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**WORKSHOP**

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**AGREEMENT**

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## Reference Architecture 2.0 for eBusiness harmonisation in Textile/Clothing and Footwear sectors

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## **Acknowledgement**

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## Foreword

This CEN Workshop Agreement has been drafted and approved by a Workshop of representatives of interested parties on 2013-06-26, the constitution of which was supported by CEN following the public call for participation made on 2012-01-23.

A list of the individuals and organizations which supported the technical consensus represented by the CEN Workshop Agreement is available to purchasers from the CEN-CENELEC Management Centre. These organizations were drawn from the following economic sectors:

- fashion industry,
- textile, clothing,
- footwear and
- ICT-eBusiness.

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The final review/endorsement round for this CWA was started on 2013-06-14 and was successfully closed on 2013-06-26. The final text of this CWA was submitted to CEN for publication on 2013-06-27.

The following companies/organizations endorsed the CWA:

- Ab. Telematica Italy
- Alugroup, Spain
- AEDT - European Association of Fashion Retailers, EU
- Athens Technology Center SA., Greece
- Aton Spa., Italy
- Bivolino, Belgium
- Canali Spa., Italy
- Cariaggi Lanificio Spa. , Italy
- Ariaggi Lanificio Spa., Italy
- CEC - European Confederation of the Footwear Industry,EU
- CENTROCOT, Italy
- Clave Informática SL., Spain
- CTCP- Centro Tecnológico del calçado de Portugal, Portugal

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- Compello GmbH. (former Client Computing Germany GmbH.), Germany
- Domina Srl., Italy
- EDW International Srl., Italy
- ENEA - National Agency for New Technologies, Energy and Sustainable Economic Development, Italy
- Ermenegildo Zegna Group, Italy
- Essecubo Srl., Italy
- EURATEX - European Apparel and Textile Confederation, EU
- Filidea Srl., Italy
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- Fratelli Piacenza Spa., Italy
- Gruppo Colle Srl., Italy
- GS1 Germany, Germany
- GCS, Germany
- TMTE - Hungarian Society of Textile Technology and Science, Hungary
- i.level software Ltd., United kingdom
- INESC Porto - Institute for Systems and Computer Engineering of Porto, Portugal
- INESCOP - Instituto Tecnológico del Calzado y Conexas, Spain
- INTEA di Vareschi Roberto & c. Snc., Italy
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- Loro Piana Spa., Italy
- Marchi & Fildi Spa., Italy
- Multidata Srl., Italy
- INCDTDP - National Research & Development Institute for Textiles and Leather, Romania
- Next Technology Tecnotessile - Società Nazionale di Ricerca R.I., Italy
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- Trend Technology Srl., Italy
- TREVISO TECNOLOGIA – Azienda Speciale per l'innovazione della Camera di Commercio di Treviso, Italy
- TXT e-solutions Spa., Italy
- UIT - Union des Industries Textiles, France
- University of Modena & Reggio Emilia, Italy
- UTOK - Association for Textil, Leader and Shoes of Bosnia and Herzegovina, Bosnia and Herzegovina
- WebScience Srl, Italy

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Comments or suggestions from the users of the CEN Workshop Agreement are welcome and should be addressed to the CEN-CENELEC Management Centre.

## Executive summary

**1. The aim of this document** is to offer a Guideline of the **updated Reference Architecture (RA)** for the eBusiness harmonisation in the Textile Clothing and Footwear sectors as it results from the activities of the **CEN Workshop “eBusiness in the textile, clothing and footwear sectors (WS eBIZ)”**.

The eBIZ architecture aims to enable interoperability between existing systems and organisations. Achieving it, would lower the threshold for starting eBusiness both for large enterprises and for medium and small actors in the supply chain and would also encourage technology suppliers to provide better support and services for eBusiness.

It can be used as reference both for new eBusiness implementations and by existing users needing to modify their systems or to achieve interoperability with others.

The **first version** of the Reference Architecture was developed in 2009 in the framework of the eBIZ-TCF project ([www.eBIZ-TCF.eu](http://www.eBIZ-TCF.eu)), a DG Enterprise and Industry initiative that was an European large scale initiative to foster the adoption of eBusiness and related technologies and standards in sectors characterised by a large presence of SMEs and by a low level of adoption of eBusiness and interoperability standards.

**This document is the final version of the Reference Architecture of eBIZ, released in 2013.**

The CEN Workshop on eBusiness in the textile, clothing and footwear sectors (WS/eBIZ) has performed an activity to review and update the RA in order to satisfy new requirements and progress in the real textile, clothing and footwear (TCF) industry.

**2. As main initial requisite**, wherever possible, the architecture’s specifications are based on existing public standards and already running experiences.

In general terms, the RA does not aim to develop or validate a new technology or a new software but aims to setup an approach to foster eBusiness adoption (eAdoption) in two sectors dominated by SMEs through a work of harmonisation that is strongly aware of the standardisation achievements.

The key features of the architecture:

- **Based on past experiences** of existing communities of users and European and International public standards.
- **Inclusive approach**: open, designed to support many models and many solutions (ASP, P2P, Hub...).
- **Public and usable**: public and usable specifications to reduce the gap between standard experts and company managers and technicians.
- **Scalable**: of value to small and medium enterprises as well as large organisations.
- **Targeted to real needs**: the different requirements of manufacturing networks and of production to retail relationships.

In short the architecture aims to create a favourable environment to establish a collaboration between producers and between producers and retail organisations.

**3.** For the producer-retail supply chains (*downstream* part of the supply chain) and for the producer-supplier networks (*upstream* part) different requirements were outlined in **the past analysis reports** (produced by the eBIZ-TCF project and by CEN WS eBIZ [1]) and the architecture started from them in order to propose appropriate technological and methodological specifications to cover topics such as data models, communication protocols and product classification.

**4.** The document offers a guideline for a possible and coherent reference framework of existing specifications and initiatives that enable the design of eBusiness experiences; a strong focus is on the reference scenarios and on some general requirements; when developed and maintained by third parties, the technical specifications are referenced from their sources so that it is easy to design harmonised eBusiness solutions.

5. This document is the FINAL CEN Workshop Agreement (CWA) delivered by the CEN Workshop on eBusiness in the textile, clothing and footwear sectors (WS/eBIZ) in the framework of the activities of Reference Architecture Updating (Task 2 of WS/eBIZ workplan).

This document should be assumed as the technical reference in order to tackle the objectives of eBusiness harmonisation in Textile Clothing and Footwear initiatives aiming to join eBIZ.

Topics that are object of **new chapters** or relevant improvements in respect of the RA released in 2009 are:

- Business model classification,
- Customised and health-oriented footwear manufacturing scenarios,
- RFID usage in the supply chain,
- eInvoicing,
- Testing and validation,
- Yarn production technical data and quality check,
- Communications protocols,
- A new approach to the process description based on the concept of 'Function'.

6. The report is structured on three main parts:

- The initial chapters 1, 2 and 3 offer a general methodological overview.
- The remaining chapters detail the architecture in its main areas and allow to choose the right scenarios of interest (business models, upstream manufacturing networks for Textile-Clothing and for Footwear, downstream relationships between retailers and producers, Communication, RFID devices, product numbering and identification)
- The appendices offer the details about the technical implementation and the references about on-line resources available to implementers.

7. This document is available from the eBIZ web site ([www.ebiz-tcf.eu](http://www.ebiz-tcf.eu)) together with other resources that should help the designers and implementers in their work.

## Terms and definitions

The following terms have been used to provide consistency throughout this document. They have been used in connection with various aspects of the complex supply chain in the sectors and some of the relevant terms used in eBusiness.

### Textile/Clothing Sector

The Textile/Clothing sector comprises those defined in the NACE Revision 1.1 classification<sup>1</sup> as Group 17 “The Manufacture of Textile” and Group 18 “The manufacture of wearing apparel; dressing; dyeing of fur”.

### Footwear Sector

The Footwear sector is defined as Group 19.3 of the NACE classification “Manufacture of footwear”.

### TCF Sectors

The term “*TCF sectors*” is used when referring to the combined Textile/Clothing and Footwear sectors.

### Roles

The following roles of participants within the textile supply chains are defined as Functions. The reasons for preferring the term “Function” are explained in 2.4.

#### Brand owner function

It has the right on the brand. It can be licensed or used within producer functions.

#### Producer function

It organises manufacturing and material supplying in order to obtain a finished good to sell to the retail function.

The actual manufacturing may be done by own factories or by sub-contractors.

Producer can be the role serving the retail function with finished products, but can also be supplier of fabrics or yarn with either own manufacturing or using third party manufacturing.

#### Manufacturer function

Is a manufacturer that performs actual transformations of the materials or goods within its organisation and equipments. It could provide the manufacturer function by itself or through a sub-contractor.

#### Retail function

It purchases the final good in order to sell it to the consumers.

Retailer and retail function are the same.

#### Consumer

Who buys the finished product from the retail function.

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[http://ec.europa.eu/eurostat/ramon/nomenclatures/index.cfm?TargetUrl=LST\\_NOM\\_DTL&StrNom=NACE\\_1\\_1&StrLanguageCode=EN&IntPcKey=&StrLayoutCode=EN](http://ec.europa.eu/eurostat/ramon/nomenclatures/index.cfm?TargetUrl=LST_NOM_DTL&StrNom=NACE_1_1&StrLanguageCode=EN&IntPcKey=&StrLayoutCode=EN)

### Supplier function

The term “*supplier*” is used when referring to an enterprise that supplies materials, parts, processes used in manufacturing (such as printing and dyeing) or when referring to sub-contractors who supply finished products to producers.

### Downstream

The term “*downstream*” is used when referring to that part of the supply chain between producers of finished products and their customers (normally retailers).

### Upstream

The term “*upstream*” is used when referring to that part of the supply chain between producers of a finished product and their suppliers of materials, component parts and processes used in manufacturing products. It is also used when referring to the whole of the supply chain involving the sub-contracting of finished products and the sub-contracting of materials and component parts or of processes used in manufacturing products.

It can be seen from this definition that there are both Producer-Customer relations and Producer-Supplier relations in the upstream chain.

### eBusiness

Generally, the term “*eBusiness*” can be applied to a number of different facets of ICT ranging from integration and improving the efficiency of the supply chain to improving the efficiency of development and production processes and to innovation in marketing and sales both to business and consumers.

In this document, the term is limited to supply chain-related electronic exchange of data or documents in the business to business (B2B) environment, covering both the upstream and downstream parts of the chain.

### Formal Standard

The term “*formal standard*” is used when referring to specifications that comply with the definition in Regulation (EU) 1025/2012: “*a technical specification, adopted by a recognised standardisation body, for repeated or continuous application, with which compliance is not compulsory*”.

### Local Standard

The term “*local standard*” is used when referring to specifications developed through collaboration and cooperation between partnerships of various sizes. These may either be local to one region or be cross-border.

### Proprietary Standard

The term “*proprietary standard*” is used when referring to specifications developed by a single enterprise to satisfy its own particular requirements.

### Traditional EDI Messages

The term “*traditional EDI messages*” is used when referring to data in business documents or messages using plain text formats. The most common of these are EDIFACT messages but the term is used to also cover EANCOM, X12 and TRADACOM and similar message formats as well as messages that are not compliant with a formal standard.

## 1 Introduction

### 1.1 This document

**The aim of this document** is to offer a guideline of the **updated Reference Architecture (RA)** for the eBusiness harmonisation in the Textile Clothing and Footwear sectors as it results from the activities of the **CEN Workshop “eBusiness in the textile, clothing and footwear sectors (WS eBIZ)”**.

The document does not contain all the technical specifications necessary to support eBusiness in the TCF industry; sometimes these specifications are developed and owned by third parties and, more in general, their development and maintenance is still an open issue, or, probably, a never ending process.

The document offers a guideline for a reference framework of existing specifications and initiatives that enable the design of eBusiness experiences; a strong focus is on the reference scenarios and on some general requirements but the technical specification are referenced from their sources so that it is easy to retry all that is necessary in order to design harmonised eBusiness solutions. Only in few cases the RA provides technical specifications in form of Use Profiles or representations of business scenarios.

The **first version** of the Reference Architecture was developed in 2009 in the framework of the eBIZ-TCF project ([www.eBIZ-TCF.eu](http://www.eBIZ-TCF.eu)), a DG Enterprise and Industry initiative that is an European large scale attempt to foster the adoption of eBusiness and related technologies and standards in sectors characterised by a large presence of SMEs and by low levels of adoption of eBusiness and interoperability standards.

The CEN Workshop on eBusiness in the textile, clothing and footwear sectors (WS/eBIZ) has reviewed and updated the RA in order to satisfy new requirements and progresses in the real textile, clothing and footwear (TCF) industry.

**This document is the FINAL version delivered as CWA by the CEN Workshop on eBusiness in the textile, clothing and footwear sectors (WS/eBIZ) in the framework of the activities of the Task 2 (“upgrade of the Reference Architecture”).**

This document is available from the eBIZ web site ([www.ebiz-tcf.eu](http://www.ebiz-tcf.eu)) together with other resources that should help the designers and implementers in their work.

### 1.2 Background and rationale

eBIZ-TCF project, funded by DG Enterprise & Industry of the European Commission, was a European large scale attempt to foster the adoption of eBusiness and related technologies and standards, at sectorial level in the Textile/Clothing and Footwear (TCF) sectors. One of the main outcomes of the project was the first version of the RA.

CEN WS eBIZ “eBusiness in the textile, clothing and footwear sectors (WS eBIZ)” is a standardisation initiative, run by CEN on a proposal of EURATEX and ENEA and co-ordinated by EURATEX, with the financial support of DG Enterprise & Industry of the European Commission. The aim is to update the RA according to new requirements (from companies and emerging business models and scenarios) and to foster its adoption in the European TCF industry.

These sectors are characterised by a large presence of SMEs and by an average level of adoption of eBusiness and interoperability standards that appears to be quite lower comparing to other similar manufacturing sectors.

Innovative e-collaboration combined with other new manufacturing and supply chain paradigms can provide some of the answers to the European companies to strengthen or re-gain global competitiveness.

Success in the fast-moving fashion business is increasingly reaped by companies with lowest response time to changing market and consumer’s requirements by integrating design, consumer feedback, sourcing and manufacturing, distribution and retailing.

Some traditional retailers functions and producers functions try to solve the conflict between long lead times and efficient consumer response (no over-stock, fast re-ordering and delivery) with a vertical integration of the value chain, if possible. And if this is not possible, by e-linking and e-collaboration in the value chain to have the same fast answers to consumer demand.

The key for such connectivity is the **interoperability** of systems based on commonly agreed open standards.

**Possible definitions of interoperability:**

The ability of a system or a product to work with other systems or products without special effort on the part of the customer (whatis.com)

The ability of two or more systems or components to exchange information and to use the information that has been exchanged (IEEE<sup>2</sup>)

A lot of efforts have been done in the field of standardisation for Textile/Clothing and Footwear industry in these years (as witnessed by analysis reports produced by the eBIZ-TCF project and by CEN WS eBIZ [1]).

All these efforts have prepared a background of analysis and specifications that is (almost) ready to be implemented by the industry.

Yet so far an overall harmonisation has been lacking and in many cases, the results of these activities did not led to a widespread adoption in the user community.

As a result, the fashion sector (textile-clothing and footwear at first) has remained without globally implemented eBusiness standards and has not sufficiently succeeded in its efforts to synchronise data and to exchange business documents electronically.

Being aware of these issues, the RA has assumed the objective of the definition of a reference architecture for eBusiness in Textile/Clothing and Footwear sectors to tackle the different requisites for both the producer-retail supply chains (*downstream* part of the architecture) and the supplier-producer- networks (*upstream* part of the architecture) with appropriate technological and methodological specifications to cover topics such as data models, communication protocols and product classification.

The key features of the architecture:

- **Based on past experiences** of existing communities of users and European and International public standards.
- **Inclusive approach:** open, designed to support many models and many solutions (ASP, P2P, Hub...).
- **Public and usable:** public and usable specifications to reduce the gap between standard experts and company managers and technicians.
- **Scalable:** of value to small and medium enterprises as well as large organisations.
- **Targeted to real needs:** the different requirements of manufacturing networks and of production to retail relationships.

In general terms, the RA has not aimed to develop or validate a new technology or new software but to setup an approach to foster eBusiness adoption (eAdoption) in two sectors that are dominated by SMEs, through a work of harmonisation that is strongly aware of the standardisation achievements.

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<sup>2</sup> Institute of Electrical and Electronics Engineers. IEEE Standard Computer Dictionary: A Compilation of IEEE Standard Computer Glossaries. New York, NY: 1990.(iftikahr)

In short, the architecture aims to create a favourable environment to establish collaboration between producers and their suppliers and focuses on European manufacturing industry that has not completely outsourced its production.

### **1.3 Relationship with the world of standards**

While acknowledging the difficulty of creating universally adopted standards, the eBIZ RA is well aware of the enormous advantages that a common set of simple, unambiguous specifications would bring to the whole industry.

It also recognised that the development and maintenance of standards is often ongoing and, in all probability, a never ending process. To keep them updated, many of the technical specifications, particularly those based on existing public standards, are embedded in or are cross-referenced from their original sources.

The architecture has been developed taking state of the art of standardisation activities into account and with the involvement of standards bodies such as CEN/ISSS, OASIS as well as no-profit organisations as GS1. For example, the need for specifications for data transport has been dealt with by recommending the technological protocols recognised by W3C, ISO and OASIS.

On the other hand regarding RFID usage the EPCGlobal recommendations have been endorsed.

The same happened for the work in the field of the identification of business models performed by GS1 Germany that has agreed to contribute with its outcomes to the new chapter ("*4. Business models classification*") addressing this topic.

At the business level, a number of specifications have been developed for the sectors by several different projects and initiatives which have been adopted, enhanced and kept alive by various user communities. The most suitable ones have been adopted by the eBIZ team, working with the existing users and developers, and adapted to fit the architecture's aims for interoperability.

While upstream specifications have a basis on the Moda-ML and Shoenet users communities, the specifications for downstream eBusiness with retail organisations are based on EANCOM specifications from WWS Profile; using them to create business scenarios and data models specified in the Universal Business Language (UBL, that is XML based) while also drawing on the experiences of the EFNET and CECMADESHOE projects in the footwear sector.

A specific issue addressed in the architecture is the need in the downstream chain, for system such as logistics and point of sale to have a common method of consistently identifying products and parties (companies and locations). Otherwise, they would be faced with enormous difficulties if presented with the various proprietary coding systems adopted internally by producers and retailers.

To overcome this problem GTIN and GLN codes, managed by GS1, provide identification for products and locations respectively and are internationally recognised and widely accepted by retail organisations in the world of consumer products. Using GTIN and GLN numbers is therefore, mandatory in the eBIZ architecture for downstream applications.

The need for a common product identification, however, is not applicable to networks of producers in the upstream chain who deal with materials, components, processes and finished products that are continuously changing and easily identifiable as belonging to a specific producer.

To summarise, eBIZ's approach has been to identify the best available standardised specifications and use them in a common framework while, at the same time, suggesting how they may be implemented in actual TCF scenarios.

### **1.4 The approach to build a reference architecture**

The work of analysis has evidenced the importance to understand the existence of different priorities and requisites that are the drivers for the eBusiness adoption; this has led to identify the two different challenges related to the different segments of the supply chains of the TCF industry (see also [2]).

**a. The highly specialised networks of manufacturing enterprises (upstream area):** the producers of final goods rely on complex networks of enterprises (large as well as small) with highly specialised processes:

- these relationships require a strong integration between the actors and cannot be hampered by rigid or poor models
- the keywords are *flexibility* and *completeness*
- specific languages (and data models) have to be provided for each sector with its specificity
- the collaborations involve a 'reduced' number of actors that know and trust each other with a strong partnership and are extremely '*customised*' to fit the organisation of the partners
- in the past there were local networks, now, increasingly, transnational networks.

**b. The retail channels for the Textile/Clothing and Footwear final goods (downstream area):** based on large organisations as well as small shops, the retail organisations need to achieve a common and efficient connection with the producers;

- the keywords are *efficiency* and *normalisation*
- uniform ways of coding (product and party identification) have to be provided
- the collaborations involve large numbers of actors that do not know too much each other with an '*anonymous*' partnership that is based only on obligations deriving from purchase contracts and that usually expire with the goods delivery
- the importance of fast and effective feedbacks from retail to producers is getting more and more relevance for industry.

For these reasons the RA has assumed as target a domain organised in three main areas:

- Textile/Clothing Enterprise Networks (TC Upstream)
- Footwear Enterprise Networks (FW Upstream)
- Production to retail relationships (Common TCF Downstream)

For each area, the pre-existing initiatives and requirements produced by the work of analysis have been assumed as the starting point of the work; the homogenization of their representation and the development of some lacking elements are the added value from the RA.

Nevertheless, within the scope of the eBIZ-TCF project and of CEN WS eBIZ it was impossible to develop all the lacking elements for the two industrial sectors: the project has focussed its efforts in order to provide the basic technical specifications for establishing interoperable eBusiness solutions, leaving further refinements and developments for future initiatives.

Thus the homogenisation and the creation of a coherent structure of documentation for specifications arising from different experiences and sources has been one of the driving activities of the first phase of the activities on the architecture.

## 2 Reference Architecture and overview of selected standards

The domain of application of the RA is based on three sub **domains** (see Figure 2.1):

- Production to Retail Relationships (Downstream)
- Textile/Clothing Enterprise Networks (TC Upstream)
- Footwear Enterprise Networks (FW Upstream)

### 2.1 The production to retail relationship (downstream)

The production to retail relationship is characterised by:

- business processes and data models derived from CEN/ISSS EFNET [6] and TexWeave and reengineered in CecMadeShoe and WWS Profil, common to both the sectors

- XML implementation through a profile of use built on the OASIS UBL [11] specifications (a cross-sectorial standard for eBusiness that could be considered the XML correspondent of EDIFACT and EANCOM)
- interoperability with EDIFACT legacy, mainly WWS Profil, thanks to an intermediate level of data models that is common between XML and EDI implementations (and is open for future developments)
- anonymous collaborations (large numbers) to support fast and simple connection between hubs, firms and retail organisations
- use of Global Trade Item Number coding for product and party identification (GTIN, GLN) and of logistic identification (SSCC)
- focus on small & large retail (not huge international) organisations
- use of EPC for single item identification.

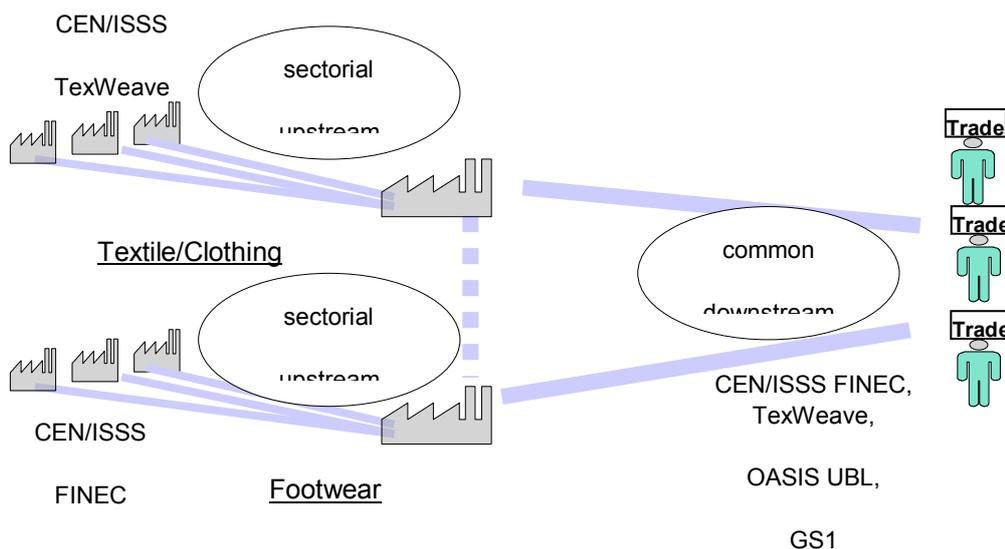


Figure 2.1 - The domain of the architecture.

## 2.2 The manufacturing networks (upstream)

The manufacturing networks are characterised by:

- business processes and data models based on XML syntax, specific for the sectorial processes: derived from CEN/ISSS TexWeave [3] and Moda-ML [9] for the Textile/Clothing production processes; derived from CEN/ISSS EFNET [5] and Shoenet [7] for the Footwear processes
- reference XML specifications provided by Moda-ML and Shoenet
- closed collaborations (small numbers; supported at logical level by ebXML CPPA specifications [12] in order to fit the specific collaboration models that each pair of partners intend to support).

According to this approach, the custom products supply chains are catalogued by the eBIZ RA as manufacturing networks, even if they connect producers (or producers functions) and retail functions: they are thought to be very business specific and strongly dependent from the product itself and its production chain.

## 2.3 The architecture

The Reference Architecture is organised on 4 main layers (see diagram in Figure 2.2):

1. a Business Model layer based on the chosen model of business
2. a Business Application layer based on business processes implementing business models
3. a Middleware layer consisting two sublayers:

- an optional eBusiness Middleware
- a Messaging Middleware.

It is based mainly on ebMS for messaging and ebXML CPPA for collaborations, and any other type of choreography;

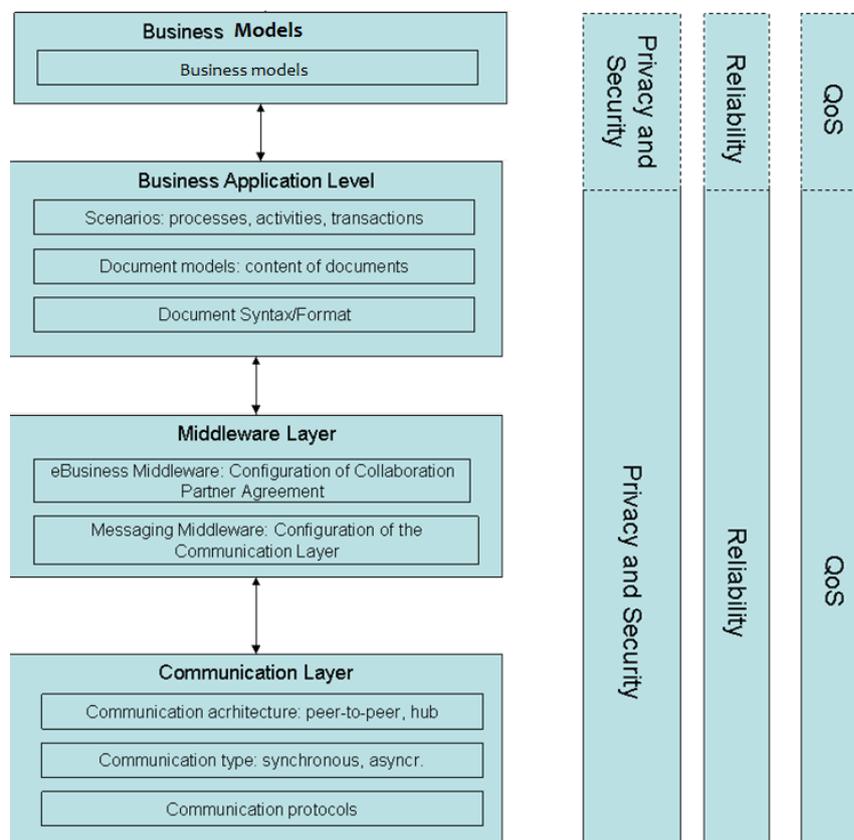
it creates a connection between the upper and the bottom layers

4. a Communication layer specifying the communication type (synchronous or asynchronous), the communication architecture (peer-to-peer, hub-based, etc) and the underlying communication protocols.

In addition there are a Security/Privacy block and other vertical ones which can be applied on each of the hierarchical layers.

The architecture is based on five different **types** of specifications:

- business models
- business processes (that will be represented using UML notation and ebBP templates [12])
- data models (document template specifications, based on a logical level and a syntactic level, implemented on XML but related with pre-existing EDI specifications)
- collaboration and communication protocols
- product classifications



**Figure 2.2 - The 4 main layers of the Reference Architecture.**

## 2.4 Roles and functions

It is to mention that in this RA 2.0 the concept of actor used in the previous version (Retail, Manufacturer, etc.) has been substituted by the new approach to the process description based on the concept of 'Function'.

In this way, rather than labelling an organisation with a single function it is recognised that the same organisation can play with different functions in different processes or in respect of different partners ("Material supplier **function**" rather than "Material supplier").

## 2.5 Collaboration and communication

The architecture related to collaboration and communication protocols is only partially defined and is characterized by:

- a model of an European TCF logical Network (ETCFN) of communication based on three main scenarios: Hub-Hub, Hub-Firm, Firm-Firm (being *hub* an application connectivity service provider –like EdiCom, eGate, Intesa and others- or an integration service provider –like TXTChain, TextileBusiness, etc-)
- a strong attention to the issues on security through the network (especially through the hubs of services that must guarantee the identification of the senders)
- protocols focused on both SMTP and Web Services.
- ebXML CPPA to model and publish the collaborative reference processes. The objective of this layer is to make each participant able to find a path to interoperate with any other, despite the service and solutions they adopt.

## 2.6 Product identification and classification

**Identification.** The product and party identification in the relationships with retail organisation must be assured by the mandatory use of global unique coding (GTIN and GLN).

Using RFID devices the EPC specifications have to be assumed as mandatory.

On the other relationships (between manufacturers or between manufacturers and brand owners) it is possible to use other types of coding more flexible and expressive; anyhow, the key points are

- 1) clear declaration of the issuer of the codes,
- 2) affordable coding management inside the company's ERP.

**Classification.** The activities related to product classification have registered a status of art that appears still not fitting the industry needs; thus the aim of the architecture report is to provide a way to preserve existing (and used) regional/national classification systems (where existing) and to allow them to be mapped to a common classification reference in order to facilitate interchanges.

## 2.7 The conformance to the architecture

The first immediate aim of this document is to establish a reference framework for the designers and developers engaged in the implementation of the eBIZ architecture in their applications.

Why conformance is so relevant?

Interoperation between different networks or peers is much more **easily achieved if both are fully conformant** with the eBIZ architecture, thereby greatly **reducing the costs** and encouraging extension to new partners.

To be accepted as conformant with the eBIZ architecture it is not necessary to implement all of the specifications for an application, although some minimum criteria must be satisfied:

- an example is the mandatory adoption of the specified data models to avoid incompatibility (and unexpected costs);
- on the other hand, it is not necessary to fully implement the reference processes (the sequence of messages to be exchanged). As long as the partners involved have compatible workflows, a partial implementation or a variation in the sequence is permitted.

Thus it is worth to clearly define what is expected in terms of 'conformance' with the architecture.

### **2.7.1 The minimal criteria of compliance can be summarised in this way:**

The criteria of compliance, that are outlined here, indicate what is expected from systems and applications that want to follow the architecture.

There are five main types of elements in the architecture (see previous paragraphs):

- the business models
- the organisational and procedural aspects implementing the business models
- the semantic and data models to exchange information
- the product and party classification and identification
- the middleware and communication protocols.

#### **a) the business models that must be coherent between the direct partners**

The business model determines which processes have to be implemented and the rules that must be respected; the RA does not force a specific business model; nevertheless through the classification of possible business models and their variants allow to clearly understand which is the model a partnership has to implement: it is expected that a firm can participate in different business models with different partners, but for each of them the business model of the two parties has to be coherent.

#### **b) the organisational and procedural aspects related to business scenarios**

**Upstream** the proposed processes are assumed as a reference that could be modified or partially implemented with high degree of freedom;

**Downstream** the architecture specifies the 'mandatory' **minimum set of transactions** of each process; the participants, once defined the process they are interested in, must implement at least this minimum set of transactions.

#### **c) the semantic and data models to exchange information**

The **data models** of the exchanged XML messages always must be strictly validated with the reference XML Schemas (XSDs) and with some basic business rules (expressed through Schematron definitions).

**Downstream** there is also the necessity of a second check using the **Use Profiles** that presently are not completely implemented by XSDs (they implement both XML Schema and business rule constraints).

Nevertheless, at this stage, there are no means for a complete automatic check; thus semantic is guaranteed by the compliance to the published definition of each element that must be guaranteed by the developer.

#### **d) the product and party classification and identification**

**Downstream** the product and party (even location) information must be represented by GLN and GTIN global identifiers issued by GS1.

The only exception could be for company internal communications: it is acceptable that internally a global company uses other identification systems (in this case the 'schemaName' must be declared explicitly according to the adopted use profiles);

Anyway it is not acceptable for the communication towards other partners.

**Upstream** any kind of identifier can be accepted for product/part identification (but the issuing organisation must be declared clearly), is a duty of the parties to avoid misunderstandings; the parties and locations usually are explicitly and extensively described.

#### **e) the middleware and communication protocols**

Inter-company (in a Peer-to-Peer mode or via a connectivity hubs) and inter-hub data exchange must be supported with SOAP over HTTP or SMTP. Intercompany data exchange must satisfy minimal level of security. Inter-hub data exchanges must guarantee the identity of the originator of business documents and assure non-repudiation of received messages.

### **2.7.2 The validation tool**

As with any set of specifications, assessing conformance with eBIZ specifications can be a complex process so an automatic on-line tool enabling users to check conformance by themselves has been developed.

A first tool was developed for eBIZ-TCF project in 2010 based on XML Schema validation (XSDs). It is publicly available at <http://spring.bologna.enea.it/eBIZ-TCFvalidator.asp> and is maintained by ENEA.

An updated tool has been released to support the present Reference Architecture delivered in 2013 tool; it is specialised to the three main RA areas and has capabilities to support the updated data models as well as business rules related to the use scenarios. The new system work within the [www.ebiz-tcf.eu](http://www.ebiz-tcf.eu) web site.

It checks the data models of uploaded XML messages (point 'c' in the previous list), the core component of the eBIZ architecture, giving responses that enable users to fix non-compliant elements.

It allows also to check the conformity against basic business rules that are depending on the usage scenario of the documents (supporting in some way point 'b' in the previous list).

However, it must be stressed that these tests cannot give 100 % assurance that any pair of systems will understand the data exchanged and perform the required operation. As with any ICT system, this can only be verified after a process of test and tuning.

The screenshot shows the 'eBIZ-TCF documents Validator' web interface. At the top, there is a banner with the text 'eBIZ-TCF' and four small images: a woman in a hat, hands holding a shoe, a factory interior, and a blue bag. Below the banner, the title 'eBIZ-TCF documents Validator' is centered. A 'Back to Home' link is visible on the right. The main content area is titled 'Validation Report' and contains a box with the following information:

- File name: DI510-012a-v2x-WRONG-Order.xml
- Area of the document: Downstream (relationship Producer - Retail)
- eBiz-TCF schema validator: <http://www.moda-ml.net/ebiz-retail/repository/validationTools/xsd/maindoc/eBiz-TCF-OrderValidator.xsd>

Below this box, the result is displayed as 'Result: Validation Failed'. Underneath, there is a section titled 'Violations of the Schematron constraints' which contains a table with one row of error details:

Type	Line	Message
ERROR	27	If the 'schemeName' attribute occurs in this path, it must be 'GLN'. (@schemeName='GLN')

**Figure 2.3** - A sample of 'failed validation': the 2010 validator tool has detected the absence of the GLN coding in a downstream instance of UBL.

The screenshot shows the 'eBIZ - Textile/Clothing and Footwear Downstream document Validator' web interface. The title is 'eBIZ - Textile/Clothing and Footwear Downstream document Validator'. Below the title, there is a section titled 'Select the validation process/activity:' with a dropdown menu. The menu is open, showing the following options:

- VMI - Daily report of sales and inventory movement
- VMI - Initial stocking of the area by vendor
- VMI - Invoicing
- VMI - Permanent replenishment
- VMI - Price adjustments
- VMI - Returns initiated by the producer

Below the dropdown, there is a paragraph: 'This is the tool to check conformance of the eBIZ Textile/Clothing and Footwear (TCF) Downstream XML documents.' followed by another paragraph: 'The aim of this tool is to check the conformance of XML instances to the specification of eBIZ TCF Downstream data models. The conformance test is based on two stages of validation:'

- validation against generic UBL 2.0 specifications (XSDs)
- validation against the use profile of eBIZ-TCF (using Schematrons)

At the bottom, there is a link: 'Explanation about the usage >>'

**Figure 2.3a** - A sample initial web page of the 2013 validator tool.

## 2.8 How to use this report and the Architecture in general

The Reference Architecture can be used to guide users and developers through an implementation, helping them to understand the process and to design applications, but it should be remembered that its primary purpose is to enable the exchange of data and share procedures with external systems.

If the existing systems are already well structured and manage the workflow throughout the company, this can simply be achieved by adding some “front end” software to send/receive messages and by mapping data to and from internal systems. If not, it may be necessary to re-engineer those systems to better support internal workflows and data management.

The architecture is structured so that:

- the main Report explains **what** has to be done;
- the Appendices explain **how** it should be done.

An **overview** of the specifications is also available online at [www.ebiz-tcf.eu](http://www.ebiz-tcf.eu) together with additional resources such as samples, XML Schema, User Guides and visual representation of collaborations.

## 3 Business models classification

Since the release of eBIZ-TCF Reference Architecture 1.0, in 2010, two influential market developments happened on this field of lacking business scenarios though which find their way now into this revised version of eBIZ Reference Architecture 2.0:

1. Classical producer – retailer (wholesale) relationships have been increasingly replaced by various forms of vertical partnerships. This is an important development particularly in countries like Germany where major TCF companies introduce such new ways of doing TCF business with its strong export activities into other countries. As these new business models create major increases in retail productivities it is obvious that increasing revenues per m<sup>2</sup> will be the main driving force behind structural changes within the European TCF Sectors. That's why we gave this part a new chapter within this revised version of eBIZ architecture.
2. The successful work of EPC Global developing relevant standards around RFID within the Fast Moving Consumer Goods (FMCG) industries changed with its broad approach including a Fashion vocabulary for EPCIS the way of thinking in standards within the TCF sector and raised the willingness to accept standards. The biggest breakthrough on this field was the decision for UHF Gen 2 standard to be the global TCF air interface standard which eliminated a major obstacle against RFID. Despite this breakthrough and other structural improvements there are other important topics unsolved yet, which leads us to a separate RFID chapter in this revised version – please see chapter 10.
3. The generalisation of the internet use (social networks, mobile connectivity, etc..), the new ICT developments, and the new flexible manufacturing techniques, have introduced new business models that affect the way of manufacturing and commercialising the products, as

well as its associated services (product-service mix). This new environment has facilitated the product customisation and small-lot production specially in the footwear sector. Complex internet-based configuration applications allow the users to define a unique product that will be manufactured only once. Specific business models derived from this new societal scenario are, for example, manufacturing of fashion custom shoes, and custom shoes for the health sector. For the purpose of the eBIZ Reference Architecture these new business models and processes, being tailored to the product features and the production chains, are managed as sector specific special cases.

The reason why these new business models are majorly important is the fact that they determine exactly these TCF processes which shall be supported by this reference architecture.

In other words, the clearer and complete these business models are structured and defined the more this guarantees the completeness of all mentioned relevant processes. This creates as a side effect some sort of “identical TCF language” which is by opinion of many experts one of the main obstacles of transforming the 2009 vision of eBIZ Reference Architecture into the reality many TCF sector companies wait for.

And there is another important effect: the more relevant processes can be connected by IT companies to known and structured business models the more they feel that such logics cover all eventualities which gives them the security they need to invest resources in adapting this eBIZ reference architecture.

That’s why the structuring of successful business models is so crucial for the acceptance of any reference architecture.

### **3.1 Downstream Business Models**

Within a so called “Connecting Fashion Business – Concepts of Floor Management” [21] GS1 Germany developed together with a retail expert for the downstream part of the supply chain the following floor management best practise structure.

The reason behind such effort was the same mentioned before: without speaking the same language within the TCF sectors there is no basis for any efficient development of relevant process and IT standards.

The following chapter on (downstream) business models is taken from the above mentioned report “Connecting Fashion Business – Concepts of Floor Management” [21] as GS1’s contribution to this updated version of the eBIZ Reference Architecture.

#### **Collaborative strategies implemented by the business models**

The aim of collaborative strategies is to optimize the traditionally uncoordinated flow of information and goods between manufacturers or rather producer and retailer; the expected result being to organize the logistic processes and the marketing more efficiently and increase productivity of retail space.

For example, the Efficient Consumer Response (ECR) concept is a strategy to focus all of these activities more efficiently on the needs of the consumer and is subdivided into several basic strategies, which are independent concepts themselves. An overall ECR-Approach is achieved by following the different basic strategies simultaneously.

The principal aims of ECR are to maximize consumer satisfaction and to minimize costs at all stages of the value chain. This is realised by an efficient flow of information, as well as the automation of internal and supply chain business processes; in particular for the fashion industry one focus lies on availability of stock on the sales floor – essential condition for selling goods to the consumer.

### **3.1.1 Elements and terms of Floor-Management**

#### **Business model**

Business models in the fashion retail industry take different forms. They can range from complete stock risk for the retailer and the retailer is carrying out all process steps, deploying retailer specific transport means (e.g. pallets, boxes) and other investment goods (such as cash registers and other IT-equipment). On the other hand, the producer could also take over all of these functions, investments and risks or only to some extent.

#### **Stock risk**

The main stock risk in the fashion industry – besides theft and accounting errors – lies with the product becoming obsolete in terms of style. This leads to a reduction in value of these articles, so that they still can be sold at reduced prices. Less Profit is the direct consequence.

The more complete the stock is regarding size and / or colour, the better it can be sold. To reduce stock risk, one can either selectively reorder certain sizes / colours, or exchange the goods between different floors, so that almost complete product ranges are created on particular floors. Floors, which have been deprived of product range, can be restocked.

The risk of loss of goods as a sub-item to stock risk, summarizes the risks of inventory differences, theft, Act of God (fire, storm, water etc.) and other problems (goods which are not available on a short term basis).

#### **Assortment**

In a Floor-Management system an assortment needs to be determined. Determination from the assortment defines the goods available, regarding class of goods, cuts, colour and size.

#### **Width of the Assortment**

Describes the variety of offered class of goods.

#### **Depth of the Assortment**

Determines the available choice within certain classes of goods regarding: model, quality, price range, size.<sup>3</sup>

#### **Return of goods**

Return of goods to producer.

#### **Exchange of goods**

Return of goods by the consumer to the shop in exchange for money or goods of equivalent value to the retailer.

#### **Handling Unit**

The term "Handling Unit" describes a quantity of garments or footwear or any other goods, which is sent on hangers. During the loading process, these items are bundled by hand, packed (sack / bag) and marked with a SSCC (Serial Shipping Container Code).

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<sup>3</sup> See: German BBE Retail experts, [www.handelswissen.de](http://www.handelswissen.de)

### 3.1.2 Business model and its variant elements

To efficiently explain the term “Floor-Management” one needs to define the term “floor”:

- **Floor**  
“Floor” describes all sales areas in a store / retail store which are defined according to the particular business model and upon which turnover should be generated. The term might include furniture for product presentation as well as adjoining sales area in the same store, as far as this sales area is part of the same stock management.
  
- **Location Number per Floor**  
To make the Floor-Management-system efficient, each floor (e.g. the main department and shop-in-shop) is identified with its own GLN (Global Location Number) to enable unambiguous control and administration with the help of electronic data exchange.

Besides the determination of the “floor”, one has to decide whether it is the retailer or the producer who provides the sales furniture, so that either the uniformity of sales in one house or a consistent representation of the brand with its own furniture is created. The capacity of furniture must be known and it should remain constant for the period of management, because it constitutes the basis for planning width and depth of the assortment.

#### Contractual aspects related to the business model

Each business relationship is based upon a contractual arrangement, which defines the relevant parameters, the expected activities, the particular responsibility and the charging method and charging intervals. Use of IT Systems and EDI (Electronic Data Interchange) is essential. To which extend EDI messages are implemented, has to be defined individually and is based mainly upon the number of business transactions.

Now it is worth to recall, shortly, some of the elements that determine different variants of the business models and should be regulated/mentioned in the contractual arrangement.

#### Core elements of floor-management contracts

1. Definition of the **floor**, which is to be managed with a particular business model.
2. Determination of the assortment which should be offered
3. Agreement upon which business partner has sovereignty over the **product range** and **price** and over which processes.
4. Who takes the **risk** of loss of goods and the stock risk. In this context it has to be determined, how the change from the current to the future business model should be arranged (treatment of old stock, e.g. reselling or rebuying the stock).
5. Arrangements upon which partner accomplishes goods **handling** on the sales floor.
6. Who is responsible and executes the **cashing** up process (check out).
7. Which **logistical** processing is chosen (including transfer of risks).
8. At which point in the flow of goods the **transfer of property** takes place.
9. Clarification of the tasks, which have to be accomplished by the staff on the sales floor as well as managerial responsibility and salaries for the staff.
10. Adjustment of the technological demands to IT Systems, data exchange etc. as well as connected processes, which are relevant for accounting processes and conditions (allowances and charges).
11. Joint definition upon **rules for inventory** and handling of stock discrepancies. The partners adjust the rules with their auditors before starting a new business model.

These core elements consist of different sub-items (see GS1 document [21]).

Depending on the business model, responsibilities are proposed as to facilitate contractual arrangements. These propositions are not binding as not to interfere with the entrepreneurial decision-making freedom.

### **3.1.3 Five (main) business model determining elements**

For an easier understanding of these recommendations, five varying base types of business models have been defined which differentiate in some main aspects. Definition of details is part of the particular business partner's contracts.

The mentioned business models are:

#### **Order to cash**

The classical business model for the supply chain management is defined in this context "order to cash". The retailer is responsible for the definition of the assortment and can also independently determine the kind of goods up to its variants. He orders goods from the producer who sends them to him. Transfer of ownership (where necessary including reservation of property rights) takes place at time of delivery. At the same time, or rather after receiving the proof of delivery, the invoice is generated, payment is made due to the particular payment target. Sales floor arrangement is subjected entirely to the retailer who also carries the risk of loss of goods and the stock risk on his own.

#### **Consignment (S and DC level)**

Here, the producer provides the goods physically. However, the producer retains ownership up to determined events. Two kinds of consignment can be differentiated:

**a) Consignment store level**

Goods become the retailer's property in the logical second before the sale – and therefore at the logical second before the goods are registered at the retailer's cash register. The goods are practically just in the retailer's ownership in an administrative way.

**b) Consignment distribution center level**

Goods are delivered to a central- / regional warehouse which is administrated by the retailer. Goods remain in the producer's ownership until the retailer takes them.

#### **Commission**

Sold goods directly become property of the consumer after having been property of the producer. Activities and responsibilities for the stock of goods on the floor are incumbent upon the producer.

#### **Concessions**

The retailer rents his sales floors to the producer, who uses the floor to sell goods (potentially with his own staff) for own account. The producer is also responsible for stock control. Where required, he uses the retailer's inventory devices and systems. Sold goods directly become consumer's property after having been the producer's property.

### Overview Parameters of Floor-management

Parameters Floor-Management		order to cash		Consignment store level	Consignment DC level		Commission	Concessions	
		VMI	BMI		d.center	s. area			
Definition Floor	Floor								
	Equipment								
Definition of the Assortment	Category								
	Module								
	Price bracket								
	NOS								
	Disposable articles								
Decision without restriction on assortment	Contents	Choice disp. Articles							
		Sizes							
		Amounts							
	Activities	Observing							
		Update							
		Additional Deliveries							
		Returns			P ⇌ R			P ⇌ R	
		Special Orders							
		Stock Transfer			P ⇌ R				
		Write Offs			P ⇌ R				
		Advertising							
		Special Offers							
	Conditions	Price List							
		Cond. For Payment							
Invoice / Credit									
Inventory Fraud Loss Risk	Inventory								
	Theft								
	Act of God								
	Other Losses								
Stock risk	Write Offs								
	Who pays?								
Handling of Goods Sales Floor	Replenishment								
	Responsibility for Sales Staff								
	Costs Sales Staff								
	Availability								
	Labelling								
	Relabelling								
Cashing up process Checkout	Sale								
	Exchange								
Inventory Logistics	Guidelines								
	Direct Delivery to the Store	yes	yes	yes	---	yes	yes		
	Distribution Center	yes	yes	yes	yes	---	---		
	CD	1 & 2	1 & 2	1 & 2	---	1	limited 1		
Transfer of Property	Immediately before sale	x		x					
	At Goods Receipt / Takeover of Goods		x						
	Directly to the Customer at Moment of Sale					x	x		
	At moment of delivery fr Dist. Cent. to SIs Area					x			

**Caption:**  
 Retailer - R  
 Producer - P  
 Together

Figure 3.1 - Overview Parameters of Floor-management

This overview shows the responsibilities for Retailer (R) in blue, for the Producer (P) in yellow and joint responsibility (together) in green.

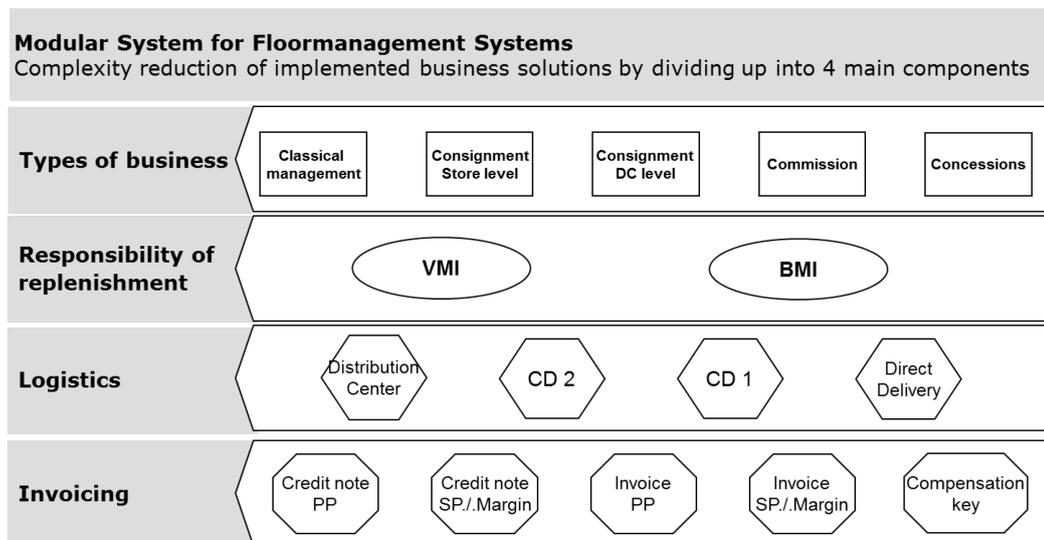
### 3.2 Variants of Business Models

#### 3.2.1 Downstream business models

In Figure (3.2) the most important varieties of floor-management are shown in a morphological box. Desired variants can be selected out of the particular section and then they can be composed just likes bricks in a building block.

The different sections are:

- business model as described in chapter 4.1
- responsibility for stock-management on the sales floors and reordering stock during the season
- logistic handling procedures
- accounting methods



**Figure 3.2 - Building blocks for formation of business model variants**

This modular system for floor management systems characterizes in other words:

- Which party, vendor or buyer, owns the merchandise
- Which party manages the merchandise
- Which logistical variant is used and
- How does the invoicing is set up.

This way each vertical partnership can be determined very precisely and this way a base is generated to define standard processes which can be a precise bases to determine which supply chain partner has which specific needs in particular information.

Downstream this definition of information needs is important, but years of unstructured development of electronic data exchange methods (mostly EDI) result in the fact that most information necessities got defined over the years.

The next chapter shows upstream business models, where standardized electronic data exchange is a total new territory.

In this new environment a precise language between the partners is crucial and an important prerequisite to determine information necessities and the matching standards.

The content of GS1's „Connecting Fashion Business – Concepts of Floor Management” – document has only been integrated into this eBIZ RA as it is relevant to the original purpose of the RA. The GS1 document shows in much more details the corresponding processes and other details that would be way out of proportion if fully integrated.

### 3.2.2 Upstream business models

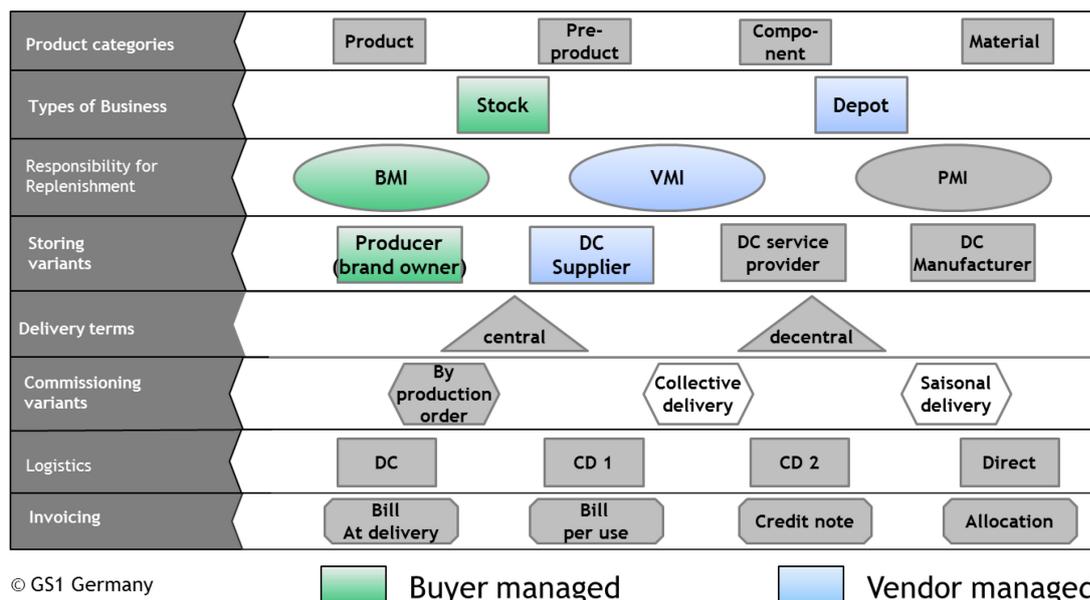
A closer look at the upstream part of the supply chain shows that there are quite some similarities to downstream:

- There is a supplier side, delivering in this case mostly materials.
- There are product master data that could be electronically submitted (like e.g. PRICAT, 'Catalogue' in eBIZ RA)
- There are supplier master data that could be transmitted electronically
- So could receiving data, inventory data and order or replenishment data.

More importantly the logic behind vendor or buyer managed inventory similar to vertical partnership would make sense. The current praxis shows though that any use of such sophisticated business models happens more or less randomly and so sporadic that it basically doesn't happen in the TCF sector in Europe.

According to this approach the above described downstream logic has been applied to the upstream supply chains by a group of German ICT suppliers, consultants together with GS1 Germany.

The result of this venture is shown by the following Graphic:



**Figure 3.3 - Overview of Business Model elements Upstream (generalised)**

The elementary terms supplier, manufacturer and producer (in its function as brand owner and supplier to the retailer) are used identical as in the downstream logic above.

The following definitions demonstrate the meanings behind each bullet point and are designed for TCF companies including Corporate Fashion Producers as well as Luxury Brands.

**It is to note that this logic starts in the supply chain, where materials like e.g. fabrics and trimmings are manufactured and ready to ship.** To be precise fibre and yarn production have not been considered, because in the GS1 work group that developed this scheme no participants of such groups have been represented. In other words it doesn't mean that they couldn't be integrated into the system but that would require additional standardisation work.

eBIZ RA, on the other hand, supports also the eBusiness activities of the Yarn and Fabric producers as well as the Shoes subcontractors that have a specific point of view that is situated 'before' the beginning of this logic. Nevertheless it is worth to have this picture also for their business. A support to their production processes is given by specific processes in the following chapters 6 and 7.

### **3.2.2.1 Product categories**

- Product: Finished garment or shoes sourced either full package or by CMT (Cut Made Trim) manufacturing that can be delivered to consumers without any further production process.
- Pre-product: Finished garment or shoes sourced either full package or by CMT manufacturing that can be delivered to consumers only with an additional production process, like e.g. a corporate fashion garment that needs additional company logo embroidery before shipping.
- Component: material component consisting out of preassembled materials – e.g. a preassembled shaft as a component of a shoe.
- Material: Trimmings or fabric/leather.

### **3.2.2.2 Types of business**

- Stock: In this sense stock that is owned by the buyer (mostly the producer, not the manufacturer, but could be either or).
- Depot: In this sense stock that is owned by the vendor.

### **3.2.2.3 Responsibility for replenishment**

- BMI (Buyer managed Inventory): inventory that is managed by the buyer (mostly the producer, not the manufacturer, but could be either or).
- VMI (Vendor managed Inventory): inventory that is managed by the vendor, which can be a fabric, leather or trimming supplier.

### **3.2.2.4 Storing variants**

- Producer: if the material logistics is handled by the producer in his rooms.
- DC (Distribution Centre) Supplier: if the material logistics is handled by the supplier in his rooms.
- DC Service Supplier: if the material logistics is handled by a service provider in space the service provider manages.
- DC Manufacturer: if the material logistics is handled by the manufacturer in space the manufacturer manages.

### **3.2.2.5 Delivery terms**

- Central: If the supplier delivers his material from one central manufacturing place or DC.
- Decentral: If the supplier delivers his material from various manufacturing places or more than one DC.

### **3.2.2.6 Commissioning variants**

- By production order: Material collected and commissioned for one production order.

- Collective delivery: Material collected and commissioned for all production orders of one shipment.
- Seasonal delivery: Material shipped serving the demand of a significant production period, like e.g. one season.

### 3.2.2.7 Logistics

- DC: Consolidation approach – DC Producer – shipment representing demand and storage into DC without any predetermined manufacturer, using this material.
- CD1 (Cross Docking 1): Consolidation approach – CD1 Producer – shipment arrives with a defined shipment to manufacturer to be using it - collection with other material without any further processing and storage in DC of this prepacked material shipment.
- CD2 (Cross Docking 2): Consolidation approach – CD2 Producer – shipment arrives with a defined shipment to manufacturer to be using it - storage in DC without any further processing of this prepacked material before collection with other material for shipment.
- Direct: material shipped directly from supplier to manufacturer without handling by producer or one of his service providers.

### 3.2.2.8 Invoicing

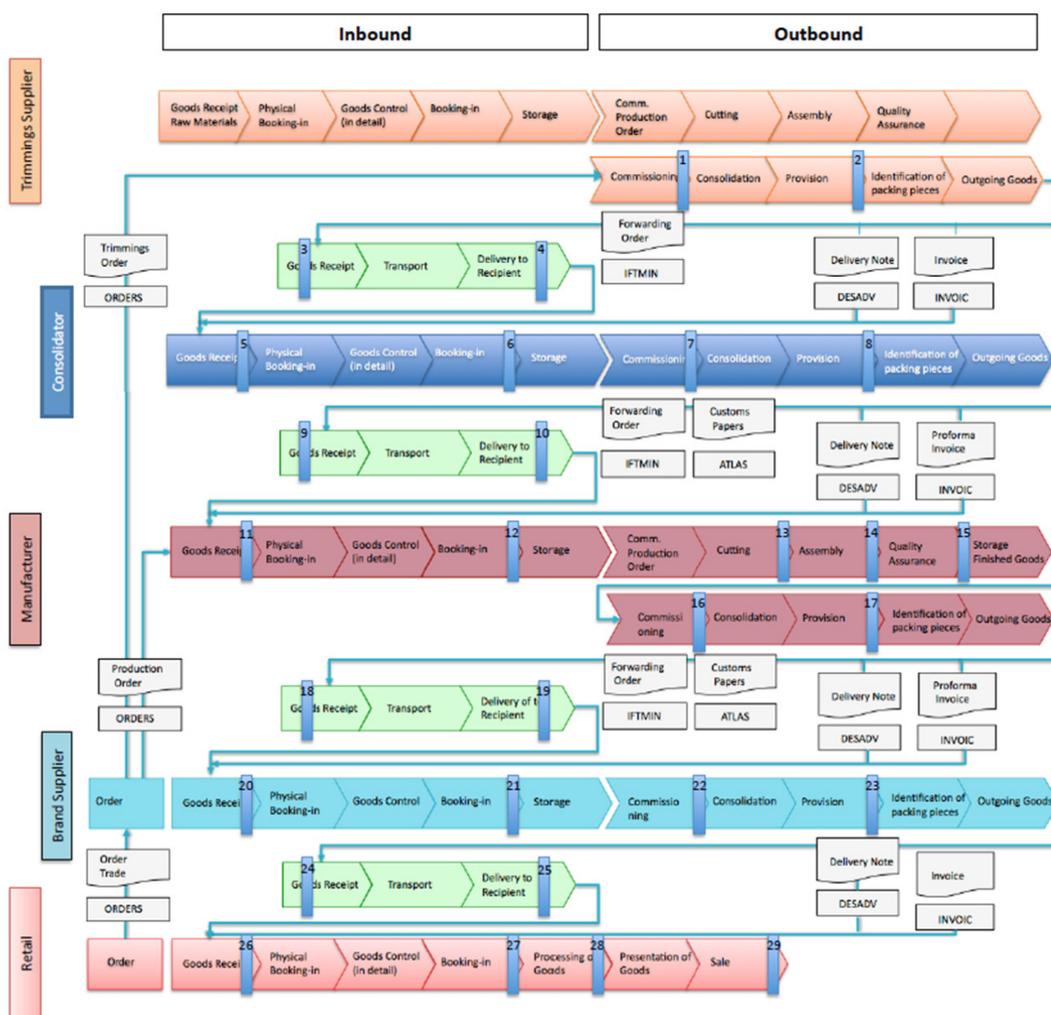
- Bill at delivery: Vendor bills with delivery of the shipment.
- Bill per use: Vendor bill, what the buyer has taken from depot and announced to vendor.
- Credit note: Buyer sends credit note corresponding to what buyer has taken from depot.
- Allocation: Supplier bills to manufacturer. Manufacturer ads such costs for this material to the price for his services, like e.g. his CMT costs.

