



# Interface Description

## ELBRIDGE

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## Version History

Modified 15.04.2020  
Insert Chapter 4.0

Modified 04.10.2019  
Chapter 4.2

- Documentation correction Example retransmission and return  
Spaces in parameter MANUFACTURER\_PID  
Remedy Tip Parameter MANUFACTURER\_TYPE\_DESCR  
Correction spelling UDX.EDXF.DISCOUNT\_GROUP\_MANUFACTURER  
Add the parameter ORDER\_UNIT

Modified 04.04.2017

Chapter 2.5:

- Figure 4 edited

Chapter 2.5.1:

- Figure 5 edited

Chapter 2.5.3:

- Figure 7 edited
- Deleted CONTENT\_UNIT as prices always relate to ORDER\_UNIT.
- Added explanations to data content

Chapter 4.2:

- Deleted CONTENT\_UNIT in the example

Chapter 4.3:

- Inserted the pattern for PRICE\_AMOUNT
- Changed the pattern for PRICE\_AMOUNT (at least one digit required before the decimal point)
- Changed the pattern for QUANTITY (digits after the decimal point are optional)
- Deleted CONTENT\_UNIT in JSON Schema

Chapter 4.4:

- Deleted CONTENT\_UNIT in standard item example

Chapter 4.5:

- Deleted CONTENT\_UNIT in standard item with reference number example

Chapter 4.6:

- Deleted CONTENT\_UNIT in reference to a configuration example



## 1 Introduction/Framework

This documentation standardises the product selection process of workers at wholesalers by using the configuration tool of the respective relevant industry company. This will, in particular, create the opportunity to automatically transfer the results of a configuration to the wholesaler's shop (basket) in order to use this in further process steps.

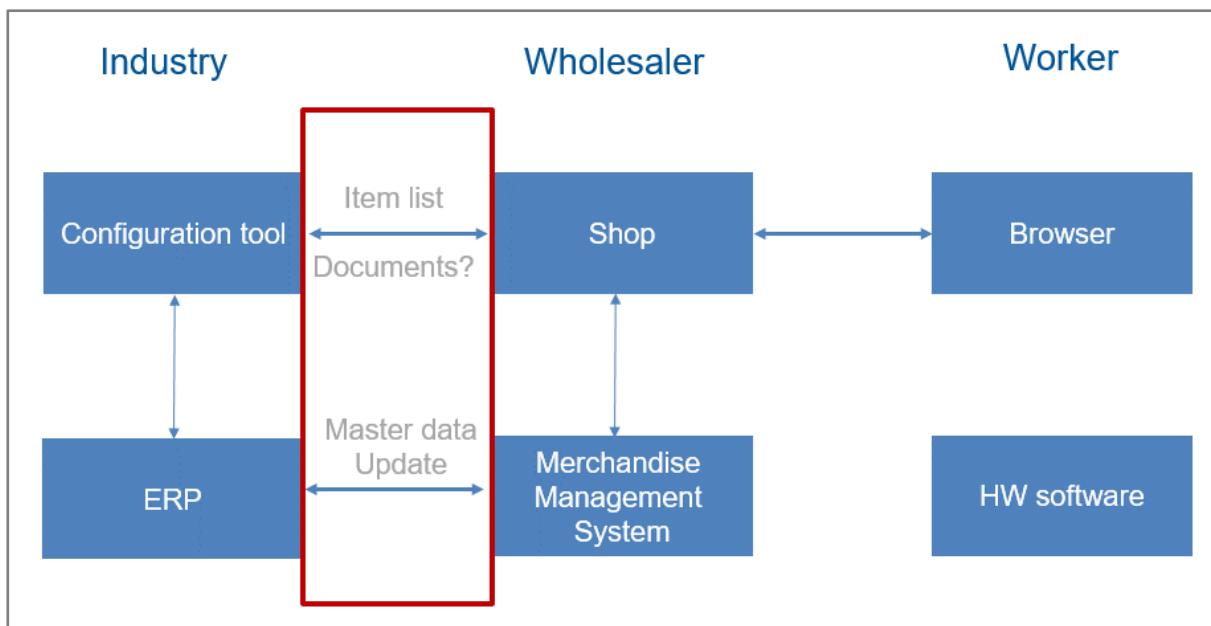


Figure 1: Subject of standardisation

The interface builds on the sector's existing standards:

- Data structures in data exchange reproduce a section of BMEcat ETIM.



## 2 Functional Principle / Process

### 2.1 Configuration Tool Applications

Conceptually, there are three different applications supported by the interface:

1. Configuration as a compilation of standard items

The result of the configuration is a parts list of items which can be automatically ordered by number.

2. Configuration as a customisation of standard items (e.g. products in a special colour or with special printing)

The result of the configuration is one standard item and a reference to the saved configuration for the industry.

3. Configuration as a special production as per stated dimensions or special designs

The result of the configuration is a reference to a saved configuration for the industry.

### 2.2 Application Scenario

In the shop system of the wholesaler, configurations can be accessed from a list of configurations from different manufacturers. The precise implementation of this (menu item, button, links etc.) and the lists of configurations remain in the creative freedom of the wholesaler and are not prescribed or restricted by the interface. Once this has been accessed, the various functions of the respective configuration tool can be used. Once the configuration is complete, the configured items are transferred back to the system they were accessed from. The range of functions and the user interface of the various configuration tools are not prescribed or restricted by the interface. The interface merely provides the communications framework for accessing the configuration tool and transferring the result back to the system that has been accessed.

