATION_FEATURE_REF** in BMEcat 2005 final draft, now it is named **FREF**.

General

Used in	Default value	Data type	Field length	Lang. specific	l.chg. in ver.
CONFIG_FEATURE, **PARAMETER_DEFINITION**	-	-	-	-	2005

Elements

Designation	Element name	Mandatory/ Optional	Single/ Multiple	Explanation	Default value	Data type	Field length	Lang. specific	l.chg. in ver.
Classification or feature system	**REFERENCE_FEATURE_SYSTEM_NAME**	Mandatory	Single	Name of the referenced classification or feature system If the classification system is transferred by the **T_NEW_CATALOG** transaction and its **CLASSIFICATION_SYSTEM** element, the value of this element must be equal with the name defined in **CLASSIFICATION_SYSTEM_NAME**. Remark: The format for the name (**CLASSIFICATION_SYSTEM_NAME**) should comply with the following structure: "<Name>-<Major Version>.<Minor Version> See also: **Predefined values for element REFERENCE_FEATURE_SYSTEM_NAME** **Examples** ECLASS-4.1, UNSPSC-6.0801 `<REFERENCE_FEATURE_SYSTEM_NAME>ECLASS-4.1</REFERENCE_FEATURE_SYSTEM_NAME>`	-	**dtSTRING**	80	-	-
Feature reference	**FT_IDREF**	Mandatory	Single	Reference to the unique ID of a feature (see**CLASSIFICATION_SYSTEM_FEATURE_TEMPLATE**)	-	**dtSTRING**	60	-	-

Predefined values for element REFERENCE_FEATURE_SYSTEM_NAME

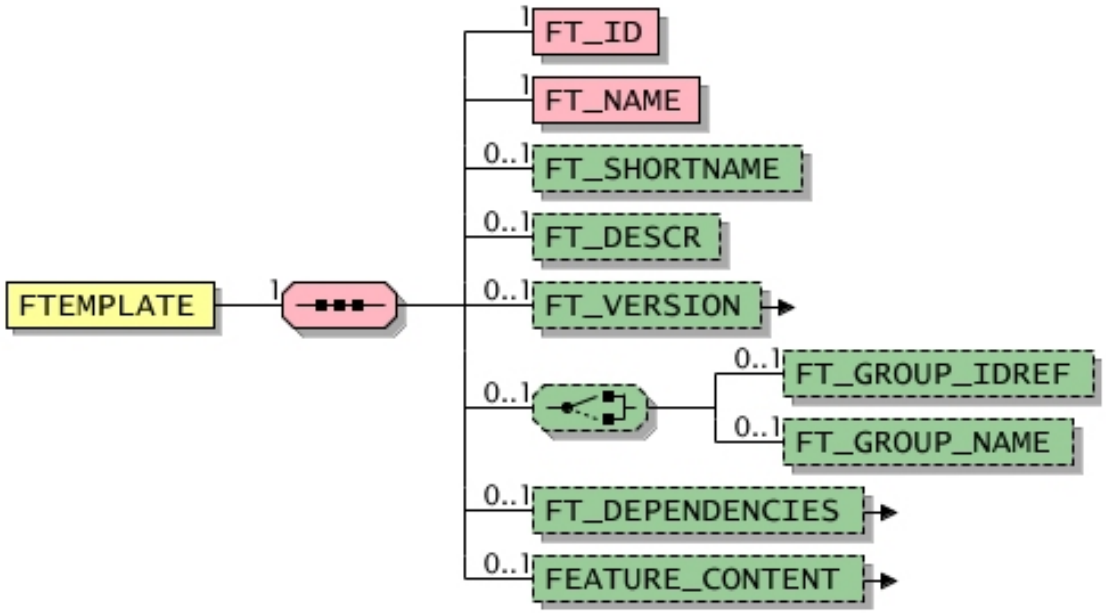
Designation	Element value	Explanation	l.chg. in ver.
CPV	CPV-yyyy-mm-dd	Reference to the classification system CPV (Common Procurement Vocabulary) with version date (e.g., CPV-2003-12-16); see siehe **http://simap.eu.int**	2005fd
eCl@ss	ECLASS-x.y	Reference to the classification system eCl@ss with major version x and minor version y (e.g., ECLASS-5.1); see **http://www.eclass-online.com**	-
eOTD	EOTD-yyyy-mm-dd	Reference to the classification system eOTD (ECCMA Open Technical Dictionary) with version date (e.g., EOTD-2004-08-01); see **http://www.eccma.org**	2005fd
ETIM	ETIM-x.y	Reference to the classification system ETIM with major version x and minor version y (e.g., ETIM-2.0); see **http://www.etim.de**	-
GPC	GPC-x.y	Reference to the classification system EAN.UCC GPC (Global Product Classification) with major version x and minor version y (e.g., GPC-4.0); see **http://www.gs1.org**	2005fd
profiCl@ss	PROFICLASS-x.y	Reference to the classification system profiCl@ss with major version x and minor version y (e.g., PROFICLASS-2.1); see **http://www.proficlass.de**	2005fd
RNTD	RNTD-x.y	Reference to the classification system RNTD (RosettaNet Technical Dictionary) with major version x and minor version y (e.g., RNTD-4.0); see **http://www.rosettanet.org**	2005fd
RUS	RUS-x.y	Reference to the classification system RUS (Requisite Unifying Structure) with major version x and minor version y (e.g., RUS-4.0); see **http://ruspor-tal.requisite.com**	2005fd
UNSPSC	UNSPSC-x.yyyy	Reference to the classification system UNSPSC with major version x and minor version y (e.g., UNSPSC-6.0801); see **http://www.unspsc.org**	-
Proprietary classificati-on system	udf_NAME-x.y	Reference to a proprietary (non-standard) classification system. The value has to start with 'udf_' followed by the classification system name in capital letters, hyphen, and version (major version x and minor version y). For example: udf_MYSYSTEM-3.0. The length of the name is limited to 72 characters; the version to 7 characters.	-
Other classification sy-stem	User defined value, for-mat: [\w\-\.]{1,80}	Other standard classification system, which is not pre-defined in BMEcat, can be described in a similar way: The name of the system in capital, followed by a hyphen and the version information. For instance, NAME-3.4. The length of the name is limited to 72 characters. The version information, where major and minor version are separated by a dot, is limited to 7 characters.	2005fd

FTEMPLATE

(Feature definition)

This element defines a feature, it does not define the feature value though.

2005: New element



General

Used in	Default value	Data type	Field length	Lang. specific	I.chg. in ver.
CONFIG_FEATURE	-	-	-	-	2005

Elements

Designation	Element name	Mandatory/ Optional	Single/ Multiple	Explanation	Default value	Data type	Field length	Lang. specific	I.chg. in ver.
Feature identifier	**FT_ID**	Mandatory	Single	Unique identifier of the feature. This identifier ist required for referencing the feature from a classification group.	-	**dtSTRING**	60	-	-

Elements

Designation	Element name	Mandatory/ Optional	Single/ Multiple	Explanation	Default value	Data type	Field length	Lang. specific	I.chg. in ver.
Feature name	**FT_NAME**	Mandatory	Single	This element defines the feature name. 2005fd: The maximum length has been extended from 60 characters to 80 characters.	-	**dtML-STRING**	80	Yes	2005fd
Feature short name	**FT_SHORTNAME**	Optional	Single	Short name of the feature in addition to its name 2005fd: New element	-	**dtML-STRING**	80	Yes	2005fd

Feature description	**FT_DESCR**	Optional	Single	Description of the feature and its semantics; it does not describe the value of the feature.
				This element is especially usefull for describing user-defined, non-standardized features.
				2005fd: The maximum length has been extended from 250 characters to 16,000 characters.
				Example
				`<FT_NAME>Colour</FT_NAME>`
				`<FT_DESCR>The feature color represents the color of the tabletop, but not the colour of the table legs.</FT_DESCR>`
					-	**dtML-STRING**	16000	Yes	2005fd

Version of the feature	**FT_VERSION**	Optional	Single	Detailled information on the version of the feature	-	-	-	-	2005fd
Feature group ID reference	**FT_GROUP_IDREF**	Optional	Single	Reference to the unique ID of a feature group. The reference must point to a **FT_GROUP_ID**, which has been defined in the **FT_GROUP** element for the respective classification system. 2005: New element	-	**dtSTRING**	60	-	2005
Feature group name	**FT_GROUP_NAME**	Optional	Single	Specifies the name of the feature group; e.g., "Technical features" 2005: New element	-	**dtML-STRING**	80	Yes	2005
Feature dependencies	**FT_DEPENDENCIES**	Optional	Single	List of features on which the current feature depends	-	-	-	-	2005

Elements

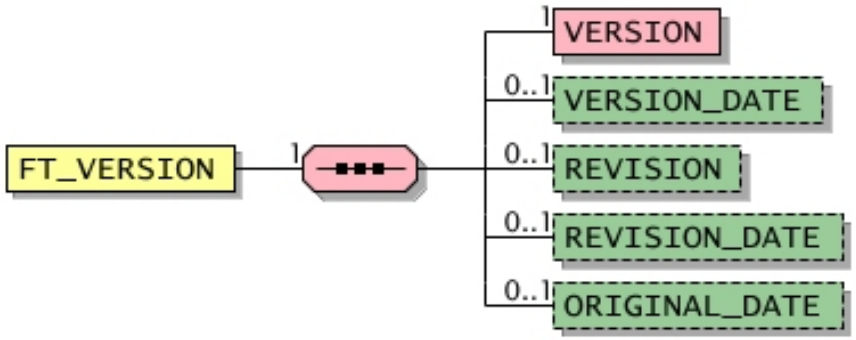
Designation	Element name	Mandatory/ Optional	Single/ Multiple	Explanation	Default value	Data type	Field length	Lang. specific	I.chg. in ver.
Feature content definition	**FEATURE_CONTENT**	Optional	Single	Detailled information on the feature content, e.g., data type, unit of measurement, domain of values, synonyms, and many more characteristics 	-	-	-	-	2005

FT_VERSION

(Version of the feature)

This element contains detailled information on the version of the feature and its version history.

2005fd: New element



General

Used in	Default value	Data type	Field length	Lang. specific	I.chg. in ver.
FTEMPLATE	-	-	-	-	2005fd

Elements

Designation	Element name	Mandatory/ Optional	Single/ Multiple	Explanation	Default value	Data type	Field length	Lang. specific	I.chg. in ver.
Version	**VERSION**	Mandatory	Single	Detailled information on the version 2005fd: New element	-	**dtSTRING**	20	-	2005fd
Version date	**VERSION_DATE**	Optional	Single	Date of the given version 2005fd: New element	-	**dtDATETI-ME**	-	-	2005fd
Revision	**REVISION**	Optional	Single	Revision number of the given version 2005fd: New element	-	**dtSTRING**	20	-	2005fd

Elements

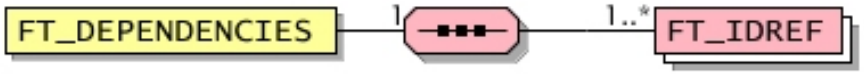
Designation	Element name	Mandatory/ Optional	Single/ Multiple	Explanation	Default value	Data type	Field length	Lang. specific	I.chg. in ver.
Revision date	**REVISION_DATE**	Optional	Single	Date of the latest revision  2005fd: New element	-	**dtDATETIME**	-	-	2005fd
Original date	**ORIGINAL_DATE**	Optional	Single	Date of the first version in its first revision  2005fd: New element	-	**dtDATETIME**	-	-	2005fd

FT_DEPENDENCIES

(Feature dependencies)

This element contais a list of feature on which the current feature depends; hence it is possible to express, for instance, that the feature 'length' depends on the feature 'temperature'. The features that determine the current feature are referenced by their identifier.

2005: New element



General

Used in	Default value	Data type	Field length	Lang. specific	I.chg. in ver.
FTEMPLATE	-	-	-	-	2005

Elements

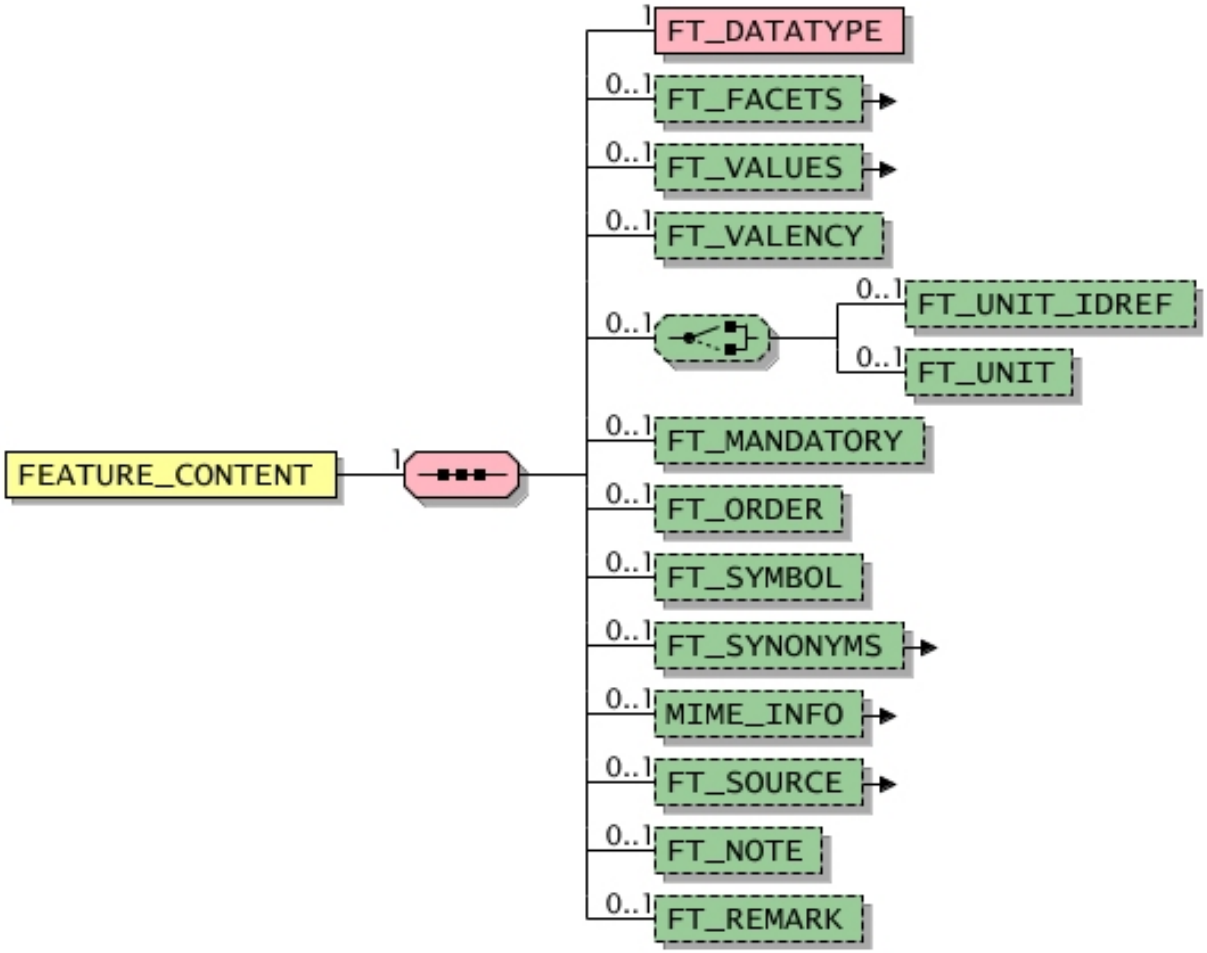
Designation	Element name	Mandatory/ Optional	Single/ Multiple	Explanation	Default value	Data type	Field length	Lang. specific	I.chg. in ver.
Feature reference	**FT_IDREF**	Mandatory	Multiple	Reference to the unique ID of a feature (see**CLASSIFICATION_SYSTEM_FEATURE_TEMPLATE**)	-	**dtSTRING**	60	-	-

FEATURE_CONTENT

(Feature content definition)

This element contains detailled information on the feature content, e.g., data type, unit of measurement, application, synonyms, and many more characteristics.

2005fd: New element
2005: The sub-element **FT_DOMAIN_VALUES** was renamed to **FT_VALUES**.



General

Used in	Default value	Data type	Field length	Lang. specific	I.chg. in ver.
FTEMPLATE	-	-	-	-	2005

Elements

Designation	Element name	Mandatory/ Optional	Single/ Multiple	Explanation	Default value	Data type	Field length	Lang. specific	I.chg. in ver.
Feature data type	**FT_DATATYPE**	Mandatory	Single	This element contains the data type of the feature. See also: **Permitted values for element FT_DATATYPE**	-	**dtSTRING**	20	-	-
Data type restrictions	**FT_FACETS**	Optional	Single	List of data type restrictions 	-	-	-	-	2005fd
Feature domain values	**FT_VALUES**	Optional	Single	List of allowed values for the feature (only available for enumerative features) 	-	-	-	-	2005
Feature valency	**FT_VALENCY**	Optional	Single	Indicates whether the product feature can have more than one value (**multivalent**) or only one value (**univalent**).  2005fd: New element See also: **Permitted values for element FT_VALENCY**	univa-lent	**dtSTRING**	20	-	2005fd
Feature unit ID reference	**FT_UNIT_IDREF**	Optional	Single	Reference to the unique ID of a unit of measurement. The reference must point to a **UNIT_ID**, which has been defined in the **UNIT** element for the respective classification system. This element can only be used for defining features of a classification system. Therefore, it can not used on the product level for defining static features (**PRODUCT_FEATURES**) or for configuration purposes (**CONFIG_FEATURE**).  2005fd: This new element replaces with a modified semantics the former **FT_UNIT** element.	-	**dtSTRING**	60	-	2005fd
Feature unit	**FT_UNIT**	Optional	Single	Unit of measurement for the feature; the unit should be coded in accordance with the **dtUNIT** data type.  2005fd: The maximum length has been extended from 20 characters to 80 characters.	-	**dtSTRING**	80	-	2005fd
Mandatory feature	**FT_MANDATORY**	Optional	Single	This element specifies, whether the feature is mandatory or optional; if so, the feature must be used when classifying a respective product.	-	**dtBOOLEAN**	-	-	-
Feature order	**FT_ORDER**	Optional	Single	Defines the order (sequence) in which the feature has to be presented in the target system.	-	**dtINTEGER**	-	-	-

Elements

Designation	Element name	Mandatory/ Optional	Single/ Multiple	Explanation	Default value	Data type	Field length	Lang. specific	I.chg. in ver.
Feature symbol	**FT_SYMBOL**	Optional	Single	Symbol of the feature	-	**dtML-STRING**	20	Yes	1.2
Feature synonyms	**FT_SYNONYMS**	Optional	Single	List of synonyms for the feature name 	-	-	-	-	2005fd
Additional multimedia information	**MIME_INFO**	Optional	Single	Information about multimedia files For example an illustration which clarifies the measurements relevant for the feature or any other feature related document could be added here.	-	-	-	-	-
Feature source	**FT_SOURCE**	Optional	Single	Source for the feature definition which has been given in the **FT_DESCR** element; e.g. a reference to a document, standard or definition describing the feature. 	-	-	-	-	2005
Feature note	**FT_NOTE**	Optional	Single	The note should be extracted from the source of the definition (element **FT_SOURCE**). It increases the tangibility of the definition. This element has been adopted from ISO 13584.  2005fd: New element	-	**dtML-STRING**	16000	Yes	2005fd
Feature remark	**FT_REMARK**	Optional	Single	Remark giving additional information about the feature and its definition. This element has been adopted from ISO 13584.  2005fd: New element	-	**dtML-STRING**	16000	Yes	2005fd

Permitted values for element FT_DATATYPE

Designation	Element value	Explanation	I.chg. in ver.
Alphanumeric	alphanumeric	Alphanumeric string, see also data type **dtSTRING**	-
Boolean value	boolean	"true" or "false", see data type **dtBOOLEAN**	-
Class instance type	class_instance_type	Reference to a classification group. By this type it is possible to define a feature that establishes a relationship to another product class; e.g., feature "component". This type has been adopted from the ISO 13584 standard.  2005: New value	2005

Permitted values for element FT_DATATYPE

Designation	Element value	Explanation	l.chg. in ver.
Positive number	count	Positive number, see also data type **dtCOUNT**  2005fd: New value	2005fd
Currency	currency	Currency code, see also data type **dtCURRENCIES**  2005: New value	2005
Date	date	Date, see also data type **dtDATETIME**  2005fd: New value	2005fd
Date and time	date-time	Date and time, see also data type **dtDATETIME**  2005fd: New value	2005fd
Floating-point number	float	Floating-point number, see also data type **dtFLOAT**  2005fd: New value	2005fd
Integer value	integer	Integer value, see also data type **dtINTEGER**	-
Boolean value	logic	"true" or "false", see data type **dtBOOLEAN**	-
Named type	named_type	Named type. This type has been adopted from the ISO 13584 standard.  2005: New value	2005
Number	number	Number, see also data type **dtNUMBER**	-
Numeric	numeric	Numeric, see also data type **dtNUMBER**	-
Integer range	range-integer	Range definition by two integer values (see also**FEATURE , Beispiel 1**)	-
Numeric range	range-numeric	Range definition by two numeric values (see also**FEATURE , Beispiel 1**)	-
Alphanumeric set	set-alphanumeric	Set of alphanumeric values (see also **FEATURE , Beispiel 1**)	-
Integer set	set-integer	Set of integer values (see also **FEATURE , Beispiel 1**)	-
Numeric set	set-numeric	Set of numeric values (see also **FEATURE , Beispiel 1**)	-

Permitted values for element FT_DATATYPE

Designation	Element value	Explanation	l.chg. in ver.
Alphanumeric	string	Alphanumeric string, see also data type **dtSTRING**	-
Time	time	Time, see also data type **dtTIME**  2005fd: New value	2005fd

Permitted values for element FT_VALENCY

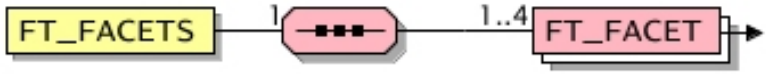
Designation	Element value	Explanation	l.chg. in ver.
Multivalent	multivalent	The feature can have more than one value.	2005fd
Univalent	**univalent**	The feature can only have one value.	2005fd

FT_FACETS

(Data type restrictions)

This element contains a list of data type restrictions. The restrictions (**FT_FACET**) are based on: XML Schema Part 2: Data types Second Edition - W3C Recommendation 28 October 2004 (**http://www.w3.org/TR/xmlschema-2/#dt-constraining-facet**)

2005fd: New element



General

Used in	Default value	Data type	Field length	Lang. specific	l.chg. in ver.
FEATURE_CONTENT	-	-	-	-	2005fd

Elements

Designation	Element name	Mandatory/ Optional	Single/ Multiple	Explanation	Default value	Data type	Field length	Lang. specific	l.chg. in ver.
Data type restriction	**FT_FACET** **- type**	Mandatory	Multiple (4)	Restriction of the datatpye, e.g. maximum field length	-	**dtSTRING**	20	-	2005fd

Example 1: String

The value of the feature ist a string, which has length between 1 and 20 characters.

```
<FEATURE_CONTENT>
    <FT_DATATYPE>string</FT_DATATYPE>
    <FT_FACETS>
        <FT_FACET type="minLength">1</FT_FACET>
        <FT_FACET type="maxLength">20</FT_FACET>
    </FT_FACETS>
</FEATURE_CONTENT>
```

Example 2: Floating-point number
The value of the feature is a floating-point number, which is in the interval]-5,5] and has no more than 4 digits and 2 decimal places.

