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DRAFT

Extract from IMPLEMENTATION GUIDE  
TRANSACTION "PIECE CONTROL ORDER"

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Guides repository: <http://www.ebiz.enea.it/moda-ml/repository/guide/draft/default.asp>

Guide filename: G062-eBIZ-PieceControlOrder.pdf

## 0. PREMISE

This document contains a proposal for the updating and extension of eBIZ specifications starting from the eBIZ version 2018. Under the name of 'Draft version' it is reported the result of an extensive work of analysis and consultation aimed at developing and maintaining eBIZ specifications.

In particular, the content of this proposal is the result of various activities, mainly those carried out within the framework of the **TRICK project** funded by the European Commission: grant agreement 958352, call H2020-LOW-CARBON-CIRCULAR-INDUSTRIES-2020 / H2020-LCCI-2020-EASME-twostage.

The technical contents are backwards compatible with the latest official published version, with the exclusion of the totally new concepts added explicitly for the version that are thought as incremental evolution of the knowledge base.

## 1. BUSINESS DESCRIPTION

### 1.1 Scope

The present guide has been issued to assist the companies of the Textile-Clothing sector in the implementation of the standard XML document type "PIECE CONTROL ORDER", providing all the instruction required for its use in any context of e-commerce between Fabric Buyers and Textile Controllers.

All the rules required for the construction and validation of the document are embedded into the specific XML-Schema, which is detailed in section "Implementation guide".

### 1.2 Generalities

The document "Piece Control Orderr" is used by the Fabric Buyer to specify the type of inspection and accessory treatments requested for each fabric piece.

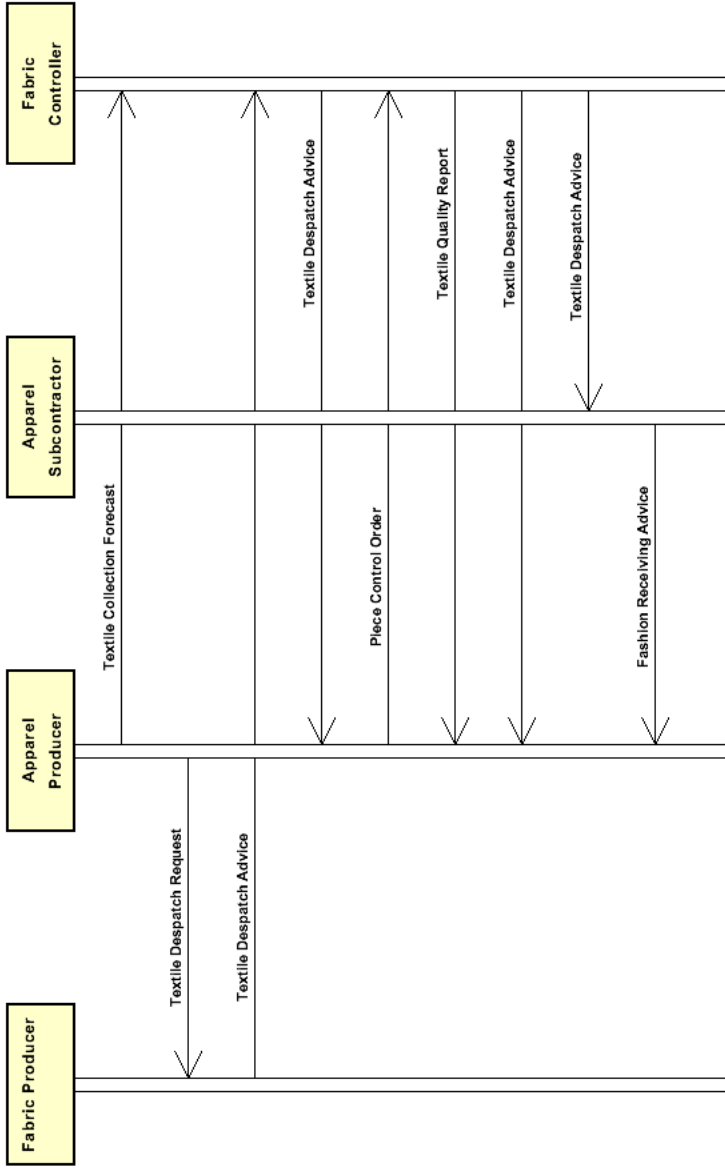
The Order can refer to one or more pieces and can be used either in conjunction with the "Textile Despatch Advise" (1 DA : 1 Order) or independently.