While downstream the defined business models express in a structured way what had been developed within the TCF sectors, the above mentioned business models show possibilities to organize upstream supply chains by using the intelligence behind vertical partnerships between material suppliers, manufacturers and producers.

This can help to save speed to market as well as inventory costs and administrative expenses.

What is also already possible is the definition of “standard” processes where each TCF sector player feels “comfortable” recognizing “his own” environment.

The following graphic shows the current status of standard processes, representing CMT production as well as full package.



**Figure 3.4: Overview of standard process elements Upstream with potential RFID read points**

The Upstream Business Model structure described here is a first draft and basis for a Upstream Best Practice description that is in the process of being developed by GS1 Germany and will be available most likely after summer 2013.

It shows though, how surprisingly good the environment for EDI use is also in the upstream supply chains.

This document aims to represent the current status of discussion and analysis on these topics; further improvements are expected by the running activities of GS1 members of Germany and other countries.

### 3.3 Outlook

#### 3.3.1 Upstream Master Data

To finish the upstream part it makes sense to give a short outlook on upcoming eBIZ topics.

The key question is why EANCOM hasn't been used so far in the upstream part of the supply chain if the environment is as ideal as the above process picture shows?

One key obstacle is the broad variety of different (material-)article number systems in use within the TCF sectors. In collaboration with GS1 Germany two meetings with material suppliers took place in 2012 to evaluate, why material suppliers don't use GTIN as a standardized (material-)article number.

The answer was quite surprising showing that many major suppliers use the GTIN already in their business parts, where they deliver products to retail clients like e.g. department stores. Major suppliers noted that their client side, the producers weren't interested in the use of GTIN as (material-)article standard. This topic will be addressed in further standardization efforts within the TCF sector.

Another major topic is the electronic exchange of material master data between the supplier side and manufacturers and/or producers. A deeper look during the work of the iFIT Initiative in Germany showed that it is possible to define standards on this field, if relevant ICT supplier, e.g. PDM/PLM software provider can be stimulated to support such venture.

This is just a brief outlook but it proves that any eBIZ reference architecture is never 100% finished but that it is always an ongoing process.

#### 3.3.2 EANCOM versus EPCIS

The two meetings with trimming suppliers and producers showed that such defined standard processes allow a precise evaluation at which points – upstream and downstream – the TCF sector participants have specific needs for information. Such a step is e.g. cutting within manufacturing where producers would like to know when a production order is cut, because this is a significant milestone on the order's way to be ready for delivery.

This event point is a good example for a very particular topic. EPCIS has been designed to deliver events within the supply chains.

Currently there is no master plan though – considering the standard processes the process chart shows – when an EDI message type is appropriate and when an EPCIS event. As the process overview is a late development from Germany being developed second half of 2012 and as it is the only one of its kind, it is natural that it takes quite some time until this bases finds its way into GS1 Global standardization work so it is natural that such a master plan doesn't exist, yet.

Another reason for this is the fact that the development of the so called "Discovery Service" mechanism (right/role mechanism within the Internet of Objects) is also not finished, yet.

This results in an increasingly number of bilateral EPCIS applications with an increasing use of EPCIS databases for exchanging event data.

Now the increasing use of (majorly downstream) EANCOM use plus increasing bilateral 1.1 EPCIS application developed that first cases of conflicts between those two data exchange mechanism resulting in TCF sector requests to develop such a missing master plan concept.

This topic has been addressed in Germany to GS1 Germany and the first results of a small German task force taking a closer look at this topic is a formal EANCOM change request detailing how SGTIN's can be integrated into a updated EANCOM standard for FMCG industries including TCF.

The last step will be a master plan how to integrate the two worlds (EANCOM and EPCIS) ideally in a way that companies don't have to deal with two parallel systems. This last point is the clear wish of relevant TCF Producer market player.

## 4 Business Application Layer: Downstream

### 4.1 Downstream business processes overview

Process	Activity	Function	Transactions
<b>cyclic replenishment program - CRP</b>	Transfer of base article catalogue ( <i>mandatory</i> )	Producer Retailer	Article catalogue
	Initial stocking of the area by retailer	Retailer Producer	Order Despatch advice Receiving advice
	Periodic (weekly) replenishment ( <i>mandatory</i> )	Retailer Producer	Order Despatch advice Receiving advice
	Report of sales and inventory movements ( <i>mandatory</i> )	Retailer Producer	Sales report Inventory movement report
	Invoicing	Producer Retailer	Invoice
	Synchronizing of stock information	Retailer Producer	Inventory report
	Changes to the article catalogue ( <i>mandatory</i> )	Producer Retailer	Article catalogue
<b>classical preorder</b>	Initial transfer of order and article data ( <i>mandatory</i> )	Producer Retailer	Article catalogue Initial order response
	Transfer of changes to the order	Producer Retailer	Change order response Order change reaction
	Finalizing of the order	Producer Retailer	Final order response
	Delivery ( <i>mandatory</i> )	Producer Retailer	Article catalogue Despatch advice Receiving advice
	Invoicing	Producer Retailer	Invoice

	Report of sales data ( <i>mandatory</i> )	Retailer Producer	Sales report
<b>vendor managed inventory - VMI</b>	Initial stocking of the area by vendor ( <i>mandatory</i> )	Producer Retailer	Article catalogue Despatch advice Receiving advice
	Daily report of sales and inventory movement ( <i>mandatory</i> )	Retailer Producer	Sales report Inventory movement report
	Synchronizing of stock information (RFID based in between inventory)	Retailer Producer	Inventory report
	Permanent replenishment ( <i>mandatory</i> )	Producer Retailer	Article catalogue Despatch advice Receiving advice
	Invoicing	Producer Retailer	Invoice
	Returns initiated by the producer	Producer Retailer	Instruction for returns Returns advice Receiving advice
	Price adjustments ( <i>mandatory</i> )	Producer Retailer	Price list
<b>replenishment on customer demand</b>	Transfer of base article catalogue ( <i>mandatory</i> )	Producer Retailer	Article catalogue
	Periodic transfer of article availability information ( <i>mandatory</i> )	Producer Retailer	Stock availability report
	Initial stocking of the area by vendor and buyer ( <i>mandatory</i> )	Producer Retailer	Order  Change order response  Despatch advice  Receiving advice
	Periodic replenishment ( <i>mandatory</i> )	Producer Retailer	Order  Change order response  Despatch advice  Receiving advice

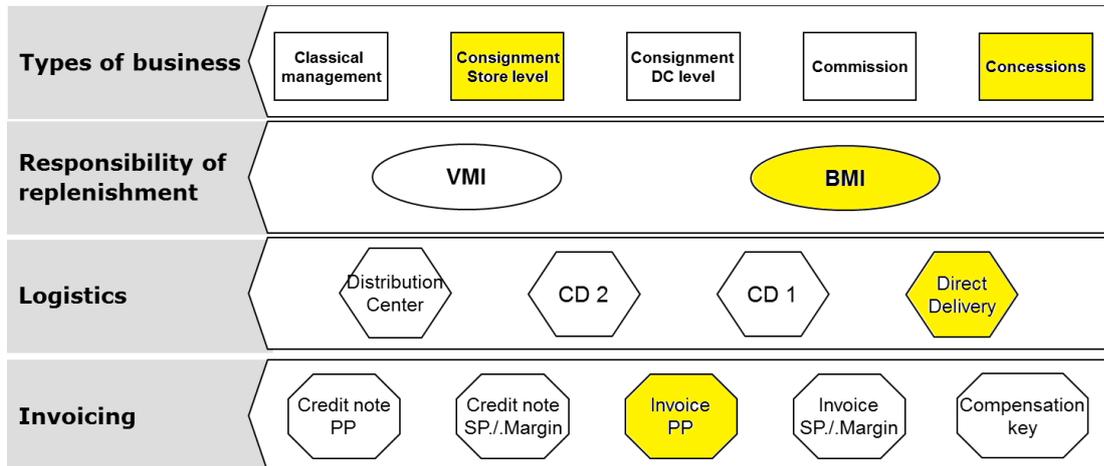
	Report of sales and inventory movements	Producer Retailer	Sales report  Inventory movement report
	Invoicing ( <i>mandatory</i> )	Producer Retailer	Invoice
	Synchronizing of stock information ( <i>mandatory</i> )	Producer Retailer	Inventory report
	Changes to the article catalogue ( <i>mandatory</i> )	Producer Retailer	Article catalogue

To consult this chapter remember that, as explained in 2.1, the **Processes** are splitted into **Activities**, each of them implemented by a set of **Transactions** based on an electronic **Document**.

The following 4.1.x paragraphs will illustrate the each Process and the related Activities (details are in **Appendix A**); a description of the role and content of the electronic Documents to implement each transaction is in in the following 4.2 section; finally in **Appendix B** there are the details about the technical implementation of the documents, with references to samples, XML Schema and any other online resource.

The support to the adoption of **object identification devices** (for example through RFID devices), the transmission of information about a serial product identifier (based on EPC coding) in the inventory activities is supported as well as in the Despatch and Receiving Advices and Return Advice activities.

## 4.1.1 Process "cyclic replenishment program - CRP"

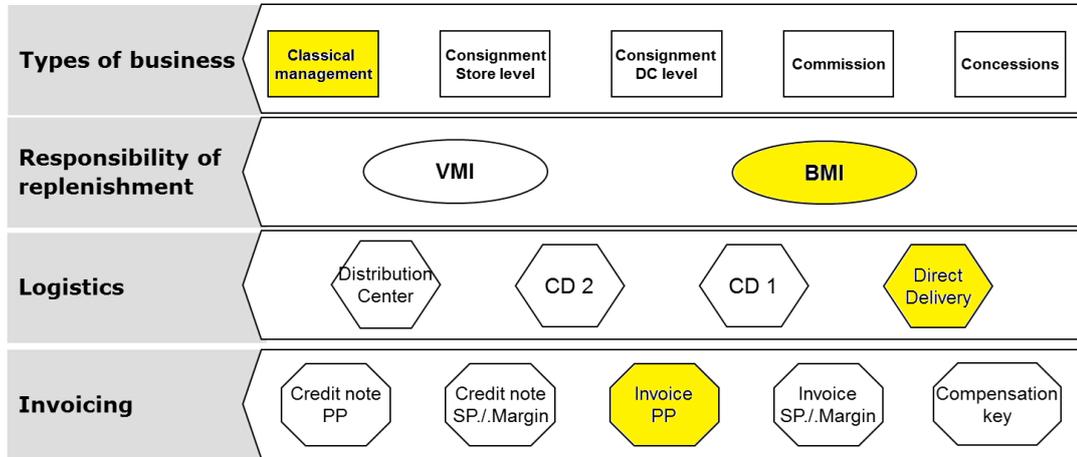


This diagram is a proposal to map processes into the business model specification with the aim to facilitate the identification of the best fitting scenarios of eBIZ adoption.

<b>Process Name</b>	cyclic replenishment program - CRP
<b>Actors</b>	Producer function, Retailer function
<b>Description</b>	From the producer functions portfolio of NOS or seasonal NOS articles the Retailer function picks his choice of products for the cyclic (weekly) replenishment. The logistic scenario can be combined with the charge-on-delivery as well as with a consignment/concession model
<b>Activities</b>	<ul style="list-style-type: none"> <li>• Transfer of base article catalogue (<i>mandatory</i><sup>4</sup>)</li> <li>• Initial stocking of the area by Retailer function</li> <li>• Periodic (weekly) replenishment (<i>mandatory</i>)</li> <li>• Report of sales and inventory movements (<i>mandatory</i>)</li> <li>• Invoicing</li> <li>• Synchronizing of stock information</li> <li>• Changes to the article catalogue (<i>mandatory</i>)</li> </ul>
<b>Reference to the related ebBP</b>	<a href="http://www.moda-ml.net/ebiz-retail/repository/ebbp/v2013-1/en/ebBP_cyclicreplenishmentprogramcrp-1_2013-1.xml">http://www.moda-ml.net/ebiz-retail/repository/ebbp/v2013-1/en/ebBP_cyclicreplenishmentprogramcrp-1_2013-1.xml</a>
<b>Detailed description</b>	Appendix A

<sup>4</sup> "Mandatory" activities represent the minimal implementation of this scenario

4.1.2 Process "classical preorder"

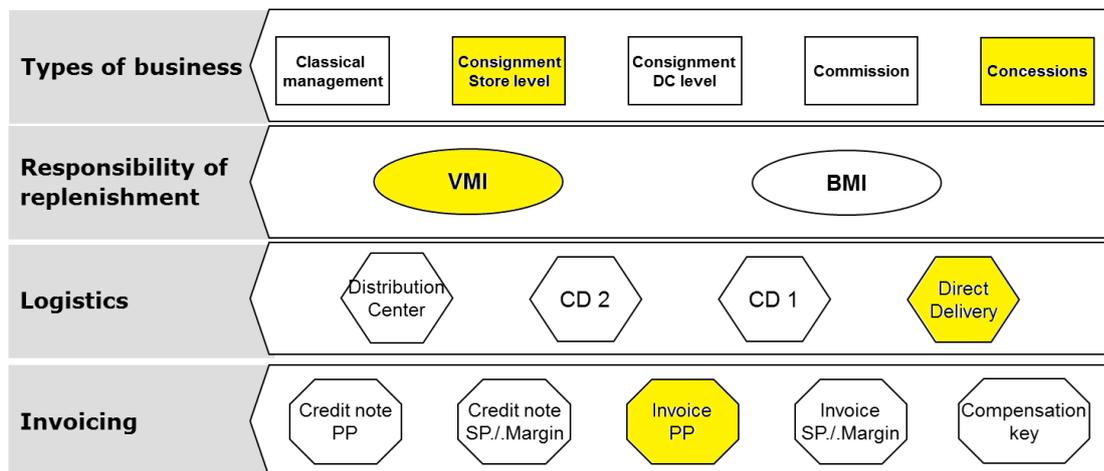


This diagram is a proposal to map processes into the business model specification with the aim to facilitate the identification of the best fitting scenarios of eBIZ adoption.

<b>Process Name</b>	classical preorder
<b>Actors</b>	Producer function, Retailer function
<b>Description</b>	In this process the Retailer function orders his products in advance of the season and the production process. The selection of the products is done manually, as people say 'with the finger-tips'. Between order and delivery a period of some month is without any communication. The invoicing normally is charge-on-delivery based but can also be a consignment/concession model.
<b>Activities</b>	<ul style="list-style-type: none"> <li>• Initial transfer of order and article data (<i>mandatory</i><sup>5</sup>)</li> <li>• Transfer of changes to the order</li> <li>• Finalizing of the order</li> <li>• Delivery (<i>mandatory</i>)</li> <li>• Invoicing</li> <li>• Report of sales data (<i>mandatory</i>)</li> </ul>
<b>Reference to the related ebBP</b>	<a href="http://www.moda-ml.net/ebiz-retail/repository/ebbp/v2013-1/en/ebBP_classicalpreorder-1_2013-1.xml">http://www.moda-ml.net/ebiz-retail/repository/ebbp/v2013-1/en/ebBP_classicalpreorder-1_2013-1.xml</a>
<b>Detailed description</b>	Appendix A

<sup>5</sup> "Mandatory" activities represent the minimal implementation of this scenario

## 4.1.3 Process "vendor managed inventory - VMI"

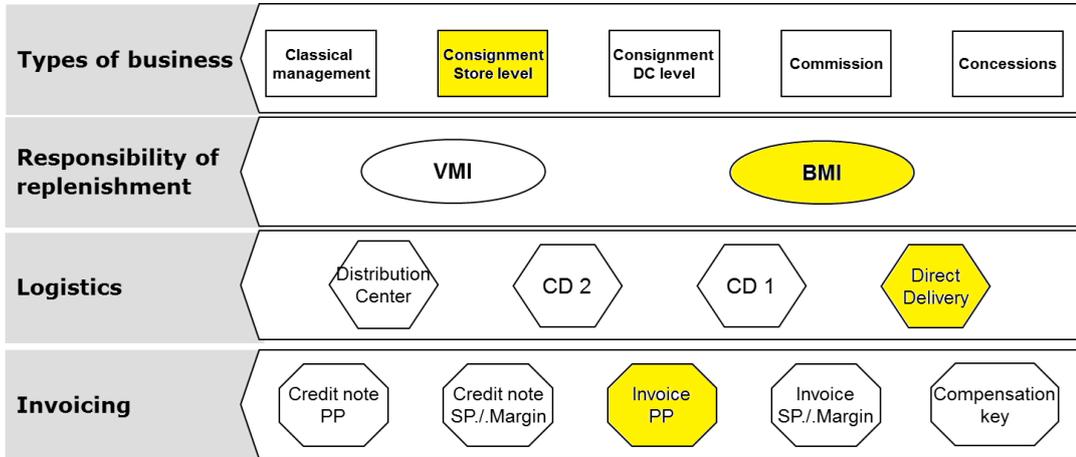


This diagram is a proposal to map processes into the business model specification with the aim to facilitate the identification of the best fitting scenarios of eBIZ adoption.

<b>Process Name</b>	vendor managed inventory - VMI
<b>Actors</b>	Producer function, Retailer function
<b>Description</b>	A shop-in-shop area or a store is managed completely by the producer function. The logistic concept of VMI can be combined with consignment/concession as well as with charge-on-delivery as financial model. Mostly it is combined with consignment
<b>Activities</b>	<ul style="list-style-type: none"> <li>• Initial stocking of the area by vendor (<i>mandatory</i><sup>6</sup>)</li> <li>• Daily report of sales and inventory movement (<i>mandatory</i>)</li> <li>• Permanent replenishment (<i>mandatory</i>)</li> <li>• Invoicing</li> <li>• Returns initiated by the producer function</li> <li>• Price adjustments (<i>mandatory</i>)</li> </ul>
<b>Reference to the related ebBP</b>	<a href="http://www.moda-ml.net/ebiz-retail/repository/ebbp/v2013-1/en/ebBP_vendormanagedinventoryvmi-1_2013-1.xml">http://www.moda-ml.net/ebiz-retail/repository/ebbp/v2013-1/en/ebBP_vendormanagedinventoryvmi-1_2013-1.xml</a>
<b>Detailed description</b>	Appendix A

<sup>6</sup> "Mandatory" activities represent the minimal implementation of this scenario

4.1.4 Process "replenishment on customer demand "



This diagram is a proposal to map processes into the business model specification with the aim to facilitate the identification of the best fitting scenarios of eBIZ adoption.

<b>Process Name</b>	Replenishment on customer demand
<b>Actors</b>	Producer function, Retailer function
<b>Description</b>	In this process the producer function out of all the products selects a subset for the specific customer and sends the related article catalogue. Then the producer function periodically sends information about the availability of items, in order to allow the customer to optimize the ordering plan. The replenishment periodically happens on customer demand and the producer function is allowed to propose changes to the orders. The invoicing normally is charge-on-delivery based.
<b>Activities</b>	<ul style="list-style-type: none"> <li>• Transfer of base article catalogue (<i>mandatory</i>)</li> <li>• Periodic transfer of article availability information (<i>mandatory</i>)</li> <li>• Initial stocking of the area by vendor and buyer function (interactively ordered at the vendor) (<i>mandatory</i>)</li> <li>• Periodic replenishment (<i>mandatory</i>)</li> <li>• Report of sales and inventory movements</li> <li>• Invoicing (<i>mandatory</i>)</li> <li>• Synchronizing of stock information</li> <li>• Changes to the article catalogue</li> </ul>
<b>Reference to the related ebBP</b>	<a href="http://www.moda-ml.net/ebiz-retail/repository/ebbp/v2013-1/en/ebBP_replenishmentoncustomerdemand-1_2013-1.xml">http://www.moda-ml.net/ebiz-retail/repository/ebbp/v2013-1/en/ebBP_replenishmentoncustomerdemand-1_2013-1.xml</a>
<b>Detailed description</b>	Appendix A

## 4.2 Downstream scenario: Document models

Note that in Appendix B there are the details about the technical implementation of the following Documents, with references to samples, XML Schema and any other online resource.

### 4.2.1 Document: Article catalogue

<b>Document Name</b>	Article catalogue
<b>Document description</b>	Total article information sent by the supplier function
<b>Generalities or notes about the usage</b>	The message is meant to enable the Retailer function to build his article base in an automated process. While the information about the single item is not dependent on the scenario the selected items are. In classic preorder and VMI only the articles are selected, which are ordered or delivered. In CRP an special selection of articles is sent

### 4.2.2 Document: Order

<b>Document Name</b>	Order
<b>Document description</b>	Order placed by Retailer function
<b>Generalities or notes about the usage</b>	An order is always meant for one location and one date. In case of CRP (the only use of the order inside our scenarios) it is the weekly order for the replenishment of a certain shop

### 4.2.3 Document: Despatch advice

*Alternative documents:*

<b>Document Name</b>	Despatch Advice Delivery Based
<b>Document description</b>	The despatch advice document is sent from a supplier to a buyer function to announce a delivery in general.
<b>Generalities or notes about the usage</b>	<p>Mostly the despatch advice is send at the same time as the shipment takes place because only then the information has sufficient quality. It has to arrive before the goods.</p> <p>In the “<i>despatch advice delivery based</i>” message the despatched items are organized in despatch lines to facilitate the checking against the Order.</p> <p>The document supports the transmission of serial product identity codes (support to the transmission of the individual serial numbers (i.e. EPC Code with RFID) and, eventually of tag identifiers (TID) for anti-counterfeiting purposes.</p>

<b>Document Name</b>	Despatch Advice Package Based
<b>Document description</b>	The despatch advice document is sent from a supplier function to a buyer function to announce a delivery in general.
<b>Generalities or notes about the usage</b>	<p>Mostly the despatch advice is send at the same time as the shipment takes place because only then the information has sufficient quality. It has to arrive before the goods.</p> <p>In the <b>“despatch advice package based”</b> message the despatched items are organized in Transport Handling Logistic Units to facilitate the checking against the Transport Handling Units (and contained items) that will be received.</p> <p>The document supports the transmission of serial product identity codes (i.e. EPC Code with RFID) and, eventually of tag identifiers (TID) for anti-counterfeiting purposes.</p>

**4.2.4 Document: Receiving advice**

*Alternative documents:*

<b>Document Name</b>	Receiving Advice Delivery Based
<b>Document description</b>	The receiving advice document is sent from a buyer function to a supplier function to announce that the ordered goods have been received.
<b>Generalities or notes about the usage</b>	<p>The receiving advice document is sent from a buyer function to a supplier function to announce that the ordered goods have been received.</p> <p>In the <b>“receiving advice delivery based”</b> message the received items are described in receipt lines and there is no information about Transport Handling Units.</p> <p>The document supports the transmission of serial product identity codes (i.e. EPC Code with RFID) and, eventually of tag identifiers (TID) for anti-counterfeiting purposes.</p>

<b>Document Name</b>	Receiving Advice Package Based
<b>Document description</b>	The receiving advice document is sent from a buyer function to a supplier function to announce that the ordered goods have been received.
<b>Generalities or notes about the usage</b>	<p>The receiving advice document is sent from a buyer function to a supplier function to announce that the ordered goods have been received.</p> <p>In the <b>“receiving advice package based”</b> message the received items are described according to their organization in received Transport Handling Units.</p> <p>The document supports the transmission of serial product identity codes (support to the transmission of the individual serial numbers (i.e. EPC Code with RFID) and, eventually of tag identifiers (TID) for anti-counterfeiting purposes.</p>

#### 4.2.5 Document: Sales report

<b>Document Name</b>	Sales report
<b>Document description</b>	Daily sales report sent by Retailer function
<b>Generalities or notes about the usage</b>	This document contains the information about the sales • at a certain location • on a certain day • for a certain item (GTIN code) • with a certain price (one line per price really paid) The payload is the quantity of that item at that price. The information is used for the planning of deliveries in VMI or for the issuing of a concession invoice, if such financial model is chosen.

#### 4.2.6 Document: Inventory movement report

<b>Document Name</b>	Inventory movement report
<b>Document description</b>	Report of movement of goods between the locations of a Retailer function
<b>Generalities or notes about the usage</b>	<p>This document is used to provide information about movement of a certain quantity of items between the locations of a retailer function. The ship-to and the ship-from branch are mentioned. The information is normally provided when the items are shipped.</p> <p>The document supports the transmission of serial product identity codes (support to the transmission of the individual serial numbers (i.e. EPC Code with RFID) and, eventually of tag identifiers (TID) for anti-counterfeiting purposes.</p>

#### 4.2.7 Document: Invoice

<b>Document Name</b>	Invoice
<b>Document description</b>	<p>Invoice for a delivery</p> <p>Updated according to new legal eInvoice requirements of the chapter 10</p>
<b>Generalities or notes about the usage</b>	Related to each delivery an invoice is sent from the producer function to the retailer function. At the moment it is not always possible to supplant the paper invoice by the electronic document. This is due to the different tax laws in Europe. For the future this is expected.

**4.2.8 Document: Inventory report**

<b>Document Name</b>	Inventory report
<b>Document description</b>	Report about the quantities on stock
<b>Generalities or notes about the usage</b>	<p>The retailer function informs the producer function about the quantities of each item which are on stock. This is necessary because sales are not the only reasons items leave the shop. It is needed either for planning purposes (VMI) or financial handling of the gap.</p> <p>The document supports the transmission of serial product identity codes (support to the transmission of the individual serial numbers (i.e. EPC Code with RFID) and, eventually of tag identifiers (TID) for anti-counterfeiting purposes.</p>

**4.2.9 Document: Initial order response**

<b>Document Name</b>	Initial order response
<b>Document description</b>	Order data of an order placed by other means (fair, showroom, phone,...) sent by the producer function to the retailer function
<b>Generalities or notes about the usage</b>	It is not an order confirmation but just an information. The transfer should happen very shortly after the placement of the order (24 hours). The rules about the scope of an order from the order document apply

**4.2.10 Document: Change order response**

<b>Document Name</b>	Change order response
<b>Document description</b>	Information about changes in the order during the preproduction phase
<b>Generalities or notes about the usage</b>	This document is sent by the producer function to inform the retailer function about changes to his order due to changes in the production scheme. (Cancellation of the product, change in time scale) By this the expectations of the retailer function are corrected

**4.2.11 Document: Order change reaction**

<b>Document Name</b>	Order change reaction
<b>Document description</b>	Reaction of the retailer function to a change order response
<b>Generalities or notes about the usage</b>	The document is used to either accept or reject a change order response sent by the producer function.

**4.2.12 Document: Final order response**

<b>Document Name</b>	Final order response
<b>Document description</b>	Information that the planning phase is finished and no more changes are to be expected
<b>Generalities or notes about the usage</b>	If the change order response is used to synchronize the systems this document tells the retailer function that no more changes are to be expected. By this it has the quality of an order confirmation.

**4.2.13 Document: Instruction for returns**

<b>Document Name</b>	Instruction for returns
<b>Document description</b>	Instruction of returns sent by the producer function
<b>Generalities or notes about the usage</b>	This document is used in the context of the VMI scenario to initiate a return of goods. The producer function is requesting products which are badly sold either for use in other places or just to free the area from it.

**4.2.14 Document: Returns advice**

<b>Document Name</b>	Returns advice
<b>Document description</b>	Announcement of a return of goods sent by the retailer function
<b>Generalities or notes about the usage</b>	<p>This document is a special version of a despatch advice traveling the opposite direction. The retailer function announces item and quantity to the producer function.</p> <p>The document supports the transmission of serial product identity codes (support to the transmission of the individual serial numbers (i.e. EPC Code with RFID) and, eventually of tag identifiers (TID) for anti-counterfeiting purposes.</p>

**4.2.15 Document: Price list**

<b>Document Name</b>	Price list
<b>Document description</b>	Price changes sent by the producer function
<b>Generalities or notes about the usage</b>	The document is used to transfer price changes especially concerning sales prices from the producer function to the retailer function. This can be either mark-downs or promotional activities.

**4.2.16 Document: Stock availability report**

<b>Document Name</b>	Stock availability report
<b>Document description</b>	Information about the quantities of each item which are available.
<b>Generalities or notes about the usage</b>	The producer function informs the retailer function about the quantities of each item which are available. It is needed when the retailer function want base his purchases taking into account the availabilities on the supplier side.

### 4.3 Compliance with GS1 XML

The XML standard specifications used in eBIZ downstream are different from the GS1 definition of XML document template.

From the point of view of semantic contents we can define them as equivalent. This means all content used can be mapped in both directions. The reason by we have to limit it lies only in the philosophy of the use profile. A use profile always restricts the scope to the really used business models and the effective content of them. On the other side GS1 XML is designed as a general standard. That means that many potential uses, beyond those in the scope of eBIZ, are included.

### 4.4 Recommendations and missing elements

The missing elements related to downstream scenario could be summarised in these direction.

As a matter of general strategy it is to outline that the main target of the RA has been the basic business processes of the TCF sector and that, on the contrary, a large variety of more complex business models are in the field.

Potential development areas could be globalised logistics and integration of anti-counterfeiting strategies in the goods supplying processes.

## 5 Business Application Layer: Textile Clothing upstream scenarios

### 5.1 Textile Clothing upstream business processes overview

Process	Activity	Functions	Documents
Fabric subcontracted darning	Subcontracted fabric darning	Fabric Producer Darn Subcontractor	Textile Darn Order Textile Despatch advice Receiving Advice Textile Darn Return Textile Despatch Request Textile in work Inventory report
	Subcontracted warping	Fabric Producer Fabric Subcontractor	Warping Request Warping Offer Warping commission order Yarn Despatch Advice Receiving Advice Textile Order status report
	Subcontracted weaving	Fabric Producer Fabric Subcontractor	Weaving Request Weaving Offer Weaving commission order Yarn Despatch Advice Receiving Advice

			Textile Order status report Textile Despatch advice Textile Despatch Request Textile in work Inventory report
	Subcontracted fabric dyeing-finishing	Fabric Producer Dyeing/Finishing Sub-contractor	Textile Dyeing-Finishing Request Textile Dyeing-Finishing Offer Textile Dyeing-Finishing Order Textile Despatch advice Receiving Advice Textile Order status report Textile Despatch Request Textile in work Inventory report
	Subcontracted fabric printing	Fabric Producer Print shop	Textile printing commission order Textile Despatch advice Receiving Advice Textile Order status report Textile Despatch Request Textile in work Inventory report
<b>Fabric supply</b>	Selection of fabrics	Fabric Producer Apparel Producer	Textile catalogue Fabric Technical Sheet Textile Collection Forecast
	Purchase of fabrics	Apparel Producer Fabric Producer	Textile Purchase Order Textile Order Response Textile Order change Textile Order status report
	Fabric delivery with quality reporting by Producer	Apparel Producer Fabric Producer	Textile Despatch Request Textile Despatch advice Textile Quality Report
	Despatch of fabrics with groupage <i>(Alternative to the previous one)</i>	Apparel Producer Fabric Producer Fabric Controller Apparel Subcontractor	Textile Despatch Request Textile Despatch advice Garment Kit Despatch Request Garment Kit Despatch Advice
	Fabric delivery with quality reporting by Controller <i>(Alternative to the previous one)</i>	Apparel Producer Fabric Controller Fabric Producer	Textile Collection Forecast Textile Despatch Request Textile Despatch Advice Piece control Order

	<i>one)</i>	Apparel Subcontractor	Textile Quality Report Receiving Advice
	Invoicing of fabrics	Fabric Producer Apparel Producer	Textile Invoice
<b>Garment accessory supply</b>	Purchase of Garment accessory	Apparel Producer Garment Accessory Producer	Garment Accessory Purchase Order Garment Accessory Purchase Order Response Garment Accessory Purchase Order Change
	Delivery of Garment accessories	Garment Accessory Producer Apparel Producer	Garment accessory Despatch Advice Garment accessory Despatch Request
<b>Knitwear subcontracted manufacturing</b>	Knitting and assembling	Knitwear Producer Knitwear Subcontractor	Knitting-Clothing Commission Order Yarn Despatch Advice Garment accessory Despatch Advice Receiving Advice Yarn Despatch Request Garment accessory Despatch Request General purpose request Knitting-Clothing Order Status Garment Despatch Request Garment Despatch Advice Textile Invoice Garment in work Inventory report
	Knitwear finishing	Knitwear Producer Knitwear Subcontractor	Knitting-Clothing Commission Order Garment Despatch Advice Receiving Advice General purpose request Knitting-Clothing Order Status Garment Despatch Request Textile Invoice Garment in work Inventory report
<b>On line stock service</b>	Offer stocks on-line	Retail organisation e-service manager	Garment Stock Offer Garment Stock Offer Status

			Garment Stock Offer Change
<b>Yarn subcontracted manufacturing</b>	Subcontracted dyeing of raw material	Yarn Producer Dyeing/Finishing Sub-contractor	Raw material Dyeing Request Raw material dyeing Offer Raw material Dyeing commission Order Raw material dyeing Order Response Raw material dyeing Order Change Raw material Despatch Advice Receiving Advice Raw material order status Raw material in work Inventory report
	Subcontracted spinning of raw material	Yarn Producer Yarn Subcontractor	Spinning Request Spinning Offer Spinning Commission Order Spinning Order Resp. Spinning Order Change Raw material Despatch Advice Receiving Advice Yarn Order Status Report Yarn Despatch Advice Yarn in work Inventory report
	Subcontracted yarn twisting	Yarn Producer Yarn Subcontractor	Twisting Request Twisting Offer Yarn Twisting Commission Order Yarn Despatch Advice Receiving Advice Yarn Order Status Report Yarn in work Inventory report
	Subcontracted yarn dyeing	Yarn Producer Dyeing/Finishing Sub-contractor	Yarn Dyeing Request Yarn Dyeing Offer Yarn dyeing commission order Yarn dyeing Order Response Yarn dyeing Order Change Yarn Despatch Advice Receiving Advice Yarn Order Status Report Yarn in work Inventory

			report
<b>Yarn supply</b>	Selection of yarn	Fabric/Apparel Producer Yarn Producer	YarnOfferRequest  YarnOffer  YarnTechSheet
	Purchase of yarn	Fabric Producer Yarn Producer	Yarn Purchase Order Yarn Purchase Order Response Yarn Purchase Order Change Yarn Order Status Report  YarnQualityReport
	Delivery of yarn	Fabric Producer Yarn Producer	Yarn Despatch Request Yarn Despatch Advice

To consult this chapter remember that, as explained in 2.1, the **Processes** are splitted into **Activities**, each of them implemented by a set of **Transactions** based on an electronic **Document**.

The following 5.1.x paragraphs will illustrate the each Process and the related Activities (details are in **Appendix C**);

A description of the role and content of the electronic Documents to implement each transaction is in in the following 5.2 section; finally in **Appendix D** there are the details about the technical implementation of the documents, with references to samples, XML Schema and any other online resource.

The main improvement in the updated RA Architecture is the full support to information related to the characteristics of the yarn in the Yarn Supply process: technical requirements in a Offer Request from the buyer, yarn Technical Sheet from the supplier function and even single lot quality reports in order to maximize the possibility to put in evidence the real product features.

The second one is the possibility to support the adoption of **object identification devices** (for example through RFID devices) and the transmission of information about a serial product identifier (based on EPC coding) for non-final garments in the garment supply process.

### 5.1.1 Process: Fabric subcontracted darning

Process	Activity	Function	Documents
<b>Fabric subcontracted darning</b>	Subcontracted fabric darning	Fabric Producer Darn Subcontractor	Textile Darn Order Textile Despatch advice Receiving Advice Textile Darn Return Textile Despatch Request Textile in work Inventory report

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<b>Process Name</b>	Fabric subcontracted darning
<b>Actors</b>	Fabric Producer function, Darn Subcontractor
<b>Description</b>	Process by which the Fabric Producer function commissions to a Subcontractor the screening and darning of the grey fabric.
<b>Activities</b>	<ul style="list-style-type: none"><li>• Subcontracted fabric darning</li></ul>
<b>Reference to the related ebBP</b>	<a href="http://www.moda-ml.net/moda-ml/repository/ebBP/v2013-1/en/ebBP_fabricsubcontracteddarning-1_2013-1.xml">http://www.moda-ml.net/moda-ml/repository/ebBP/v2013-1/en/ebBP_fabricsubcontracteddarning-1_2013-1.xml</a>
<b>Detailed description</b>	Appendix C

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## 5.1.2 Process: Fabric subcontracted manufacturing

Process	Activity	Function	Documents
Fabric subcontracted manufacturing	Subcontracted warping	Fabric Producer Fabric Subcontractor	Warping Request Warping Offer Warping commission order Yarn Despatch Advice Receiving Advice Textile Order status report
	Subcontracted weaving	Fabric Producer Fabric Subcontractor	Weaving Request Weaving Offer Weaving commission order Yarn Despatch Advice Receiving Advice Textile Order status report Textile Despatch advice Textile Despatch Request Textile in work Inventory report
	Subcontracted fabric dyeing-finishing	Fabric Producer Dyeing/Finishing Sub-contractor	Textile Dyeing-Finishing Request Textile Dyeing-Finishing Offer Textile Dyeing-Finishing Order Textile Despatch advice Receiving Advice Textile Order status report Textile Despatch Request Textile in work Inventory report
	Subcontracted fabric printing	Fabric Producer Print shop	Textile printing commission order Textile Despatch advice Receiving Advice Textile Order status report Textile Despatch Request Textile in work Inventory report

<b>Process Name</b>	Fabric subcontracted manufacturing
<b>Actors</b>	Fabric Producer function, Fabric Subcontractor, Dyeing/Finishing Sub-contractor, Print shop
<b>Description</b>	Fabric production process commissioned to subcontractors; the process starts from raw material and produces finished fabrics. The Fabric Producer commissions to specialised Subcontractors some value-added operations of the manufacturing cycle because of specific know-how or scale economies. In this process 3 events are fundamental: the issue of the commission order, the swap of the material, the reporting of the order progress.
<b>Activities</b>	<ul style="list-style-type: none"> <li>• Subcontracted warping</li> <li>• Subcontracted weaving</li> <li>• Subcontracted fabric dyeing-finishing</li> <li>• Subcontracted fabric printing</li> </ul>
<b>Detailed description</b>	<ul style="list-style-type: none"> <li>• Appendix C</li> </ul>

## 5.1.3 Process: Fabric supply

Process	Activity	Functions	Documents
Fabric supply	Selection of fabrics	Fabric Producer Apparel Producer	Textile catalogue Fabric Technical Sheet Textile Collection Forecast
	Purchase of fabrics	Apparel Producer Fabric Producer	Textile Purchase Order Textile Order Response Textile Order change Textile Order status rep.
	Fabric delivery with quality reporting by Producer	Apparel Producer Fabric Producer	Textile Despatch Request Textile Despatch advice Textile Quality Report
	Despatch of fabrics with groupage <i>(Alternative to the previous one)</i>	Apparel Producer Fabric Producer Fabric Controller Apparel Subcontractor	Textile Despatch Request Textile Despatch advice Garment Kit Despatch Request Garment Kit Despatch Advice
	Fabric delivery with quality reporting by Controller <i>(Alternative to the previous one)</i>	Apparel Producer Fabric Controller Fabric Producer Apparel Subcontractor	Textile Collection Forecast Textile Despatch Request Textile Despatch advice Piece control Order Textile Quality Report Receiving Advice
	Invoicing of fabrics	Fabric Producer Apparel Producer	Textile Invoice

<b>Process Name</b>	Fabric supply
<b>Actors</b>	Fabric Producer function, Apparel Producer function, Fabric Controller, Apparel Subcontractor
<b>Description</b>	process that describes the procurement of fabric by Clothing companies or Brand Retailers or other kind of Users (Home textile or automotive)
<b>Activities</b>	<ul style="list-style-type: none"> <li>• Selection of fabrics</li> <li>• Purchase of fabrics</li> <li>• Fabric delivery with quality reporting by Producer function</li> <li>• Despatch of fabrics with groupage</li> <li>• Fabric delivery with quality reporting by Controller</li> <li>• Invoicing of fabrics</li> </ul>
<b>Detailed description</b>	<ul style="list-style-type: none"> <li>• Appendix C</li> </ul>

5.1.4 Process: Garment accessory supply

Process	Activity	Functions	Documents
Garment accessory supply	Purchase of Garment accessory	Apparel Producer Garment Accessory Producer	Garment Accessory Purchase Order Garment Accessory Purchase Order Response Garment Accessory Purchase Order Change
	Delivery of Garment accessories	Garment Accessory Producer Apparel Producer	Garment accessory Despatch Advice Garment accessory Despatch Request

<b>Process Name</b>	Garment accessory supply
<b>Actors</b>	Apparel Producer function, Garment Accessory Producer function
<b>Description</b>	process that describes the procurement of garment accessories by Clothing companies or Brand Retailers or other kind of Users (Home textile or automotive)
<b>Activities</b>	<ul style="list-style-type: none"> <li>• Purchase of Garment accessory</li> <li>• Delivery of Garment accessories</li> </ul>
<b>Reference to the related ebBP</b>	<a href="http://www.moda-ml.net/moda-ml/repository/ebBP/v2013-1/en/ebBP_garmentaccessorysupply-1_2013-1.xml">http://www.moda-ml.net/moda-ml/repository/ebBP/v2013-1/en/ebBP_garmentaccessorysupply-1_2013-1.xml</a>
<b>Detailed description</b>	Appendix C

5.1.5 Process: Knitwear subcontracted manufacturing

Process	Activity	Function	Documents
Knitwear subcontracted manufacturing	Knitting and assembling	Knitwear Producer Knitwear Subcontractor	Knitting-Clothing Commission Order Yarn Despatch Advice Garment accessory Despatch Advice Receiving Advice Yarn Despatch Request Garment accessory Despatch Request General purpose request Knitting-Clothing Order

			Status Garment Despatch Request Garment Despatch Advice Textile Invoice Garment in work Inventory report
	Knitwear finishing	Knitwear Producer Knitwear Subcontractor	Knitting-Clothing Commission Order Garment Despatch Advice Receiving Advice General purpose request Knitting-Clothing Order Status Garment Despatch Request Textile Invoice Garment in work Inventory report

<b>Process Name</b>	Knitwear subcontracted manufacturing
<b>Actors</b>	Knitwear Producer function, Knitwear Subcontractor
<b>Description</b>	Subcontracted production of the knitwear; the input of the process is yarn and accessories; the phases of the process include knitting, cutting, assembling and finishing (washing, ironing, labelling, etc...)
<b>Activities</b>	<ul style="list-style-type: none"> <li>• Knitting and assembling</li> <li>• Knitwear finishing</li> </ul>
<b>Reference to the related ebBP</b>	<a href="http://www.moda-ml.net/moda-ml/repository/ebBP/v2013-1/en/ebBP_knitwearsubcontractedmanufacturing-1_2013-1.xml">http://www.moda-ml.net/moda-ml/repository/ebBP/v2013-1/en/ebBP_knitwearsubcontractedmanufacturing-1_2013-1.xml</a>
<b>Detailed description</b>	Appendix C

## 5.1.6 Process: On line stock service

Process	Activity	Actors	Documents
On line stock service	Offer stocks on-line	Retail organisation e-service manager	Garment Stock Offer Garment Stock Offer Status Garment Stock Offer Change

<b>Process Name</b>	On line stock service
<b>Actors</b>	Retail organisation, e-service manager
<b>Description</b>	On line service to offer/retrieve of stocks of textile/Clothing products
<b>Activities</b>	<ul style="list-style-type: none"> <li>Offer stocks on-line</li> </ul>
<b>Reference to the related ebBP</b>	<a href="http://www.moda-ml.net/moda-ml/repository/ebBP/v2013-1/en/ebBP_onlinestockservice-1_2013-1.xml">http://www.moda-ml.net/moda-ml/repository/ebBP/v2013-1/en/ebBP_onlinestockservice-1_2013-1.xml</a>
<b>Detailed description</b>	Appendix C

## 5.1.7 Process: Yarn subcontracted manufacturing

Process	Activity	Function	Documents
Yarn subcontracted manufacturing	Subcontracted dyeing of raw material	Yarn Producer Dyeing/Finishing Sub-contractor	Raw material Dyeing Request Raw material dyeing Offer Raw material Dyeing commission Order Raw material dyeing Order Response Raw material dyeing Order Change Raw material Despatch Advice Receiving Advice Raw material order stat. Raw material in work Inventory report
	Subcontracted spinning of raw material	Yarn Producer Yarn Subcontractor	Spinning Request Spinning Offer Spinning Commission Order Spinning Order Response Spinning Order Change Raw material Despatch Advice Receiving Advice Yarn Order Status Rep. Yarn Despatch Advice Yarn in work Inventory Report
	Subcontracted yarn twisting	Yarn Producer Yarn Subcontractor	Twisting Request Twisting Offer Yarn Twisting Commission Order Yarn Despatch Advice Receiving Advice Yarn Order Status Rep. Yarn in work Inventory Rep.
	Subcontracted yarn dyeing	Yarn Producer Dyeing/Finishing Sub-contractor	Yarn Dyeing Request Yarn Dyeing Offer Yarn dyeing commission order Yarn dyeing Order Response Yarn dyeing Order Change Yarn Despatch Advice Receiving Advice Yarn Order Status Rep. Yarn in work Inventory report

<b>Process Name</b>	Yarn subcontracted manufacturing
<b>Actors</b>	Yarn Producer function, Dyeing/Finishing Sub-contractor, Yarn Subcontractor
<b>Description</b>	Yarn production process commissioned to subcontractors; the process starts from raw material and produces finished yarns. The Yarn Producer commissions to specialised Subcontractors some value-added operations of the manufacturing cycle because of specific know-how or scale economies. In this process 3 events are fundamental: the issue of the commission order, the swap of the material, the reporting of the order progress.
<b>Activities</b>	<ul style="list-style-type: none"> <li>• Subcontracted dyeing of raw material</li> <li>• Subcontracted spinning of raw material</li> <li>• Subcontracted yarn twisting</li> <li>• Subcontracted yarn dyeing</li> </ul>
<b>Detailed description</b>	<ul style="list-style-type: none"> <li>• Appendix C</li> </ul>

## 5.1.8 Process: Yarn supply

Process	Activity	Functions	Documents
Yarn supply	Selection of yarn	Fabric/Apparel Producer Yarn Producer	YarnOfferRequest YarnOffer YarnTechSheet
	Purchase of yarn	Fabric Producer Yarn Producer	Yarn Purchase Order Yarn Purchase Order Response Yarn Purchase Order Change Yarn Order Status Report YarnQualityReport
	Delivery of yarn	Fabric Producer Yarn Producer	Yarn Despatch Request Yarn Despatch Advice

<b>Process Name</b>	Yarn supply
<b>Actors</b>	Fabric Producer function, Yarn Producer function
<b>Description</b>	Process of supplying of yarns (usually for production of fabrics, knitwear; sometimes directly to clothing suppliers and other industrial users and to final customers)
<b>Activities</b>	<ul style="list-style-type: none"> <li>• Selection of yarns</li> <li>• Purchase of yarn</li> <li>• Delivery of yarn</li> </ul>
<b>Reference to the related ebBP</b>	<a href="http://www.moda-ml.net/moda-ml/repository/ebBP/v2013-1/en/ebBP_yarnsupply-1_2008-1.xml">http://www.moda-ml.net/moda-ml/repository/ebBP/v2013-1/en/ebBP_yarnsupply-1_2008-1.xml</a>
<b>Detailed description</b>	Appendix C

## 5.2 Textile Clothing Upstream scenario: Document models

Remember that in Appendix C there are the details about the technical implementation of the documents, with references to samples, XML Schema and any other online resource.

### 5.2.1 Document: Textile Darn Order

<b>Document Name</b>	Textile Darn Order
<b>Document description</b>	Document sent by the Fabric Producer function to the Darn Subcontractor to request the darning services (reports the list of the darning operations and related information for each)
<b>Generalities or notes about the usage</b>	<p>The document "Textile Darn Order" is used by the Fabric Producer function to specify the darning operations required on each fabric piece and possibly the standard (or maximum) worktimes allowed with the related prices.</p> <p>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.</p> <p>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 transport document with which was sent to the Subcontractor.</p> <p>EACH ITEM CONTAINS A JOB ORDER FOR ONE OR MORE PIECES OF THE SAME TEXTILE ARTICLE.</p> <p>The Job cost can be calculated from a metre rate or from an hourly rate times a given operation time or from a combination of both.</p>
<b>Source</b>	Moda-ML, TexWeave

### 5.2.2 Document: Textile Despatch advice

<b>Document Name</b>	Textile Despatch advice
<b>Document description</b>	Advice for despatch of fabric sent by the Supplier function
<b>Generalities or notes about the usage</b>	<p>The message is issued to anticipate the details the articles actually despatched. The same message can be used with the client for sale and with the subcontractor for working operation (e.g. darn disposition).</p> <p>This document can be used:</p> <ul style="list-style-type: none"> <li>- as a standard despatch advice</li> <li>- as a pre-despatch notification of the goods that are to be despatched.</li> </ul> <p>Each document item must correspond with a well defined fabric article (article + pattern + colour) and must identify the actual pieces that make it up; for each item is possible to reference the Order line that is delivered.</p> <p>The document supports the transmission of serial product identity codes (support to the transmission of the individual serial numbers (i.e. EPC Code with RFID) and, eventually</p>

	of tag identifiers (TID) for anti-counterfeiting purposes.
<b>Source</b>	Moda-ML, TexWeave

### 5.2.3 Document: Receiving Advice

<b>Document Name</b>	Receiving Advice
<b>Document description</b>	Receiving Advise of the goods received upon purchase or for commissioned works
<b>Generalities or notes about the usage</b>	The Receiving Advise can be used by the Receiver of goods (purchased or received for commissioned works) either to confirm the regular receipt of goods or to notify discrepancies between what was declared by the Sender and what was received and accepted. The present document must always be used in coupling with the Despatch Advise document. It is recommended to issue one Receiving Advise against one Despatch Advise
<b>Source</b>	Moda-ML, TexWeave

### 5.2.4 Document: Textile Darn Return

<b>Document Name</b>	Textile Darn Return
<b>Document description</b>	Document that the Fabric Producer function receives from the Darn Subcontractor to notify the execution of the darning services
<b>Generalities or notes about the usage</b>	<p>The document "Textile Darn Return" is used by the Darn Subcontractor to specify the darning operations performed on each fabric piece and possibly the worktimes invoiced.</p> <p>The document can refer to one or more pieces and can be used either in conjunction with the "Textile Despatch Advise" (1 DA: 1 Return) or independently.</p> <p>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 transport document with which was returned to the Client.</p> <p>EACH ITEM CONTAINS A JOB REPORTING FOR ONE OR MORE PIECES OF THE SAME TEXTILE ARTICLE.</p> <p>The Job cost reporting can be calculated from a metre rate or from an hourly rate times a given operation time or from a combination of both.</p>
<b>Source</b>	Moda-ML, TexWeave

### 5.2.5 Document: Textile Despatch Request

<b>Document Name</b>	Textile Despatch Request
<b>Document description</b>	Request for despatch of fabric (allows to specify destination and delivery date)

<b>Generalities or notes about the usage</b>	<p>The message is issued to plan the delivery of the fabric pieces that are in the "ready for despatch" status (see the document "Textile Order Status").</p> <p>This document enables the Buyer function to modify some date of its Order (delivery dates and places)</p> <p>This document can be used:</p> <ul style="list-style-type: none"> <li>- as a standard despatch request</li> <li>- as a despatch request that, at the same time, cancels a previous request referenced there in</li> </ul> <p>Each document item must correspond with a well defined fabric article (article + pattern + colour) and for each item is possible to reference the Order line that is delivered.</p>
<b>Source</b>	Moda-ML, TexWeave

**5.2.6 Document: Textile in work Inventory report**

<b>Document Name</b>	Textile in work Inventory report
<b>Document description</b>	Inventory report of Textile in work
<b>Generalities or notes about the usage</b>	<p>The present document can be used by a Subcontractor to inform his Client (Commission issuer), periodically or on demand, about the quantity of pre-works or in-work Textile items (Client's property) stocked at the Subcontractor's premises. This inventory may refer to all the goods of one Commission issuer or just to those related to one Commission order; item quantities may be subdivided by type of stock and physical location.</p>
<b>Source</b>	Moda-ML

**5.2.7 Document: Warping Request**

<b>Document Name</b>	Warping Request
<b>Document description</b>	Request to Subcontractor for Warping
<b>Generalities or notes about the usage</b>	<p>The Request is used by a Yarn Manufacturer to request from a Subcontractor an Offer for the warping.</p> <p>The Request is structured in four levels: Macro-type of Work Requested = document root (7 types of Request) Product Family = document qualifier (type of product with reference to the manufacturing process; e.g.: combed yarn, jacquard weaved fabric, ..) Product Specifications = "xxxSpecs" (technical characteristics and properties of the product) Operations requested 0 "XXXMnfrOperation" (details of the works requested) Quantities, unit measures and prices must be referred to the third level (Line Item)</p>
<b>Source</b>	Moda-ML

### 5.2.8 Document: Warping Offer

<b>Document Name</b>	Warping Offer
<b>Document description</b>	Offer from Subcontractor for the warping
<b>Generalities or notes about the usage</b>	<p>The Offer is used by a Subcontractor to respond to the Request of a Fabric Manufacturer for the warping of a yarn.</p> <p>The Offer is structured in four levels: Macro-type of Work offered = document root (7 types of Request) Product Family = document qualifier (type of product with reference to the manufacturing process; e.g.: combed yarn, jacquard weaved fabric, ..) Product Specifications = "xxxSpecs" (technical characteristics and properties of the product) Operations offered = "XXXMnfrOperation" (details of the works requested) Quantities, unit measures and prices must be referred to the third level (Line Item)</p>
<b>Source</b>	Moda-ML

### 5.2.9 Document: Warping commission order

<b>Document Name</b>	Warping commission order
<b>Document description</b>	Warping commission order
<b>Generalities or notes about the usage</b>	<p>The Warping commission order is used by a Fabric Producer to commit to a Subcontractor the warping of yarn</p> <p>When the Issuer of the Commission requires different manufacturing operations in sequence to different Subcontractors, he can use this document not only as work order but also as a despatch order to send the semi-finished product to a successive Subcontractor</p> <p>As a general rule, the warping commission order specifies only the manufacturing technology (if required) and the characteristics of the end product of each operation and specifies the components used to manufacture that product</p> <p>It must be noted that this end product can be, in turn, a component for a successive manufacturing operation</p> <p>The definition of any "manufacturing parameters" is left to the Subcontractor; sometimes however these parameters can be specified by the Issuer of the Commission itself, that can define machines and machine parameters in the Commission Order</p>
<b>Source</b>	Moda-ML

### 5.2.10 Document: Yarn Despatch Advice

<b>Document Name</b>	Yarn Despatch Advice
<b>Document</b>	Advice for despatch of a yarn supply sent by the Producer function or by the

<b>description</b>	Subcontractor
<b>Generalities or notes about the usage</b>	<p>The message is issued to anticipate the details the articles actually despatched. The same message can be used with the client for sale and with the subcontractor for working operation (e.g. dyeing).</p> <p>This document can be used:</p> <ul style="list-style-type: none"> <li>- as a standard despatch advice</li> <li>- as a pre-despatch notification of the goods that are to be despatched.</li> </ul> <p>Each document item must correspond with a well defined fabric article (article + colour); for each item is possible to reference the Order line that is delivered.</p> <p>The document supports the transmission of serial product identity codes (support to the transmission of the individual serial numbers (i.e. EPC Code with RFID) and, eventually of tag identifiers (TID) for anti-counterfeiting purposes.</p>
<b>Source</b>	Moda-ML, TexWeave

**5.2.11 Document: Textile Order status report**

<b>Document Name</b>	Textile Order status report
<b>Document description</b>	Report of the Order status of fabric (informs about the foreseen delivery date)
<b>Generalities or notes about the usage</b>	<p>The message is issued by the Fabric Producer function to report to his Client the status of his Orders and the updated delivery dates, with the possibility of splitting an order line into several consignments.</p> <p>The message may concern all the articles ordered (Type = H "historic"), all the articles ordered and not yet delivered (type = C "complete") or just the articles in the "ready for shipment" status (type = S "for shipping").</p> <p>The status report can be given for each article or for each Order line.</p>
<b>Source</b>	Moda-ML, TexWeave

**5.2.12 Document: Weaving Request**

<b>Document Name</b>	Weaving Request
<b>Document description</b>	Request to Subcontractor for Weaving
<b>Generalities or notes about the usage</b>	<p>The Request is used by a Yarn Producer to request from a Subcontractor an Offer for the weaving.</p> <p>The Request is structured in four levels: Macro-type of Work Requested = document root (7 types of Request) Product Family = document qualifier (type of product with reference to the manufacturing process; e.g.: combed yarn, jacquard weaved fabric, ..) Product Specifications = "xxxSpecs" (technical characteristics and properties of the</p>

	product) Operations requested 0 "XXXMnfrOperation" (details of the works requested) Quantities, unit measures and prices must be referred to the third level (Line Item)
<b>Source</b>	Moda-ML

### 5.2.13 Document: Weaving Offer

<b>Document Name</b>	Weaving Offer
<b>Document description</b>	Offer from Subcontractor for the weaving
<b>Generalities or notes about the usage</b>	<p>The Offer is used by a Subcontractor to respond to the Request of a Fabric Producer for the weaving of a yarn.</p> <p>The Offer is structured in four levels: Macro-type of Work offered = document root (7 types of Request) Product Family = document qualifier (type of product with reference to the manufacturing process; e.g.: combed yarn, jacquard weaved fabric, ..) Product Specifications = "xxxSpecs" (technical characteristics and properties of the product) Operations offered = "XXXMnfrOperation" (details of the works requested) Quantities, unit measures and prices must be referred to the third level (Line Item)</p>
<b>Source</b>	Moda-ML

### 5.2.14 Document: Weaving commission order

<b>Document Name</b>	Weaving commission order
<b>Document description</b>	Weaving commission order
<b>Generalities or notes about the usage</b>	<p>The Weaving commission order is used by a Fabric Producer to commit to a Subcontractor the weaving of yarn</p> <p>When the Issuer of the Commission requires different manufacturing operations in sequence to different Subcontractors, he can use this document not only as work order but also as a despatch order to send the semi-finished product to a successive Subcontractor</p> <p>As a general rule, the weaving commission order specifies only the manufacturing technology (if required) and the characteristics of the end product of each operation and specifies the components used to manufacture that product</p> <p>It must be noted that this end product can be, in turn, a component for a successive manufacturing operation</p> <p>The definition of any "manufacturing parameters" is left to the Subcontractor; sometimes however these parameters can be specified by the Issuer of the Commission itself, that can define machines and machine parameters in the Commission Order</p>
<b>Source</b>	Moda-ML, TexWeave

**5.2.15 Document: Textile Dyeing-Finishing Request**

<b>Document Name</b>	Textile Dyeing-Finishing Request
<b>Document description</b>	Request to Subcontractor for textile Dyeing/Finishing
<b>Generalities or notes about the usage</b>	<p>The Request is used by a Yarn Producer to request from a Subcontractor an Offer for the dyeing/finishing of fabric.</p> <p>The Request is structured in four levels: Macro-type of Work Requested = document root (7 types of Request) Product Family = document qualifier (type of product with reference to the manufacturing process; e.g.: combed yarn, jacquard weaved fabric, ..) Product Specifications = "xxxSpecs" (technical characteristics and properties of the product) Operations requested 0 "XXXMnfrOperation" (details of the works requested) Quantities, unit measures and prices must be referred to the third level (Line Item)</p>
<b>Source</b>	Moda-ML

**5.2.16 Document: Textile Dyeing-Finishing Offer**

<b>Document Name</b>	Textile Dyeing-Finishing Offer
<b>Document description</b>	Offer from Subcontractor for the dyeing/finishing of fabric
<b>Generalities or notes about the usage</b>	<p>The Offer is used by a Subcontractor to respond to the Request of a Fabric Producer for the dyeing/finishing of a fabric.</p> <p>The Offer is structured in four levels: Macro-type of Work offered = document root (7 types of Request) Product Family = document qualifier (type of product with reference to the manufacturing process; e.g.: combed yarn, jacquard weaved fabric, ..) Product Specifications = "xxxSpecs" (technical characteristics and properties of the product) Operations offered = "XXXMnfrOperation" (details of the works requested) Quantities, unit measures and prices must be referred to the third level (Line Item)</p>
<b>Source</b>	Moda-ML

**5.2.17 Document: Textile Dyeing-Finishing Order**

<b>Document Name</b>	Textile Dyeing-Finishing Order
<b>Document description</b>	Dyeing-finishing Order commissioned to a Subcontractor (contains the parameters and the sequence of the operations to be performed)
<b>Generalities or notes about the usage</b>	The Textile Dyeing-Finishing Order is issued when a Contractor commits to a Subcontractor a work required to transform a fabric material into something usable for apparel production. This work Order can include one or several operations of the fabric manufacturing cycle specifying their sequence.