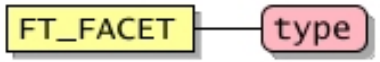
```
<FEATURE_CONTENT>
    <FT_DATATYPE>float</FT_DATATYPE>
    <FT_FACETS>
        <FT_FACET type="minExclusive">-5</FT_FACET>
        <FT_FACET type="maxInclusive">5</FT_FACET>
        <FT_FACET type="totalDigits">4</FT_FACET>
        <FT_FACET type="fractionDigits">2</FT_FACET>
    </FT_FACETS>
</FEATURE_CONTENT>
```

FT_FACET

(Data type restriction)

This element defines a restriction on a data type, e.g., maximum length of a character string.

2005fd: New element



General

Used in	Default value	Data type	Field length	Lang. specific	l.chg. in ver.
FT_FACETS	-	**dtSTRING**	20	-	2005fd

Attributes

Designation	Attribute name	Mandatory/ optional	Explanation	Default value	Data type	Field length	Lang. specific	l.chg. in ver.
Restriction type	type	Mandatory	This attribute contains the type of the restriction. See also: **Permitted values for attribute "type"**	-	**dtSTRING**	20	-	2005fd

Permitted values for attribute "type"

Designation	Attribute value	Explanation	l.chg. in ver.
Minimum length	minLength	Defines the minimum length of all string data types, i.e. 'alphanumeric', 'set-alphanumeric' or 'string'.	2005fd
Maximum length	maxLength	Defines the maximum length of string data types, i.e. 'alphanumeric', 'set-alphanumeric' or 'string'.	2005fd
Included lower bound	minInclusive	Defines the included lower bound of numeric data types, i.e. 'count', 'float', 'integer', 'number', 'numeric', 'range-inter', 'range-numeric', 'set-integer' or 'set-numeric'.	2005fd
Included upper bound	maxInclusive	Defines the included upper bound of numeric data types, i.e. 'count', 'float', 'integer', 'number', 'numeric', 'range-inter', 'range-numeric', 'set-integer' or 'set-numeric'.	2005fd
Excluded lower bound	minExclusive	Defines the excluded lower bound of numeric data types, i.e. 'count', 'float', 'integer', 'number', 'numeric', 'range-inter', 'range-numeric', 'set-integer' or 'set-numeric'.	2005fd
Excluded upper bound	maxExclusive	Defines the excluded upper bound of numeric data types, i.e. 'count', 'float', 'integer', 'number', 'numeric', 'range-inter', 'range-numeric', 'set-integer' or 'set-numeric'.	2005fd
Digits	totalDigits	Defines the maximum number of digits of numeric data types, i.e. 'count', 'float', 'integer', 'number', 'numeric', 'range-integer', 'range-numeric', 'set-integer' oder 'set-numeric'.	2005fd

Permitted values for attribute "type"

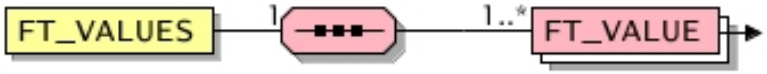
Designation	Attribute value	Explanation	l.chg. in ver.
Decimal places	fractionDigits	Defines the maximum number of decimal places.	2005fd

FT_VALUES

(Feature domain values)

This element contains a list of allowed values for the feature (only available for enumerative features).

2005fd: New element
2005: This element was named **FT_DOMAIN_VALUES** and is now named **FT_VALUES**. The sub-element **FT_DOMAIN_VALUE** was renamed to **FT_VALUE**.



General

Used in	Default value	Data type	Field length	Lang. specific	l.chg. in ver.
FEATURE_CONTENT	-	-	-	-	2005

Elements

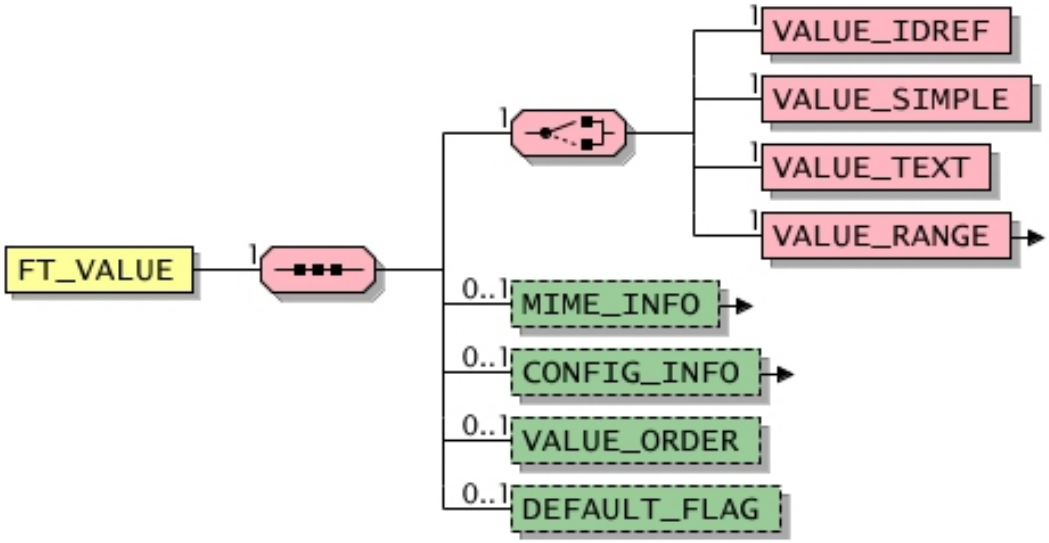
Designation	Element name	Mandatory/ Optional	Single/ Multiple	Explanation	Default value	Data type	Field length	Lang. specific	l.chg. in ver.
Feature value	**FT_VALUE**	Mandatory	Multiple	Value being part of the list of values for this feature	-	-	-	-	2005

FT_VALUE

(Feature value)

This element defines a value as part of the list of values for this feature

2005fd: New element
2005: This element was named **FT_DOMAIN_VALUE** in BMEcat 2005 final draft, now it is named **FT_VALUE**.



General

Used in	Default value	Data type	Field length	Lang. specific	l.chg. in ver.
FT_VALUES	-	-	-	-	2005

Elements

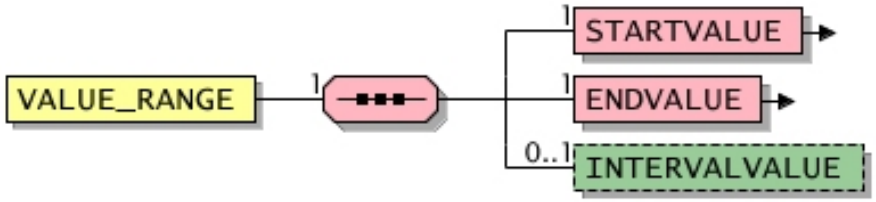
Designation	Element name	Mandatory/ Optional	Single/ Multiple	Explanation	Default value	Data type	Field length	Lang. specific	I.chg. in ver.
Reference to a value	**VALUE_IDREF**	Mandatory	Single	Reference to the unique identifier of a value. The reference must point to a value defined in the document (element **ALLOWED_VALUE** identified by **ALLOWED_VALUE_ID**). This element can only be used for defining features of a classification system; it can not be used for defining features directly for products (**PRODUCT_FEATURES**) or for configurations (**CONFIG_FEATURE**). 2005fd: New element	-	**dtSTRING**	60	-	2005fd
Atomic value	**VALUE_SIMPLE**	Mandatory	Single	A single, atomic value 2005fd: New element	-	**dtSTRING**	80	-	2005fd
Text value	**VALUE_TEXT**	Mandatory	Single	This element contains a text. 2005fd: New element	-	**dtML-STRING**	80	Yes	2005fd
Interval of values	**VALUE_RANGE**	Mandatory	Single	Definition of an interval of values	-	-	-	-	2005fd
Additional multimedia information	**MIME_INFO**	Optional	Single	Information about multimedia files For example an illustration which clarifies the value could be added here.	-	-	-	-	-
Configuration information	**CONFIG_INFO**	Optional	Single	Information on creating order numbers and prices if the enumerative value is subject of product configuration.	-	-	-	-	2005fd
Value order	**VALUE_ORDER**	Optional	Single	The order determines how a list of values is presented in target systems, beginning with the lowest number. 2005fd: New element	-	**dtINTE-GER**	-	-	2005fd
Default flag	**DEFAULT_FLAG**	Optional	Single	Sets the default value of a list of values 2005fd: New element	-	**dtBOO-LEAN**	-	-	2005fd

VALUE_RANGE

(Interval of values)

This element defines an interval of values.

2005fd: New element



General

Used in	Default value	Data type	Field length	Lang. specific	I.chg. in ver.
FT_VALUE	-	-	-	-	2005fd

Elements

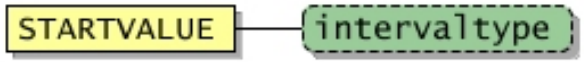
Designation	Element name	Mandatory/ Optional	Single/ Multiple	Explanation	Default value	Data type	Field length	Lang. specific	I.chg. in ver.
Start value	**STARTVALUE** **- intervaltype**	Mandatory	Single	Start value of the interval; the value is part of the interval.	-	**dtNUM-BER**	-	-	2005fd
End value	**ENDVALUE** **- intervaltype**	Mandatory	Single	End value of the interval; the value is part of the interval.	-	**dtNUM-BER**	-	-	2005fd
Distance of values	**INTERVALVALUE**	Optional	Single	Distance between the values in an interval of discrete values. For instance, a domain for the values 110, 120, 130, … 220 can be defined by setting the start and end values (110 and 120) and adding the distance (10). 2005fd: New element	-	**dtNUM-BER**	-	-	2005fd

STARTVALUE

(Start value)

This element sets the start value of the interval, thus the lower bound that is part of the interval.

2005fd: New element



General

Used in	Default value	Data type	Field length	Lang. specific	l.chg. in ver.
VALUE_RANGE	-	**dtNUM-BER**	-	-	2005fd

Attributes

Designation	Attribute name	Mandatory/ optional	Explanation	Default value	Data type	Field length	Lang. specific	l.chg. in ver.
Interval type	intervaltype	Optional	This attribute indicates whether the value is part of the domain or not See also: **Permitted values for attribute "intervaltype"**	include	**dtSTRING**	20	-	2005fd

Permitted values for attribute "intervaltype"

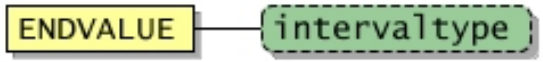
Designation	Attribute value	Explanation	l.chg. in ver.
Value excluded	exclude	Indicates that the value is not part of the domain	2005fd
Value included	**include**	Indicates that the value is part of the domain	2005fd

ENDVALUE

(End value)

This element sets the end value of the interval, thus the upper bound that is part of the interval.

2005fd: New element



General

Used in	Default value	Data type	Field length	Lang. specific	l.chg. in ver.
VALUE_RANGE	-	**dtNUM-BER**	-	-	2005fd

Attributes

Designation	Attribute name	Mandatory/ optional	Explanation	Default value	Data type	Field length	Lang. specific	l.chg. in ver.
Interval type	intervaltype	Optional	This attribute indicates whether the value is part of the domain or not See also: **Permitted values for attribute "intervaltype"**	include	**dtSTRING**	20	-	2005fd

Permitted values for attribute "intervaltype"

Designation	Attribute value	Explanation	l.chg. in ver.
Value excluded	exclude	Indicates that the value is not part of the domain	2005fd
Value included	**include**	Indicates that the value is part of the domain	2005fd

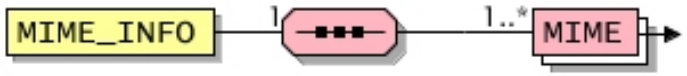
MIME_INFO

(Additional multimedia information)

This element can be used to specify references to additional multimedia documents belonging to a particular article. This makes it possible, for example, to reference photographs or product data sheets of an article at the same time as the catalog data is exchanged.

It is assumed that this additional data is transferred (separately) and that it is imported relative to the directory specified in the **HEADER** as **MIME_ROOT**.

This element can contain any number of **MIME** elements. Each of these elements represents exactly one reference to an additional document. The definition of the **MIME** element is based on the MIME format (Multipurpose Internet Mail Extensions). The MIME format serves to standardize data transfers over the Internet.



General

Used in	Default value	Data type	Field length	Lang. specific	l.chg. in ver.
CONFIG_FEATURE, **FEATURE_CONTENT**, **FORMULA**, **FT_VALUE**	-	-	-	-	-

Elements

Designation	Element name	Mandatory/ Optional	Single/ Multiple	Explanation	Default value	Data type	Field length	Lang. specific	l.chg. in ver.
Multimedia document	**MIME**	Mandatory	Multiple	Information about a multimedia file. The file itself is only referenced and must be transferred separately.	-	-	-	-	-

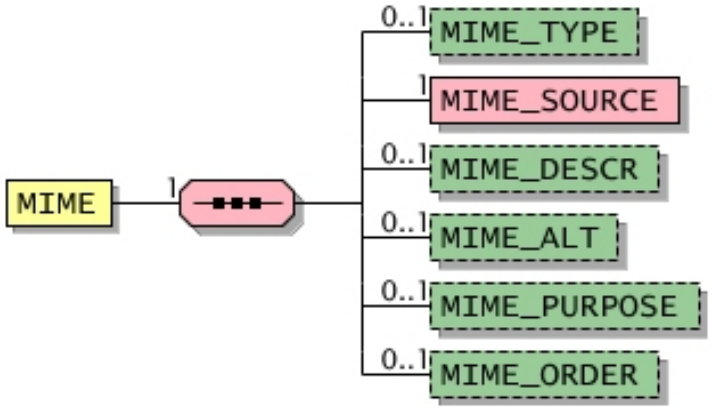
Example

```
<MIME_INFO>
    <MIME>
        <MIME_TYPE>image/jpeg</MIME_TYPE>
        <MIME_SOURCE>55-K-31.jpg</MIME_SOURCE>
        <MIME_DESCR>Frontal view of the standard DIN A4 letter tray</MIME_DESCR>
        <MIME_ALT>Image of the standard DIN A4 letter tray</MIME_ALT>
        <MIME_PURPOSE>normal</MIME_PURPOSE>
    </MIME>
    <MIME>
        <MIME_TYPE>image/jpeg</MIME_TYPE>
        <MIME_SOURCE>55-K-31k.jpg</MIME_SOURCE>
        <MIME_DESCR>Frontal view of the standard DIN A4 letter tray</MIME_DESCR>
        <MIME_ALT>Image of the standard DIN A4 letter tray</MIME_ALT>
        <MIME_PURPOSE>thumbnail</MIME_PURPOSE>
    </MIME>
    <MIME>
        <MIME_TYPE>application/pdf</MIME_TYPE>
        <MIME_SOURCE>office line 2001.pdf</MIME_SOURCE>
        <MIME_DESCR>Designation of the complete product line office line 2001</MIME_DESCR>
        <MIME_ALT>PDF file for office line 2001</MIME_ALT>
        <MIME_PURPOSE>others</MIME_PURPOSE>
    </MIME>
</MIME_INFO>
```

MIME

(Multimedia document)

This element serves for transferring information about a multimedia file. The file itself is only referenced and must be transferred separately.



General

Used in	Default value	Data type	Field length	Lang. specific	I.chg. in ver.
MIME_INFO	-	-	-	-	-

Elements

Designation	Element name	Mandatory/ Optional	Single/ Multiple	Explanation	Default value	Data type	Field length	Lang. specific	I.chg. in ver.
MIME type	**MIME_TYPE**	Optional	Single	Type of the additional document; this element is oriented towards the mime type usual in the Internet (**ftp://ftp.isi.edu/in-notes/rfc1341.txt**) See also: **Predefined values for element MIME_TYPE**	-	**dtSTRING**	30	-	-
Source	**MIME_SOURCE**	Mandatory	Single	The relative path and the file name or URL address. The MIME_SOURCE string is combined with the base path (**MIME_ROOT**) specified in the header of the document (attached to it by means of a simple contecatenation). Sub-directories must be separated by means of slashes ("/") (e.g. /public/document/demo.pdf).	-	**dtML-STRING**	255	Yes	-
Designation	**MIME_DESCR**	Optional	Single	Description of the additional file. It will be displayed in the target system.	-	**dtML-STRING**	250	Yes	-

Elements

Designation	Element name	Mandatory/ Optional	Single/ Multiple	Explanation	Default value	Data type	Field length	Lang. specific	l.chg. in ver.
Alternative text	**MIME_ALT**	Optional	Single	Alternative text used if the file cannot be represented in the target system, for example.  2005fd: The maximum length has been extended from 50 characters to 80 characters.	-	**dtML-STRING**	80	Yes	2005fd
Purpose	**MIME_PURPOSE**	Optional	Single	Desired purpose for which the MIME document is to be used in the target system.  2005fd: The list of allowed values has been extended by 'icon' and 'safety_data_sheet'. See also: **Permitted values for element MIME_PURPOSE**	-	**dtSTRING**	20	-	2005fd
Order	**MIME_ORDER**	Optional	Single	Order in which the additional data is to be represented in the target system. When additional documents are listed they should be represented in ascending order (the first document is the one with the lowest number).	-	**dtINTE-GER**	-	-	-

Predefined values for element MIME_TYPE

Designation	Element value	Explanation	l.chg. in ver.
PDF document	application/pdf	(Local) Acrobat PDF format	-
XML file	application/xml	(Local) XML file (see also **http://www.w3.org/TR/xhtml-media-types/xhtml-media-types.html**)	2005fd
GIF	image/gif	(Local) image/graphic in GIF format	-
JPEG	image/jpeg	(Local) image/graphic in JPEG format	-
HTML	text/html	(Local) document in HTML format (within the catalog file system; see also **http://www.w3.org/TR/xhtml-media-types/xhtml-media-types.html**)	-
Text	text/plain	(Local) unformatted text file	-
URL	url	Link to a resource on the Internet (or Intranet); this is not an official MIME type but will be used here anyway. Example: "http://www.bmecat.org"	-
...	User defined value, format: [\w\-\.]{1,30}	All MIME types can be used. It cannot be guaranteed, however, that the target systems will be able to represent them.	-

Permitted values for element MIME_PURPOSE

Designation	Element value	Explanation	l.chg. in ver.
Product data sheet	data_sheet	Product data sheet (e.g., technical drawing)	-
Detail view	detail	Enlarged image	-

Permitted values for element MIME_PURPOSE

Designation	Element value	Explanation	I.chg. in ver.
Icon	icon	Small icon, e.g, indicating the fullfilment of a standard  2005fd: New value	2005fd
Logo	logo	Product or supplier logo	1.2_fd
Normal view	normal	Normal view (normal size)	-
Safety data sheet	safety_data_sheet	Safety data sheet (for dangerous materials, for example)  2005fd: New value	2005fd
Thumbnail view	thumbnail	Preview (small)	-
Others	others	Should none of the other values be suitable, others can be used.	-

Example
References to an image file and a product data sheet belonging to the “Charlie casual shirt” must be transferred at the same time as the product data is being exchanged.

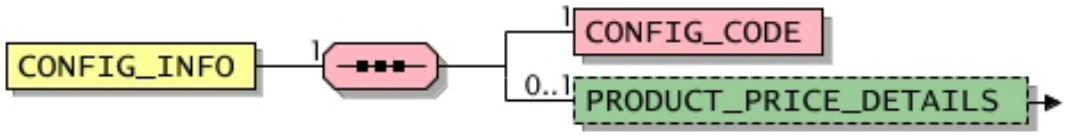
```
<MIME_INFO>
    <MIME>
        <MIME_TYPE>image/jpeg</MIME_TYPE>
        <MIME_SOURCE>charlie.jpg</MIME_SOURCE>
        <MIME_DESCR>Front view of our casual shirt</MIME_DESCR>
        <MIME_ALT>Photo of Charlie</MIME_ALT>
        <MIME_PURPOSE>normal</MIME_PURPOSE>
    </MIME>
    <MIME>
        <MIME_TYPE>application/pdf</MIME_TYPE>
        <MIME_SOURCE>charlie.pdf</MIME_SOURCE>
        <MIME_DESCR>Designation of the production process</MIME_DESCR>
        <MIME_ALT>PDF file belonging to Charlie</MIME_ALT>
        <MIME_PURPOSE>data_sheet</MIME_PURPOSE>
    </MIME>
</MIME_INFO>
```

CONFIG_INFO

(Configuration information)

This element contains information on creating order numbers and prices if the enumerative value is subject of product configuration.