In the first instance the reference to the Despatch Advise must be given in the Header; in the second each piece can have at item level its reference to the document with which it was registered by the Controller.

Each line item refers to one fabric piece and indicates the inspection code and the ultimate receiver of the piece.

### 1.3. Possible scenario

Fabric delivery with quality reporting by controller



## 2. IMPLEMENTATION GUIDE

### 2.1 General structure of XML document

All the business data that can be exchanged through this class of documents are shown in the following "document structure", that provides a simplified vision of the Schema.

In particular:

- the two numbers following each element define its "cardinality" (minimum and maximum number of occurrences); the minimum equal zero indicates that the element is optional, the minimum greater than zero indicates that is mandatory;
- the bold character denotes the complex elements (aggregates of simple elements) that were built for the sake of functionality and re-usability of some complex informations sets. The child elements in each parent element are easily spotted as "indented";
- the symbol "@" denotes an attribute of the preceding element; here "the usage indicator (optional, required, ...) is shown in square brackets.

### Structure

#### TEXControlOrder

@msgfunction [Optional] [Default= OR]

@version [Optional] [Default= 2018-1]

@useProfile [Optional]

#### | PCOheader 1-1

| | msgN 1-1

| - choose -

| | msgID 0-1

| - or -

| | docID 0-1

| | @numberingOrg [Optional]

| - end choose -

| | msgDate 1-1

| | @dateForm [Optional]

#### | refDoc 0-9

| | @docType [Required]

| | | docID 1-2

| | | @numberingOrg [Optional]

| | | docDate 0-1

| | | @dateForm [Optional]

| | | season 0-1

| | | @numberingOrg [Optional]

| | | @codeList [Optional]

| | | @listName [Optional]

| | | @listVersion [Optional]

| | | itemID 0-1

#### | | attachment 0-1

| | | @uid [Optional]

| | | | fileName 0-1

| | | | @numberingOrg [Optional]

| | | | binaryObject 0-1

| | | | @format [Optional]

| | | | @mime [Optional]

| | | | @encoding [Optional]

| | | | @characterSet [Optional]

#### | | | externalReference 0-99

| | | | uri 1-1

| | | | @isURL [Optional] [Default= true]

| | | | mimeTypeCode 0-1

| | | | formatCode 0-1

| | | | encodingCode 0-1

| | | | characterSetCode 0-1

#### | buyer 1-1

| | @logo [Optional]

| | @sender [Optional]

| | | id 1-1

| | | @numberingOrg [Optional]

| | | additionalIdentifier 0-9

| | | @numberingOrg [Optional]

- | | *@idQualifier [Optional]*
- | | legalName 0-1
- | | dept 0-1
- | | subDept 0-1
- | | person 0-1
- | | *@email [Optional]*
- | | *@phone [Optional]*
- | | *@fax [Optional]*
- | | street 0-1
- | | city 0-1
- | | subCountry 0-1
- | | country 0-1
- | | postCode 0-1
- | | **geoCoordinates 0-1**
- | | *@um [Optional] [Default= DEGD]*
- | | *@geoReferenceSystem [Optional]*
- | | | xGeoCoord 1-1
- | | | yGeoCoord 1-1
- | | | zGeoCoord 0-0

| | **supplier 1-1**

- | | *@logo [Optional]*
- | | *@sender [Optional]*
- | | id 1-1
- | | *@numberingOrg [Optional]*
- | | additionalIdentifier 0-9
- | | *@numberingOrg [Optional]*
- | | *@idQualifier [Optional]*
- | | legalName 0-1
- | | dept 0-1
- | | subDept 0-1
- | | person 0-1
- | | *@email [Optional]*
- | | *@phone [Optional]*
- | | *@fax [Optional]*
- | | street 0-1
- | | city 0-1
- | | subCountry 0-1
- | | country 0-1
- | | postCode 0-1
- | | **geoCoordinates 0-1**
- | | *@um [Optional] [Default= DEGD]*
- | | *@geoReferenceSystem [Optional]*
- | | | xGeoCoord 1-1
- | | | yGeoCoord 1-1
- | | | zGeoCoord 0-0