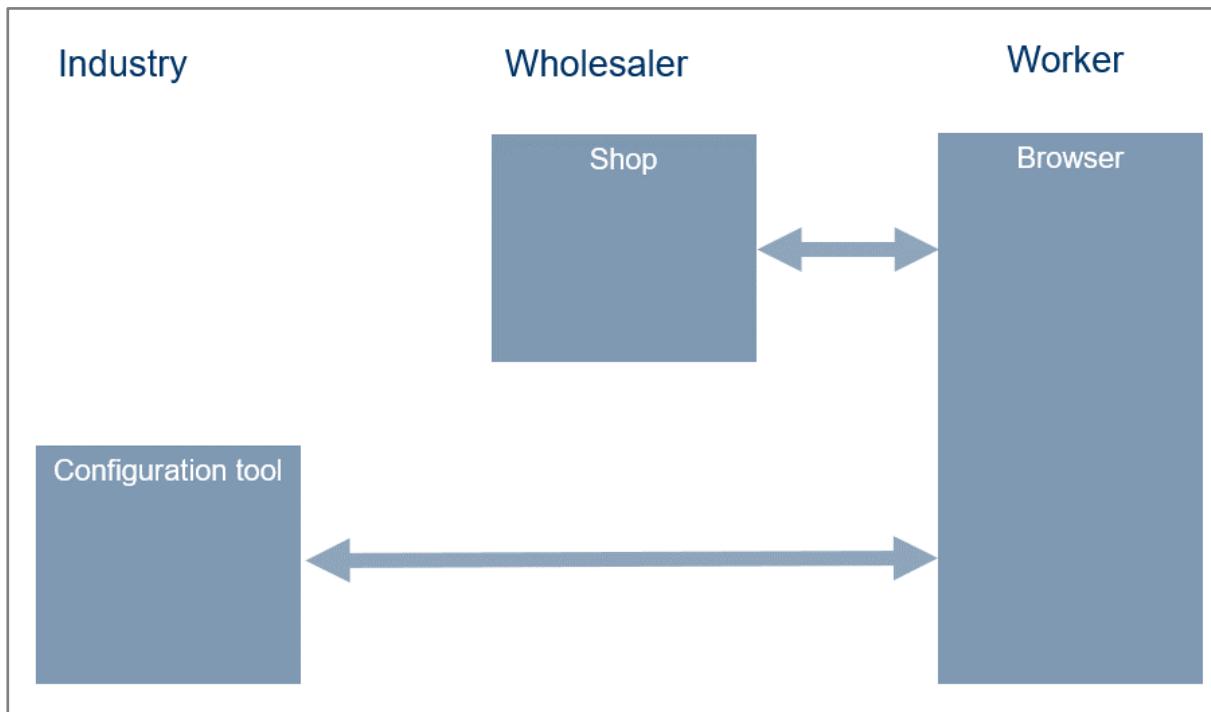


Figure 2: Participating communication systems

## 2.3 Participating Systems

The following systems participate in the process:

- The wholesaler's online shop
- The industry's online configuration tool
- The user's browser, which acts as a client for the online system

## 2.4 Initial Situation for the Process

In the initial situation for the process the user logs on to the wholesaler's online shop. The online shop must contain information on which configuration tools exist for the industry and which URLs these can be accessed from.

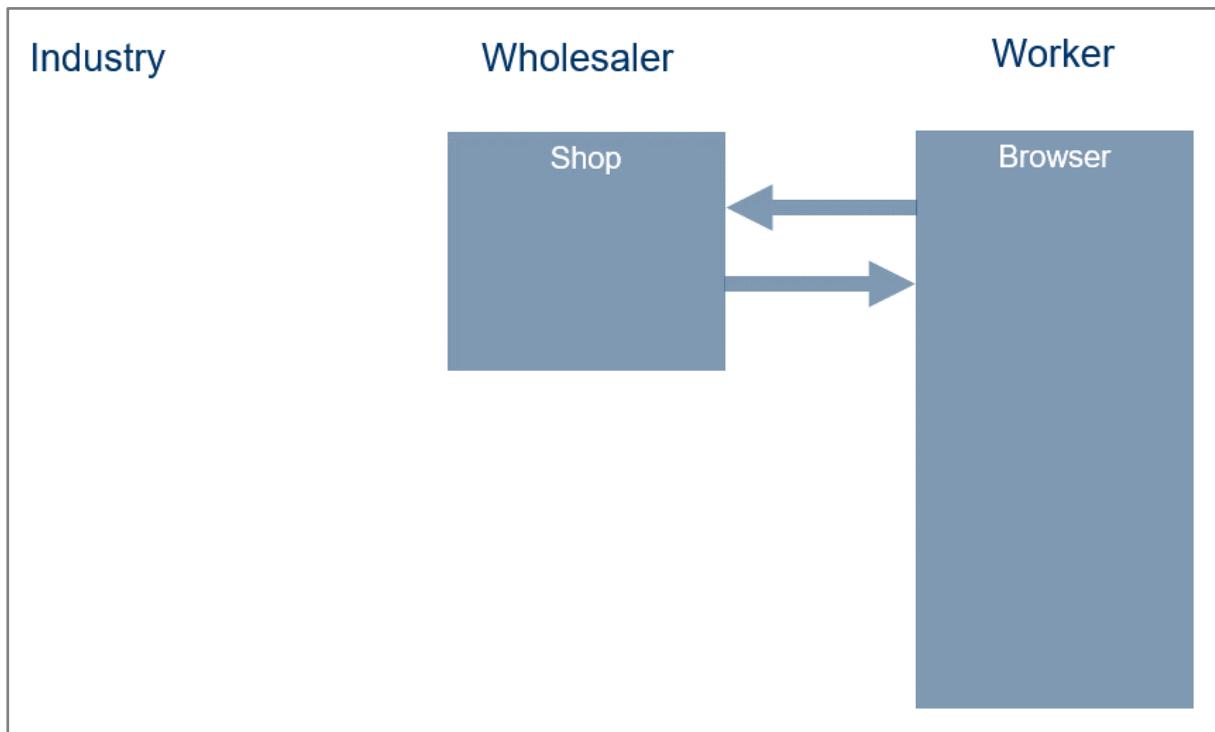


Figure 3: Initial situation

## 2.5 Steps in the Configuration Process

The communication process is divided up into various steps. In detail these are:

1. Accessing the configuration tool via the wholesaler's system
2. Carrying out the configuration in the industry's configuration tool
3. Returning the results of the configuration and returning to the wholesaler's system
4. Querying unlisted items

The following diagram shows the communication between the participating systems.