<b>Source</b>	Moda-ML
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#### 5.2.18 Document: Textile printing commission order

<b>Document Name</b>	Textile printing commission order
<b>Document description</b>	Printing commission order for a fabric
<b>Generalities or notes about the usage</b>	<p>The Printing commission order is used by a Fabric Producer to commit to a Subcontractor the printing of fabric</p> <p>When the Issuer of the Commission requires different manufacturing operations in sequence to different Subcontractors, he can use this document not only as work order but also as a despatch order to send the semi-finished product to a successive Subcontractor</p> <p>As a general rule, the Printing commission order specifies only the manufacturing technology (if required) and the characteristics of the end product of each operation and specifies the components used to manufacture that product</p> <p>It must be noted that this end product can be, in turn, a component for a successive manufacturing operation</p> <p>The definition of any "manufacturing parameters" is left to the Subcontractor; sometimes however these parameters can be specified by the Issuer of the Commission itself, that can define machines and machine parameters in the Commission Order</p>
<b>Source</b>	Moda-ML, TexWeave

#### 5.2.19 Document: Textile catalogue

<b>Document Name</b>	Textile catalogue
<b>Document description</b>	Trade document containing the prices and the technical properties of the Textile articles offered by the Producer.
<b>Generalities or notes about the usage</b>	<p>This document is usable less for a sales catalogue than to exchange in advance the product data between the Supplier function and the Customer, in order to synchronize their product data-bases.</p> <p>It lists the articles composing the Fabric Producer function's offer (codes, descriptions, prices and sales conditions) and can include some of the technical data (composition, weight and width, construction specifications, ...).</p>
<b>Source</b>	Moda-ML, TexWeave

#### 5.2.20 Document: Fabric Technical Sheet

<b>Document Name</b>	Fabric Technical Sheet
<b>Document</b>	Technical document describing the commercial details and the construction properties

<b>description</b>	of the fabric
<b>Generalities or notes about the usage</b>	<p>This document is used to provide the Customer (Buyer function) with the technical data relevant to describe and characterize the fabric article; i.e.:</p> <ul style="list-style-type: none"> <li>- general data</li> <li>- construction details</li> <li>- measurements of colour fastness, dimensional stability and mechanical properties</li> </ul>
<b>Source</b>	Moda-ML, TexWeave

**5.2.21 Document: Textile Collection Forecast**

<b>Document Name</b>	Textile Collection Forecast
<b>Document description</b>	Document used by the Apparel Producer function to inform the Fabric Producer function about the articles of his interest or expected supply and foreseen volumes of production (no details on colours and variants)
<b>Generalities or notes about the usage</b>	<p>The document "Textile Collection Forecast" is used to notify to the Fabric Producer function the articles of his Offer that are considered for future acquisition or use in the Season Collection. The same document can also be used by the Client to request the Fabric Technical Sheet and/or notify his article code to the Producer function.</p> <p>Each article notified must be identified at SKU level by the Supplier's code. An estimated quantity can be supplied only for information.</p> <p>In some business scenarios this message may be used to notify the Textile Controller about the fabric articles he will inspect in the season</p>
<b>Source</b>	Moda-ML, TexWeave

**5.2.22 Document: Textile Purchase Order**

<b>Document Name</b>	Textile Purchase Order
<b>Document description</b>	Purchase order to the Fabric Producer function.
<b>Generalities or notes about the usage</b>	<p>The message is issued by the Apparel Producer function to purchase fabric articles.</p> <p>Three types of order are possible:</p> <ul style="list-style-type: none"> <li>- "standard", when the order is completely defined</li> <li>- "blanket", when some of the data are left out for subsequent definition (e.g. colour)</li> <li>- "call off", when it defines and closes a "blanket order"</li> </ul> <p>The "standard" and the "call off" order is an authorization to ship and invoice well defined fabric articles in well defined quantities, dates, locations and prices. The</p>

	“blanket” order provides the anticipation of some data to the supplier function.
<b>Source</b>	Moda-ML, TexWeave

### 5.2.23 Document: Textile Order Response

<b>Document Name</b>	Textile Order Response
<b>Document description</b>	Order Response sent by the Fabric Producer function (enables changes to the order).
<b>Generalities or notes about the usage</b>	<p>The message is issued by the Fabric Producer function in response to a purchase order.</p> <p>The Producer function must, in any case, return an Order Response for any Order received, where, for each item, he notifies the acceptance as it is (C), the variation (V) or the cancellation (A).</p> <p>Basic function of the message is to notify acceptance or to request modifications or cancellations concerning:</p> <ol style="list-style-type: none"> <li>1) suppliable quantities</li> <li>2) dates and places of delivery</li> <li>3) prices</li> </ol> <p>The Order Response can show a number of lines different from the related Purchase Order, when variations/cancellations have occurred so as to create the splitting of an Order Line.</p> <p>However the sum of the quantities of the lines in the Order Response (accepted + varied + cancelled) must always equal the sum of the quantities in the Order.</p>
<b>Source</b>	Moda-ML, TexWeave

### 5.2.24 Document: Textile Order change

<b>Document Name</b>	Textile Order change
<b>Document description</b>	Order Change sent to the Fabric Producer function (allows to change destination, quantity, delivery date)
<b>Generalities or notes about the usage</b>	<p>The Apparel Producer function sends to the Fabric Producer function an Order Change any time he must modify some conditions of his previous Order (e.g. to cancel items not delivered in time) or amend errors (e.g. invalid prices).</p> <p>Basic function of the message is to replace an invalid Order with a valid Order, amending:</p> <ul style="list-style-type: none"> <li>- suppliable quantities</li> <li>- dates and places of delivery</li> </ul>

	<p>- prices</p> <p>The Order Change can show a number of lines different from the related Purchase Order, when variations/cancellations have occurred so as to create the splitting of an Order Line.</p> <p>However the sum of the quantities of the lines in the Order Change (confirmed + varied + cancelled) must always equal the sum of the quantities in the original Order.</p>
<b>Source</b>	Moda-ML, TexWeave

**5.2.25 Document: Textile Quality Report**

<b>Document Name</b>	Textile Quality Report
<b>Document description</b>	Quality report of the fabric piece (contains defects or non-conformances of the pieces, eventually the related bonuses)
<b>Generalities or notes about the usage</b>	<p>The message is issued either by the Fabric Producer function and/or by the Fabric Quality Controller as "quality certificate" of the fabric piece, mainly to anticipate the details on the existence, position and classification of faults in order to accelerate and improve the following apparel manufacturing.</p> <p>Each document refers either to one piece of fabric, identified by its id. number (TQ type="S"ingle) or to several pieces belonging to the same shipment (TQ type="M"ultiple) and likewise identified.</p> <p>The following classes of data can be reported in the document:</p> <ul style="list-style-type: none"> <li>- physical dimensions and overall allowance</li> <li>- fabric faults and their positions</li> <li>- test value of conformance to specifications and taylorability</li> <li>- the reporting of the inspection.</li> </ul>
<b>Source</b>	Moda-ML, TexWeave

**5.2.26 Document: Garment Kit Despatch Request**

<b>Document Name</b>	Garment Kit Despatch Request
<b>Document description</b>	Despatch request of a garment kit sent by an Apparel Producer function to a Logistic Operator or Fabric Producer function or Controller
<b>Generalities or notes about the usage</b>	<p>In this scenario, the Fabric Producer functions agree to send fabrics and accessories ordered by the Apparel Producer function to a Logistics Company or directly to the Apparel Subcontractor specified by the Apparel Producer function.</p> <p>The Apparel Producer function send a Despatch Request of the "kit" to the Fabric Producer function or to the Logistics company so that it can make the "groupage (fabric, buttons, fastners...)" and send it to the specified Subcontractor.</p>

	<p>At this point, the Logistics company (or the Fabric Producer function acting as) sends the Despatch Advise to the Apparel Producer function to confirm the shipping; the same document is sent to the Subcontractor to anticipate the information about the material it will receive.</p> <p>This document is relative to the Despatch Request of the "kit" and can concern one or several Subcontractors.</p> <p>The basic principles are:</p> <ul style="list-style-type: none"> <li>- one line item must correspond to one "kit" and one Subcontractor</li> <li>- every kit is made of one or more fabrics of which the single pieces can be identified, plus several accessories</li> <li>- as for the roles: the Apparel Producer function is "buyer", the Logistics company is "supplier" and the Subcontractor is "third party"</li> </ul>
<b>Source</b>	Moda-ML, TexWeave

#### 5.2.27 Document: Garment Kit Despatch Advice

<b>Document Name</b>	Garment Kit Despatch Advice
<b>Document description</b>	Despatch advise of a garment kit sent by a Apparel Producer function or by a Logistic Operator or Fabric Controller or Producer function on his behalf to a Apparel Subcontractor
<b>Generalities or notes about the usage</b>	<p>In this scenario, the Fabric Producer functions agree to send fabrics and accessories ordered by the Apparel Producer function to a Logistics Company or directly to the Apparel Subcontractor specified by the Apparel Producer function.</p> <p>The Apparel Producer function send a Despatch Request of the "kit" to the Fabric Producer function o to the Logistics company so that it can make the "groupage (fabric, buttons, fastners...)" and send it to the specified Subcontractor.</p> <p>At this point, the Logistics company (or the Fabric Producer function acting as) sends the Despatch Advise to the Apparel Producer function to confirm the shipping; the same document is sent to the Subcontractor to anticipate the information about the material it will receive.</p> <p>This document is relative to the Despatch Advise of the "kit" and can concern one Subcontractor only.</p> <p>The basic principles are:</p> <ul style="list-style-type: none"> <li>- one line item must correspond to one "kit" and one Subcontractor</li> <li>- every kit is made of one or more fabrics of which the single pieces can be identified, plus several accessories</li> <li>- as for the roles: the Apparel Producer function is "buyer", the Logistics company is "supplier" and the Subcontractor is "third party"</li> </ul> <p>The document supports the transmission of serial product identity codes (support to the transmission of the individual serial numbers (i.e. EPC Code with RFID) and, eventually</p>

	of tag identifiers (TID) for anti-counterfeiting purposes.
<b>Source</b>	Moda-ML, TexWeave

**5.2.28 Document: Piece control Order**

<b>Document Name</b>	Piece control Order
<b>Document description</b>	Document sent by the Fabric Buyer function to the Textile Controller to specify the type of inspection requested for the fabric piece (usually indicated by means of an "inspection code")
<b>Generalities or notes about the usage</b>	<p>The document "Piece Control Order" is used by the Fabric Buyer function to specify the type of inspection and accessory treatments requested for each fabric piece.</p> <p>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.</p> <p>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.</p> <p>Each line item refers to one fabric piece and indicates the inspection code and the ultimate receiver of the piece.</p>
<b>Source</b>	Moda-ML

**5.2.29 Document: Textile Invoice**

<b>Document Name</b>	Textile Invoice
<b>Document description</b>	Invoice used to debit supplies and works or miscellaneous services in the Textile-Clothing industry
<b>Generalities or notes about the usage</b>	<p>The document "Textile invoice" can be used to debit the Client for any kind of supply or service.</p> <p>This document can be used to debit standard supply using the option "texItem", and additional goods or services using the option "prodServItem", even in the same invoice.</p> <p>The use of quantity and unit price is mandatory only with "texItem".</p> <p>Updated according to new legal eInvoice requirements of the chapter 10.</p>
<b>Source</b>	Moda-ML

### 5.2.30 Document: Garment Accessory Purchase Order

<b>Document Name</b>	Garment Accessory Purchase Order
<b>Document description</b>	Purchase order to the Garment Accessories Producer function (Supplier function)
<b>Generalities or notes about the usage</b>	<p>The message is issued to purchase garment accessories.</p> <p>Three types of order are possible:</p> <ul style="list-style-type: none"> <li>- “standard”, when the order is completely defined</li> <li>- “blanket”, when some of the data are left out for subsequent definition (e.g. colour)</li> <li>- “call off”, when it defines and closes a “blanket order”</li> </ul> <p>The “standard” and the “call off” order is an authorization to ship and invoice well defined fabric articles in well defined quantities, dates, locations and prices. The “blanket” order provides the anticipation of some data to the supplier function.</p>
<b>Source</b>	Moda-ML

### 5.2.31 Document: Garment Accessory Purchase Order Response

<b>Document Name</b>	Garment Accessory Purchase Order Response
<b>Document description</b>	Order Response sent by the Garment accessory Producer function (Supplier function) (enables changes to the order).
<b>Generalities or notes about the usage</b>	<p>The message is issued by the Garment Accessory Producer function (Supplier function) in response to a purchase order.</p> <p>The Producer function must, in any case, return an Order Response for any Order received, where, for each item, he notifies the acceptance as it is (C), the variation (V) or the cancellation (A).</p> <p>Basic function of the message is to notify acceptance or to request modifications or cancellations concerning:</p> <ol style="list-style-type: none"> <li>1) suppliable quantities</li> <li>2) dates and places of delivery</li> <li>3) prices</li> </ol> <p>The Order Response can show a number of lines different from the related Purchase Order, when variations/cancellations have occurred so as to create the splitting of an Order Line.</p> <p>However the sum of the quantities of the lines in the Order Response (accepted + varied + cancelled) must always equal the sum of the quantities in the Order.</p>
<b>Source</b>	Moda-ML

**5.2.32 Document: Garment Accessory Purchase Order Change**

<b>Document Name</b>	Garment Accessory Purchase Order Change
<b>Document description</b>	Order Change sent to the Garment Accessory Producer function (Supplier function) (allows to change destination, quantity, delivery date)
<b>Generalities or notes about the usage</b>	<p>The Apparel or the Fabric Producer function sends an Order Change any time he must modify some conditions of his previous Order (e.g. to cancel items not delivered in time) or amend errors (e.g. invalid prices).</p> <p>Basic function of the message is to replace an invalid Order with a valid Order, amending:</p> <ul style="list-style-type: none"> <li>- suppliable quantities</li> <li>- dates and places of delivery</li> <li>- prices</li> </ul> <p>The Order Change can show a number of lines different from the related Purchase Order, when variations/cancellations have occurred so as to create the splitting of an Order Line.</p> <p>However the sum of the quantities of the lines in the Order Change (confirmed + varied + cancelled) must always equal the sum of the quantities in the original Order.</p>
<b>Source</b>	Moda-ML

**5.2.33 Document: Garment accessory Despatch Advice**

<b>Document Name</b>	Garment accessory Despatch Advice
<b>Document description</b>	Advice for despatch of the garment accessory sent by the Supplier function
<b>Generalities or notes about the usage</b>	<p>The message is issued to anticipate the details the articles actually despatched. The same message can be used with the client for sale and with the subcontractor for working operation.</p> <p>This document can be used:</p> <ul style="list-style-type: none"> <li>- as a standard despatch advice</li> <li>- as a pre-despatch notification of the goods that are to be despatched.</li> </ul> <p>Each document item must correspond with a well defined fabric article (article + pattern + colour); for each item is possible to reference the Order line that is delivered.</p> <p>The document supports the transmission of serial product identity codes (support to the transmission of the individual serial numbers (i.e. EPC Code with RFID) and, eventually of tag identifiers (TID) for anti-counterfeiting purposes.</p>
<b>Source</b>	Moda-ML

### 5.2.34 Document: Garment accessory Despatch Request

<b>Document Name</b>	Garment accessory Despatch Request
<b>Document description</b>	Request for despatch of garment accessories (allows to specify destination and delivery date)
<b>Generalities or notes about the usage</b>	<p>The message is issued to plan the delivery of the garment accessories that are in the "ready for despatch" status (see the document "Order Status").</p> <p>This document enables the Buyer function to modify some date of its Order (delivery dates and places)</p> <p>This document can be used:</p> <ul style="list-style-type: none"> <li>- as a standard despatch request</li> <li>- as a despatch request that, at the same time, cancels a previous request referenced there in</li> </ul> <p>Each document item must correspond with a well defined garment accessory article (article + pattern + colour) and for each item is possible to reference the Order line that is delivered.</p>
<b>Source</b>	Moda-ML

### 5.2.35 Document: Knitting-Clothing Commission Order

<b>Document Name</b>	Knitting-Clothing Commission Order
<b>Document description</b>	Knitting/clothing commission order
<b>Generalities or notes about the usage</b>	<p>The knitting-clothing commission is used by the Knitwear or Clothing Company to commit to a Sub-contractor the manufacturing of knitwear or clothing articles</p> <p>Each commission order can include one or more operations of the manufacturing cycle, each one corresponding to a line item</p> <p>The document can be used either to order the manufacturing of finished goods or of component parts of them.</p> <p>When the Commissioner orders a sequence of operations to different Sub-contractors, he can use this document also to dispose the delivering of semifinished goods from one Sub-contractor to the next.</p> <p>This document specifies only the technology (when necessary) and the characteristics of the final product and of the initial goods (components) to be used in the manufacturing</p> <p>The output product specified in each line item can be the input component in a following line item also in the same Commission order.</p>
<b>Source</b>	Moda-ML

**5.2.36 Document: Yarn Despatch Request**

<b>Document Name</b>	Yarn Despatch Request
<b>Document description</b>	Request for despatching of yarn
<b>Generalities or notes about the usage</b>	<p>The message is issued to plan the delivery of the yarn articles that are in the "ready for despatch" status (see the document "Yarn Order Status").</p> <p>This document enables the Buyer function to modify some date of its Order (delivery dates and places)</p> <p>This document can be used:</p> <ul style="list-style-type: none"> <li>- as a standard despatch request</li> <li>- as a despatch request that, at the same time, cancels a previous request referenced there in</li> </ul> <p>Each document item must correspond with a well defined fabric article (article + colour) and for each item is possible to reference the Order line that is delivered.</p>
<b>Source</b>	Moda-ML

**5.2.37 Document: General purpose request**

<b>Document Name</b>	General purpose request
<b>Document description</b>	Request for a specific electronic document as indicated in the instance
<b>Generalities or notes about the usage</b>	-
<b>Source</b>	Moda-ML

**5.2.38 Document: Knitting-Clothing Order Status**

<b>Document Name</b>	Knitting-Clothing Order Status
<b>Document description</b>	Knitting/Clothing Order status
<b>Generalities or notes about the usage</b>	<p>The message is issued by the Subcontractor to report to his Client (Apparel Producer function) the status of his Commission Orders and the updated delivery dates, with the possibility of splitting an order line into several consignments.</p> <p>The message may concern all the articles ordered (Type = H "historic"), all the articles ordered and not yet delivered (type = C "complete") or just the articles in the "ready for shipment" status (type = S "for shipping").</p>

	For each article, the status report can be consolidated or partial for each Order line.
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<b>Source</b>	Moda-ML
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#### 5.2.39 Document: Garment Despatch Request

<b>Document Name</b>	Garment Despatch Request
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<b>Document description</b>	Request for despatch of garment articles (knitwear or clothing items); allows to specify destination and delivery date.
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<b>Generalities or notes about the usage</b>	<p>The message is issued by the Client to request/plan the delivery of the sendable articulated. The same message can be used from/ to a sub-contractor for commissioned operations.</p> <p>This document can be used:</p> <ul style="list-style-type: none"> <li>- as a standard request</li> </ul> <p>as a change notification of a previous request .</p>
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<b>Source</b>	Moda-ML
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#### 5.2.40 Document: Garment Despatch Advice

<b>Document Name</b>	Garment Despatch Advice
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<b>Document description</b>	Advice for despatch of clothing or knitwear items.
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<b>Generalities or notes about the usage</b>	<p>The message is issued by the Clothing Producer to anticipate the details the articles actually despatched. The same message can be used from/ to a sub-contractor for commissioned operations.</p> <p>This document can be used:</p> <ul style="list-style-type: none"> <li>- as a standard despatch advice</li> <li>- as a pre-despatch notification of the goods that are to be despatched.</li> </ul> <p>Each document item must correspond with a well defined garment article (SKU); for each item is possible to reference the Order line that is delivered. The document supports the transmission of serial product identity codes (support to the transmission of the individual serial numbers (i.e. EPC Code with RFID) and, eventually of tag identifiers (TID) for anti-counterfeiting purposes.</p>
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<b>Source</b>	Moda-ML
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**5.2.41 Document: Garment in work Inventory report**

<b>Document Name</b>	Garment in work Inventory report
<b>Document description</b>	Inventory report of knitwear or clothing in work
<b>Generalities or notes about the usage</b>	<p>The present document can be used by a Knitwear or Clothing Subcontractor to inform his Client (Commission issuer), periodically or on demand, about the quantity of pre-works or in-work Textile items (Client's property) stocked at the Subcontractor's premises. This inventory may refer to all the goods of one Commission issuer or just to those related to one Commission order; item quantities may be subdivided by type of stock and physical location.</p> <p>The document supports the transmission of serial product identity codes (support to the transmission of the individual serial numbers (i.e. EPC Code with RFID) and, eventually of tag identifiers (TID) for anti-counterfeiting purposes.</p>
<b>Source</b>	Moda-ML

**5.2.42 Document: Garment Stock Offer**

<b>Document Name</b>	Garment Stock Offer
<b>Document description</b>	On-line sales offer of garment stock
<b>Generalities or notes about the usage</b>	<p>The document is issued by the Trade organisation or the Garment company to create an offer of garment stock through the e-Stockflow service. Each document line must deal with one stock item in one definite location. The description of the stock item includes the classification per category and sex and the assortment of colour/sizes.</p>
<b>Source</b>	Moda-ML

**5.2.43 Document: Garment Stock Offer Status**

<b>Document Name</b>	Garment Stock Offer Status
<b>Document description</b>	Status of an on-line sales Offer of garment stock
<b>Generalities or notes about the usage</b>	<p>The document is issued by the e-Stockflow Service Provider to respond to an Offer of garment stock or to notify the status of the Offer. Each document line must refer to one line of a former "Stock Offer", of which is notified either the loading or the following development of the dealing.</p>

<b>Source</b>	Moda-ML
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#### 5.2.44 Document: Garment Stock Offer Change

<b>Document Name</b>	Garment Stock Offer Change
<b>Document description</b>	Change of an On-line sales offer of garment stock
<b>Generalities or notes about the usage</b>	The document is issued by the Trade organisation or the Garment company to modify an offer of garment stock through the e-Stockflow service. Each document line must refer to one line of a former "Stock Offer", that can be cancelled (attribute "act" = A) or modified (attribute "act" = V); in the latter case the definition and classification of the article, the new assortment colour/size as well as the new quantity and/or price should be specified.
<b>Source</b>	Moda-ML

#### 5.2.45 Document: Raw material Dyeing Request

<b>Document Name</b>	Raw material Dyeing Request
<b>Document description</b>	Request to Subcontractor for the Dyeing of raw material
<b>Generalities or notes about the usage</b>	<p>The Request is used by a Yarn Producer to request from a Subcontractor an Offer for the dyeing of a raw material.</p> <p>The Request is structured in four levels: Macro-type of Work Requested = document root (7 types of Request) Product Family = document qualifier (type of product with reference to the manufacturing process; e.g.: combed yarn, jacquard weaved fabric, ..) Product Specifications = "xxxSpecs" (technical characteristics and properties of the product) Operations requested 0 "XXXMnfrOperation" (details of the works requested) Quantities, unit measures and prices must be referred to the third level (Line Item)</p>
<b>Source</b>	Moda-ML

#### 5.2.46 Document: Raw material dyeing Offer

<b>Document Name</b>	Raw material dyeing Offer
<b>Document description</b>	Offer from Subcontractor for the Dyeing of raw material
<b>Generalities or notes about the usage</b>	<p>The Offer is used by a Subcontractor to respond to the Request of a Yarn Producer for the dyeing of a raw material.</p> <p>The Offer is structured in four levels: Macro-type of Work offered = document root (7 types of Request) Product Family = document qualifier (type of product with reference to the manufacturing process; e.g.: combed yarn, jacquard weaved fabric, ..) Product Specifications = "xxxSpecs" (technical characteristics and properties of the product)</p>

	Operations offered = "XXXMnfrOperation" (details of the works requested) Quantities, unit measures and prices must be referred to the third level (Line Item)
<b>Source</b>	Moda-ML

**5.2.47 Document: Raw material Dyeing commission Order**

<b>Document Name</b>	Raw material Dyeing commission Order
<b>Document description</b>	Dyeing commission Order for a raw material
<b>Generalities or notes about the usage</b>	<p>The Raw material Dyeing commission order is used by a Yarn Producer to commit to a Subcontractor the dyeing of a raw material required to transform the material into yarn usable for fabric production. This work order can include one or several operations of the dyeing cycle.</p> <p>When the Issuer of the Commission requires different manufacturing operations in sequence to different Subcontractors, he can use this document not only as work order but also as a despatch order to send the semi-finished product to a successive Subcontractor</p> <p>As a general rule, the Raw material dyeing commission order specifies only the characteristics of the end product of each operation and specifies the components used to manufacture that product</p> <p>It must be noted that this end product can be, in turn, a component for a successive manufacturing operation</p>
<b>Source</b>	Moda-ML

**5.2.48 Document: Raw material Despatch Advice**

<b>Document Name</b>	Raw material Despatch Advice
<b>Document description</b>	Despatch advise of the raw material to be transformed
<b>Generalities or notes about the usage</b>	Document usable by the Commissioner to inform the Subcontractor about the shipment of raw material to be worked
<b>Source</b>	Moda-ML

**5.2.49 Document: Raw material order status**

<b>Document Name</b>	Raw material order status
<b>Document description</b>	Order status report for works on the raw material
<b>Generalities or</b>	The message is issued to report to the Client the status of his Orders and the updated

<b>notes about the usage</b>	dates of delivery, with the possibility of splitting the order line into several consignments.
<b>Source</b>	Moda-ML

#### 5.2.50 Document: Raw material in work Inventory report

<b>Document Name</b>	Raw material in work Inventory report
<b>Document description</b>	Inventory report of the raw material in work
<b>Generalities or notes about the usage</b>	The present document can be used by a Subcontractor to inform his Client (Commission issuer), periodically or on demand, about the quantity of pre-works or in-work raw material items (Client's property) stocked at the Subcontractor's premises. This inventory may refer to all the goods of one Commission issuer or just to those related to one Commission order; item quantities may be subdivided by type of stock and physical location.
<b>Source</b>	Moda-ML

#### 5.2.51 Document: Spinning Request

<b>Document Name</b>	Spinning Request
<b>Document description</b>	Request to Subcontractor for Spinning
<b>Generalities or notes about the usage</b>	<p>The Request is used by a Yarn Producer to request from a Subcontractor an Offer for the spinning of a raw material.</p> <p>The Request is structured in four levels: Macro-type of Work Requested = document root (7 types of Request) Product Family = document qualifier (type of product with reference to the manufacturing process; e.g.: combed yarn, jacquard weaved fabric, ..) Product Specifications = "xxxSpecs" (technical characteristics and properties of the product) Operations requested 0 "XXXMnfrOperation" (details of the works requested) Quantities, unit measures and prices must be referred to the third level (Line Item)</p>
<b>Source</b>	Moda-ML

#### 5.2.52 Document: Spinning Offer

<b>Document Name</b>	Spinning Offer
<b>Document description</b>	Offer from Subcontractor for the spinning of raw material
<b>Generalities or notes about the usage</b>	<p>The Offer is used by a Subcontractor to respond to the Request of a Yarn Producer for the spinning of a raw material.</p> <p>The Offer is structured in four levels: Macro-type of Work offered = document root (7 types of Request) Product Family = document qualifier (type of product with reference to the manufacturing process; e.g.: combed yarn, jacquard weaved fabric, ..) Product</p>

	Specifications = "xxxSpecs" (technical characteristics and properties of the product) Operations offered = "XXXMnfrOperation" (details of the works requested) Quantities, unit measures and prices must be referred to the third level (Line Item)
<b>Source</b>	Moda-ML

**5.2.53 Document: Spinning Commission Order**

<b>Document Name</b>	Spinning Commission Order
<b>Document description</b>	Spinning commission Order for a raw material
<b>Generalities or notes about the usage</b>	<p>The Spinning Commission Order is used by a Yarn Producer to commit to a Subcontractor the spinning of raw material required to transform the material into yarn usable for fabric production. This work Order can also include one or several operations on the raw material (see Table T200).</p> <p>When the Issuer of the Commission requires different manufacturing operations in sequence to different Subcontractors, he can use this document not only as work order but also as a despatch order to send the semi-finished product to a successive Subcontractor</p> <p>As a general rule, the Spinning Commission Order specifies only the manufacturing technology (if required) and the characteristics of the end product of each operation and specifies the components used to manufacture that product</p> <p>It must be noted that this end product can be, in turn, a component for a successive manufacturing operation</p> <p>The definition of any "manufacturing parameters" is left to the Subcontractor; sometimes however these parameters can be specified by the Issuer of the Commission itself, that can define machines and machine parameters in the Commission Order</p>
<b>Source</b>	Moda-ML

**5.2.54 Document: Yarn Order Status Report**

<b>Document Name</b>	Yarn Order Status Report
<b>Document description</b>	Status report of a yarn order (indicate the foreseen delivery date)
<b>Generalities or notes about the usage</b>	<p>The message is issued to report to the Client the status of his Orders and the updated dates of delivery, with the possibility of splitting the order line into several consignments.</p> <p>The message may concern all the articles ordered (Type = H "historic"), all the articles ordered and not yet delivered (type = C "complete") or just the articles in the "ready for shipment" status (type = S "for shipping").</p> <p>The status report can be given for each article or for each Order line.</p>

<b>Source</b>	Moda-ML, TexWeave
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#### 5.2.55 Document: Yarn in work Inventory report

<b>Document Name</b>	Yarn in work Inventory report
<b>Document description</b>	Inventory report of yarn in work
<b>Generalities or notes about the usage</b>	The present document can be used by a Subcontractor to inform his Client (Commission issuer), periodically or on demand, about the quantity of pre-works or in-work Yarn items (Client's property) stocked at the Subcontractor's premises. This inventory may refer to all the goods of one Commission issuer or just to those related to one Commission order; item quantities may be subdivided by type of stock and physical location.
<b>Source</b>	Moda-ML

#### 5.2.56 Document: Twisting Request

<b>Document Name</b>	Twisting Request
<b>Document description</b>	Request to Subcontractor for Twisting
<b>Generalities or notes about the usage</b>	<p>The Request is used by a Yarn Producer to request from a Subcontractor an Offer for the twisting of a yarn.</p> <p>The Request is structured in four levels: Macro-type of Work Requested = document root (7 types of Request) Product Family = document qualifier (type of product with reference to the manufacturing process; e.g.: combed yarn, jacquard weaved fabric, ..) Product Specifications = "xxxSpecs" (technical characteristics and properties of the product) Operations requested 0 "XXXMnfrOperation" (details of the works requested) Quantities, unit measures and prices must be referred to the third level (Line Item)</p>
<b>Source</b>	Moda-ML

#### 5.2.57 Document: Twisting Offer

<b>Document Name</b>	Twisting Offer
<b>Document description</b>	Offer from Subcontractor for the twisting of yarn
<b>Generalities or notes about the usage</b>	<p>The Offer is used by a Subcontractor to respond to the Request of a Yarn Producer for the twisting of a yarn.</p> <p>The Offer is structured in four levels: Macro-type of Work offered = document root (7 types of Request) Product Family = document qualifier (type of product with reference to the manufacturing process; e.g.: combed yarn, jacquard weaved fabric, ..) Product Specifications = "xxxSpecs" (technical characteristics and properties of the product) Operations offered = "XXXMnfrOperation" (details of the works requested) Quantities,</p>

	unit measures and prices must be referred to the third level (Line Item)
<b>Source</b>	Moda-ML

**5.2.58 Document: Yarn Twisting Commission Order**

<b>Document Name</b>	Yarn Twisting Commission Order
<b>Document description</b>	Twisting Commission Order for a yarn
<b>Generalities or notes about the usage</b>	<p>The Twisting Commission Order is used by a Yarn Producer to commit to a Subcontractor the twisting of yarn required to transform the material into yarn usable for fabric production. This work Order can include one or several operations of the twisting cycle.</p> <p>When the Issuer of the Commission requires different manufacturing operations in sequence to different Subcontractors, he can use this document not only as work order but also as a despatch order to send the semi-finished product to a successive Subcontractor</p> <p>As a general rule, the Twisting Commission Order specifies only the manufacturing technology (if required) and the characteristics of the end product of each operation and specifies the components used to manufacture that product</p> <p>It must be noted that this end product can be, in turn, a component for a successive manufacturing operation</p> <p>The definition of any "manufacturing parameters" is left to the Subcontractor; sometimes however these parameters can be specified by the Issuer of the Commission itself, that can define machines and machine parameters in the Commission Order</p>
<b>Source</b>	Moda-ML, TexWeave

**5.2.59 Document: Yarn Dyeing Request**

<b>Document Name</b>	Yarn Dyeing Request
<b>Document description</b>	Request to Subcontractor for Dyeing of yarn
<b>Generalities or notes about the usage</b>	<p>The Request is used by a Yarn Producer to request from a Subcontractor an Offer for the dyeing of a yarn.</p> <p>The Request is structured in four levels: Macro-type of Work Requested = document root (7 types of Request) Product Family = document qualifier (type of product with reference to the manufacturing process; e.g.: combed yarn, jacquard weaved fabric, ..) Product Specifications = "xxxSpecs" (technical characteristics and properties of the product) Operations requested 0 "XXXMnfrOperation" (details of the works requested) Quantities, unit measures and prices must be referred to the third level (Line Item)</p>
<b>Source</b>	Moda-ML

## 5.2.60 Document: Yarn Dyeing Offer

<b>Document Name</b>	Yarn Dyeing Offer
<b>Document description</b>	Offer from Subcontractor for the dyeing of yarn
<b>Generalities or notes about the usage</b>	<p>The Offer is used by a Subcontractor to respond to the Request of a Yarn Producer for the dyeing of a yarn.</p> <p>The Offer is structured in four levels: Macro-type of Work offered = document root (7 types of Request) Product Family = document qualifier (type of product with reference to the manufacturing process; e.g.: combed yarn, jacquard weaved fabric, ..) Product Specifications = "xxxSpecs" (technical characteristics and properties of the product) Operations offered = "XXXMnfrOperation" (details of the works requested) Quantities, unit measures and prices must be referred to the third level (Line Item)</p>
<b>Source</b>	Moda-ML

## 5.2.61 Document: Yarn dyeing commission order

<b>Document Name</b>	Yarn dyeing commission order
<b>Document description</b>	Dyeing commission order for a yarn
<b>Generalities or notes about the usage</b>	<p>The Yarn Dyeing commission order is used by a Yarn Producer to commit to a Subcontractor the dyeing of yarn required to transform the material into yarn usable for fabric production. This work order can include one or several operations of the dyeing cycle.</p> <p>When the Issuer of the Commission requires different manufacturing operations in sequence to different Subcontractors, he can use this document not only as work order but also as a despatch order to send the semi-finished product to a successive Subcontractor</p> <p>As a general rule, the Yarn dyeing commission order specifies only the manufacturing technology (if required) and the characteristics of the end product of each operation and specifies the components used to manufacture that product</p> <p>It must be noted that this end product can be, in turn, a component for a successive manufacturing operation</p> <p>The definition of any "manufacturing parameters" is left to the Subcontractor; sometimes however these parameters can be specified by the Issuer of the Commission itself, that can define machines and machine parameters in the Commission Order.</p>
<b>Source</b>	Moda-ML, TexWeave

**5.2.62 Document: Yarn dyeing commission order**

<b>Document Name</b>	Yarn dyeing commission order
<b>Document description</b>	Dyeing commission order for a yarn
<b>Generalities or notes about the usage</b>	<p>The Yarn Dyeing commission order is used by a Yarn Producer to commit to a Subcontractor the dyeing of yarn required to transform the material into yarn usable for fabric production. This work order can include one or several operations of the dyeing cycle.</p> <p>When the Issuer of the Commission requires different manufacturing operations in sequence to different Subcontractors, he can use this document not only as work order but also as a despatch order to send the semi-finished product to a successive Subcontractor</p> <p>As a general rule, the Yarn dyeing commission order specifies only the manufacturing technology (if required) and the characteristics of the end product of each operation and specifies the components used to manufacture that product</p> <p>It must be noted that this end product can be, in turn, a component for a successive manufacturing operation</p> <p>The definition of any "manufacturing parameters" is left to the Subcontractor; sometimes however these parameters can be specified by the Issuer of the Commission itself, that can define machines and machine parameters in the Commission Order</p>
<b>Source</b>	Moda-ML

**5.2.63 Document : Yarn dyeing Order Response**

<b>Document Name</b>	Yarn dyeing Order Response
<b>Document description</b>	Response to the Dyeing commission Order for a yarn
<b>Generalities or notes about the usage</b>	<p>The message is issued by the Subcontractor in response to a yarn dyeing commission order.</p> <p>The Subcontractor should return an Order Response for any Order received, where, for each item, he notifies the acceptance as it is (C), the variation (V) or the cancellation (A).</p> <p>Basic function of the message is to notify acceptance or to request modifications or cancellations concerning:</p> <ol style="list-style-type: none"> <li>1) suppliable quantities</li> <li>2) dates and places of delivery</li> <li>3) prices</li> </ol> <p>The Order Response can show a number of lines different from the related Commission Order, when variations/cancellations have occurred so as to create the splitting of an Order Line.</p> <p>However the sum of the quantities of the lines in the Order Response (accepted + varied + cancelled) must always equal the sum of the quantities in the Order.</p>
<b>Source</b>	Moda-ML

**5.2.64 Document: Yarn dyeing Order Change**

<b>Document Name</b>	Yarn dyeing Order Change
<b>Document description</b>	Change to the Dyeing commission Order for a yarn
<b>Generalities or notes about the usage</b>	<p>The Commissioner sends to the Subcontractor a Yarn dyeing Order Change any time he must modify some conditions of his previous Order (eg. to suspend operations already ordered) or amend errors.</p> <p>Basic function of the message is to replace an invalid Order with a valid Order, amending:</p> <ul style="list-style-type: none"> <li>- suppliable quantities</li> <li>- dates and places of delivery</li> <li>- prices</li> </ul> <p>The Order Change can show a number of lines different from the related Purchase Order, when variations/cancellations have occurred so as to create the splitting of an Order Line.</p> <p>However the sum of the quantities of the lines in the Order Change (confirmed + varied + cancelled) must always equal the sum of the quantities in the original Order.</p>
<b>Source</b>	Moda-ML

**5.2.65 Document: Yarn Offer Request**

<b>Document Name</b>	Yarn Offer Request
<b>Document description</b>	Request for a specific kind of yarn
<b>Generalities or notes about the usage</b>	<p>the Fabric or Knitwear Producer function sends this enquiry to the Yarn Producer about the kind of yarn he needs, by specifying a selection of manufacturing characteristics and mechanical-physical-chemical properties with the desired values of the ad-hoc parameters.</p>
<b>Source</b>	Moda-ML

**5.2.66 Document: Yarn Offer**

<b>Document Name</b>	Yarn Offer
<b>Document description</b>	Offer (or Catalogue) of yarn articles with enclosed Technical Sheet
<b>Generalities or notes about the usage</b>	<p>the Yarn Producer function sends this document reporting all the data that identify the yarn articles matching the Request and certify their manufacturing characteristics and its mechanical-physical-chemical properties.</p> <p>In many cases the values declared for these parameters may be the average of several test measurements with a coefficient of variation (CV).</p>
<b>Source</b>	Moda-ML

**5.2.67 Document: Yarn Purchase Order**

<b>Document Name</b>	Yarn Purchase Order
<b>Document description</b>	Purchase order of yarns
<b>Generalities or notes about the usage</b>	<p>The Purchase Order is issued by a Fabric or Knitwear Producer function to procure yarn.</p> <p>Key elements of this type of Order, besides quantities and delivery dates, are</p> <ul style="list-style-type: none"> <li>1- the yarn product code, showing article, colour and additional coding</li> <li>2- the technical and construction specifications of the yarn product and the possible specification of "special treatments"</li> <li>3- the detailed specifications referring to packing and packaging</li> </ul>
<b>Source</b>	Moda-ML, TexWeave

**5.2.68 Document: Yarn Purchase Order Response**

<b>Document Name</b>	Yarn Purchase Order Response
<b>Document description</b>	Order Response sent by the Yarn Producer function (Supplier function)
<b>Generalities or notes about the usage</b>	<p>The message is issued by the Yarn Producer function in response to a purchase order.</p> <p>The Producer function must, in any case, return an Order Response for any Order received, where, for each item, he notifies the acceptance as it is (C), the variation (V) or the cancellation (A).</p> <p>Basic function of the message is to notify acceptance or to request modifications or cancellations concerning:</p> <ul style="list-style-type: none"> <li>1) suppliable quantities</li> <li>2) dates and places of delivery</li> <li>3) prices</li> </ul> <p>The Order Response can show a number of lines different from the related Purchase Order, when variations/cancellations have occurred so as to create the splitting of an Order Line.</p> <p>However the sum of the quantities of the lines in the Order Response (accepted + varied + cancelled) must always equal the sum of the quantities in the Order.</p>
<b>Source</b>	Moda-ML

## 5.2.69 Document: Yarn Purchase Order Change

<b>Document Name</b>	Yarn Purchase Order Change
<b>Document description</b>	Order Change sent to the Yarn Producer function (Supplier function)
<b>Generalities or notes about the usage</b>	<p>The Client sends to the Yarn Producer function an Order Change any time he must modify some conditions of his previous Order (e.g. to cancel items not delivered in time) or amend errors (e.g. invalid prices).</p> <p>Basic function of the message is to replace an invalid Order with a valid Order, amending:</p> <ul style="list-style-type: none"> <li>- suppliable quantities</li> <li>- dates and places of delivery</li> <li>- prices</li> </ul> <p>The Order Change can show a number of lines different from the related Purchase Order, when variations/cancellations have occurred so as to create the splitting of an Order Line.</p> <p>However the sum of the quantities of the lines in the Order Change (confirmed + varied + cancelled) must always equal the sum of the quantities in the original Order.</p>
<b>Source</b>	Moda-ML

## 5.2.70 Document: Yarn Quality Report

<b>Document Name</b>	Yarn Quality Report
<b>Document description</b>	Yarn Laboratory Reporting
<b>Generalities or notes about the usage</b>	<p>Rarely, and usually when problems arise at the weaving mill, the Client can request to an external Laboratory either the check of the values given by the Producer or the evaluation of further parameters.</p> <p>In such case the Laboratory sends a quality report that certify the manufacturing characteristics and the mechanical-physical-chemical properties through the actual values of the concerned parameters.</p>
<b>Source</b>	Moda-ML

### 5.3 Recommendations and missing elements

In terms of scenarios there is a set of business collaborations that are covered only partially: they are related to the subcontracting for clothing and apparel. In the existing standardised specifications there is explicit support for only a part of these collaborations (knitwear subcontracting, dyeing).

Furthermore it is to stress that the nature itself of the upstream transactions is flexible and continuously changing, so it is advisable to investigate on what (new) kind of specifications and tools are necessary to support and speed-up the 'setup' of the collaborative processes and their related flow of data between independent organisations.

On this purpose the ebBP representations of the reference collaborative processes could be a support but its efficacy is to be demonstrated in the field.

It has to be noted the existence of the OntoModa ontology, output of the Leapfrog IP project that could be considered as the formal representation of the semantics associated to the TexWeave/Moda-ML specifications.

A second completely different area arises from the diffusion of new paradigms:

- the diffusion of technical and functional textiles requires new type of information and a more collaborative and knowledge intensive exchange of information across the organisations (and an oculte management of confidentiality and IPR on the knowledge)
- virtual prototyping, virtual try-on and virtual design of clothing (and of generic goods made of textile materials) ask for similar enhancement of the scenarios and data models to be considered.

As a general recommendation it should be considered relevant that the upstream relationships, being very complex and tailored on the specific productive organisation (and procedures) require flexible and highly dynamic supports for the collaborations that, still, are not in place.

## 6 Business Application Layer: Footwear Upstream scenarios

### 6.1 Footwear upstream business processes overview

Process	Activity	Functions	Documents
Component supply	Transfer Of Order	Producer, Component Supplier	Order, Order Response
	Status Report	Producer, Component Supplier	Order Status Request, Order Status Report
	Technical Specification	Producer, Component Supplier	Technical Specification Report
	Delivery	Producer, Component Supplier	Despatch Advice, Receiving Advice

<b>Product Design</b>	Transfer of Model Design	Designer, Producer,	LineProposal
	Pre-Series order	Producer, Component Supplier	Order, Order Response
	Status Report	Producer, Component Supplier	Order Status Request, Order Status Report,
	Delivery	Producer, Component Supplier	Despatch Advice Receiving Advice
	Technical Specification	Designer, Producer	Technical Specification Report
<b>Customised made shoes for health sector</b>	Technical Specification for custom product	Producer, Retailer	Technical Specification
	Transfer Of custom product order	Retailer , Producer	Order, Order Response
	Custom Supply Component	Producer, Component Supplier	Order, Order Response, Order Status Request, Order Status Report, Despatch Advice Receiving Advice
	Status Report for custom product	Producer, Retailer	Order Status Request, Order Status Report
	Delivery of custom product	Producer, Retailer, (Customer)	Despatch Advice Receiving Advice
<b>Fashion custom made shoes</b>	Technical Specification for custom product	Producer, Retailer	Technical Specification

	Transfer of custom product order	Retailer , Producer	Order, Order Response
	Custom Component Supply	Producer, Component Supplier	Order, Order Response, Order Status Request, Order Status Report, Despatch Advice Receiving Advice
	Status Report for custom product	Producer, Retailer	Order Status Request, Order Status Report
	Delivery of custom product	Producer, Retailer (Customer)	Despatch Advice Receiving Advice

To consult this chapter remember that, as explained in 2.1, the **Processes** are splitted into **Activities**, each of them implemented by a set of **Transactions** based on an electronic **Document**.

The following 6.1.x paragraphs will illustrate the each Process and the related Activities (details are in **Appendix E**); a description of the role and content of the electronic Documents to implement each transaction is in in the following 6.2 section; finally in **Appendix F** there are the details about the technical implementation of the documents, with references to samples, XML Schema and any other online resource.

The adoption of **object identification devices** (for example through RFID devices) and the transmission of information about a serial product identifier (based on EPC coding) are now supported.

**6.1.1 Process: component supply**

<b>Process Name</b>	Component supply
<b>Actors</b>	<b>Producer function, component supplier function</b>
<b>Description</b>	Components are ordered by the supplier function and the process is monitored by status reports. Finally the delivery is announced and confirmed.
<b>Activities</b>	<ul style="list-style-type: none"> <li>• transfer of order</li> <li>• status report</li> <li>• technical specifications</li> <li>• delivery</li> </ul>
<b>Reference to the</b>	<a href="http://spring.bologna.enea.it/eBIZ-footwear/repository/ebbp/v2013-">http://spring.bologna.enea.it/eBIZ-footwear/repository/ebbp/v2013-</a>

<b>related ebBP</b>	<a href="1/en/ebBP_Componentsupply-1_v2013-1.xml">1/en/ebBP_Componentsupply-1_v2013-1.xml</a>
<b>Detailed description</b>	Appendix E

### 6.1.2 Process: Product Design

<b>Process Name</b>	Product Design
<b>Actors</b>	<b>Designer, Producer function, Component supplier function.</b>
<b>Description</b>	<p>Sketches, comments and 3D information (including EFNET3) are exchanged between the designer and the producer function in order to reach an agreement in the final design. Based on the design, the materials and quality specifications are exchanged. Once the final design and technical characteristics are agreed, a pre-series order and the technical specifications are sent to the component suppliers for prototype manufacturing.</p> <p>As a final step, and once the prototype component has been delivered, the component supplier function can send back to the producer function the technical modifications that could have been applied to the original design during the prototype manufacturing.</p>
<b>Activities</b>	<ul style="list-style-type: none"> <li>• Transfer of Model Design</li> <li>• Pre-series order</li> <li>• Status report</li> <li>• Delivery</li> <li>• Technical Specifications</li> </ul>
<b>Reference to the related ebBP</b>	<a href="http://spring.bologna.enea.it/eBIZ-footwear/repository/ebbp/v2013-1/en/ebBP_Design-1_v2013-1.xml">http://spring.bologna.enea.it/eBIZ-footwear/repository/ebbp/v2013-1/en/ebBP_Design-1_v2013-1.xml</a>
<b>Detailed description</b>	Appendix E

The exchange of CAD and design data is not a new subject. Even an ISO standard exist, namely ISO Standard 10303, widely known as STEP, used by very large projects to design and manufacture very complex systems such as ships, cars, planes, building. The furniture industry has produced its own view of the use of ISO 10303 (FunStep). In ISO 10303, the language used for determining the details of product data is Express, a “modeling language”, which is not the modeling language used in eBusiness (UML).

Software applications for shoe design (CAD systems) and for production management require the storage of data on a disk using suitable data formats. Data to be stored usually includes:

- Generic textual information
- Generic numerical information
- 2D and / or 3D graphical data: Points, lines, segments, 3D surfaces (polygon meshes) or volumes.
- Open and closed paths
- Bitmap Images
- Production management data
- Catalogue management data

Some data is stored using “standard” formats. Bitmap Images can be stored as GIF, TIF, or JPG. 2D and 3D data can be stored using DXF, IGES, HPGL or other formats, but other relevant information is stored using “custom” formats.

### EFNET3

EFNET3 initiative (CEN/ISSS) aim was to provide support, under the form of the definition of new data formats and protocols based on XML, to the exchange of business documents in the first ring of the footwear supply chain (footwear design), extending possibly to the link between design and production, and maintaining compatibility with the previous efforts (mainly the results of the EFNET2 project).

The EFNET3 project’s main scope was to design, implement and test a specific proposal for new data formats for the business documents exchanged in the footwear design scenario. The new format was to be specific for the sector, compatible with the previous standardization efforts for the footwear chain (and so based on XML), and capable of being initially used as a viable alternative to the existing formats, with the scope to replace them fully in the mid – long term.

The main results achieved by the project were:

- The core structure of the ShoeML data format was designed, implemented and tested.
  - o ShoeML is actually a series of sub-schemas, compatible with EFNET2, arranged, under the form of a reusable framework, around a core which covers the “geometry data”. Geometry is the bulk of business data exchanged in the design ring of the footwear chain.
- The data storage format was a viable substitute to the existing data formats. The elements of the framework can be used in extremely different contexts (also independently), to suit the various data exchange needs.
- The core of the data format was extended to cover different needs of the design business scenario. The design ring of the chain is a complex one, and time will be needed to cover all the needs, but extension to the CAM part was also an objective.

### Current situation

Despite the efforts done in previous initiatives like EFNET 3 and given the wide range of CAD systems that are currently available in the 2D/3D graphic design software market, a major shortage of interconnection between these systems can now be seen from a user’s point of view. The majority of CAD systems still work with proprietary file formats, in which the stored (usually coded) information cannot be completely used in other systems.

There are different generic data formats that can be used to avoid this problem, such as STL, VRML, IGES and STEP, which allow partial interconnection between different systems. The users of this kind of software are accustomed to using these types of file format to share information between different systems that are used in their daily processes.

This working method poses many problems. On the one hand, the typical problems related to design entity management, for example, some of which do not allow layered information storage, nor the storage of material textures or if they do, they lose the references for the material in question (image.jpg), etc... On the other hand, and being the reason why these systems are inefficiently interconnected, there is no hierarchical relationship between entities, i.e. the hierarchical dependency information between design entities, as well as the parametrical design information, which allows the automatic recalculation of entities, is not stored in the exchange file.

This latter problem implies that the exchange formats that are currently used only allow the saving of basic geometry and a few simple characteristics for the object and not the hierarchical dependency relations between them.

For this, a data sharing format still needs to be designed which stores multi-object hierarchical dependency information as well as the parametrical relations, if any, between them. Also, the automatic management of materials should be addressed, permitting the specific self-generation of defined materials in each software system to which a dynamic file of this new data type is imported.

### 6.1.3 Product customisation and small-lot production

<b>Process Name</b>	Customised made shoes for health sector
<b>Actors</b>	Producer function, Retailer function, Customer
<b>Description</b>	In this process the producer function issues the retailer function with the technology needed to be able to sale customised products. The diagnosis and monitoring systems allow the orthopaedic technician to characterize the patient's feet, required for the shoe design. The technicians can also use 3D scanners (foot scanners) and product configurators to allow the customer to select the model of the shoe. Usually the information in these systems can be updated by means of a Technical Specification document. The Retailer function helps the customer to configure the custom article, and orders the product(s). In this process, the delivery of the product is deferred due to the product still don't exists and have to be manufactured on purpose. Logistics acquire special importance in this process, unique item production is the usual case, and the customer is waiting for its purchased article. In this process only the product delivery in shop is modelled, although the delivery can be also performed on the customer address.
<b>Activities</b>	<ul style="list-style-type: none"> <li>• Technical Specification for custom product</li> <li>• Transfer of custom product order</li> <li>• Custom Component Supply</li> <li>• Status report for custom product</li> <li>• Delivery of custom product</li> </ul>
<b>Reference to the related ebBP</b>	<a href="http://www.moda-ml.net/ebiz-retail/repository/ebbp/v201313-1/en/ebBP_customproductsale-1_201313-1.xml">http://www.moda-ml.net/ebiz-retail/repository/ebbp/v201313-1/en/ebBP_customproductsale-1_201313-1.xml</a>
<b>Detailed description</b>	Appendix E

<b>Process Name</b>	Fashion custom made shoes
<b>Actors</b>	Producer function, Retailer function, Customer
<b>Description</b>	In this process the producer function issues the retailer function with the technology needed to be able to sale customised products. This can imply 3D scanners, but also advanced product configurators like augmented reality applications. The orthopaedic technical uses Usually the information in these systems can be updated by means of a Technical Specification document. The Retailer function helps the customer to configure the custom article, and orders the product(s). In this process, the delivery of the product is deferred due to the product still don't exists and have to be manufactured on purpose. Logistics acquire special importance in this process, unique item production is the usual case, and the customer is waiting for its purchased article. The invoicing normally is charge-on-delivery based, In this case only the product delivery in shop is modelled, although the delivery can be also performed on the customer address.
<b>Activities</b>	<ul style="list-style-type: none"> <li>• Technical Specification for custom product</li> <li>• Transfer of custom product order</li> <li>• Custom Component Supply</li> <li>• Status report for custom product</li> <li>• Delivery of custom product</li> </ul>

Reference to the related ebBP	<a href="http://www.moda-ml.net/ebiz-retail/repository/ebbp/v2013-1/en/ebBP_customproductsale-2_2013-2.xml">http://www.moda-ml.net/ebiz-retail/repository/ebbp/v2013-1/en/ebBP_customproductsale-2_2013-2.xml</a>
Detailed description	Appendix E

Two main recent cases have been identified in the footwear sector which mean a new business process for the footwear industry, based on new available IT-based and measurement Technologies (3D scanners):

- Custom made shoes for health sector
- Fashion custom made shoes

In both cases, it is the final customer (patient in the health case) at the beginning of the full process providing some inputs to the process:

- preferred designs, which leads to unique designs by using advanced 3D configurators, to create unique products.
- foot data coming from a 3D scanner which gets digital measurements and geometries to be used as input for product design
- biomechanical or medical data which can be used for footwear or some of its components bespoke design and manufacturing.

In the case of fashion custom made shoes, the level of customization may vary from just choosing materials and styles from already existing ones to create new combinations (which in fact are new products created on-line) to bespoke shoes which are 100% fitted to individual foot data.

### 6.1.3.1 Health

The process, as represented in Figure 6.1, starts when the patient comes within the clinic or orthopaedic shop for a new orthopaedic shoe. The diagnosis and monitoring systems allow the orthopaedic technician to characterize the patient's feet, required for the shoe design. At this stage, the patient has also the possibility to configure the shoe how he prefers, through a shoe configurator. The order defined by the technician is then uploaded within the cluster portal, so it is transmitted to a hub. The hub phases are related to the shoe design and manufacturing (shoe upper, last and outsole). According to the outsole types, the manufacturing can be also delegated to external factories. The hub output consists in: 3d shoe last model, physical shoe last, shoe upper and shoe outsole (not always). The 3D model of the shoe last is used by the factory to design the customized insole. Other outputs coming out from the hub, which are asynchronous with shoe product development process required to update the mini-factory warehouse.

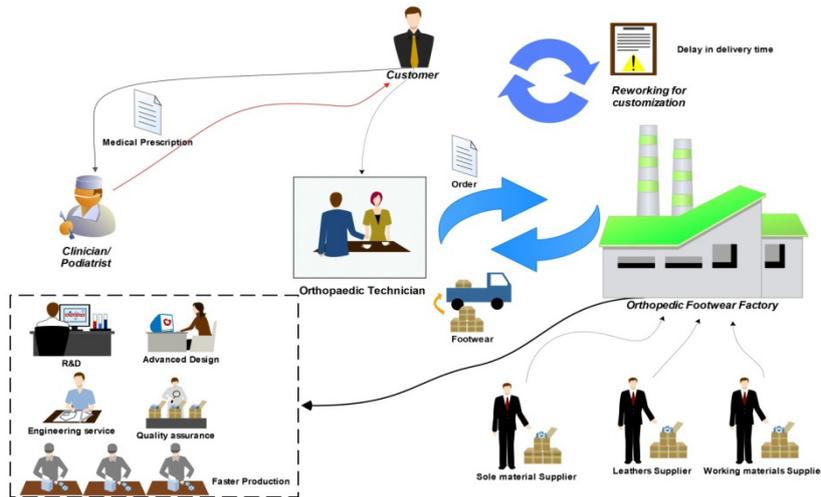


Figure 6.1 - Externalized footwear production flow-chart

A strong trend in Europe is the full virtualization of the whole process, so clear indications towards interoperability should be soon adopted to avoid future problems.

The cases of the companies Todo para sus pies, S.L. from Spain, Duna from Italy and others, as shown in Figure 6.2, reflect how complex could be to manage all data necessary and how the early adoption of eBizz can support data exchange even in very traditional value chains.

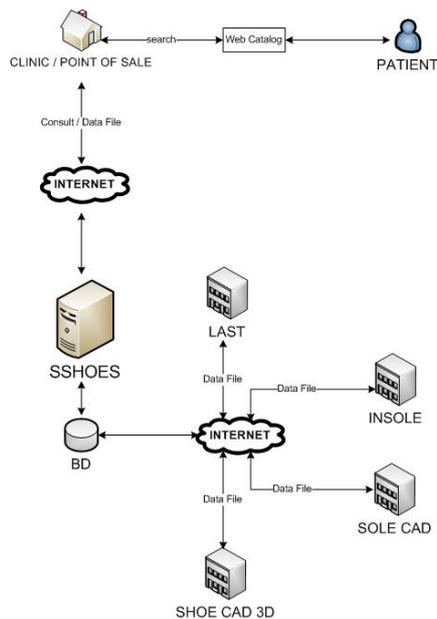


Figure 6.2 - Data flow for customised health products

In these specific cases and related to eBIZ, the practical consequence is a new extension of the document "Order", which contains additional data to permit the integration within retail/clinic management system (see details as Annex 1).

### **6.1.3.2 Fashion**

From the business model perspective, the possibility of customers designing new models, means starting the process in a relatively different way from the traditional one, as far as the customer is now the starting point of the process. It is the customer who creates a new model, based on pre-existing elements (style, last).

Through an specific 3D configurator (web or tablet based), it is possible to create a model (style, last) and to select a unique combination of materials (database of materials) for an specific feet already scanned. So, an order document containing all this info through specific e-commerce tools is generated in order to start the business process.

A few cases are running in Europe with more or less complexity and maturity, but all of them are based on the business virtualization: Bivolino (NL), SACHA (ES), Rivolta (IT), Selve (GE), Animas Code (ES), etc.

As far as the product does not exist, nor physically nor virtually, like in the traditional process, it is important that any new design launched ordered to production goes in the same way and with the necessary info to be manufactured. The health case in the previous paragraph would be the more complex case.

## 6.2 Footwear Upstream scenario: Document models

Remember that in Appendix F there are the details about the technical implementation of the documents, with references to samples, XML Schema and any other online resource.