| | **thirdParty 0-5**

- | | *@VAT [Optional]*
- | | *@role [Required]*
- | | *@sender [Optional]*
- | | id 1-1
- | | *@numberingOrg [Optional]*
- | | legalName 0-1
- | | dept 0-1
- | | subDept 0-1
- | | person 0-1
- | | *@email [Optional]*
- | | *@phone [Optional]*
- | | *@fax [Optional]*
- | | street 0-1
- | | city 0-1
- | | subCountry 0-1
- | | country 0-1
- | | postCode 0-1
- | | **geoCoordinates 0-1**
- | | *@um [Optional] [Default= DEGD]*
- | | *@geoReferenceSystem [Optional]*
- | | | xGeoCoord 1-1
- | | | yGeoCoord 1-1

- | | | zGeoCoord 0-0
- | note 0-99
- | | @numberingOrg [Optional]
- | | @codeList [Optional]
- | | @noteLabel [Optional]

**PCObody 1-1**

**PCOitem 1-unbounded**

- | serialN 1-9
- | | @numberingOrg [Optional]
- | | @idQualifier [Optional]
- | | **texCode 0-2**
- | | | @numberingOrg [Optional]
- | | | art 1-1
- | | | | @numberingOrg [Optional]
- | | | | @codeList [Optional]
- | | | | @listName [Optional]
- | | | | @listVersion [Optional]
- | | | pattern 0-1
- | | | | @numberingOrg [Optional]
- | | | | @codeList [Optional]
- | | | | @listName [Optional]
- | | | | @listVersion [Optional]
- | | | color 0-1
- | | | | @numberingOrg [Optional]
- | | | | @codeList [Optional]
- | | | | @listName [Optional]
- | | | | @listVersion [Optional]
- | | | added 0-9
- | | | | @numberingOrg [Optional]
- | | | | @addType [Optional]
- | | | description 0-unbounded
- | | | | @ln [Optional]
- | | | **refDoc 0-9**
- | | | | @docType [Required]
- | | | | docID 1-2
- | | | | | @numberingOrg [Optional]
- | | | | docDate 0-1
- | | | | | @dateForm [Optional]
- | | | | season 0-1
- | | | | | @numberingOrg [Optional]
- | | | | | @codeList [Optional]
- | | | | | @listName [Optional]
- | | | | | @listVersion [Optional]
- | | | | itemID 0-1
- | | | | **attachment 0-1**
- | | | | | @uid [Optional]
- | | | | | | fileName 0-1
- | | | | | | | @numberingOrg [Optional]
- | | | | | | binaryObject 0-1
- | | | | | | | @format [Optional]
- | | | | | | | @mime [Optional]
- | | | | | | | @encoding [Optional]
- | | | | | | | @characterSet [Optional]
- | | | | | | **externalReference 0-99**
- | | | | | | | uri 1-1
- | | | | | | | | @isURL [Optional] [Default= true]
- | | | | | | | | mimeTypeCode 0-1
- | | | | | | | | formatCode 0-1
- | | | | | | | | encodingCode 0-1
- | | | | | | | | characterSetCode 0-1
- | | pieceControl 1-1
- | | | @numberingOrg [Optional]
- | | | @codeList [Optional]
- | | | @listName [Optional]
- | | | @listVersion [Optional]
- | | | **thirdParty 0-3**
- | | | | @VAT [Optional]

```

| | | @role [Required]
| | | @sender [Optional]
| | | | id 1-1
| | | | @numberingOrg [Optional]
| | | | legalName 0-1
| | | | dept 0-1
| | | | subDept 0-1
| | | | person 0-1
| | | | @email [Optional]
| | | | @phone [Optional]
| | | | @fax [Optional]
| | | | street 0-1
| | | | city 0-1
| | | | subCountry 0-1
| | | | country 0-1
| | | | postCode 0-1
| | | | geoCoordinates 0-1
| | | | | @um [Optional] [Default= DEGD]
| | | | | @geoReferenceSystem [Optional]
| | | | | | xGeoCoord 1-1
| | | | | | yGeoCoord 1-1
| | | | | | zGeoCoord 0-0
| | | note 0-99
| | | @numberingOrg [Optional]
| | | @codeList [Optional]
| | | @noteLabel [Optional]