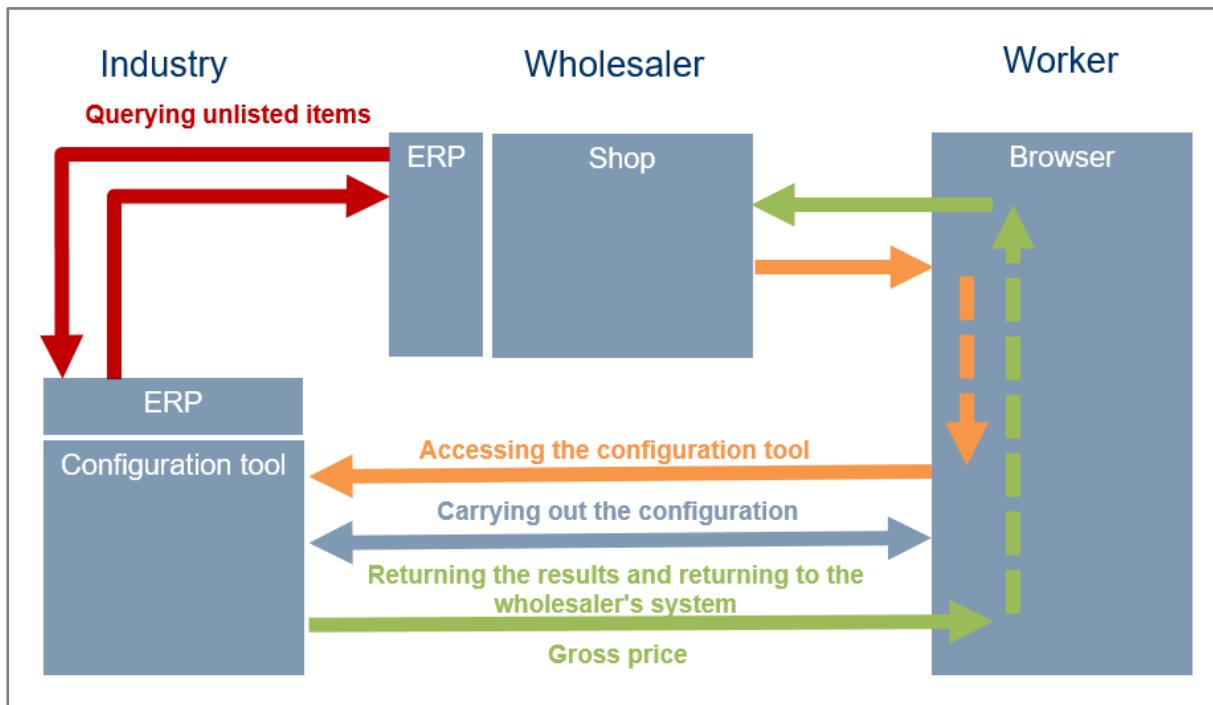


Figure 4: Process overview

As various systems participate to carry out the individual steps, these can be regarded separately. The connection between individual steps results from the information which is exchanged between the individual systems. This information is either created, used or merely transmitted by the various systems.

The “Access the Configuration Tool” step and “Return the Results and Return” step technically take place in the user’s browser. Visualising the data transferred is not foreseen, as only the transmission of queries is relevant here.



## 2.5.1 Accessing the Configuration Tool

The configuration tool is accessed via a specific URL.

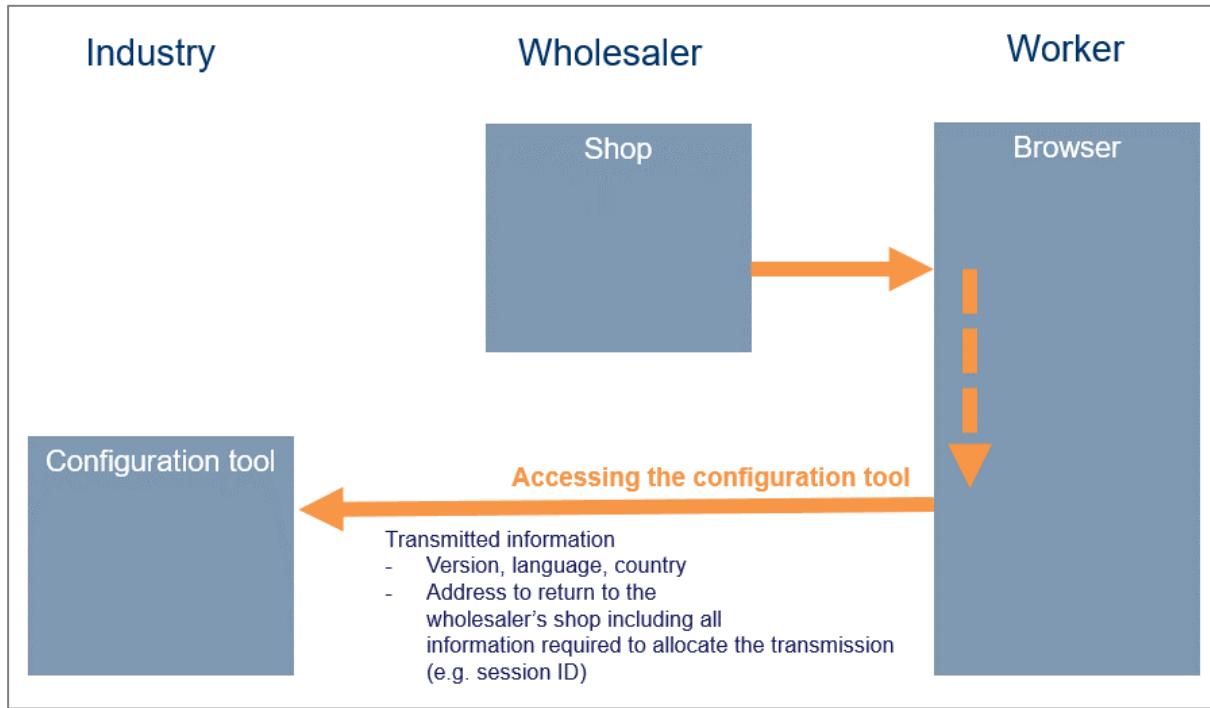


Figure 5: Accessing the configuration tool

When accessing the tool, parameters are transmitted that control the display of the configuration tool and that may be relevant for the later return of the result and leaving the tool to return to the wholesaler's system.