2005fd: New element



General

Used in	Default value	Data type	Field length	Lang. specific	I.chg. in ver.
FT_VALUE	-	-	-	-	2005fd

Elements

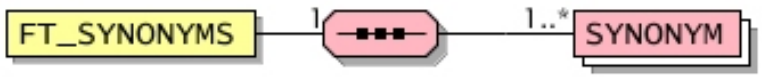
Designation	Element name	Mandatory/ Optional	Single/ Multiple	Explanation	Default value	Data type	Field length	Lang. specific	I.chg. in ver.
Order number extension	**CONFIG_CODE**	Mandatory	Single	In order to generate the order number of configurated products, this element can be used for coding the result of each configuration step; the unique code is added to the base order number. By adding these codes for each configuration step a unique order number is created. If the configuration requires more than one configuration step, it should be guaranted that the extensions can be separated. A solution is to standardize the length of each added code; for instance, adding 3 characters, e.g., "003"="black". Another solution is to separate the codes by a hyphen (e.g., "-red"). 2005fd: New element	-	**dtSTRING**	50	-	2005fd
Price details	**PRODUCT_PRICE_DETAILS**	Optional	Single	Price information for the product In this context the element is used to specifiy the allowance or charge which is added by this feature to the final configuration price.	-	-	-	-	2005fd

FT_SYNONYMS

(Feature synonyms)

This element contains a list of synonyms for the feature name.

2005fd: New element



General

Used in	Default value	Data type	Field length	Lang. specific	l.chg. in ver.
FEATURE_CONTENT	-	-	-	-	2005fd

Elements

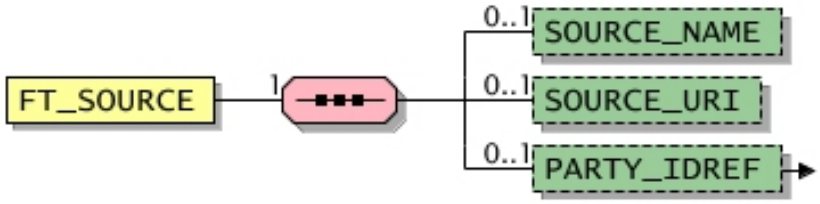
Designation	Element name	Mandatory/ Optional	Single/ Multiple	Explanation	Default value	Data type	Field length	Lang. specific	l.chg. in ver.
Synonym	**SYNONYM**	Mandatory	Multiple	The synonym support name-based product search. 2005fd: The maximum length has been extended from 60 characters to 80 characters.	-	**dtML-STRING**	80	Yes	2005fd

FT_SOURCE

(Feature source)

This element contains the source for the feature definition which has been given in the **FT_DESCR** element; e.g. a reference to a document, standard or definition describing the feature.

2005fd: New element
2005: The sub-element **SOURCE_DESCR** was renamed to **SOURCE_NAME**.



General

Used in	Default value	Data type	Field length	Lang. specific	l.chg. in ver.
FEATURE_CONTENT	-	-	-	-	2005

Elements

Designation	Element name	Mandatory/ Optional	Single/ Multiple	Explanation	Default value	Data type	Field length	Lang. specific	l.chg. in ver.
Source description	**SOURCE_NAME**	Optional	Single	Description of the source, e.g., the name of the document or standard 2005fd: New element 2005: This element was named **SOURCE_DESCR** in Version 2005 final draft, now it is named **SOURCE_NAME**. The maximum length has been reduced from 250 characters to 80 characters.	-	**dtML-STRING**	80	Yes	2005
URI of the source	**SOURCE_URI**	Optional	Single	URI of the source, e.g., pointing to the document or standard 2005fd: New element	-	**dtSTRING**	255	-	2005fd

Elements

Designation	Element name	Mandatory/ Optional	Single/ Multiple	Explanation	Default value	Data type	Field length	Lang. specific	I.chg. in ver.
Reference to a business partner	**PARTY_IDREF - type**	Optional	Single	Reference to a business partner. It contains the unique identifier (**PARTY_ID**) of the respective party (element **PARTY**). In this context the element is used to reference the organisation which is responsible for the specification of the element. 	-	**dtSTRING**	250	-	2005fd

PARTY_IDREF

(Reference to a business partner)

This element provides a reference to a business partner. It contains the unique identifier (**PARTY_ID**) of the respective party (element **PARTY**).

2005fd: New element

General

Used in	Default value	Data type	Field length	Lang. specific	l.chg. in ver.
FORMULA_SOURCE, **FT_SOURCE**	-	**dtSTRING**	250	-	2005fd

Attributes

Designation	Attribute name	Mandatory/ optional	Explanation	Default value	Data type	Field length	Lang. specific	l.chg. in ver.
Coding standard	type	Optional	This attribute is used to state the coding standard to which the identifier (**PARTY_ID**) adheres. The most common coding standards are predefined. See also: **Predefined values for attribute "type"**	-	**dtSTRING**	250	-	1.2_fd

Predefined values for attribute "type"

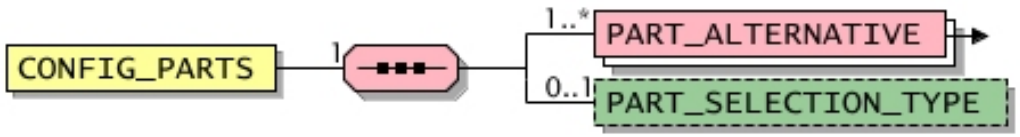
Designation	Attribute value	Explanation	l.chg. in ver.
Buyer-specific number	buyer_specific	Identification number defined by the buyer	-
Customer specific number	customer_specific	Identification number defined by the customer	2005fd
Dun & Bradstreet	duns	DUNS-Number (see also **http://dbuk.dnb.com/english/DataBase/duns.htm**)	-
Global location number	iln	Internationally called GLN (see GLN below)	-
Global location number	gln	Global Location Number GLN (see also **http://www.ean-int.org/locations.html**)	2005fd
Party-specific number	party_specific	Identification number defined by the respective party	2005fd
Supplier-specific number	supplier_specific	Identification number defined by the supplier	-
Other codification standard	User defined value, format: \w{1,250}	Identificator of codification standard. "\w{1,250}" means that the identificator of the codification standard has to be at least 1 chraracter long up to a maximum of 250 characters.	-

CONFIG_PARTS

(Configuration component)

This element defines a component, which can or must be selected in an actual product configuration.

2005fd: New element



General

Used in	Default value	Data type	Field length	Lang. specific	I.chg. in ver.
CONFIG_STEP	-	-	-	-	2005fd

Elements

Designation	Element name	Mandatory/ Optional	Single/ Multiple	Explanation	Default value	Data type	Field length	Lang. specific	I.chg. in ver.
Variant componetnts	**PART_ALTERNATIVE**	Mandatory	Multiple	Contains information about the componente, e.g. reference to the product and implications to the order code and configuration price	-	-	-	-	2005fd
Selection type	**PART_SELECTION_TY-PE**	Optional	Single	If multiple components can be selected the selection type specifies wether the selected components have to be distinct or if one component can be selected multiple times. 2005fd: New element See also: **Permitted values for element PART_SELECTION_TYPE** **Example** If a laptop has two cartriges the value 'distinct' means that both cartriges have two be filled different. The value 'non-distinct' or the absence of the element **PART_SELECTION_TY-PE** allows that both cartriges can be filled the same way.	non-distinct	**dtSTRING**	20	-	2005fd

Permitted values for element PART_SELECTION_TYPE

Designation	Element value	Explanation	I.chg. in ver.
distinct	distinct	This value specifies that in multiple selections all components have to be distinct from each other.	2005fd

Permitted values for element PART_SELECTION_TYPE

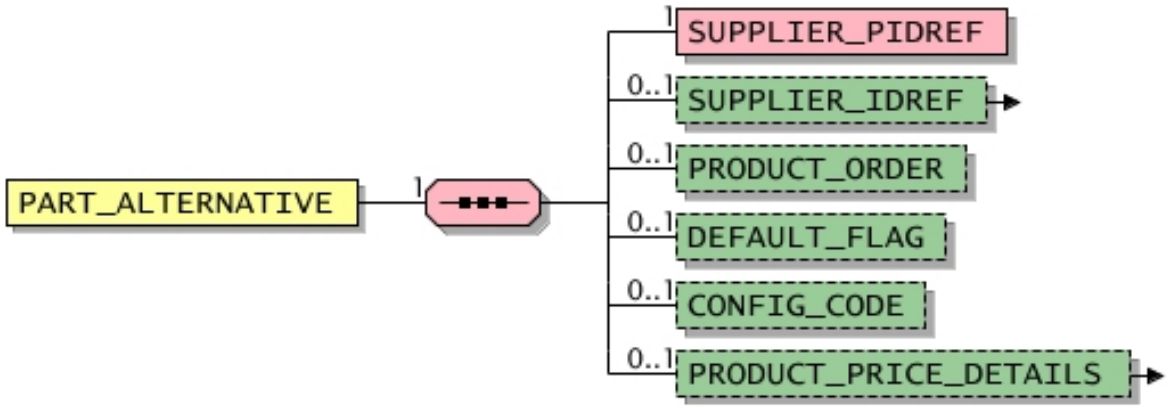
Designation	Element value	Explanation	l.chg. in ver.
non-distinct	**non-distinct**	This value specifies that in multiple selections each components can only be selected once.	2005fd

PART_ALTERNATIVE

(Variant componetnts)

This element contains information about the componente, e.g. reference to the product and implications to the order code and configuration price.

2005fd: New element



General

Used in	Default value	Data type	Field length	Lang. specific	I.chg. in ver.
CONFIG_PARTS	-	-	-	-	2005fd

Elements

Designation	Element name	Mandatory/ Optional	Single/ Multiple	Explanation	Default value	Data type	Field length	Lang. specific	I.chg. in ver.
Reference to a product number	**SUPPLIER_PIDREF**	Mandatory	Single	This element provides a reference to a product number of the supplier. It contains the unique identifier (**SUPPLIER_PID**) that is defined in the document. In this context the element is used to reference to the product number of the sub component. 2005fd: This new element replaces the **ART_ID_TO** element.	-	**dtSTRING**	32	-	2005fd
Reference to supplier	**SUPPLIER_IDREF - type**	Optional	Single	Reference to the supplier. It contains the unique identifier (**PARTY_ID**) of the respective party that is defined in the document (element **PARTY**).	-	**dtSTRING**	250	-	2005fd

Elements

Designation	Element name	Mandatory/ Optional	Single/ Multiple	Explanation	Default value	Data type	Field length	Lang. specific	I.chg. in ver.
Product order	**PRODUCT_ORDER**	Optional	Single	Order in which the product has to be presented in the target system In list presentation of articles, the articles appear in ascending order (first article corresponds to lowest number). When all products of a catalog group are to be presented, sorting should comply with **PRODUCT_TO_CATALOGGROUP_MAP_ORDER**.  2005fd: This new element replaces the former **ARTICLE_ORDER** element.	-	**dtINTEGER**	-	-	2005fd
Default flag	**DEFAULT_FLAG**	Optional	Single	Sets the default value of a list of values  2005fd: New element	-	**dtBOOLEAN**	-	-	2005fd
Order number extension	**CONFIG_CODE**	Optional	Single	In order to generate the order number of configurated products, this element can be used for coding the result of each configuration step; the unique code is added to the base order number. By adding these codes for each configuration step a unique order number is created. If the configuration requires more than one configuration step, it should be guaranted that the extensions can be separated. A solution is to standardize the length of each added code; for instance, adding 3 characters, e.g., "003"="black". Another solution is to separate the codes by a hyphen (e.g., "-red").  2005fd: New element	-	**dtSTRING**	50	-	2005fd
Price details	**PRODUCT_PRICE_DETAILS**	Optional	Single	Price information for the product In this context the element is used to specifiy the allowance or charge which is added by this component to the final configuration price. 	-	-	-	-	2005fd

SUPPLIER_IDREF

(Reference to supplier)

This element contains the unique identifier (**PARTY_ID**) of the respective party that is defined in the document (element **PARTY**).

2005fd: This new element together with the **PARTY** replaces the **SUPPLIER** element.

General

Used in	Default value	Data type	Field length	Lang. specific	l.chg. in ver.
PART_ALTERNATIVE	-	**dtSTRING**	250	-	2005fd

Attributes

Designation	Attribute name	Mandatory/ optional	Explanation	Default value	Data type	Field length	Lang. specific	l.chg. in ver.
Coding standard	type	Optional	This attribute is used to state the coding standard to which the identifier (**PARTY_ID**) adheres. The most common coding standards are predefined. See also: **Predefined values for attribute "type"**	-	**dtSTRING**	250	-	1.2_fd

Predefined values for attribute "type"

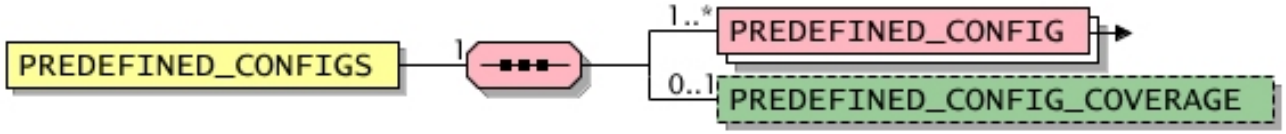
Designation	Attribute value	Explanation	l.chg. in ver.
Buyer-specific number	buyer_specific	Identification number defined by the buyer	-
Customer specific number	customer_specific	Identification number defined by the customer	2005fd
Dun & Bradstreet	duns	DUNS-Number (see also **http://dbuk.dnb.com/english/DataBase/duns.htm**)	-
Global location number	iln	Internationally called GLN (see GLN below)	-
Global location number	gln	Global Location Number GLN (see also **http://www.ean-int.org/locations.html**)	2005fd
Party-specific number	party_specific	Identification number defined by the respective party	2005fd
Supplier-specific number	supplier_specific	Identification number defined by the supplier	-
Other codification standard	User defined value, format: \w{1,250}	Identificator of codification standard. "\w{1,250}" means that the identificator of the codification standard has to be at least 1 chraracter long up to a maximum of 250 characters.	-

PREDEFINED_CONFIGS

(Predefined configurations)

This element contains a list of predefined configurations and allows to specify wether this list covers all valid configurations or only parts.

2005fd: New element



General

Used in	Default value	Data type	Field length	Lang. specific	l.chg. in ver.
PRODUCT_CONFIG_DETAILS	-	-	-	-	2005fd

Elements

Designation	Element name	Mandatory/ Optional	Single/ Multiple	Explanation	Default value	Data type	Field length	Lang. specific	l.chg. in ver.
Predefined configuration	**PREDEFINED_CONFIG**	Mandatory	Multiple	Details for a predefined configuration	-	-	-	-	2005fd
Configuration coverage	**PREDEFINED_CONFIG_COVERAGE**	Optional	Single	With this element it can be specified wether the list of predefined configurations covers all valid configurations or only some of all valid configurations. If all valid configurations are covered there is no need to specify constraints (**TERM**) in the element **CONFIG_RULES**. 2005fd: New element See also: **Permitted values for element PREDEFINED_CONFIG_COVERAGE**	partial	**dtSTRING**	20	-	2005fd

Permitted values for element PREDEFINED_CONFIG_COVERAGE

Designation	Element value	Explanation	l.chg. in ver.
Full coverage	full	The specified predefined configurations cover all valid configurations.	2005fd
Partial coverage	**partial**	The specified predefined configurations cover only some of the valid configurations.	2005fd

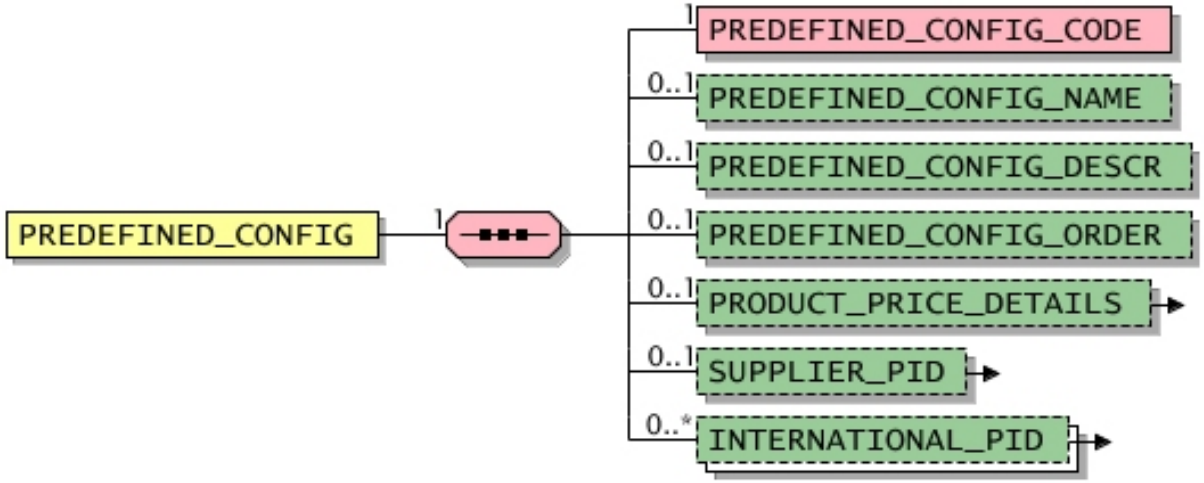
Example 1
A well documented example can be found in chapter **Example: laptop configuration**.

PREDEFINED_CONFIG

(Predefined configuration)

This element allows the specification of a predefined configuration. These represent a product which has been specified with a full pass through all configuration steps with choosing or entering the different values. The configuration or oredr code which has been assembled througout the pass identifies the predefined configuration (**PREDEFINED_CONFIG_CODE**). By this means it is possible to present different standard configurations to the user, to describe them and to assign special prices and product numbers.

2005fd: New element



General

Used in	Default value	Data type	Field length	Lang. specific	I.chg. in ver.
PREDEFINED_CONFIGS	-	-	-	-	2005fd

Elements

Designation	Element name	Mandatory/ Optional	Single/ Multiple	Explanation	Default value	Data type	Field length	Lang. specific	I.chg. in ver.
Configuration code	**PREDEFINED_CONFIG_ CODE**	Mandatory	Single	The configuration code (or order code) contains the product number (**SUPPLIER_PID**) and the configuration codes (**CONFIG_CODE**) of all configuration steps and their values selected or entered in the predefined configuration process. The configuration code represents a fully configured product and is therefore identical with the configuration string which is built up during a identical manual configuration. It is the uique identifier for the element **PREDEFINED_CONFIG**.  2005fd: New element	-	**dtSTRING**	6000	-	2005fd
Name of the configuration	**PREDEFINED_CONFIG_ NAME**	Optional	Single	This element is used to specify the name of the predefined product (e.g. standard laptop or laptop high end model).  2005fd: New element	-	**dtML-STRING**	100	Yes	2005fd
Description of the configuration	**PREDEFINED_CONFIG_ DESCR**	Optional	Single	This element is used to decribe the predefined product in detail (e.g. equipment or application range of the product).  2005fd: New element	-	**dtML-STRING**	250	Yes	2005fd
Configuration order	**PREDEFINED_CONFIG_ ORDER**	Optional	Single	Order in which the predefined configurations are represented in the target system. If the predefined configurations are listed they are listed in ascending order (the first predefined configuration corresponds to the **PREDEFINED_CONFIG_ORDER** with the lowest number).  2005fd: New element	-	**dtINTEGER**	-	-	2005fd
Price details	**PRODUCT_PRICE_DETAILS**	Optional	Single	Price information for the product In this context the element is used to specify the price of the predefined configuration. 	-	-	-	-	2005fd

Elements

Designation	Element name	Mandatory/ Optional	Single/ Multiple	Explanation	Default value	Data type	Field length	Lang. specific	I.chg. in ver.
Supplier's product ID	**SUPPLIER_PID** **- type**	Optional	Single	This element contains the product number issued by the supplier. It is determining for ordering the product; it identifies the product in the supplier catalog. In multi-supplier catalogs, however, only the combination of **SUPPLIER_PID** and **SUPPLIER_IDREF** identifies a product.  Some target systems are not able to accept all 32 characters (e.g., SAP max. 18 characters). It is therefore advisable to keep product identifications as short as possible. The element **SUPPLIER_PID** can be used here to assign an individual product number to the predefined configuration e.g. a GTIN number.  This product number has to be distinct within the catalog (if necessary in combination with the element **SUPPLIER_IDREF**). 	-	**dtSTRING**	32	-	2005
International product number	**INTERNATIONAL_PID** **- type**	Optional	Multiple	Indicates an international product number (e.g., EAN). The underlying standard respectively organisation is given in the 'type' attribute. The element **INTERNATIONAL_PID** can be used here to assign an alternative product number to the predefined configuration e.g. a GTIN number. 	-	**dtSTRING**	100	-	2005fd

Example 1
A well documented example can be found in chapter **Example: laptop configuration**.

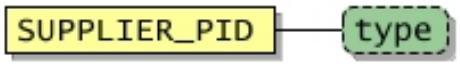
SUPPLIER_PID

(Supplier's product ID)

This element contains the product number issued by the supplier. It is determining for ordering the product; it identifies the product in the supplier catalog. In multi-supplier catalogs, however, only the combination of **SUPPLIER_PID** and **SUPPLIER_IDREF** identifies a product.

Some target systems are not able to accept all 32 characters (e.g., SAP max. 18 characters). It is therefore advisable to keep product identifications as short as possible.

2005fd: This new element replaces the **SUPPLIER_AID** element.
2005: The type-attribute was added to this element.