```

## 2.2 Detailed description of document elements

Following tables show all elements (complex and simple) used in this document. Description includes: 1) element's information: xml tag, name, brief description, data type and syntax constraints; 2) information about use of the element in a particular position in the document: xpath and possible associated notes.

### 2.2.1 Complex elements (Aggregate Business Information Entities)

Complex elements are those elements whose content is composed of other elements (childs). Complex elements are alphabetically ordered.

<b>attachment</b>	an attached document. An attachment can refer to an external document or be included with the document being exchanged
<b>buyer</b>	details of the Buyer (party that buys the good or service that is object of the current collaborative process) - base type: Nad,
<b>externalReference</b>	details about an external object, such as a document stored at a remote location
<b>geoCoordinates</b>	geographical coordinates
<b>PCObody</b>	body of the document PIECE CONTROL ORDER
<b>PCOheader</b>	header of the document PIECE CONTROL ORDER
<b>PCOitem</b>	line item of the document PIECE CONTROL ORDER
<b>refDoc</b>	identification of a document and of an item thereof, to which the message makes reference
<b>supplier</b>	details of the Supplier (party that supplies the good or service that is object of the current collaborative process) - base type: Nad,
<b>texCode</b>	full codification of the textile product
<b>thirdParty</b>	identification and details of the Third Party, different from Sender and Receiver of the document - base type: Nad,

### 2.2.2 Simple elements (Basic Business Information Entities)

Simple elements are those elements whose content is characterized by a data type plus a domain of possible values. Simple elements are alphabetically ordered.

<b>added</b>	additional code of the product (complementing the formers) - base type: string, max length: 80,
<b>additionalIdentifier</b>	additional identification code of a Party, for example customs registries or others - base type: string, max length: 15,
<b>@addType</b>	qualifier of the additional coding of a product - base type: string, cod. table: T44 <a href="http://www.ebiz.enea.it/moda-ml/repository/codelist/draft/gc_T44.xml">http://www.ebiz.enea.it/moda-ml/repository/codelist/draft/gc_T44.xml</a>
<b>art</b>	article number of the product - base type: string, max length: 80,
<b>binaryObject</b>	a binary large object containing an attached document, Coding 'base64Binary' is recommended. - base type: base64Binary,
<b>@characterSet</b>	the character set of the binary object (examples UTF-8, UTF-16, Windows-1252, ISO-8859-7,..)



	- base type: normalizedString,
characterSetCode	the character set of an external document (examples UTF-8, UTF-16, Windows-1252, ISO-8859-7,..) - base type: normalizedString,
city	name of the city (town, village) - base type: string, max length: 40,
@codeList	it specifies the URL where the list of codes used to make an instance of the element can be found - base type: string, max length: 255,
color	colour number of the product, when not included in the model or fabric code - base type: string, max length: 15,
country	code of the nation - base type: string, cod. table: T10 <a href="http://www.ebiz.enea.it/moda-ml/repository/codelist/draft/gc_T10.xml">http://www.ebiz.enea.it/moda-ml/repository/codelist/draft/gc_T10.xml</a>
@dateForm	format used for the date - base type: string, cod. table: NT29 <a href="http://www.ebiz.enea.it/moda-ml/repository/codelist/draft/gc_NT29.xml">http://www.ebiz.enea.it/moda-ml/repository/codelist/draft/gc_NT29.xml</a>
dept	name or code of a department - base type: string, max length: 40,
description	free text description. The content of the element must be unique, it might be translated and repeated into more languages (thus no more than one instance for each language ). - base type: string, max length: 250,
docDate	date of issue of the referenced document, according to one of the patterns YYYY-MM-DD, YYYY-MM-DD:HH-MM or YYYY-WW. - base type: string,
docID	identification number of the referenced document - base type: string, max length: 80,
@docType	type or class to which the referenced document belongs - base type: string, cod. table: T21 <a href="http://www.ebiz.enea.it/moda-ml/repository/codelist/draft/gc_T21.xml">http://www.ebiz.enea.it/moda-ml/repository/codelist/draft/gc_T21.xml</a>
@email	electronic mail address of the contact person within a Party - base type: string, max length: 250,
@encoding	specifies the decoding algorithm of the binary object - base type: normalizedString,
encodingCode	the encoding/decoding algorithm used with the external object (example is 'base64Binary') - base type: normalizedString,
@fax	fax number of the contact person within a Party - base type: string, max length: 35,
fileName	unique identifier (name) of the file - base type: string, max length: 255,
@format	the format of the binary content (examples xml, pdf, doc,...) - base type: string,
formatCode	the format of the external object (examples xml, pdf, doc,...) - base type: normalizedString,
@geoReferenceSystem	georeference system adopted for the coordinate (in example wgs84 with decimal degree or degree with minute and seconds) - base type: string,
id	primary identification code of a Party; it is recommended the format: nation code (ISO 3166) + VAT identification number (11 crt), with the qualifier "numberingOrg"= MF - base type: string, max length: 15,