Parameter	Description	Name	Mandatory	Format
<b>Version</b>	Version of the interface.	Version	Yes	x.y. corresponding to the version of the interface
<b>Country</b>	The country where the configuration tool is to be accessed from.  This parameter can be used to specify under which country the user is registered in the wholesaler's system and which view of the configuration tool is to be shown. If this parameter is not specified or the	Country	No	Similar to BMEcat ETIM ISO 3166-1 e.g. "DE" Germany



	configuration tool is not available for the specified country, the display for the standard country of the configuration tool will be shown.			
Language	<p>The language in which the configuration tool is to be called up in.</p> <p>This parameter can be used to specify in which language the wholesaler's shop and which view of the configuration tool is to be shown. If this parameter is not specified or the configuration tool is not available in the specified language, the configuration tool will be displayed in the default language.</p>	Language	No	Similar to BMEcat ETIM ISO 639-2 e.g. "deu" German
HOOK-URL	<p>URL for returning the result</p> <p>The Hook URL specifies which URL should be called up when returning the result and returning to the wholesaler's system (see 2.5.3).</p> <p>In addition to the address, it also contains all information necessary to allocate the return in the wholesaler's system. The Hook URL is assigned by the wholesaler's system. The interface will not specify the Hook, as this can differ depending on the wholesaler's system. It must be a valid URL including protocol (HTTPS).</p>	hookurl	Yes	

Table 1: Access parameters

Access technically takes place via the user's browser. Visualising the data transferred is not foreseen, as only the transmission of queries is relevant here. The result is to be shown in a new browser window.

Example - Accessing the configuration tool **see Appendix 5.1**

➤ Implementation notes for wholesalers

The Hook URL should always be unique each time access is made. This ensures that the previous Hook URL is not specified when re-accessing the configuration tool. Furthermore, these should not be valid indefinitely in order to restrict the potential return message to a short period of time (e.g. 1 day).



## ➤ Implementation notes for the industry

In addition to the Hook URL, the version of the interface should also be saved and used for the later return transmission.

### 2.5.2 Carrying out the configuration

Performing the configuration in the industry's system is considered as a black box for the interface, as the interaction only takes place between the user's browser and the configuration tool. The possible functions lie within the creative freedom of the respective configuration tool. The following functions can be used, for example:

- Logging in to the configuration tool
- Accessing saved configurations
- Downloading documents
- Uploading documents
- ...

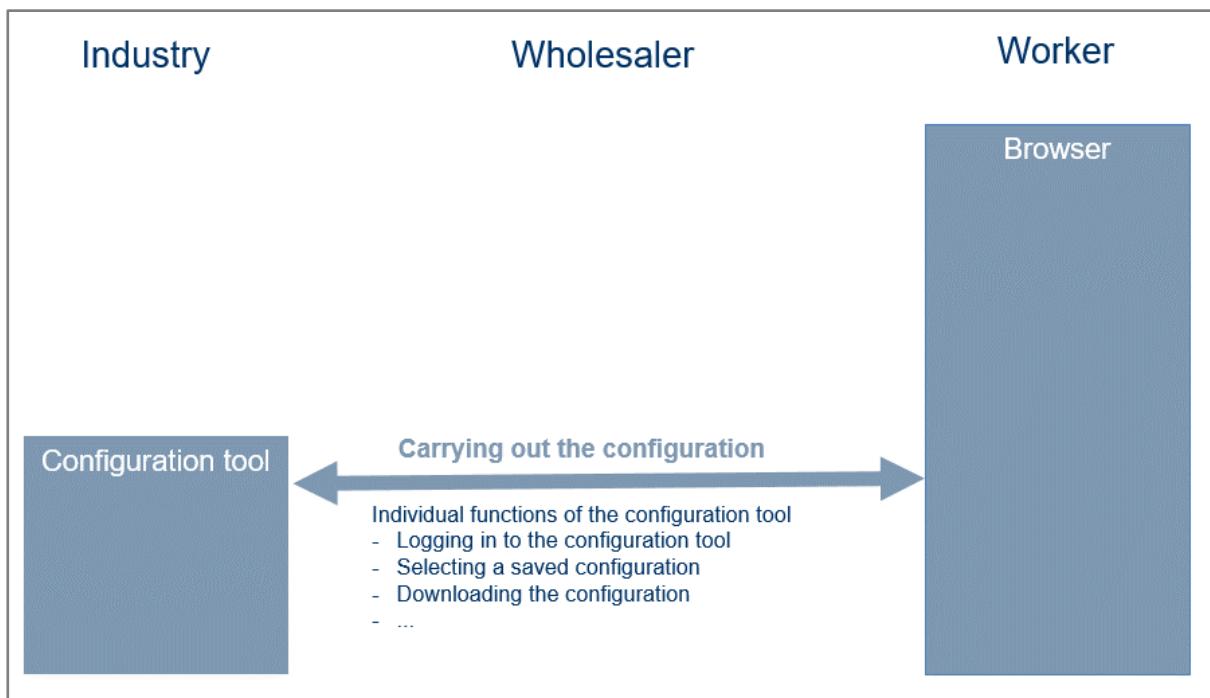


Figure 6: Accessing the configuration tool

### 2.5.3 Returning the Configuration Result and Returning to the Wholesaler's System

Returning the configuration result and returning to the wholesaler's system is carried out synchronously in one step. This process uses the Hook URL provided by the wholesaler's system.