### 6.2.1 Document: OrderChangeRequest

<b>Document Name</b>	OrderChangeRequest
<b>Document description</b>	The order change request document is sent by a buyer function to a supplier function to change an existing order.
<b>Generalities or notes about the usage</b>	The order change request specifies an existing order and contains the full new, changed order.
<b>Source</b>	EFNET, Shoenet

### 6.2.2 Document: DeliveryNote

<b>Document Name</b>	DeliveryNote
<b>Document description</b>	The delivery note document is sent from a supplier function to a buyer function to specify the details of a certain delivery.
<b>Generalities or notes about the usage</b>	The delivery note is created when all information about the delivery is available. The general announcement is done by the despatch
<b>Source</b>	EFNET, Shoenet

### 6.2.3 Document: ReceivingConfirmation

<b>Document Name</b>	ReceivingConfirmation
<b>Document description</b>	The receiving confirmation document is sent from a buyer function to a supplier function to confirm the receiving of goods in detail.
<b>Generalities or notes about the usage</b>	A receiving confirmation document is always related to a delivery note document. It contains the goods receipt in detail.
<b>Source</b>	EFNET, Shoenet

**6.2.4 Document: RequestForQuotation**

<b>Document Name</b>	RequestForQuotation
<b>Document description</b>	A request for quotation is sent from a buyer function to a supplier function to request a quotation for the specified goods.
<b>Generalities or notes about the usage</b>	As the identification of goods in the upstream process is sometimes very complicated the range might differ from article identification to a technical specification sheet.
<b>Source</b>	EFNET, Shoenet

**6.2.5 Document: Quotation**

<b>Document Name</b>	Quotation
<b>Document description</b>	The quotation document is sent by a supplier function to a buyer function as reaction of a request for quotation document.
<b>Generalities or notes about the usage</b>	As the identification of goods in the upstream process is sometimes very complicated the range might differ from article identification to a technical specification sheet.
<b>Source</b>	EFNET, Shoenet

**6.2.6 Document: Claim**

<b>Document Name</b>	Claim
<b>Document description</b>	The claim document is sent from a buyer function to a supplier function to specify any claims he has because of bad service.
<b>Generalities or notes about the usage</b>	A claim may be for commercial compensation or replacement of damaged goods.
<b>Source</b>	EFNET, Shoenet

**6.2.7 Document: Invoice**

<b>Document Name</b>	Invoice
<b>Document description</b>	The invoice document is sent from a supplier function to a buyer function to specify the amounts and other commercial topics he asks for his services.

<b>Generalities or notes about the usage</b>	Under normal conditions an invoice is related to a delivery or an order. There might be different terms due to special agreements.
<b>Source</b>	EFNET, Shoenet

#### 6.2.8 Document: ProFormalInvoice

<b>Document Name</b>	ProFormalInvoice
<b>Document description</b>	The proforma invoice document is used when a regular invoice can not be produced but a commercial document is necessary due to legal needs.
<b>Generalities or notes about the usage</b>	This document is mainly produced for reasons of the custom authority when products are moved and no real business transaction is behind that movement, i.e. delivery to a plant which belongs to the company.
<b>Source</b>	EFNET, Shoenet

#### 6.2.9 Document: CreditNote

<b>Document Name</b>	CreditNote
<b>Document description</b>	The credit note document is sent from a supplier function to a buyer function to correct an existing invoice (after a claim).
<b>Generalities or notes about the usage</b>	In general the credit note is of the same structure as the invoice.
<b>Source</b>	EFNET, Shoenet

#### 6.2.10 Document: LineProposal

<b>Document Name</b>	LineProposal
<b>Document description</b>	The line proposal document is sent from a designer to a Producer (supplier function) or vice-versa to make a proposal for a specific collection or model design and/or to provide comments, acceptance status, or additional information. The document can contain design documents and/or links to design documents (3D, sketches, etc...). It can also be sent from a supplier function to a buyer function to make a proposal for a specific collection which the supplier function wants to produce for that buyer function.
<b>Generalities or notes about the usage</b>	Line Proposal Document

<b>usage</b>	
<b>Source</b>	EFNET, Shoenet

**6.2.11 Document: Order**

<b>Document Name</b>	Order
<b>Document description</b>	The order document is sent by a buyer function to a supplier function to order goods, finished or parts, in a certain quantity at a certain time.
<b>Generalities or notes about the usage</b>	Because in the upstream process the identification of goods is not as clearly defined as on the downstream side, it is possible to identify the ordered products in different ways. The range is from a GTIN to a reference to a technical specifications report.
<b>Source</b>	EFNET, Shoenet

**6.2.12 Document: OrderResponse**

<b>Document Name</b>	OrderResponse
<b>Document description</b>	The order response document is sent by a supplier function to a buyer function to indicate either, acceptance, rejection or change to an order.
<b>Generalities or notes about the usage</b>	The document can be handled either in a simple way, just specifying acceptance or rejection of a whole order document. In this case no details are transmitted. The other use is for change. Then all details have to be specified.
<b>Source</b>	EFNET, Shoenet

**6.2.13 Document: OrderStatusRequest**

<b>Document Name</b>	OrderStatusRequest
<b>Document description</b>	The order status request document is sent by a buyer function to supplier function to request status information either about a specific order or about all open orders.
<b>Generalities or notes about the usage</b>	If buyerordernumber or supplierordernumber are specified, the request is meant for one specific order. Else a status about all open orders is requested.
<b>Source</b>	EFNET, Shoenet

**6.2.14 Document: OrderStatusReport**

<b>Document Name</b>	OrderStatusReport
<b>Document description</b>	The order status report document is sent from a supplier function to a buyer function to specify information about the status of the processing of a certain order.
<b>Generalities or notes about the usage</b>	The order status report is either sent as a reply to an order status request or on a regular basis scheduled by an agreement between the partners
<b>Source</b>	EFNET, Shoenet

**6.2.15 Document: TechnicalSpecificationReport**

<b>Document Name</b>	TechnicalSpecificationReport
<b>Document description</b>	The technical specification report is sent by a supplier function to a buyer function to specify the details of a product.
<b>Generalities or notes about the usage</b>	Technical Specification Report Document
<b>Source</b>	EFNET, Shoenet

**6.2.16 Document: DespatchAdvise**

<b>Document Name</b>	DespatchAdvise
<b>Document description</b>	The despatch advice document is sent from a supplier function to a buyer function to announce a delivery in general.
<b>Generalities or notes about the usage</b>	The despatch advice document is only a very general announcement of a delivery. The details are specified in the delivery note document.
<b>Source</b>	EFNET, Shoenet

**6.2.17 Document: ReceivingAdvise**

<b>Document Name</b>	ReceivingAdvise
<b>Document description</b>	The receiving advice document is sent from a buyer function to a supplier function to confirm the receiving of a delivery in general.

<b>Generalities or notes about the usage</b>	No details are in the message. For a detailed statement the receiving confirmation is used.
<b>Source</b>	EFNET, Shoenet

## 7 Business Layer: Product Classification

### 7.1 Overview of existing product classification for T/C/F

Product classification is critical to the functioning of any industry in the knowledge based market of today. In the eBusiness context, product classification is the basis to design electronic catalogues.

A harmonised product classification will help buyers to easily find the products listed in the catalogues, to order and purchase them. It will help all the trading partners to create and maintain quality relationships. A standardised classification structure will help Producers to easily classify their products.

The objective of eBIZ has been to provide trading partners a common description being accessible by all parties involved in the value chain. It serves the industry and retailers in their electronic business transactions and facilitates electronic procurement. It ensures visibility to European niche products on the international scene. It is a key to a more open market and increase the competitiveness on the world stage.

Different product classifications do exist for TCF sector, all with different structures, history and use.

Overview of the product classifications for TCF without being complete:

- **Dialog Textil – Bekleidung (DTB)** a German group of companies who joined forces for the TC sector. The product classification can be found on their website (<http://www.dialog-dtb.de>) if you are a member. A version of 2002 can be found on <http://wwwa.pranke.com/en/services/wwwprofil/index.htm> (click on *product groups*) or, a more recent version, on [http://www.moda-ml.org/eBIZ-retail/repository/classification/DO510-010-v1-DTB\\_product%20classification\\_February%202009.pdf](http://www.moda-ml.org/eBIZ-retail/repository/classification/DO510-010-v1-DTB_product%20classification_February%202009.pdf).
- **GS1** developed product classification schemes for different sectors, including textile and footwear. The Global Data Synchronisation Network (GDSN) is a cornerstone of electronic business practice and is used by more than 5000 retailers and suppliers. The **Global Product Classification (GPC)** is the chosen classification system for GDSN. Sellers and buyers need to group products the same way globally to ensure effective data synchronization in the GDSN and to enable product search. In addition it can be cross-referenced to existing other proprietary trading partners' classification systems. GPC linked to GTINs (the Global Trade Identification Numbers) are the most worldwide spread identification of consumer good products) enables huge use of POS (Point Of Sale) data consolidation. An overview of GPC for all sectors including clothing and footwear, is available at <http://gpcbrowser.gs1.org/>.
- **EAS** has been developed by a number of German buying groups and is used in some countries (German system) for footwear.
- **FEDAS**, the umbrella association of the European sports goods manufacturers' associations, has been working on a giant task for several years: in the electronic data exchange within the sports goods sector. It wants to ensure, for instance, that all computers interlinked with each other will know what ski can be found for what sort of activity in the shelves of the specialist outlets. To accomplish this task the association created the FEDAS Product Classification Key together with experts from the brand-name industry and the big trade corporations. This code has been available in the Internet at <http://www.fedas.com> since 2000. On October 1, 2002 the updated version 2.0 of the code was launched on the web. The FEDAS Product Classification Key is an essential prerequisite for a smooth and precise data exchange between the trade and the industry. It is indispensable to have order data featured in electronic catalogues. Amongst other things this data includes the EAN article code, which is an identification code for all goods on SKU level – Stock Keeping Unit – alongside a currency code, a country code and supplier codes (Incoterms).

- **eCat project of CEN.** Interoperability of catalogues and harmonization of product classification systems is a key issue for industry for reaping the full benefits from eBusiness. Multilingualism in the European Union is often seen as an obstacle for the European economy in terms of competition and of the opening up of new markets, but it has also political dimensions relating to consumer protection, freedom to move, etc. Products and services are sold in the language of the target market. eCommerce and eBusiness can function well, only if the virtual and all their major elements (product classification schemes, user interfaces, product catalogues, etc.) are multilingual from the outset. This would create insurmountable financial barriers for SMEs. The first workshop eCAT1 was set up in 2002 by CEN with the support of the European Commission, Enterprise and Industry Directorate General, to address these concerns. The CEN eCAT WS is closely collaborating on the eCl@ss ([www.eclass.eu](http://www.eclass.eu)) initiative for product classification

## 7.2 Matching with the requirements

Connecting companies electronically between each other can only be achieved if the data required within the industry are gathered once at one source and then are transmitted between the IT systems directly. For example, in order to transmit article data it is important that one can depend on industry standards. In this way, additional internal work to translate external data into internal formats (manually or with conversion tables) can be avoided.

Only with the help of an efficient product classification, companies will be able to enjoy the enclosed benefits as:

- a uniform and unique product classification avoids additional internal processing to translate external data into internal formats (manually or with conversion tables);
- product classification supports buying programmes by allowing buyers to pre-select groups, product groups and applicable products;
- a common language for category management thus speeding up the ability to react to consumer needs;
- elimination of redundant activities and improvement of data integrity and accuracy of product set-up, maintenance and catalogues;
- being cross-referenced to existing proprietary trading partner classification systems;
- enabling potential use of POS data consolidation.

The classification systems for both sectors can be reviewed and modifications proposed but all proposals will take into the need for a common system to inter-operate with existing local classification systems and the particular needs of the sectors which require different levels of categorisation and flexibility in order to allow niche productions as well as seasonal product innovations.

## 7.3 Downstream Standards

### 7.3.1 Standards for identification

For identification the standards of GS1 will be used only. These are:

- GLN (global location number) for parties and locations
- GTIN (global trade item number) for article sold in a Point of Sales, represented by
  - EAN (European article number)
  - UPC (universal product code)
- SGTIN (Serialized Global Trade Item Number) for single trade item identification (a GTIN code combined with a unique serial number)
- SSCC (serial shipping container code) for logistic unit

Note that Electronic Product Code is a universal identifier for any physical object. It has a textual form called "Pure Identity EPC UR" (for example urn:epc:id:sgtin:0614141.112345.400).

A GTIN identifies a class of trade items, not an individual trade item.

The combination of a GTIN and a unique serial number, performed according to EPC Global Tag Data Standard specifications, corresponds to an EPC code.

A retailer needs a GLN for headquarter, every branch and all locations involved either in the logistics or the financial process. For a single store retailer all this is the same which results in one GLN.

In more complex business organizations GLN for shop-in-shop areas might be useful.

The producer needs separate identifications for special business models. Especially if charge-by-delivery and consignment models are used with the same customer, different identifications should identify the processes as different logical suppliers.

### 7.3.2 Standards for classification

The article classification is important as a tool to support the automated insertion of article data at the retailer's side.

For product group classification the GPC is globally proposed by GS1.

Other regional/national classifications have a regional use, like, in Germany, EAS for footwear, and DTB product groups for textile/clothing and FEDAS for sports. They are the most widespread standards for product group classifications.

For colour and article class it is recommended to use the definitions from the WWS profile (<http://www.pranke.com/en/services/wwsprofil/index.htm>, in "code lists").

Concerning size there is no transnational running standard but there is the CEN workgroup WG10 TC248 draft specifications (pr EN13402-4, [13]) for the "Size designation of clothes -Coding system" that still is a draft not implemented.

Because of this the producer should use his national size schema and the retailer will assign the local codes by a lookup table.

RMS (Retail Management System) providers should build their article inserting process in a way, that these classifications, together with GTIN and three level identification of article number, colour code and size code, are sufficient for the task.

### 7.3.3 Good practices: the use of DTB product groups for TC sector

Why using DTB product groups should be considered a good practice?

There are two main reasons for the use of the DTB product groups. The first is saving efforts compared to the use of individual groups. The second and even more important reason is to have the necessary deepness in classification to map it to the own product groups in the process of automated insert of the article information.

The first reason is saving efforts. It is possible to map the specifications of each supplier individually but this means a lot of work. From this knowledge we looked for a standard some years ago. While for the internal use inside a retail company a lot of reasons may influence the decision in a special way, the decision for an inter-company standard has only one criterion, the level of definition has to be deep enough. At the time the decision was taken the DTB specification fulfilled this condition best. By now more than a hundred producers are using the DTB product groups which is an important argument because that also means that nearly all retailers using EDI have a mapping table from DTB to own groups. In consequence there is no additional effort for a new supplier if it is using the DTB specifications.

The second reason is the necessary level of detail in the specification. The DTB product groups are a six digit number which consists of five levels.

Digit 1	main area	clothing
Digit 2	area	men
Digit 3-4	main group	jacket
Digit 5	group	indoor
Digit 6	sub group	jeans

To be of real use the specification has to be used at least down to group level better to sub group level. On a higher level the information is useless because the retailer is not able to map to his own groups in a unique way and the goal of automated creation of the article data set is missed.

## 8 Middleware and communication layers

### 8.1 The approach

#### 8.1.1 An overview

The section introduces the idea of an European Textile Clothing and Footwear Network (ETCFN), a virtual eBusiness network, where business level communication is based on the harmonised standards specifications (described above), and for which there are some recommendations regarding physical communications in order to achieve the better union in terms of flexibility and interoperability.

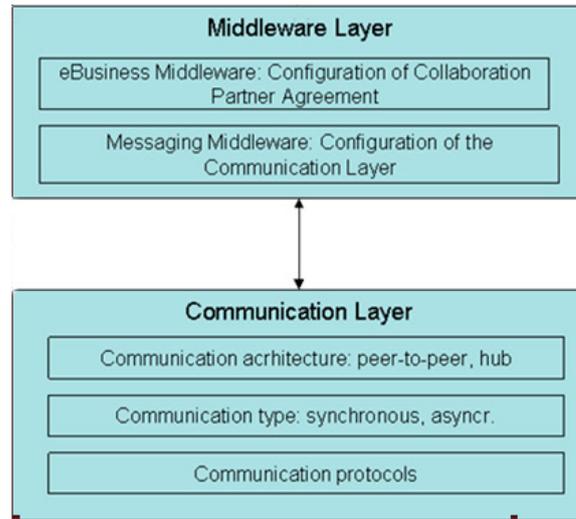
The network is made of eBusiness partners (various actors in the TCF supply chains) and connectivity service providers (Hubs) or application service providers (ASPs) (the latter ones provide various business logic services in addition to the connectivity services).

As specified in the paragraph 2.3, the Reference Architecture is organised on 4 main layers (see diagram in Figure 2.2):

1. Business Models layer
2. Business Application layer
3. Middleware layer consisting of two sub-layers:
  - Messaging Middleware
  - eBusiness Middleware.
4. Communication layer

This section is related to layer 3 and 4, Middleware and Communication, and describes the eBIZ standards-based methodology organized in:

- Business Middleware sub-layer,
- Messaging Middleware sub-layer and
- Communication layer.



**Figure 8.1 - Middleware and Communication layers.**

The purpose of the **Business Middleware** layer is to prepare and to formalize partner collaborations to allow automatic configuration in the underlying Messaging Middleware Layer. The Business Middleware layer can also provide additional services on the top of the Messaging Middleware layer, such as data transformations and business processes management.

The **Messaging Middleware** layer allows automatic configuration of the communication layer and provides services on the top of it (such as routing, message reliability, etc.).

The **Communication** layer function is to physically transport the messages. It is based on Internet protocols: HTTP for synchronous communication and SMTP for asynchronous communication.

### 8.1.2 The eBIZ approach

The Middleware and Communication layers are not sector-specific, they concern the communication systems and applications in a cross-sectorial way. It is out of the scope of the eBIZ to harmonise the existing standards at these levels, as well as to define guidelines of how to use existing standard.

However, eBusiness is not possible without implementation of software and communication systems that can exchange and process standard business documents. Therefore the eBIZ Reference Architecture, although not focused on communication issues, has decided to recommend a set of standard specifications on the middleware layer and basic guidelines for their use, with the point of view of creating the ETCFN (European Textile/Clothing/Footwear Network) basis.

This set of standard specifications allows for implementation of different communication models in accordance with the different requirements of the users.

Within the same model, interoperability on middleware level can be achieved but implementations adopting different models are not fully interoperable from the point of view of communication (for example email over SMTP communications cannot access web service interfaces).

It is evident that cross model communications can be achieved through intermediary services providers (see next sections) or with a replication of the interfaces.

In the eBIZ Reference Architecture, it is out of the scope to analyse the interoperability standards of the Middleware layer and to define profiles from them for the requirements of the Textile/Clothing and Footwear sectors. Still, if true interoperability has to be achieved, the more detailed development of the ETCFN should be re-considered in a successive Europe-wide research and development effort.

The goal of eBIZ RA is create the base for the creation of ETCFN by:

1. Selecting the standards on which the middleware solutions must be based;
2. Providing descriptions for best practices and data models regarding each standards-based approach;
3. Providing the data models based on best practices and experience of the pilot projects.

The following diagram shows a few standards that are recommended.

Three basic approaches have been adopted:

- SMTP/POP-based
- ebXML-based
- Web Service-based

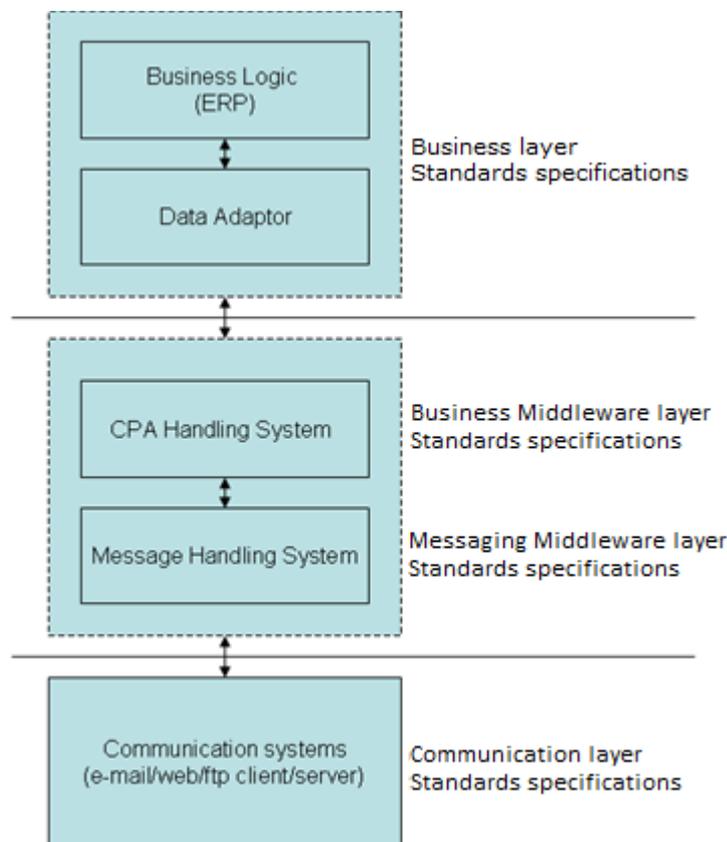
	e-mail client (SMTP/POP)	ebXML on SMTP	AS4 Web service (ebXML on HTTP)
<b>eBusiness Middleware</b>		CPP/CPA ebBP/Pmode	CPP/CPA ebBP/Pmode
<b>Messaging Middleware</b>	MIME envelope	ebMS envelope (SOAP with attachment)	AS4 envelope (subset of ebMS)
<b>Communication Middleware</b>	SMTP		HTTP

Abstract content models, best practices and examples are presented for each of the three approaches in Appendices G and H. The SOAP-based data models for the ebXML and SMTP/POP-based approaches have undergone a first harmonization, and have the same content.

Note that FTP protocols are not included in the communication layer of the architecture, due to the difficulties related to them in tracking message sending and receiving.

### 8.1.3 Business and Messaging middleware

As a first step it is appropriate to analyse which kind of software component is necessary in order to implement the business collaboration between two enterprises. The following Figure 8.2 shows the basic software systems/components corresponding to the three standards layers (chapter 2 "Methodology").



**Figure 8.2 - Basic software systems/components corresponding to the three standards layers**

It is assumed that at the premises of each trading partner, there is a system which handles the various business data (usually an ERP or generic MIS- Management Information System).

Often the trading partners use pre-existing software for these business functions, which is configured and adapted for their needs. In order to implement eBusiness according to the standards-based approach of the eBIZ RA, it is necessary to provide a software interface (typically a software component with the function of data adaptor) that is doing the translation between proprietary data formats and data models into those recommended as standards within the project.

At the Middleware layer, there can be software components and/or systems which perform functions such as:

- Middleware Business sub layer functions: configuration of collaboration partner's agreements, as far as collaboration business processes are concerned, or characteristics of the underlying communication channel, related to its security and reliability features;
- Middleware Messaging sub layer functions: message handling systems (transaction management, security management, message reliability, and error handling)

It is not necessary that such middleware systems are implemented, any kind of information (including business transactions) can be transferred directly via e-mail or web, but in this case the partners should be aware that these communication channels do not provide proper security and reliability mechanisms, and if the message exchange fails, it could be hard to handle eventual disputes between trading partners. In fact, it depends on what are the requirements of each business partner with respect to security and logistics of services and what are their agreements regarding these aspects, in order to handle and solve any future dispute. The amount of traceability information of messages will also depend on the Message Handling System implementation and capabilities, it can rely on P2P communication, but also messaging platforms, hubs, etc. It is out of scope of this document to define these capabilities, and as stated before, they will depend on the users' choice.

Note: while in EDIFACT a single document is called "message", in eBIZ RA the term message is used to describe a set of an envelope and payload (document/s).

In the end at the communication layer, there are typical software systems for Internet: web server and client, e-mail server and client, etc. The communication software could be configured via the middleware: the collaboration agreements and message handling functionalities could be fixed within the business level software. Alternatively these aspects can be handled using non-automatic procedures of the partners with all the consequent human errors that may happen.

## 8.2 A European Network: ETCFN

### 8.2.1 Overview

The European Textile/Clothing/Footwear Network (ETCFN) is a concept adopted in the eBIZ RA, in order to assure connectivity among players from the TCF sectors which adopt eBusiness solutions. In fact, one of the main problems in adoption of eBusiness solutions (and not only in the TCF sectors) is when new partners are joining a consolidated network of trading partners, or when a given company begins e-collaboration with new clients or suppliers. The idea behind ETCF is to assure connectivity between any two companies engaged in e-collaboration.

In order to be able to create the ETCFN, within the eBIZ RA, the pre-requisite is that:

- all the actors adopt the business specifications recommended;
- all the actors have access to e-mail and/or web servers, and to messaging software;
- it is also necessary to reach agreements regarding the middleware (both Business and Messaging layers) used by the various actors.

In this section, the concept for such a network will be outlined in terms of main actors, their roles and communication models. Recommendations about use of middleware compliant to international standards will be provided and specified in more details. However, it is out of scope of the eBIZ RA to harmonise such sector-independent standards and to supply detailed and interoperable middleware architecture. Nevertheless, a follow-up research effort would be the creation of the ETCFN, based on interoperable standard specifications on both business and middleware layers.

### 8.2.2 Main actors in ETCFN and communication models

The main actors of the ETCFN are two:

- **End-users** companies from the TCF sectors which engage in eBusiness, or their corresponding Application Service Providers (ASP);
- **Connectivity Hubs** service providers that:
  - implement and maintain the middleware functions;
  - act as a gateway between different middleware options, e.g. Web Services or ebXML;
  - connect other hubs or end-users (and their corresponding clients).

For each actor corresponds, in the ETCFN network, a type of node:

- **Leaf Nodes:** these are the End-Users, which can be companies from the TCF sectors (in case they host their business applications) or otherwise their Application Service Providers (organisations, which host the business application and provide application level services to sector players);
- **Intermediate Nodes:** Hubs that facilitate the communication between Leaf Nodes.

Three inter-organisational communication models are considered in the ETCFN network:

- Peer-to-Peer
- Hub-Spoke
- Four-Corner

### **Peer-to-Peer**

End-User companies (or alternatively, their ASP providers) that engage directly in eBusiness communicate in Peer-to-Peer (P2P) mode. They are responsible for managing the middleware (Business and Messaging) functionalities, define (formal or paper-based) collaboration partner agreements, and maintain them through the middleware functions.

### **Hub-Spoke**

Hub-to-Hub communication follows the P2P-mode as well. Hub-Spoke communication models assume the existence of a central entity (Hub) which manages the exchanged messages between two end-users, that is the communication between two spokes is done always through the hub, or through a network of interconnected hubs. This central entity could provide additional security, traceability and format conversion services.

The communication between two Connectivity Hubs can be agreed bilaterally or use standards, as with Peer-to-Peer communication. For example, the OASIS BDX committee is working on profiles of Web Services standards as interconnect messaging protocol for service providers in a four-corner model.

### **Four-Corner**

The term "four-corner model" refers to a generalization of the Hub-Spoke model where end entities are connected as leaf nodes to intermediaries, and where the intermediaries are themselves interconnected (a visualization of a four-corner network is given in the following diagram). This allows end entities to interact without requiring them to agree on a single service provider for connectivity. The four-corner model is used in various application domains, and has been adopted in large scale e-procurement initiatives, such as the EU PEPPOL project, and is currently being standardized within the OASIS Business Document Exchange (BDX) committee.

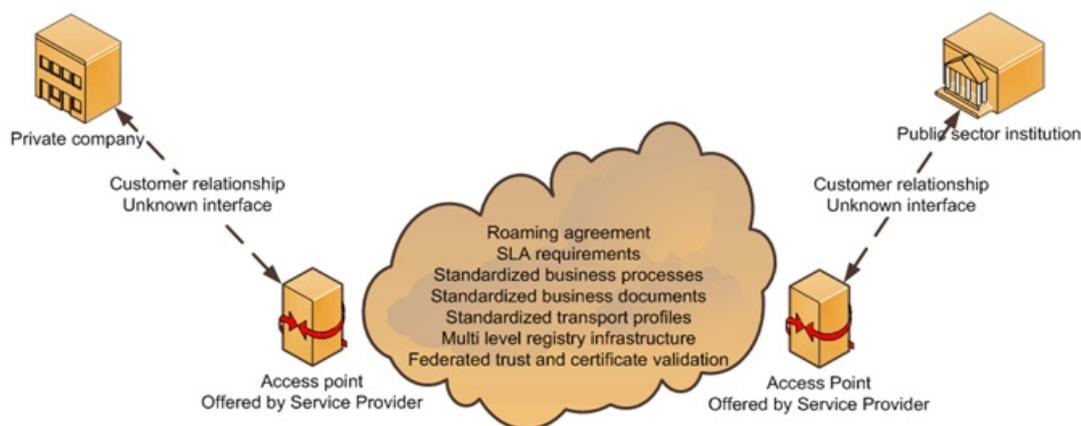


Figure 8.3

Table 8.1 below shows how the communication between different types of ETCFN actors can be implemented within the ETCFN.

Table 8.1

<b>Inter-organisational Communication Model</b> →	Peer-to-Peer	Hub-Spoke	Four-Corner
<b>Communication type</b> ↓			
End User - End User	ebXML, Web Services or SMTP/POP	-	-
End User - Hub	-	AS4 Web Services or SMTP/POP or proprietary	AS4 Web Services or SMTP/POP or proprietary
Hub - Hub	-	-	AS4 Web Services

Only the communication between end-nodes of the ETCFN is considered within the eBIZ Reference Architecture. It can be implemented in a Peer-to-Peer mode (direct exchange of messages between two business partners) or in a Hub-Spoke mode (all the messages between two business partners are passing through a Connectivity Hub).

Further research effort is also needed to define a Peer-to-Peer communication in a more generic way within the global ETCFN. For example, two end-users communicating in Peer-to-Peer mode can rely on particular services from Connectivity Hub (for example, middleware transformation services). Such more sophisticated Peer-to-Peer communications could be based on the newer Enterprise Service Bus paradigms and need substantial R&D efforts before adequate take-up will be reached.

### **8.2.2.1 Independent End-User**

The Independent end-user is an actor from the TCF supply chain.

Minimum requirements:

- Use of ebMS (and CPPA) over SMTP or AS4 Web Services over HTTP, when collaborating in P2P mode with other end-users
- Support at least SMTP communication enhanced with basic security mechanisms, when communicating with connectivity hubs

### **8.2.2.2 Connectivity Hub**

A Connectivity Hub (CH) is the backbone element of ETCFN.

The CH has a dual role:

1) focus point for a special group of end-users. It provides access to the ETCFN for the members of its group and other services concerning the communication.

In this case a CH must be able to provide at least:

- SMTP communication for the connected End-Users
- Full active security handling
- Traceability of messages
- Error handling.

In addition a connectivity hub may provide for business related middleware services, such as transformation of various data formats into the standard data formats adopted within eBIZ RA.

2) provider of the functionalities to connect to other Connectivity Hubs.

In this case the CH main functions are:

- Routing functions based on standard specifications such as ebMS and EDIINT. Independent End-Users communicate transparently with the CH when they need middleware transformation services;
- Gateway functions between the different middleware options, e.g. between ebMS over SMTP and AS4 or between ebMS over SMTP and the simple option where no middleware is used (SMTP with security extensions). It could be also a gateway to other networks.

The routing functions of the CH require that adequate security handling should be assured in order to respect communication requirements from End-Users sides. Moreover the routing functionality is related to agreeing on a standard way of party identification, finding and storage of party identities and communication profiles.

## **8.3 Short overview of middleware specifications**

### **8.3.1 Business Middleware Layer**

The table 8.2 below gives a short overview of the Business middleware specifications recommended for implementation of End User-to-End User communications within the eBIZ RA.

Table 8.2

eBusiness Middleware Layer	ebXML (over SMTP)	Web Service (with AS4)	SMTP/POP based
1 Party (trading partner/service) Information	CPPA	CPPA	no
- Party identification/description	ebCore Party ID	ebCore Party ID	LDAP, LDIF
- Business Process Specification	ebBP	ebBP	no
- Specification of messaging middleware and communication configuration options	CPPA/Pmode	CPPA/Pmode	no
2 Specification of trading partners agreements	CPPA	CPPA	On paper or proprietary solutions
- Negotiation protocol	CPPA	CPPA	No or proprietary solutions
- Reliable business document delivery and business process control protocols	ebMS/ebBP	AS4/ebBP	No or Eventually based on proprietary solutions

### 8.3.2 Messaging Middleware and Communication Layers

The table 8.3 below gives a short overview of the messaging middleware and communication layer specifications recommended for implementation of End User-to-End User communications within the eBIZ RA. These recommendations are not mandatory for the project pilots.

The following tables could serve as a guideline for an eBusiness application within the eBIZ framework. For each specific business case (including pilot cases) it is necessary to decide :

- Which middleware services need to be implemented. It is strongly recommend that if automatic configuration of messaging and communication is required, to use the approaches based on standard middleware (ebXML or AS4 Web Services).
- Which type of communication is desired to be implemented? For asynchronous communication it can be used ebXML over SMTP or the SMTP/POP approach; Web Services with AS4 works for synchronous or asynchronous communications.

If requirements include services not considered by the project, submitting a request for enhancing the architecture and trying to base the implementation on standards as much as possible.

**Table 8.3**

<b>Messaging and Communication Layer Specifications</b>	<b>ebXML (over SMTP)</b>	<b>Web Service (with AS4)</b>	<b>SMTP/POP based</b>
Message Envelope configuration	ebMS (SOAP with attachments)	ebMS (SOAP with attachments)	S/MIME
Digital signature (message integrity, non-repudiation)	XML signature (X509 certificates)	WS-security	X509 certificate
Message Encryption (message secrecy)	XML Encryption	WS-security	X509 certificate
Time Stamps (non repudiation)	W3C duration	WS-security	W3C duration
Reliable Messaging	ebMS reliable messaging	AS4 reception awareness	-
Channels	SMTP	HTTP	SMTP
Channel reliability	-	-	SMTP reliability
Channel Access Control	Various standard-based options	WS-Security	Various standards-based options.
Secure Channel	SSL/TLS	SSL/TLS	SSL/TLS

## 8.4 ebXML over SMTP

### 8.4.1 ebXML and its role

Some of the main functionalities that are necessary in order to collaborate through electronic messages is the message exchange mechanisms. This involves a number of issues:

1. The organization and monitored execution of exchange process
2. The agreement between business parties on:
  - transport protocol to message exchange
  - envelope protocol to message exchange

- content of messages to exchange
- security constraints (signature, encryption, etc.)

The ebXML.org homepage offers this brief characterization of the ebXML project:

*“ebXML is a set of specifications that together enable a modular electronic business framework. The vision of ebXML is to enable a global electronic marketplace where enterprises of any size and in any geographical location can meet and conduct business with each other through the exchange of XML-based messages.”*

#### 8.4.2 Formalisation of Collaboration Partner Agreements: ebCPPA and ebBP

To enable business collaborations between two or more enterprises through collaboration modelling of the collaboration there are two specifications of ebXML:

- ebXML Business Process Specification Schema (ebBP 2.0.4)
- ebXML Collaboration Protocol Profile and Agreement (CPPA 3.0)

The **ebXML Business Process Specification Schema (ebBP or BPSS)** is a technical business process specification that provides a generic framework for business process collaborations, both between two parties/partners (binary) and multiparty (expressed as two or more binary collaborations).

The **ebXML Collaboration Protocol Profile and Agreement (CPP/CPA)** OASIS Standard provides definitions for the sets of information used in business collaborations. One set of information (the CPP Profile) contains data about the business partners' technical capabilities to engage in electronic business collaborations with other partners. The second set of information (the CPA Agreement) contains data that has been agreed to configure the public, shared aspects of the protocols used in the business collaboration protocols.

A Business Partner is an entity that engages in Business Transactions with other Partner(s).

The Message-exchange capabilities of a Party may be described by a Collaboration-Protocol Profile (CPP). A CPA may be created by computing the intersection of the two Partners' CPPs.

Included in the CPP and CPA are details of transport, messaging, security constraints, and bindings to an ebBP Business-Process-Specification (or, for short, Process-Specification) document that contains the definition of the interactions between the two Parties while engaging in a specified electronic Business Collaboration.

When the agreement is achieved two parties can express in the agreement, for example, their complementary preferences related to one or more business processes described through ebBP standard:

- which business roles they will play;
- which business documents they will exchange;
- how they will exchange the agreed business documents, etc.

#### 8.4.3 Process definitions

In the eBIZ RA, the ebBP description for the processes of upstream and downstream phases is defined. Such formal definitions of processes are intended to be used within process management application components, which control the correct implementation of a collaboration process.

In detail, the business processes defined through ebBP standard are related to the three main areas of eBIZ and are stored in the following locations:

- Textile/Clothing industry upstream area:  
<http://www.moda-ml.net/moda-ml/repository/ebBP/v2013-1/en/>

## CWA 16667:2013 (E)

- Footwear industry upstream area:  
<http://spring.bologna.enea.it/eBIZ-footwear/repository/ebbp/v2013-1/en/>
- Textile/Clothing and Footwear industry downstream area:  
<http://www.moda-ml.net/eBIZ-retail/repository/ebbp/v2013-1/en/>

For example, the "*cyclic replenishment program - CRP*" business process of the Downstream Business Application Layer (described in the paragraph 4.1.1), is represented by XML syntax, through ebBP modelling language, in the file:

*ebBP\_cyclicreplenishmentprogramCRP-1\_v2013-1.xml*

stored in this location:

[http://www.moda-ml.net/eBIZ-retail/repository/ebBP/v2013-1/en/ebBP\\_cyclicreplenishmentprogramCRP-1\\_2013-1.xml](http://www.moda-ml.net/eBIZ-retail/repository/ebBP/v2013-1/en/ebBP_cyclicreplenishmentprogramCRP-1_2013-1.xml)

The CPP profiles and CPA agreements created in the eBIZ context will refer the eBIZ business processes (upstream and/or downstream) defined through ebBP standard.

Some examples of CPA agreements XML instances are stored in the following location:

- Textile/Clothing industry upstream area:  
<http://www.moda-ml.net/moda-ml/repository/cppa/>
- Footwear industry upstream area:  
<http://spring.bologna.enea.it/eBIZ-footwear/repository/cppa/>
- Textile/Clothing and Footwear industry downstream area:  
<http://www.moda-ml.net/eBIZ-retail/repository/cppa/>

For example, an agreement between an Italian party and a Romanian party, that want collaborate on a predefined business process can be described and represented, by XML syntax, through the CPPA standard, in the file:

*CPA\_IT-12345678909\_RO-98765432101\_2013-07-10.xml*

stored in this location:

[http://www.moda-ml.net/eBIZ-retail/repository/cppa/CPA\\_IT-12345678909\\_RO-98765432101\\_2013-07-10.xml](http://www.moda-ml.net/eBIZ-retail/repository/cppa/CPA_IT-12345678909_RO-98765432101_2013-07-10.xml)

In this example, both parties agreed on the "*cyclic replenishment program - CRP*" business process in the Textile/Clothing and Footwear industry downstream area; the Italian party plays the "Retailer" role and the Romanian party plays the "Producer" role; in this simple example of agreement the parties agreed on "Order", "Despatch advice" and "Invoice" business documents using only a delivery channel SMTP based.

### 8.4.4 Automatic Configuration of Communication Channels and their services: ebMS

The ebXML Messaging (ebMS) provides for standard transaction management facilities (in addition to SMTP or, as explained in the next chapter, to HTTP) and reliability handling.

The ebMS specification can be viewed as an early standard to take advantage of emerging specifications like SOAP, SOAP-with-attachments, XML Signature and Internet protocols such as HTTP and SSL/TLS. Several updates to these standards were developed since the publication of ebMS 2.0. The newer version 3.0 of ebXML Messaging is a technical update that modernized the ebMS standard to fully conform to recent Web Services standards (described in the next section 8.5).

If SMTP without ebMS is used, then the transaction management should be done within the business application logic. With ebMS, the transaction management can be configured and negotiated on Peer-to-Peer

basis. The configuration of the transaction management will be done preferably (but not necessarily) with the help of ebCPPA.

The ebMS service related to the communication channel, such as security, transaction management, reliability, etc are described in more details below.

#### 8.4.5 ebMS Envelope

The ebMS standard is based on the adoption of a SOAP with Attachments envelope that is associated to the payload (the business document to be exchanged).

ebMS specifies how to define and fill the XML envelope of the message and provides an XML Schema for its validation; anyhow the ebMS specification leaves several optional elements and does not provide the syntax of various identifier types.

Thus, to support the adoption of ebMS in a common and interoperable way,

- it is mandatory to validate incoming and outgoing XML messages against the XML Schema of the envelope (to achieve a minimal level of conformance)
- it is suggested to follow some further rules and best practices:
  - to use an adequate *encoding* type in the XML prologue;
  - to specify the *Timestamp* through the “Date and Time Formats” specification [16] of W3C;
  - to use the *PartyId* element and its attribute type to identify unambiguously the Party (for example using URN and international codes);
  - if specified, to use consistent references to the Business Process and relative roles described through ebBP standard (see par. 8.4.2 and 8.4.3).

In Appendix H a set of rules about identifiers is suggested together with a complete example of ebMS message. A complete description of SMTP binding is provided in the ebMS 3.0 Core Specification [19].

#### 8.4.6 Message reliability

There is also a requirement for a reliability mechanism (see the following Figure 8.2). This mechanism is based on exchange of acknowledgment messages for business messages sent. The business message is re-sent within pre-defined time intervals, until the acknowledgement is not received. On receiver side, eventual duplicates of the message are ignored.

In future versions of the architecture, and according to the requirements of the pilots, other more sophisticated reliability protocols could be considered.

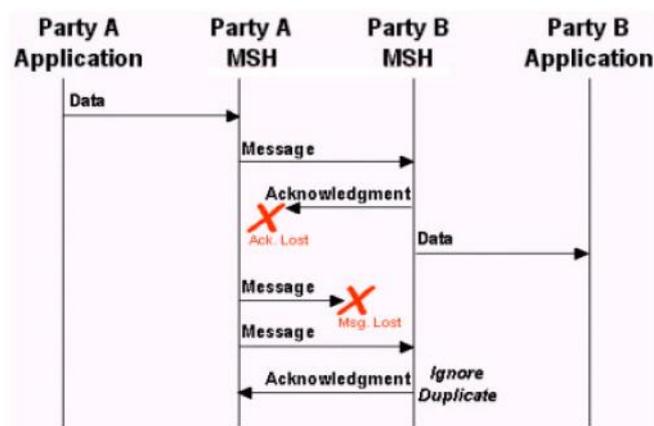


Figure 8.4

## 8.5 Web Services over HTTP

### 8.5.1 Overview of Web Services

The W3C Web Services Architecture Working Group defines a Web Service as: “a software system designed to support interoperable machine-to-machine interaction over a network.” (<http://www.w3.org/TR/ws-arch/#whatis>). There are many reasons to choose Web Services for an eBusiness network:

- They are based on XML technologies and they are programming platform and language independent. A client written in the programming language X can communicate with the Web Service written in the programming language Y, without problems.
- They use, mainly, the HTTP transport layer and hence, they can be used without changing the security configuration of the enterprise network.
- They are based on open standards and protocols.

The benefits of use of Web Services can be easily seen, for example, in the case of centralized management of the communications or in the case of a large enterprise that collaborates with small enterprises. The Hub or the larger enterprise can keep its Web Services always on line, charging itself with the main computational effort and keeping the control of the communication level, and the other parties can communicate with the central Hub or larger enterprise using light software based on a Web Service Client. Web Services constitute the default choice, when more recent architectural options, such as Enterprise Service Bus and Service Oriented Architectures are considered.

### 8.5.2 AS4: Web Services for B2B

Web Services is term that refers to a family of interrelated technical specification and standards, not to a single technical specification. As explained in the GS1 White Paper *AS4: Web Services for B2B* [17], Web Services are used in a wide range of application domains, each of which has its unique set of requirements and characteristics. The diversity of requirements is matched by a range of technical specifications and profiles, focussed on specific aspects, which offer great flexibility and customizability, but which has also caused issues in interoperability and complexity.

B2B document exchange is just one of these applications.

The OASIS AS4 Standard [18] is a recent profile of ebMS 3.0 [19] that:

- Retains the overall ebXML message structure and flexible packaging concepts introduced in section 8.4.5.
- Represents a simplified and standardized interoperable subset of ebMS 3.0, thereby supporting the development of interoperable software implementation; an example of simplification is the use of AS4 reception awareness, a simpler and more interoperable form of reliable messaging that WS-ReliableMessaging.
- Leverages the recent SOAP 1.2 and WS-Security W3C recommendation.
- Provides all B2B functionality (such as non-repudiation of receipt, or payload compression) from established B2B protocols like AS2 that is not provided out of the box in Web Services standards.
- Is light-weight, easy to set up and to operate by businesses of all size, including SMEs.

AS4 can be used in ETCFN is a number of ways, supporting each of the communication models described in section 8.2:

- Peer-to-Peer
- Hub-Spoke and Four-Corner

While AS4 is a Web Services-based messaging protocol, it only uses a subset of underlying Web Services specifications. In particular, it does not require the use of WSDL.

### 8.5.3 Peer-to-Peer AS4 messaging

When used in peer-to-peer communication, businesses would deploy AS4-aware (open source or commercial) messaging endpoints and configure these to communicate with their trading partners.

AS4 provides a "pull" mode (in the right of the following image), by which an entity A can send a message to an entity B while letting B control the actual transmission of the message. Informally speaking, A provides a Web Services "mailbox" that B can periodically connect to and from which B can download any waiting messages. This mechanism supports communities in which some end entities (like B) have anonymous, client-only endpoints that may not be on-line 24/7, may be behind firewalls or lack a static IP address or DNS record. Note that A must be online and addressable for B to be able to connect to its messages.

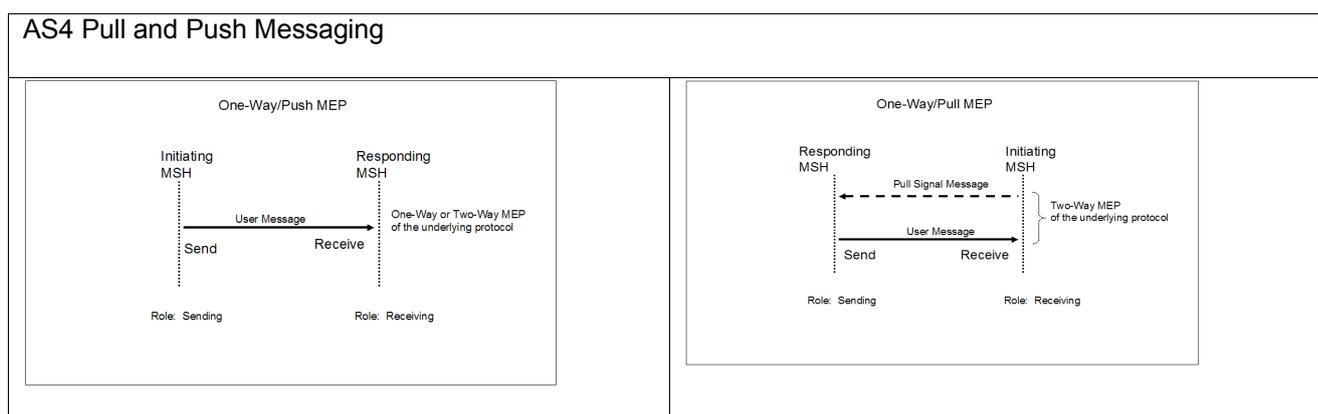


Figure 8.5

AS4 also supports the more familiar "push" mode (in the left of the previous image), by which entity A connects to B's AS4 server to transmit the document. The choice of pull or push is a configuration parameter that can be set for different partners or message types on a case by case basis.

### 8.5.4 Connectivity Hubs

When used with Connectivity Hubs, messaging endpoints are not connected directly.

As described in 8.2.2.2, there are two main behaviours that CH can adopt:

1. offering connectivity only;
2. offering additional functionalities.

In the first case, sender and receiver connect to an intermediary transport hub that provides store-and-forward capabilities. Messaging intermediary functionality is defined in ebMS 3.0 Part 2, Advanced Features [20] and further profiled in the AS4 standard [18].

- Support for endpoints that are occasionally online. Just as with email clients that can be offline, with email servers providing temporary storage for message and routing of messages, this capability is available to AS4 endpoints.

- End-to-end signing and encryption are available. Intermediaries only use the ebMS header for routing, so the message is available in unmodified form and content is not modified. Any tampering of message content breaks digest values and is therefore readily detected. Within the header, the *From/PartyId* and *To/PartyId* elements refer to the leaf nodes, not to the connectivity service provider.
- In contrast to peer-to-peer AS4 messaging, it is possible for both sender and receiver to be anonymous and only able to receive messages by pulling. The requirement to be addressable is now a requirement for the intermediary only.
- As in the AS4 peer-to-peer messaging model, both sender and receiver must be able to process AS4 messages. They must also agree on business document schemas, as the connectivity hub does not perform payload transformation.
- The ebMS 3.0 intermediary model is not limited to a single ebMS intermediary, again similar to the email model where SMTP servers can store and forward messages.

In the second case, there is an even more decoupled exchange model and, also, more responsibilities on intermediaries.

For example, in a Four-Corner topology (a brief description is provided in 8.2.2.2) the inner two nodes are Connectivity Hubs that support gateway functions between the different middleware.

In this exchange model, the following situation occurs:

- The message protocol used between sender Leaf Node and CH can differ from the message protocol used between CH and receiver Leaf Node. So if the hop from sender to hub uses AS4, there is no requirement that the hop from hub to receiver (or any exchanges between hubs, in a four-corner model) also uses AS4. The four-corner model can, therefore, be seen as a way to achieve interoperability, that protects the existing investments of end entities in connecting to a particular service provider.
- Connectivity Hubs may also provide payload transformation functionality, e.g. converting a UBL document to an EDI document or to a proprietary format. Leaf nodes that use the services of a CH are assumed to trust that those transformations preserve content and intent of the original sender. These assumptions and others are part of the interconnectivity terms and conditions.
- No end-to-end security is available. Instead, the service providers are trusted to have authenticated their customers and to have been authorized to send messages on their behalf. The assumed end entity authentication is a key added value of CHs but it also means that the original is only indirectly committed to message content.

Further profiling is undertaken in OASIS BDX and other contexts to further profile AS4 to operate in a four-corner model. One aspect of relevance is the addressing of the various entities involved in a four corner exchange.

## **8.6 SMTP/POP based approach**

### **8.6.1 Overview**

In this case the protocol to be used is SMTP/POP with MIME or S/MIME extensions. In this approach all aspects of communication channels and their services are agreed in advance, are not formalised, and the corresponding agreements are implemented in light software components or otherwise are implicit and followed manually by the trading partners. The security services in this approach are limited to access control and authorisation mechanisms (the corresponding informal agreements and protocol used are described

below), The reliability services are not considered as well, and it is up to the trading partners to implement reliability mechanisms within their applications.

As specified in the section "Business and Messaging middleware" (see 8.1.3 paragraph) in eBIZ RA (SMTP/POP based approach and, also, ebXML and AS4) the term "message" is used to describe a set of an envelope and payload.

In detail:

- each message has one or more attachments which are separated files;
- each attachment contains one or more interchanges;
- each interchange is a XML structure from one sender to one final recipient. It can contain one or more documents. Only for transactional interchanges the restriction to one document is highly recommended. For asynchronous communication it can be any number of documents;
- each document is an atomic unit of business communication (e.g. an *order*, a *delivery note* or an *invoice*).

#### *Content of an attachment*

An attachment contains the XML declaration and one interchange.

Example of a simple XML declaration:

```
<?xml version="1.0" encoding="UTF8" standalone="yes"?>
```

## Interchange Frame

Presently the interchange starts with exactly seven pieces of information before the documents.

They are:

**SenderGLN** – the GLN (global location number assigned by GS1) of the originator of the documents, who can be different from the sender of the physical message

**RecipientGLN** – GLN of the final recipient of the documents, who can be different from the recipient of the physical message

**InterchangeID** – an unique identification of this single interchange

**InterchangeTimeStamp** – generation date and time of the interchange

**InterchangeTA** – a yes/no parameter indicating if the interchange is for synchronous or asynchronous handling

**NumerOfDocuments** - the count of documents inside the interchange

**DocumentType** – either a valid document type of ETCFN or the term 'Mixed' if more than one type is in the interchange

Below there is an example of an interchange frame.

```
< ETCFN_INTERCHANGE>
```

```
  <SenderGLN>4035811991014</SenderGLN>
```

```
  <RecipientGLN>4035811991021</RecipientGLN>
```

```
  <InterchangeID>01</InterchangeID>
```

```
  <InterchangeTimeStamp>2006-09-07T12:12:23</InterchangeTimeStamp>
```

<InterchangeTA>NO</InterchangeTA>

<NumberOfDocuments>1</NumberOfDocuments>

<DocumentType>Mixed</DocumentType>

... document ...

... document ...

</ ETCFN\_INTERCHANGE>

### 8.6.2 Security services

Security services are limited to identification and authentication services. The authentication can be by digital certificate, user name/password or simply by e-mail address recognition.

Table 8.4 below gives an overview of the considered authentication methods. The numeric code value is useful in the case of a hub connectivity provider, which differentiates between its clients. In a peer-to-peer approach the choice will be on a single authentication method, due to the fact that each authentication method should be implemented by a separate application/component.

To implement the necessary authentication features with SMTP the following RFCs must be (partially) implemented.

- RFC 1869 - SMTP service extensions (EHLO extension)  
<http://www.faqs.org/rfcs/rfc1869.html>
- RFC 2554 - SMTP service extensions for authentication  
<http://www.faqs.org/rfcs/rfc2554.html>
- RFC 2487 - SMTP service extensions for secure SMTP over TLS  
<http://www.faqs.org/rfcs/rfc2487.html>

**Table 8.4. Example of definition of security levels (table provided by Pranke Consulting GMBH for eBIZ-TCF project)**

Name	Value	Description
Top Individual	67	<ul style="list-style-type: none"> <li>▪ by stored public key validated individual certificate of the user</li> <li>▪ username password authentication</li> </ul>

Top Group	65	<ul style="list-style-type: none"> <li>▪ by stored public key validated individual certificate of the user</li> <li>▪ group username password authentication</li> </ul>
Very high individual	35	<ul style="list-style-type: none"> <li>▪ by accepted signer validated individual certificate of the user</li> <li>▪ username password authentication</li> </ul>
High individual	19	<ul style="list-style-type: none"> <li>▪ by accepted signer validated certificate</li> <li>▪ username password authentication</li> </ul>
Standard plus	15	<ul style="list-style-type: none"> <li>▪ high level username password authentication over secure channel</li> </ul>
Standard	11	<ul style="list-style-type: none"> <li>▪ username password authentication over secure channel</li> </ul>
Low plus	7	<ul style="list-style-type: none"> <li>▪ high level username password authentication</li> </ul>
Low	3	<ul style="list-style-type: none"> <li>▪ username password authentication</li> </ul>
Very low	1	<ul style="list-style-type: none"> <li>▪ registered mail sender identification</li> </ul>
Unsecure	0	<ul style="list-style-type: none"> <li>▪ nonregistered mail sender identification</li> </ul>

## 9 RFID for supply chain improvement (NEW)

### 9.1 RFID technology and standards

RFID is basically a technology to gather data without touching the data carrier.

It became a synonym though for a system of elements invented by so called auto ID centres to establish an “Internet of Objects” and for many applications using RFID technology for functions and related to the benefits of this technology.

This internet of objects promotes principles of product serialization to gain benefits in the supply chain, which are only possible if each product carries an individual number for identification.

For consumer goods this e.g. means, that each item carrying today a GTIN (Global Trade Item Number) will carry a serialized GTIN (corresponding to an Electronic Product Code or EPC code) in the future.

The 4 core elements of the Internet of Objects for consumer goods proposed by GS1, the main reference in this area, are:

1. The **EPC code**, which is an identification scheme for the universal identification physical objects via RFID tags and other means. An EPC construct consists of an EPC Manager Number determining if it is e.g. an item, a box or a pallet, object class identification, and a serial number used to uniquely identify the instance of the object. It contains therefore today's GTIN which allows migration from one system into the other.
2. EPC Information Service (**EPCIS**) which is a data standard allowing data bases to communicate directly with each other. This happens by transmitting so called EPCIS Events, describing: What happened, When, Where and Why.
3. **Object Name Service**, which is a physical database structure delivering all non sensitive data within this concept and
4. a so called **Discovery Service** which is a component of the EPCglobal Architecture Framework consisting of a suite of services that enable users to find data held by individual companies related to a specific Electronic Product Code. Object Naming Service is one component of Discovery Services. It is in other words a right/role management mechanism allowing the exchange of data between partners that don't need to know each other in an environment, where the sender keeps the authority to determine who is allowed to receive his data.

If each item has a different number the gathering of product data by scanner is not feasible. That's why RFID is so important because it allows bulk reading without touching the objects just by reading the tags with RFID inlays (chip and antenna) by an antenna signal.

The following picture shows schematic the components of a RFID system.

An RFID system is made up of three principal components:

- transponder
- reader
- computer application

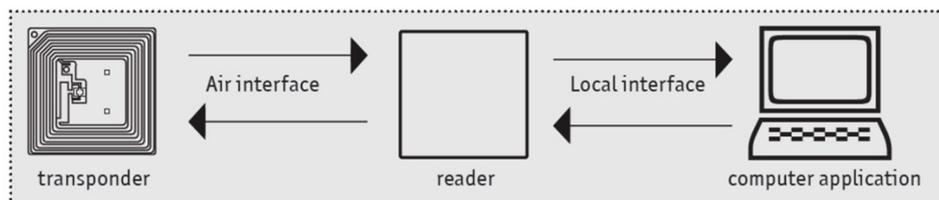


Figure 9.1 - Source: GCS Consulting GmbH, Munich - Germany

The following graphic shows in detail the structure of the EPC Code.

Data Header	Filter Value	Partition	Company Prefix	Item Reference	Serial Number
48	2	5	4009418	012894	000000123456

Figure 9.2 - Source: Metro Group brochure 2007, p.9

It is obvious that this will happen in the future between numerous market players and therefore requires standards, so that e.g. all readers can read all different tags.

This part of the eBIZ reference architecture uses the synonym character of RFID and this in specific relation to the goals and the content of this reference architecture paper. In TCF sector RFID tags are passive tags, which mean they send only data, when hit by an antenna signal.

This is relevant, because no battery is needed which saves space and costs.

The following chart shows all related standards developed by GS1 (formerly with a GS1 suborganization called EPCGlobal) showing which standards are ratified and which ones are in development:

One of the most controversially discussed standards was the air interface standard regulating the data exchange between RFID readers and tags.

The main obstacle determining this standard was the choice of the right operating frequency, due to physical differences of the various frequency bands:

- HF frequency (13,56) has a short read range with a consistency and good precision on short ranges within the core read range of 60cm.
- UHF frequency (860 – 930 MHz) is a frequency band and has a long read range (several meters) but with physic based instabilities.

And long read ranges are not always a good thing, which was the main reason why for a long time HF was the frequency band of choice, particularly because for a long time it was impossible to guarantee by using UHF tags, that at a cashier in retail the first person in line at the cashier counter would not be billed for the purchases of somebody else behind in the line. This was a physical problem that could be solved by integrating a second antenna into the tag antenna design and this way by using the nearfield characteristics of UHF signal in combination with specific adaptations at the antenna at the cashier point.

This was important because pallet handling/reading requires more space and therefore wider antenna space which won't work with HF. The solution inventing near field antennas for the RFID tags made it possible to work now with one running frequency for the air interface protocol which results in scale effects at all RFID systems, particularly at antennas and RFID tags lowering the prices and creating higher confidence for RFID investments.

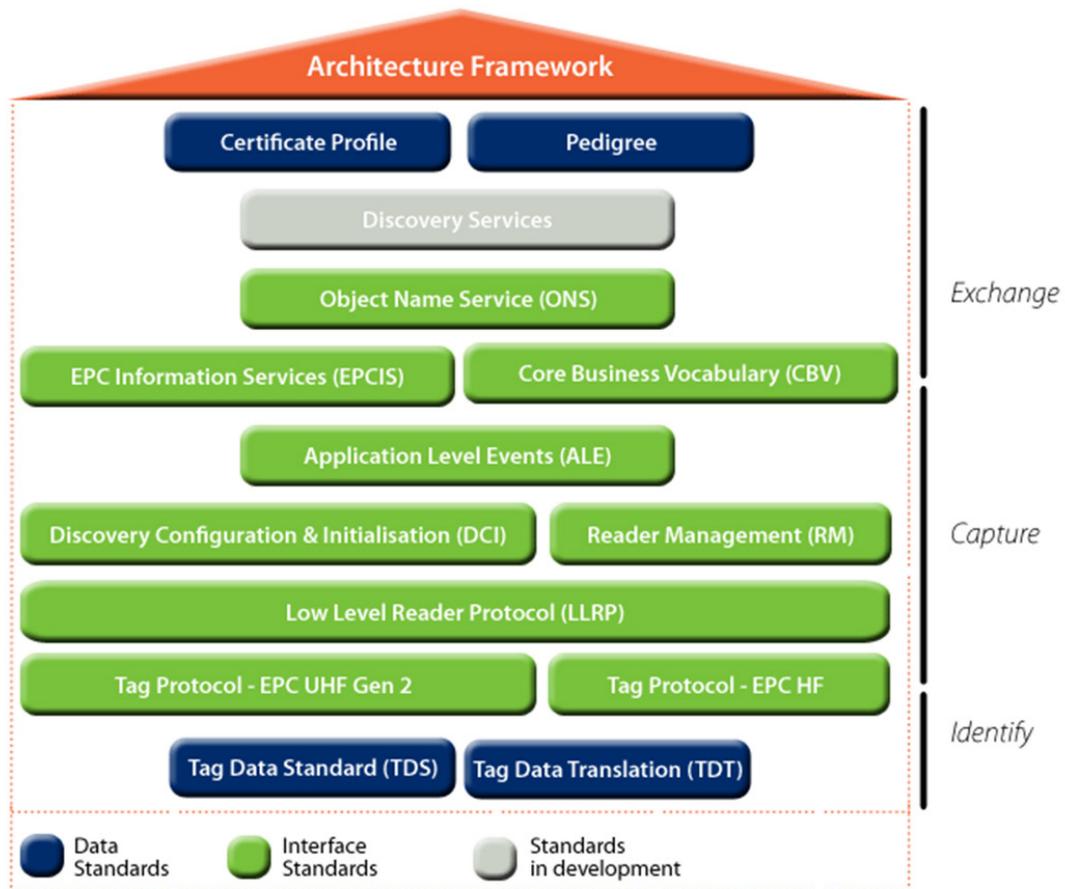


Figure 9.3 - Source GS1 at <http://www.gs1.org/gsm/kc/epcglobal>

Other RFID frequencies exist, but are not relevant for TCF sector (with the sole exception of LF bands that are used in corporate fashion within garment rental businesses).