<i>@idQualifier</i>	Qualification of the identifier. - base type: string,
<i>@isURL</i>	it indicates if the referred element is an URL (true) or not (false) - base type: boolean,
itemID	number of the line/item of the referenced document - base type: string, max length: 40,
legalName	legal name - base type: string, max length: 250,
<i>@listName</i>	the name of the list of codes used to make an instance of the element (it might be thought as descriptive element, i.e. 'fabric printing technologies', or not, i.e. "T264") - base type: string, max length: 40,
<i>@listVersion</i>	it specifies the version of the list of codes used to make an instance of the element - base type: string, max length: 6,
<i>@ln</i>	Language code. - base type: string, cod. table: NT60 <a href="http://www.ebiz.enea.it/moda-ml/repository/codelist/draft/gc_NT60.xml">http://www.ebiz.enea.it/moda-ml/repository/codelist/draft/gc_NT60.xml</a>
<i>@logo</i>	company logo (URL of the image jpeg or gif). It is recommended that the width of the image does not exceed 640 pixel. - base type: string, max length: 255,
<i>@mime</i>	the mime type of the binary object - base type: normalizedString,
mimeCode	mime type of the external object - base type: normalizedString,
msgDate	date of issue of the present message (xml document), according to one of the patterns YYYY-MM-DD, YYYY-MM-DD:HH-MM or YYYY-WW. - base type: string,
<i>@msgfunction</i>	function performed by the present message with regards to the transmission - base type: string, cod. table: NT18 <a href="http://www.ebiz.enea.it/moda-ml/repository/codelist/draft/gc_NT18.xml">http://www.ebiz.enea.it/moda-ml/repository/codelist/draft/gc_NT18.xml</a>
msgID	key identifier of the business document in the information system of the issuing Party. In case of more despatches of the same business document, it is unchanged. - base type: string, max length: 35,
msgN	identification number given to the message (xml document) by its issuer. In case of more despatches of the same business document, it changes. - base type: string, max length: 35,
note	free text or structured (computer processing) note. For note structuring use the attributes "noteLabel" and "codelist" - base type: string, max length: 350,
<i>@noteLabel</i>	subject qualifier of a note - base type: string, max length: 35,
<i>@numberingOrg</i>	code specifying the organisation who has created or owns the coding or numbering system - base type: string, cod. table: NT6 <a href="http://www.ebiz.enea.it/moda-ml/repository/codelist/draft/gc_NT6.xml">http://www.ebiz.enea.it/moda-ml/repository/codelist/draft/gc_NT6.xml</a>
pattern	pattern/design number of the product, when not included in the article code - base type: string, max length: 15,
person	name of a person (e.g. contact person within an organization) - base type: string, max length: 40,
<i>@phone</i>	phone number of the contact person within a Party - base type: string, max length: 35,
pieceControl	code assigned to a fabric piece to specify the type of control required/performed - base type: string, max length: 7,