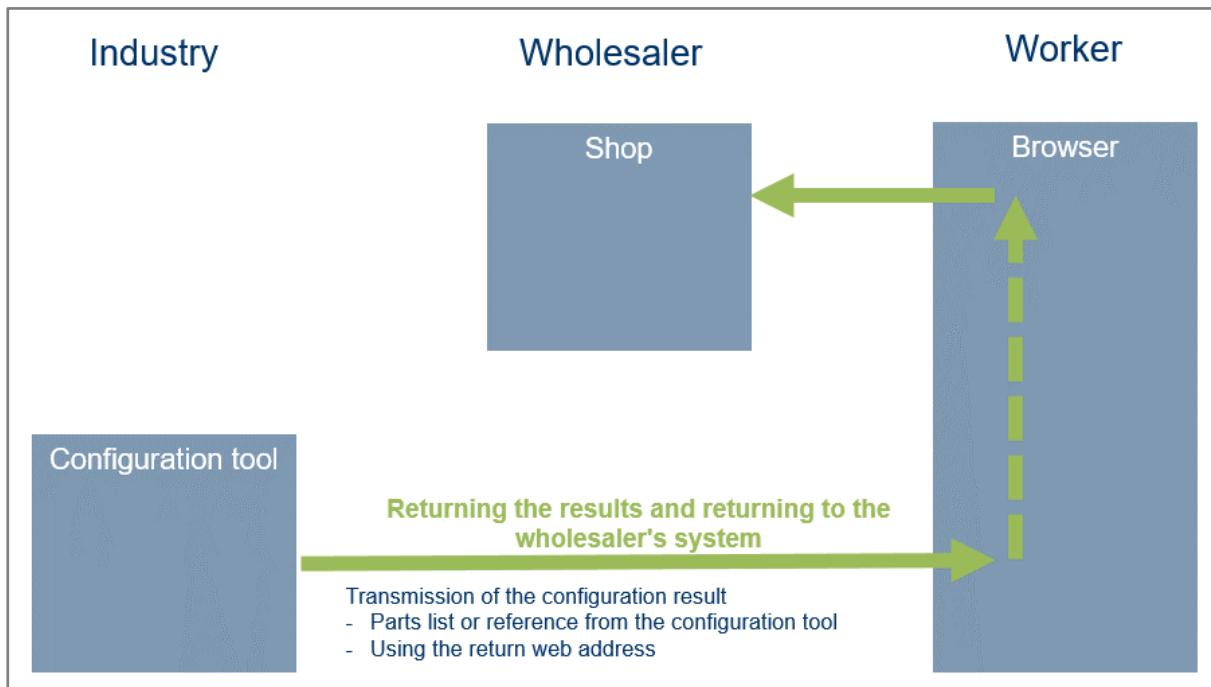


Figure 7: Returning from the configuration tool to the shop

The configuration result is returned as parameters in a JSON structure.

Parameter	Description	Name	Mandatory	Format
<b>Version</b>	Version of the interface	Version	Yes	x.y
<b>Configuration result</b>	Result of the configuration as JSON structure.	Result	Yes	

Table 2: Parameters in a JSON structure

Various types of positions can be contained in the JSON structure depending on the specific application:

- Standard items
- Standard items with reference to a configuration.
- Reference to a configuration

The following data content is transferred for the individual positions:



Data content	Description	Mandatory Standard items	Mandatory Customised standard	Mandatory Customised configuration	Identified	Format
GLN manufacturer identification	SUPPLIER_ID _GLN	Yes  In Germany the GLN is mandatory for the identification of the manufacturer.			Yes, if available	Text 13 digits (only numbers)
DUNS manufacturer identification	SUPPLIER_ID _DUNS	The DUNS is a possible international alternative.			Yes, if available	Text 9 digits (only numbers)
Manufacturer's item number	MANUFACTURER_PID	Yes	Yes	Not possible	Yes, if available	Text 50 characters
Type	MANUFACTURER_TYPE_DESCR	No	No	No	Yes, if available	Text 50 characters
Configuration reference number	REFNUMBER_CONFIG	Not possible	Yes	Yes	Yes, if available	Text 255 characters
GTIN	INTERNATIONAL_PID	No	No	Not possible	Yes, if available	Text 14 characters
Short description	DESCRIPTION_SHORT	No	No	Yes	No	Text 150 characters
Price (gross)	PRICE_AMOUNT	No  The price, currency, price quantity and price group must all be stated if a price is delivered.			No	Decimal  18 digits before the decimal point and 2 digits after the decimal point  Decimal separator “.”
Currency	CURRENCY	No  The price, currency, price quantity and price group must all be stated if a price is delivered.			No	Code list 3 characters



Data content	Description	Mandatory Standard items	Mandatory Customised standard	Mandatory Customised configuration	Identified	Format
Price quantity	PRICE_QUANTITY	No	The price, currency, price quantity and price group must all be stated if a price is delivered.		No	Decimal 18 digits before the decimal point
Price group	UDX.EDXF.DI SCOUNT_GR OUP _MANUFACT URER	No	The price, currency, price quantity and price group must all be stated if a price is delivered.		No	Text 20 characters
Quantity	QUANTITY	Yes			No	Decimal 18 digits before the decimal point and 2 digits after the decimal point Decimal separator “.”
Order unit / pricing unit	ORDER_UNIT	Yes			No	Code list 3 characters Same as BMEcat ETIM
End of validity	VALIDITY_END	No	No	No	No	Date yyyy-mm-dd

Table 3: Return transmission data content

➤ Explanations regarding the data content

As all prices relate to the order quantity, no separate pricing unit is transferred. The ORDER\_UNIT content represents the order unit and the pricing unit.

The End of validity is not the end of validity in the BMEcat system. This specifies the validity of the configuration.



The transfer technically takes place via the user's browser. Visualising the data transferred is not foreseen, as only the transmission of queries is relevant here.

The transferred JSON structure is received, checked and processed when the shop system is accessed. The positions for standard items are identified via the "Manufacturer identification", "Manufacturer's item number", "GTIN" and "Type" information. For items that cannot be identified, an attachment containing the basic data contained in the position (short description, price information and price group) can be included. The request for further data can be made separately (see 2.5.4).

All entries that contain a "configuration reference number" must be saved in the wholesaler's system, because the entries can only be identified by this information from the industry.

Once the configuration tool has been accessed the wholesaler's shop is displayed. This is to display the status and any errors that may have occurred. The user must be able to determine whether individual positions from the result have been accepted or whether a problem has occurred.

In addition to communications problems, the following problems with content can occur:

- The JSON structure does not correspond to the requirements
- Items could not be identified
- Quantities have been altered

If it is not possible to automatically order the accepted positions (e.g. for positions with reference to a configuration), this should also be displayed. The exact type of the display, the status and any error messages is not specified by the interface.

➤ Implementation notes for the industry

If a configuration reference number is specified within the result, the configuration must be automatically saved before returning the result and this must be available in the order process to enable identification of the configuration.

➤ Implementation notes for wholesalers

Only one return transmission should be accepted for one Hook URL. This prevents a configuration from being transmitted multiple times.

Data content in the JSON structure is always transferred as text (string). A pattern is specified in the JSON Schema for compliance with content requirements, such as the number of digits after the decimal point, for example. Data content that does not represent text must be converted accordingly before processing.



The actual process lies in the creative freedom of the wholesaler's system. When processing positions that cannot be identified or that contain a reference, manual intervention may be necessary that requires an individual process at the wholesaler.

## 2.5.4 Querying Unlisted Items

For items that cannot be identified, because they are not listed in the wholesaler's system, for example, the entire data can be queried with the industry.



Figure 8: Querying unlisted items



### 3 Technical Agreements

The following framework must be adhered to when transferring parameters on accessing the configuration tool and transferring the result:

Area	Agreement
<b>Use of HTTPS</b>	All transfers (accessing the configuration tool and transfers to the wholesaler's shop) must be carried out via HTTPS.
<b>Encoding</b>	All transfers between the systems must be encoded using utf-8.
<b>Header parameter</b>	All transfers between the systems must be carried out with text/html in the HTTP header of the content.
<b>Parameter transfer</b>	Parameters are to be transferred using the POST variant. The GET variant is not supported for security reasons.
<b>Enctype</b>	All transfers between the systems must be carried out with the multipart/form-data enctype formula.
<b>Data content</b>	The data content used within the JSON structure must correspond to the content contained in the BMEcat ETIM. For data content that is specified in multiple languages in BMEcat ETIM, the information is reduced to a transmission in a language without specification of the language code.