General

Used in	Default value	Data type	Field length	Lang. specific	I.chg. in ver.
PREDEFINED_CONFIG	-	**dtSTRING**	32	-	2005

Attributes

Designation	Attribute name	Mandatory/ optional	Explanation	Default value	Data type	Field length	Lang. specific	I.chg. in ver.
Type of ID	type	Optional	This attribute specifies the type of ID, i.e. indicates the organization that has issued the ID. See also: **Predefined values for attribute "type"**	-	**dtSTRING**	50	-	-

Predefined values for attribute "type"

Designation	Attribute value	Explanation	I.chg. in ver.
Buyer-specific number	buyer_specific	Identification number defined by the buyer	2005
European Article Number	ean	European article number (14 characters), s. **http://www.ean-int.org**	2005
Global Trade Item Number	gtin	Global Trade Item Number, see **http://www.uc-council.org/2005sunrise/global_trade_item_number.html**	2005
Supplier-specific number	supplier_specific	Identification number defined by the supplier	2005

Predefined values for attribute "type"

Designation	Attribute value	Explanation	l.chg. in ver.
Universal Product Code	upc	Universal Product Code; see **http://www.uc-council.org**	2005
User defined type	User defined value, format: \w{1,50}	Identification of the user defined type . "\w{1,50}" means that the type identification has to be at least 1 chraracter long up to a maximum of 50 characters.	2005

INTERNATIONAL_PID

(International product number)

This element contains an international product number (e.g., EAN). The underlying standard respectively organisation is given in the 'type' attribute.

2005fd: This new element replaces with an increased maximum field length (100 characters instead of 14 respectively 50 characters) the former **EAN** and **SUPPLIER_ALT_PID** elements.

General

Used in	Default value	Data type	Field length	Lang. specific	l.chg. in ver.
PREDEFINED_CONFIG	-	**dtSTRING**	100	-	2005fd

Attributes

Designation	Attribute name	Mandatory/ optional	Explanation	Default value	Data type	Field length	Lang. specific	l.chg. in ver.
Type of international product number	type	Optional	Specification of the underlying standard respectively organisation See also: **Predefined values for attribute "type"**	-	**dtSTRING**	50	-	2005fd

Predefined values for attribute "type"

Designation	Attribute value	Explanation	l.chg. in ver.
European Article Number	ean	European article number (14 characters), s. **http://www.ean-int.org**	2005fd
Global Trade Item Number	gtin	Global Trade Item Number, see. **http://www.uc-council.org/ean_ucc_system/pdf/GTIN.pdf**	2005fd
Universal Product Code	upc	Universal Product Code, see **http://www.uc-council.org**	2005fd
User-defined type	User defined value, format: \w{1,50}	Identification of the user-defined type. "\w{1,50}" means that the type identification has to be at least 1 chraracter long up to a maximum of 50 characters.	2005fd

CONFIG_RULES

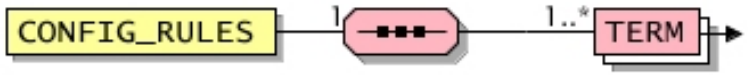
(Configuration rules)

This element contains a list of terms (**TERM**). This terms are serving two functions. First they allow the destinction between valid and not valid configurations. Second they are used to calculate values within configurations. Which of this two function a term serves depends on the content of the attribute "**type**" within the element **TERM**.

The value of the attribute "**type**" is set to "**constraint**" when the terms is uesed for restricting valid configurations. When the term is used to describe a valid configuartion the term expression (**TERM_EXPRESSION**) has to be "true". A non-valid configuration is specified via the term expression (**TERM_EXPRESSION**) "false".

For simplifying the definition and evaluation of these constraints either only valid configurations or only non-valid configurations are permitted within one product. This means that all terms with the attribute "**type**" equals "**constraint**" are containing all the value "true" or are containing all the value "false".

Terms with the type "**function**" are used for calculating values depending on configurations (e.g. the weight of a product depending on the size specified in the configuration).



General

Used in	Default value	Data type	Field length	Lang. specific	I.chg. in ver.
PRODUCT_CONFIG_DETAILS	-	-	-	-	-

Elements

Designation	Element name	Mandatory/ Optional	Single/ Multiple	Explanation	Default value	Data type	Field length	Lang. specific	I.chg. in ver.
Term	**TERM** **- type**	Mandatory	Multiple	Term for calculating values or for restricting configurations Terms are used in the context of configuration rules (**CONFIG_RULES**) only to restrict valid configurations. The operands used in the term conditions (**TERM_CONDITION**) and term expressions (**TERM_EXPRESSION**), have to be the identificators of the referenced configuration steps (**STEP_ID**). Values out of user input are referenced via the **CONFIG_CODE** or the respective value enclosed in quotation marks	-	-	-	-	2005fd

Example 1
In the following example is specified that for a pen which is available in four colours and different point/line sizes the extra fine point size is only available in black.

```
<CONFIG_RULES>
    <TERM type="constraint">
        <TERM_ID>PEN1</TERM_ID>
        <TERM_CONDITION>(STEP1 = "EF") && !(STEP2 = "black")</TERM_CONDITION>
        <TERM_EXPRESSION>false</TERM_EXPRESSION>
    </TERM>
</CONFIG_RULES>
```

Example 2
In the following example is specified that a wooden plate is configurated correct if the edges are not exceeding 5m and the overall size is 20m² at most.

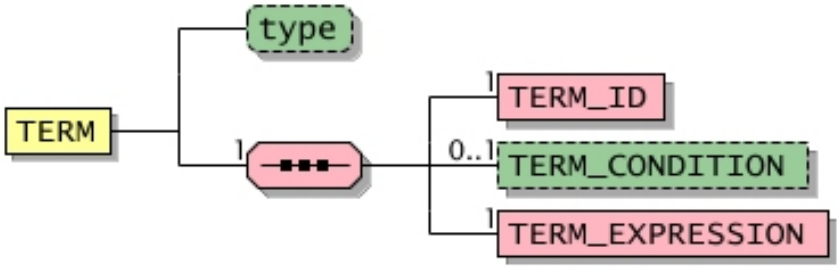
```
<CONFIG_RULES>
    <TERM type="constraint">
        <TERM_ID>PLATE1</TERM_ID>
        <TERM_CONDITION>STEP1 < "5"</TERM_CONDITION>
        <TERM_EXPRESSION>true</TERM_EXPRESSION>
    </TERM>
    <TERM type="constraint">
        <TERM_ID>PLATE2</TERM_ID>
        <TERM_CONDITION>STEP2 < "5"</TERM_CONDITION>
        <TERM_EXPRESSION>true</TERM_EXPRESSION>
    </TERM>
    <TERM type="constraint">
        <TERM_ID>PLATE3</TERM_ID>
        <TERM_CONDITION>(STEP1 * STEP2) < "20"</TERM_CONDITION>
        <TERM_EXPRESSION>String</TERM_EXPRESSION>
    </TERM>
</CONFIG_RULES>
```

TERM

(Term)

This element specifies a term for calculating values or for restricting configurations. Which of this two function the term serves depends on the content of the attribute "**type**".

2005fd: New element



General

Used in	Default value	Data type	Field length	Lang. specific	I.chg. in ver.
CONFIG_RULES, **FORMULA_FUNCTION**	-	-	-	-	2005fd

Attributes

Designation	Attribute name	Mandatory/ optional	Explanation	Default value	Data type	Field length	Lang. specific	I.chg. in ver.
Term type	type	Optional	This attribute specifies the purpose of the term. See also: **Permitted values for attribute "type"**	function	**dtSTRING**	20	-	2005fd

Permitted values for attribute "type"

Designation	Attribute value	Explanation	I.chg. in ver.
Calculation	**function**	The term contains a formula to calculate a value.	2005fd
Constraint	constraint	The term is used to restrict valid configurations.	2005fd

Elements

Designation	Element name	Mandatory/ Optional	Single/ Multiple	Explanation	Default value	Data type	Field length	Lang. specific	I.chg. in ver.
Identification of the term	**TERM_ID**	Mandatory	Single	Unique identifier of the term.  2005fd: New element	-	**dtSTRING**	20	-	2005fd
Condition	**TERM_CONDITION**	Optional	Single	This element contains the condition of the term (e.g. "M1='red' and not(M2>5)"). The meaning of the element depends on the type of the term (**TERM -->type**). In calculation terms (**TERM -->type =function**) the element **TERM_CONDITION** is used to indicate if the expression of the term (**TERM_EXPRESSION**) should be calculated. Normally in these cases there are different terms (**TERM**) with diverse condition (**TERM_CONDITION**) and diverse expressions (**TERM_EXPRESSION**) (see also **Example for price formulas** and **Examples for configuration rules**). If the term is used to express a constraint to specify valid configurations a term is valid if the result of the evaluation of the **TERM_CONDITION** equals the evaluation of **TERM_EXPRESSION**. If all configuartion terms are valid the whole configuration is valid (see also **Examples for configuration rules**. This means that in case of configurations the meaning of the content of the **TERM_CONDITION** depends on the value of the **TERM_EXPRESSION**. Is the valuer "true" the **TERM_CONDITION** specifies the conditions for a valid product. Is the value "false" the element **TERM_CONDITION** specifies situation which are not allowed for valid products. The language to define the conditions is defined close to terms from the language javascript (see also **http://web.archive.org/web/20040211195031/http://developer.netscape.com/library/manuals/2000/javascript/1.5/guide/**). The content of the condition has to be evaluated to a logical value ("true" oder "false").  2005fd: New element	-	**dtSTRING**	3000	-	2005fd

Elements

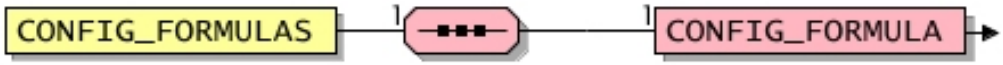
Designation	Element name	Mandatory/ Optional	Single/ Multiple	Explanation	Default value	Data type	Field length	Lang. specific	I.chg. in ver.
Expression	**TERM_EXPRESSION**	Mandatory	Single	This element is used to specify an expression. This expression consists of parameter symbols, mathematical functions, operands and numbers. Conditionals, loops or funftion definitions are not allowed. In the context of a calculation term (**TERM -->type =function**) the expression has to be calculated either if the content of the element **TERM_CONDITION** evaluates to a true result or if the element **TERM_CONDITION** is absent. In this case the element **TERM_EXPRESSION** contains a funktion like P = A * B (see also **Examples to price formulas** and **Examples to configuration rules**). If the term is used to constrict valid configurations (**TERM -->type =constraint**) within configuration rules the element **TERM_EXPRESSION** contains always either "true" or "false" (see also **CONFIG_RULES**). The language to define the expressions is defined close to terms from the language javascript (see also **http://web.archive.org/web/20040211195031/http://developer.netscape.com/library/manuals/2000/javascript/1.5/guide/**).  2005fd: New element	-	**dtSTRING**	3000	-	2005fd

CONFIG_FORMULAS

(Configuration formulas)

This element contains a list of configuration formulas which refer to formulars of the global formula dictionary.

2005fd: New element



General

Used in	Default value	Data type	Field length	Lang. specific	I.chg. in ver.
PRODUCT_CONFIG_DETAILS	-	-	-	-	2005fd

Elements

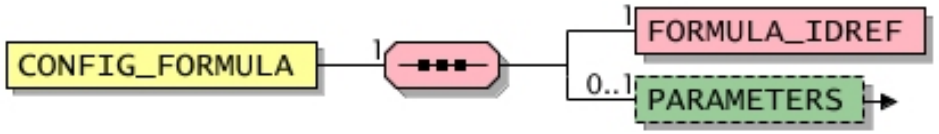
Designation	Element name	Mandatory/ Optional	Single/ Multiple	Explanation	Default value	Data type	Field length	Lang. specific	I.chg. in ver.
Configuration formula	**CONFIG_FORMULA**	Mandatory	Single	Formula for calculating configuration-dependent values	-	-	-	-	2005fd

CONFIG_FORMULA

(Configuration formula)

This element defines a formular for calculating configuration-dependent values on the basis of parameters.

2005fd: New element



General

Used in	Default value	Data type	Field length	Lang. specific	l.chg. in ver.
CONFIG_FORMULAS	-	-	-	-	2005fd

Elements

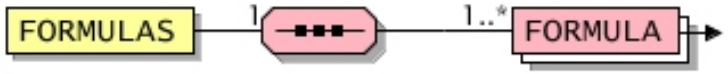
Designation	Element name	Mandatory/ Optional	Single/ Multiple	Explanation	Default value	Data type	Field length	Lang. specific	l.chg. in ver.
Reference to a formula	**FORMULA_IDREF**	Mandatory	Single	Reference to the unique identifier of a formula. The reference must point to a formula defined in the document (**FORMULA** element identified by **FORMULA_ID**). 2005fd: New element	-	**dtSTRING**	60	-	2005fd
Paramters	**PARAMETERS**	Optional	Single	List of paramters which are used in a price formula	-	-	-	-	2005fd

FORMULAS

(Dictionary of formulas)

This element contains a list of formulas that are specified in the document header.

2005fd: New element



General

Used in	Default value	Data type	Field length	Lang. specific	l.chg. in ver.
-	-	-	-	-	2005fd

Elements

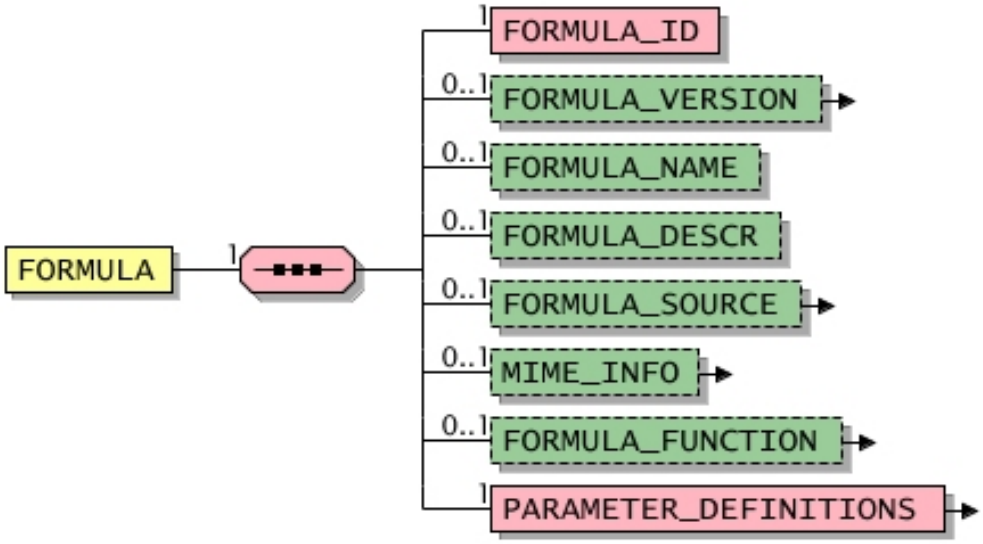
Designation	Element name	Mandatory/ Optional	Single/ Multiple	Explanation	Default value	Data type	Field length	Lang. specific	l.chg. in ver.
Formula	**FORMULA**	Mandatory	Multiple	Definition of a formula on the header level. All required parameters have to be specified here, this can include default values. Eventually, the formula can be referenced on the product level, when referencing a formula, default values can be overwritten with values specific for the respective product.	-	-	-	-	2005fd

FORMULA

(Formula)

This element is used to define a formula on the header level. All required parameters have to be specified here, this can include default values. Eventually, the formula can be referenced on the product level, when referencing a formula, default values can be overwritten with values specific for the respective product.

2005fd: New element



General

Used in	Default value	Data type	Field length	Lang. specific	I.chg. in ver.
FORMULAS	-	-	-	-	2005fd

Elements

Designation	Element name	Mandatory/ Optional	Single/ Multiple	Explanation	Default value	Data type	Field length	Lang. specific	I.chg. in ver.
Formula ID	**FORMULA_ID**	Mandatory	Single	Unique identifier of the formula. This ID is used on the product level to reference the formula. 2005fd: New element	-	**dtSTRING**	60	-	2005fd

Elements

Designation	Element name	Mandatory/ Optional	Single/ Multiple	Explanation	Default value	Data type	Field length	Lang. specific	I.chg. in ver.
Formula version	**FORMULA_VERSION**	Optional	Single	Detailled information on the version of the formula	-	-	-	-	2005fd
Formula name	**FORMULA_NAME**	Optional	Single	e.g., "Formula for livestocks" 2005fd: New element	-	**dtML-STRING**	100	Yes	2005fd
Description of the formula	**FORMULA_DESCR**	Optional	Single	This element is used to describe the formula. 2005fd: New element	-	**dtML-STRING**	250	Yes	2005fd
Formula source	**FORMULA_SOURCE**	Optional	Single	Reference to a document, standard or definition describing the formula.	-	-	-	-	2005
Additional multimedia information	**MIME_INFO**	Optional	Single	Information about multimedia files For example more detailed explanations of the formula or any other formula related documents could be added here.	-	-	-	-	-
Function of the formula	**FORMULA_FUNCTION**	Optional	Single	Mathematical description of the formula	-	-	-	-	2005fd
Parameter definitions	**PARAMETER_DEFINITIONS**	Mandatory	Single	List of parameter definitions	-	-	-	-	2005fd

Example 1
A well documented example can be found in chapter **Example: metal allowances**.

Example 2
In this example the price of the specified product depends on the the delivery time. The price is structured as follows:

- normal (up to 3 days): without allowance
- short (24 hours): 50 euro allowance
- long (up to 2 weeks): 20 euro discount

The price of the product depends on a paramter which has to be entered within a (very small) configuartion by the user. Therefore the example is divided up into three parts: the definition of the formula within the global formula repository is shown below; the specification of the required configuration is described here **Example 2 for element PRODUCT_CONFIG_DETAILS**; the usage of the defined price formulas is described in **Example 2 for element PRODUCT_PRICE_DETAILS**.

One option to define this priceformula is the usage of one formula with three terms (**TERM**) each with different conditions (**TERM_CONDITION**). To access the results of the configuration a paramter "DT" with the **type** "**PARAMETER_ORIGIN -->type =config**"is defined. in this case the content of the element **PARAMETER_ORIGIN** references to the identificator of the configuration step.

```
<FORMULA>
    <FORMULA_ID>33</FORMULA_ID>
    <FORMULA_NAME>Delivery speed</FORMULA_NAME>
    <FORMULA_FUNCTION>
        <TERM type="function">
            <TERM_ID>1</TERM_ID>
            <TERM_CONDITION>DT="N"</TERM_CONDITION>
            <TERM_EXPRESSION>PP</TERM_EXPRESSION>
        </TERM>
        <TERM type="function">
            <TERM_ID>2</TERM_ID>
            <TERM_CONDITION>DT="E"</TERM_CONDITION>
            <TERM_EXPRESSION>PP+50</TERM_EXPRESSION>
        </TERM>
        <TERM type="function">
            <TERM_ID>3</TERM_ID>
            <TERM_CONDITION>DT="S"</TERM_CONDITION>
            <TERM_EXPRESSION>PP-20</TERM_EXPRESSION>
        </TERM>
    </FORMULA_FUNCTION>
    <PARAMETER_DEFINITIONS>
        <PARAMETER_DEFINITION>
            <PARAMETER_SYMBOL>PP</PARAMETER_SYMBOL>
            <PARAMETER_BASICS>
                <PARAMETER_NAME>Product price</PARAMETER_NAME>
                <PARAMETER_UNIT>EUR</PARAMETER_UNIT>
            </PARAMETER_BASICS>
            <PARAMETER_ORDER>1</PARAMETER_ORDER>
        </PARAMETER_DEFINITION>
        <PARAMETER_DEFINITION>
            <PARAMETER_SYMBOL>DT</PARAMETER_SYMBOL>
            <PARAMETER_BASICS>
                <PARAMETER_NAME>Delivery time</PARAMETER_NAME>
            </PARAMETER_BASICS>
            <PARAMETER_ORIGIN type="config">S1</PARAMETER_ORIGIN>
            <PARAMETER_ORDER>2</PARAMETER_ORDER>
        </PARAMETER_DEFINITION>
    </PARAMETER_DEFINITIONS>
```

```
</FORMULA>
```

Example 3
In this example the configuration information for a cable with individual length are shown. The order unit should be piece to order any amount of cables with an individual length within one order line. The cable length can be entered from 10 cm up to 1000 m in 1cm steps.

The length of the cable can be entered by the user via a configuration (see also **Example 3 for element PRODUCT_CONFIG_DETAILS**). The ID of the configuration step (**STEP_ID**) is referenced in the definition of the paramter "LENGTH" in the element **PARAMETER_ORIGIN** with the attribute "**type**" = "**config**".

```
<FORMULA>
    <FORMULA_ID>cableconf</FORMULA_ID>
    <FORMULA_NAME>Formel cable with individual length</FORMULA_NAME>
    <FORMULA_FUNCTION>
        <TERM type="function">
            <TERM_ID>1</TERM_ID>
            <TERM_EXPRESSION>KP+(PPM * LENGTH)</TERM_EXPRESSION>
        </TERM>
    </FORMULA_FUNCTION>
    <PARAMETER_DEFINITIONS>
        <PARAMETER_DEFINITION>
            <PARAMETER_SYMBOL>KP</PARAMETER_SYMBOL>
            <PARAMETER_BASICS>
                <PARAMETER_NAME>Base price</PARAMETER_NAME>
                <PARAMETER_DESCR>There is a base price for every tailor made cable</PARAMETER_DESCR>
                <PARAMETER_UNIT>EUR</PARAMETER_UNIT>
            </PARAMETER_BASICS>
            <PARAMETER_DEFAULT_VALUE>5</PARAMETER_DEFAULT_VALUE>
            <PARAMETER_ORDER>1</PARAMETER_ORDER>
        </PARAMETER_DEFINITION>
        <PARAMETER_DEFINITION>
            <PARAMETER_SYMBOL>PPM</PARAMETER_SYMBOL>
            <PARAMETER_BASICS>
                <PARAMETER_NAME>Price per meter</PARAMETER_NAME>
                <PARAMETER_UNIT>EUR/m</PARAMETER_UNIT>
            </PARAMETER_BASICS>
            <PARAMETER_ORDER>2</PARAMETER_ORDER>
        </PARAMETER_DEFINITION>
        <PARAMETER_DEFINITION>
            <PARAMETER_SYMBOL>LENGTH</PARAMETER_SYMBOL>
            <PARAMETER_BASICS>
                <PARAMETER_NAME>Cable length</PARAMETER_NAME>
                <PARAMETER_UNIT>m</PARAMETER_UNIT>
            </PARAMETER_BASICS>
            <PARAMETER_ORIGIN type="config">CL</PARAMETER_ORIGIN>
            <PARAMETER_ORDER>3</PARAMETER_ORDER>
        </PARAMETER_DEFINITION>
    </PARAMETER_DEFINITIONS>
</FORMULA>
...
<PRODUCT_PRICE_DETAILS>
    <PRODUCT_PRICE price_type="net_list">
        <PRICE_FORMULA>
            <FORMULA_IDREF>cableconf</FORMULA_IDREF>
            <PARAMETERS>
                <PARAMETER>
                    <PARAMETER_SYMBOLREF>PPM</PARAMETER_SYMBOLREF>
                    <PARAMETER_VALUE>1.2</PARAMETER_VALUE>
```

```
                </PARAMETER>
            </PARAMETERS>
        </PRICE_FORMULA>
        <PRICE_CURRENCY>EUR</PRICE_CURRENCY>
        <TAX>.16</TAX>
    </PRODUCT_PRICE>
</PRODUCT_PRICE_DETAILS>
```

Example 4
This example shows how a pen is specified which a individual text can be printed on. The text is limited to 20 characters.