postCode	code defining the postal zone - base type: string, max length: 10,
@role	Third Party role qualifier - base type: string, cod. table: NT2 <a href="http://www.ebiz.enea.it/moda-ml/repository/codelist/draft/gc_NT2.xml">http://www.ebiz.enea.it/moda-ml/repository/codelist/draft/gc_NT2.xml</a>
season	sale season; defined as: season (1 crt) + year (4 crt) - season: S/S=1 A/W=2 Spring=3 Summer=4 Autumn=5 Winter=6: for more than four seasons use alphabetic sequence: 1st season=A 2nd season=B etc.etc. - base type: string, max length: 15,
@sender	qualifier that specifies the Party issuing of the document - base type: boolean,
serialN	serial number used for the identification of a physical unit - base type: string, max length: 250,
street	street and building number identifying a location - base type: string, max length: 80,
subCountry	short name or code of the sub-country entity - base type: string, max length: 9,
subDept	name or code of a department - base type: string, max length: 40,
@uid	unique element identifier within the xml document - base type: string,
@um	specification of the unit of measure - base type: string, cod. table: NT7 <a href="http://www.ebiz.enea.it/moda-ml/repository/codelist/draft/gc_NT7.xml">http://www.ebiz.enea.it/moda-ml/repository/codelist/draft/gc_NT7.xml</a>
uri	Uniform Resource Identifier (URI) that identifies the external object as an Internet resource - base type: normalizedString,
@useProfile	use profile to which the present document is compliant if it was agreed by the parties. It is suggested a URI with reference to the firms or the URL of the profile. - base type: string,
@VAT	VAT rate or code (DEPRECATED, use dtScheme element) - base type: string, cod. table: NT16 <a href="http://www.ebiz.enea.it/moda-ml/repository/codelist/draft/gc_NT16.xml">http://www.ebiz.enea.it/moda-ml/repository/codelist/draft/gc_NT16.xml</a>
@version	Dictionary version from which the instance has been created - base type: string, cod. table: NT100 <a href="http://www.ebiz.enea.it/moda-ml/repository/codelist/draft/gc_NT100.xml">http://www.ebiz.enea.it/moda-ml/repository/codelist/draft/gc_NT100.xml</a>
xGeoCoord	geographical coordinate x , corresponding to latitude - base type: decimal,
yGeoCoord	geographical coordinate y , corresponding to longitude - base type: decimal,
zGeoCoord	geographical coordinate z , corresponding to altitude - base type: decimal,

## 2.3 Suggested best practices

**TEXControlOrder/PCObody/PCOitem/refDoc/docID (identification number of the referenced document)**

numberingOrg indicates the role that produced the document identifier (it is allowed to declare two different ones -e.g. customer and supplier - with two docID with different numberingOrg)

**TEXControlOrder/PCOheader/refDoc/docID (identification number of the referenced document)**

numberingOrg indicates the role that produced the document identifier (it is allowed to declare two different ones -e.g. customer and supplier - with two docID with different numberingOrg)

**TEXControlOrder/PCOheader/refDoc/attachment/  
externalReference/mimeCode (mime type of the external object)**

Use coding from IANA <http://www.iana.org/assignments/media-types/media-types.xml>

**TEXControlOrder/PCObody/PCOitem/refDoc/attachment/  
externalReference/mimeCode (mime type of the external object)**

Use coding from IANA <http://www.iana.org/assignments/media-types/media-types.xml>

## 2.4 Enumeration tables

List of enumeration tables used in the XML document. You can find all the tables with the corresponding codes at:  
<http://www.ebiz.enea.it/eBIZ/imple/eBIZTCU-draft.asp?lingua=en&pag=6>

NT100 - eBIZ TCFUpstream version  
NT16 - VAT rate or code  
NT18 - message function  
NT2 - third party qualifier  
NT29 - format of a date  
NT6 - coding system owner/issuer  
NT60 - language, codes from ISO 639-1 (subset)  
NT7 - unit of measure  
T10 - ISO3166 - Country  
T21 - type of document  
T44 - additional code type

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# Annex A

Representative images of the principal complex elements' structure.