Table 4: Technical agreements



## 4 Design guidelines

In order to achieve a uniform appearance for integration in the configurators and wholesale systems, the following design notes are provided.

For retrieving the configurator from the wholesaler's shop, a button or text link with the name "Manufacturer configurator" is recommended.

For the transfer of the configuration results to the wholesaler, a button or text link with the designation "Transfer to wholesaler", "Transfer to wholesaler" is recommended.



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## 5 Appendix

### 5.1 Example - Accessing the configuration tool

```
<HTML>
<HEAD>
    <META http-equiv="Content-Type" content="text/html; charset=utf-8">
</HEAD>
<BODY>
<FORM action="https://www.beispielkonfigurator.de/konfigurator" method="post" name="start"
enctype="multipart/form-data">
    <INPUT type="hidden" name="version" value="1.0"/>
    <INPUT type="hidden" name="country" value="DE"/>
    <INPUT type="hidden" name="language" value="DE"/>
    <INPUT type="hidden" name="hookurl"
value="https://www.beispielhookurl.de?konfiguratorID=1234567890"/>
    <INPUT type="submit" value="Access configuration tool">
</FORM>
<script language="JavaScript">document.start.submit()</script>
</BODY>
</HTML>
```

### 5.2 Example - Leaving the configuration tool and returning to the wholesaler's system

```
<HTML>
    <HEAD><META http-equiv="Content-Type" content="text/html; charset=utf-8"></HEAD>
<BODY>
<FORM      action="https://www.beispielhookurl.de?konfiguratorID=1234567890"      method="post"
name="start" enctype="multipart/form-data">

<INPUT type="hidden" name="version" value="1.0"/>
<INPUT type="hidden" name="result" value="[{{
    &quot;SUPPLIER_ID_GLN&quot;; &quot;1234567000006&quot;;,
    &quot;MANUFACTURER_PID&quot;; &quot;1234-5678-9013&quot;;,
    &quot;REFNUMBER_CONFIG&quot;; &quot;1234567890ABC&quot;;,
    &quot;INTERNATIONAL_PID&quot;; &quot;1234567890128&quot;;,
    &quot;MANUFACTURER_TYPE_DESCR&quot;; &quot;Modell 4711&quot;;,
    &quot;DESCRIPTION_SHORT&quot;; &quot;Kurzbeschreibung für einen individualisierten
Artikels&quot;;,
    &quot;PRICE_AMOUNT&quot;; &quot;1.23&quot;;,
    &quot;CURRENCY&quot;; &quot;EUR&quot;;,
    &quot;PRICE_QUANTITY&quot;; &quot;1&quot;;,
    &quot;UDX.EDXF.DISCOUNT_GROUP_MANUFACTURER&quot;; &quot;D123&quot;;,
    &quot;QUANTITY&quot;; &quot;1&quot;;,
    &quot;ORDER_UNIT&quot;; &quot;C62&quot;;,
    &quot;VALIDITY_END&quot;; &quot;2017-12-31&quot;;
}}]"/>
</FORM>
<script language="JavaScript">document.start.submit()</script>
</BODY>
</HTML>
```

### 5.3 JSON Schema



```
{
    "$schema": "http://json-schema.org/draft-04/schema#",
    "description": "Comment describing your JSON Schema",
    "items": [
        "oneOf": [
            {
                "oneOf": [
                    {
                        "properties": {
                            "SUPPLIER_ID_GLN": {
                                "type": "string",
                                "maxLength": 13,
                                "pattern": "^[0-9]*$"
                            }
                        },
                        "required": [
                            "SUPPLIER_ID_GLN"
                        ]
                    },
                    {
                        "properties": {
                            "SUPPLIER_ID_DUNS": {
                                "type": "string",
                                "maxLength": 9,
                                "pattern": "^[0-9]*$"
                            }
                        },
                        "required": [
                            "SUPPLIER_ID_DUNS"
                        ]
                    }
                ],
                "properties": {
                    "MANUFACTURER_PID": {
                        "type": "string",
                        "maxLength": 50
                    },
                    "MANUFACTURER_TYPE_DESCR": {
                        "type": "string",
                        "maxLength": 50
                    },
                    "INTERNATIONAL_PID": {
                        "type": "string",
                        "maxLength": 14,
                        "pattern": "^[0-9]*$"
                    },
                    "DESCRIPTION_SHORT": {
                        "type": "string",
                        "maxLength": 150
                    },
                    "PRICE_AMOUNT": {
                        "type": "string",
                        "pattern": "^[0-9]{1,18}(\\.[0-9]{2})?$$"
                    },
                    "CURRENCY": {
                        "type": "string",
                        "pattern": "^[A-Z]{3}$"
                    }
                }
            }
        ]
    ]
}
```



```

    "pattern": "^(|ADP|AED|AFA|ALL|ANG|AOK|ARA|ATS|AUD|AWG|BBD|BDT|BEF|BGL|BHD|BIF|BMD|BND|BOB|BRC|BSD|BTN|BUK|BWP|BZD|CAD|CHF|CLF|CLP|CNY|COP|CRC|CSK|CUP|CVE|CYP|DDM|DEM|DJF|DKK|DOP|DZD|ECS|EGP|ESP|ETB|EUR|FIM|FJD|FKP|FRF|GBP|GHC|GIP|GMD|GNF|GRD|GT|Q|GWP|GYD|HKD|HNL|HTG|HUF|IDR|IEP|ILS|INR|IQD|IRR|ISK|ITL|JMD|JOD|JPY|KES|KHR|KMF|K|PW|KRW|KWD|KYD|LAK|LBP|LKR|LRD|LSL|LUF|LYD|MAD|MGF|MNT|MOP|MRO|MTL|MUR|MVR|M|WK|MXP|MYR|MZN|NGN|NIC|NLG|NOK|NPR|NZD|OMR|PAB|PEI|PGK|PHP|PKR|PLZ|PLN|PTE|PY|G|QAR|ROR|RWF|SAR|SBD|SCR|SDP|SEK|SGD|SHP|SLL|SKK|SOS|SRG|STD|SUR|SVC|SYP|SZL|THB|TND|TOP|TPE|TRL|TTD|TWD|TZS|UGS|USD|UYP|WEB|VND|VUV|WST|YDD|YER|YUD|ZAR|Z|MK|ZRZ|ZWD)$"
    },
    "PRICE_QUANTITY": {
        "type": "string",
    },
    "pattern": "^[0-9]{1,18}$"
    },
    "UDX.EDXF.DISCOUNT_GROUP_MANUFACTURER": {
        "type": "string",
        "maxLength": 20
    },
    "QUANTITY": {
        "type": "string",
    },
    "pattern": "^[0-9]{1,18}(\.[0-9]{2})?$"
    },
    "ORDER_UNIT": {
        "type": "string",
        "pattern": "^(BE|BG|BO|BX|C62|CA|CL|CMT|CQ|CS|CT|DR|GRM|KG|KGM|LTR|MGM|MLT|MMT|MTR|PA|PF|PK|PL|PR|PU|RG|RL|RO|SA|SET|ST|TN|TU|Z2|Z3)$"
    },
    "VALIDITY_END": {
        "type": "string",
        "pattern": "^[0-9]{4}-[0-9]{2}-[0-9]{2}$"
    }
},
"patternProperties": {
    "^SUPPLIER_ID_GLN$": {
        "type": "string",
        "maxLength": 13,
        "pattern": "^[0-9]*$"
    },
    "^SUPPLIER_ID_DUNSS$": {
        "type": "string",
        "maxLength": 9,
        "pattern": "^[0-9]*$"
    }
},
"additionalProperties": false,
"required": [
    "MANUFACTURER_PID",
    "QUANTITY",
    "ORDER_UNIT"
]
},
{
    "oneOf": [
        {