The length of the text is considered within the formula via the property "length" of the string.

The user can enter the printed text in a configuration (see also **Example 4 for element PRODUCT_CONFIG_DETAILS**).

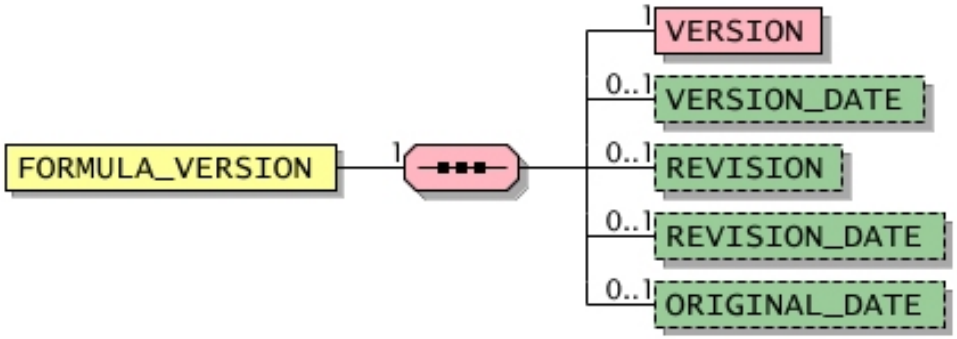
```
<FORMULA>
    <FORMULA_ID>pp</FORMULA_ID>
    <FORMULA_FUNCTION>
        <TERM type="function">
            <TERM_ID>1</TERM_ID>
            <TERM_EXPRESSION>PP+(PPC * TEXT.length)</TERM_EXPRESSION>
        </TERM>
    </FORMULA_FUNCTION>
    <PARAMETER_DEFINITIONS>
        <PARAMETER_DEFINITION>
            <PARAMETER_SYMBOL>PP</PARAMETER_SYMBOL>
            <PARAMETER_BASICS>
                <PARAMETER_NAME>Print price</PARAMETER_NAME>
                <PARAMETER_UNIT>EUR</PARAMETER_UNIT>
            </PARAMETER_BASICS>
            <PARAMETER_DEFAULT_VALUE>10</PARAMETER_DEFAULT_VALUE>
            <PARAMETER_ORDER>1</PARAMETER_ORDER>
        </PARAMETER_DEFINITION>
        <PARAMETER_DEFINITION>
            <PARAMETER_SYMBOL>PPC</PARAMETER_SYMBOL>
            <PARAMETER_BASICS>
                <PARAMETER_NAME>Price per character</PARAMETER_NAME>
                <PARAMETER_UNIT>EUR/character</PARAMETER_UNIT>
            </PARAMETER_BASICS>
            <PARAMETER_ORDER>2</PARAMETER_ORDER>
        </PARAMETER_DEFINITION>
        <PARAMETER_DEFINITION>
            <PARAMETER_SYMBOL>TEXT</PARAMETER_SYMBOL>
            <PARAMETER_BASICS>
                <PARAMETER_NAME>Print text</PARAMETER_NAME>
            </PARAMETER_BASICS>
            <PARAMETER_ORIGIN type="config">PTEXT</PARAMETER_ORIGIN>
            <PARAMETER_ORDER>3</PARAMETER_ORDER>
        </PARAMETER_DEFINITION>
    </PARAMETER_DEFINITIONS>
</FORMULA>
```

FORMULA_VERSION

(Formula version)

This element contains detailled information on the version of the formula.

2005fd: New element



General

Used in	Default value	Data type	Field length	Lang. specific	I.chg. in ver.
FORMULA	-	-	-	-	2005fd

Elements

Designation	Element name	Mandatory/ Optional	Single/ Multiple	Explanation	Default value	Data type	Field length	Lang. specific	I.chg. in ver.
Version	**VERSION**	Mandatory	Single	Detailled information on the version 2005fd: New element	-	**dtSTRING**	20	-	2005fd
Version date	**VERSION_DATE**	Optional	Single	Date of the given version 2005fd: New element	-	**dtDATETI-ME**	-	-	2005fd
Revision	**REVISION**	Optional	Single	Revision number of the given version 2005fd: New element	-	**dtSTRING**	20	-	2005fd

Elements

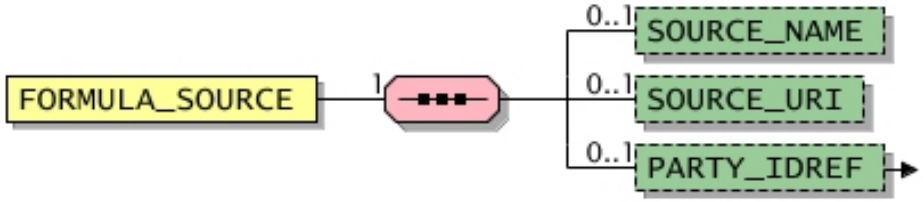
Designation	Element name	Mandatory/ Optional	Single/ Multiple	Explanation	Default value	Data type	Field length	Lang. specific	I.chg. in ver.
Revision date	**REVISION_DATE**	Optional	Single	Date of the latest revision  2005fd: New element	-	**dtDATETIME**	-	-	2005fd
Original date	**ORIGINAL_DATE**	Optional	Single	Date of the first version in its first revision  2005fd: New element	-	**dtDATETIME**	-	-	2005fd

FORMULA_SOURCE

(Formula source)

This element contains a reference to a document, standard or definition describing the formula.

2005fd: New element
2005: The sub-element **SOURCE_DESCR** was renamed to **SOURCE_NAME**.



General

Used in	Default value	Data type	Field length	Lang. specific	l.chg. in ver.
FORMULA	-	-	-	-	2005

Elements

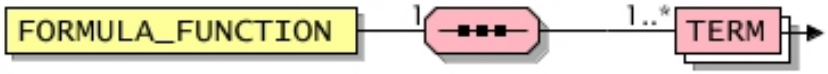
Designation	Element name	Mandatory/ Optional	Single/ Multiple	Explanation	Default value	Data type	Field length	Lang. specific	l.chg. in ver.
Source description	**SOURCE_NAME**	Optional	Single	Description of the source, e.g., the name of the document or standard 2005fd: New element 2005: This element was named **SOURCE_DESCR** in Version 2005 final draft, now it is named **SOURCE_NAME**. The maximum length has been reduced from 250 characters to 80 characters.	-	**dtML-STRING**	80	Yes	2005
URI of the source	**SOURCE_URI**	Optional	Single	URI of the source, e.g., pointing to the document or standard 2005fd: New element	-	**dtSTRING**	255	-	2005fd
Reference to a business partner	**PARTY_IDREF - type**	Optional	Single	Reference to a business partner. It contains the unique identifier (**PARTY_ID**) of the respective party (element **PARTY**). In this context the element is used to reference the organisation which is responsible for the specification of the element.	-	**dtSTRING**	250	-	2005fd

FORMULA_FUNCTION

(Function of the formula)

This element describes the formula in a technical way. Therefore the formula expression can be mathematically evaluated.

2005fd: New element



General

Used in	Default value	Data type	Field length	Lang. specific	l.chg. in ver.
FORMULA	-	-	-	-	2005fd

Elements

Designation	Element name	Mandatory/ Optional	Single/ Multiple	Explanation	Default value	Data type	Field length	Lang. specific	l.chg. in ver.
Term	**TERM** **- type**	Mandatory	Multiple	Term for calculating values or for restricting configurations Terms are used in the context of formulas only to calculate values (**TERM -->type =function**). Terms for the restriction of configurations (**TERM -->type =constraint**) are not allowed here. The operands used in the term conditions (**TERM_CONDITION**) and term expressions (**TERM_EXPRESSION**), have to be parameters symbols (**PARAMETER_SYMBOL**) defined using parameters (**PARAMETER_DEFINITION**).	-	-	-	-	2005fd

Example 1

In the following example the weight of a wood plate is calculated (overallweight = length * width * 0.3). With the parameters O, L and W the function of the formula looks like this:

```
<FORMULA_FUNCTION>
    <TERM type="function">
        <TERM_ID>PLATE1</TERM_ID>
        <TERM_EXPRESSION>O = L * W * 0.3</TERM_EXPRESSION>
    </TERM>
</FORMULA_FUNCTION>
```

Example 2
In the following example the delivery time of the product depends on the selected alternative. With the parameters DURATION and STEP1, which refers to the CONFIG_STEP for selecting the alternative, the function of the formula looks like this:

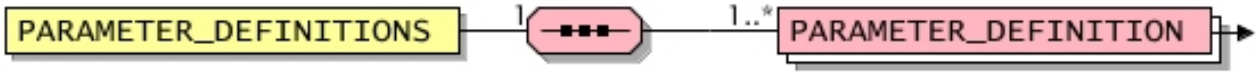
```
<FORMULA_FUNCTION>
    <TERM type="function">
        <TERM_ID>TERM1</TERM_ID>
        <TERM_CONDITION>STEP1 = "A1"</TERM_CONDITION>
        <TERM_EXPRESSION>DURATION = 4</TERM_EXPRESSION>
    </TERM>
    <TERM type="function">
        <TERM_ID>TERM2</TERM_ID>
        <TERM_CONDITION>STEP1 = "A2"</TERM_CONDITION>
        <TERM_EXPRESSION>DURATION = 10</TERM_EXPRESSION>
    </TERM>
    <TERM type="function">
        <TERM_ID>TERM3</TERM_ID>
        <TERM_CONDITION>STEP1 = "A3"</TERM_CONDITION>
        <TERM_EXPRESSION>DURATION = 14</TERM_EXPRESSION>
    </TERM>
</FORMULA_FUNCTION>
```

PARAMETER_DEFINITIONS

(Parameter definitions)

This element contains a list of definitions of parameters, which can be used in formulas.

2005fd: New element



General

Used in	Default value	Data type	Field length	Lang. specific	I.chg. in ver.
FORMULA	-	-	-	-	2005fd

Elements

Designation	Element name	Mandatory/ Optional	Single/ Multiple	Explanation	Default value	Data type	Field length	Lang. specific	I.chg. in ver.
Parameter definition	**PARAMETER_DEFINITI-ON**	Mandatory	Multiple	Definition of the parameter in the document header	-	-	-	-	2005

PARAMETER_DEFINITION

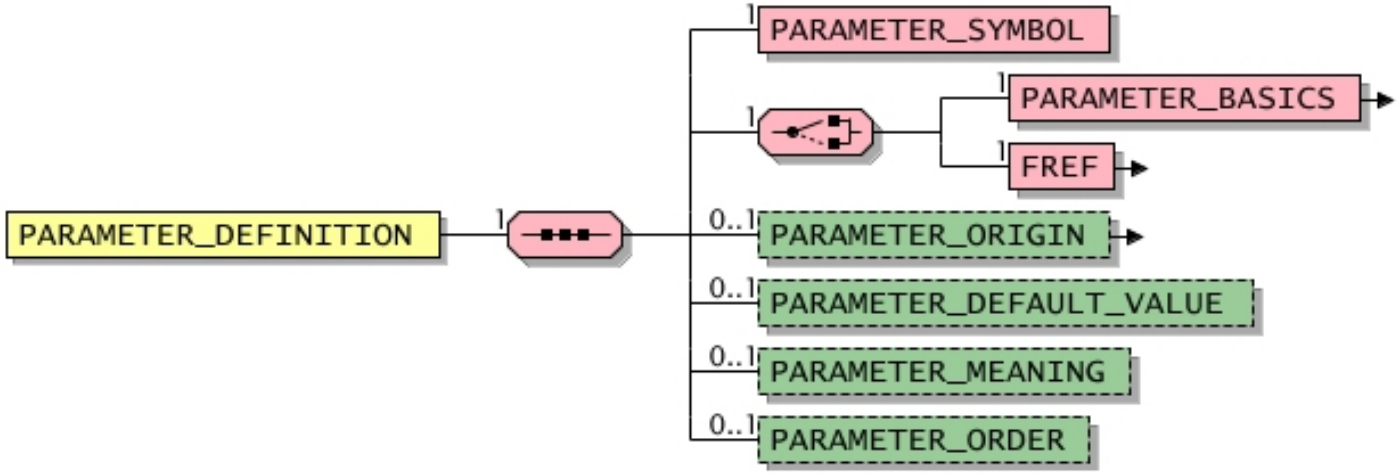
(Parameter definition)

This element defines the parameter in the document header.

Referencing this parameter and setting a product-specific value takes place on the product level by the **PARAMETERS** element.

Besides using the parameters to calculate the formula, the paramters could also be displayed as a list in the target system. Often this allready enables the buyer to evaluate the price.

2005fd: New element
2005: The sub-element **CLASSIFICATION_FEATURE_REF** was renamed to **FREF**.



General

Used in	Default value	Data type	Field length	Lang. specific	l.chg. in ver.
PARAMETER_DEFINITIONS	-	-	-	-	2005

Elements

Designation	Element name	Mandatory/ Optional	Single/ Multiple	Explanation	Default value	Data type	Field length	Lang. specific	I.chg. in ver.
Parameter symbol	**PARAMETER_SYMBOL**	Mandatory	Single	This element contains the parameter symbol. The symbol can be used in formulas where its represents the parameter. In addition, the symbol can be used on the product level for setting product-specific parameter values.  The symbol must start with a character followed by a combination of characters and numbers. Country-specific characters, i.e. vowels, are not allowed.  2005fd: New element	-	**dtSTRING**	60	-	2005fd
Basic parameter information	**PARAMETER_BASICS**	Mandatory	Single	Basic information on the paraemter; it is not necessary, if the parameter has been derived from a property of a classification system (then, it is described there) 	-	-	-	-	2005fd
Reference to a feature	**FREF**	Mandatory	Single	Reference to a feature which is defined in a classification system 	-	-	-	-	2005
Parameter origin	**PARAMETER_ORIGIN - type**	Optional	Single	This element determines the origin of the parameter. 	-	**dtML-STRING**	6000	Yes	2005fd
Default value of the parameter	**PARAMETER_ DEFAULT_VALUE**	Optional	Single	This element sets a default value for the parameter. The parameter can be changed on the product level by the **PARAMETER_VALUE** element.  2005fd: New element	-	**dtSTRING**	250	-	2005fd
Parameter type	**PARAMETER_MEANING**	Optional	Single	Marks the meaning of the parameter  2005fd: New element See also: **Permitted values for element PARAMETER_MEANING**	-	**dtSTRING**	20	-	2005fd
Parameter order	**PARAMETER_ORDER**	Optional	Single	Order (sequence) in which the parameter is listed in target system When parameters are listed they are always represented in ascending order (the first parameter is the one with the lowest number).  2005fd: New element	-	**dtINTE-GER**	-	-	2005fd

Permitted values for element PARAMETER_MEANING

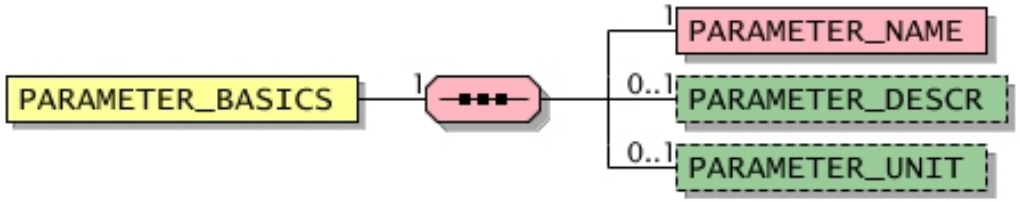
Designation	Element value	Explanation	l.chg. in ver.
Allowance or charge	allow_or_charge	The parameter contains an allowance or charge.	2005fd
Tax rate	tax	The parameter contains a tax rate.	2005fd

PARAMETER_BASICS

(Basic parameter information)

This element provides basic information on the paraemter; it is not necessary, if the parameter has been derived from a property of a classification system (then, it is described there)

2005fd: New element



General

Used in	Default value	Data type	Field length	Lang. specific	l.chg. in ver.
PARAMETER_DEFINITION	-	-	-	-	2005fd

Elements

Designation	Element name	Mandatory/ Optional	Single/ Multiple	Explanation	Default value	Data type	Field length	Lang. specific	l.chg. in ver.
Parameter name	**PARAMETER_NAME**	Mandatory	Single	Name of the parameter. The name is shown in the GUI when listing the values for a product, e.g., Metal weight: 0.5 kg 2005fd: New element	-	**dtML-STRING**	100	Yes	2005fd
Parameter description	**PARAMETER_DESCR**	Optional	Single	This element is used to describe the parameter. 2005fd: New element	-	**dtML-STRING**	250	Yes	2005fd
Parameter unit	**PARAMETER_UNIT**	Optional	Single	Unit of measurement of the parameter. The unit is shown in the GUI when listing the values for a product, e.g., Metal weight: 0.5 kg 2005fd: New element 2005: The maximum length has been reduced from 600 characters to 60 characters.	-	**dtML-STRING**	60	Yes	2005

PARAMETER_ORIGIN

(Parameter origin)

This element determines the origin of the parameter. If the parameter value is given in a **PARAMETER_DEFAULT_VALUE** or **PARAMETER_VALUE** element, this element is not permitted.

The content of this element depends on the content of the attribute '**type**'. The element is language-dependent in order to enable language-specific URISs, if the attribute has the value "uri".

2005fd: New element

General

Used in	Default value	Data type	Field length	Lang. specific	l.chg. in ver.
PARAMETER_DEFINITION	-	**dtML-STRING**	6000	Yes	2005fd

Attributes

Designation	Attribute name	Mandatory/ optional	Explanation	Default value	Data type	Field length	Lang. specific	l.chg. in ver.
Origin type	type	Mandatory	This attribute determines the source of the parameter value. See also: **Permitted values for attribute "type"**	-	**dtSTRING**	20	-	2005fd

Permitted values for attribute "type"

Designation	Attribute value	Explanation	l.chg. in ver.
User input	config	The value is provided by the user during the product configuration. In this case, the **PARAMETER_ORIGIN** element must contain the identifier of the respective configuration step (**STEP_ID**).	2005fd
Formula	formula	The value is the result of another formula. In this case, the **PARAMETER_ORIGIN** element must contain the identifier of the respective formula (**FORMULA_ID**).	2005fd
Value from URI	uri	The value is requested online from the a URI. In this case, the **PARAMETER_ORIGIN** element must contain the identifier of the respective URI. If the internet connection is broken, the target system may determine the parameter value by other means, i.e. user input or local data source.	2005fd

Permitted values for attribute "type"

Designation	Attribute value	Explanation	l.chg. in ver.
XPATH	xpath	The value is referenced by a XPATH expression. In this case, the **PARAMETER_ORIGIN** element must contain the respective XPATH expression. Elements and its values within the BMEcat catalog documents can be referenced by these expressions (see also **http://www.w3.org/TR/xpath**). The starting element for XPATH is the **PRODUCT** element of the respective product (for which the formula is used). **Example 1** A XPATH expression for referencing the **INTERNATIONAL_PID** element looks like this: `<PARAMETER_ORIGIN>PRODUCT_DETAILS/INTERNATIONAL_PID[@type='ean']</PARAMETER_ORIGIN>` . **Example 2** A reference to a product feature is made by its ID (**FT_IDREF**) or its name (**FNAME**): `<PARAMETER_ORIGIN>PRODUCT_FEATURES/FEATURE[FT_IDREF='a12120']/FVALUE</PARAMETER_ORIGIN>` .	2005fd

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Annex

Basic data types

Designation	Data type name	Explanation	Underlying standards	Format	l.chg. in ver.
Boolean value	dtBOOLEAN	The values "true" or "false" can be entered, case-insensitive, i.e. regardless of capital or small letters. **Examples:** TRUE or true or True	Leaned on: XML Schema Part 2: Data types Second Edition W3C Recommendation 28 October 2004 Data type **boolean** **http://www.w3.org/TR/xmlschema-2/#boolean**		-
Integral positive number	dtCOUNT	Integral positive number. No fractions. No negative numbers. "0" is permitted. No separator for thousand is permitted  2005fd: New data type **Examples:** 0; 1; 2; ...	XML Schema Part 2: Data types Second Edition W3C Recommendation 28 October 2004 Data type **nonNegativeInteger** **http://www.w3.org/TR/xmlschema-2/#nonNegativeInteger**		2005fd
Date and time	dtDATETIME	Date and optional time specification  2005fd: This new data type replaces the following types: **dtDATETYPE**, **dtTIMETYPE** and **dtTIMEZONETYPE** **Examples:** 2005-03-27T08:10:30+01:00 (corresponds to: March 27, 2005 08:10:30 CET); 2005-03; 2005-03-27; 2005-03-27T08:10	XML Schema Part 2: Data types Second Edition W3C Recommendation 28 October 2004 Data type **dateTime** **http://www.w3.org/TR/xmlschema-2/#dateTime** see also: ISO 8601: Representations of dates and times	yyyy-mm-ddThh:mm:ss+tt:00	2005fd
Date	dtDATETYPE	Date specification This data type has been replaced by the **dtDATETIME** data type and will not be allowed in the future. **Examples:** 2005-03-27	ISO 8601 Second edition 1997 **http://www.w3.org/TR/NOTE-datetime-970915**	yyyy-mm-dd	-

Designation	Data type name	Explanation	Underlying standards	Format	l.chg. in ver.
Floating-point number	dtFLOAT	Floating-point number in accordance with IEEE 754 The decimal separator is the dot. No separator for thousand is permitted. **Examples:** .314159265358979E+1 15.4	IEEE 754-1985: IEEE Standard for Binary Floating-Point Arithmetic siehe dazu auch: XML Schema Part 2: Data types Second Edition W3C Recommendation 28 October 2004 Data type **float** **http://www.w3.org/TR/xmlschema-2/#float**		-
Integer value	dtINTEGER	Whole number with an optional sign. No fractions. No floating-point numbers. No separator for thousand is permitted. **Examples:** 1; 58502; -13	XML Schema Part 2: Data types Second Edition W3C Recommendation 28 October 2004 Data type **integer** **http://www.w3.org/TR/xmlschema-2/#integer**		-

Multilingual string	dtMLSTRING	This data type differs from the **dtSTRING** data type only in the additional "lang" attribute, which is added to the respective element. The "lang" attribute specifies the language of text used in the element. It has to be coded according to the **dtLANG** data type. This new data type allows multilingual catalogs, thus multilangual content (i.e. texts) can be transferred in a single BMEcat document (see also: **Chapter: Multilingual Catalog Documents**). In a multilingual document, all language-dependent elements of cardinality "single" may occur multiple, though the values of the "lang" attribute must be different.
		