The globally established air interface standard for TCF is a GS1 standard called UHF Class1 Gen2 (approved by ISO as Iso 18000-6C), also widely known as UHF Gen2 which is today the globally accepted air interface standard in TCF sector.

The main chance and at the same time the main obstacle of using RFID or related standards in this world is the possibility to exchange product data within a heterogeneous environment.in TCF sector.

The following Figure 9.4 shows an overview of available frequencies and their characteristics.

Frequency		Applications	Range
LF Low frequency	125-135 kHz	Animal identification Production monitoring Access control	1-1.5 m
HF High frequency	13.56 MHz	Retail goods (individual) Library management Ticketing Access control	1-1.5 m  10 cm + security
UHF Ultra high frequency	865-868 MHz	Pallet identification Carton identification	3-4 meter Europe (7 m USA)
Active Transponders	GHz with battery	Container identification Production monitoring	Up to several hundred meters

**Figure 9.4 - Source: Metro Group Future Store brochure - 2006**

It is a chance because once the item is tagged all participants in the supply chain can gain the benefits of gathering serialized product data without scanning. The challenge lays in the fact that the benefits are shared while the producer (producer/wholesale) has to pay for the labels and so do retailers, when they have private label business selling their own retailer brands.

There exist theoretically 3 different possible ways to exchange RFID based EPC coded supply chain data:

1. With electronic messages (EANCOM or XML) respectively data exchange mechanisms described in this eBIZ reference architecture.
2. By peer to peer connections either by
  - a. EPCIS data banks communication directly or via Discovery Service providers or
  - b. By file transfer from one RFID software environment to another.

If such competing concepts will be a barrier for further expansion of RFID in TCF sector is unclear, yet.

Updating this eBIZ reference architecture definitely makes sense though because it will raise the awareness of the value of data exchange itself and raises the chance that a possible TCF sector decision for one out of the 3 ways of exchanging data will give in the future any RFID investment the security the UHF Gen 2 decision brought.

By definition EPCIS is the transformation medium for event data while data with a more documentary character are subject to electronic messages exchange.

A closer look to the standardized processes of the supply chain shows the necessity for more precision to categorize the data at each read point one of these two categories (transmitting with EANCOM/XML OR EPCIS message exchange).

Additionally there are TCF participants demanding for only one data exchange medium. This is understandable but won't have a chance to be realized.

Being aware of this challenge and there is work in progress inside GS1 to determine such categorization as well as a reliable migration scenario how to transmit RFID data with EPCIS versus EANCOM data exchange and to implement EPCIS in coexistence with EANCOM/XML message exchanges.

## 9.2 RFID within the supply chain steps

When considering RFID for supply chain management in this text, we define that the supply chain starts at material and trimming suppliers and ends at the returns of a consumer having a problem with the product. This doesn't mean that RFID for fibre or yarn producer or dyeing service providers cannot be an interesting topic. Considering major movements in the RFID user scene in Europe, USA and Asia are majorly downstream driven so that we skip any theoretical use cases in the yarn and fiber field.

The following use cases are considered relevant RFID supply chain business cases:

- *Materials – trimmings*  
RFID at box level could improve their inventory management and would help manufacturers and producers to secure all handling processes around trimmings which is a major and costly drama within all TCF sectors. This is currently a real but purely intellectual approach because the few TCF producers currently using RFID are such special cases that this approach will remain a valuable source for improvement in the future.
- *RFID in Manufacturing*  
Whether the manufacturer is owned by the producer or is an independent CMT (Cut Make Trim) producer RFID item tagging right after the cutting room improves the visibility within the manufacturing process. The question how complete a production order is for shipment creates high complexities within manufacturing. Just a few examples:
  - RFID can trigger a signal that the cutting process is finished.
  - Item tagging helps to identify returns within the manufacturing process due to e.g. flaws in the fabric that show up during manufacturing and lead to replacement of the defected piece of the garment. These to be repaired garments are extremely difficult to identify in piles of bundles within manufacturing and jeopardize complete and timely shipments.
  - RFID can also help to improve visibility of what kind of pieces of a production order have passed that specific state within manufacturing. RFID can:
    - deliver valuable prerequisites for intelligent managing of line inventory and
    - bring transparency on the updated status of the available volume for shipment and
    - helps the manufacturer to act in time instead of reacting when delivery date is getting closer (the amount of time and effort to gain this visibility within the manufacturing process is widely underestimated is the reason why mainly producers who own manufacturing plants far away from headquarter are interested in RFID item tagging for this exact purpose).
  - RFID can also help to secure process accuracy in manufacturing plants to a level, that they can prepack garments for Cross Docking procedures replacing such costly processes at the producer's DC (distribution center). In this case RFID is a business enabler.
  - RTLS (Real Time Location Systems) of products, WIP (Work In Process) and people: (this point has to be expanded considering RFID solutions for Real time location systems).
- *RFID use for incoming goods at producers distribution center (DC)*  
This is the "classical" RFID application because item tagging speeds up the process significantly because it replaces scanning or manual counting.
- *RFID use for outgoing goods at producer's DC*  
Here RFID has the same effect of speeding up the process and save resources by replacing manual processes. Additionally it can help to secure the process because RFID use can help to increase packing accuracy, identify missing pieces and create trustworthy documentation of what really sent to the retailer.
- *RFID use for incoming goods at retailers DC*  
Same effects like at the producer's DC. Many retailers don't count their incoming own private

label merchandise, to save time and live with the differences on the way to the shelf because manual counting would be too expensive. They do so knowing that they have to live with quite some corresponding problems such inaccuracy creates. Here RFID would be a valuable tool.

- *RFID use for outgoing goods at retailers' DC*  
Same effects like at the producers' DC. As most retailers count the outgoing merchandise immediately as the ingoing merchandise in the individual branch and book it correspondingly in their ERP software the accuracy of the outgoing merchandise is critical. RFID can help to secure this process.
- *RFID use for incoming goods at retailer's branch*  
Theoretically the same effects like at the producer's DC. Most retailers don't count though the incoming merchandise because the manual efforts to do so wouldn't be feasible. The current praxis of booking outgoing stock (DC) as incoming stock (branch) results in inventory deficits though, that create quite a few problems as items seem to be in stock which are in realist yet on the truck on the way. RFID could help to improve inventory accuracy in the branch, could even trigger a *Receiving Advice* message and bring the correlated efforts down to a feasible level.
- *RFID use for back room – front room management with gates*  
Unless a retailer books goods entering and leaving any backroom manually any location determination for individual items requires manual search work which keeps the sales force from servicing the customer. Depending on the individual circumstances within each retailers branch gates between back and front room in combination with RFID item tagging can help to identify this situation significantly. This mechanism of updated inventory is the organizational prerequisite to automate and standardize an IT supported replenishment process which is otherwise practically impossible.
- *RFID use for back room – front room management with hand readers*  
If there are only few or very small back rooms it is possible to make intermediate inventory counts with hand readers that can additionally be used to search requested merchandise and find it much faster. This improves the service level to the consumers. Whether the hand reader approach or gates are first choice is a matter of feasibility and is determined by the local circumstances within the store.
- *Permanent inventory accuracy by using phase array antennas*  
The latest technology approach is the permanent monitoring of the front room inventory by antennas from the ceilings. They send systematically moving antenna beams on the area that is monitored and by knowing what is in the front it is clear what is in the backroom.
- *Smart shelves and mirror*  
tracking and tracing items directly on a smart shelf could improve inventory monitoring and re-filling of sold items. Smart mirror could help in improving the activity of selling clothes by showing in real time the potential matching of the specific garment (held by the customer) with those in the warehouse. The smart mirror could match them depending on color, type of textile,
- *Electronically Article Surveillance (EAS) with RFID*  
Item tagging with RFID that is permanently connected to the garment, so that it cannot be removed easily developed into one of the main business cases for RFID use.

This development resulted in two different technological directions:  
A) *A care label with an integrated RFID inlay*. The RFID chip can be fed with data at the printing process of the care label and doesn't require an extra process and guaranties that the data on the care label and on the chip are identical. It still can be removed relatively easy by potential thieves. Practice shows though that this happens within reasonable degrees

plus that this way all merchandise is EAS protected versus only parts of the merchandise using classical EAS devices. The savings for not using classical EAS devices are significant. Producers have the more benefit out of this the more own retail they have.

*B) Brand labels with woven RFID antennas.* This technology is marketed for higher prices as the care label approach and is designed e.g. for Luxury Brands who want a more elegant look for the RFID technology due to the higher design relevance of their products. Such labels have the benefit of normally many own retail stores with all the above mentioned benefits in their supply chains, counterfeit protection for new and vintage products and they have the benefit that consumers won't destroy the brand label for theft because they would significantly damage the value of the product.

The following pictures show the care label with RFID Gerry Weber is using in their roll out and a brand label with RFID chip and woven antenna by the Swiss company Textrace AG who developed this basic technology and the machinery to produce such RFID brand label.



**Figure 9.5 - Source; Gerry Weber International AG, Halle/Westf. Germany and Textrace AG, Frick in Switzerland.**

The tag suppliers play a crucial role when care labels with RFID are used or hangtags (price tags or logistical hangtags).

Writing the product data on the chip while writing within one process step bar codes and clear text on the carrier medium (textile-care label or paper-hang tags) has the benefit that both data carrier have to have the same information. Checking the functionality of the chip/label combination as a third element of this process slows the process down but is crucial because production problems occur at chip and tag production as well as at any other manufacturing step so it is crucial.

Producing high quality paper hang tags or RFID care label requires specific know how. So does the management of the related production order and creating of EPC codes and other master data, so that many companies using RFID use established tag producers with their widespread print shop facilities within TCF sourcing countries to use such outsourcing chances and save trouble with customs and save transportation costs.

The complexities of managing the print data are often underestimated so the choice of the right partner is a crucial success factor at any RFID pilot project or roll out.

### 9.3 RFID technical and technological functionality issues

One question determines practically every RFID discussion for many years: does RFID technology works in a read rate quality as expected and as necessary for a successful pilot or roll out.

The answer to this question is: *Yes, if.....*

RFID stands for Radio Frequency Identification Device and this means that radio signals are involved. Different to other technologies radio waves are much more influenced by the environment, particularly metal, like e.g. cars or cell phones (for example, in TCF industry, metallic yarns or inks, packaging, furnitures, metal environment in DC's...).

Beside this the so far existing RFID pilots or the few rollouts are so unique when it comes to the main business cases and feasibility drivers behind the RFID decision, that only very few RFID packages exist (Tags, Antennas, Readers, Software – bundled as packed products).

This and the high influence of the RFID radio wave environment result in the fact that RFID projects require a certain degree of know-how, preparation, external expertise input to choose the right partners and the necessity to adapt the chosen RFID system elements to the radio wave environment.

The answer to question “*does RFID work?*” consequently depends on the progress of the individual RFID project plus the fact, in which state of the running project the question is asked.

Solid experiences of RFID rollouts show, that within closed circles after a time of working on the performance improvement the quality of RFID reads is not 100% but substantially better than manual counting processes. The higher the wishes regarding read rates are the more efforts are necessary, particularly in the accompanying processes in the early supply chain steps.

The fact that despite HF, the UHF frequency is not one single frequency but a frequency band (different in the USA, Europe and in Asia) brings sporadically higher complexities for the producers of readers but in practice is not a relevant problem.

### 9.4 RFID migration challenges

#### 9.4.1 Many players relationships issues

Many players relationships RFID applications add some additional issues to the implementation of collaborative RFID applications.

RFID implementation currently happens almost exclusively in scenarios, where one individual company is able to fully determine the feasibility of the RFID implementation decision by itself.

In other words any approach of a neuronal use (multiple supply chain player using one technology –that is 1toN or MtoN relationships) of RFID technology over single company's boarder still remains some challenges.

For example different tag and/or device models –although EPC Gen 2 conformant- could be chosen by different organisations, each of them with different performances in a specific environment, for example, which represent, on the other hand, a degree of freedom to choose the most appropriate solution...

Thus, due to the lack of experience and to the variety of possible choices, it is currently impossible to give a safe judgment regarding read rates in heterogeneous network environments, when e.g. one retailer receives tagged garments from many producers where one can assume that different basic technologies are involved.

As the standards are set though experiences from existing roll outs indicate though that it will take additional fine tuning at the retailers branch but shouldn't be a substantial problem with severe influence on the success of this collaborative RFID use. In other words most likely there will be problems but none, that couldn't be solved.

#### 9.4.2 How to overcome remaining obstacles

There are two positive factors to be considered:

a) Relevant system integrators with focus on the TCF sector present more and more sophisticated TCF RFID products, beginning with inexpensive plug and play starter kits for retailers up to more complex systems. The expectation is that performances will increase and converge to a common acceptable threshold.

This fact together with successful roll out experiences published by early movers creates a positive environment for RFID use.

b) A second positive factor is that GS1's EPC UHF Gen 2 is a global standard and this not only in TCF sector but also in Health Care and very soon in Pharmaceutical Industries.

This is relevant

- A) Because TCF sector and health care e.g. Corporate Fashion have quite some connection so does the fast Moving Consumer Goods Industries (FMCG) and large retail organizations often sell both, TCF and Pharma goods.
- B) It can be expected that product serialization becomes a major topic for pharmaceutical companies very soon, because dramatically increasing cases of counterfeiting of pharma products alarmed law makers both at EU and USA.
- C) This will result in infrastructural developments at global customs organizations that can only be built up on relevant product serialization standards that will be FMCG standards if they are the first ones to be demanded.

#### 9.4.3 How RFID migration challenges

But why doesn't RFID use increase more, if the major air interface standard is globally set, hardware and tag prizes decreased substantially and there is practically nobody in the TCF sector questioning the benefits of using RFID technology.

There are several reasons for this:

- A) Critical Mass. Even where several producers tag already all their products with RFID (it is the case of Germany for example) the current volume of tagged merchandise in the market is too low to reach critical mass, so that it would pay for retailers to replace classical 8,2 MHZ or accustom magnetic EAS gates with RFID gates. This is purely an economical scale problem. As challenging this situation currently (beginning of 2013) is, as much does it pay particularly for ICT suppliers to be prepared for a sudden start as the RFID development in the USA showed, where major retailers jumped on the topic and suddenly there is severe movement in the market and RFID demand to their supplier. This can also happen in Europe as soon as a few major producers change their mind or have the necessary internal resources and suddenly there will be critical mass and immediate changes on the market acceptance of RFID.
- B) Different drivers. Additionally the variance in seeing relevant feasibility drivers corresponds with different RFID technology variations, e.g. favor retailers in Southern Europe a combination of classical EAS tools with RFID while Germany is mainly focused on care label solutions with integrated RFID inlays. This jeopardizes scale effects and is not helpful for

further sinking inlay prizes which are due to the volume effect the main cost drivers behind use of RFID.

- C) Cost-benefits subdivision . On top of all this the importance of the sheer inlay prizes also vary, depending on the business case and particularly on the degree of own retail, a producer has. The less own retail the less the benefits by saving costs for classical EAS devices works.

If one summarizes all these obstacles it explains, why RFID is not spreading faster within TCF sector producers and why currently the Vertical TCF players show increasing interest for RFID use, because they work in closed systems and can determine the environment for all their supply chain steps much better as TCF producer, working rather less than more with vertical partnerships (in foreign countries). And this explains why there is across Europe on one hand so much interest regarding RFID use and on the other hand such a slow migration path.

Nevertheless it is reasonable that RFID will make its way because the benefits are clear and major retailer in the USA and vertical retailers in Europe are driving the topic.

In the perspective of overcoming the first of these obstacles it is important to notice the initiative of the German TCF Associations (Wholesale and Retail) that have agreed on a standardized (brand neutral) hangtag with the name "PINK", that allows retailers to ask their supplier (the producer) to tag all or parts of their volume of products with such separate hang tag.

"PINK" defines the technical specifications in accordance with all current (spring 2013) volume RFID rollouts in the USA and Europe to guarantee on one hand scale effects and, on the other hand, prevent the producer side, tagging small volumes of their deliveries either themselves or by a service providers, from requests for different labels which couldn't be handled.

This hangtag will carry both (GS1 and ISO) RFID symbols and all participating companies are aware that this separate hangtag costs money and will be only a provisory solution.

This best practice will allow to gradually built up N:M' relationships bypassing the problem of critical mass which is the core remaining obstacle.

## **10 e-Invoicing**

The first version of eBIZ RA defined the Invoicing activity and document models with the only objective to enable the customer and the supplier to exchange the invoicing data needed to their internal systems.

In this chapter those models are extended in order to enable the eBIZ RA to substitute the paper based invoicing process. This is in-line with the current European "state of art" on the topic; in particular with:

- the European Commission position, clearly expressed through the Communication "Reaping the benefits of electronic invoicing for Europe" (COM(2010) 712 final);
- the legal framework, represented by the Directive 2010/45/EU;
- the choice made by several European countries (Denmark, Norway, Sweden, Spain, ...), where e-invoicing is already mandatory at least in public procurement transactions.

The business processes defined in the eBIZ RA including an Invoicing activity must adopt the e-invoicing activity and document models defined in this chapter.

## 10.1 Status of art

### 10.1.1 Current activities on e-invoicing in Europe

Over the past few years, the European Commission has performed several actions at European level with the aim to facilitate the emergence of a pan-European e-invoicing environment for enterprises of all sizes and public administrations.

The most relevant of them are:

- in 2007: the establishment of a group of experts with a mandate to prepare a European e-Invoicing Framework; the result of the work made by this "Expert Group on e-invoicing" was its report<sup>7</sup> adopted on November 2009. It defines a list of business requirements which represent necessary conditions for achieving mass adoption of e-invoicing, in particular, the widespread use of e-invoicing by SMEs; furthermore it identifies the core data set and the single semantic data model supporting basic cross-industry e-invoicing business requirements (verified against requirements from many operational businesses, as well as against the UN/CEFACT CII v28);
- in 2007: starting e-PRIOR, a project supported by ISA (previously IDABC) that has developed an open-source e-procurement platform, Open e-PRIOR, supporting not only e-invoicing, but also all the other post-awarding processes;
- in 2008: starting PEPPOL9 (Pan-European Public Procurement Online), a pilot project that has developed a pan-European, standards-based IT infrastructure aligning business processes (e-invoicing as well) for electronic procurement across all governments within Europe. At the end of August 2012 it has been accomplished; the openPEPPOL non-profit international association, operating since September 2012, has been established to ensure the long-term sustainability of the PEPPOL infrastructure networks and user communities. openPEPPOL is still having a high focus on e-invoicing;
- in 2011: the establishment of the "European Multi-Stakeholder Forum"<sup>10</sup> that brings together key actors from the private and public sector of all Member States. It is in charge for monitoring the uptake of e-invoicing in all Member States and helping the Commission in identifying further measures to facilitate the mass adoption of e-invoicing across borders.

Furthermore, in 2010, the European Commission reinforced its position about e-invoicing by adopting the Communication "Reaping the benefits of e-invoicing for Europe" (COM(2010) 712 final, 2 December 2010<sup>11</sup>). The Communication identifies a set of actions to favour the uptake of e-invoicing according to following priorities:

- to ensure legal certainty and a clear technical environment for e-invoices;
- to encourage and promote the development of open and interoperable e-invoicing solutions based on a common standard, paying particular attention to the needs of SMEs.

Moreover it invites the Member States to act aiming to foster e-invoicing at national level.

In parallel, several European and international standardisation organisations have been working on e-invoicing standardisation:

- under **CEN** (European Committee for Standardization) umbrella there are:
  - 2010-2011: Workshop on "e-Invoicing - Phase 3" (eINV 3)<sup>12</sup>;

<sup>7</sup> [http://ec.europa.eu/enterprise/sectors/ict/files/finalreport\\_en.pdf](http://ec.europa.eu/enterprise/sectors/ict/files/finalreport_en.pdf)

<sup>8</sup> <http://www1.unece.org/cefact/platform/display/TBG/P043+-+ODP+7+-+Final+Release>

<sup>9</sup> <http://www.peppol.eu/>

<sup>10</sup> [http://ec.europa.eu/enterprise/sectors/ict/e-invoicing/benefits/invoicing\\_forum\\_en.htm](http://ec.europa.eu/enterprise/sectors/ict/e-invoicing/benefits/invoicing_forum_en.htm)

<sup>11</sup> <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2010:0712:FIN:EN:HTML>

<sup>12</sup> [http://www.cen.eu/CEN/sectors/sectors/iss/activity/Pages/einvoicing\\_2.aspx](http://www.cen.eu/CEN/sectors/sectors/iss/activity/Pages/einvoicing_2.aspx)

- 2010-2012: Workshop “Business Interoperability Interfaces for public procurement in Europe - Phase 2” (BII 2)<sup>13</sup>;
- From 1995 (ongoing): Workshop on "eBusiness Board for European Standardization" (eBES)<sup>14</sup>;
- 2010-2011: MUG Project<sup>15</sup>, carried out as a joint activity between the relevant CEN Workshops (i.e. eBES, eINV 3 and BII2) to design Implementation Guidelines for the "Core Cross Industry Invoice European Message";
- ISO has developed the ISO 20022 Financial Invoice message<sup>16</sup>, registered and published on 1 December 2010 by the ISO 20022 Registration Authority;
- UN/CEFACT (United Nations Centre for Trade Facilitation and Electronic Business) has developed and is maintaining the CII (Cross Industry Invoice) v2<sup>17</sup>;
- **OASIS** (Organisation for the Advancement of Structured Information Standards), through its own UBL TC (Universal Business Language Technical Committee)<sup>18</sup>, has developed and is maintaining the UBL Invoice;
- **GS1** provides two sets of information exchange standards, one based on UN/EDIFACT (EANCOM<sup>19</sup>) and one based on XML (GS1 XML<sup>20</sup>); both include the invoice message.

### **10.1.2 Legal framework**

At European level the legal regime on invoicing is represented by **Council Directive 2010/45/EU**<sup>21</sup> of 13 July 2010 amending **Directive 2006/112/EC**<sup>22</sup> on the common system of value added tax as regards the rules on invoicing.

This Directive, transposed by 1 January 2013, establishes equal treatment between paper and electronic invoices without increasing the administrative burden on paper invoices and aims to foster the uptake of e-invoicing by allowing freedom of choice regarding the invoicing method.

A set of explanatory notes<sup>23</sup>, aiming to ensure a clear understanding of the Directive, is available.

#### **10.1.2.1 Directive 2006/112/EC as amended by 2010/45/EU - core principles**

##### *Definition of eInvoice (shortened from Article 217)*

“Electronic invoice” means an invoice that contains the information required in the Directive, and which has been issued and received in any electronic format.

##### *Issue of invoices (shortened from Articles 219a-225)*

Invoicing shall be subject to the rules applying in the Member State in which the supply of goods or services is deemed to be made.

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<sup>13</sup> <http://spec2.cenbii.eu/>

<sup>14</sup> <http://www.cen.eu/cen/Sectors/Sectors/ISSS/Activity/Pages/WSeBES.aspx>

<sup>15</sup> <http://www.cen.eu/cen/Sectors/Sectors/ISSS/Activity/Pages/MUG.aspx>

<sup>16</sup> [http://www.iso20022.org/about\\_iso20022.page](http://www.iso20022.org/about_iso20022.page)

<sup>17</sup> <http://www1.unece.org/cefact/platform/display/TBG/P043+-+ODP+7+-+Final+Release>

<sup>18</sup> [https://www.oasis-open.org/committees/tc\\_home.php?wg\\_abbrev=ubl](https://www.oasis-open.org/committees/tc_home.php?wg_abbrev=ubl)

<sup>19</sup> <http://www.gs1.org/ecom/about/eancom>

<sup>20</sup> <http://www.gs1.org/ecom/about/xml>

<sup>21</sup> <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2010:189:0001:01:EN:HTML>

<sup>22</sup> <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2006:347:0001:01:EN:HTML>

<sup>23</sup> [http://ec.europa.eu/taxation\\_customs/resources/documents/taxation/vat/traders/invoicing\\_rules/explanatory\\_notes\\_en.pdf](http://ec.europa.eu/taxation_customs/resources/documents/taxation/vat/traders/invoicing_rules/explanatory_notes_en.pdf)

The activities affected by invoicing and the related exceptions are stated in the Directive. The responsibility of the invoice issuing is on the taxable person that shall ensure that an invoice is issued, either by himself or by his customer or, in his name and on his behalf, by a third party.

*Content of invoices (shortened from Article 226)*

The information required in an invoice are:

- 1) The date of issue
- 2) A sequential number, based on one or more series, which uniquely identifies the invoice
- 3) The supplier's VAT identification number
- 4) The customer's VAT identification number (when the customer is liable for payment of VAT)
- 5) The full name and address of the supplier and of the customer
- 6) The quantity and nature of the goods supplied or the extent and nature of the services rendered
- 7) The date on which the supply of goods or services was made or completed or the date on which the payment on account was made, if different from the date of invoice
- 7a) The mention 'Cash accounting', where the VAT becomes chargeable at the time when the payment is received and the right of deduction arises at the time the deductible tax becomes chargeable
- 8) The taxable amount per rate or exemption, the unit price exclusive of VAT and any discounts or rebates if they are not included in the unit price
- 9) The VAT rate applied
- 10) The VAT amount payable, except where a special arrangement is applied under which such a detail is excluded
- 10a) The mention "Self-billing", where the customer receiving a supply issues the invoice instead of the supplier
- 11) In the case of an exemption, reference to the applicable provision of this Directive, or to the corresponding national provision, or any other reference indicating that the supply of goods or services is exempt
- 11a) The mention "Reverse charge", where the customer is liable for the payment of the VAT, In the case of the supply of a new means of transport,
- 12) In the case of the supply of a new means of transport made in accordance with the conditions specified in Article 138(1) and (2)(a), the characteristics as identified in point (b) of Article 2(2) of this Directive
- 13) The mention "Margin scheme — Travel agents", where the margin scheme for travel agents is applied
- 14) The mention "Margin scheme — Second-hand goods", "Margin scheme — Works of art" or "Margin scheme — Collector's items and antiques" respectively, where one of the special arrangements applicable to second-hand goods, works of art, collectors' items and antiques is applied
- 1%) Where the person liable for payment of VAT is a tax representative, its VAT identification number, full name and address

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The Directive indicates particular conditions under which simplified invoices, including only a subset of the information listed before, are allowed.

### Other invoices requirements (shortened from Articles 229-230)

Member States shall not require invoices to be signed.

The amounts which appear on the invoice may be expressed in any currency, provided that the amount of VAT payable is expressed in the national currency of the Member State in which the supply of goods or services takes place

### Sending invoices by electronic means (shortened from Articles 232-237)

The use of an electronic invoice shall be subject to acceptance by the recipient.

The authenticity of the origin, the integrity of the content and the legibility of an invoice, whether on paper or in electronic form, shall be ensured from the point in time of issue until the end of the period for storage of the invoice; in this context:

- “*Authenticity of the origin*” means the assurance of the identity of the supplier or the issuer of the invoice
- “*Integrity of the content*” means that the content required according to this Directive has not been altered.

Each taxable person shall determine the way to ensure the authenticity of the origin, the integrity of the content and the legibility of the invoice.

The Directive gives some examples of way in which this can be achieved but any particular technology or approach is required. Trading parties have freedom of choice the solutions more suitable to meet their specific business needs consistently with the applicable legislative obligations.

### Storage invoices (shortened from *Articles 238-240*)

Every taxable person shall ensure that copies of the invoices issued by himself, or by his customer or, in his name and on his behalf, by a third party, and all the invoices which he has received, are stored.

The taxable person may decide the place and the way of storage of all invoices provided that they can be made available to the competent authorities without undue delay whenever they so request.

## 10.2 The reference framework

Taking into account the outputs of current European initiatives/activities and the legal framework on e-invoicing, this section defines the e-invoicing business activity and document models valid in the scope of eBIZ Reference Architecture.

### 10.2.1 The scope

The e-invoicing activity involves the exchange of an electronic invoice between the supplier and the customer for the supply of goods or services ordered, delivered, received, consumed, etc. It claims the payment<sup>24</sup> for goods or services supplied under conditions agreed between the supplier and the customer.

The execution of an e-invoicing activity and, more strictly, the kind of exchanged information are influenced by conditions and requirements that should be taken into account. They can be distinguished in:

- Legal requirements: set of requirements that the e-invoicing procedure and the e-invoice document must satisfy in order to be comply with legal regime under which the invoice is issued;
- Business requirements: set of requirements that the e-invoicing procedure and the e-invoice document must satisfy in order to support the business model adopted by the business partners;
- Internal requirements: set of requirements that the e-invoicing procedure and the e-invoice document must satisfy in order to support the internal procedures of the business partners.

Respect to each of them the eBIZ RA has adopted the approach described below.

#### Legal requirements

eBIZ RA is under the legal regime stated by the EU VAT Directive 2006/112/EC, as amended by EU directive 2010/45/EU.

eBIZ RA has to support e-invoices for supplies both inside and outside the scope of the Directive 2006/112/EC (non-VAT invoices). So, respect to the Directive, the following approach has been adopted:

- the eBIZ invoice data model includes all legally mandatory information for invoicing in the EU member states;
- the issuer of an invoice is responsible for producing an invoice complying this Directive<sup>25</sup> and the national legislation (of the country of the issuer);
- the authenticity of the origin, the integrity of the content and the legibility of an invoice must be ensured by the issuer (for example by adopting the eBIZ RA transport protocols);
- invoice storage is out of the scope of eBIZ RA;
- invoice signature is out of the scope of eBIZ RA;
- additional legal requirements coming from national legislations are out of the scope of eBIZ RA; nevertheless references to resources to support national requirements are provided when available.

#### Business requirements

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<sup>24</sup> The payment procedure can be carried out also through the credit note document: it is issued by the customer and specifies the credit due to the supplier for the supply of goods or services received or consumed. This scenario is out of the scope of the eBIZ RA.

<sup>25</sup> eBIZ RA provides a validation tool to check if the invoices have the mandatory content but the issuer is responsible for data correctness and inclusion of information required only under specific conditions.

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The business requirements to be satisfied during the e-invoicing activity execution are stated by the combination of the business models and the agreements between business partners under which the activity is run.

The business requirements can apply both at invoice document level and invoicing activity level. They are defined in terms of:

- *Business rule*, applicable on the document;
- *Pre and post condition*, applicable on the activity and on the processes it is part of.

eBIZ RA e-invoicing activity and related document models support the business requirements<sup>26</sup> coming from:

- *business models*:
  - a. *Order to cash*
  - b. *Consignment at store level*
  - c. *Consignment at distribution center level*
  - d. *Commission*
  - e. *Concession*
- *payment method agreements*:
  - a. *at purchase price*
  - b. *at settlement price*
  - c. *at compensation key*.

### Internal requirements

Commonly each business partner has internal procedures to process these invoices and cross-checking activities like reconciliation with orders, deliveries, etc. Such procedures could lead to specific requirements.

eBIZ RA e-invoicing activity and document models support only basic cross-checking between e-invoice and other documents.

#### 10.2.2 The abstract data model for the eInvoice document

The abstract data model for the eBIZ eInvoice document is here defined. It represents the **minimum set** of information that the Invoice documents defined by the eBIZ RA must be able to support.

The following tables define this set of information both at header (Table 10.1) and line (*Table 10.2*) level.

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<sup>26</sup> Look at eBIZ RA downstream and upstream processes description to find all the supported business requirements.

**LEGENDA**

*In the tables below, the following explanation applies:*

- *gray rows indicate a group of information composed of the simple information that follow (white rows)*
- *white rows describe simple information;*

*For example:*

....	....
<b>Order reference</b>	<b>References of the Order associated to this Invoice.</b>
Supplier order number	<b>The Order identifier assigned by the Supplier function.</b>
Customer order number	<b>The Order identifier assigned by the Buyer function.</b>
Order date	<b>The date on which the Order was issued.</b>
...	...

*In this this is group*

*case the of*

*information called "Order reference"; it is composed of the following simple information: "Supplier order number", "Customer order number", "Order date".*

**Table 10.1 - HEADER's element list:**

Name	Description	Note
Invoice general information		
Document date	The date on which the Invoice is issued.	1
Document function	The function performed by the message with regards to the transmission (if it is the original one or a copy).	
Document number	An identifier for the Invoice assigned by issuer.	1
Invoice currency	The currency in which the document is presented.	
Invoice type	The type of the Invoice (such as commercial invoice or proforma invoice).	
Invoice period	The period to which the invoice applies.	
Note	Free-form text (note or similar information) applying to the Invoice.	
Tax point date	The date at which tax becomes applicable.	
Value date	The date when the payment is due.	
Order reference	References of the Order associated to the Invoice.	
Customer order number	The Order identifier assigned by the Customer.	

Name	Description	Note
Customer reference number	A reference applied to the Order by Customer.	
Order date	The date on which the Order was issued.	
Supplier order number	The Order identifier assigned by the Supplier function.	
Despatch advice reference	References of the Despatch advice associated to the Invoice.	
Despatch advice number	The identifier of the Despatch Advice.	
Despatch advice date	The date on which the Despatch advice was issued.	
Delivery note	References of the Delivery note associated to the Invoice.	
Delivery note number	The identifier of the Delivery note.	
Delivery note date	The date on which the Delivery note was issued.	
Contract Reference	References of the Contract associated to the Invoice.	
Contract number	The identifier of the Contract.	

Name	Description	Note
Contract date	The date on which the Contract was issued.	
Additional document Reference	References of a document associated to the Invoice.	
Document number	The document identifier.	
Document date	The date on which the document was issued.	
Description	A description of the document.	
Supplier information	Details of the Supplier.	
Supplier name	The full name of the Supplier.	1
Supplier standard identifier	A standard identifier for the Supplier.	
Supplier VAT number	The identifier assigned for tax purposes to the Supplier by the taxation authority.	1
Supplier address	The full address of the Supplier (street name, city name, post code, country subdivision, country).	
Supplier contact	Contact information for the Supplier (e.g. email, telephone, fax,...).	
Customer information	Details of the Customer.	
Customer name	The full name of the Customer.	1
Customer standard identifier	A standard identifier for the Customer.	
Customer VAT number	The identifier assigned for tax purposes to the Customer by the taxation authority.	1
Customer address	The full address of the Customer (street name, city name, post	

Name	Description	Note
	code, country subdivision, country).	
Customer contact	Contact information for the Customer (e.g. email, telephone, fax,...).	
<b>Payer</b>	<b>Details of the party who pays the invoice.</b>	
Payername	The full name of the Payer.	
Payerstandard identifier	<b>A standard identifier for the Payer.</b>	
<b>Payee</b>	<b>Details of the party who receives the payment.</b>	
Payee name	The name of the Payee.	
Payee standard identifier	<b>A standard identifier for the Payee.</b>	
<b>Tax representative party</b>	<b>Details of the Supplier's Tax representative party .</b>	
Tax representative party name	The name of the Tax representative party.	1
Tax representative party VAT identifier	The identifier assigned for tax purposes to the Tax representative party.	1
Tax representative party address	The full address of the Tax representative party (street name, city name, post code, country subdivision, country).	1
<b>Delivery</b>	<b>Details about the delivery.</b>	
Delivery date	The date on which the goods were delivered.	1
Delivery terms	Specification of the terms of trade (INCOTERMS).	
Delivery location	<b>Information about the place where the goods were delivered by the Supplier or his agent (GLN code, street name, city name, post code, country subdivision, country).</b>	
Consignee reference	<b>A reference (e.g. name, identifier) of the party to</b>	

Name	Description	Note
	which the goods were delivered.	
Consignor reference	A reference (e.g. name or identifier) of the party that send the goods.	
Transport	Details of transport (mode,carrier, transport stages).	
Invoice discount/ charge amount	The allowance and/or charge applied to the Invoice as a whole (this group of information must be provided for each allowance or charge).	
Amount	The allowance or charge amount.	
VAT category	A code that identifies to what tax category the allowance or charge belongs to.	
VAT percentage	The tax percentage that applies to the allowance/charge.	
Description	The reason due to the allowance or charge is. E.g. "Minimum order charge amount " or " Freight costs", ...	
Payment	Information about payments terms and means.	
Payment terms	The payment terms that apply to the invoice due amount.	
Payment instructions	Payment instructions.	
Payment means	A code or description to identify the payment method.	
Financial account	Bank details relevant for the payment (bank coordinates, SWIFT code, ...).	
Document totals	The calculated totals of the document.	
Total line amounts	Sum of line amounts in the document.	
Total of allowances	Sum of all allowances on header level in the document. Allowances on line level are included in the line amount and summed up into the "Total line amounts" .	
Total charges	Sum of all charge on header level in the document. Charges on line level are included in the line amount and summed up into the "Total line amounts".	

Name	Description	Note
Document total without taxes	The "Total line amounts" plus " Total of allowances" on document level plus "Total charges" on document level, but exclusive of taxes.	
Taxes total amount	The total taxes amount (the sum of all tax subcategory amounts).	1
Rounding of document total	Any rounding (positive or negative) of the "Document total including taxes" added to the invoice to produce a rounded invoice total.	
Document total including taxes	The total value including taxes.	
Paid amounts	Any amounts that have been paid a-priory.	
Amount for payment	The amount that is expected to be paid based on the document. This amount is the "Document total including taxes" less the "paid amounts" that have been paid a-priori.	
Tax breakdown	Information about tax subtotals (an invoice should contain a "Tax breakdown" group for each tax category).	1
Taxable amount	The net amount to which the tax percent (rate) is applied to calculate the tax amount.	
Tax amount	The tax amount.	
Tax category	A code or text that uniquely identifies the tax category.	
Tax percent	The tax rate that is to be applied to the taxable amount in order to derive the tax amount.	
Tax exemption reason	A textual description of the reason why the items belonging to the amount are exempted for tax.	

NOTE: Mandatory due to Directive 2006/112/EC, as amended by EU directive 2010/45/EU.

**Table 10.2 - LINE's element list**

Name	Description	Note
Line general information		
Line number	An unique identifier for the invoice line.	
Line text note	Notes or any other similar information that is not contained	

Name	Description	Note
	explicitly in another structure.	
Invoiced quantity	The quantity of articles on the Invoice Line (the measurement unit should be specified).	1
Line amount	The total amount for the Invoice Line, including allowances, charges but net of taxes.	
Item price	The price of the article specified.	
Net weight	The net weight of the single unit of article, declared for transport or customs.	
Order line reference	A reference to the relevant order line in the order that is identified on the document level in the invoice.	
Customers accounting string	A reference to the Customer's accounting code applicable to the specific line, in order to facilitate automation in booking into accounts following an order to invoice transformation.	
Item information	Information about the item the line is related to.	
Item name	A short name indicating the nature of the goods supplied.	1
Item supplier's identifier	The supplier's identifier for the item.	
Item standard identifier	A item identifier based on a registered schema.	
Item commodity classification	A classification code for classifying the item by its type or nature.	
Item attributes	Attributes describing the technical item features( like colour, size, meter numbers).	
Item country of origin	The country of origin of the article.	
Item manufacturer identification	The identifier of the item Manufacturer.	
Invoice discount/charge amount	The allowance or charge applied to the Invoice line (this group of information must be provided for each allowance or charge).	

Name	Description	Not e
Amount	The allowance or charge amount.	
Description	The reason due to the allowance or charge is. E.g. "Minimum order charge amount " or " Freight costs", ...	
Tax totals	Information about tax applied to invoice line.	
Tax amount	The total tax amount.	
Tax category	A code or text that uniquely identifies the tax category.	
Tax percent	The tax rate that is to be applied to the taxable amount in order to derive the tax amount.	

NOTE: Mandatory due to Directive 2006/112/EC, as amended by EU directive 2010/45/EU.

## 11 Product Numbering/Identification and GS1 data models compliancy

### 11.1 Product Numbering/Identification

The demand for a common or standard method of identifying products has been driven by retailers. Without such a standard, their systems would need to understand the different identification and numbering practices of different manufacturers and to make provision for number duplication.

Consequently, the Global Trade Item Number (GTIN) was developed by the standards organisation GS1, and has become a de facto identification standard for many types of consumer product. As company identification forms part of each GTIN, all products have a globally unique number.

In response to the demands of large retailer customers, GTIN is being more widely adopted in both the Textile/Clothing (T/C) and Footwear sectors. It is used to identify products in eBusiness data exchange and at the point of sale through bar coding using EAN/UPC symbology.

This standard has therefore been specified in the eBIZ Technical Architecture for use in eBusiness in the "downstream" supply chain. Of course this does NOT mean that organisations have to change their internal numbering systems to the GTIN.

However, companies involved in downstream scenarios are expected to make the necessary business and system changes to adopt GTIN for eBusiness involving external partners.

In most cases, companies will continue to use their existing numbering systems internally in the business and to translate/map to GTIN numbering for external communication. This translation can either take place in their internal systems or in a third party eBusiness system.

Objections to using GTIN are sometimes made on the grounds of cost and/or the lack of sufficient product numbers. Costs are incurred by an annual registration fee with the local GS1 body which varies from country to country and is usually based on the company turnover. The eBIZ position is that the benefits of eBusiness far outweigh the relatively small cost of registration.

Although the breakdown of the GTIN can vary from country to country, most GS1 Member Organisations offer a maximum capacity for article numbers of 100,000 per GS1 company prefix. Often medium sized and large

enterprises in the T/C and Footwear sectors have a number of colour/size variants for each model and have a need for more than 100,000 numbers.

The only solution to this constraint is to have multiple registrations each offering a set of 100,000 numbers. This has already been done by a number of large companies in both sectors.

## **11.2 Compliance with GS1 data models**

The XML standard specifications used in eBIZ TCF downstream to model data to be exchanged are different from the GS1 definitions but from the point of view of semantic contents we can define them as equivalent (more details in paragraph 3.3).

## **11.3 Location Identification/Numbering**

A standard method of uniquely identifying business locations is desirable in eBusiness so that systems do not need to understand the different identification and numbering practices of different organisations.

The Global Location Number (GLN) was developed for this purpose by the standards organisation GS1 and is closely aligned to the GTIN standard used for product identification and numbering. The company prefix used in GTIN and GLN is identical and is covered by a single registration cost. Although the breakdown of these codes can vary from country to country, the format in most GS1 Member Organisations offers a maximum capacity of 100,000 location numbers.

This standard has therefore been specified in the eBIZ Technical Architecture for use in eBusiness in the “downstream” supply chain. It is particularly relevant for retail companies who have many shops and, because it enables the identification of individual locations, is more suitable than company identification methods that have been proposed such as company registration numbers or tax codes.

It does NOT mean that organisations have to change their internal method of identifying their locations to the GLN format. However, companies involved in downstream scenarios are expected to make the necessary business and system changes to adopt GLN for eBusiness with external partners.

In most cases, companies will continue to use their existing identification internally in the business and to translate/map to GLN numbering for external communication. This translation can either take place in their internal systems or in a third party eBusiness system.

Objections to using GTIN are sometimes made on the grounds of cost, particularly by small retailers. Costs are incurred by an annual registration fee with the local GS1 body.

Although eBIZ believes that, even for small retailers, the benefits of eBusiness can outweigh the cost of registration it also believes that opportunities exist to share the cost over a number of businesses. For example, it could be possible for a Trade Association, Buying Group or similar organisation to register a single company identification with the local GS1 body and then to allocate individual location numbers to its members.

## **12 How to use this RA**

### **12.1 Six step towards eBIZ RA**

**How decision makers and analysts can use the report**

Step 1. Domain and Business Processes

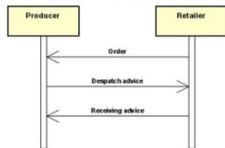
Find the relevant section for the business activity – Downstream, Upstream in Textile/Clothing or Upstream in Footwear and then the business process(es) or interest

4.1.1 Process "cyclic replenishment program - CRP"

<b>Process Name</b>	cyclic replenishment program - CRP
<b>Actors</b>	Producer, Retailer
<b>Description</b>	From the producers portfolio of NOS or seasonal NOS articles the retailer picks his choice of products for the cyclic (weekly) replenishment. The logistic scenario can be combined with the charge-on-delivery as well as with a consignment/concession model.
<b>Activities</b>	<ul style="list-style-type: none"> <li>• Transfer of base article catalogue (<i>mandatory</i>)</li> <li>• Initial stocking of the area by retailer</li> <li>• Periodic (weekly) replenishment (<i>mandatory</i>)</li> <li>• Report of sales and inventory movements (<i>mandatory</i>)</li> <li>• Invoicing</li> <li>• Synchronizing of stock information</li> <li>• Changes to the article catalogue (<i>mandatory</i>)</li> </ul>
<b>Reference to the related ebBP</b>	<a href="http://www.moda-ml.net/ebiz-retail/repository/ebbp/v2008-1/en/ebBP_cyclicreplenishmentprogramcrp-1_2008-1.xml">http://www.moda-ml.net/ebiz-retail/repository/ebbp/v2008-1/en/ebBP_cyclicreplenishmentprogramcrp-1_2008-1.xml</a>

Business process description

4.1.1.2 Activity "Initial stocking of the area by retailer"



<b>Activity Name</b>	Report of sales data
<b>Description</b>	At the end of each sales day a sales report is sent for all sales locations of the retailer
<b>Transactions</b>	<ul style="list-style-type: none"> <li>• Sales report</li> </ul>
<b>Pre-conditions</b>	All sales data of all sales locations of the retailer are collected in the HQ
<b>Post-conditions</b>	The sales information is available at the producer

Description of activities with conditions

Step 2. Verify suitability

For each business process, confirm that the reference process implementation matches the business requirements by verifying them against the activities described.

Step 3. Analyse transactions.

Determine the document types required for the sequence of transactions defined for each of the business processes

4.1.2.4.1 Transactions inside the activity "Delivery"

<b>Action 1 (Request from Producer to Retailer)</b>	
<b>Action Name</b>	Article catalogue
<b>Action Description</b>	The article information for the additional products is transferred to the retailer
<b>Action 2 (Request from Producer to Retailer)</b>	
<b>Action Name</b>	Despatch advice
<b>Action Description</b>	The delivery is announced by the despatch advice with date, EAN and quantity
<b>Action 3 (Response from Retailer to Producer)</b>	
<b>Action Name</b>	Receiving advice
<b>Action Description</b>	After goods receive the retailer reports back the products which arrived with the delivery announced in the despatch advice

Sequence of transactions implementing the activities

Step 4. Analyse documents

4.2.6 Document: Inventory movement report

<b>Document Name</b>	Inventory movement report
<b>Document description</b>	Report of movement of goods between the locations of a retailer
<b>Generalities or notes about the usage</b>	This document is used to provide information about movement of a certain quantity of items between the locations of a retailer. The ship-to and the ship-from branch are mentioned. The information is normally provided when the items are shipped.

Analyse the content of document types to be implemented (order, despatch advice, catalogue).

Document descriptions and how to use them

This should be defined in a draft project proposal to be agreed with partners

**How analysts and designers can use the report and appendices**



**A.1. Document Article Catalogue**

Source: UBL and TexWeave/WWSProfil

**Scope**

The article catalogue message has the purpose to provide the necessary information for an automated creation of the article data set on the retailer side. The mandatory fields are absolutely necessary for this purpose. All other information should be provided if it is available without big effort.

**Data model details**

List of aggregated elements (alphabetically ordered):

Name (not XML tag)	Occurrence	Description
HEADER	1-1	Each information contained in this part is referred to the whole document.
LINE-POSITION	1-N	Article catalogue line.

List of simple elements (alphabetically ordered) of HEADER:

Name (not XML tag)	Occurrence	Description	Type details (Type of coding, elements)
Catalogue reference	0-1	An associative reference to a Catalogue that can be changed or replaced by this (only used in case of change/replacement).	
Document date	1-1	The date on which the Catalogue was issued.	YYYY-MM-DD
Document number	1-1	An Identifier for the Catalogue assigned by the sender.	
GLN buyer	0-1	GLN code of the place where the Buyer's physical location is (the legal Buyer of goods, normally the headquarter of the retailer). This field should be used only if the Buyer and the catalogue recipient are not the same party.	
GLN catalogue recipient	1-1	GLN code of the place where the catalogue recipient's physical location is.	
GLN catalogue sender	1-1	GLN code of the place where the catalogue sender's physical location is.	

**Step 5. Data models**

The data models in the appendices enable analysts and designers to check the details of the information be exchanged and determine if it is available and whether it is acceptable to share with partners.



**References on the WEB**

<b>Document Name</b>	Article catalogue
<b>Version</b>	2008-1
<b>XML Implementation</b>	Technical guide: <a href="http://docs.oasis-open.org/ubl/2.0/UBL-2.0.pdf">http://docs.oasis-open.org/ubl/2.0/UBL-2.0.pdf</a> XML Schema (UBL 2.0): <a href="http://docs.oasis-open.org/ubl/2.0/UBL-2.0.xsd">http://docs.oasis-open.org/ubl/2.0/UBL-2.0.xsd</a> Textile Clothing Footwear use profile: <a href="http://www.moda-mil.net/ebiz-retail/ebiz/ubl/TCF-UseProfile/2008-1/en/UBL-TCF-useprofile-articles-catalogue.pdf">http://www.moda-mil.net/ebiz-retail/ebiz/ubl/TCF-UseProfile/2008-1/en/UBL-TCF-useprofile-articles-catalogue.pdf</a>
<b>EDI Implementation</b>	<a href="http://www.pranis.com/en/services/wvsprofil/index.htm">http://www.pranis.com/en/services/wvsprofil/index.htm</a>
<b>Sample Instances</b>	of <a href="http://www.moda-mil.net/ebiz-retail/trsposition/instances/2008-1/en/DIS10-01/Doc2-Article-Catalogue.xml">http://www.moda-mil.net/ebiz-retail/trsposition/instances/2008-1/en/DIS10-01/Doc2-Article-Catalogue.xml</a>

*Syntax independent data model of a document*

The online resources for the technical implementation e.g. samples, XML Schema, can be found here

**Step 6. Communication and agreement layer.**

Data transmission should be considered after the business processes have been agreed. The specifications contain recommendations and criteria to be used when selecting the IT solution.

It is possible for companies to configure themselves by following the formal representation of the processes when adopting ebXML protocols.

**12.2 Testing and validation**

In order to verify that an implementation is conformant to the eBIZ RA, the developers should perform a testing activity.

eBIZ has developed a set of artifacts for testing that can be used to validate the several layers of the RA. The artifacts and how to use them are described in this chapter.

**12.2.1 Introduction**

In the context of software systems, "Testing" is the process, based on several different diagnostic actions (*validation steps*), aiming to check that a software component (e.g. a program, system, application or product):

- meets the requirements stated in the specification it implements;
- works as expected;
- can be implemented with the same characteristics.

In other words, the succeeding of a testing procedure means that a software component is ready to be used.

Depending on the approach, testing methods can be classified as:

- *white-box*:
  - checks internal structures of the software component, at source code level;
  - aims to improve the software performance;
- *black-box*:
  - analysis the functionality of the software component, that means to check if the software does what is expected as stated in the specification (the software internal structures is not taken into account);
  - aims to ensure quality and goodness of the results.

In order to support the users in adopting the eBIZ RA, a set of testing artifacts have been developed. They are intended to:

- perform testing based on a black-box approach (the objectives of the white-box approach are out of the scope);
- allow the execution of testing actions at several conformance levels (see more in the next chapter).

eBIZ strictly recommends the testing activities to its users.

### 12.2.2 eBIZ validation architecture

A testing procedure can be divided in two main steps:

- *conformance testing*: checks that there are not violations to the constraints and requirements stated by the specification the software implements;
- *interoperability testing*: checks that systems belong to different partners are able to effectively communicate.

The testing artifacts developed by eBIZ have been designed for implementing **conformance testing** procedure based on a level-based approach. Each level implies the execution of a validation activity aiming to check a given specification part or the RA.

The supported validation levels are:

1. *conformance to standard specifications*:
  - checks that there are not violations to the constraints and requirements stated by the standard specification the eBIZ RA is based on;
  - it applies to eBIZ business documents;
2. *conformance to the use profiles*:
  - checks that there are not violations to the constraints and requirements stated by the business documents use profiles defined in the eBIZ RA;
  - he eBIZ RA is based on;

- it applies to eBIZ business documents;
3. *conformance to eBIZ business processes:*
- checks that there are not violations to the constraints and requirements stated by the choreography (at transaction, activity and process level) defined in the eBIZ RA;
  - it applies to eBIZ business single transaction, multiple transactions and full processes execution.

Artifacts for interoperability testing are not provided.

**12.2.3 eBIZ validation artifacts**

In order to perform the validation activities described before, eBIZ provides a set of artifacts based on three XML technologies. Referring to the validation levels defined before, they are:

- *XML Schema*, to validate the business document conformance to standard specifications;
- *Schematron*, to validate the business document conformance to eBIZ use profiles;
- *ebBP* and *Schematron*, to validate the process execution conformance to eBIZ business processes.

The following table shows the artifact available for each area of eBIZ RA:

	<b>T/C upstream</b>	<b>F upstream</b>	<b>TCF downstream</b>
<b>Conformance to eBIZ documents</b>	XML Schema Moda-ML	XML Schema Shoenet	XML Schema UBL
<b>Conformance to eBIZ use profiles</b>	----	----	Schematron
<b>conformance to eBIZ business processes</b>	Schematron ebBP	ebBP	Schematron ebBP

eBIZ recommends the execution of each validation level.

In the following table is described the procedure that should be followed for testing the conformance to a specific eBIZ process of a software system.

<b>How developers can use the eBIZ validation artifacts for testing the conformance of their implementation</b>				
<i>Step</i>	<i>Validation level</i>	<i>Description</i>	<i>Object to be validated</i>	<i>Artefacts</i>
1	eBIZ documents conformance	Validate the capability of the implementation to produce XML documents having syntax and structure conformant to the standard specification (UBL, Moda-ML or Shoenet)	Single XML document	XML Schemas
2	eBIZ use profile conformance	Validate the capability of the implementation to produce XML documents having the requirements stated in the eBIZ use profiles	Single XML document	Schematrons
3	eBIZ process conformance	Validate the capability of the implementation to execute a business process as stated in the RA	Two or more XML documents being in the same process	Schematron ebBP

#### 12.2.4 eBIZ validation tool

eBIZ has developed a validation tool to validate the conformance of the eBIZ business documents and transactions.

The tool is based on the XML Schemas and Schematron artifacts described before:

- Upstream (textile clothing footwear) data models: the conformance test is based on reference XML Schema (Moda-ML and Shoenet)
- Downstream data models: the conformance test is based on two stages of validation:
  - validation against generic UBL 2.0 specifications (XSDs)
  - validation against Schematron implementing the use profile of eBIZ
- Upstream and Downstream textile clothing processes: the conformance test is based on Schematron.

### 13 Conclusions and Recommendations

Some conclusion can be outlined as a first outcome of the activities of definition of a European architecture for eBusiness Harmonisation in the Footwear, Textile Clothing sector.

Firstly, we can observe that, despite its history and the absence of a choreography managed by a core group of market leaders, there is an architecture in place, it is made of many contributions but it appears stable and complete enough to be considered a sectorial reference architecture.

Secondly, its weakness is in the absence of a critical mass of adopters. The eBIZ-TCF pilots were a first group of early adopters and the CEN WS eBIZ witnesses the involvement of the standardisation bodies; but still there is necessity that a work is performed in order to make aware policy makers and industrial managers of its existence and its potential benefits if promoted with a systematic approach.

Thirdly there are open aspects of implementation:

- Incremental developments are needed, as described in the paragraphs related to the 'Missing elements' along this report.

- Further innovative scenarios, derived by the introduction of the outcomes of the research activities, should be analysed and added to the already in place scenarios (for example clothing customised products, open innovation methodologies, virtual prototyping, functional textiles, could be covered).

## **14 Glossary**

### **ASP**

Application service provisioning.

Business applications are not installed locally but on a central server, managed by an ASP Provider, and made available to the user either generally or on-demand based.

### **CRP**

Cyclic replenishment program

Business model in which the retailer reorders certain products based on a predefined schedule. This needs an availability scheme based on NOS articles.

### **EPC**

Electronic Product Code, it is designed as a universal identifier that provides a unique identity for every physical object anywhere in the world, for all time. Its structure is defined in the EPCglobal Tag Data Standard, which is freely available for download from the website of EPCglobal, Inc (see <http://www.gs1.org/gsm/kc/epcglobal/tds>)

### **Fast Moving Fashion Business**

All business models in which the decisions about the products are made on short term basis. See CRP and VMI.

### **GLN**

Global location number. Worldwide unique identification of companies or locations inside a company. GS1 standard. (see <http://www.gs1.org/barcodes/technical/idkeys/gln>)

### **GTIN**

Global trade item number. Worldwide unique identification of products (EAN and UPC are parts of GTIN). GS1 standard. (see <http://www.gs1.org/barcodes/technical/idkeys/gtin>)

### **HUB**

Service provider for business or communication services.

While inside the local community of a HUB special rules may apply, it takes care of the compliance towards the outside world.

**NOS**

Never Out of Stock articles (articles that are produced on a basis that makes available through different commercial seasons).

**Retailer Management System (RMS)**

A system addressing the management of the information of a retail organisation (it is the equivalent of ERP for manufacturers), from order management to the monitoring of the stocks.

**SSCC**

Serial Shipping Container Code, it is the GS1 Identification Key for an item of any composition established for transport and/or storage which needs to be managed through the supply chain. The SSCC is assigned for the life time of the transport item and is a mandatory element on the GS1 Logistic Label using Application Identifier (00). (from <http://www.gs1.org/barcodes/technical/idkeys/sscc>)

**Use profile**

Integration to a specification that guides the user to implement the specification within a specific domain (a use domain); generally speaking the Use Profile should propose a 'restriction' to the original specifications and assure the back compatibility with it (an instance following the use profile is a valid implementation of the specifications; not vice versa).

**VMI**

Vendor managed inventory. Business model in which the producer stocks the retailer based on own decisions inside the limits of a general agreement. Often this is combined with consignment or concession.

## 15 References

[1] "D2.1 Analysis report on eBusiness adoption in Textile/Clothing and Footwear sectors", eBIZ-TCF project, Bruxelles, June 2008 and

"Gap Analysis Report", CEN WS eBIZ, Bruxelles, September 2012

[2] "TexSpin, Guidelines for XML/EDI messages in the Textile/clothing sector", CWA 14948:2004, CEN/ISSS, March 2004, Bruxelles

[3] "TexWeave: Scenarios and XML templates for B2B in the textile clothing manufacturing and retail", CWA (CEN Workshop Agreement) 15557:2006, CEN/ISSS, 2006, Bruxelles; <http://www.texweave.org>

[4] "The Application of EANCOM for the Trade of Shoe Products", Published by EAN International with the co-operation of the European Confederation of the Footwear Industry (CEC) and the European Confederation of the Shoe Retailers Association (CEDDEC) November 1998

[5] EFNET-2, FINEC, "Electronic Commerce: A case study of the footwear industry in Europe" CWA 14746:200E CEN/ISSS, June 2003, Bruxelles

[6] EFNET-3, FINEC, "Proposal for an XML based format for storage and exchange of design data in the footwear industry" CWA 15043:2004(E) CEN/ISSS, July 2004, Bruxelles

[7] SHOENET project, <http://www.shoenet.info>

[8] CECMADESHOE project, <http://www.cec-made-shoe.com>, <http://scn.inescporto.pt/>

[9] MODA-ML initiative, <http://www.moda-ml.org>

[10] "ebXML Business Process Specification Schema Technical Specification v2.0.1", July 2005; see also <http://www.ebXML.org/>

[11] Bosak J., McGrath T., Holman G.K., "Universal Business Language v2.0, Standard", OASIS Open, 12 December 2006; <http://docs.oasis-open.org/ubl/os-UBL-2.0/>

[12] "ebXML. Collaboration-Protocol Profile and Agreement Specification Version 2.1", July 2005

[13] CEN workgroup WG10 TC248, draft specifications (pr EN13402-4) for the "Size designation of clothes - Coding system"; 2007 (see also <http://www.moda-ml.org/moda-ml/cms/pg.asp?lingua=en&p=131> )

[14] Chituc, Claudia-Melania; Toscano, César; Azevedo, Américo, "Interoperability in Collaborative Networks: Independent and industry-specific initiatives "The case of the footwear industry", Computers in Industry, special issue on Enterprise Integration and Interoperability In Manufacturing Systems, vol. 59, no. 7, pp. 741-757. 2008

[15] Chituc, Claudia-Melania; Azevedo, Américo; Toscano, César (2008), "An Analytical Approach for Comparing Business Frameworks". In Innovation in Manufacturing Networks, Eighth IFIP International Conference on Information Technology for Balanced Automation Systems, BASYS 2008, Porto, Portugal, June 23-25, 2008, (Ed. Azevedo, Américo), IFIP International Federation for Information Processing, Springer, vol. 266, pp. 137-144.