```



```

"properties": {
    "SUPPLIER_ID_GLN": {
        "type": "string",
        "maxLength": 13,
        "pattern": "^[0-9]*$"
    }
},
"required": [
    "SUPPLIER_ID_GLN"
]
},
{
    "properties": {
        "SUPPLIER_ID_DUNS": {
            "type": "string",
            "maxLength": 9,
            "pattern": "^[0-9]*$"
        }
},
"required": [
    "SUPPLIER_ID_DUNS"
]
}
],
"properties": {
    "MANUFACTURER_PID": {
        "type": "string",
        "maxLength": 50
    },
    "MANUFACTURER_TYPE_DESCR": {
        "type": "string",
        "maxLength": 50
    },
    "REFNUMBER_CONFIG": {
        "type": "string",
        "maxLength": 255
    },
    "INTERNATIONAL_PID": {
        "type": "string",
        "maxLength": 14,
        "pattern": "^[0-9]*$"
    },
    "DESCRIPTION_SHORT": {
        "type": "string",
        "maxLength": 150
    },
    "PRICE_AMOUNT": {
        "type": "string",
        "pattern": "^[0-9]{1,18}(\.[0-9]{2})?$$"
    },
    "CURRENCY": {
        "type": "string",
        "pattern": "
"^(ADP|AED|AFA|ALL|ANG|AOK|ARA|ATS|AUD|AWG|BBD|BDT|BEF|BGL|BHD|BIF|BMD|BND|BOB|
BCR|BSD|BTN|BUK|BWP|BZD|CAD|CHF|CLF|CLP|CNY|COP|CRC|CSK|CUP|CVE|CYP|DDM|DEM|
DJF|DKK|DOP|DZD|ECS|EGP|ESP|ETB|EUR|FIM|FJD|FKP|FRF|GBP| GHC|GIP|GMD|GNF|GRD|GT

```



Q|GWP|GYD|HKD|HNL|HTG|HUF|IDR|IEP|ILS|INR|IQD|IRR|ISK|ITL|JMD|JOD|JPY|KES|KHR|KMF|K  
PW|KRW|KWD|KYD|LAK|LBP|LKR|LRD|LSL|LUF|LYD|MAD|MGF|MNT|MOP|MRO|MTL|MUR|MVR|M  
WK|MXP|MYR|MZN|NGN|NIC|NLG|NOK|NPR|NZD|OMR|PAB|PEI|PGK|PHP|PKR|PLZ|PLN|PTE|PY  
G|QAR|ROL|RWF|SAR|SBD|SCR|SDP|SEK|SGD|SHP|SLL|SKK|SOS|SRG|STD|SUR|SVC|SYP|SZL|  
THB|TND|TOP|TPE|TRL|TTD|TWD|TZS|UGS|USD|UYP|WEB|VND|VUV|WST|YDD|YER|YUD|ZAR|Z  
MK|ZRZ|ZWD)\$"

```

        },
        "PRICE_QUANTITY": {
            "type": "string",
            "pattern": "^[0-9]{1,18}$"
        },
        "UDX.EDXF.DISCOUNT_GROUP_MANUFACTURER": {
            "type": "string",
            "maxLength": 20
        },
        "QUANTITY": {
            "type": "string",
            "pattern": "^[0-9]{1,18}(\\.[0-9]{2})?$"
        },
        "ORDER_UNIT": {
            "type": "string",
            "pattern": "^(BE|BG|BO|BX|C62|CA|CL|CMT|CQ|CS|CT|DR|GRM|KG|KGM|LTR|MGM|MLT|MMT|MTR|PA|PF|P  
K|PL|PR|PU|RG|RL|RO|SA|SET|ST|TN|TU|Z2|Z3)$"
        },
        "VALIDITY_END": {
            "type": "string",
            "pattern": "^[0-9]{4}-[0-9]{2}-[0-9]{2}$"
        }
    },
    "patternProperties": {
        "^SUPPLIER_ID_GLN$": {
            "type": "string",
            "maxLength": 13,
            "pattern": "[0-9]*$"
        },
        "^SUPPLIER_ID_DUNSS$": {
            "type": "string",
            "maxLength": 9,
            "pattern": "[0-9]*$"
        }
    },
    "additionalProperties": false,
    "required": [
        "MANUFACTURER_PID",
        "REFNUMBER_CONFIG",
        "QUANTITY",
        "ORDER_UNIT"
    ]
},
{
    "oneOf": [
        {
            "properties": {
                "SUPPLIER_ID_GLN": {
                    "type": "string",