		Examples:
		The short description in the **DESCRIPTION_SHORT** element is provided both in German and English . Note that the "lang" attribute in the second **PRODUCT_DETAILS** element is not necessary, if the default language of the catalog (**CATALOG**) has been set to German.
		
		`<PRODUCT_DETAILS>`
		`  <DESCRIPTION_SHORT lang="deu">Schraubendreher`
		`</DESCRIPTION_SHORT>`
		`  <DESCRIPTION_SHORT lang="eng">Screw driver</DESCRIPTION_SHORT>`
		`</PRODUCT_DETAILS>`
		`...`
		`<PRODUCT_DETAILS>`
		`  <DESCRIPTION_SHORT>Bohrer</DESCRIPTION_SHORT>`
		`  <DESCRIPTION_SHORT lang="eng">Drill</DESCRIPTION_SHORT>`
		`</PRODUCT_DETAILS>`
					-

Designation	Data type name	Explanation	Underlying standards	Format	l.chg. in ver.
Number	dtNUMBER	Numeric value. Used whenever a more specific numeric format is either not required or impractical. There are no restrictions regarding minimum or maximum values, the number of digits or the number of decimal places. The decimal separator is the dot. No separator for thousand is permitted. **Right:** 15 3.14 -123.456E+10 **Wrong:** 13,20 1.000.000			-
Character string	dtSTRING	Character string according to the encoding standard (see also **Chapter: Coding in XML**) **Example:** Screw driver, yellow			-
Time	dtTIME	Time  2005fd: New data type **Example:** 08:10:30	XML Schema Part 2: Data types Second Edition W3C Recommendation 28 October 2004 Datentyp **time** **http://www.w3.org/TR/xmlschema-2/#time** see also: ISO 8601: Representations of dates and times	hh:mm:ss.sss	2005fd
Time	dtTIMETYPE	This data type has been replaced by the **dtDATETIME** data type and will not be allowed in the future. **Example:** 08:10:30	ISO 8601 Second edition 1997 **http://www.w3.org/TR/NOTE-datetime-970915**	hh:mm:ss	-
Time zone	dtTIMEZONETYPE	This data type has been replaced by the **dtDATETIME** data type and will not be allowed in the future. **Example:** +01:00	ISO 8601 Second edition 1997 **http://www.w3.org/TR/NOTE-datetime-970915**	+tt:00	-

Enumeration data types

Designation	Data type name	Explanation	Underlying standards	Format	l.chg. in ver.
Country codes	dtCOUNTRIES	Country codes to indicate areas of availability (**TERRITORY**). The country subdivision codes can be used to subdivide country codes further, for example into regions. **Examples:** DE (Germany); US (USA) DE-NW (North-Rhine Westphalia in Germany) DK-025 (Roskilde Administrative District in Denmark)	ISO 3166-1 Country codes **http://www.iso.org/iso/en/prods-services/iso3166ma/index.html**	6 characters	-
Currency codes	dtCURRENCIES	Currency codes to indicate currencies **Examples:** EUR (Euro); USD (US Dollar)	ISO 4217:1995 Currency codes [ISO-4217:1995] **http://www.unece.org/cefact/recommendations/rec09/rec09.zip** Since 1997 the code "EUR" instead of "XEU" has been in place for Euro. This is proscribed as the official code ISO 4217:2000. It is therefore urgently recommended that "EUR" be used as code for Euro.	3 characters	-
Package unit codes	dtPUNIT	Package unit codes: this list contains the permitted package units **Example:** C62 (piece)	UN/ECE Recommendation 20 / Package Units **http://www.unece.org/cefact/recommendations/rec_index.htm** The package unit codes have been defined in UN/ECE Recommendation 21 (Codes for types of cargo, packages and packaging materials), and the existing code entries in Recommendation 20 have been flagged for deletion. Due to compatibility, BMEcat 2005 sticks to the 3-letter-code of Recommendation 20. However, future versions of BMEcat may switch to Recommendation 21.	maximal 3 characters	1.2_fd
Units of measurement	dtUNIT	This data type is used to represent units of measurement such as m (Meter), kg (Kilogram) or km/h. However it does not contain the Package Units from the section **dtPUNIT**. **Example:** MTR (meter)	UN/ECE Recommendation 20 (all except "Package Units") **http://www.unece.org/cefact/recommendations/rec_index.htm**	maximal 3 characters	-

History of changes Version 2005fd

Change	Description of changes
AREA_IDREF	New element
AREA_REFS	New element
CONFIG_CODE	New element
CONFIG_FEATURE	New element
CONFIG_FORMULA	New element
CONFIG_FORMULAS	New element
CONFIG_INFO	New element
CONFIG_PARTS	New element
CONFIG_STEP	New element
DEFAULT_FLAG	New element
dtCOUNT	New data type
dtDATETIME	This new data type replaces the following types: **dtDATETYPE**, **dtTIMETYPE** and **dtTIMEZONETYPE**
dtTIME	New data type
ENDVALUE	New element
FEATURE_CONTENT	New element
FORMULA	New element
FORMULA_DESCR	New element
FORMULA_FUNCTION	New element
FORMULA_ID	New element
FORMULA_IDREF	New element
FORMULA_NAME	New element
FORMULA_SOURCE	New element
FORMULA_VERSION	New element
FORMULAS	New element
FREF	New element

Change	Description of changes
FT_DATATYPE =count	New value
FT_DATATYPE =date	New value
FT_DATATYPE =date-time	New value
FT_DATATYPE =float	New value
FT_DATATYPE =time	New value
FT_DESCR	The maximum length has been extended from 250 characters to 16,000 characters.
FT_FACET	New element
FT_FACETS	New element
FT_NAME	The maximum length has been extended from 60 characters to 80 characters.
FT_NOTE	New element
FT_REMARK	New element
FT_SHORTNAME	New element
FT_SOURCE	New element
FT_SYNONYMS	New element
FT_UNIT	The maximum length has been extended from 20 characters to 80 characters.
FT_UNIT_IDREF	This new element replaces with a modified semantics the former **FT_UNIT** element.
FT_VALENCY	New element
FT_VALUE	New element
FT_VALUES	New element
FT_VERSION	New element
INTERNATIONAL_PID	This new element replaces with an increased maximum field length (100 characters instead of 14 respectively 50 characters) the former **EAN** and **SUPPLIER_ALT_PID** elements.
INTERVALVALUE	New element
MAX_OCCURANCE	New element
MIME_ALT	The maximum length has been extended from 50 characters to 80 characters.
MIME_PURPOSE	The list of allowed values has been extended by 'icon' and 'safety_data_sheet'.
MIME_PURPOSE =icon	New value

Change	Description of changes
MIME_PURPOSE =safety_data_sheet	New value
MIME_TYPE =application/xml	New value
MIN_OCCURANCE	New element
ORIGINAL_DATE	New element
PARAMETER	New element
PARAMETER_BASICS	New element
PARAMETER_DEFAULT_VALUE	New element
PARAMETER_DEFINITION	New element
PARAMETER_DEFINITIONS	New element
PARAMETER_DESCR	New element
PARAMETER_MEANING	New element
PARAMETER_NAME	New element
PARAMETER_ORDER	New element
PARAMETER_ORIGIN	New element
PARAMETER_SYMBOL	New element
PARAMETER_SYMBOLREF	New element
PARAMETER_UNIT	New element
PARAMETER_VALUE	New element
PARAMETERS	New element
PART_ALTERNATIVE	New element
PART_SELECTION_TYPE	New element
PARTY_IDREF	New element
PREDEFINED_CONFIG	New element
PREDEFINED_CONFIG_CODE	New element
PREDEFINED_CONFIG_COVERAGE	New element

Change	Description of changes
PREDEFINED_CONFIG_DESCR	New element
PREDEFINED_CONFIG_NAME	New element
PREDEFINED_CONFIG_ORDER	New element
PREDEFINED_CONFIGS	New element
PRICE_BASE	New element
PRICE_FLAG -->type	The list of values can now be extended. The list here contains only the predefined values.
PRICE_FLAG -->type =incl_insurance	The new value 'incl_insurance' replaces the value **PRICE_FLAG -->type =incl_assurance**.
PRICE_FLAG -->type =userdefined__	User-defined value
PRICE_FORMULA	New element
PRICE_UNIT	New element
PRICE_UNIT_FACTOR	New element
PRODUCT_CONFIG_DETAILS	New element
PRODUCT_ORDER	This new element replaces the former **ARTICLE_ORDER** element.
PRODUCT_PRICE	This new element replaces with a modified semantics the **ARTICLE_PRICE** element; it has been extended by the following sub-elements: **PRICE_FORMULA**, **AREA_REFS**, **PRICE_BASE**, **PRICE_FLAG**.
PRODUCT_PRICE_DETAILS	This new element replaces with a modified semantics the **ARTICLE_PRICE_DETAILS** element; it has been extended by the following sub-elements: **VALID_START_DATE**, **VALID_END_DATE**
PRODUCT_PRICE -->price_type =on_request	New value
REFERENCE_FEATURE_SYSTEM_NAME =CPV-yyyy-mm-dd	New value
REFERENCE_FEATURE_SYSTEM_NAME =EOTD-yyyy-mm-dd	New value
REFERENCE_FEATURE_SYSTEM_NAME =GPC-x.y	New value
REFERENCE_FEATURE_SYSTEM_NAME =PROFICLASS-x.y	New value
REFERENCE_FEATURE_SYSTEM_NAME =RNTD-x.y	New value

Change	Description of changes
REFERENCE_FEATURE_SYSTEM_NAME =RUS-x.y	New value
REVISION	New element
REVISION_DATE	New element
SOURCE_NAME	New element
SOURCE_URI	New element
STARTVALUE	New element
STEP_DESCR_LONG	New element
STEP_DESCR_SHORT	New element
STEP_HEADER	New element
STEP_ID	New element
STEP_INTERACTION_TYPE	New element
STEP_ORDER	New element
SUPPLIER_IDREF	This new element together with the **PARTY** replaces the **SUPPLIER** element.
SUPPLIER_PID	This new element replaces the **SUPPLIER_AID** element.
SUPPLIER_PIDREF	This new element replaces the **ART_ID_TO** element.
SYNONYM	The maximum length has been extended from 60 characters to 80 characters.
TERM	New element
TERM_CONDITION	New element
TERM_EXPRESSION	New element
TERM_ID	New element
VALID_END_DATE	This new element replaces with a modified semantics the **DATETIME** in the context of PRODUCT_PRICE_DETAILS element and its attribute type='valid_end_date'.
VALID_START_DATE	This new element replaces with a modified semantics the **DATETIME** in the context of PRODUCT_PRICE_DETAILS element and its attribute type='valid_start_date'.
VALUE_IDREF	New element
VALUE_ORDER	New element
VALUE_RANGE	New element
VALUE_SIMPLE	New element

Change	Description of changes
VALUE_TEXT	New element
VERSION	New element
VERSION_DATE	New element

History of changes Version 2005

Change	Description of changes
CALCULATION_SEQUENCE	New element
CONFIG_FEATURE	The sub-element **CLASSIFICATION_FEATURE_REF** was renamed to **FREF**. The sub-element **CLASSIFICATION_SYSTEM_FEATURE_TEMPLATE** was replaced with the fully identical element **FTEMPLATE**. The sequence of **FREF** and **FTEMPLATE** was switched.
EXEMPTION_REASON	New element
FEATURE_CONTENT	The sub-element **FT_DOMAIN_VALUES** was renamed to **FT_VALUES**.
FORMULA_SOURCE	The sub-element **SOURCE_DESCR** was renamed to **SOURCE_NAME**.
FREF	This element was named **CLASSIFICATION_FEATURE_REF** in BMEcat 2005 final draft, now it is named **FREF**.
FT_DATATYPE =class_instance_type	New value
FT_DATATYPE =currency	New value
FT_DATATYPE =named_type	New value
FT_DEPENDENCIES	New element
FT_GROUP_IDREF	New element
FT_GROUP_NAME	New element
FT_SOURCE	The sub-element **SOURCE_DESCR** was renamed to **SOURCE_NAME**.
FT_VALUE	This element was named **FT_DOMAIN_VALUE** in BMEcat 2005 final draft, now it is named **FT_VALUE**.
FT_VALUES	This element was named **FT_DOMAIN_VALUES** and is now named **FT_VALUES**. The sub-element **FT_DOMAIN_VALUE** was renamed to **FT_VALUE**.
FTEMPLATE	New element
JURISDICTION	New element
PARAMETER_DEFINITION	The sub-element **CLASSIFICATION_FEATURE_REF** was renamed to **FREF**.
PARAMETER_UNIT	The maximum length has been reduced from 600 characters to 60 characters.
PRICE_FACTOR	A default value was added.
PRICE_UNIT_FACTOR	A default value was added.
PRODUCT_PRICE	This element has been extended by the sub-element **TAX_DETAILS**.
SOURCE_NAME	This element was named **SOURCE_DESCR** in Version 2005 final draft, now it is named **SOURCE_NAME**. The maximum length has been reduced from 250 characters to 80 characters.
SUPPLIER_PID	The type-attribute was added to this element.

Change	Description of changes
TAX_CATEGORY	New element
TAX_DETAILS	New element
TAX_TYPE	New element

Overview of elements - order by appearance

Amount	Element name	Default value	Data type	Field length	Lang. specific	I.chg. in ver.
1	|_ **PRODUCT_CONFIG_DETAILS**	-	-	-	-	2005fd
1	| |_ SEQUENCE	-	-	-	-	-
1..*	| | |_ **CONFIG_STEP**	-	-	-	-	2005fd
1	| | | |_ SEQUENCE	-	-	-	-	-
1	| | | | |_ **STEP_ID**	-	**dtSTRING**	60	-	2005fd
1..1	| | | | |_ **STEP_HEADER**	-	**dtMLSTRING**	250	Yes	2005fd
0..1	| | | | |_ **STEP_DESCR_SHORT**	-	**dtMLSTRING**	3000	Yes	2005fd
0..1	| | | | |_ **STEP_DESCR_LONG**	-	**dtMLSTRING**	64000	Yes	2005fd
0..1	| | | | |_ **STEP_ORDER**	-	**dtINTEGER**	-	-	2005fd
0..1	| | | | |_ **STEP_INTERACTION_TYPE**	force_ userin- put	**dtSTRING**	20	-	2005fd
0..1	| | | | |_ **CONFIG_CODE**	-	**dtSTRING**	50	-	2005fd
0..1	| | | | |_ **PRODUCT_PRICE_DETAILS**	-	-	-	-	2005fd
1	| | | | | |_ SEQUENCE	-	-	-	-	-
0..1	| | | | | | |_ CHOICE	-	-	-	-	-
0..1	| | | | | | | |_ SEQUENCE	-	-	-	-	-
0..1	| | | | | | | | |_ **VALID_START_DATE**	-	**dtDATETIME**	-	-	2005fd
0..1	| | | | | | | | |_ **VALID_END_DATE**	-	**dtDATETIME**	-	-	2005fd
0..2	| | | | | | | |_ **DATETIME** in the context of PRODUCT_PRICE_DETAILS	-	-	-	-	-
1	| | | | | | | | |_ SEQUENCE	-	-	-	-	-
1	| | | | | | | | | |_ **DATE**	-	**dtDATETYPE**	-	-	-
0..1	| | | | | | | | | |_ **TIME**	-	**dtTIMETYPE**	-	-	-
0..1	| | | | | | | | | |_ **TIMEZONE**	-	**dtTIMEZONETYPE**	-	-	-
0..1	| | | | | | |_ **DAILY_PRICE**	-	**dtBOOLEAN**	-	-	-
1..*	| | | | | | |_ **PRODUCT_PRICE**	-	-	-	-	2005
1	| | | | | | | |_ SEQUENCE	-	-	-	-	-
0..1	| | | | | | | | |_ CHOICE	-	-	-	-	-
0..1	| | | | | | | | | |_ **PRICE_AMOUNT**	-	**dtNUMBER**	-	-	-
0..1	| | | | | | | | | |_ **PRICE_FORMULA**	-	-	-	-	2005fd
1	| | | | | | | | | | |_ SEQUENCE	-	-	-	-	-
1	| | | | | | | | | | | |_ **FORMULA_IDREF**	-	**dtSTRING**	60	-	2005fd
0..1	| | | | | | | | | | | |_ **PARAMETERS**	-	-	-	-	2005fd
1	| | | | | | | | | | | | |_ SEQUENCE	-	-	-	-	-
1..*	| | | | | | | | | | | | | |_ **PARAMETER**	-	-	-	-	2005fd
1	| | | | | | | | | | | | | | |_ SEQUENCE	-	-	-	-	-
1	| | | | | | | | | | | | | | | |_ **PARAMETER_SYMBOLREF**	-	**dtSTRING**	60	-	2005fd
1	| | | | | | | | | | | | | | | |_ **PARAMETER_VALUE**	-	**dtSTRING**	250	-	2005fd
0..1	| | | | | | | | |_ **PRICE_CURRENCY**	-	**dtCURRENCIES**	-	-	-
0..1	| | | | | | | | |_ CHOICE	-	-	-	-	-
0..*	| | | | | | | | | |_ **TAX_DETAILS**	-	-	-	-	2005
1	| | | | | | | | | | |_ SEQUENCE	-	-	-	-	-
0..1	| | | | | | | | | | | |_ **CALCULATION_SEQUENCE**	1	**dtCOUNT**	-	-	2005fd
0..1	| | | | | | | | | | | |_ **TAX_CATEGORY**	-	**dtSTRING**	80	-	2005
0..1	| | | | | | | | | | | |_ **TAX_TYPE**	vat	**dtSTRING**	250	-	2005