[16] W3C, 1997, "Date and Time Formats", <http://www.w3.org/TR/NOTE-datetime>

[17] GS1 AS4 white paper, Issue 1, Approved, July 2011,

[http://www.gs1.org/docs/ecom/AS4\\_-\\_A\\_new\\_tools\\_for\\_the\\_B2B\\_toolbox.pdf](http://www.gs1.org/docs/ecom/AS4_-_A_new_tools_for_the_B2B_toolbox.pdf)

[18] AS4 Profile of ebMS 3.0 Version 1.0, OASIS Standard, 23 January 2013

<http://docs.oasis-open.org/ebxml-msg/ebms/v3.0/profiles/AS4-profile/v1.0/os/AS4-profile-v1.0-os.pdf>

[19] ebMS 3.0 Core, OASIS ebXML Messaging Services Version 3.0: Part 1, Core Features, OASIS Standard, 1 October 2007,

[http://docs.oasis-open.org/ebxml-msg/ebms/v3.0/core/ebms\\_core-3.0-spec.pdf](http://docs.oasis-open.org/ebxml-msg/ebms/v3.0/core/ebms_core-3.0-spec.pdf)

[20] ebMS 3.0 Part 2, OASIS ebMS Version 3.0: Part 2, Advanced Features, OASIS Committee Specification 01, 19 May 2011, <http://docs.oasis-open.org/ebxml-msg/ebms/v3.0/part2/201004/ebms-v3-part2.pdf>

[21] "Connecting Fashion Business – Concepts of Floor Management", GS1 Germany; the complete document can be requested in German and in English at Markus Müller, TCF industry manager at GS1 Germany ([mueller@gs1-germany.de](mailto:mueller@gs1-germany.de)).



Towards one eBusiness Language for fashion

## **APPENDIX A**

# **Reference Architecture 2.0 for eBusiness harmonisation in Textile/Clothing and Footwear sectors**

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## **APPENDIX A: Downstream processes**

### **Scope**

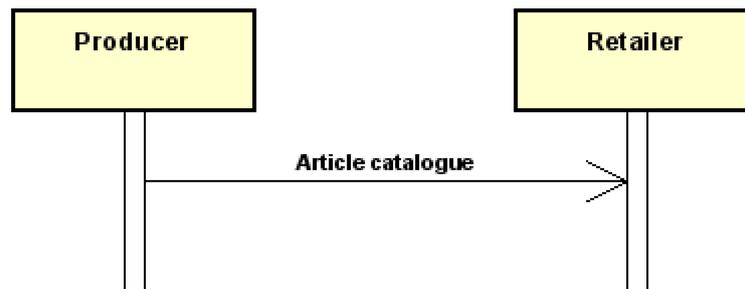
The goal behind the definitions is an easy implementation of the business processes and a complete understanding of the activities behind the process descriptions.

The Actors or Company Functions participating in the different processes and processes activities are highlighted in each of the descriptions, and an activity diagram is described for a better comprehension.

### 1.1.1 Process "cyclic replenishment program - CRP"

<b>Process Name</b>	cyclic replenishment program - CRP
<b>Actors</b>	Producer function, Retailer function
<b>Description</b>	From the producer functions portfolio of NOS or seasonal NOS articles the retailer function picks his choice of products for the cyclic (weekly) replenishment. The logistic scenario can be combined with the charge-on-delivery as well as with a consignment/concession model
<b>Activities</b>	<ul style="list-style-type: none"> <li>• Transfer of base article catalogue (<i>mandatory</i><sup>1</sup>)</li> <li>• Initial stocking of the area by retailer function</li> <li>• Periodic (weekly) replenishment (<i>mandatory</i>)</li> <li>• Report of sales and inventory movements (<i>mandatory</i>)</li> <li>• Invoicing</li> <li>• Synchronizing of stock information</li> <li>• Changes to the article catalogue (<i>mandatory</i>)</li> </ul>
<b>Reference to the related ebBP</b>	<a href="http://www.moda-ml.net/ebiz-retail/repository/ebbp/v2013-1/en/ebBP_cyclicreplenishmentprogramcrp-1_2013-1.xml">http://www.moda-ml.net/ebiz-retail/repository/ebbp/v2013-1/en/ebBP_cyclicreplenishmentprogramcrp-1_2013-1.xml</a>

#### 1.1.1.1 Activity "Transfer of base article catalogue"



<b>Activity Name</b>	Transfer of base article catalogue (mandatory)
<b>Description</b>	The producer function publishes the catalogue of his NOS and seasonal NOS articles to the retailer function
<b>Transactions</b>	<ul style="list-style-type: none"> <li>• Article catalogue</li> </ul>
<b>Pre-conditions</b>	The producer function has defined his NOS and seasonal NOS articles (articles which can be delivered inside 48 hours). The collection of these articles will be under maintenance in the future
<b>Post-conditions</b>	The retailer function has the base for his choice of products for cyclic (weekly) replenishment

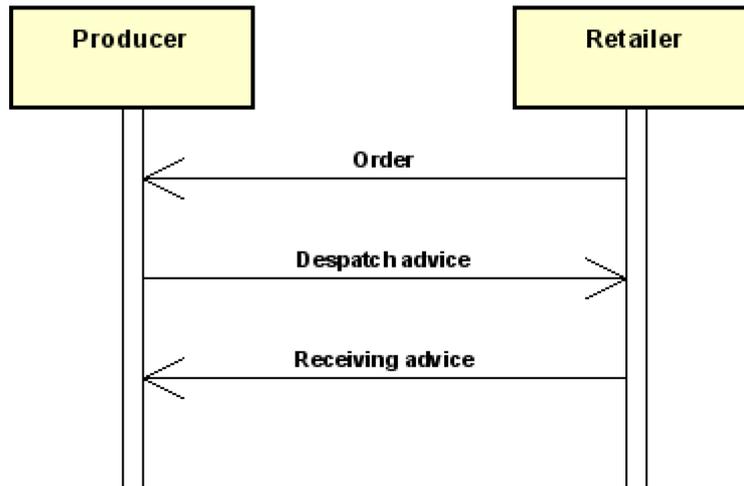
#### Transactions inside the activity "Transfer of base article catalogue"

##### Action 1 (Request from Producer function to Retailer function)

<b>Action Name</b>	Article catalogue
<b>Action Description</b>	The article catalogue containing the information about the NOS and seasonal NOS articles of the producer function is sent to the retailer function.

<sup>1</sup> "Mandatory" activities represent the minimal implementation of this scenario

### 1.1.1.2 Activity "Initial stocking of the area by retailer function"

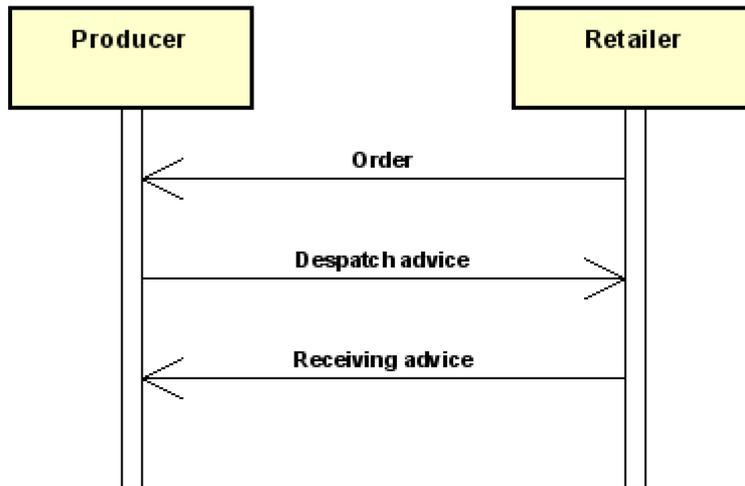


<b>Activity Name</b>	Initial stocking of the area by retailer function (mandatory)
<b>Description</b>	At the beginning of the business cooperation or maybe of a season, if seasonal NOS products are the focus, the retailer function orders his base stock and the products are delivered
<b>Transactions</b>	<ul style="list-style-type: none"> <li>• Order</li> <li>• Despatch advice</li> <li>• Receiving advice</li> </ul>
<b>Pre-conditions</b>	The retailer function made his choice from the product catalogue and has decided on the initial quantities and replenishment scheme
<b>Post-conditions</b>	The area is stocked with the initial quantities for all articles

#### **Transactions inside the activity "Initial stocking of the area by retailer function"**

<b>Action 1 (Request from Retailer function to Producer function)</b>	
<b>Action Name</b>	Order
<b>Action Description</b>	The retailer function sends an order from his system containing the initial demand.
<b>Action 2 (Request from Producer function to Retailer function)</b>	
<b>Action Name</b>	Despatch advice
<b>Action Description</b>	The delivery is announced by the despatch advice with date, EAN and quantity
<b>Action 3 (Response from Retailer function to Producer function)</b>	
<b>Action Name</b>	Receiving advice
<b>Action Description</b>	After goods receive the retailer function reports back the products which arrived with the delivery announced in the despatch advice.

### 1.1.1.3 Activity "Periodic (weekly) replenishment"



<b>Activity Name</b>	Periodic (weekly) replenishment (mandatory)
<b>Description</b>	Each period (every week) the system of the retailer function calculates the quantities needed for the replenishment of the area. From the result an order is sent and the producer function reacts with a direct delivery within 48 hours
<b>Transactions</b>	<ul style="list-style-type: none"> <li>• Order</li> <li>• Despatch advice</li> <li>• Receiving advice</li> </ul>
<b>Pre-conditions</b>	The retailer function has calculated the demand for the next period.
<b>Post-conditions</b>	The area is restocked.

#### Transactions inside the activity "Periodic (weekly) replenishment"

##### Action 1 (Request from Retailer function to Producer function)

<b>Action Name</b>	Order
<b>Action Description</b>	The retailer function sends an order from his system containing the demand for the next period.

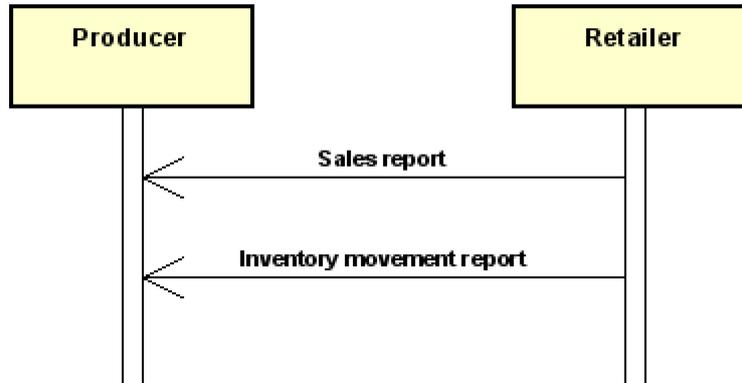
##### Action 2 (Request from Producer function to Retailer function)

<b>Action Name</b>	Despatch advice
<b>Action Description</b>	The delivery is announced by the despatch advice with date, EAN and quantity.

##### Action 3 (Response from Retailer function to Producer function)

<b>Action Name</b>	Receiving advice
<b>Action Description</b>	After goods receive the retailer function reports back the products which arrived with the delivery announced in the despatch advice.

#### 1.1.1.4 Activity "Report of sales and inventory movements"



<b>Activity Name</b>	Report of sales and inventory movements (mandatory)
<b>Description</b>	At the end of each sales day a sales report is sent for all sales locations of the retailer function.
<b>Transactions</b>	<ul style="list-style-type: none"> <li>• Sales report</li> <li>• Inventory movement report</li> </ul>
<b>Pre-conditions</b>	All sales data and inventory movements of all sales and maybe logistic locations of the retailer function are collected in the HQ.
<b>Post-conditions</b>	The sales and inventory movement information is available at the producer function.

#### Transactions inside the activity "Report of sales and inventory movements"

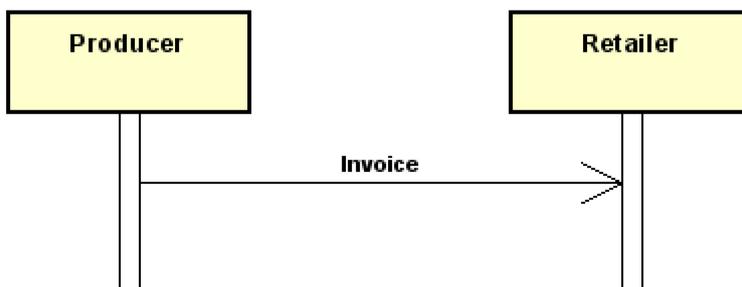
##### Action 1 (Request from Retailer function to Producer function)

<b>Action Name</b>	Sales report
<b>Action Description</b>	At the end of each sales day a sales report is sent for all sales locations of the retailer function

##### Action 2 (Request from Retailer function to Producer function)

<b>Action Name</b>	Inventory movement report
<b>Action Description</b>	At the end of each sales day a inventory movement report is sent for all locations of the retailer function at which such an event occurred

#### 1.1.1.5 Activity "Invoicing"



<b>Activity Name</b>	Invoicing
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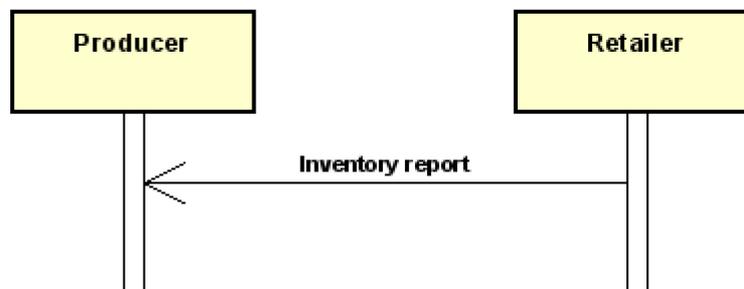
<b>Description</b>	An invoice is sent either on delivery or sales base.
<b>Transactions</b>	<ul style="list-style-type: none"> <li>• Invoice</li> </ul>
<b>Pre-conditions</b>	In a charge-on-delivery model the data for the invoice is prepared from the delivery or in a consignment/concession model from the sales reports.
<b>Post-conditions</b>	The retailer function knows what to pay

### ***Transactions inside the activity "Invoicing"***

#### **Action 1 (Request from Producer function to Retailer function)**

<b>Action Name</b>	Invoice
<b>Action Description</b>	An invoice is sent either for one delivery or the sales of a certain period.

### ***1.1.1.6 Activity "Synchronizing of stock information"***



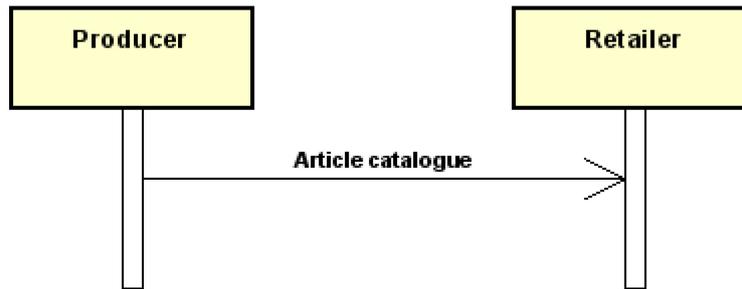
<b>Activity Name</b>	Synchronizing of stock information
<b>Description</b>	In a certain periodic scheme (each 1 to 3 month) the information about the actual stock is synchronized. At least once a year this happens together with a physical stock taking.
<b>Transactions</b>	<ul style="list-style-type: none"> <li>• Inventory report</li> </ul>
<b>Pre-conditions</b>	Differences in the stock quantities between the retailer functions system and the shadow system at the producer function occurred by quantities leaving the shop on non-official ways.
<b>Post-conditions</b>	The information is again synchronized.

### ***Transactions inside the activity "Synchronizing of stock information"***

#### **Action 1 (Request from Retailer function to Producer function)**

<b>Action Name</b>	Inventory report
<b>Action Description</b>	The retailer function sends an inventory report containing the information about the quantities currently on stock

### 1.1.1.7 Activity "Changes to the article catalogue"



<b>Activity Name</b>	Changes to the article catalogue (mandatory)
<b>Description</b>	On the event of a change either inside an article belonging to the CRP catalogue or the relationship of an article towards the CRP catalogue this information is passed over to the retailer function
<b>Transactions</b>	<ul style="list-style-type: none"> <li>Article catalogue</li> </ul>
<b>Pre-conditions</b>	The article information either about an article itself or its belonging to the selection which is the base of the CRP catalog has changed at the producer function.
<b>Post-conditions</b>	The information about the CRP catalogue is up-to-date at the retailer function.

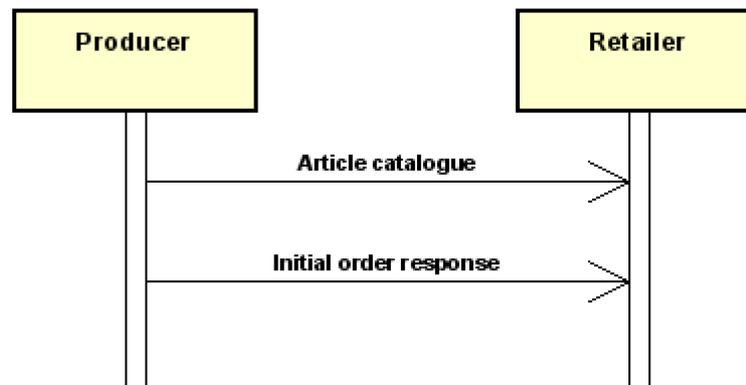
#### *Transactions inside the activity "Changes to the article catalogue"*

<b>Action 1 (Request from Producer function to Retailer function)</b>	
<b>Action Name</b>	Article catalogue
<b>Action Description</b>	On the event of a change an article catalogue document containing the changes only is sent from producer function to retailer function

## 1.1.2 Process "classical preorder"

<b>Process Name</b>	classical preorder
<b>Actors</b>	Producer function, Retailer function
<b>Description</b>	In this process the retailer function orders his products in advance of the season and the production process. The selection of the products is done manually, as people say 'with the finger-tips'. Between order and delivery a period of some month is without any communication. The invoicing normally is charge-on-delivery based but can also be a consignment/concession model.
<b>Activities</b>	<ul style="list-style-type: none"> <li>• Initial transfer of order and article data (<i>mandatory</i><sup>1</sup>)</li> <li>• Transfer of changes to the order</li> <li>• Finalizing of the order</li> <li>• Delivery (<i>mandatory</i>)</li> <li>• Invoicing</li> <li>• Report of sales data (<i>mandatory</i>)</li> </ul>
<b>Reference to the related ebBP</b>	<a href="http://www.moda-ml.net/ebiz-retail/repository/ebbp/v2013-1/en/ebBP_classicalpreorder-1_2013-1.xml">http://www.moda-ml.net/ebiz-retail/repository/ebbp/v2013-1/en/ebBP_classicalpreorder-1_2013-1.xml</a>

### 1.1.2.1 Activity "Initial transfer of order and article data"



<b>Activity Name</b>	Initial transfer of order and article data (mandatory)
<b>Description</b>	After the manual placement of the order in a showroom or on a fair the order data is provided for the retailer function together with the article information of the ordered products.
<b>Transactions</b>	<ul style="list-style-type: none"> <li>• Article catalogue</li> <li>• Initial order response</li> </ul>
<b>Pre-conditions</b>	The order is manually placed in a showroom or at a fair. Only a print out of the order was given to the retailer function. The data is available only in the system of the producer function
<b>Post-conditions</b>	The systems of producer function and retailer function are synchronized concerning the order data and the article information for the ordered products is available in the system of the retailer function

<sup>1</sup> "Mandatory" activities represent the minimal implementation of this scenario

### **Transactions inside the activity "Initial transfer of order and article data"**

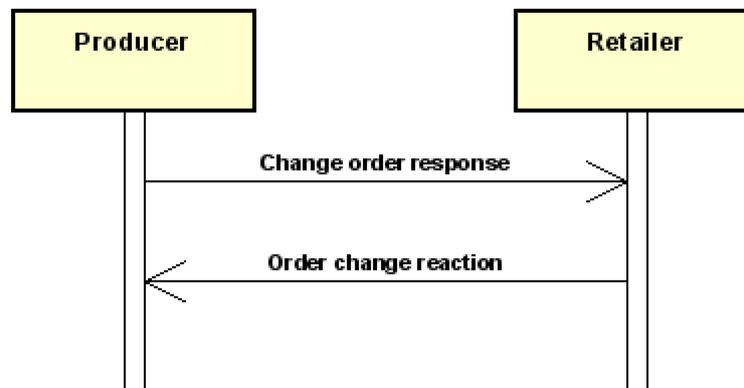
#### **Action 1 (Request from Producer function to Retailer function)**

<b>Action Name</b>	Article catalogue
<b>Action Description</b>	For all EAN codes from the order the article information is sent by the article catalogue document. It is also possible to send all variants of the ordered colors or articles. No full catalogue should be sent here to avoid junk data at the retailer function

#### **Action 2 (Request from Producer function to Retailer function)**

<b>Action Name</b>	Initial order response
<b>Action Description</b>	The order data from the host of the producer function is sent to the retailer function inside the first 24 hours after the placement of the order. It is no order confirmation but just the transfer of the order data

### **1.1.2.2 Activity "Transfer of changes to the order"**



<b>Activity Name</b>	Transfer of changes to the order
<b>Description</b>	During the order period it happens that certain articles are canceled or the delivery date changes. To synchronize the systems this information is passed over to the retailer function by a change order response
<b>Transactions</b>	<ul style="list-style-type: none"> <li>• Change order response</li> <li>• Order change reaction</li> </ul>
<b>Pre-conditions</b>	The order is changed in the system of the producer function. Both systems have different information.
<b>Post-conditions</b>	The systems are synchronized again.

### **Transactions inside the activity "Transfer of changes to the order"**

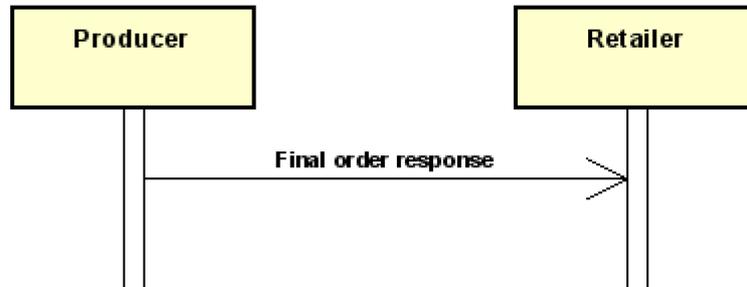
#### **Action 1 (Request from Producer function to Retailer function)**

<b>Action Name</b>	Change order response
<b>Action Description</b>	The changes to the order are transferred to the retailer function's system

**Action 2 (Response from Retailer function to Producer function)**

<b>Action Name</b>	Order change reaction
<b>Action Description</b>	The change is either accepted or rejected

**1.1.2.3 Activity "Finalizing of the order"**



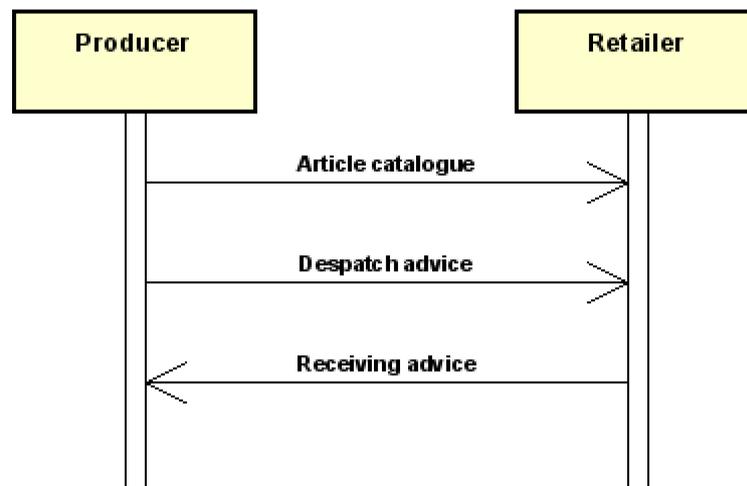
<b>Activity Name</b>	Finalizing of the order
<b>Description</b>	At the end of the order period the producer function informs the retailer function that no more changes are to be expected.
<b>Transactions</b>	<ul style="list-style-type: none"> <li>Final order response</li> </ul>
<b>Pre-conditions</b>	The systems are synchronized but the order is not finally confirmed.
<b>Post-conditions</b>	The order is confirmed.

**Transactions inside the activity "Finalizing of the order"**

**Action 1 (Request from Producer function to Retailer function)**

<b>Action Name</b>	Final order response
<b>Action Description</b>	The retailer function receives the information that no more changes are to be expected and the order is confirmed

**1.1.2.4 Activity "Delivery"**



<b>Activity Name</b>	Delivery (mandatory)
<b>Description</b>	Shortly after the arrival of the products from the production plants the deliveries are planned and performed. If some articles are supplanted by others, the retailer function is missing the article data for those products. The despatch advice is sent in advance of the delivery and gives the retailer function the chance to prepare for the arrival of the goods. With the receiving advice the information in both systems is again synchronized
<b>Transactions</b>	<ul style="list-style-type: none"> <li>• Article catalogue</li> <li>• Despatch advice</li> <li>• Receiving advice</li> </ul>
<b>Pre-conditions</b>	The producer function has prepared the shipping of goods. Quantities and variances are known, if any
<b>Post-conditions</b>	Producer function and retailer function have the same information about the delivery

### *Transactions inside the activity "Delivery"*

#### **Action 1 (Request from Producer function to Retailer function)**

<b>Action Name</b>	Article catalogue
<b>Action Description</b>	The article information for the additional products is transferred to the retailer function

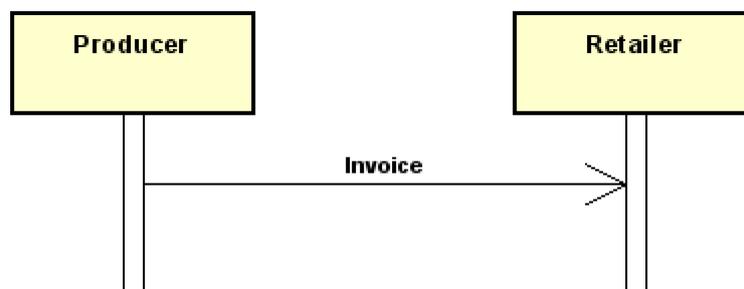
#### **Action 2 (Request from Producer function to Retailer function)**

<b>Action Name</b>	Despatch advice
<b>Action Description</b>	The delivery is announced by the despatch advice with date, EAN and quantity

#### **Action 3 (Response from Retailer function to Producer function)**

<b>Action Name</b>	Receiving advice
<b>Action Description</b>	After goods receive the retailer function reports back the products which arrived with the delivery announced in the despatch advice

### **1.1.2.5 Activity "Invoicing"**



<b>Activity Name</b>	Invoicing
<b>Description</b>	An invoice is sent either on delivery or sales base. The invoice must comply with legal regime of the country where the issuer is registered. The issuer of an invoice is responsible for producing a legal invoice.

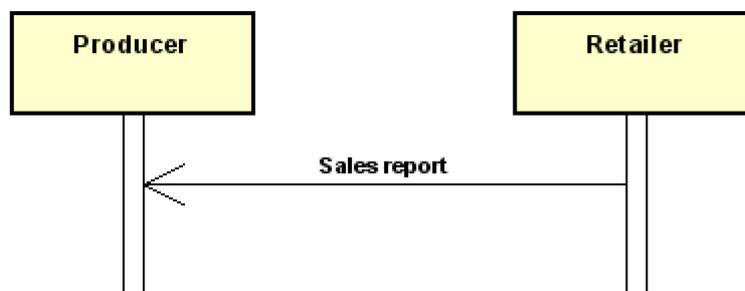
<b>Transactions</b>	<ul style="list-style-type: none"> <li>• Invoice</li> </ul>
<b>Pre-conditions</b>	In a charge-on-delivery model the data for the invoice is prepared from the delivery or in a consignment/concession model from the sales reports.
<b>Post-conditions</b>	The retailer function knows what to pay

### ***Transactions inside the activity "Invoicing"***

#### **Action 1 (Request from **Producer** function to **Retailer** function)**

<b>Action Name</b>	Invoice
<b>Action Description</b>	An invoice is sent either for one delivery or the sales of a certain period.

### **1.1.2.6 Activity "Report of sales data"**



<b>Activity Name</b>	Report of sales data
<b>Description</b>	At the end of each sales day a sales report is sent for all sales locations of the retailer function
<b>Transactions</b>	<ul style="list-style-type: none"> <li>• Sales report</li> </ul>
<b>Pre-conditions</b>	All sales data of all sales locations of the retailer function are collected in the HQ
<b>Post-conditions</b>	The sales information is available at the producer function

### ***Transactions inside the activity "Report of sales data"***

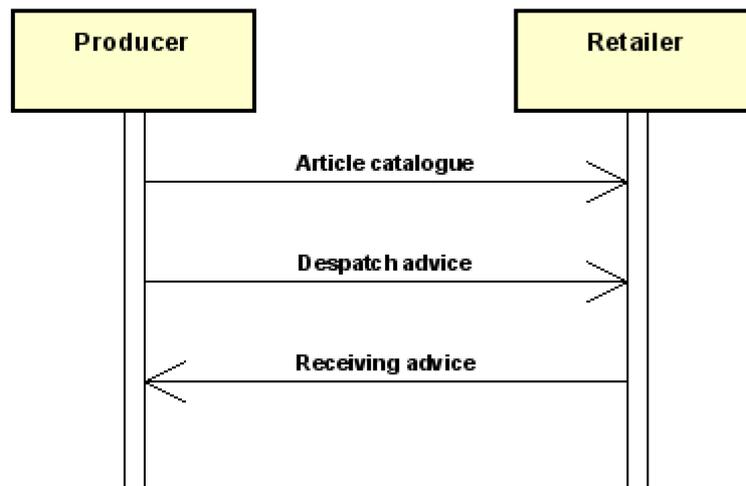
#### **Action 1 (Request from **Retailer** function to **Producer** function)**

<b>Action Name</b>	Sales report
<b>Action Description</b>	At the end of each sales day a sales report is sent for all sales locations of the retailer function

### 1.1.3 Process "vendor managed inventory - VMI"

<b>Process Name</b>	vendor managed inventory - VMI
<b>Actors</b>	Producer function, Retailer function
<b>Description</b>	A shop-in-shop area or a store is managed completely by the producer function. The logistic concept of VMI can be combined with consignment/concession as well as with charge-on-delivery as financial model. Mostly it is combined with consignment
<b>Activities</b>	<ul style="list-style-type: none"> <li>• Initial stocking of the area by vendor (<i>mandatory</i><sup>1</sup>)</li> <li>• Daily report of sales and inventory movement (<i>mandatory</i>)</li> <li>• Synchronizing of stock information (RFID based in between inventory)</li> <li>• Permanent replenishment (<i>mandatory</i>)</li> <li>• Invoicing</li> <li>• Returns initiated by the producer function</li> <li>• Price adjustments (<i>mandatory</i>)</li> </ul>
<b>Reference to the related ebBP</b>	<a href="http://www.moda-ml.net/ebiz-retail/repository/ebbp/v2013-1/en/ebBP_vendormanagedinventoryvmi-1_2013-1.xml">http://www.moda-ml.net/ebiz-retail/repository/ebbp/v2013-1/en/ebBP_vendormanagedinventoryvmi-1_2013-1.xml</a>

#### 1.1.3.1 Activity "Initial stocking of the area by vendor"



<b>Activity Name</b>	Initial stocking of the area by vendor (mandatory)
<b>Description</b>	At the beginning of the cooperation the area is stocked. The retailer function receives article and delivery information and reports back the goods actually received.
<b>Transactions</b>	<ul style="list-style-type: none"> <li>• Article catalogue</li> <li>• Despatch advice</li> <li>• Receiving advice</li> </ul>
<b>Pre-conditions</b>	A system at the producer function has calculated the initial delivery.

<sup>1</sup> "Mandatory" activities represent the minimal implementation of this scenario

<b>Post-conditions</b>	The retailer functions has received the article and delivery information as well as the physical products and reported back the actual quantities received.
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**Transactions inside the activity "Initial stocking of the area by vendor"**

**Action 1 (Request from Producer function to Retailer function)**

<b>Action Name</b>	Article catalogue
<b>Action Description</b>	The article information of all articles in the initial delivery is sent to the retailer function

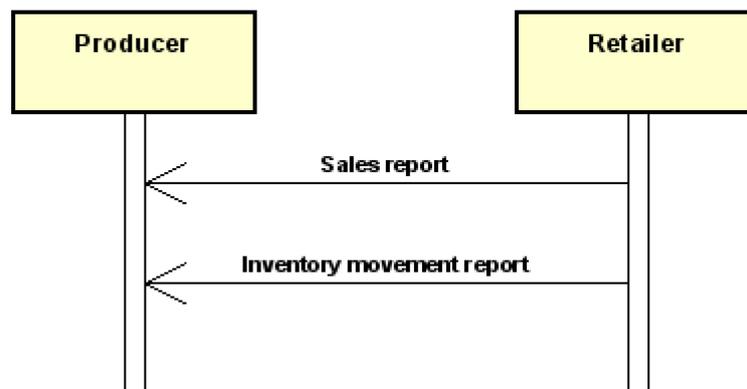
**Action 2 (Request from Producer function to Retailer function)**

<b>Action Name</b>	Despatch advice
<b>Action Description</b>	The delivery is announced by the despatch advice with date, EAN and quantity

**Action 3 (Response from Retailer function to Producer function)**

<b>Action Name</b>	Receiving advice
<b>Action Description</b>	After goods receive the retailer function reports back the products which arrived with the delivery announced in the despatch advice.

**1.1.3.2 Activity "Daily report of sales and inventory movement"**



<b>Activity Name</b>	Daily report of sales and inventory movement (mandatory)
<b>Description</b>	Each day the sales and inventory movement information is transferred from the retailer function to the producer function
<b>Transactions</b>	<ul style="list-style-type: none"> <li>• Sales report</li> <li>• Inventory movement report</li> </ul>
<b>Pre-conditions</b>	Base information for the process is missing.
<b>Post-conditions</b>	The system of the producer function is up-to-date concerning sales and inventory movements. Replenishment can be planned

**Transactions inside the activity "Daily report of sales and inventory movement"**

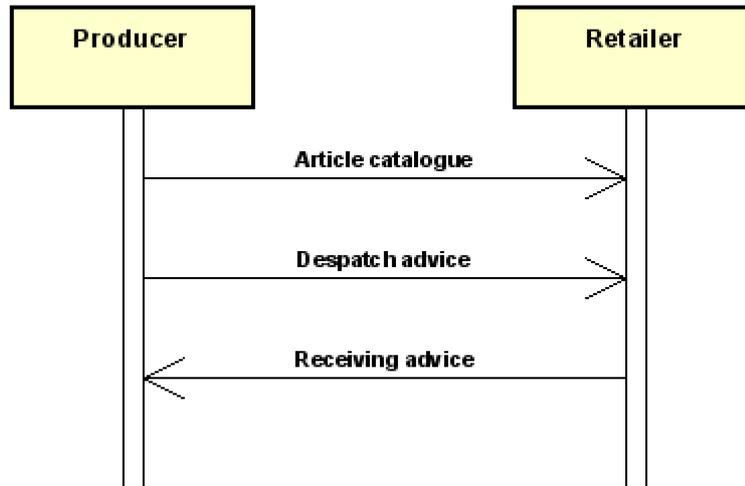
**Action 1 (Request from Retailer function to Producer function)**

<b>Action Name</b>	Sales report
<b>Action Description</b>	At the end of each sales day a sales report is sent for all sales locations of the retailer function

**Action 2 (Request from Retailer function to Producer function)**

<b>Action Name</b>	Inventory movement report
<b>Action Description</b>	At the end of each sales day a inventory movement report is sent for all locations of the retailer function at which such an event occurred

**1.1.3.3 Activity "Permanent replenishment"**



<b>Activity Name</b>	Permanent replenishment
<b>Description</b>	
<b>Transactions</b>	<ul style="list-style-type: none"> <li>• Article catalogue</li> <li>• Despatch advice</li> <li>• Receiving advice</li> </ul>

**Transactions inside the activity "Permanent replenishment"**

**Action 1 (Request from Producer function to Retailer function)**

<b>Action Name</b>	Article catalogue
<b>Action Description</b>	The article information of the articles which are sent the first time in this delivery is sent to the retailer function

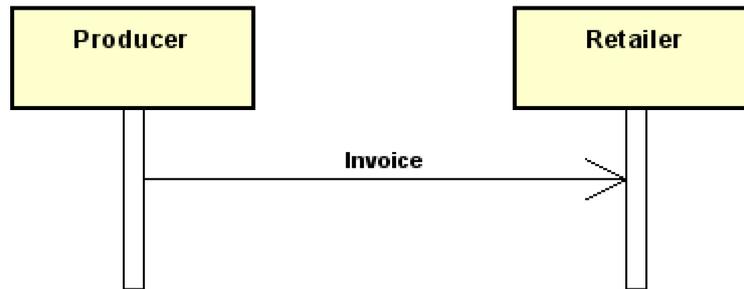
**Action 2 (Request from Producer function to Retailer function)**

<b>Action Name</b>	Despatch advice
<b>Action Description</b>	The delivery is announced by the despatch advice with date, EAN and quantity

**Action 3 (Response from Retailer function to Producer function)**

<b>Action Name</b>	Receiving advice
<b>Action Description</b>	After goods receive the retailer function reports back the products which arrived with the delivery announced in the despatch advice

### 1.1.3.4 Activity "Invoicing"



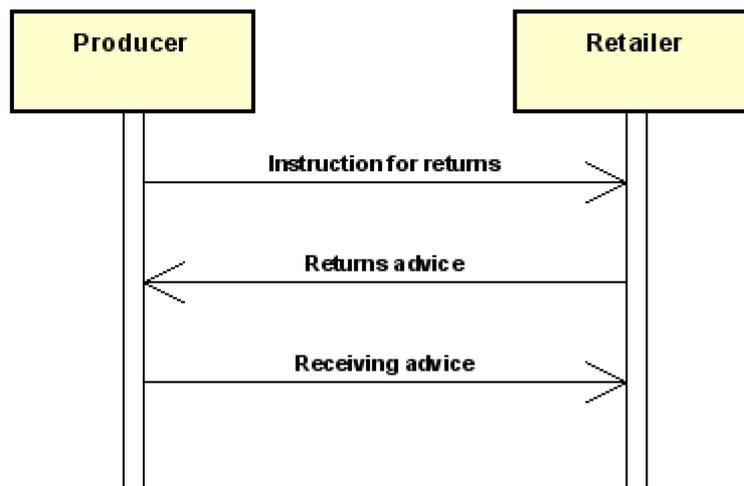
<b>Activity Name</b>	Invoicing
<b>Description</b>	An invoice is sent either on delivery or sales base. The invoice must comply with legal regime of the country where the issuer is registered. The issuer of an invoice is responsible for producing a legal invoice.
<b>Transactions</b>	<ul style="list-style-type: none"> <li>• Invoice</li> </ul>
<b>Pre-conditions</b>	In a charge-on-delivery model the data for the invoice is prepared from the delivery or in a consignment/concession model from the sales reports.
<b>Post-conditions</b>	The retailer function knows what to pay

#### *Transactions inside the activity "Invoicing"*

##### Action 1 (Request from **Producer** function to **Retailer** function)

<b>Action Name</b>	Invoice
<b>Action Description</b>	An invoice is sent either for one delivery or the sales of a certain period.

### 1.1.3.5 Activity "Returns initiated by the producer function"



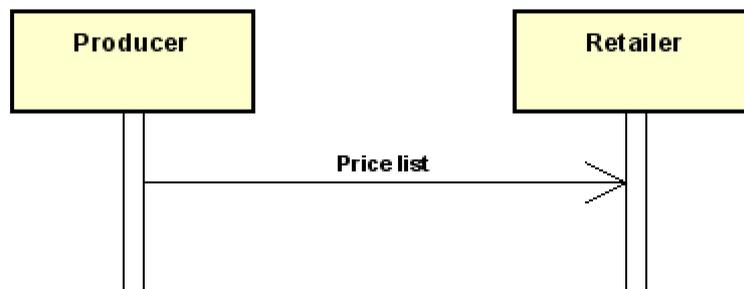
<b>Activity Name</b>	Returns initiated by the producer function
<b>Description</b>	If sales in certain places does not fit the scheme, products are reallocated by the producer function. Because he cannot request from the retailer function to send the products to a competitor, the producer function request a return and handles the goods afterwards by himself.

<b>Transactions</b>	<ul style="list-style-type: none"> <li>• Instruction for returns</li> <li>• Returns advice</li> <li>• Receiving advice</li> </ul>
<b>Pre-conditions</b>	The area at a certain retailer function is overstocked.
<b>Post-conditions</b>	The goods are moved back to the producer function for further use.

**Transactions inside the activity "Returns initiated by the producer function"**

<b>Action 1 (Request from Producer function to Retailer function)</b>	
<b>Action Name</b>	Instruction for returns
<b>Action Description</b>	The producer function requests the return of certain quantities of products from the retailer function
<b>Action 2 (Request from Retailer function to Producer function)</b>	
<b>Action Name</b>	Returns advice
<b>Action Description</b>	The return is announced by the returns advice with date, EAN and quantity
<b>Action 3 (Response from Producer function to Retailer function)</b>	
<b>Action Name</b>	Receiving advice
<b>Action Description</b>	After goods receive the producer function reports back the products which arrived with the delivery announced in the returns advice

**1.1.3.6 Activity "Price adjustments"**



<b>Activity Name</b>	Price adjustments (mandatory)
<b>Description</b>	On the event of a price change a price list containing the changes is sent from producer function to retailer function.
<b>Transactions</b>	<ul style="list-style-type: none"> <li>• Price list</li> </ul>
<b>Pre-conditions</b>	Retailer function is working with old prices.
<b>Post-conditions</b>	Retailer function is working with the new prices.

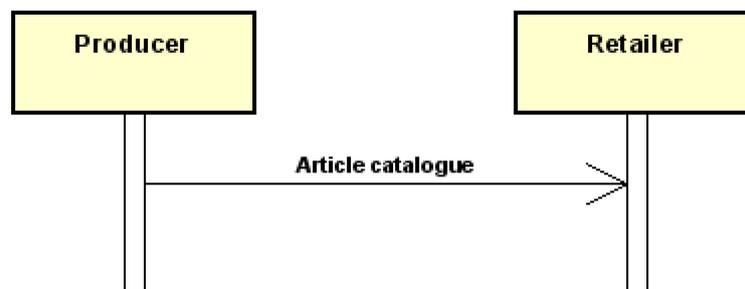
**Transactions inside the activity "Price adjustments"**

<b>Action 1 (Request from Producer function to Retailer function)</b>	
<b>Action Name</b>	Price list
<b>Action Description</b>	On the event of a price change a price list containing the changes is sent from producer function to retailer function

### 1.1.4 Process "replenishment on customer demand "

<b>Process Name</b>	Replenishment on customer demand
<b>Actors</b>	Producer function, Retailer function
<b>Description</b>	In this process the producer function out of all the products selects a subset for the specific customer and sends the related article catalogue. Then the producer function periodically sends information about the availability of items, in order to allow the customer to optimize the ordering plan. The replenishment periodically happens on customer demand and the producer function is allowed to propose changes to the orders. The invoicing normally is charge-on-delivery based.
<b>Activities</b>	<ul style="list-style-type: none"> <li>• Transfer of base article catalogue (<i>mandatory</i>)</li> <li>• Periodic transfer of article availability information (<i>mandatory</i>)</li> <li>• Initial stocking of the area by vendor and Customer (interactively ordered at the vendor) (<i>mandatory</i>)</li> <li>• Periodic replenishment (<i>mandatory</i>)</li> <li>• Report of sales and inventory movements</li> <li>• Invoicing (<i>mandatory</i>)</li> <li>• Synchronizing of stock information</li> <li>• Changes to the article catalogue</li> </ul>
<b>Reference to the related ebBP</b>	<a href="http://www.moda-ml.net/ebiz-retail/repository/ebbp/v2013-1/en/ebBP_replenishmentoncustomerdemand-1_2013-1.xml">http://www.moda-ml.net/ebiz-retail/repository/ebbp/v2013-1/en/ebBP_replenishmentoncustomerdemand-1_2013-1.xml</a>

#### 1.1.4.1 Activity "Transfer of base article catalogue"



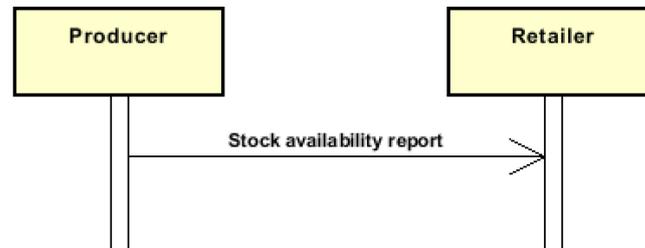
<b>Activity Name</b>	Transfer of base article catalogue
<b>Description</b>	The producer function publishes the catalogue of his NOS and seasonal NOS articles to the retailer function
<b>Transactions</b>	<ul style="list-style-type: none"> <li>• Article catalogue</li> </ul>
<b>Pre-conditions</b>	The producer function has defined his articles.
<b>Post-conditions</b>	The retailer function has the base for his choice of products for cyclic replenishment

#### Transactions inside the activity "Transfer of base article catalogue "

**Action 1 (Request from Producer function to Retailer function)**

**Action Name** Article catalogue  
**Action** The article catalogue containing the information articles of the producer  
**Description** function is sent to the retailer function.

#### 1.1.4.2 Activity “Periodic transfer of article availability information”



<b>Activity Name</b>	Periodic transfer of article availability information
<b>Description</b>	The producer function sends out information about availability of goods (quantities on hand, quantities incoming, out of stock quantities).
<b>Transactions</b>	<ul style="list-style-type: none"> <li>• Stock availability report</li> </ul>

#### *Transactions inside the activity “Periodic transfer of article availability information ”*

##### Action 1 (Request from Producer function to Retailer function)

**Action Name** Stock availability report  
**Action** The stock availability report containing the information about the present  
**Description** availability of the articles is sent to the retailer function.  
 It allows to declare at least three different levels of availability: quantities on hand, quantities incoming, out of stock quantities and related information.

#### 1.1.4.3 Activity “Initial stocking of the area by vendor and Customer (interactively ordered at the vendor)”

<b>Activity Name</b>	Initial stocking of the area by vendor and Customer (interactively ordered at the vendor)
<b>Description</b>	At the beginning of the business cooperation or maybe of a season the retailer function orders his base stock and the products are delivered. The producer function is allowed to propose changes to the order.
<b>Transactions</b>	<ul style="list-style-type: none"> <li>• Order</li> <li>• Change order response</li> <li>• Despatch advice</li> <li>• Receiving advice</li> </ul>

**Transactions inside the activity " Initial stocking of the area by vendor and Customer "**

**Action 1 (Request from Retailer function to Producer function)**

**Action Name** Order  
**Action Description** The retailer function sends an order from his system containing the initial demand.

**Action 2 (Response from Producer function to Retailer function)**

**Action Name** Change order response  
**Action Description** If necessary the changes to the order are transferred to the retailer function.

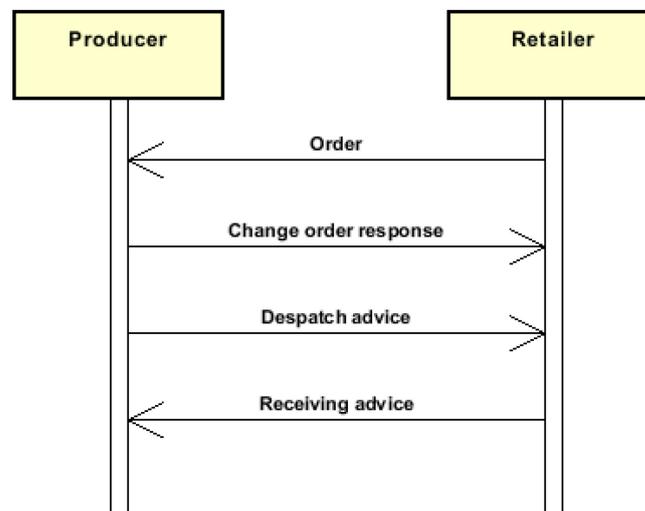
**Action 3 (Request from Producer function to Retailer function)**

**Action Name** Despatch advice  
**Action Description** The delivery is announced by the despatch advice with date, GTIN (Global Trade Item Number) and quantity

**Action 4 (Response from Retailer function to Producer function)**

**Action Name** Receiving advice  
**Action Description** After goods receive the retailer function reports back the products which arrived with the delivery announced in the despatch advice.

**1.1.4.4 Activity "Periodic replenishment"**



<b>Activity Name</b>	Periodic replenishment
<b>Description</b>	Each period the system of the retailer function calculates the quantities needed for the replenishment of the area. From the result an order is sent and the producer function reacts quickly.
<b>Transactions</b>	<ul style="list-style-type: none"> <li>• Order</li> <li>• Change order response</li> <li>• Despatch advice</li> <li>• Receiving advice</li> </ul>

### **Transactions inside the activity "Periodic replenishment"**

#### **Action 1 (Request from Retailer function to Producer function)**

**Action Name** Order  
**Action Description** The retailer function sends an order from his system containing the demand for the next period.

#### **Action 2 (Response from Producer function to Retailer function)**

**Action Name** Change order response  
**Action Description** If necessary the changes to the order are transferred to the retailer function's system

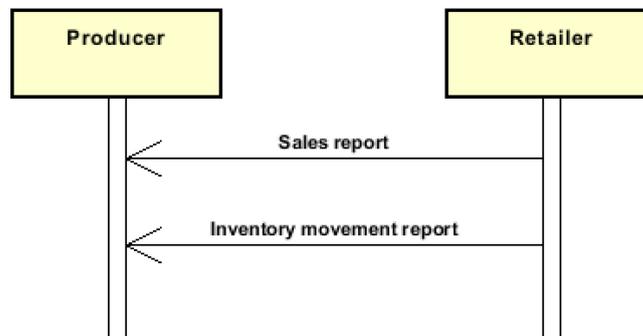
#### **Action 3 (Request from Producer function to Retailer function)**

**Action Name** Despatch advice  
**Action Description** The delivery is announced by the despatch advice with date, GTIN and quantity.

#### **Action 4 (Response from Retailer function to Producer function)**

**Action Name** Receiving advice  
**Action Description** After goods receive the retailer function reports back the products which arrived with the delivery announced in the despatch advice.

### **1.1.4.5 Activity "Report of sales and inventory movements "**



<b>Activity Name</b>	Report of sales and inventory movements
<b>Description</b>	At the end of each sales day a sales report is sent for all sales locations of the retailer function.
<b>Transactions</b>	<ul style="list-style-type: none"> <li>• Sales report</li> <li>• Inventory movement report</li> </ul>
<b>Pre-conditions</b>	All sales data and inventory movements of all sales and maybe logistic locations of the retailer function are collected in the HQ.
<b>Post-conditions</b>	The sales and inventory movement information is available at the producer function.

### **Transactions inside the activity "Report of sales and inventory movements"**

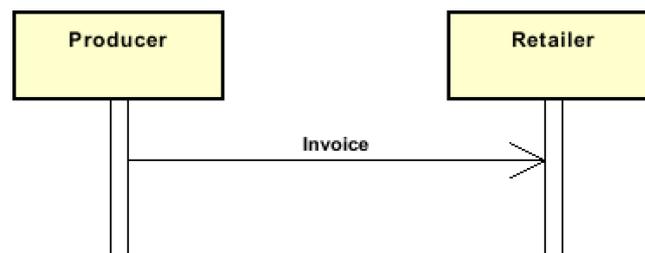
#### **Action 1 (Request from Retailer function to Producer function)**

**Action Name** Sales report  
**Action Description** At the end of each sales day a sales report is sent for all sales locations of the retailer function

**Action 2 (Request from Retailer function to Producer function)**

**Action Name** Inventory movement report  
**Action Description** At the end of each sales day a inventory movement report is sent for all locations of the retailer function at which such an event occurred

**1.1.4.6 Activity "Invoicing"**



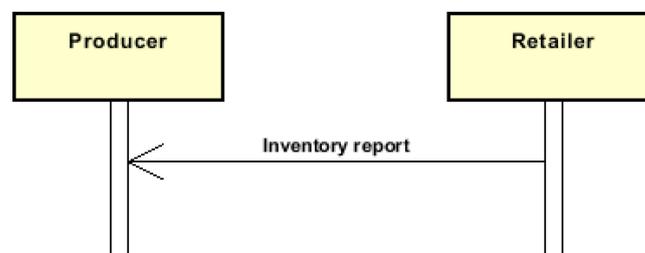
<b>Activity Name</b>	Invoicing
<b>Description</b>	An invoice is sent either on delivery or sales base. The invoice must comply with legal regime of the country where the issuer is registered. The issuer of an invoice is responsible for producing a legal invoice.
<b>Transactions</b>	<ul style="list-style-type: none"> <li>• Invoice</li> </ul>
<b>Post-conditions</b>	The retailer function knows what to pay

**1.1.4.7 Transactions inside the activity "Invoicing "**

**Action 1 (Request from Producer function to Retailer function)**

**Action Name** Invoice  
**Action Description** An invoice is sent either for one delivery or the sales of a certain period.

**1.1.4.8 Activity "Synchronizing of stock information"**



<b>Activity Name</b>	Synchronizing of stock information
<b>Description</b>	In a certain periodic scheme the information about the actual stock is synchronized. At least once a year this happens together with a physical stock taking.
<b>Transactions</b>	<ul style="list-style-type: none"> <li>• Inventory report</li> </ul>

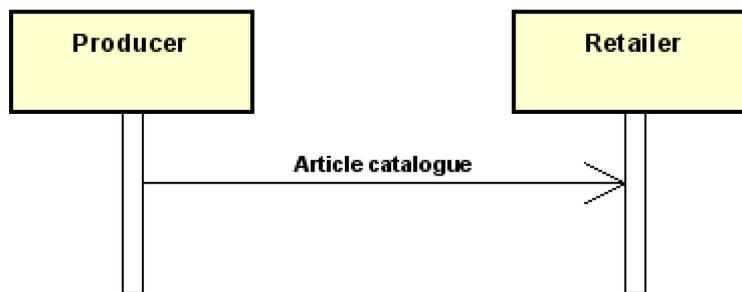
<b>Pre-conditions</b>	Differences in the stock quantities between the retailer functions system and the shadow system at the producer function occurred by quantities leaving the shop on non-official ways.
<b>Post-conditions</b>	The information is again synchronized.

### ***Transactions inside the activity "Synchronizing of stock information"***

#### **Action 1 (Request from Retailer function to Producer function)**

<b>Action Name</b>	Inventory report
<b>Action Description</b>	The retailer function sends an inventory report containing the information about the quantities currently on stock

### ***1.1.4.9 Activity "Changes to the article catalogue"***



<b>Activity Name</b>	Changes to the article catalogue
<b>Description</b>	On the event of a change inside an article of the catalogue this information is passed over to the retailer function
<b>Transactions</b>	<ul style="list-style-type: none"> <li>• Article catalogue</li> </ul>
<b>Pre-conditions</b>	The article information either about an article itself or its belonging to the selection which is the base of the catalog has changed at the producer function.
<b>Post-conditions</b>	The information about the catalogue is up-to-date at the retailer function.

### ***Transactions inside the activity "Changes to the article catalogue"***

#### **Action 1 (Request from Producer function to Retailer function)**

<b>Action Name</b>	Article catalogue
<b>Action Description</b>	On the event of a change an article catalogue document containing the changes only is sent from producer function to retailer function



Towards one eBusiness Language for fashion

## **APPENDIX B**

# **Reference Architecture 2.0 for eBusiness harmonisation in Textile/Clothing and Footwear sectors**

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## APPENDIX B: Data models for downstream

### Scope

The goal behind the definitions is an easy implementation of the business processes and messages in an anonymous market.

The data models here presented are abstract and syntax independent; to implement real cases it is necessary to adopt a syntactic notation and a use profile that define exactly how to create unambiguous semantics and interoperable messages.

Thus, considering the EANCOM syntax and the UBL syntax, we indicate, respectively, the use profiles from WWS/Profil for EANCOM and from eBIZ-TCF for UBL (see the “*References on the web*” paragraph for each abstract data model).

The eBIZ-TCF UBL Use Profiles refer to UBL 2.0 version (<http://docs.oasis-open.org/ubl/os-UBL-2.0/>) released on December 2006.

An UBL 2.0 update package exists (<http://docs.oasis-open.org/ubl/os-UBL-2.0-update-delta.zip>); it upgrades the code lists and corrects a number of typos and editorial errors. None of these changes is considered substantive in the sense that any of them would require modifications to existing software.

Therefore, thanks to the use profiles, the generic messages are restricted to the common use inside the TCF sector and offer exactly one unique version of the implementation.

Only by these restrictions it is possible to implement the processing of the messages without extra negotiations each time.

Note about compliance to product identification requirements: the product and party (even location) information must be represented by GLN and GTIN global identifiers issued by GS1.

The only exception could be temporarily for ‘local networks’ communications (it is the case of internal data exchange inside a single organisation), where it is acceptable the use of local identification systems but in this case the ‘schemaName’ must be declared explicitly as indicated in the use profiles.

Anyway it must be assured the capability to translate the local identification system towards the global ones.

## Legend

The document data models are shown through tables representing their abstract model, independently by the syntax.

There are two kinds of tables:

- table of information blocks;
- table of aggregated and simple elements.

### 1. Table of information blocks

The information blocks identify the main parts a data model is composed of.

The structure of the table describing the information blocks related to a document data model is like the following:

Name (not XML tag)	Occurrence	Description
HEADER	1-1	Each information contained in this part is referred to the whole document.
INVOICE LINE	1-N	Invoice line.

*Table 1 Example of table of information blocks.*

These tables are composed by the following columns:

- "Name": the block name;
- "Occurrence": the number of times that the block may occur (minimum and maximum number of occurrences);
- "Description": textual description of the information contained in the block.

Every eBIZ downstream data model has two information blocks:

- the **HEADER**, containing information applied to the whole document;
- the **LINE**, containing information applied to the specific article the line is associated to.

The HEADER block has always one occurrence, whereas the LINE block can be repeated.

### 2. Table of simple and aggregated elements

Each information block is composed of simple and aggregated elements that are represented by one specific table for each block.

A **simple element** is an elementary business information.

An **aggregated element** is a concept that collects a group of related business information and it is composed by simple elements.

Name (not XML tag)	Occurrence	Description	Type details (Type of coding, elements)
...	...	...	...
<b>Tax representative</b>	<b>0-1</b>	<b>Details of the Supplier's tax representative.</b>	
Tax representative name	1-1	The name of the tax representative.	
Tax representative VAT number	1-1	The identifier assigned for tax purposes to the tax representative.	
<b>Total amounts</b>	<b>1-1</b>	<b>Details about the total amount payable on the Invoice, including Allowances, Charges, and Taxes.</b>	
Line total amount	1-1	Sum of line amounts in the document.	
Line total amount @Currency	1-1	The currency that is used for the "Line total amount".	ISO code
<b>Paid amounts</b>	<b>0-1</b>	<b>Any amounts that have been paid a-priory.</b>	
Paid amount @Currency	1-1	The currency that is used for the "Paid amount".	ISO code

Table 2 Example of table of aggregated and simple elements.

In the table above, the following explanation applies:

- green rows indicate an aggregated element composed of the simple elements that follow (white rows);
- white rows indicates simple elements.

The tables are composed by the following columns:

- "Name": the element name;
- "Occurrence": the number of times that the element may occur (minimum and maximum number of occurrences). Minimum equal zero indicates that the element is optional, tminimum greater than zero indicates that is mandatory;"Description": textual description of the business information represented by the element;

only for tables of simple elements:

- "Type details": particular constraints related to the data type of the element (for example, it states if the value of the element must be in a code list).

In the example:

- "Tax representative" is an optional aggregated elements and it can occur once only;
- "Tax representative" is composed of "Tax representative name" and "Tax representative VAT number " simple elements; if "Tax representative" occurs, both of them must occur;
- "Total amounts" is a mandatory aggregated element and can occurs once only.



A particular kind of element is the **attribute**. An attribute is an element property. Attributes are identified by the "@" symbol.

In the example:

- "Currency" is the attribute of the "Paid amounts " element.

The values of "Occurrence" column states that:

- "Paid amounts " simple element is optional and it may be occur until one times;
- if "Paid amounts" occurs, for each occurrence the "Currency" attribute is mandatory.

## B.1. Document Article Catalogue

Source: UBL and TexWeave/WWSProfil

### Scope

The article catalogue message has the purpose to provide the necessary information for an automated creation of the article data set on the retailer side.