```



```

        "maxLength": 13,
        "pattern": "[0-9]*$"
    }
},
"required": [
    "SUPPLIER_ID_GLN"
]
},
{
    "properties": {
        "SUPPLIER_ID_DUNS": {
            "type": "string",
            "maxLength": 9,
            "pattern": "[0-9]*$"
        }
    },
    "required": [
        "SUPPLIER_ID_DUNS"
    ]
}
],
"properties": {
    "MANUFACTURER_TYPE_DESCR": {
        "type": "string",
        "maxLength": 50
    },
    "REFNUMBER_CONFIG": {
        "type": "string",
        "maxLength": 255
    },
    "DESCRIPTION_SHORT": {
        "type": "string",
        "maxLength": 150
    },
    "PRICE_AMOUNT": {
        "type": "string",
        "pattern": "[0-9]{1,18}(\.[0-9]{2})?$"
    },
    "CURRENCY": {
        "type": "string",
        "pattern": "^(ADP|AED|AFA|ALL|ANG|AOK|ARA|ATS|AUD|AWG|BBD|BDT|BEF|BGL|BHD|BIF|BMD|BND|BOB|BRC|BSD|BTN|BUK|BWP|BZD|CAD|CHF|CLF|CLP|CNY|COP|CRC|CSK|CUP|CVE|CYP|DDM|DEM|DJF|DKK|DOP|DZD|ECS|EGP|ESP|ETB|EUR|FIM|FJD|FKP|FRF|GBP| GHC|GIP|GMD|GNF|GRD|GTQ|GWP|GYD|HKD|HNL|HTG|HUF|IDR|IEP|ILS|INR|IQD|IRR|ISK|ITL|JMD|JOD|JPY|KES|KHR|KMF|KPW|KRW|KWD|KYD|LAK|LBP|LKR|LRD|LSL|LUF|LYD|MAD|MGF|MNT|MOP|MRO|MTL|MUR|MVR|MWK|MXP|MYR|MZN|NGN|NIC|NLG|NOK|NPR|NZD|OMR|PAB|PEI|PGK|PHP|PKR|PLZ|PLN|PTE|PYG|QAR|ROL|RWF|SAR|SBD|SCR|SDP|SEK|SGD|SHP|SLL|SKK|SOS|SRG|STD|SUR|SVC|SYP|SZL|THB|TND|TOP|TPE|TRL|TTD|TWD|TZS|UGS|USD|UYP|WEB|VND|VUV|WST|YDD|YER|YUD|ZAR|ZMK|ZRZ|ZWD)$"
    },
    "PRICE_QUANTITY": {
        "type": "string",
        "pattern": "[0-9]{1,18}$"
    }
},
"UDX.EDXF.DISCOUNT_GROUP_MANUFACTURER": {

```



```

        "type": "string",
        "maxLength": 20
    },
    "QUANTITY": {
        "type": "string",
        "pattern": "[0-9]{1,18}(\\.[0-9]{2})?\""
    },
    "ORDER_UNIT": {
        "type": "string",
        "pattern": "(BE|BG|BO|BX|C62|CA|CL|CMT|CQ|CS|CT|DR|GRM|KG|KGM|LTR|MGM|MLT|MMT|MTR|PA|PF|PK|PL|PRI|PU|RG|RL|RO|SA|SET|ST|TN|TU|Z2|Z3)"
    },
    "VALIDITY_END": {
        "type": "string",
        "pattern": "[0-9]{4}-[0-9]{2}-[0-9]{2}?"
    }
},
"patternProperties": {
    "^SUPPLIER_ID_GLN$": {
        "type": "string",
        "maxLength": 13,
        "pattern": "[0-9]*"
    },
    "^SUPPLIER_ID_DUNS$": {
        "type": "string",
        "maxLength": 9,
        "pattern": "[0-9]*"
    }
},
"additionalProperties": false,
"required": [
    "REFNUMBER_CONFIG",
    "DESCRIPTION_SHORT",
    "QUANTITY",
    "ORDER_UNIT"
]
}
}

```

All data content is transferred as text. A pattern is to be specified for verification for data content that corresponds to a figure or a date.



## 5.4 Example - JSON structure for a standard item

```
[  
  {  
    "SUPPLIER_ID_GLN": "1234567000006",  
    "MANUFACTURER_PID": "1234-5678-9012",  
    "MANUFACTURER_TYPE_DESCR": "Type 4711",  
    "INTERNATIONAL_PID": "1234567890128",  
    "DESCRIPTION_SHORT": "Short description of standard item",  
    "PRICE_AMOUNT": "1.23",  
    "CURRENCY": "EUR",  
    "PRICE_QUANTITY": "1",  
    "UDX.EDXF.DISCOUNT_GROUP_MANUFACTURER": "D123",  
    "QUANTITY": "1.00",  
    "ORDER_UNIT": "C62",  
    "VALIDITY_END": "2017-12-31"  
  }  
]
```

## 5.5 Example - JSON structure for a standard item with reference number

```
[  
  {  
    "SUPPLIER_ID_GLN": "1234567000006",  
    "MANUFACTURER_PID": "1234-5678-9013",  
    "MANUFACTURER_TYPE_DESCR": "Type 4711",  
    "REFNUMBER_CONFIG": "1234567890ABC",  
    "INTERNATIONAL_PID": "1234567890128",  
    "DESCRIPTION_SHORT": "Short description of customised item",  
    "PRICE_AMOUNT": "1.23",  
    "CURRENCY": "EUR",  
    "PRICE_QUANTITY": "1",  
    "UDX.EDXF.DISCOUNT_GROUP_MANUFACTURER": "D123",  
    "QUANTITY": "1.00",  
    "ORDER_UNIT": "C62",  
    "VALIDITY_END": "2017-12-31"  
  }  
]
```

## 5.6 Example - JSON structure for a reference to a configuration

```
[  
  {  
    "SUPPLIER_ID_GLN": "1234567000006",  
    "REFNUMBER_CONFIG": "1234567890ZZZ",  
    "DESCRIPTION_SHORT": "Short description of configuration",  
    "PRICE_AMOUNT": "1.23",  
    "CURRENCY": "EUR",  
    "PRICE_QUANTITY": "1",  
    "UDX.EDXF.DISCOUNT_GROUP_MANUFACTURER": "D123",  
    "QUANTITY": "1.00",  
    "ORDER_UNIT": "C62",  
    "VALIDITY_END": "2017-12-31"  
  }  
]
```