Amount	Element name	Default value	Data type	Field length	Lang. specific	l.chg. in ver.
0..1	| | | | | | | | | | | |_ **TAX**	-	**dtNUMBER**	-	-	-
0..1	| | | | | | | | | | | |_ **EXEMPTION_REASON**	-	**dtMLSTRING**	250	Yes	2005
0..1	| | | | | | | | | | | |_ **JURISDICTION**	-	**dtMLSTRING**	250	Yes	2005
0..1	| | | | | | | | | | |_ **TAX**	-	**dtNUMBER**	-	-	-
0..1	| | | | | | | | | |_ **PRICE_FACTOR**	1	**dtNUMBER**	-	-	2005
0..1	| | | | | | | | | |_ **LOWER_BOUND**	-	**dtNUMBER**	-	-	-
0..1	| | | | | | | | | |_ CHOICE	-	-	-	-	-
0..*	| | | | | | | | | | |_ **TERRITORY**	-	**dtCOUNTRIES**	-	-	1.2_fd
0..1	| | | | | | | | | | |_ **AREA_REFS**	-	-	-	-	2005fd
1	| | | | | | | | | | |_ SEQUENCE	-	-	-	-	-
1..*	| | | | | | | | | | | |_ **AREA_IDREF**	-	**dtSTRING**	60	-	2005fd
0..1	| | | | | | | | | |_ **PRICE_BASE**	-	-	-	-	2005fd
1	| | | | | | | | | | |_ SEQUENCE	-	-	-	-	-
1	| | | | | | | | | | | |_ **PRICE_UNIT**	-	**dtPUNIT**	-	-	1.2_fd
0..1	| | | | | | | | | | | |_ **PRICE_UNIT_FACTOR**	1	**dtFLOAT**	-	-	2005
0..*	| | | | | | | | | |_ **PRICE_FLAG**	-	**dtBOOLEAN**	-	-	-
1	| | | | |_ CHOICE	-	-	-	-	-
1	| | | | | |_ **CONFIG_FEATURE**	-	-	-	-	2005
1	| | | | | | |_ SEQUENCE	-	-	-	-	-
1	| | | | | | | |_ CHOICE	-	-	-	-	-
1	| | | | | | | | |_ **FREF**	-	-	-	-	2005
1	| | | | | | | | | |_ SEQUENCE	-	-	-	-	-
1	| | | | | | | | | | |_ **REFERENCE_FEATURE_SYSTEM_NAME**	-	**dtSTRING**	80	-	-
1	| | | | | | | | | | |_ **FT_IDREF**	-	**dtSTRING**	60	-	-
1	| | | | | | | | | |_ **FTEMPLATE**	-	-	-	-	2005
1	| | | | | | | | | |_ SEQUENCE	-	-	-	-	-
1	| | | | | | | | | | |_ **FT_ID**	-	**dtSTRING**	60	-	-
1	| | | | | | | | | | |_ **FT_NAME**	-	**dtMLSTRING**	80	Yes	2005fd
0..1	| | | | | | | | | | |_ **FT_SHORTNAME**	-	**dtMLSTRING**	80	Yes	2005fd
0..1	| | | | | | | | | | |_ **FT_DESCR**	-	**dtMLSTRING**	16000	Yes	2005fd
0..1	| | | | | | | | | | |_ **FT_VERSION**	-	-	-	-	2005fd
1	| | | | | | | | | | | |_ SEQUENCE	-	-	-	-	-
1	| | | | | | | | | | | | |_ **VERSION**	-	**dtSTRING**	20	-	2005fd
0..1	| | | | | | | | | | | | |_ **VERSION_DATE**	-	**dtDATETIME**	-	-	2005fd
0..1	| | | | | | | | | | | | |_ **REVISION**	-	**dtSTRING**	20	-	2005fd
0..1	| | | | | | | | | | | | |_ **REVISION_DATE**	-	**dtDATETIME**	-	-	2005fd
0..1	| | | | | | | | | | | | |_ **ORIGINAL_DATE**	-	**dtDATETIME**	-	-	2005fd
0..1	| | | | | | | | | | |_ CHOICE	-	-	-	-	-
0..1	| | | | | | | | | | | |_ **FT_GROUP_IDREF**	-	**dtSTRING**	60	-	2005
0..1	| | | | | | | | | | | |_ **FT_GROUP_NAME**	-	**dtMLSTRING**	80	Yes	2005
0..1	| | | | | | | | | | |_ **FT_DEPENDENCIES**	-	-	-	-	2005
1	| | | | | | | | | | | |_ SEQUENCE	-	-	-	-	-
1..*	| | | | | | | | | | | | |_ **FT_IDREF**	-	**dtSTRING**	60	-	-
0..1	| | | | | | | | | | |_ **FEATURE_CONTENT**	-	-	-	-	2005
1	| | | | | | | | | | | |_ SEQUENCE	-	-	-	-	-
1	| | | | | | | | | | | | |_ **FT_DATATYPE**	-	**dtSTRING**	20	-	-
0..1	| | | | | | | | | | | | |_ **FT_FACETS**	-	-	-	-	2005fd

Amount	Element name	Default value	Data type	Field length	Lang. specific	l.chg. in ver.
1	|_ SEQUENCE	-	-	-	-	-
1..4	|_ **FT_FACET**	-	**dtSTRING**	20	-	2005fd
0..1	**FT_VALUES**	-	-	-	-	2005
1	|_ SEQUENCE	-	-	-	-	-
1..*	|_ **FT_VALUE**	-	-	-	-	2005
1	|_ SEQUENCE	-	-	-	-	-
1	|_ CHOICE	-	-	-	-	-
1	|_ **VALUE_IDREF**	-	**dtSTRING**	60	-	2005fd
1	|_ **VALUE_SIMPLE**	-	**dtSTRING**	80	-	2005fd
1	|_ **VALUE_TEXT**	-	**dtMLSTRING**	80	Yes	2005fd
1	|_ **VALUE_RANGE**	-	-	-	-	2005fd
1	|_ SEQUENCE	-	-	-	-	-
1	|_ **STARTVALUE**	-	**dtNUMBER**	-	-	2005fd
1	|_ **ENDVALUE**	-	**dtNUMBER**	-	-	2005fd
0..1	|_ **INTERVALVALUE**	-	**dtNUMBER**	-	-	2005fd
0..1	**MIME_INFO**	-	-	-	-	-
1	|_ SEQUENCE	-	-	-	-	-
1..*	|_ **MIME**	-	-	-	-	-
1	|_ SEQUENCE	-	-	-	-	-
0..1	|_ **MIME_TYPE**	-	**dtSTRING**	30	-	-
1..1	|_ **MIME_SOURCE**	-	**dtMLSTRING**	255	Yes	-
0..1	|_ **MIME_DESCR**	-	**dtMLSTRING**	250	Yes	-
0..1	|_ **MIME_ALT**	-	**dtMLSTRING**	80	Yes	2005fd
0..1	|_ **MIME_PURPOSE**	-	**dtSTRING**	20	-	2005fd
0..1	|_ **MIME_ORDER**	-	**dtINTEGER**	-	-	-
0..1	**CONFIG_INFO**	-	-	-	-	2005fd
1	|_ SEQUENCE	-	-	-	-	-
1	|_ **CONFIG_CODE**	-	**dtSTRING**	50	-	2005fd
0..1	|_ **PRODUCT_PRICE_DETAILS**	-	-	-	-	2005fd
1	|_ SEQUENCE	-	-	-	-	-
0..1	|_ CHOICE	-	-	-	-	-
0..1	|_ SEQUENCE	-	-	-	-	-
0..1	|_ **VALID_START_DATE**	-	**dtDATETIME**	-	-	2005fd
0..1	|_ **VALID_END_DATE**	-	**dtDATETIME**	-	-	2005fd
0..2	|_ **DATETIME** in the context of PRODUCT_PRICE_DETAILS	-	-	-	-	-
1	|_ SEQUENCE	-	-	-	-	-
1	|_ **DATE**	-	**dtDATETYPE**	-	-	-
0..1	|_ **TIME**	-	**dtTIMETYPE**	-	-	-
0..1	|_ **TIMEZONE**	-	**dtTIMEZONETYPE**	-	-	-
0..1	**DAILY_PRICE**	-	**dtBOOLEAN**	-	-	-
1..*	**PRODUCT_PRICE**	-	-	-	-	2005
1	|_ SEQUENCE	-	-	-	-	-
0..1	|_ CHOICE	-	-	-	-	-
0..1	|_ **PRICE_AMOUNT**	-	**dtNUMBER**	-	-	-
0..1	|_ **PRICE_FORMULA**	-	-	-	-	2005fd
1	|_ SEQUENCE	-	-	-	-	-
1	|_ **FORMULA_IDREF**	-	**dtSTRING**	60	-	2005fd

Amount	Element name	Default value	Data type	Field length	Lang. specific	l.chg. in ver.
0..1	|_ **PARAMETERS**	-	-	-	-	2005fd
1	|_ SEQUENCE	-	-	-	-	-
1..*	|_ **PARAMETER**	-	-	-	-	2005fd
1	|_ SEQUENCE	-	-	-	-	-
1	|_ **PARAMETER_SYMBOLREF**	-	**dtSTRING**	60	-	2005fd
1	|_ **PARAMETER_VALUE**	-	**dtSTRING**	250	-	2005fd
0..1	|_ **PRICE_CURRENCY**	-	**dtCURRENCIES**	-	-	-
0..1	|_ CHOICE	-	-	-	-	-
0..*	|_ **TAX_DETAILS**	-	-	-	-	2005
1	|_ SEQUENCE	-	-	-	-	-
0..1	|_ **CALCULATION_SEQUENCE**	1	**dtCOUNT**	-	-	2005fd
0..1	|_ **TAX_CATEGORY**	-	**dtSTRING**	80	-	2005
0..1	|_ **TAX_TYPE**	vat	**dtSTRING**	250	-	2005
0..1	|_ **TAX**	-	**dtNUMBER**	-	-	-
0..1	|_ **EXEMPTION_REASON**	-	**dtMLSTRING**	250	Yes	2005
0..1	|_ **JURISDICTION**	-	**dtMLSTRING**	250	Yes	2005
0..1	|_ **TAX**	-	**dtNUMBER**	-	-	-
0..1	|_ **PRICE_FACTOR**	1	**dtNUMBER**	-	-	2005
0..1	|_ **LOWER_BOUND**	-	**dtNUMBER**	-	-	-
0..1	|_ CHOICE	-	-	-	-	-
0..*	|_ **TERRITORY**	-	**dtCOUNTRIES**	-	-	1.2_fd
0..1	|_ **AREA_REFS**	-	-	-	-	2005fd
1	|_ SEQUENCE	-	-	-	-	-
1..*	|_ **AREA_IDREF**	-	**dtSTRING**	60	-	2005fd
0..1	|_ **PRICE_BASE**	-	-	-	-	2005fd
1	|_ SEQUENCE	-	-	-	-	-
1	|_ **PRICE_UNIT**	-	**dtPUNIT**	-	-	1.2_fd
0..1	|_ **PRICE_UNIT_FACTOR**	1	**dtFLOAT**	-	-	2005
0..*	|_ **PRICE_FLAG**	-	**dtBOOLEAN**	-	-	-
0..1	|_ **VALUE_ORDER**	-	**dtINTEGER**	-	-	2005fd
0..1	|_ **DEFAULT_FLAG**	-	**dtBOOLEAN**	-	-	2005fd
0..1	|_ **FT_VALENCY**	univa-lent	**dtSTRING**	20	-	2005fd
0..1	|_ CHOICE	-	-	-	-	-
0..1	|_ **FT_UNIT_IDREF**	-	**dtSTRING**	60	-	2005fd
0..1	|_ **FT_UNIT**	-	**dtSTRING**	80	-	2005fd
0..1	|_ **FT_MANDATORY**	-	**dtBOOLEAN**	-	-	-
0..1	|_ **FT_ORDER**	-	**dtINTEGER**	-	-	-
0..1	|_ **FT_SYMBOL**	-	**dtMLSTRING**	20	Yes	1.2
0..1	|_ **FT_SYNONYMS**	-	-	-	-	2005fd
1	|_ SEQUENCE	-	-	-	-	-
1..*	|_ **SYNONYM**	-	**dtMLSTRING**	80	Yes	2005fd
0..1	|_ **MIME_INFO**	-	-	-	-	-
1	|_ SEQUENCE	-	-	-	-	-
1..*	|_ **MIME**	-	-	-	-	-
1	|_ SEQUENCE	-	-	-	-	-
0..1	|_ **MIME_TYPE**	-	**dtSTRING**	30	-	-

Amount	Element name	Default value	Data type	Field length	Lang. specific	l.chg. in ver.
1..1	| | | | | | | | | | | | | | | |_ **MIME_SOURCE**	-	**dtMLSTRING**	255	Yes	-
0..1	| | | | | | | | | | | | | | | |_ **MIME_DESCR**	-	**dtMLSTRING**	250	Yes	-
0..1	| | | | | | | | | | | | | | | |_ **MIME_ALT**	-	**dtMLSTRING**	80	Yes	2005fd
0..1	| | | | | | | | | | | | | | | |_ **MIME_PURPOSE**	-	**dtSTRING**	20	-	2005fd
0..1	| | | | | | | | | | | | | | | |_ **MIME_ORDER**	-	**dtINTEGER**	-	-	-
0..1	| | | | | | | | | | | | |_ **FT_SOURCE**	-	-	-	-	2005
1	| | | | | | | | | | | | | |_ SEQUENCE	-	-	-	-	-
0..1	| | | | | | | | | | | | | | |_ **SOURCE_NAME**	-	**dtMLSTRING**	80	Yes	2005
0..1	| | | | | | | | | | | | | | |_ **SOURCE_URI**	-	**dtSTRING**	255	-	2005fd
0..1	| | | | | | | | | | | | | | |_ **PARTY_IDREF**	-	**dtSTRING**	250	-	2005fd
0..1	| | | | | | | | | | | | |_ **FT_NOTE**	-	**dtMLSTRING**	16000	Yes	2005fd
0..1	| | | | | | | | | | | | |_ **FT_REMARK**	-	**dtMLSTRING**	16000	Yes	2005fd
0..1	| | | | | | | |_ **MIME_INFO**	-	-	-	-	-
1	| | | | | | | | |_ SEQUENCE	-	-	-	-	-
1..*	| | | | | | | | | |_ **MIME**	-	-	-	-	-
1	| | | | | | | | | | |_ SEQUENCE	-	-	-	-	-
0..1	| | | | | | | | | | | |_ **MIME_TYPE**	-	**dtSTRING**	30	-	-
1..1	| | | | | | | | | | | |_ **MIME_SOURCE**	-	**dtMLSTRING**	255	Yes	-
0..1	| | | | | | | | | | | |_ **MIME_DESCR**	-	**dtMLSTRING**	250	Yes	-
0..1	| | | | | | | | | | | |_ **MIME_ALT**	-	**dtMLSTRING**	80	Yes	2005fd
0..1	| | | | | | | | | | | |_ **MIME_PURPOSE**	-	**dtSTRING**	20	-	2005fd
0..1	| | | | | | | | | | | |_ **MIME_ORDER**	-	**dtINTEGER**	-	-	-
1	| | | | | | |_ **CONFIG_PARTS**	-	-	-	-	2005fd
1	| | | | | | |_ SEQUENCE	-	-	-	-	-
1..*	| | | | | | | |_ **PART_ALTERNATIVE**	-	-	-	-	2005fd
1	| | | | | | | | |_ SEQUENCE	-	-	-	-	-
1	| | | | | | | | | |_ **SUPPLIER_PIDREF**	-	**dtSTRING**	32	-	2005fd
0..1	| | | | | | | | | |_ **SUPPLIER_IDREF**	-	**dtSTRING**	250	-	2005fd
0..1	| | | | | | | | | |_ **PRODUCT_ORDER**	-	**dtINTEGER**	-	-	2005fd
0..1	| | | | | | | | | |_ **DEFAULT_FLAG**	-	**dtBOOLEAN**	-	-	2005fd
0..1	| | | | | | | | | |_ **CONFIG_CODE**	-	**dtSTRING**	50	-	2005fd
0..1	| | | | | | | | | |_ **PRODUCT_PRICE_DETAILS**	-	-	-	-	2005fd
1	| | | | | | | | | |_ SEQUENCE	-	-	-	-	-
0..1	| | | | | | | | | | |_ CHOICE	-	-	-	-	-
0..1	| | | | | | | | | | | |_ SEQUENCE	-	-	-	-	-
0..1	| | | | | | | | | | | | |_ **VALID_START_DATE**	-	**dtDATETIME**	-	-	2005fd
0..1	| | | | | | | | | | | | |_ **VALID_END_DATE**	-	**dtDATETIME**	-	-	2005fd
0..2	| | | | | | | | | | | | |_ **DATETIME** in the context of PRODUCT_PRICE_DETAILS	-	-	-	-	-
1	| | | | | | | | | | | | | |_ SEQUENCE	-	-	-	-	-
1	| | | | | | | | | | | | | | |_ **DATE**	-	**dtDATETYPE**	-	-	-
0..1	| | | | | | | | | | | | | | |_ **TIME**	-	**dtTIMETYPE**	-	-	-
0..1	| | | | | | | | | | | | | | |_ **TIMEZONE**	-	**dtTIMEZONETYPE**	-	-	-
0..1	| | | | | | | | | | | |_ **DAILY_PRICE**	-	**dtBOOLEAN**	-	-	-
1..*	| | | | | | | | | | | |_ **PRODUCT_PRICE**	-	-	-	-	2005
1	| | | | | | | | | | | | |_ SEQUENCE	-	-	-	-	-
0..1	| | | | | | | | | | | | | |_ CHOICE	-	-	-	-	-
0..1	| | | | | | | | | | | | | | |_ **PRICE_AMOUNT**	-	**dtNUMBER**	-	-	-

Amount	Element name	Default value	Data type	Field length	Lang. specific	l.chg. in ver.
0..1	| | | | | | | | | | | | | |_ **PRICE_FORMULA**	-	-	-	-	2005fd
1	| | | | | | | | | | | | | | |_ SEQUENCE	-	-	-	-	-
1	| | | | | | | | | | | | | | | |_ **FORMULA_IDREF**	-	**dtSTRING**	60	-	2005fd
0..1	| | | | | | | | | | | | | | | |_ **PARAMETERS**	-	-	-	-	2005fd
1	| | | | | | | | | | | | | | | | |_ SEQUENCE	-	-	-	-	-
1..*	| | | | | | | | | | | | | | | | | |_ **PARAMETER**	-	-	-	-	2005fd
1	| | | | | | | | | | | | | | | | | | |_ SEQUENCE	-	-	-	-	-
1	| | | | | | | | | | | | | | | | | | | |_ **PARAMETER_SYMBOLREF**	-	**dtSTRING**	60	-	2005fd
1	| | | | | | | | | | | | | | | | | | | |_ **PARAMETER_VALUE**	-	**dtSTRING**	250	-	2005fd
0..1	| | | | | | | | | | | | | |_ **PRICE_CURRENCY**	-	**dtCURRENCIES**	-	-	-
0..1	| | | | | | | | | | | | | |_ CHOICE	-	-	-	-	-
0..*	| | | | | | | | | | | | | | |_ **TAX_DETAILS**	-	-	-	-	2005
1	| | | | | | | | | | | | | | | |_ SEQUENCE	-	-	-	-	-
0..1	| | | | | | | | | | | | | | | | |_ **CALCULATION_SEQUENCE**	1	**dtCOUNT**	-	-	2005fd
0..1	| | | | | | | | | | | | | | | | |_ **TAX_CATEGORY**	-	**dtSTRING**	80	-	2005
0..1	| | | | | | | | | | | | | | | | |_ **TAX_TYPE**	vat	**dtSTRING**	250	-	2005
0..1	| | | | | | | | | | | | | | | | |_ **TAX**	-	**dtNUMBER**	-	-	-
0..1	| | | | | | | | | | | | | | | | |_ **EXEMPTION_REASON**	-	**dtMLSTRING**	250	Yes	2005
0..1	| | | | | | | | | | | | | | | | |_ **JURISDICTION**	-	**dtMLSTRING**	250	Yes	2005
0..1	| | | | | | | | | | | | | |_ **TAX**	-	**dtNUMBER**	-	-	-
0..1	| | | | | | | | | | | | | |_ **PRICE_FACTOR**	1	**dtNUMBER**	-	-	2005
0..1	| | | | | | | | | | | | | |_ **LOWER_BOUND**	-	**dtNUMBER**	-	-	-
0..1	| | | | | | | | | | | | | |_ CHOICE	-	-	-	-	-
0..*	| | | | | | | | | | | | | | |_ **TERRITORY**	-	**dtCOUNTRIES**	-	-	1.2_fd
0..1	| | | | | | | | | | | | | | |_ **AREA_REFS**	-	-	-	-	2005fd
1	| | | | | | | | | | | | | | | |_ SEQUENCE	-	-	-	-	-
1..*	| | | | | | | | | | | | | | | | |_ **AREA_IDREF**	-	**dtSTRING**	60	-	2005fd
0..1	| | | | | | | | | | | | | |_ **PRICE_BASE**	-	-	-	-	2005fd
1	| | | | | | | | | | | | | | |_ SEQUENCE	-	-	-	-	-
1	| | | | | | | | | | | | | | | |_ **PRICE_UNIT**	-	**dtPUNIT**	-	-	1.2_fd
0..1	| | | | | | | | | | | | | | | |_ **PRICE_UNIT_FACTOR**	1	**dtFLOAT**	-	-	2005
0..*	| | | | | | | | | | | | | | |_ **PRICE_FLAG**	-	**dtBOOLEAN**	-	-	-
0..1	| | | | | | | |_ **PART_SELECTION_TYPE**	non-distinct	**dtSTRING**	20	-	2005fd
1	| | | | |_ **MIN_OCCURANCE**	-	**dtCOUNT**	-	-	2005fd
1	| | | | |_ **MAX_OCCURANCE**	-	**dtCOUNT**	-	-	2005fd
0..1	| | |_ **PREDEFINED_CONFIGS**	-	-	-	-	2005fd
1	| | | |_ SEQUENCE	-	-	-	-	-
1..*	| | | | |_ **PREDEFINED_CONFIG**	-	-	-	-	2005fd
1	| | | | | |_ SEQUENCE	-	-	-	-	-
1	| | | | | | |_ **PREDEFINED_CONFIG_CODE**	-	**dtSTRING**	6000	-	2005fd
0..1	| | | | | | |_ **PREDEFINED_CONFIG_NAME**	-	**dtMLSTRING**	100	Yes	2005fd
0..1	| | | | | | |_ **PREDEFINED_CONFIG_DESCR**	-	**dtMLSTRING**	250	Yes	2005fd
0..1	| | | | | | |_ **PREDEFINED_CONFIG_ORDER**	-	**dtINTEGER**	-	-	2005fd
0..1	| | | | | | |_ **PRODUCT_PRICE_DETAILS**	-	-	-	-	2005fd
1	| | | | | | | |_ SEQUENCE	-	-	-	-	-
0..1	| | | | | | | | |_ CHOICE	-	-	-	-	-