The mandatory fields are absolutely necessary for this purpose. All other information should be provided if it is available without big effort.

### Data model details

List of information blocks:

Name (not XML tag)	Occurrence	Description
HEADER	1-1	Each information contained in this part is referred to the whole document.
LINE	1-N	Article catalogue line.

List of elements (alphabetically ordered) of HEADER:

Name (not XML tag)	Occurrence	Description	Type details (Type of coding, elements)
Catalogue reference	0-1	An associative reference to a Catalogue that can be changed or replaced by this (only used in case of change/replacement).	
Document date	1-1	The date on which the Catalogue was issued.	YYYY-MM-DD
Document number	1-1	An identifier for the Catalogue assigned by the sender.	
Note	0-1	Free-form text (note or similar information) applying to the document.	
Supplier catalogue ID	0-1	The identifier of a special assortment defined by the Supplier (for example the NOS articles of the Supplier).	
Supplier catalogue version	0-1	The catalogue version according to the Supplier's system.	
Validity period	0-1	The period during which the information in the Catalogue is effective. The "Start date" is mandatory, the "End date" should be specified only if you really need, for example in case of special offer.	
Customer	0-1	Details of the Customer (the legal buyer of goods). This field should be used only if the Buyer and the catalogue recipient are not the same party.	

<b>Address</b>	<b>0-1</b>	The full address of the place where the Customer's physical location is (street name, city name, post code, country subdivision, country).	
<b>Contact</b>	<b>0-1</b>	A Customer contact.	
<b>GLN</b>	<b>1-1</b>	The GLN code related to the Customer's address is (normally the headquarter of the retailer).	
<b>Name</b>	<b>0-1</b>	The full name of the Customer.	
<b>Recipient</b>	<b>1-1</b>	<b>Details about the catalogue recipient.</b>	
<b>Address</b>	<b>0-1</b>	The full address of the place where the Recipient's physical location is (street name, city name, post code, country subdivision, country).	
<b>Contact</b>	<b>0-1</b>	A Recipient contact.	
<b>GLN</b>	<b>1-1</b>	The GLN code related to the Recipient's address.	
<b>Name</b>	<b>0-1</b>	The full name of the Recipient.	
<b>Sender</b>	<b>1-1</b>	<b>Details about the catalogue sender.</b>	
<b>Address</b>	<b>0-1</b>	The full address of the place where the Sender's physical location is (street name, city name, post code, country subdivision, country).	
<b>Contact</b>	<b>0-1</b>	A Sender contact.	
<b>GLN</b>	<b>1-1</b>	The GLN code related to the Sender's address.	
<b>Name</b>	<b>0-1</b>	The full name of the Sender.	
<b>Supplier</b>	<b>0-1</b>	<b>Details of the Supplier (who provides the goods specified in the catalogue). This field should be used only if the Supplier and the catalogue sender are not the same party.</b>	
<b>Address</b>	<b>0-1</b>	The full address of the place where the Supplier's physical location is (street name, city name, post code, country subdivision, country).	
<b>Contact</b>	<b>0-1</b>	A Supplier contact.	
<b>GLN</b>	<b>1-1</b>	The GLN code related to the Supplier's addressThe GLN code related to the Supplier's address.	
<b>Name</b>	<b>0-1</b>	The full name of the Supplier.	

List of the elements (simple ones alphabetically ordered, followed by aggregate ones alphabetically ordered) of the LINE:

<b>Name (not XML tag)</b>	<b>Occurrence</b>	<b>Description</b>	<b>Type details (Type of coding, elements)</b>
<b>Line action</b>	<b>1-1</b>	The function performed by the present row (it can be "add", "delete" or "change").	<b>Code list</b>
<b>Line number</b>	<b>1-1</b>	A unique identifier for the catalogue line.	
<b>Minimum order quantity</b>	<b>0-1</b>	The minimum quantity of articles that can be ordered (the measurement unit should be specified).	
Minimum order quantity <b>@Measurement unit</b>	<b>0-1</b>	The unit of the "Minimum order quantity".	<b>Code list</b>

Name (not XML tag)	Occurrence	Description	Type details (Type of coding, elements)
<b>Article</b>	<b>1-1</b>	<b>Details about the article associated to this catalogue line.</b>	
<b>Article class</b>	<b>1-1</b>	<b>Basic classification of article in scope of time and use. It can be: BAS: basic article (lifetime of more than 1 season); NOS: never out of stock (BAS + replenishment in less than 72 hours); SEA: seasonal (lifetime of about half a year); SSC: short season collection (lifetime of about a month / one delivery, no replenishment at all); SEN: seasonal never out of stock (SEA + replenishment in less than 72 hours).</b>	
<b>Article description</b>	<b>0-1</b>	<b>A textual description of the article.</b>	
<b>Article name</b>	<b>1-1</b>	<b>The name given to the article.</b>	
<b>Brand name</b>	<b>0-1</b>	<b>The brand name of the article.</b>	
<b>Country of origin</b>	<b>0-1</b>	<b>The origin country of the article.</b>	
<b>Color code</b>	<b>0-n</b>	<b>The color code assigned according to a standard codify system (for example: EAS, FEDAS, WWS, ...).</b>	
<b>Color code @Color codes's owner</b>	<b>1-1</b>	<b>The name of the agency that maintains the list of color codes.</b>	
<b>Customs tariff number</b>	<b>0-1</b>	<b>The product code from harmonised system of customs authorities.</b>	
<b>Fabric name</b>	<b>0-1</b>	<b>The fabric name of the article.</b>	
<b>Fashion theme</b>	<b>0-1</b>	<b>Grouping of articles by a special theme.</b>	
<b>GPCbrick</b>	<b>0-1</b>	<b>Specification according to GPC (GS1).</b>	
<b>GPCattribut eKey</b>	<b>0-10</b>	<b>Specification according to GPC (GS1).</b>	
<b>GPCattribut evalue</b>	<b>0-10</b>	<b>Specification according to GPC (GS1).</b>	
<b>GTIN</b>	<b>1-1</b>	<b>GTIN article identification code.</b>	
<b>Material code</b>	<b>0-5</b>	<b>The code of material the item is composed by.</b>	<b>ISO code</b>
<b>Material percentage</b>	<b>0-5</b>	<b>The percentage of each material the item is composed by.</b>	
<b>Packing height</b>	<b>0-1</b>	<b>The packing height in millimeter (MMT).</b>	
<b>Packing length</b>	<b>0-1</b>	<b>The packing length in millimeter (MMT).</b>	
<b>Packing width</b>	<b>0-1</b>	<b>The packing width in millimeter (MMT).</b>	

Name (not XML tag)	Occurrence	Description	Type details (Type of coding, elements)
Picture file	0-1	A picture of the article (the URL of the image file).	
Product group	0-n	Associates the item with a commodity classifying system and the classification(s) according to it (for example: EAS, FEDAS, DTB, GS1,...).	
Product group @Product group codes's owner	1-1	The name of the agency that maintains the list of product group codes.	
Quality	0-1	Textual description of the article quality.	
Quantity per packing	0-1	The quantity per packing (the measurement unit should be specified).	
Quantity per packing @Measurement unit	0-1	The unit of the "Quantity per packing".	Code list
Receipt text	0-1	Short version of article name to be printed on the consumers receipt.	
Size code	0-n	The size code assigned according to a standard size coding system (for example: FEDAS).	
Size code @Size codes's owner	1-1	The name of the agency that maintains the list of size codes.	
Size grid code	0-n	A standard size grid code assigned according to a standard size coding system.	
Size grid code @Size grid codes's owner	1-1	The name of the agency that maintains the list of size codes.	
Style name	0-1	The name of the model/style (free text).	
Subbrand name	0-1	The subbrand name of the article.	
Supplier article number	1-1	An identifier for an item assigned by Supplier.	
Supplier color code	1-1	The color code assigned according to the Supplier's system.	
Supplier color name	0-1	The color name assigned according to Supplier's system.	
Supplier fabric code	0-1	The fabric code assigned according to Supplier's system	
Supplier product group	0-1	Associates the item with its classification(s) according to Supplier's commodity classifying system.	
Supplier product	0-1	Associates the item with its classification(s) according to Supplier's commodity classifying	

Name (not XML tag)	Occurrence	Description	Type details (Type of coding, elements)
group name		system.	
Supplier season	0-1	The season assigned according to Supplier's system.	
Supplier size	1-1	The size code assigned according to the Supplier's system.	
Supplier style code	0-1	The style code assigned according to Supplier's system.	
Supplier variant code	0-1	The variant code assigned according to Supplier's system.	
Weight	0-1	The weight of a single unit of product in grams (GRM).	
Weight @Measurement unit	1-1	The unit of the "Weight".	Code list
<b>Prices</b>	<b>0-1</b>	<b>The prices of the article associated with this catalogue line.</b>	
Effective purchase price	0-1	The effective purchase price referred to a single unit (any discounts have already been applied).	
Effective purchase price @Currency	1-1	The currency of the "Effective purchase price".	ISO code
List purchase price	0-1	The list purchase price referred to a single unit (any discounts will be applied to this price).	
List purchase price @Currency	1-1	The currency of the "List purchase price".	ISO code
Suggested retail price	0-1	The selling price that the Supplier suggests to the retailer.	
Suggested retail price @Currency	1-1	The currency of the "Suggested retail price".	ISO code

## References on the WEB

<b>Document Name</b>	Article catalogue
<b>Version</b>	2013-1
<b>XML Implementation</b>	<p>Technical guide: <a href="http://docs.oasis-open.org/ubl/os-UBL-2.0/UBL-2.0.pdf">http://docs.oasis-open.org/ubl/os-UBL-2.0/UBL-2.0.pdf</a></p> <p>XML Schema (UBL 2.0): <a href="http://docs.oasis-open.org/ubl/os-UBL-2.0/xsd/maindoc/UBL-Catalogue-2.0.xsd">http://docs.oasis-open.org/ubl/os-UBL-2.0/xsd/maindoc/UBL-Catalogue-2.0.xsd</a></p> <p>Textile Clothing Footwear use profile:</p> <ul style="list-style-type: none"> <li>PDF: <a href="http://www.moda-ml.net/ebiz-retail/repository/TCF-UseProfile/v2013-1/en/UBL-TCF-useprofile-Articlecatalogue.pdf">http://www.moda-ml.net/ebiz-retail/repository/TCF-UseProfile/v2013-1/en/UBL-TCF-useprofile-Articlecatalogue.pdf</a></li> </ul>

	<ul style="list-style-type: none"> <li>HTLM: <a href="http://www.moda-ml.net/ebiz-retail/repository/TCF-UseProfile/v2013-1/en/UBL-TCF-useprofile-Articlecatalogue.html">http://www.moda-ml.net/ebiz-retail/repository/TCF-UseProfile/v2013-1/en/UBL-TCF-useprofile-Articlecatalogue.html</a></li> </ul>
<b>EDI Implementation</b>	<a href="http://wwwa.pranke.com/en/services/wwsprofil/index.htm">http://wwwa.pranke.com/en/services/wwsprofil/index.htm</a>
<b>Sample instances</b>	<b>of</b> <a href="http://www.moda-ml.net/ebiz-retail/repository/istanze/v2013-1/en/DI511-059a-v1-ArticleCatalogue.xml">http://www.moda-ml.net/ebiz-retail/repository/istanze/v2013-1/en/DI511-059a-v1-ArticleCatalogue.xml</a>

## B.2. Document Order

Source: UBL and TexWeave/WWSProfil

### Scope

The order message is used by the retailer function to order goods. An order is always meant for one location and one date. In case of CRP (the only use of the order message inside our scenarios) it is the weekly order for the replenishment of a certain shop.

The mandatory fields are absolutely necessary for this purpose. All other information should be provided if it is available without big effort.

### Data model details

List of information blocks:

Name (not XML tag)	Occurrence	Description
HEADER	1-1	Each information contained in this part is referred to the whole document.
LINE/POSITION	1-N	Order line.

List of elements (alphabetically ordered) of HEADER:

Name (not XML tag)	Occurrence	Description	Type details (Type of coding, elements)
Customer reference	0-1	A reference applied to the document by the order issuer (Customer) to be send back in all other messages related to this order and maybe printed on the papers related to the order (for example, Delivery note).	
Document date	1-1	The date on which the Order was issued.	
Document function	0-1	The function performed by the present message with regards to the transmission (it is original when <i>false</i> , otherwise is a copy).	Boolean
Document number	1-1	An identifier for the Order assigned by the order issuer (Customer).	
Note	0-1	Free-form text (note or similar information) applying to the document.	
Number of lines	0-1	The number of lines in the document.	
Order currency	1-1	The currency that is used for prices in the Order.	ISO code
Order type	1-1	Order type. <i>It can be:</i> <i>BAS:</i> basic order; <i>NOS:</i> replenishment; <i>SEA:</i> season preoder; <i>SEB:</i> season reorder; <i>OOS:</i> out-of-stock order.	Code list

Name (not XML tag)	Occurrence	Description	Type details (Type of coding, elements)
<b>Additional document reference</b>	0-n	References of any document associated to the Order that are not provided explicitly in another document reference element.	
Document type	0-1	A description of the document (for example 'Receiving Advice').	
Issue date	0-1	The date on which the associated document was issued.	YYYY-MM-DD
Number	1-1	The identifier of the document.	
<b>Allowance</b>	0-n	An allowance/discount applied to the Order as a whole (this group of information must be repeated for each allowance).	
Amount	1-1	The allowance amount.	
Amount @Currency	1-1	The currency that is used for the "Amount".	ISO code
Reason	0-1	The reason due to the allowance is.	
<b>Charge</b>	0-n	A charge/cost applied to the Order as a whole (this group of information must be repeated for each charge).	
Amount	1-1	The charge amount.	
Amount @Currency	1-1	The currency that is used for the "Amount".	ISO code
Reason	0-1	The reason due to the charge is.	
<b>Contract reference</b>	0-1	References of the Contract associated to this Order.	
Issue date	0-1	The issue date of the Contract.	YYYY-MM-DD
Number	1-1	The identifier of the Contract.	
<b>Customer</b>	1-1	Details of the Customer (the legal buyer of goods).	
Address	0-1	The full address of the place where the Customer's physical location is (street name, city name, post code, country subdivision, country).	
Contact	0-1	A customer's contact for purchasing.	
GLN	1-1	The GLN code related to the Customer's address (normally the headquarter of the Customer).	
Legal entity	0-1	Customer legal registration name and identifier.	
Name	0-1	The full name of the Customer.	
VAT number	0-1	The identifier assigned for tax purposes to the Customer by the taxation authority.	
<b>Delivery</b>	1-1	Details about the delivery.	
Address	0-1	The address of the place where the goods will be physically brought to by the Supplier or his agent.	
Delivery date/period	1-1	The date or the period for delivery.	
GLN	1-1	The GLN code related to the address.	
<b>Invoicee</b>	1-1	Details of the legal recipient of the Invoice (who pays the Invoice).	
Address	0-1	The full address of the of the place where the	

Name (not XML tag)	Occurrence	Description	Type details (Type of coding, elements)
		Invoicee's physical location is (street name, city name, post code, country subdivision, country).	
GLN	1-1	The GLN code related to the Invoicee's address.	
Legal entity	0-1	Invoicee legal registration name and identifier.	
Name	0-1	The full name of the Invoicee.	
VAT number	0-1	The identifier assigned for tax purposes to the Invoicee by the taxation authority.	
<b>Supplier</b>	<b>1-1</b>	<b>Details of the Supplier.</b>	
Address	0-1	The full address of the place where the Supplier's physical location is (street name, city name, post code, country subdivision, country).	
Contact	0-1	A Supplier contact for sales.	
GLN	1-1	The GLN code related to the Supplier's address.	
Legal entity	0-1	Supplier legal registration name and identifier.	
Name	0-1	The full name of the Supplier.	
VAT number	0-1	The identifier assigned for tax purposes to the Supplier by the taxation authority.	
<b>Total amounts</b>	<b>0-1</b>	<b>Details about the amounts expected the Invoice.</b>	
Line total amount	0-1	Sum of line amounts in the document.	
Line total amount @Currency	1-1	The currency that is used for the "Line total amount".	ISO code
Payable amount	1-1	The total amount to be paid.	
Payable amount @Currency	1-1	The currency that is used for the "Payable amount".	ISO code
Taxable amount	0-1	The net amount to which the tax percent (rate) is applied to calculate the tax amount.	
Taxable amount @Currency	1-1	The currency that is used for the "Taxable amount".	ISO code
Tax total	0-1	The tax total amount expected in the Invoice.	
Tax total @Currency	1-1	The currency that is used for the "Tax total".	ISO code
Rounding amount	0-1	Any rounding (positive or negative) of the "Total amount" added to the invoice to produce a rounded invoice total.	
Rounding amount @Currency	1-1	The currency that is used for the "Rounding".	ISO code
Total amount	0-1	The total value including taxes.	
Total amount @Currency	1-1	The currency that is used for the "Total amount".	ISO code
<b>Transaction conditions</b>	<b>0-1</b>	<b>Detail about the condition under which the Order is issued.</b>	
Back order	0-1	It establishes if the document has to be wholly	Boolean

Name (not XML tag)	Occurrence	Description	Type details (Type of coding, elements)
handling		settled ( <i>false</i> ), or if the Supplier can send only what is available ( <i>true</i> ) and cancel the missing quantities and articles.	
Delivery date fix	0-1	The date by which the order can be cancelled (if not delivered).	YYYY-MM-DD
Delivery Terms	0-1	Specification of the terms of trade (INCOTERMS).	
<b>Ultimate consignee</b>	<b>1-1</b>	<b>Details of the Ultimate consignee (the place inside the property of the retailer where the goods will be finally meant for. The Supplier isn't involved in this transport).</b>	
Address	0-1	The full address of the place is (street name, city name, post code, country subdivision, country).	
GLN	1-1	GLN code of the place.	

List of the elements (simple ones alphabetically ordered, followed by aggregated ones alphabetically ordered) of the LINE:

Name (not XML tag)	Occurrence	Description	Type details (Type of coding, elements)
Line number	1-1	An unique identifier for the order line.	
Order quantity	1-1	The ordered quantity of items for the order line (the measurement unit should be specified).	
Order quantity @Measurement unit	0-1	The measurement unit of the "Order quantity".	Code list
<b>Allowance</b>	<b>0-n</b>	<b>An allowance/discount applied to the order price related this order line (this group of information must be repeated for each allowance).</b>	
Amount	1-1	The allowance amount.	
Amount @Currency	1-1	The currency that is used for the "Amount".	ISO code
Reason	0-1	The reason due to the allowance is.	
<b>Article</b>	<b>1-1</b>	<b>Details about the article associated to this order line.</b>	
GTIN	1-1	GTIN article identification code.	
Label text	0-5	The text that has to be printed on the label.	
Name	0-1	The name given to the article.	
<b>Charge</b>	<b>0-n</b>	<b>A charge/cost applied to the order price related this order line (this group of information must be repeated for each charge).</b>	
Amount	1-1	The charge amount.	
Amount @Currency	1-1	The currency that is used for the "Amount".	ISO code
Reason	0-1	The reason due to the charge is.	

Name (not XML tag)	Occurrence	Description	Type details (Type of coding, elements)
<b>Prices</b>	<b>0-1</b>	<b>The prices of the article associated with this order line.</b>	
Label price	0-1	The price to have be printed on the label (the selling price that will be applied by the retailer).	
Label price @Currency	1-1	The currency that is used for the "Label price".	ISO code
Order price	0-1	The purchase price applied by the Supplier to the Buyer (allowances and charges are included, Vat is excluded). It's referred to a single unit.	
Order price @Currency	1-1	The currency of the "Order price".	ISO code

## References on the WEB

<b>Document Name</b>	Order
<b>Version</b>	2013-1
<b>XML Implementation</b>	<p>Technical guide: <a href="http://docs.oasis-open.org/ubl/os-UBL-2.0/UBL-2.0.pdf">http://docs.oasis-open.org/ubl/os-UBL-2.0/UBL-2.0.pdf</a></p> <p>XML Schema (UBL 2.0): <a href="http://docs.oasis-open.org/ubl/os-UBL-2.0/xsd/maindoc/UBL-Order-2.0.xsd">http://docs.oasis-open.org/ubl/os-UBL-2.0/xsd/maindoc/UBL-Order-2.0.xsd</a></p> <p>Textile Clothing Footwear use profile:</p> <ul style="list-style-type: none"> <li>• PDF: <a href="http://www.moda-ml.net/ebiz-retail/repository/TCF-UseProfile/v2013-1/en/UBL-TCF-useprofile-Order.pdf">http://www.moda-ml.net/ebiz-retail/repository/TCF-UseProfile/v2013-1/en/UBL-TCF-useprofile-Order.pdf</a></li> <li>• HTML: <a href="http://www.moda-ml.net/ebiz-retail/repository/TCF-UseProfile/v2013-1/en/UBL-TCF-useprofile-Order.html">http://www.moda-ml.net/ebiz-retail/repository/TCF-UseProfile/v2013-1/en/UBL-TCF-useprofile-Order.html</a></li> </ul>
<b>EDI Implementation</b>	<a href="http://wwwa.pranke.com/en/services/wwsprofil/index.htm">http://wwwa.pranke.com/en/services/wwsprofil/index.htm</a>
<b>Sample instances</b>	of <a href="http://www.moda-ml.net/ebiz-retail/repository/istanze/v2013-1/en/DI511-059I-v1-Order.xml">http://www.moda-ml.net/ebiz-retail/repository/istanze/v2013-1/en/DI511-059I-v1-Order.xml</a>

### B.3. Document Despatch Advice Delivery Based

Source: UBL and TexWeave/WWSProfil

#### Scope

The despatch advice message has the purpose to provide the necessary information about a delivery sent by the supplier function in advance of the delivery.

In the “despatch advice delivery based” message the despatched items are organized in despatch lines to facilitate the checking against the Order.

The message can include information related to the single item identification (for example for traceability purpose), such as the EPC number used in RFID.

The mandatory fields are absolutely necessary for this purpose. All other information should be provided if it is available without big effort.

#### Data model details

List of information blocks:

Name (not XML tag)	Occurrence	Description
HEADER	1-1	Each information contained in this part is referred to the whole document.
LINE/POSITION	1-N	Despatch advice line.

List of elements (alphabetically ordered) of HEADER:

Name (not XML tag)	Occurrence	Description	Type details (Type of coding, elements)
Document date	1-1	The date on which the Despatch Advice was issued.	YYYY-MM-DD
Document function	0-1	The function performed by the present message with regards to the transmission (it is original when false, otherwise is a copy).	Boolean
Document number	1-1	An identifier for the Despatch Advice assigned by the issuer.	
Note	0-1	Free-form text (note or similar information) applying to the document.	
Number of lines	0-1	The number of lines in the document.	
<b>Customer</b>	<b>1-1</b>	<b>Details of the Customer (the legal buyer of goods).</b>	
Address	0-1	The full address of the place where the Customer's physical location is (street name, city name, post code, country subdivision, country).	
Contact	0-1	A customer contact for this despatch.	
GLN	1-1	The GLN code related to the Customer's address	

Name (not XML tag)	Occurrence	Description	Type details (Type of coding, elements)
		(normally the headquarter of the Customer).	
Name	0-1	The full name of the Customer.	
<b>Delivery</b>	<b>1-1</b>	<b>Details about the delivery.</b>	
Address	0-1	The full address of place where the goods will be physically brought to by the Supplier or his agent.	
GLN	1-1	The GLN code related to the address.	
<b>Goods receiver party</b>	<b>0-1</b>	<b>Details about the Goods receiver party (the party that will receive the goods).</b>	
Address	0-1	The full address of place where the Goods receiver party's physical location is (street name, city name, post code, country subdivision, country).	
Contact	0-1	A contact of the goods receiver party.	
GLN	0-1	The GLN code related to the Goods receiver party's address.	
Name	0-1	The full name of the Goods receiver party.	
<b>Order reference</b>	<b>1-1</b>	<b>References of the Order associated to this dispatch</b>	
Customer order number	1-1	The Order identifier assigned by the Customer.	
Customer reference	0-1	A reference applied to the Order by the Customer.	
Issue date	0-1	The date on which the Order was issued.	YYYY-MM-DD
Supplier order number	1-1	The Order identifier assigned by the Supplier.	
<b>Shipment</b>	<b>1-1</b>	<b>Information about the shipment this dispatch of goods is related to (a shipment is an identifiable collection of one or more goods items to be transported between the Supplier party and the Customer party. It can be transported in different consignments (e.g., split for logistical purposes)).</b>	
Consignment identifier	1-1	An identifier for the consignment associated to this shipment.	
Despatch date	1-1	The actual despatch (pick-up) date.	YYYY-MM-DD
Gross weight	0-1	The total weight of the shipment including packaging.	
Gross weight @Measurement unit	0-1	The measurement unit of the "Gross weight".	Code list
Gross volume	0-1	The total volume of the shipment including packaging.	
Gross volume @Measurement unit	0-1	The measurement unit of the "Gross volume".	Code list
Identifier	1-1	The shipment identifier.	
Number of packages	1-1	Count of the number of pieces of transport handling equipment in a shipment, such as pallets, boxes, and cases.	

Name (not XML tag)	Occurrence	Description	Type details (Type of coding, elements)
Packing type	0-1	The type of the transport handling units, expressed as a code (pallet, package, ...).	Code list
Total quantity	0-1	The total despatched quantity (the measurement unit should be specified).	
Total quantity @Measurement unit	0-1	The measurement unit of the "Total quantity".	Code list
<b>Carrier</b>	<b>0-1</b>	<b>Details of the party that handles the delivery of the despatched shipment.</b>	
Identifier	0-1	GLN code of the place where the Carrier's physical location is (normally the headquarter of the Customer).	
Name	0-1	The full name of the Carrier.	
<b>Supplier</b>	<b>1-1</b>	<b>Details of the Supplier (he is always the party where goods were collected from).</b>	
Address	0-1	The full address of the place where the Supplier's physical location is (street name, city name, post code, country subdivision, country).	
Contact	0-1	A Supplier contact for this despatch.	
GLN	1-1	The GLN code related to the Supplier's address .	
Name	0-1	The full name of the Supplier.	
<b>Ultimate consignee</b>	<b>1-1</b>	<b>Details of the Ultimate consignee (the place inside the property of the retailer where the goods will be finally meant for. The Supplier isn't involved in this transport).</b>	
Address	0-1	The full address of the place (street name, city name, post code, country subdivision, country)..	
GLN	1-1	GLN code of the place.	

List of the elements (simple ones alphabetically ordered, followed by aggregated ones alphabetically ordered) of the LINE:

Name (not XML tag)	Occurrence	Description	Type details (Type of coding, elements)
Back order notification	0-1	If a quantity variance occurs, this field states if a further split delivery can be expected (it values "yes") or not (it values "no").	
Despatched quantity	1-1	The despatched quantity for the article this line is related to (the measurement unit should be specified).	
Despatched quantity @Measurement unit	0-1	The measurement unit of the "Despatched quantity".	Code list

Name (not XML tag)	Occurrence	Description	Type details (Type of coding, elements)
Line number	1-1	An unique identifier for the despatch line.	
Order line reference	1-1	The identifier (assigned by Customer) of an order line associated to this despatch line.	
Quantity variance	0-1	The difference between ordered quantity and total delivered quantity, which is the sum of the current quantity and maybe former split deliveries (the measurement unit should be specified).	
Quantity variance @Measurement unit	0-1	The measurement unit of the "Quantity variance".	Code list
<b>Article</b>	<b>1-1</b>	<b>Details about the article associated to this despatch line.</b>	
Name	0-1	The name given to the article.	
GTIN	1-1	GTIN article identification code.	
Producer's GLN	0-1	GLN code of the place where the Producer's physical location is (used only if the Producer isn't the Supplier).	
<b>Trace info</b>	<b>0-n</b>	<b>Information used for tracing one or more item instances. The block is repeated for each instance.</b>	
Chip identifier	0-1	The registration identifier of an item instance. Example: the value of the serial TID (Tag Identifier) of the chip.	
Chip identifier @schemeID	0-1	The identifier for the registration scheme. Example: "TID".	
Item identifier	1-1	A URI identifier used for tracing an item instance. Example: EPC SGTIN serial number written on the RFID (e.g. urn:epc:id:sgtin:0614141.107346.2018).	
Item identifier @schemeID	0-1	The identifier for the trace scheme. For example "EPC SGTIN-96" (that is considered the default)	

## References on the WEB

<b>Document Name</b>	Despatch Advice Delivery Based
<b>Version</b>	2013-1
<b>XML Implementation</b>	<p>Technical guide: <a href="http://docs.oasis-open.org/ubl/os-UBL-2.0/UBL-2.0.pdf">http://docs.oasis-open.org/ubl/os-UBL-2.0/UBL-2.0.pdf</a></p> <p>XML Schema (UBL 2.0): <a href="http://docs.oasis-open.org/ubl/os-UBL-2.0/xsd/maindoc/UBL-DespatchAdvice-2.0.xsd">http://docs.oasis-open.org/ubl/os-UBL-2.0/xsd/maindoc/UBL-DespatchAdvice-2.0.xsd</a></p> <p>Textile Clothing Footwear use profile:</p> <ul style="list-style-type: none"> <li>PDF: <a href="http://www.moda-ml.net/ebiz-retail/repository/TCF-UseProfile/v2013-1/en/UBL-TCF-useprofile-DespatchAdviceDeliveryBased.pdf">http://www.moda-ml.net/ebiz-retail/repository/TCF-UseProfile/v2013-1/en/UBL-TCF-useprofile-DespatchAdviceDeliveryBased.pdf</a></li> </ul>

	<ul style="list-style-type: none"> <li>HTLM: <a href="http://www.moda-ml.net/ebiz-retail/repository/TCF-UseProfile/v2013-1/en/UBL-TCF-useprofile-DespatchAdviceDeliveryBased.html">http://www.moda-ml.net/ebiz-retail/repository/TCF-UseProfile/v2013-1/en/UBL-TCF-useprofile-DespatchAdviceDeliveryBased.html</a></li> </ul>
<b>EDI Implementation</b>	<a href="http://wwwa.pranke.com/en/services/wwsprofil/index.htm">http://wwwa.pranke.com/en/services/wwsprofil/index.htm</a>
<b>Sample instances</b>	of <a href="http://www.moda-ml.net/ebiz-retail/repository/istanze/v2013-1/en/DI511-059c-v2-DespatchAdviceDeliveryBased.xml">http://www.moda-ml.net/ebiz-retail/repository/istanze/v2013-1/en/DI511-059c-v2-DespatchAdviceDeliveryBased.xml</a>

## B.4. Document Despatch Advice Package Based

Source: UBL and TexWeave/WWSProfil

### Scope

The despatch advice message has the purpose to provide the necessary information about a delivery sent by the supplier function in advance of the delivery.

In the “despatch advice package based” message the despatched items are organized in Transport Handling Logistic Unit to facilitate the checking against the Transport Handling Units (and contained items) that will be received.

The message can include information related to the single item identification (for example for traceability purpose), such as the EPC number used in RFID.

The mandatory fields are absolutely necessary for this purpose. All other information should be provided if it is available without big effort.

### Data model details

List of information blocks:

Name (not XML tag)	Occurrence	Description
HEADER	1-1	Each information contained in this part is referred to the whole document.
LINE/POSITION	1-N	Despatch advice line.

List of elements (alphabetically ordered) of HEADER:

Name (not XML tag)	Occurrence	Description	Type details (Type of coding, elements)
Document date	1-1	The date on which the Despatch Advice was issued.	YYYY-MM-DD
Document function	0-1	The function performed by the present message with regards to the transmission (it is original when false, otherwise is a copy).	Boolean
Document number	1-1	An identifier for the Despatch Advice assigned by the issuer.	
Note	0-1	Free-form text (note or similar information) applying to the document.	
Number of lines	0-1	The number of lines in the document.	
<b>Customer</b>	<b>1-1</b>	<b>Details of the Customer (the legal buyer of goods).</b>	
Address	0-1	The full address of the place where the Customer's physical location is (street name, city name, post code, country subdivision, country).	
Contact	0-1	A customer contact for this despatch.	
GLN	1-1	The GLN code related to the Customer's address (normally the headquarter of the customer).	
Name	0-1	The full name of the Customer.	

Name (not XML tag)	Occurrence	Description	Type details (Type of coding, elements)
<b>Delivery</b>	<b>1-1</b>	<b>Details about the delivery.</b>	
Address	0-1	The address of place where the goods will be physically brought to by the Supplier or his agent (street name, city name, post code, country subdivision, country).	
GLN	1-1	The GLN code related to the address.	
<b>Goods receive party</b>	<b>0-1</b>	<b>Details about the Goods receive party (the party that will receive the goods).</b>	
Address	0-1	The full address of place where the goods receive party's physical location is (street name, city name, post code, country subdivision, country).	
Contact	0-1	A contact for the goods receiver party.	
GLN	0-1	The GLN code related to the the Goods receive party's address.	
Name	0-1	The full name of the Goods receiver party.	
<b>Order reference</b>	<b>1-1</b>	<b>References of the Order associated to this despatch.</b>	
Customer order number	1-1	The Order identifier assigned by the Customer.	
Customer reference	0-1	A reference applied to the Order by the Customer.	
Issue date	0-1	The date on which the Order was issued.	YYYY-MM-DD
Supplier order number	1-1	The Order identifier assigned by the Supplier.	
<b>Shipment</b>	<b>1-1</b>	<b>Details about the shipment that the document is related to (a shipment is an identifiable collection of one or more goods items to be transported between the Supplier party and the Customer party. It can be transported in different consignments (e.g., split for logistical purposes)).</b>	
Consignment identifier	1-1	An identifier for the consignment associated to this shipment.	
Despatch date	1-1	The actual despatch (pick-up) date.	YYYY-MM-DD
Gross weight	0-1	The total weight of the shipment including packaging.	
Gross weight @Measurement unit	0-1	The measurement unit of the "Gross weight".	Code list
Gross volume	0-1	The total volume of the shipment including packaging.	
Gross volume @Measurement unit	0-1	The measurement unit of the "Gross volume".	Code list
Identifier	1-1	The shipment identifier.	

Name (not XML tag)	Occurrence	Description	Type details (Type of coding, elements)
<b>Total quantity</b>	0-1	The total despatched quantity (the measurement unit should be specified).	
Total quantity @Measurement unit	0-1	The measurement unit of the "Total quantity".	Code list
<b>Carrier</b>	0-1	Details of the party that handles the delivery of the despatched shipment.	
Identifier	0-1	An identifier for the Carrier.	
Name	0-1	The full name of the Carrier.	
<b>Supplier</b>	1-1	Details of the Supplier (he is always the party where goods were collected from).	
Address	0-1	T The full address of the place where the Supplier's physical location is (street name, city name, post code, country subdivision, country).	
Contact	0-1	A Supplier contact for this despatch.	
GLN	1-1	The GLN code related to the Supplier's address. The GLN code related to the Supplier's address.	
Name	0-1	The full name of the Supplier.	
<b>Transport Handling Logistic Unit</b>	1-n	Information related to a Transport Handling Logistic Unit.	
Packing type	0-1	The type of each transport handling unit, expressed as a code (pallet, package, ...).	Code list
SSCC	1-1	Serial Shipping Container Code (it is a unique identifier for the logistic unit).	
Weight	0-1	The weight of the logistic unit (the measurement unit have to be specified).	
Weight @Measurement unit	1-1	The measurement unit of the "Weight".	Code list
<b>Despatch Line Reference</b>	1-n	Information related to a despatch advice line in this document. The number of occurrences of this element is the same of the number of despatch lines related to this logistic unit.	
Identifier	1-1	The identifier of the despatch line.	
GTIN	1-1	The identifier of the item related to this despatch line.	
Order line number	1-n	The reference to an order line related to this despatch line.	
<b>Ultimate consignee</b>	1-1	The place inside the property of the retailer where the goods will be finally meant for. The Supplier isn't involved in this transport.	
Address	0-1	The full address of the place (street name, city name, post code, country subdivision, country).	
GLN	1-1	GLN code of the place.	

List of the elements (simple ones alphabetically ordered, followed by aggregated ones alphabetically ordered) of the LINE:

Name (not XML tag)	Occurrence	Description	Type details (Type of coding, elements)
Back order notification	0-1	If a quantity variance occurs, this field states if a further split delivery can be expected (it values "yes") or not (it values "no").	
Despatched quantity	1-1	The despatched quantity for the article this line is related to (the measurement unit should be specified).	
Despatched quantity @Measurement unit	0-1	The measurement unit of the "Despatched quantity".	Code list
Line number	1-1	An unique identifier for the despatch line.	
Order line reference	1-1	The identifier (assigned by Customer) of an order line associated to this despatch line.	
Quantity variance	0-1	The difference between ordered quantity and total delivered quantity, which is the sum of the current quantity and maybe former split deliveries (the measurement unit should be specified).	
Quantity variance @Measurement unit	0-1	The measurement unit of the "Quantity variance".	Code list
<b>Article</b>	<b>1-1</b>	<b>Details about the article associated to this despatch line.</b>	
GTIN	1-1	GTIN article identification code.	
Producer's GLN	0-1	GLN code of the place where the Producer's physical location is (used only if the Producer isn't the Supplier).	
Name	0-1	The name given to the article.	
<b>Trace info</b>	<b>0-n</b>	<b>Information used for tracing one or more item instances. The block is repeated for each instance.</b>	
Chip identifier	0-1	The registration identifier of an item instance. Example: the value of the serial TID (Tag Identifier) of the chip.	
Chip identifier @schemeID	0-1	The identifier for the registration scheme. Example: "TID".	
Item identifier	1-1	A URI identifier used for tracing an item instance. Example: EPC SGTIN serial number written on the RFID (e.g. urn:epc:id:sgtin:0614141.107346.2018).	
Item identifier @schemeID	0-1	The identifier for the trace scheme. Example "EPC SGTIN-96" (that is considered the default)	

## References on the WEB

<b>Document Name</b>	Despatch Advice Package Based
<b>Version</b>	2013-1
<b>XML Implementation</b>	<p>Technical guide: <a href="http://docs.oasis-open.org/ubl/os-UBL-2.0/UBL-2.0.pdf">http://docs.oasis-open.org/ubl/os-UBL-2.0/UBL-2.0.pdf</a></p> <p>XML Schema (UBL 2.0): <a href="http://docs.oasis-open.org/ubl/os-UBL-2.0/xsd/maindoc/UBL-DespatchAdvice-2.0.xsd">http://docs.oasis-open.org/ubl/os-UBL-2.0/xsd/maindoc/UBL-DespatchAdvice-2.0.xsd</a></p> <p>Textile Clothing Footwear use profile:</p> <ul style="list-style-type: none"> <li>• PDF: <a href="http://www.moda-ml.net/ebiz-retail/repository/TCF-UseProfile/v2013-1/en/UBL-TCF-useprofile-DespatchAdvicePackageBased.pdf">http://www.moda-ml.net/ebiz-retail/repository/TCF-UseProfile/v2013-1/en/UBL-TCF-useprofile-DespatchAdvicePackageBased.pdf</a></li> <li>• HTML: <a href="http://www.moda-ml.net/ebiz-retail/repository/TCF-UseProfile/v2013-1/en/UBL-TCF-useprofile-DespatchAdvicePackageBased.html">http://www.moda-ml.net/ebiz-retail/repository/TCF-UseProfile/v2013-1/en/UBL-TCF-useprofile-DespatchAdvicePackageBased.html</a></li> </ul>
<b>EDI Implementation</b>	<a href="http://wwwa.pranke.com/en/services/wwsprofil/index.htm">http://wwwa.pranke.com/en/services/wwsprofil/index.htm</a>
<b>Sample instances</b>	of <a href="http://www.moda-ml.net/ebiz-retail/repository/istanze/v2013-1/en/DI511-059d-v2-DespatchAdvicePackageBased.xml">http://www.moda-ml.net/ebiz-retail/repository/istanze/v2013-1/en/DI511-059d-v2-DespatchAdvicePackageBased.xml</a>

## B.5. Document Receiving Advice Delivery Based

Source: UBL and TexWeave/WWSProfil

### Scope

The receiving advice message is sent from the retailer function to the supplier function to announce that the ordered goods have been received.

In the “receiving advice delivery based” message the received items are described in receipt lines and there is no information about Transport Handling Units.

The message can include information related to the single item identification (for example for traceability purpose), such as the EPC number used in RFID. The mandatory fields are absolutely necessary for this purpose. All other information should be provided if it is available without big effort.

### Data model details

List of information blocks:

Name (not XML tag)	Occurrence	Description
HEADER	1-1	Each information contained in this part is referred to the whole document.
LINE/POSITION	1-N	Receipt line.

List of elements (alphabetically ordered) of HEADER:

Name (not XML tag)	Occurrence	Description	Type details (Type of coding, elements)
Document date	1-1	The date on which the Receipt Advice was issued.	YYYY-MM-DD
Document function	0-1	The function performed by the present message with regards to the transmission (it is original when false, otherwise is a copy).	Boolean
Document number	1-1	An identifier for the Receiving Advice assigned by the issuer.	
Note	0-1	Free-form text (note or similar information) applying to the document.	
Number of lines	0-1	The number of lines in the document.	Code list
<b>Customer</b>	<b>1-1</b>	<b>Details of the Customer (the legal buyer of goods).</b>	
Address	0-1	The full address of the place where the Customer's physical location is (street name, city name, post code, country subdivision, country).	
Contact	0-1	A customer contact for this receiving.	
GLN	1-1	The GLN code related to the Customer's address (normally the headquarter of the Customer).	

Name (not XML tag)	Occurrence	Description	Type details (Type of coding, elements)
Name	0-1	The full name of the Customer.	
<b>Delivery</b>	<b>1-1</b>	<b>Details about the delivery.</b>	
Address	0-1	The full address of place where the goods have been physically brought to by the Supplier or his agent (street name, city name, post code, country subdivision, country).	
Date	0-1	The actual date of the delivery.	YYYY-MM-DD
GLN	1-1	The GLN code related to the address.	
<b>Delivery note reference</b>	<b>1-1</b>	<b>References of the Delivery note associated to this to this receipt.</b>	
Issue date	0-1	The date on which the Delivery Note.	YYYY-MM-DD
Number	1-1	The identifier of the Delivery Note.	
<b>Despatch advice reference</b>	<b>0-1</b>	<b>References of the Despatch Advice associated to this to this receipt.</b>	
Issue date	0-1	The date on which the Despatch Advice was issued.	YYYY-MM-DD
Number	1-1	The identifier of the Despatch Advice.	
<b>Goods receive party</b>	<b>0-1</b>	<b>Details about the Goods receive party (the party is reporting).</b>	
Address	0-1	The full address of place where the Goods receive party's physical location is (street name, city name, post code, country subdivision, country).	
Contact	0-1	A contact for the goods receiver party.	
GLN	0-1	The GLN code related to the the Goods receive party's address.	
Name	0-1	The full name of the Goods receiver party.	
<b>Order reference</b>	<b>1-1</b>	<b>References of the Order associated to this receipt of goods.</b>	
Customer number	1-1	The Order identifier assigned by the Customer.	
Issue date	0-1	The date on which the Order was issued.	YYYY-MM-DD
Supplier number	0-1	The Order identifier assigned by the Supplier.	
<b>Shipment</b>	<b>1-1</b>	<b>Information about the shipment this receipt of goods is related to (a shipment is an identifiable collection of one or more goods items to be transported between the Supplier party and the Customer party. It can be transported in different consignments (e.g., split for logistical purposes)).</b>	
Consignment identifier	1-1	An identifier for the consignment associated to this shipment.	
Identifier	1-1	The shipment identifier.	
Number of packages	1-1	Count of the number of pieces of transport handling equipment in a shipment, such as pallets, boxes, and cases.	
Packing type	0-1	The type of each transport handling unit, expressed as a code (pallet, package, ...).	Code list

Name (not XML tag)	Occurrence	Description	Type details (Type of coding, elements)
Total quantity	0-1	Total received quantity (the measurement unit should be specified).	
Total quantity @Measurement unit	0-1	The measurement unit of the "Total quantity".	Code list
<b>Supplier</b>	<b>1-1</b>	<b>Details of the Supplier (he is always the party where goods were collected from).</b>	
Address	0-1	The full address of the place where the Supplier's physical location is (street name, city name, post code, country subdivision, country).	
Contact	0-1	A Supplier contact for this shipment.	
GLN	1-1	The GLN code related to the Supplier's address	
Name	0-1	The full name of the Supplier.	
<b>Ultimate consignee</b>	<b>1-1</b>	<b>Details of the Ultimate consignee (the place inside the property of the retailer where the goods have been finally meant for).</b>	
Address	0-1	The full address of the place is (street name, city name, post code, country subdivision, country).	
GLN	1-1	GLN code of the place.	

List of the elements (simple ones alphabetically ordered, followed by aggregated ones alphabetically ordered) of the LINE:

Name (not XML tag)	Occurrence	Description	Type details (Type of coding, elements)
Goods received date	1-1	The date of the real goods in process (physical check, etc.).	YYYY-MM-DD
Goods received quantity	1-1	The actual received quantity for the article this line is related to (the measurement unit should be specified).	
Goods received quantity @Measurement unit	0-1	The measurement unit of the "Goods received quantity".	Code list
Line number	1-1	An unique identifier for the receipt line.	
Short quantity	0-1	The difference between the quantity reported despatched and the quantity actual received (the measurement unit should be specified).	
Short quantity @Measurement unit	0-1	The measurement unit of the "Short quantity".	Code list
<b>Article</b>	<b>1-1</b>	<b>Details about the article associated to this receipt line.</b>	
GTIN	1-1	GTIN article identification code.	
Name	0-1	The name given to the article.	

Name (not XML tag)	Occurrence	Description	Type details (Type of coding, elements)
<b>Trace info</b>	<b>0-n</b>	<b>Information used for tracing one or more item instances. The block is repeated for each instance.</b>	
<b>Chip identifier</b>	<b>0-1</b>	<b>The registration identifier of an item instance. Example: the value of the serial TID (Tag Identifier) of the chip.</b>	
Chip identifier <b>@schemeID</b>	<b>0-1</b>	<b>The identifier for the registration scheme. Example: "TID".</b>	
<b>Item identifier</b>	<b>1-1</b>	<b>A URI identifier used for tracing an item instance. Example: EPC SGTIN serial number written on the RFID (e.g. urn:epc:id:sgtin:0614141.107346.2018).</b>	
Item identifier <b>@schemeID</b>	<b>0-1</b>	<b>The identifier for the trace scheme. For example "EPC SGTIN-96" (that is considered the default)</b>	

## References on the WEB

<b>Document Name</b>	Receiving Advice Delivery Based
<b>Version</b>	2013-1
<b>XML Implementation</b>	<p>Technical guide: <a href="http://docs.oasis-open.org/ubl/os-UBL-2.0/UBL-2.0.pdf">http://docs.oasis-open.org/ubl/os-UBL-2.0/UBL-2.0.pdf</a></p> <p>XML Schema (UBL 2.0): <a href="http://docs.oasis-open.org/ubl/os-UBL-2.0/xsd/maindoc/UBL-ReceiptAdvice-2.0.xsd">http://docs.oasis-open.org/ubl/os-UBL-2.0/xsd/maindoc/UBL-ReceiptAdvice-2.0.xsd</a></p> <p>Textile Clothing Footwear use profile:</p> <ul style="list-style-type: none"> <li>PDF: <a href="http://www.moda-ml.net/ebiz-retail/repository/TCF-UseProfile/v2013-1/en/UBL-TCF-useprofile-ReceivingAdviceDeliveryBased.pdf">http://www.moda-ml.net/ebiz-retail/repository/TCF-UseProfile/v2013-1/en/UBL-TCF-useprofile-ReceivingAdviceDeliveryBased.pdf</a></li> <li>HTML: <a href="http://www.moda-ml.net/ebiz-retail/repository/TCF-UseProfile/v2013-1/en/UBL-TCF-useprofile-ReceivingAdviceDeliveryBased.html">http://www.moda-ml.net/ebiz-retail/repository/TCF-UseProfile/v2013-1/en/UBL-TCF-useprofile-ReceivingAdviceDeliveryBased.html</a></li> </ul>
<b>EDI Implementation</b>	<a href="http://wwwa.pranke.com/en/services/wwsprofil/index.htm">http://wwwa.pranke.com/en/services/wwsprofil/index.htm</a>
<b>Sample instances</b>	of <a href="http://www.moda-ml.net/ebiz-retail/repository/istanze/v2013-1/en/DI511-059o-v2-ReceivingAdviceDeliveryBased.xml">http://www.moda-ml.net/ebiz-retail/repository/istanze/v2013-1/en/DI511-059o-v2-ReceivingAdviceDeliveryBased.xml</a>

## B.6. Document Receiving Advice Package Based

Source: UBL and TexWeave/WWSProfil

### Scope

The receiving advice message is sent from the retailer function to the supplier function to announce that the ordered goods have been received.

In the “receiving advice package based” message the received items are described according to their organization in received Transport Handling Units.

The message can include information related to the single item identification (for example for traceability purpose) the item traceability, such as the EPC number used in RFID.

The mandatory fields are absolutely necessary for this purpose. All other information should be provided if it is available without big effort.

### Data model details

List of information blocks:

Name (not XML tag)	Occurrence	Description
HEADER	1-1	Each information contained in this part is referred to the whole document.
LINE/POSITION	1-N	Receipt line.

List of elements (alphabetically ordered) of HEADER:

Name (not XML tag)	Occurrence	Description	Type details (Type of coding, elements)
Document date	1-1	The date on which the Receipt Advice was issued.	YYYY-MM-DD
Document function	0-1	The function performed by the present message with regards to the transmission (it is original when false, otherwise is a copy).	Boolean
Document number	1-1	An identifier for the Receiving Advice assigned by Delivery Party (the party to whom goods have been delivered).	
Note	0-1	Free-form text (note or similar information) applying to the document.	
Number of lines	0-1	The number of lines in the document.	
<b>Customer</b>	<b>1-1</b>	<b>Details of the Customer (the legal buyer of goods).</b>	
Address	0-1	The full address of the place where the Customer's physical location is mer (street name, city name, post code, country subdivision, country).	
Contact	0-1	A customer contact for this receiving.	
GLN	1-1	The GLN code related to the Customer's address	

Name (not XML tag)	Occurrence	Description	Type details (Type of coding, elements)
		(normally the headquarter of the Customer).	
Name	0-1	The full name of the Customer.	
<b>Delivery</b>	<b>1-1</b>	<b>Details about the delivery.</b>	
Address	0-1	The full address of place where the goods have been physically brought to by the Supplier or his agent (street name, city name, post code, country subdivision, country).	
Date	0-1	The actual date of the delivery.	YYYY-MM-DD
GLN	1-1	The GLN code related to the address.	
<b>Delivery note reference</b>	<b>1-1</b>	<b>References of the Delivery note associated to this receipt.</b>	
Issue date	0-1	The date on which the Delivery Note.	YYYY-MM-DD
Number	1-1	The identifier of the Delivery Note (the reference of the Delivery Note associated to this receipt).	
<b>Despatch advice reference</b>	<b>0-1</b>	<b>References of the Despatch Advice associated to this to this receipt.</b>	
Issue date	0-1	The date on which the Despatch Advice was issued.	YYYY-MM-DD
Number	1-1	The identifier of the Despatch Advice.	
<b>Goods receive party</b>	<b>1-1</b>	<b>Details about the Goods receive party (the party is reporting).</b>	
Address	0-1	The full address of place where the goods receive party's physical location is (street name, city name, post code, country subdivision, country).	
Contact	0-1	A contact of the goods receiver party.	
GLN	1-1	The GLN code related to the Goods receive party's address	
Name	0-1	The full name of the Goods receiver party.	
<b>Order reference</b>	<b>1-1</b>	<b>References of the Order associated to this receipt of goods.</b>	
Customer order number	1-1	The Order identifier assigned by the Customer.	
Issue date	0-1	The date on which the Order was issued.	
Supplier order number	0-1	The Order identifier assigned by the Supplier (the reference of the Order).	
<b>Shipment</b>	<b>1-1</b>	<b>Information about the shipment that the document is related to (a shipment is an identifiable collection of one or more goods items to be transported between the Supplier party and the Customer party. It can be transported in different consignments (e.g., split for logistical purposes)).</b>	
Consignment identifier	1-1	An identifier for the consignment associated to this shipment. (A consignment is an identifiable collection of one or more goods items to be transported between the consignor and the consignee. It may comprise more than one shipment).	
Identifier	1-1	The shipment identifier.	

Name (not XML tag)	Occurrence	Description	Type details (Type of coding, elements)
Total quantity	0-1	Total received quantity (the measurement unit should be specified).	
Total quantity @Measurement unit	0-1	The measurement unit of the "Total quantity".	Code list
<b>Supplier</b>	<b>1-1</b>	<b>Details of the Supplier is (he is always the party where goods were collected from).</b>	
Address	0-1	The full address of the place where the Supplier's physical location is (street name, city name, post code, country subdivision, country).	
Contact	0-1	A Supplier contact for this despatch.	
GLN	1-1	The GLN code related to the Supplier's address.	
Name	0-1	The full name of the Supplier.	
<b>Transport Handling Logistic Unit</b>	<b>1-n</b>	<b>Information related to a Transport Handling Logistic Unit.</b>	
Packing type	0-1	The type of each transport handling unit, expressed as a code (pallet, package, ...).	Code list
Receipt line reference	1-n	The identifier of a receipt advice line in this document. The number of occurrences of this element is the same of the number of receipt lines related to this logistic unit.	
SSCC	1-1	Serial Shipping Container Code (it is a unique identifier for the logistic unit).	
Weight	0-1	The weight of the logistic unit (the measurement unit have to be specified).	
Weight @Measurement unit	0-1	The measurement unit of the "Total quantity".	Code list
<b>Ultimate consignee</b>	<b>1-1</b>	<b>Details of the Ultimate consignee (the place inside the property of the retailer where the goods have been finally meant for. The Supplier isn't involved in this transport).</b>	
Address	0-1	The full address of the place (street name, city name, post code, country subdivision, country).	
GLN	1-1	GLN code of the place.	

List of the elements (simple ones alphabetically ordered, followed by aggregated ones alphabetically ordered) of the LINE:

Name (not XML tag)	Occurrence	Description	Type details (Type of coding, elements)
Goods received date	1-1	The date of the real goods in process (physical check, etc.).	YYYY-MM-DD

Name (not XML tag)	Occurrence	Description	Type details (Type of coding, elements)
Goods received quantity	1-1	The actual received quantity for the article this line is related to (the measurement unit should be specified).	
Goods received quantity @Measurement unit	0-1	The unit of the "Goods received quantity".	Code list
Line number	1-1	An unique identifier for the receipt line.	
Short quantity	0-1	The difference between the quantity reported despatched and the quantity actual received (the measurement unit should be specified).	
Short quantity @Measurement unit	0-1	The measurement unit of the "Short quantity".	Code list
<b>Article</b>	<b>1-1</b>	<b>Details about the article associated to this receipt line.</b>	
Name	0-1	The name given to the article.	
GTIN	1-1	GTIN article identification code.	
<b>Trace info</b>	<b>0-n</b>	<b>Information used for tracing one or more item instances. The block is repeated for each instance.</b>	
Chip identifier	0-1	The registration identifier of an item instance. Example: the value of the serial TID (Tag Identifier) of the chip.	
Chip identifier @schemeID	0-1	The identifier for the registration scheme. Example: "TID".	
Item identifier	1-1	A URI identifier used for tracing an item instance. Example: EPC SGTIN serial number written on the RFID (e.g. urn:epc:id:sgtin:0614141.107346.2018).	
Item identifier @schemeID	0-1	The identifier for the trace scheme. For example "EPC SGTIN-96" (that is considered the default)	

## References on the WEB

<b>Document Name</b>	Receiving Advice Package Based
<b>Version</b>	2013-1
<b>XML Implementation</b>	<p>Technical guide: <a href="http://docs.oasis-open.org/ubl/os-UBL-2.0/UBL-2.0.pdf">http://docs.oasis-open.org/ubl/os-UBL-2.0/UBL-2.0.pdf</a></p> <p>XML Schema (UBL 2.0): <a href="http://docs.oasis-open.org/ubl/os-UBL-2.0/xsd/maindoc/UBL-ReceiptAdvice-2.0.xsd">http://docs.oasis-open.org/ubl/os-UBL-2.0/xsd/maindoc/UBL-ReceiptAdvice-2.0.xsd</a></p> <p>Textile Clothing Footwear use profile:</p> <ul style="list-style-type: none"> <li>PDF: <a href="http://www.moda-ml.net/ebiz-retail/repository/TCF-UseProfile/v2013-1/en/UBL-TCF-useprofile-ReceivingAdvicePackageBased.pdf">http://www.moda-ml.net/ebiz-retail/repository/TCF-UseProfile/v2013-1/en/UBL-TCF-useprofile-ReceivingAdvicePackageBased.pdf</a></li> <li>HTLM: <a href="http://www.moda-ml.net/ebiz-retail/repository/TCF-">http://www.moda-ml.net/ebiz-retail/repository/TCF-</a></li> </ul>

		<a href="UseProfile/v2013-1/en/UBL-TCF-useprofile-ReceivingAdvicePackageBased.html">UseProfile/v2013-1/en/UBL-TCF-useprofile-ReceivingAdvicePackageBased.html</a>
<b>EDI Implementation</b>		<a href="http://wwwa.pranke.com/en/services/wwwprofil/index.htm">http://wwwa.pranke.com/en/services/wwwprofil/index.htm</a>
<b>Sample instances</b>	<b>of</b>	<a href="http://www.moda-ml.net/ebiz-retail/repository/istanze/v2013-1/en/DI1-059p-v2-ReceivingAdvicePackageBased.xml">http://www.moda-ml.net/ebiz-retail/repository/istanze/v2013-1/en/DI1-059p-v2-ReceivingAdvicePackageBased.xml</a>

## B.7. Document Sales Report

Source: UBL and TexWeave/WWSProfil

### Scope

The sales report message has the purpose to provide the information about the sales at a certain location, on a certain day (or period) for a certain item, with a certain price (one line per price really paid). The payload is the quantity of that item at that price. The information is used for the planning of deliveries in VMI or for the issuing of a concession invoice, if such financial model is chosen.

The message can include information related to the single item identification (for example for traceability purpose) the item traceability, such as the EPC number used in RFID..

The mandatory fields are absolutely necessary for this purpose. All other information should be provided if it is available without big effort.

### Data model details

List of information blocks:

Name (not XML tag)	Occurrence	Description
HEADER	1-1	Each information contained in this part is referred to the whole document.
LINE/POSITION	1-N	Sales report line.

List of elements (alphabetically ordered) of HEADER:

Name (not XML tag)	Occurrence	Description	Type details (Type of coding, elements)
Document date	1-1	The date on which the Sales Report was issued.	YYYY-MM-DD
Document function	0-1	The function performed by the present message with regards to the transmission (it is original when false, otherwise is a copy).	Boolean
Document number	1-1	An identifier for the Sales Report assigned by the issuer.	
Note	0-1	Free-form text (note or similar information) applying to the document.	
Sales period	1-1	The period the sales are referred to.	
Sales report currency	1-1	The currency that is used for prices in the Sales Report.	ISO code
Additional document reference	0-1	References of a document referred to in the Sales Report.	
Issue date	0-1	The date on which the associated document was issued.	YYYY-MM-DD

Name (not XML tag)	Occurrence	Description	Type details (Type of coding, elements)
Number	1-1	An identifier for the associated document assigned by issuer.	
<b>Recipient</b>	<b>1-1</b>	<b>Details of the Recipient (the party for whom the document is intended).</b>	
Address	0-1	The full address of the place where the Recipient's physical location is (street name, city name, post code, country subdivision, country).	
Contact	0-1	A recipient contact.	
GLN	1-1	The GLN code related to the Recipient's address.	
Name	0-1	The full name of the Recipient.	
<b>Sender</b>	<b>1-1</b>	<b>Details of the Sender (the party sending this document).</b>	
Address	0-1	The full address of the place where the Sender's physical location is (street name, city name, post code, country subdivision, country).	
Contact	0-1	A Sender contact.	
GLN	1-1	The GLN code related to the Sender's address.	
Name	0-1	The full name of the Sender.	

List of the elements (simple ones alphabetically ordered, followed by aggregated ones alphabetically ordered) of the LINE:

Name (not XML tag)	Occurrence	Description	Type details (Type of coding, elements)
Line number	1-1	An unique identifier for the Sales report line.	
Sales date/period	1-1	The date/period the sales are referred to.	
<b>Sales item</b>	<b>1-N</b>	<b>Information about sales in a location.</b>	
Promotion	0-1	It specifies if the article was in promotion or not.	Boolean
Sales quantity	1-1	The sales quantity (the measurement unit should be specified).	
Sales quantity @Measurement unit	0-1	The unit of the "Sales quantity".	Code list
<b>Article</b>	<b>1-1</b>	<b>Details about the article associated to this sales item</b>	
Name	0-1	The name given to the article.	
GTIN	1-1	GTIN article identification code.	
<b>Trace info</b>	<b>0-n</b>	<b>Information used for tracing one or more item instances. The block is repeated for each instance.</b>	
Chip identifier	0-1	The registration identifier of an item instance.	