Amount	Element name	Default value	Data type	Field length	Lang. specific	l.chg. in ver.
0..1	| | | | | | | | | |_ SEQUENCE	-	-	-	-	-
0..1	| | | | | | | | | | |_ **VALID_START_DATE**	-	**dtDATETIME**	-	-	2005fd
0..1	| | | | | | | | | | |_ **VALID_END_DATE**	-	**dtDATETIME**	-	-	2005fd
0..2	| | | | | | | | | |_ **DATETIME** in the context of PRODUCT_PRICE_DETAILS	-	-	-	-	-
1	| | | | | | | | | | |_ SEQUENCE	-	-	-	-	-
1	| | | | | | | | | | | |_ **DATE**	-	**dtDATETYPE**	-	-	-
0..1	| | | | | | | | | | | |_ **TIME**	-	**dtTIMETYPE**	-	-	-
0..1	| | | | | | | | | | | |_ **TIMEZONE**	-	**dtTIMEZONETYPE**	-	-	-
0..1	| | | | | | | | |_ **DAILY_PRICE**	-	**dtBOOLEAN**	-	-	-
1..*	| | | | | | | | |_ **PRODUCT_PRICE**	-	-	-	-	2005
1	| | | | | | | | | |_ SEQUENCE	-	-	-	-	-
0..1	| | | | | | | | | | |_ CHOICE	-	-	-	-	-
0..1	| | | | | | | | | | | |_ **PRICE_AMOUNT**	-	**dtNUMBER**	-	-	-
0..1	| | | | | | | | | | | |_ **PRICE_FORMULA**	-	-	-	-	2005fd
1	| | | | | | | | | | | | |_ SEQUENCE	-	-	-	-	-
1	| | | | | | | | | | | | | |_ **FORMULA_IDREF**	-	**dtSTRING**	60	-	2005fd
0..1	| | | | | | | | | | | | | |_ **PARAMETERS**	-	-	-	-	2005fd
1	| | | | | | | | | | | | | | |_ SEQUENCE	-	-	-	-	-
1..*	| | | | | | | | | | | | | | | |_ **PARAMETER**	-	-	-	-	2005fd
1	| | | | | | | | | | | | | | | | |_ SEQUENCE	-	-	-	-	-
1	| | | | | | | | | | | | | | | | | |_ **PARAMETER_SYMBOLREF**	-	**dtSTRING**	60	-	2005fd
1	| | | | | | | | | | | | | | | | | |_ **PARAMETER_VALUE**	-	**dtSTRING**	250	-	2005fd
0..1	| | | | | | | | | | |_ **PRICE_CURRENCY**	-	**dtCURRENCIES**	-	-	-
0..1	| | | | | | | | | | |_ CHOICE	-	-	-	-	-
0..*	| | | | | | | | | | | |_ **TAX_DETAILS**	-	-	-	-	2005
1	| | | | | | | | | | | | |_ SEQUENCE	-	-	-	-	-
0..1	| | | | | | | | | | | | | |_ **CALCULATION_SEQUENCE**	1	**dtCOUNT**	-	-	2005fd
0..1	| | | | | | | | | | | | | |_ **TAX_CATEGORY**	-	**dtSTRING**	80	-	2005
0..1	| | | | | | | | | | | | | |_ **TAX_TYPE**	vat	**dtSTRING**	250	-	2005
0..1	| | | | | | | | | | | | | |_ **TAX**	-	**dtNUMBER**	-	-	-
0..1	| | | | | | | | | | | | | |_ **EXEMPTION_REASON**	-	**dtMLSTRING**	250	Yes	2005
0..1	| | | | | | | | | | | | | |_ **JURISDICTION**	-	**dtMLSTRING**	250	Yes	2005
0..1	| | | | | | | | | | | |_ **TAX**	-	**dtNUMBER**	-	-	-
0..1	| | | | | | | | | | |_ **PRICE_FACTOR**	1	**dtNUMBER**	-	-	2005
0..1	| | | | | | | | | | |_ **LOWER_BOUND**	-	**dtNUMBER**	-	-	-
0..1	| | | | | | | | | | |_ CHOICE	-	-	-	-	-
0..*	| | | | | | | | | | | |_ **TERRITORY**	-	**dtCOUNTRIES**	-	-	1.2_fd
0..1	| | | | | | | | | | | |_ **AREA_REFS**	-	-	-	-	2005fd
1	| | | | | | | | | | | | |_ SEQUENCE	-	-	-	-	-
1..*	| | | | | | | | | | | | | |_ **AREA_IDREF**	-	**dtSTRING**	60	-	2005fd
0..1	| | | | | | | | | | |_ **PRICE_BASE**	-	-	-	-	2005fd
1	| | | | | | | | | | | |_ SEQUENCE	-	-	-	-	-
1	| | | | | | | | | | | | |_ **PRICE_UNIT**	-	**dtPUNIT**	-	-	1.2_fd
0..1	| | | | | | | | | | | | |_ **PRICE_UNIT_FACTOR**	1	**dtFLOAT**	-	-	2005
0..*	| | | | | | | | | | |_ **PRICE_FLAG**	-	**dtBOOLEAN**	-	-	-
0..1	| | | | | |_ **SUPPLIER_PID**	-	**dtSTRING**	32	-	2005
0..*	| | | | | |_ **INTERNATIONAL_PID**	-	**dtSTRING**	100	-	2005fd

Amount	Element name	Default value	Data type	Field length	Lang. specific	l.chg. in ver.
0..1	| | | | |_ **PREDEFINED_CONFIG_COVERAGE**	partial	**dtSTRING**	20	-	2005fd
0..1	| | |_ **CONFIG_RULES**	-	-	-	-	-
1	| | | |_ SEQUENCE	-	-	-	-	-
1..*	| | | | |_ **TERM**	-	-	-	-	2005fd
1	| | | | | |_ SEQUENCE	-	-	-	-	-
1	| | | | | | |_ **TERM_ID**	-	**dtSTRING**	20	-	2005fd
0..1	| | | | | | |_ **TERM_CONDITION**	-	**dtSTRING**	3000	-	2005fd
1	| | | | | | |_ **TERM_EXPRESSION**	-	**dtSTRING**	3000	-	2005fd
0..1	| | |_ **CONFIG_FORMULAS**	-	-	-	-	2005fd
1	| | | |_ SEQUENCE	-	-	-	-	-
1	| | | | |_ **CONFIG_FORMULA**	-	-	-	-	2005fd
1	| | | | | |_ SEQUENCE	-	-	-	-	-
1	| | | | | | |_ **FORMULA_IDREF**	-	**dtSTRING**	60	-	2005fd
0..1	| | | | | | |_ **PARAMETERS**	-	-	-	-	2005fd
1	| | | | | | | |_ SEQUENCE	-	-	-	-	-
1..*	| | | | | | | | |_ **PARAMETER**	-	-	-	-	2005fd
1	| | | | | | | | | |_ SEQUENCE	-	-	-	-	-
1	| | | | | | | | | | |_ **PARAMETER_SYMBOLREF**	-	**dtSTRING**	60	-	2005fd
1	| | | | | | | | | | |_ **PARAMETER_VALUE**	-	**dtSTRING**	250	-	2005fd
1	|_ **FORMULAS**	-	-	-	-	2005fd
1	| |_ SEQUENCE	-	-	-	-	-
1..*	| | |_ **FORMULA**	-	-	-	-	2005fd
1	| | | |_ SEQUENCE	-	-	-	-	-
1	| | | | |_ **FORMULA_ID**	-	**dtSTRING**	60	-	2005fd
0..1	| | | | |_ **FORMULA_VERSION**	-	-	-	-	2005fd
1	| | | | | |_ SEQUENCE	-	-	-	-	-
1	| | | | | | |_ **VERSION**	-	**dtSTRING**	20	-	2005fd
0..1	| | | | | | |_ **VERSION_DATE**	-	**dtDATETIME**	-	-	2005fd
0..1	| | | | | | |_ **REVISION**	-	**dtSTRING**	20	-	2005fd
0..1	| | | | | | |_ **REVISION_DATE**	-	**dtDATETIME**	-	-	2005fd
0..1	| | | | | | |_ **ORIGINAL_DATE**	-	**dtDATETIME**	-	-	2005fd
0..1	| | | | |_ **FORMULA_NAME**	-	**dtMLSTRING**	100	Yes	2005fd
0..1	| | | | |_ **FORMULA_DESCR**	-	**dtMLSTRING**	250	Yes	2005fd
0..1	| | | | |_ **FORMULA_SOURCE**	-	-	-	-	2005
1	| | | | | |_ SEQUENCE	-	-	-	-	-
0..1	| | | | | | |_ **SOURCE_NAME**	-	**dtMLSTRING**	80	Yes	2005
0..1	| | | | | | |_ **SOURCE_URI**	-	**dtSTRING**	255	-	2005fd
0..1	| | | | | | |_ **PARTY_IDREF**	-	**dtSTRING**	250	-	2005fd
0..1	| | | | |_ **MIME_INFO**	-	-	-	-	-
1	| | | | | |_ SEQUENCE	-	-	-	-	-
1..*	| | | | | | |_ **MIME**	-	-	-	-	-
1	| | | | | | | |_ SEQUENCE	-	-	-	-	-
0..1	| | | | | | | | |_ **MIME_TYPE**	-	**dtSTRING**	30	-	-
1..1	| | | | | | | | |_ **MIME_SOURCE**	-	**dtMLSTRING**	255	Yes	-
0..1	| | | | | | | | |_ **MIME_DESCR**	-	**dtMLSTRING**	250	Yes	-
0..1	| | | | | | | | |_ **MIME_ALT**	-	**dtMLSTRING**	80	Yes	2005fd
0..1	| | | | | | | | |_ **MIME_PURPOSE**	-	**dtSTRING**	20	-	2005fd

Amount	Element name	Default value	Data type	Field length	Lang. specific	l.chg. in ver.
0..1	| | | | | | | | |_ **MIME_ORDER**	-	**dtINTEGER**	-	-	-
0..1	| | | | |_ **FORMULA_FUNCTION**	-	-	-	-	2005fd
1	| | | | | |_ SEQUENCE	-	-	-	-	-
1..*	| | | | | | |_ **TERM**	-	-	-	-	2005fd
1	| | | | | | | |_ SEQUENCE	-	-	-	-	-
1	| | | | | | | | |_ **TERM_ID**	-	**dtSTRING**	20	-	2005fd
0..1	| | | | | | | | |_ **TERM_CONDITION**	-	**dtSTRING**	3000	-	2005fd
1	| | | | | | | | |_ **TERM_EXPRESSION**	-	**dtSTRING**	3000	-	2005fd
1	| | | | |_ **PARAMETER_DEFINITIONS**	-	-	-	-	2005fd
1	| | | | | |_ SEQUENCE	-	-	-	-	-
1..*	| | | | | | |_ **PARAMETER_DEFINITION**	-	-	-	-	2005
1	| | | | | | | |_ SEQUENCE	-	-	-	-	-
1	| | | | | | | | |_ **PARAMETER_SYMBOL**	-	**dtSTRING**	60	-	2005fd
1	| | | | | | | | |_ CHOICE	-	-	-	-	-
1	| | | | | | | | | |_ **PARAMETER_BASICS**	-	-	-	-	2005fd
1	| | | | | | | | | | |_ SEQUENCE	-	-	-	-	-
1..1	| | | | | | | | | | | |_ **PARAMETER_NAME**	-	**dtMLSTRING**	100	Yes	2005fd
0..1	| | | | | | | | | | | |_ **PARAMETER_DESCR**	-	**dtMLSTRING**	250	Yes	2005fd
0..1	| | | | | | | | | | | |_ **PARAMETER_UNIT**	-	**dtMLSTRING**	60	Yes	2005
1	| | | | | | | | | | |_ **FREF**	-	-	-	-	2005
1	| | | | | | | | | | | |_ SEQUENCE	-	-	-	-	-
1	| | | | | | | | | | | | |_ **REFERENCE_FEATURE_SYSTEM_NAME**	-	**dtSTRING**	80	-	-
1	| | | | | | | | | | | | |_ **FT_IDREF**	-	**dtSTRING**	60	-	-
0..1	| | | | | | | | |_ **PARAMETER_ORIGIN**	-	**dtMLSTRING**	6000	Yes	2005fd
0..1	| | | | | | | | |_ **PARAMETER_DEFAULT_VALUE**	-	**dtSTRING**	250	-	2005fd
0..1	| | | | | | | | |_ **PARAMETER_MEANING**	-	**dtSTRING**	20	-	2005fd
0..1	| | | | | | | | |_ **PARAMETER_ORDER**	-	**dtINTEGER**	-	-	2005fd

Overview of elements - alphabetical order

Element name	Default value	Data type	Field length	Lang. specific	l.chg. in ver.
AREA_IDREF	-	**dtSTRING**	60	-	2005fd
AREA_REFS	-	-	-	-	2005fd
CALCULATION_SEQUENCE	1	**dtCOUNT**	-	-	2005
CONFIG_CODE	-	**dtSTRING**	50	-	2005fd
CONFIG_FEATURE	-	-	-	-	2005
CONFIG_FORMULA	-	-	-	-	2005fd
CONFIG_FORMULAS	-	-	-	-	2005fd
CONFIG_INFO	-	-	-	-	2005fd
CONFIG_PARTS	-	-	-	-	2005fd
CONFIG_RULES	-	-	-	-	-
CONFIG_STEP	-	-	-	-	2005fd
DAILY_PRICE	-	**dtBOOLEAN**	-	-	-
DATE	-	**dtDATETYPE**	-	-	-
DATETIME in the context of PRODUCT_PRICE_DETAILS	-	-	-	-	-
DEFAULT_FLAG	-	**dtBOOLEAN**	-	-	2005fd
ENDVALUE	-	**dtNUMBER**	-	-	2005fd
EXEMPTION_REASON	-	**dtMLSTRING**	250	Yes	2005
FEATURE_CONTENT	-	-	-	-	2005
FORMULA	-	-	-	-	2005fd
FORMULA_DESCR	-	**dtMLSTRING**	250	Yes	2005fd
FORMULA_FUNCTION	-	-	-	-	2005fd
FORMULA_ID	-	**dtSTRING**	60	-	2005fd
FORMULA_IDREF	-	**dtSTRING**	60	-	2005fd
FORMULA_NAME	-	**dtMLSTRING**	100	Yes	2005fd
FORMULA_SOURCE	-	-	-	-	2005

Element name	Default value	Data type	Field length	Lang. specific	l.chg. in ver.
FORMULA_VERSION	-	-	-	-	2005fd
FORMULAS	-	-	-	-	2005fd
FREF	-	-	-	-	2005
FT_DATATYPE	-	**dtSTRING**	20	-	-
FT_DEPENDENCIES	-	-	-	-	2005
FT_DESCR	-	**dtMLSTRING**	16000	Yes	2005fd
FT_FACET	-	**dtSTRING**	20	-	2005fd
FT_FACETS	-	-	-	-	2005fd
FT_GROUP_IDREF	-	**dtSTRING**	60	-	2005
FT_GROUP_NAME	-	**dtMLSTRING**	80	Yes	2005
FT_ID	-	**dtSTRING**	60	-	-
FT_IDREF	-	**dtSTRING**	60	-	-
FT_MANDATORY	-	**dtBOOLEAN**	-	-	-
FT_NAME	-	**dtMLSTRING**	80	Yes	2005fd
FT_NOTE	-	**dtMLSTRING**	16000	Yes	2005fd
FT_ORDER	-	**dtINTEGER**	-	-	-
FT_REMARK	-	**dtMLSTRING**	16000	Yes	2005fd
FT_SHORTNAME	-	**dtMLSTRING**	80	Yes	2005fd
FT_SOURCE	-	-	-	-	2005
FT_SYMBOL	-	**dtMLSTRING**	20	Yes	1.2
FT_SYNONYMS	-	-	-	-	2005fd
FT_UNIT	-	**dtSTRING**	80	-	2005fd
FT_UNIT_IDREF	-	**dtSTRING**	60	-	2005fd
FT_VALENCY	univa-lent	**dtSTRING**	20	-	2005fd
FT_VALUE	-	-	-	-	2005

Element name	Default value	Data type	Field length	Lang. specific	l.chg. in ver.
FT_VALUES	-	-	-	-	2005
FT_VERSION	-	-	-	-	2005fd
FTEMPLATE	-	-	-	-	2005
INTERNATIONAL_PID	-	**dtSTRING**	100	-	2005fd
INTERVALVALUE	-	**dtNUMBER**	-	-	2005fd
JURISDICTION	-	**dtMLSTRING**	250	Yes	2005
LOWER_BOUND	-	**dtNUMBER**	-	-	-
MAX_OCCURANCE	-	**dtCOUNT**	-	-	2005fd
MIME	-	-	-	-	-
MIME_ALT	-	**dtMLSTRING**	80	Yes	2005fd
MIME_DESCR	-	**dtMLSTRING**	250	Yes	-
MIME_INFO	-	-	-	-	-
MIME_ORDER	-	**dtINTEGER**	-	-	-
MIME_PURPOSE	-	**dtSTRING**	20	-	2005fd
MIME_SOURCE	-	**dtMLSTRING**	255	Yes	-
MIME_TYPE	-	**dtSTRING**	30	-	-
MIN_OCCURANCE	-	**dtCOUNT**	-	-	2005fd
ORIGINAL_DATE	-	**dtDATETIME**	-	-	2005fd
PARAMETER	-	-	-	-	2005fd
PARAMETER_BASICS	-	-	-	-	2005fd
PARAMETER_DEFAULT_VALUE	-	**dtSTRING**	250	-	2005fd
PARAMETER_DEFINITION	-	-	-	-	2005
PARAMETER_DEFINITIONS	-	-	-	-	2005fd
PARAMETER_DESCR	-	**dtMLSTRING**	250	Yes	2005fd
PARAMETER_MEANING	-	**dtSTRING**	20	-	2005fd
PARAMETER_NAME	-	**dtMLSTRING**	100	Yes	2005fd

Element name	Default value	Data type	Field length	Lang. specific	l.chg. in ver.
PARAMETER_ORDER	-	**dtINTEGER**	-	-	2005fd
PARAMETER_ORIGIN	-	**dtMLSTRING**	6000	Yes	2005fd
PARAMETER_SYMBOL	-	**dtSTRING**	60	-	2005fd
PARAMETER_SYMBOLREF	-	**dtSTRING**	60	-	2005fd
PARAMETER_UNIT	-	**dtMLSTRING**	60	Yes	2005
PARAMETER_VALUE	-	**dtSTRING**	250	-	2005fd
PARAMETERS	-	-	-	-	2005fd
PART_ALTERNATIVE	-	-	-	-	2005fd
PART_SELECTION_TYPE	non-distinct	**dtSTRING**	20	-	2005fd
PARTY_IDREF	-	**dtSTRING**	250	-	2005fd
PREDEFINED_CONFIG	-	-	-	-	2005fd
PREDEFINED_CONFIG_CODE	-	**dtSTRING**	6000	-	2005fd
PREDEFINED_CONFIG_COVERAGE	partial	**dtSTRING**	20	-	2005fd
PREDEFINED_CONFIG_DESCR	-	**dtMLSTRING**	250	Yes	2005fd
PREDEFINED_CONFIG_NAME	-	**dtMLSTRING**	100	Yes	2005fd
PREDEFINED_CONFIG_ORDER	-	**dtINTEGER**	-	-	2005fd
PREDEFINED_CONFIGS	-	-	-	-	2005fd
PRICE_AMOUNT	-	**dtNUMBER**	-	-	-
PRICE_BASE	-	-	-	-	2005fd
PRICE_CURRENCY	-	**dtCURRENCIES**	-	-	-
PRICE_FACTOR	1	**dtNUMBER**	-	-	2005
PRICE_FLAG	-	**dtBOOLEAN**	-	-	-
PRICE_FORMULA	-	-	-	-	2005fd
PRICE_UNIT	-	**dtPUNIT**	-	-	2005fd
PRICE_UNIT_FACTOR	1	**dtFLOAT**	-	-	2005

Element name	Default value	Data type	Field length	Lang. specific	l.chg. in ver.
PRODUCT_CONFIG_DETAILS	-	-	-	-	2005fd
PRODUCT_ORDER	-	**dtINTEGER**	-	-	2005fd
PRODUCT_PRICE	-	-	-	-	2005
PRODUCT_PRICE_DETAILS	-	-	-	-	2005fd
REFERENCE_FEATURE_SYSTEM_NAME	-	**dtSTRING**	80	-	-
REVISION	-	**dtSTRING**	20	-	2005fd
REVISION_DATE	-	**dtDATETIME**	-	-	2005fd
SOURCE_NAME	-	**dtMLSTRING**	80	Yes	2005
SOURCE_URI	-	**dtSTRING**	255	-	2005fd
STARTVALUE	-	**dtNUMBER**	-	-	2005fd
STEP_DESCR_LONG	-	**dtMLSTRING**	64000	Yes	2005fd
STEP_DESCR_SHORT	-	**dtMLSTRING**	3000	Yes	2005fd
STEP_HEADER	-	**dtMLSTRING**	250	Yes	2005fd
STEP_ID	-	**dtSTRING**	60	-	2005fd
STEP_INTERACTION_TYPE	force_ userin- put	**dtSTRING**	20	-	2005fd
STEP_ORDER	-	**dtINTEGER**	-	-	2005fd
SUPPLIER_IDREF	-	**dtSTRING**	250	-	2005fd
SUPPLIER_PID	-	**dtSTRING**	32	-	2005
SUPPLIER_PIDREF	-	**dtSTRING**	32	-	2005fd
SYNONYM	-	**dtMLSTRING**	80	Yes	2005fd
TAX	-	**dtNUMBER**	-	-	-
TAX_CATEGORY	-	**dtSTRING**	80	-	2005
TAX_DETAILS	-	-	-	-	2005
TAX_TYPE	vat	**dtSTRING**	250	-	2005
TERM	-	-	-	-	2005fd

Element name	Default value	Data type	Field length	Lang. specific	l.chg. in ver.
TERM_CONDITION	-	**dtSTRING**	3000	-	2005fd
TERM_EXPRESSION	-	**dtSTRING**	3000	-	2005fd
TERM_ID	-	**dtSTRING**	20	-	2005fd
TERRITORY	-	**dtCOUNTRIES**	-	-	1.2_fd
TIME	-	**dtTIMETYPE**	-	-	-
TIMEZONE	-	**dtTIMEZONETYPE**	-	-	-
VALID_END_DATE	-	**dtDATETIME**	-	-	2005fd
VALID_START_DATE	-	**dtDATETIME**	-	-	2005fd
VALUE_IDREF	-	**dtSTRING**	60	-	2005fd
VALUE_ORDER	-	**dtINTEGER**	-	-	2005fd
VALUE_RANGE	-	-	-	-	2005fd
VALUE_SIMPLE	-	**dtSTRING**	80	-	2005fd
VALUE_TEXT	-	**dtMLSTRING**	80	Yes	2005fd
VERSION	-	**dtSTRING**	20	-	2005fd
VERSION_DATE	-	**dtDATETIME**	-	-	2005fd