Name (not XML tag)	Occurrence	Description	Type details (Type of coding, elements)
		Example: the value of the serial TID (Tag Identifier) of the chip.	
Chip identifier @schemeID	0-1	The identifier for the registration scheme. Example: "TID".	
Item identifier	1-1	A URI identifier used for tracing an item instance. Example: EPC SGTIN serial number written on the RFID (e.g. urn:epc:id:sgtin:0614141.107346.2018).	
Item identifier @schemeID	0-1	The identifier for the trace scheme. For example "EPC SGTIN-96" (that is considered the default)	
<b>Prices</b>	<b>1-1</b>	<b>The prices of the article associated with this sales report line.</b>	
Effective sales price excl. VAT	1-1	The effective sales price VAT excluded (it is referred to a single unit)	
Effective sales price excl. VAT @Currency	1-1	The currency that is used for the "Effective sales price excl. VAT".	ISO code
Effective sales price incl. VAT	1-1	The effective sales price discount and VAT included (it is referred to a single unit).	
Effective sales price incl. VAT @Currency	1-1	The currency that is used for the "Effective sales price incl. VAT".	ISO code
List sales price excl. VAT	1-1	The regular price VAT excluded.	
List sales price excl. VAT@Currency	1-1	The currency that is used for the "List sales price excl. VAT".	ISO code
List sales price incl. VAT	1-1	The regular price VAT included.	
List sales price incl. VAT@Currency	1-1	The currency that is used for the "List sales price incl. VAT".	ISO code
<b>Sales location</b>	<b>1-1</b>	<b>Information about the place where the goods have been sold.</b>	
Address	0-1	The address of the place.	
GLN	1-1	GLN code of place.	

## References on the WEB

<b>Document Name</b>	Sales report
<b>Version</b>	2013-1
<b>XML Implementation</b>	Technical guide: <a href="http://docs.oasis-open.org/ubl/os-UBL-2.0/UBL-2.0.pdf">http://docs.oasis-open.org/ubl/os-UBL-2.0/UBL-2.0.pdf</a>  XML Schema (eBIZ-TCF-v2013-1 customization of UBL 2.0): <a href="http://www.moda-ml.net/ebiz-retail/repository/schema/v2013-1/maindoc/eBiz-TCF-SalesReport.xsd">http://www.moda-ml.net/ebiz-retail/repository/schema/v2013-1/maindoc/eBiz-TCF-SalesReport.xsd</a>

	<p>Textile Clothing Footwear use profile:</p> <ul style="list-style-type: none"> <li>• PDF: <a href="http://www.moda-ml.net/ebiz-retail/repository/TCF-UseProfile/v2013-1/en/UBL-TCF-useprofile-Salesreport.pdf">http://www.moda-ml.net/ebiz-retail/repository/TCF-UseProfile/v2013-1/en/UBL-TCF-useprofile-Salesreport.pdf</a></li> <li>• HTML: <a href="http://www.moda-ml.net/ebiz-retail/repository/TCF-UseProfile/v2013-1/en/UBL-TCF-useprofile-Salesreport.html">http://www.moda-ml.net/ebiz-retail/repository/TCF-UseProfile/v2013-1/en/UBL-TCF-useprofile-Salesreport.html</a></li> </ul>
<p><b>EDI Implementation</b></p>	<p><a href="http://wwwa.pranke.com/en/services/wwsprofil/index.htm">http://wwwa.pranke.com/en/services/wwsprofil/index.htm</a></p>
<p><b>Sample instances</b></p>	<p>of <a href="http://www.moda-ml.net/ebiz-retail/repository/istanze/v2013-1/en/DI511-059r-v1-SalesReport.xml">http://www.moda-ml.net/ebiz-retail/repository/istanze/v2013-1/en/DI511-059r-v1-SalesReport.xml</a></p>

## B.8. Document Inventory Movement Report

Source: UBL and TexWeave/WWSProfil

### Scope

The inventory movement report message has the purpose to information about movement of a certain quantity of items between the locations of a retailer. The ship-to and the ship-from branch are mentioned. The information is normally provided when the items are shipped.

The message can include information related to the single item identification (for example for traceability purpose)the item traceability, such as the EPC number used in RFID.

The mandatory fields are absolutely necessary for this purpose. All other information should be provided if it is available without big effort.

### Data model details

List of information blocks:

Name (not XML tag)	Occurrence	Description
HEADER	1-1	Each information contained in this part is referred to the whole document.
LINE/POSITION	1-N	Inventory movement report line

List of elements (alphabetically ordered) of HEADER:

Name (not XML tag)	Occurrence	Description	Type details (Type of coding, elements)
Document date	1-1	The date on which the Inventory Movement Report was issued.	YYYY-MM-DD
Document function	0-1	The function performed by the present message with regards to the transmission (it is original when false, otherwise is a copy).	Boolean
Document number	1-1	An identifier for the Inventory Movement Report assigned by the issuer.	
Inventory movement date	1-1	The date when the goods are shipped from initial branch.	YYYY-MM-DD
Note	0-1	Free-form text (note or similar information) applying to the document.	
Recipient	1-1	Details of the Recipient of the Inventory Movement Report is (e.g. the shop control system of the Supplier).	
Address	0-1	The full address of the place where the Recipient's physical location is (street name, city name, post code, country subdivision, country).	

Name (not XML tag)	Occurrence	Description	Type details (Type of coding, elements)
Contact	0-1	A recipient contact.	
GLN	1-1	The GLN code related to the Recipient's address.	
Name	0-1	The full name of the Recipient.	
<b>Sender</b>	<b>1-1</b>	<b>Details of the of the Inventory Movement Report is (e.g. the heartquart of the Customer).</b>	
Address	0-1	The full address of the place where the Sender's physical location is (street name, city name, post code, country subdivision, country).	
Contact	0-1	A sender contact.	
GLN	1-1	The GLN code related to the Sender's address.	
Name	0-1	The full name of the Sender .	
<b>Ship from</b>	<b>1-1</b>	<b>Details about the place where the goods are sent from (e.g. a branch of the Customer).</b>	
Address	0-1	The full address of the place (street name, city name, post code, country subdivision, country).	
GLN	1-1	GLN code of the place.	
<b>Ship to</b>	<b>1-1</b>	<b>Details of the place where the goods are sent to (e.g. another branch of the Customer).</b>	
Address	0-1	The address of the place (street name, city name, post code, country subdivision, country).	
GLN	1-1	GLN code of the place.	

List of the elements (simple ones alphabetically ordered, followed by aggregated ones alphabetically ordered) of the LINE:

Name (not XML tag)	Occurrence	Description	Type details (Type of coding, elements)
Line number	1-1	An unique identifier for the inventory movement report line.	
Inventory movement quantity	1-1	The moved quantity (the measurement unit should be specified).	
Inventory movement quantity @Measurement unit	0-1	The measurement unit of the "Inventory movement quantity".	Code list
<b>Article</b>	<b>1-1</b>	<b>Details about the article that was moved.</b>	
Name	0-1	The name given to the article.	
GTIN	1-1	GTIN article identification code.	
<b>Trace info</b>	<b>0-n</b>	<b>Information used for tracing one or more item instances. The block is repeated for each instance.</b>	
Chip	0-1	The registration identifier of an item instance.	

Name (not XML tag)	Occurrence	Description	Type details (Type of coding, elements)
identifier		Example: the value of the serial TID (Tag Identifier) of the chip.	
Chip identifier @schemeID	0-1	The identifier for the registration scheme. Example: "TID".	
Item identifier	1-1	A URI identifier used for tracing an item instance. Example: EPC SGTIN serial number written on the RFID (e.g. urn:epc:id:sgtin:0614141.107346.2018).	
Item identifier @schemeID	0-1	The identifier for the trace scheme. For example "EPC SGTIN-96" (that is considered the default)	

## References on the WEB

<b>Document Name</b>	Inventory movement report
<b>Version</b>	2013-1
<b>XML Implementation</b>	<p>Technical guide: <a href="http://docs.oasis-open.org/ubl/os-UBL-2.0/UBL-2.0.pdf">http://docs.oasis-open.org/ubl/os-UBL-2.0/UBL-2.0.pdf</a></p> <p>XML Schema (eBIZ-TCF-v2013-1 customization of UBL 2.0): <a href="http://www.moda-ml.net/ebiz-retail/repository/schema/v2013-1/maindoc/eBiz-TCF-InventoryMovementReport.xsd">http://www.moda-ml.net/ebiz-retail/repository/schema/v2013-1/maindoc/eBiz-TCF-InventoryMovementReport.xsd</a></p> <p>Textile Clothing Footwear use profile:</p> <ul style="list-style-type: none"> <li>PDF: <a href="http://www.moda-ml.net/ebiz-retail/repository/TCF-UseProfile/v2013-1/en/UBL-TCF-useprofile-Inventorymovementreport.pdf">http://www.moda-ml.net/ebiz-retail/repository/TCF-UseProfile/v2013-1/en/UBL-TCF-useprofile-Inventorymovementreport.pdf</a></li> <li>HTLM: <a href="http://www.moda-ml.net/ebiz-retail/repository/TCF-UseProfile/v2013-1/en/UBL-TCF-useprofile-Inventorymovementreport.html">http://www.moda-ml.net/ebiz-retail/repository/TCF-UseProfile/v2013-1/en/UBL-TCF-useprofile-Inventorymovementreport.html</a></li> </ul>
<b>EDI Implementation</b>	<a href="http://wwwa.pranke.com/en/services/wwsprofil/index.htm">http://wwwa.pranke.com/en/services/wwsprofil/index.htm</a>
<b>Sample instances</b>	of <a href="http://www.moda-ml.net/ebiz-retail/repository/istanze/v2013-1/en/DI511-059h-v1-InventoryMovementReport.xml">http://www.moda-ml.net/ebiz-retail/repository/istanze/v2013-1/en/DI511-059h-v1-InventoryMovementReport.xml</a>

## B.9. Document Invoice

Source: UBL and TexWeave/WWSPprofil

### Scope

The invoice is used to claim payment for goods or services supplied under conditions agreed between the supplier and the customer. In most cases this document describes the actual financial commitment of goods or services ordered from the supplier function.

Supporting the requirements stated by the EU VAT Directive 2006/112/EC, as amended by EU directive 2010/45/EU, the here defined data model allows the implementation of eInvoices as defined in the Directive.

The mandatory fields are absolutely necessary for this purpose. All other information should be provided if it is available without big effort.

### Data model detail

List of information blocks:

Name (not XML tag)	Occurrence	Description
HEADER	1-1	Each information contained in this part is referred to the whole document.
INVOICE LINE	1-N	Invoice line.

List of the elements (simple ones alphabetically ordered, followed by aggregated ones alphabetically ordered) of the HEADER:

Name (not XML tag)	Occurrence	Description	Type details (Type of coding, elements)
Document date	1-1	The date on which the Invoice was issued.	YYYY-MM-DD
Document function	0-1	The function performed by the present message with regards to the transmission (it is original when <i>false</i> , otherwise is a copy).	Boolean
Document number	1-1	An identifier for the Invoice assigned by issuer.	
Document currency	1-1	The currency in which the Invoice is presented.	
Invoice period	0-1	The period to which the invoice applies.	
Invoice type	0-1	Type of Invoice.	
Note	0-1	Free-form text (note or similar information) applying to the document.	
Tax point date	0-1	The date applicable VAT.	YYYY-MM-DD
Value date	0-1	The date when the invoice is due.	YYYY-MM-DD

Name (not XML tag)	Occurrence	Description	Type details (Type of coding, elements)
<b>Additional document reference</b>	0-n	References of any document associated to the Invoice that are not provided explicitly in another document reference element.	
Document type	0-1	A description of the document (for example 'Receiving Advice').	
Issue date	0-1	The date on which the associated document was issued.	YYYY-MM-DD
Number	1-1	An identifier for the associated document assigned by issuer.	
<b>Allowance</b>	0-n	An allowance/discount applied to the Invoice as a whole (this group of information must be repeated for each allowance).	
Amount	1-1	The allowance amount.	
Amount @Currency	1-1	The currency that is used for the "Amount".	ISO code
Reason	0-1	The reason due to the allowance is.	
Tax category	0-1	A code that identifies to what tax category the allowance belongs to.	
Tax percentage	0-1	The tax percentage that applies to the allowance.	
<b>Customer</b>	1-1	Details of the Customer (the legal Customer of goods).	
Address	0-1	The full address of the place where the Customer's physical location is (street name, city name, post code, country subdivision, country).	
Contact	0-1	A Customer's contact.	
GLN	1-1	The GLN code related to the Customer's address (normally the headquarter of the Customer).	
Legal entity	0-1	Customer legal registration name and identifier.	
Name	0-1	The full name of the Customer.	
VAT number	1-1	The identifier assigned for tax purposes to the Customer by the taxation authority.	
<b>Charge</b>	0-n	A charge/cost applied to the Invoice as a whole (this group of information must be repeated for each charge).	
Amount	1-1	The charge amount.	
Amount @Currency	1-1	The currency that is used for the "Amount".	ISO code
Reason	0-1	The reason due to the charge is. E.g. "Minimum order charge amount ", "Freight costs", ...	
Tax category	0-1	A code that identifies to what tax category the charge belongs to.	
Tax percentage	0-1	The tax percentage that applies to the charge.	
<b>Contract reference</b>	0-1	References of the Contract associated to this Invoice.	
Issue date	0-1	The issue date of the Contract.	YYYY-MM-DD

Name (not XML tag)	Occurrence	Description	Type details (Type of coding, elements)
Number	1-1	The identifier of the Contract.	
<b>Delivery</b>	<b>1-1</b>	<b>Details about the Delivery.</b>	
Address	0-1	The address of the place where the goods were physically brought to by the Supplier or his agent.	
Date	0-1	The date on which the goods were delivered.	YYYY-MM-DD
GLN	1-1	GLN code of place where the goods were physically brought to by the Supplier or his agent.	
<b>Delivery note reference</b>	<b>0-1</b>	<b>References of the Delivery note associated to this Invoice.</b>	
Issue date	0-1	The issue date of the Delivery.	YYYY-MM-DD
Number	1-1	The identifier of the Delivery.	
<b>Despatch advice reference</b>	<b>0-1</b>	<b>References of the Despatch advice associated to this Invoice.</b>	
Issue date	0-1	The issue date of the Despatch Advice.	YYYY-MM-DD
Number	1-1	The identifier of the Despatch Advice	
<b>Invoicee</b>	<b>1-1</b>	<b>Details of the legal recipient of the Invoice is (who pays the invoice).</b>	
Address	0-1	The full address of the of the place where the Invoicee's physical location is (street name, city name, post code, country subdivision, country).	
Contact	0-1	A Invoicee's contact.	
GLN	1-1	The GLN code related to the Invoicee's address	
Legal entity	0-1	Invoicee legal registration name and identifier.	
Name	0-1	The full name of the invoicee.	
VAT number	0-1	The identifier assigned for tax purposes to the Invoicee by the taxation authority.	
<b>Order reference</b>	<b>1-1</b>	<b>References of the Order associated to this Invoice.</b>	
Customer order number	1-1	The Order identifier assigned by the Customer.	
Customer reference number	0-1	The reference applied to the Order document by the Customer.	
Issue date	0-1	The date on which the Order was issued.	YYYY-MM-DD
Supplier order number	1-1	The Order identifier assigned by the Supplier .	
<b>Payee</b>	<b>0-1</b>	<b>Details of the Payee (the party who receives the payment).</b>	
GLN	1-1	The GLN code of the place where the Payee's physical location is.	
Name	0-1	The name of the payee.	
<b>Payment</b>	<b>0-1</b>	<b>Information about payments terms and means.</b>	
Financial account	0-1	Bank details (bank coordinates, SWIFT code, ...) to be used for the payment.	
Payment instructions	0-1	Payment instructions.	

Name (not XML tag)	Occurrence	Description	Type details (Type of coding, elements)
Payment means	0-1	A code or description to identify the payment method.	
Payment terms	0-1	The payment terms that apply to the invoice due amount.	
<b>Supplier</b>	<b>1-1</b>	<b>Details of the Supplier.</b>	
Address	0-1	The full address of the place where the Supplier's physical location is (street name, city name, post code, country subdivision, country).	
Contact	0-1	A Supplier's contact.	
GLN	1-1	The GLN code related to the Supplier's address.	
Legal entity	0-1	Supplier legal registration name and identifier.	
Name	0-1	The full name of the supplier.	
VAT number	1-1	The identifier assigned for tax purposes to the Supplier by the taxation authority.	
<b>Tax representative</b>	<b>0-1</b>	<b>Details of the Supplier's tax representative.</b>	
Address	0-1	The full address of the place where the Tax representative party's physical location is (street name, city name, post code, country subdivision, country).	
Name	1-1	The name of the tax representative.	
VAT number	1-1	The identifier assigned for tax purposes to the tax representative.	
<b>Total amounts</b>	<b>1-1</b>	<b>Details about the total amount payable on the Invoice, including Allowances, Charges, and Taxes.</b>	
Line total amount	0-1	Sum of line amounts in the document.	
Line total amount @Currency	1-1	The currency that is used for the "Line total amount".	ISO code
Paid amounts	0-1	Any amounts that have been paid a-priory.	
Paid amount @Currency	1-1	The currency that is used for the "Paid amount".	ISO code
Payable amount	1-1	The total amount to be paid.	
Payable amount @Currency	1-1	The currency that is used for the "Payable amount".	ISO code
Taxable amount	0-1	The net amount to which the tax percent (rate) is applied to calculate the tax amount.	
Taxable amount @Currency	1-1	The currency that is used for the "Taxable amount".	ISO code
Tax total	0-1	The total tax amount (the sum of the amounts of all tax categories).	
Tax total @Currency	1-1	The currency that is used for the "Tax total".	ISO code
Rounding amount	0-1	Any rounding (positive or negative) of the "Total amount" added to the invoice to produce a rounded invoice total.	

Name (not XML tag)	Occurrence	Description	Type details (Type of coding, elements)
Rounding amount <b>@Currency</b>	1-1	The currency that is used for the "Rounding".	ISO code
<b>Total amount</b>	0-1	The total value including taxes.	
Total amount <b>@Currency</b>	1-1	The currency that is used for the "Total amount".	ISO code
<b>Tax breakdown</b>	1-n	Information about tax subtotals (an invoice should contain a "Tax breakdown" group for each tax category).	
<b>Taxable amount</b>	0-1	The net amount to which the tax percent (rate) is applied to calculate the tax amount.	
Taxable amount <b>@Currency</b>	1-1	The currency that is used for the "Taxable amount".	ISO code
<b>Tax amount</b>	1-1	The tax amount.	
Tax amount <b>@Currency</b>	1-1	The currency that is used for the "Tax amount".	ISO code
<b>Tax category</b>	1-1	A code or text that uniquely identifies the tax category.	
<b>Tax percentage</b>	1-1	The tax rate that is to be applied to the taxable amount in order to derive the tax amount.	
<b>Tax exemption reason</b>	0-1	A textual description of the reason why the items belonging to the amount are exempted for tax.	
<b>Transaction condition</b>	0-1	Detail about the condition under which the Order was issued.	
<b>Delivery terms</b>	0-1	Specification of the terms of trade (INCOTERMS).	
<b>Ultimate consignee</b>	1-1	Details of the Ultimate consignee (the place inside the property of the retailer where the goods have been finally meant for. The Supplier isn't involved in this transport).	
<b>Address</b>	0-1	The address of the place.	
<b>GLN</b>	1-1	GLN code of the place.	

List of the elements (simple ones alphabetically ordered, followed by aggregated ones alphabetically ordered) of the LINE:

Name (not XML tag)	Occurrence	Description	Type details (Type of coding, elements)
<b>Customers accounting string</b>	0-1	A reference to the Customer's accounting code applicable to the specific line, expressed as text rather than a code in order to facilitate automation in booking into accounts following an order to invoice transformation.	
<b>Invoice price</b>	1-1	The price of the article specified.	

Name (not XML tag)	Occurrence	Description	Type details (Type of coding, elements)
Invoice price @Currency	1-1	The currency of the "Invoice price".	ISO Code
Invoice quantity	1-1	The quantity of articles on the Invoice Line (the measurement unit should be specified).	
Invoice quantity @Measurement unit	0-1	The measurement unit of the "Invoice quantity".	Code list
Line amount	1-1	The total amount for the Invoice Line, including Allowance Charges but net of taxes.	
Line amount @Currency	1-1	The currency of the "Line amount".	
Line number	1-1	An unique identifier for the invoice line.	
Line note	0-1	Notes or any other similar information that is not contained explicitly in another structure.	
Net weight	0-1	The net weight of the single unit of article, declared for transport or customs purpose (the measurement unit have to be specified).	
Net weight @Measurement unit	1-1	The measurement of unit of the "Net weight".	Code list
<b>Allowance</b>	<b>0-n</b>	<b>An allowance/discount applied to thi Invoice line (this group of information must be repeated for each allowance).</b>	
Amount	1-1	The allowance applied to the Invoice as a whole	
Amount @Currency	1-1	The currency that is used for the "Amount".	ISO code
Reason	0-1	The reason due to the allowance is.	
Tax category	0-1	A code that identifies to what tax category the allowance belongs to.	
Tax percentage	0-1	The tax percentage that applies to the allowance.	
<b>Article</b>	<b>1-1</b>	<b>Information about the article the line is related to.</b>	
Attribute	0-n	An ttribute describing the technical item features (like colour, size, meter numbers).	
Country of origin	0-1	The country of origin of the article.	
Customs tariff number	0-1	The product code from harmonised system of customs authorities.	
GTIN	1-1	GTIN article identification code.	
Producer's GLN	0-1	GLN code of the place where the Producer's physical location is (used only if the Producer isn't the Supplier).	
Name	1-1	A short name given to an item, such as a name from a Catalogue, as distinct from a description.	
Supplier article number	1-1	An identifier for an item assigned by Supplier.	

Name (not XML tag)	Occurrence	Description	Type details (Type of coding, elements)
<b>Charge</b>	0-n	A charge/cost applied to the Invoice as a whole (this group of information must be repeated for each charge).	
Amount	1-1	The charge applied to the Invoice as a whole	
Amount @Currency	1-1	The currency that is used for the "Amount".	ISO code
Reason	0-1	The reason due to the charge is. E.g. "Minimum order charge amount " or " Freight costs", ...	
Tax category	0-1	A code that identifies to what tax category the charge belongs to.	
Tax percentage	0-1	The tax percentage that applies to the charge.	
<b>Order reference</b>	0-n	A reference to the relevant order line in the order that is identified on the document level in the invoice.	
Line number	1-1	An unique identifier for the order line.	
<b>Tax breakdown</b>	0-n	Information about tax subtotals related to this invoice line.	
Tax amount	1-1	The tax amount applied to this invoice line.	
Tax amount @Currency	1-1	The currency of the "Tax amount".	ISO Code
Tax category	1-1	A code or text that uniquely identifies the tax category.	
Tax percentage	0-1	The tax rate that is to be applied to the taxable amount in order to derive the tax amount.	

## References on the WEB

<b>Document Name</b>	Invoice
<b>Version</b>	2013-1
<b>XML Implementation</b>	<p>Technical guide: <a href="http://docs.oasis-open.org/ubl/os-UBL-2.0/UBL-2.0.pdf">http://docs.oasis-open.org/ubl/os-UBL-2.0/UBL-2.0.pdf</a></p> <p>XML Schema (UBL 2.0): <a href="http://docs.oasis-open.org/ubl/os-UBL-2.0/xsd/maindoc/UBL-Invoice-2.0.xsd">http://docs.oasis-open.org/ubl/os-UBL-2.0/xsd/maindoc/UBL-Invoice-2.0.xsd</a></p> <p>Textile Clothing Footwear use profile:</p> <ul style="list-style-type: none"> <li>PDF: <a href="http://www.moda-ml.net/ebiz-retail/repository/TCF-UseProfile/v2013-1/en/UBL-TCF-useprofile-Invoice.pdf">http://www.moda-ml.net/ebiz-retail/repository/TCF-UseProfile/v2013-1/en/UBL-TCF-useprofile-Invoice.pdf</a></li> <li>HTLM: <a href="http://www.moda-ml.net/ebiz-retail/repository/TCF-UseProfile/v2013-1/en/UBL-TCF-useprofile-Invoice.html">http://www.moda-ml.net/ebiz-retail/repository/TCF-UseProfile/v2013-1/en/UBL-TCF-useprofile-Invoice.html</a></li> </ul>
<b>EDI Implementation</b>	<a href="http://wwwa.pranke.com/en/services/wwsprofil/index.htm">http://wwwa.pranke.com/en/services/wwsprofil/index.htm</a>
<b>Sample instances</b>	of <a href="http://www.moda-ml.net/ebiz-retail/repository/istanze/v2013-1/en/DI511-059k-v1-Invoice.xml">http://www.moda-ml.net/ebiz-retail/repository/istanze/v2013-1/en/DI511-059k-v1-Invoice.xml</a>

## B.10. Document Inventory Report

Source: UBL and TexWeave/WWSProfil

### Scope

The inventory report message is used by the retailer function to inform the producer function about the quantities of each item which are on stock. This is necessary because sales are not the only reasons items leave the shop. It is needed either for planning purposes (VMI) or financial handling of the gap.

The message can include information related to the single item identification (for example for traceability purpose), such as the EPC number used in RFID.

The mandatory fields are absolutely necessary for this purpose. All other information should be provided if it is available without big effort.

### Data model details

List of information blocks:

Name (not XML tag)	Occurrence	Description
HEADER	1-1	Each information contained in this part is referred to the whole document.
LINE/POSITION	1-N	Inventory report line.

List of simple elements (alphabetically ordered) of HEADER:

Name (not XML tag)	Occurrence	Description	Type details (Type of coding, elements)
Document date	1-1	The date on which the Inventory Report was issued.	YYYY-MM-DD
Document function	0-1	The function performed by the present message with regards to the transmission (it is original when <i>false</i> , otherwise is a copy).	Boolean
Document number	1-1	An identifier for the Inventory Report assigned by the issuer.	
Inventory date	1-1	The date the stock is referred to.	YYYY-MM-DD
Inventory time	1-1	The time the stock is referred to (if the time is 00:00:00 then it is the stock before the day starts).	hh:mm:ss[Z + -]hh:mm]
Note	0-1	Free-form text (note or similar information) applying to the document.	
Inventory reporting party	1-1	Details of the party that will really use the Inventory report (normally the branch for which the stock is reported).	
Address	0-1	The full address of the place where the Inventory reporting party's physical location is (street name, city name, post code, country subdivision, country).	
Contact	0-1	A Inventory reporting party's contact.	

Name (not XML tag)	Occurrence	Description	Type details (Type of coding, elements)
GLN	1-1	The GLN code related to the Inventory reporting party's address.	
Name	0-1	The full name of the Inventory reporting party.	
<b>Recipient</b>	<b>1-1</b>	<b>Details of the Recipient of the Inventory Report is (normally he is the Supplier).</b>	
Address	0-1	The full address of the place where the Recipient's physical location is (street name, city name, post code, country subdivision, country).	
Contact	0-1	A Recipient's contact.	
GLN	1-1	The GLN code related to the Recipient's address	
Name	0-1	The full name of the Recipient.	
<b>Sender</b>	<b>1-1</b>	<b>Details of the Sender of the Inventory Report is (normally he is the Customer).</b>	
Address	0-1	The full address of the place where the Sender's physical location is (street name, city name, post code, country subdivision, country).	
Contact	0-1	A Sender's contact.	
GLN	1-1	The GLN code related to the Sender's address.	
Name	0-1	The full name of the Sender .	

List of the elements (simple ones alphabetically ordered, followed by aggregated ones alphabetically ordered) of the LINE:

Name (not XML tag)	Occurrence	Description	Type details (Type of coding, elements)
Line number	1-1	An unique identifier for the inventory report line.	
Inventory value	0-1	The amount of the stock quantity.	
Inventory value @Currency	1-1	The currency of the "Inventory value".	ISO code
Stock quantity	1-1	The quantity that is currently on stock (the measurement unit should be specified).	
Stock quantity @Measurement unit	0-1	The measurement unit of the "Stock quantity".	Code list
<b>Article</b>	<b>1-1</b>	<b>Details about the article this inventory line is related to.</b>	
GTIN	1-1	GTIN article identification code.	
Name	0-1	The name given to the article.	
<b>Trace info</b>	<b>0-n</b>	<b>Information used for tracing one or more item instances. The block is repeated for each instance.</b>	
Chip identifier	0-1	The registration identifier of an item instance. Example: the value of the serial TID (Tag Identifier) of the chip.	
Chip identifier @schemeID	0-1	The identifier for the registration scheme. Example: "TID".	
Item identifier	1-1	A URI identifier used for tracing an item instance. Example: EPC SGTIN serial number written on the	

Name (not XML tag)	Occurrence	Description	Type details (Type of coding, elements)
		RFID (e.g. urn:epc:id:sgtin:0614141.107346.2018).	
Item identifier @schemeID	0-1	The identifier for the trace scheme. For example "EPC SGTIN-96" (that is considered the default)	

## References on the WEB

<b>Document Name</b>	Inventory report
<b>Version</b>	2013-1
<b>XML Implementation</b>	<p>Technical guide: <a href="http://docs.oasis-open.org/ubl/os-UBL-2.0/UBL-2.0.pdf">http://docs.oasis-open.org/ubl/os-UBL-2.0/UBL-2.0.pdf</a></p> <p>XML Schema (eBIZ-TCF-v2013-1 customization of UBL 2.0): <a href="http://www.moda-ml.net/ebiz-retail/repository/schema/v2013-1/maindoc/eBiz-TCF-InventoryReport.xsd">http://www.moda-ml.net/ebiz-retail/repository/schema/v2013-1/maindoc/eBiz-TCF-InventoryReport.xsd</a></p> <p>Textile Clothing Footwear use profile:</p> <ul style="list-style-type: none"> <li>• PDF: <a href="http://www.moda-ml.net/ebiz-retail/repository/TCF-UseProfile/v2013-1/en/UBL-TCF-useprofile-Inventoryreport.pdf">http://www.moda-ml.net/ebiz-retail/repository/TCF-UseProfile/v2013-1/en/UBL-TCF-useprofile-Inventoryreport.pdf</a></li> <li>• HTML: <a href="http://www.moda-ml.net/ebiz-retail/repository/TCF-UseProfile/v2013-1/en/UBL-TCF-useprofile-Inventoryreport.html">http://www.moda-ml.net/ebiz-retail/repository/TCF-UseProfile/v2013-1/en/UBL-TCF-useprofile-Inventoryreport.html</a></li> </ul>
<b>EDI Implementation</b>	<a href="http://wwwa.pranke.com/en/services/wwsprofil/index.htm">http://wwwa.pranke.com/en/services/wwsprofil/index.htm</a>
<b>Sample instances</b> of	<a href="http://www.moda-ml.net/ebiz-retail/repository/istanze/v2013-1/en/DI511-059j-v1-InventoryReport.xml">http://www.moda-ml.net/ebiz-retail/repository/istanze/v2013-1/en/DI511-059j-v1-InventoryReport.xml</a>

## B.11. Document Initial Order Response

Source: UBL and TexWeave/WWSProfil

### Scope

The initial order response document message has the purpose to provide the order data of an order placed by other means (fair, showroom, phone,...) sent by the producer function to the retailer function.

The mandatory fields are absolutely necessary for this purpose. All other information should be provided if it is available without big effort.

### Data model details

List of information blocks:

Name (not XML tag)	Occurrence	Description
HEADER	1-1	Each information contained in this part is referred to the whole document.
LINE/POSITION	1-N	Initial order response line.

List of simple elements (alphabetically ordered) of HEADER:

Name (not XML tag)	Occurrence	Description	Type details (Type of coding, elements)
Document date	1-1	The date on which the Initial Order Response was issued.	YYYY-MM-DD
Document function	0-1	The function performed by the present message with regards to the transmission (it is original when <i>false</i> , otherwise is a copy).	Boolean
Document number	1-1	An identifier for the Initial Order Response assigned by the Supplier.	
Note	0-1	Free-form text (note or similar information) applying to the document.	
Number of lines	0-1	The number of lines in the document.	
Order currency	1-1	The currency used for prices in the Order and in this document.	ISO code
<b>Allowance</b>	<b>0-n</b>	<b>An allowance/discount applied to the document as a whole (this group of information must be repeated for each allowance).</b>	
Amount	1-1	The allowance amount.	
Amount @Currency	1-1	The currency that is used for the "Amount".	ISO code
Reason	0-1	The reason due to the allowance is.	

Name (not XML tag)	Occurrence	Description	Type details (Type of coding, elements)
<b>Charge</b>	0-n	A charge/cost applied to the document as a whole (this group of information must be repeated for each charge).	
Amount	1-1	The charge amount.	
Amount @Currency	1-1	The currency that is used for the "Amount".	ISO code
Reason	0-1	The reason due to the charge is.	
<b>Customer</b>	1-1	Details of the Customer (the legal buyer of goods).	
Address	0-1	The full address of the place where the Customer's physical location is (street name, city name, post code, country subdivision, country).	
Contact	0-1	A Customer contact for purchasing.	
GLN	1-1	The GLN code related to the Customer's address (normally the headquarter of the customer).	
Name	0-1	The full name of the Customer.	
<b>Delivery</b>	1-1	Details about the delivery.	
Address	0-1	The address of the place where the goods will be physically brought to by the Supplier or his agent.	
Delivery date/period	1-1	The date or the period for delivery.	
GLN	1-1	GLN code of the place where the goods will be physically brought to by the Supplier or his agent.	
<b>Invoicee</b>	1-1	Details of the legal recipient of the Invoice (who pays the Invoice).	
Address	0-1	The full address of the of the place where the Invoicee 's physical location is (street name, city name, post code, country subdivision, country).	
GLN	1-1	The GLN code related to the Invoicee's address.	
Name	0-1	The full name of the Invoicee.	
<b>Order reference</b>	1-1	References of the Order associated to this response.	
Customer reference	0-1	A reference applied to the Order document by the order issuer (Customer).	
Customer order number	1-1	The Order identifier assigned by the Customer	
Issue date	0-1	The date on which the Order was issued.	YYYY-MM-DD
Order sheet date	0-1	The date on the order sheet (it's the date when the document was printed).	
Order sheet number	0-1	If the document is printed, this is the identifier that you can find on the piece of paper (it's different from the official order number of the Supplier).	
Order type	1-1	Order type. It can be: <i>BAS</i> : basic order; <i>NOS</i> : replenishment; <i>SEA</i> : season preoder;	Code list

Name (not XML tag)	Occurrence	Description	Type details (Type of coding, elements)
		<b>SEB:</b> season reorder; <b>OOS:</b> out-of-stock order.	
Supplier order number	1-1	The Order identifier assigned by the Supplier.	
<b>Supplier</b>	<b>1-1</b>	<b>Details of the Supplier.</b>	
Address	0-1	The full address of the place where the Supplier's physical location is (street name, city name, post code, country subdivision, country).	
Contact	0-1	A Supplier contact for sales.	
GLN	1-1	The GLN code related to the Supplier's address.	
Name	0-1	The full name of the Supplier.	
<b>Transaction conditions</b>	<b>0-1</b>	<b>Detail about the condition under which the Order was issued.</b>	
Back order handling	0-1	It establishes if the document has to be wholly settled ( <i>false</i> ), or if the Supplier can send only what is available ( <i>true</i> ) and cancel the missing quantities and articles.	Boolean
Delivery date fix	0-1	The date by which the order can be cancelled (if not delivered).	YYYY-MM-DD
Delivery terms	0-1	Specification of the terms of trade (INCOTERMS).	
<b>Ultimate consignee</b>	<b>1-1</b>	<b>Details of the Ultimate consignee (the place inside the property of the retailer where the goods will be finally meant for. The Supplier isn't involved in this transport).</b>	
Address	0-1	The full address of the place (street name, city name, post code, country subdivision, country).	
GLN	1-1	GLN code of the place.	

List of the elements (simple ones alphabetically ordered, followed by aggregated ones alphabetically ordered) of the LINE:

Name (not XML tag)	Occurrence	Description	Type details (Type of coding, elements)
Line number	1-1	An unique identifier for the Initial Order Response line.	
Ordered quantity	1-1	The ordered quantity of items for the order line (the measurement unit should be specified).	
Ordered quantity @Measurement unit	0-1	The measurement unit of the "Ordered quantity".	Code list
<b>Allowance</b>	<b>0-n</b>	<b>An allowance/discount applied to the order price related to this line (this group of information must be repeated for each allowance).</b>	
Amount	1-1	The allowance amount.	

Name (not XML tag)	Occurrence	Description	Type details (Type of coding, elements)
Amount @Currency	1-1	The currency that is used for the "Amount".	ISO code
Reason	0-1	The reason due to the allowance is.	
<b>Article</b>	<b>1-1</b>	<b>Details about the article associated to this order line.</b>	
GTIN	1-1	GTIN article identification code.	
Producer's GLN	0-1	GLN code of the place where the Producer's physical location is (used only if the Producer isn't the Supplier).	
Name	0-1	The name given to the article.	
<b>Charge</b>	<b>0-n</b>	<b>A charge/cost applied to the order price related to this line (this group of information must be repeated for each charge).</b>	
Amount	1-1	The charge amount.	
Amount @Currency	1-1	The currency that is used for the "Amount".	ISO code
Reason	0-1	The reason due to the charge is.	
<b>Prices</b>	<b>0-1</b>	<b>The prices of the article associated with this order line.</b>	
Purchase price	0-1	The purchase price applied by the Supplier to the Customer (allowances and charges are included, VAT is excluded). It's referred to a single unit.	
Purchase price @Currency	1-1	The currency of the "Purchase price".	ISO code

## References on the WEB

<b>Document Name</b>	Initial order response
<b>Version</b>	2013-1
<b>XML Implementation</b>	<p>Technical guide: <a href="http://docs.oasis-open.org/ubl/os-UBL-2.0/UBL-2.0.pdf">http://docs.oasis-open.org/ubl/os-UBL-2.0/UBL-2.0.pdf</a></p> <p>XML Schema (UBL 2.0): <a href="http://docs.oasis-open.org/ubl/os-UBL-2.0/xsd/maindoc/UBL-OrderResponse-2.0.xsd">http://docs.oasis-open.org/ubl/os-UBL-2.0/xsd/maindoc/UBL-OrderResponse-2.0.xsd</a></p> <p>Textile Clothing Footwear use profile:</p> <ul style="list-style-type: none"> <li>PDF: <a href="http://www.moda-ml.net/ebiz-retail/repository/TCF-UseProfile/v2013-1/en/UBL-TCF-useprofile-Initialorderresponse.pdf">http://www.moda-ml.net/ebiz-retail/repository/TCF-UseProfile/v2013-1/en/UBL-TCF-useprofile-Initialorderresponse.pdf</a></li> <li>HTLM: <a href="http://www.moda-ml.net/ebiz-retail/repository/TCF-UseProfile/v2013-1/en/UBL-TCF-useprofile-Initialorderresponse.html">http://www.moda-ml.net/ebiz-retail/repository/TCF-UseProfile/v2013-1/en/UBL-TCF-useprofile-Initialorderresponse.html</a></li> </ul>
<b>EDI Implementation</b>	<a href="http://wwwa.pranke.com/en/services/wwsprofil/index.htm">http://wwwa.pranke.com/en/services/wwsprofil/index.htm</a>
<b>Sample instances</b>	of <a href="http://www.moda-ml.net/ebiz-retail/repository/istanze/v2013-1/en/DI511-059e-v1-InitialOrderResponse.xml">http://www.moda-ml.net/ebiz-retail/repository/istanze/v2013-1/en/DI511-059e-v1-InitialOrderResponse.xml</a>

## B.12. Document Change Order Response

Source: UBL and TexWeave/WWSProfil

### Scope

The change order response message is used by the supplier function to inform the retailer function about changes to his order due to changes in the production scheme (for example: cancellation of the product, change in delivery date, ...).

The mandatory fields are absolutely necessary for this purpose. All other information should be provided if it is available without big effort.

### Data model details

List of information blocks:

Name (not XML tag)	Occurrence	Description
HEADER	1-1	Each information contained in this part is referred to the whole document.
LINE/POSITION	1-N	Change order response line.

List of elements (alphabetically ordered) of HEADER:

Name (not XML tag)	Occurrence	Description	Type details (Type of coding, elements)
Document date	1-1	The date on which the Change Order Response was issued.	
Document function	0-1	The function performed by the present message with regards to the transmission (it is original when <i>false</i> , otherwise is a copy).	Boolean
Document number	1-1	An unique identifier for the Change Order Response assigned by the Supplier (Supplier).	
Change	0-5	Free text field (for example it can contain header information, as delivery date, or information about an existing line is changed).	
Currency	0-1	The currency that is used for prices in this document.	ISO code
Number of lines	0-1	The number of lines in the document.	
Sequence number	1-1	The change order response sequence number assigned by the issuer to ensure the proper sequencing of changes.	
Allowance	0-n	An allowance/discount applied to the document as a whole (this group of information must be repeated for each allowance).	
Amount	1-1	The allowance amount.	

Name (not XML tag)	Occurrence	Description	Type details (Type of coding, elements)
Amount @Currency	1-1	The currency that is used for the "Amount".	ISO code
Reason	0-1	The reason due to the allowance is.	
<b>Charge</b>	<b>0-n</b>	<b>A charge/cost applied to the document as a whole (this group of information must be repeated for each charge).</b>	
Amount	1-1	The charge amount.	
Amount @Currency	1-1	The currency that is used for the "Amount".	ISO code
Reason	0-1	The reason due to the charge is.	
<b>Customer</b>	<b>1-1</b>	<b>Details of the Customer (the legal buyer of goods).</b>	
Address	0-1	The full address of the place where the Customer's physical location is (street name, city name, post code, country subdivision, country).	
Contact	0-1	A customer contact for purchasing.	
GLN	1-1	The GLN code related to the Customer's address (normally the headquarter of the Customer).	
Name	0-1	The full name of the Customer.	
<b>Delivery</b>	<b>1-1</b>	<b>Details about the delivery.</b>	
Address	0-1	The address of the place where the goods will be physically brought to by the Supplier or his agent.	
Delivery date/period	1-1	The date or the period for delivery.	YYYY-MM-DD
Delivery date/period change	0-1	The new date or period for delivery. Use this field only if the delivery date/period changes for all line.	YYYY-MM-DD
GLN	1-1	GLN code of the place where the goods will be physically brought to by the Supplier or his agent.	
<b>Invoicee</b>	<b>1-1</b>	<b>Details of the legal recipient of the Invoice (who pays the Invoice).</b>	
Address	0-1	The full address of the of the place where the Invoicee 's physical location is (street name, city name, post code, country subdivision, country).	
GLN	1-1	The GLN code related to the Invoicee's address	
Name	0-1	The full name of the Invoicee.	
<b>Order reference</b>	<b>1-1</b>	<b>References of the Order being changed.</b>	
Customer order number	1-1	The Order identifier assigned by the Customer (the reference of the Order being changed).	
Customer reference	0-1	A reference applied to the Order document related to this Change Order Response by the Order issuer (Customer).	
Issue date	0-1	The date on which the Order was issued.	YYYY-MM-DD
Order type	1-1	Order type. It can be: - <i>BAS</i> : basic order; - <i>NOS</i> : replenishment; - <i>SEA</i> : season preoder;	Code list

Name (not XML tag)	Occurrence	Description	Type details (Type of coding, elements)
		- <b>SEB</b> : season reorder; - <b>OOS</b> : out-of-stock order.	
Supplier order number	1-1	The Order identifier assigned by the Supplier.	
<b>Supplier</b>	<b>1-1</b>	<b>Details of the Supplier.</b>	
Address	0-1	The full address of the place where the Supplier's physical location is (street name, city name, post code, country subdivision, country).	
Contact	0-1	A Supplier contact for sales.	
GLN	1-1	GLN code of the place where the Supplier's physical location.	
Name	0-1	The full name of the Supplier.	
<b>Transaction conditions</b>	<b>0-1</b>	<b>Detail about the condition applying to the whole order transaction.</b>	
Back order handling	0-1	It establishes if the order has to be wholly settled ( <i>false</i> ), or if the Supplier can send only what is available ( <i>true</i> ) and cancel the missing quantities and articles.	Boolean
Delivery date fix	0-1	The date by which the order can be cancelled (if not delivered).	YYYY-MM-DD
Delivery terms	0-1	Specification of the terms of trade (INCOTERMS).	
<b>Ultimate consignee</b>	<b>1-1</b>	<b>Details of the Ultimate consignee (the place inside the property of the retailer where the goods will be finally meant for. The Supplier isn't involved in this transport).</b>	
Address	0-1	The full address of the place (street name, city name, post code, country subdivision, country).	
GLN	1-1	GLN code of the place.	

List of the elements (simple ones alphabetically ordered, followed by aggregated ones alphabetically ordered) of the LINE:

Name (not XML tag)	Occurrence	Description	Type details (Type of coding, elements)
Change	0-1	Free description of change reason.	
Delivery date/period change	0-1	The new date or period for delivery.	YYYY-MM-DD
Line action	1-1	The status of the line with respect to its original state (it can be " <i>add</i> ", " <i>change</i> ", " <i>accept</i> ", " <i>reject</i> ").	
Line number	1-1	An unique identification for the order change line.	
Quantity	0-1	The quantity of Items that the Supplier can delivery (the measurement unit should be specified).	
Quantity @Measurement	0-1	The measurement unit of the "Quantity".	Code list

Name (not XML tag)	Occurrence	Description	Type details (Type of coding, elements)
<b>unit</b>			
<b>Allowance</b>	0-n	An allowance/discount applied to this order change line (this group of information must be repeated for each allowance).	
Amount	1-1	The allowance amount.	
Amount @Currency	1-1	The currency that is used for the "Amount".	ISO code
Reason	0-1	The reason due to the allowance is.	
<b>Article</b>	1-1	Details about the article this order change line is related to.	
GTIN	1-1	GTIN article identification code.	
Producer's GLN	0-1	GLN code of the place where the article's Producer's physical location is (used only if the Producer isn't the Supplier).	
Name	0-1	The name given to the article.	
<b>Charge</b>	0-n	A charge/cost applied to this order change line (this group of information must be repeated for each charge).	
Amount	1-1	The charge amount.	
Amount @Currency	1-1	The currency that is used for the "Amount".	ISO code
Reason	0-1	The reason due to the charge is.	
<b>Prices</b>	0-1	The prices of the article associated with this order change line.	
Purchase price	0-1	The purchase price applied by the Supplier to the Customer (allowances and charges are included, VAT is excluded). It's referred to a single unit.	
Purchase price @Currency	1-1	The currency of the "Purchase price".	ISO code

## References on the WEB

<b>Document Name</b>	Change order response
<b>Version</b>	2013-1
<b>XML Implementation</b>	<p>Technical guide: <a href="http://docs.oasis-open.org/ubl/os-UBL-2.0/UBL-2.0.pdf">http://docs.oasis-open.org/ubl/os-UBL-2.0/UBL-2.0.pdf</a></p> <p>XML Schema (UBL 2.0): <a href="http://docs.oasis-open.org/ubl/os-UBL-2.0/xsd/maindoc/UBL-OrderChange-2.0.xsd">http://docs.oasis-open.org/ubl/os-UBL-2.0/xsd/maindoc/UBL-OrderChange-2.0.xsd</a></p> <p>Textile Clothing Footwear use profile:</p> <ul style="list-style-type: none"> <li>• PDF: <a href="http://www.moda-ml.net/ebiz-retail/repository/TCF-UseProfile/v2013-1/en/UBL-TCF-useprofile-Changeorderresponse.pdf">http://www.moda-ml.net/ebiz-retail/repository/TCF-UseProfile/v2013-1/en/UBL-TCF-useprofile-Changeorderresponse.pdf</a></li> <li>• HTML: <a href="http://www.moda-ml.net/ebiz-retail/repository/TCF-UseProfile/v2013-1/en/UBL-TCF-useprofile-Changeorderresponse.html">http://www.moda-ml.net/ebiz-retail/repository/TCF-UseProfile/v2013-1/en/UBL-TCF-useprofile-Changeorderresponse.html</a></li> </ul>
<b>EDI Implementation</b>	<a href="http://www.pranke.com/en/services/wwsprofil/index.htm">http://www.pranke.com/en/services/wwsprofil/index.htm</a>
<b>Sample instances</b>	of <a href="http://www.moda-ml.net/ebiz-retail/repository/istanze/v2013-1/en/DI511-059b-v1-ChangeOrderResponse.xml">http://www.moda-ml.net/ebiz-retail/repository/istanze/v2013-1/en/DI511-059b-v1-ChangeOrderResponse.xml</a>

## B.13. Document Order Change Reaction

Source: UBL and TexWeave/WWSProfil

### Scope

The order change reaction message is used by the retailer function to either accept or reject a change order response sent by the supplier function.

The mandatory fields are absolutely necessary for this purpose. All other information should be provided if it is available without big effort.

### Data model details

List of information blocks:

Name (not XML tag)	Occurrence	Description
HEADER	1-1	Each information contained in this part is referred to the whole document.

List of elements (alphabetically ordered) of HEADER:

Name (not XML tag)	Occurrence	Description	Type details (Type of coding, elements)
Document action	1-1	Indicates whether the Change Order Response is accepted ( <i>true</i> ) or rejected ( <i>false</i> ).	Boolean
Document date	1-1	The date on which the Order Change Reaction was issued.	YYYY-MM-DD
Document function	0-1	The function performed by the present message with regards to the transmission (it is original when false, otherwise is a copy).	Boolean
Document number	1-1	An identifier for Order Change Reaction assigned by the issuer (Customer).	
Note	0-1	Free-form text (note or similar information) applying to the document.	
Change order response	1-1	References of the Change order response this document is responding to.	
Issue date	0-1	The date on which the Change Order Response was issued.	YYYY-MM-DD
Number	1-1	The Change Order Response document identifier.	
Customer	1-1	Details of the Customer (the legal buyer of goods,	
Address	0-1	The full address of the place where the Customer's physical location is (street name, city name, post code, country subdivision, country).	
Contact	0-1	A Customer's contact for purchasing.	

Name (not XML tag)	Occurrence	Description	Type details (Type of coding, elements)
GLN	1-1	The GLN code related to the Customer's address (normally the headquarter of the Customer).	
Name	0-1	The full name of the Customer.	
<b>Order reference</b>	<b>1-1</b>	<b>References of the Order that was changed.</b>	
Customer order number	1-1	The Order identifier assigned by the Customer.	
Issue date	0-1	The date on which the Order that was changed was issued.	YYYY-MM-DD
Supplier order number	1-1	The Order identifier assigned by the Supplier.	
<b>Invoicee</b>	<b>1-1</b>	<b>Details of the legal recipient of the Invoice (who pays the Invoice).</b>	
Address	0-1	The full address of the Invoicee (street name, city name, post code, country subdivision, country).	
GLN	1-1	GLN code of the place where the Invoicee's physical location.	
Name	0-1	The full name of the Invoicee.	
<b>Supplier</b>	<b>1-1</b>	<b>Details of the Supplier.</b>	
Address	0-1	The full address of the place where the Supplier's physical location is (street name, city name, post code, country subdivision, country).	
Contact	0-1	A Supplier contact's for sales.	
GLN	1-1	The GLN code related to the Supplier's address.	
Name	0-1	The full name of the Supplier.	

## References on the WEB

<b>Document Name</b>	Order change reaction
<b>Version</b>	2013-1
<b>XML Implementation</b>	<p>Technical guide: <a href="http://docs.oasis-open.org/ubl/os-UBL-2.0/UBL-2.0.pdf">http://docs.oasis-open.org/ubl/os-UBL-2.0/UBL-2.0.pdf</a></p> <p>XML Schema (UBL 2.0): <a href="http://docs.oasis-open.org/ubl/os-UBL-2.0/xsd/maindoc/UBL-OrderResponseSimple-2.0.xsd">http://docs.oasis-open.org/ubl/os-UBL-2.0/xsd/maindoc/UBL-OrderResponseSimple-2.0.xsd</a></p> <p>Textile Clothing Footwear use profile:</p> <ul style="list-style-type: none"> <li>PDF: <a href="http://www.moda-ml.net/ebiz-retail/repository/TCF-UseProfile/v2013-1/en/UBL-TCF-useprofile-Orderchangereaction.pdf">http://www.moda-ml.net/ebiz-retail/repository/TCF-UseProfile/v2013-1/en/UBL-TCF-useprofile-Orderchangereaction.pdf</a></li> <li>HTLM: <a href="http://www.moda-ml.net/ebiz-retail/repository/TCF-UseProfile/v2013-1/en/UBL-TCF-useprofile-Orderchangereaction.html">http://www.moda-ml.net/ebiz-retail/repository/TCF-UseProfile/v2013-1/en/UBL-TCF-useprofile-Orderchangereaction.html</a></li> </ul>



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<b>Sample instances</b>	<b>of</b> <a href="http://www.moda-ml.net/ebiz-retail/repository/istanze/v2013-1/en/DI511-059m-v1-OrderChangeReaction.xml">http://www.moda-ml.net/ebiz-retail/repository/istanze/v2013-1/en/DI511-059m-v1-OrderChangeReaction.xml</a>

## B.14. Document Final Order Response

Source: UBL and TexWeave/WWSProfil

### Scope

The final order response message has the purpose to inform that the planning phase is finished and no more changes are to be expected.

The mandatory fields are absolutely necessary for this purpose. All other information should be provided if it is available without big effort.

### Data model details

List of information blocks:

Name (not XML tag)	Occurrence	Description
HEADER	1-1	Each information contained in this part is referred to the whole document.

List of elements (alphabetically ordered) of HEADER:

Name (not XML tag)	Occurrence	Description	Type details (Type of coding, elements)
Document action	1-1	Indicates whether the Order is accepted ( <i>true</i> ) or rejected ( <i>false</i> ).	Boolean
Document date	1-1	The date on which the Final Order Response was issued.	YYYY-MM-DD
Document function	0-1	The function performed by the present message with regards to the transmission (it is original when <i>false</i> , otherwise is a copy).	Boolean
Document number	1-1	An identifier for the Final Order Response assigned by the Supplier.	
Note	0-1	Free-form text (note or similar information) applying to the document.	
<b>Customer</b>	<b>1-1</b>	<b>Details of the Customer (the legal buyer of goods).</b>	
Address	0-1	The full address of the place where the Customer's physical location is (street name, city name, post code, country subdivision, country).	
Contact	0-1	A customer's contact for purchasing.	
GLN	1-1	The GLN code related to the Customer's address (normally the headquarter of the Customer).	
Name	0-1	The full name of the Customer.	
<b>Invoicee</b>	<b>1-1</b>	<b>Details of the legal recipient of the Invoice (who pays the Invoice).</b>	
Address	0-1	The full address of the place where the Invoicee's physical location is (street name, city name, post code, country subdivision, country).	

Name (not XML tag)	Occurrence	Description	Type details (Type of coding, elements)
GLN	1-1	The GLN code related to the Invoicee's address.	
Name	0-1	The full name of the Invoicee.	
<b>Order reference</b>	<b>1-1</b>	<b>References of the Order associated to this response.</b>	
Customer order number	1-1	The Order identifier assigned by the Customer.	
Issue date	0-1	The date on which the Order was issued.	YYYY-MM-DD
Supplier order number	1-1	The Order identifier assigned by the Supplier.	
<b>Supplier</b>	<b>1-1</b>	<b>Details of the Supplier.</b>	
Address	0-1	The full address of the place where the Supplier's physical location is (street name, city name, post code, country subdivision, country).	
Contact	0-1	A Supplier contact for sales.	
GLN	1-1	The GLN code related to the Supplier's address.	
Name	0-1	The full name of the Supplier.	

## References on the WEB

<b>Document Name</b>	Final order response
<b>Version</b>	2013-1
<b>XML Implementation</b>	<p>Technical guide: <a href="http://docs.oasis-open.org/ubl/os-UBL-2.0/UBL-2.0.pdf">http://docs.oasis-open.org/ubl/os-UBL-2.0/UBL-2.0.pdf</a></p> <p>XML Schema (UBL 2.0): <a href="http://docs.oasis-open.org/ubl/os-UBL-2.0/xsd/maindoc/UBL-OrderResponseSimple-2.0.xsd">http://docs.oasis-open.org/ubl/os-UBL-2.0/xsd/maindoc/UBL-OrderResponseSimple-2.0.xsd</a></p> <p>Textile Clothing Footwear use profile:</p> <ul style="list-style-type: none"> <li>PDF: <a href="http://www.moda-ml.net/ebiz-retail/repository/TCF-UseProfile/v2013-1/en/UBL-TCF-useprofile-Finalorderresponse.pdf">http://www.moda-ml.net/ebiz-retail/repository/TCF-UseProfile/v2013-1/en/UBL-TCF-useprofile-Finalorderresponse.pdf</a></li> <li>HTLM: <a href="http://www.moda-ml.net/ebiz-retail/repository/TCF-UseProfile/v2013-1/en/UBL-TCF-useprofile-Finalorderresponse.html">http://www.moda-ml.net/ebiz-retail/repository/TCF-UseProfile/v2013-1/en/UBL-TCF-useprofile-Finalorderresponse.html</a></li> </ul>
<b>EDI Implementation</b>	<a href="http://wwwa.pranke.com/en/services/wwsprofil/index.htm">http://wwwa.pranke.com/en/services/wwsprofil/index.htm</a>
<b>Sample instances</b>	of <a href="http://www.moda-ml.net/ebiz-retail/repository/istanze/v2013-1/en/DI511-059f-v1-FinalOrderResponse.xml">http://www.moda-ml.net/ebiz-retail/repository/istanze/v2013-1/en/DI511-059f-v1-FinalOrderResponse.xml</a>

## B.15. Document Instruction for Returns

Source: UBL and TexWeave/WWSProfil

### Scope

The instruction for returns message has the purpose to provide the necessary information to initiate a return of goods. The supplier function is requesting products which are badly sold either for use in other places or just to free the area from it.

The message can include information related to the single item identification (for example for traceability purpose), such as the EPC number used in RFID.

The mandatory fields are absolutely necessary for this purpose. All other information should be provided if it is available without big effort.

### Data model details

List of information blocks:

Name (not XML tag)	Occurrence	Description
HEADER	1-1	Each information contained in this part is referred to the whole document.
LINE/POSITION	1-N	Instruction for returns line.

List of elements (alphabetically ordered) of HEADER:

Name (not XML tag)	Occurrence	Description	Type details (Type of coding, elements)
Document date	1-1	The date on which the Instruction for Returns was issued.	YYYY-MM-DD
Document function	0-1	The function performed by the present message with regards to the transmission (it is original when <i>false</i> , otherwise is a copy).	Boolean
Document number	1-1	An identifier for the Instruction for Returns assigned by the Issuer.	
Note	0-1	Free-form text (note or similar information) applying to the document.	
Number of lines	0-1	The number of lines in the document.	
Customer	1-1	Details of the Customer (the legal buyer of goods).	
Address	0-1	The full address of the place where the Customer's physical location is (street name, city name, post code, country subdivision, country).	
Contact	0-1	A customer contact for this despatch.	
GLN	1-1	The GLN code related to the Customer's address (normally the headquarter of the Customer).	
Name	0-1	The full name of the Customer.	

Name (not XML tag)	Occurrence	Description	Type details (Type of coding, elements)
<b>Producer</b>	<b>0-1</b>	<b>Details of the Producer.</b>	
Address	0-1	The full address of the place where the Producer's physical location is (street name, city name, post code, country subdivision, country).	
GLN	0-1	The GLN code related to the Producer's address .	
Name	0-1	The full name of the Producer.	
<b>Ship from</b>	<b>1-1</b>	<b>Details about the place from which the products have to be shipped.</b>	
Address	0-1	The full address of the place (street name, city name, post code, country subdivision, country).	
GLN	1-1	GLN code of the place.	
<b>Ship to</b>	<b>0-1</b>	<b>Details of the place to which the products have to be shipped.</b>	
Address	0-1	The full address of the place (street name, city name, post code, country subdivision, country).	
GLN	0-1	GLN code of the place.	
<b>Shipment</b>	<b>1-1</b>	<b>An identifier for the shipment that the document is related to (a shipment is an identifiable collection of one or more goods items to be transported between the Supplier party and the Customer party. It can be transported in different consignments (e.g., split for logistical purposes)).</b>	
Consignment identifier	1-1	An identifier for the consignment that the document is related to. (A consignment is an identifiable collection of one or more goods items to be transported between the consignor and the consignee. It may comprise more than one shipment).	
Despatch date	0-1	The date on which the goods that have to be returned have to be despatched.	YYYY-MM-DD
Identifier	1-1	The shipment identifier.	
Total quantity	0-1	The total quantity that have to be returned (the measurement unit should be specified).	
Total quantity @Measurement unit	0-1	The measurement unit of the "Total quantity".	Code list
<b>Supplier</b>	<b>1-1</b>	<b>Details of the Supplier is (he is always the party where goods were collected from).</b>	
Address	0-1	The full address of the place where the Supplier's physical location is (street name, city name, post code, country subdivision, country).	
Contact	0-1	A Supplier contact for this despatch.	
GLN	1-1	The GLN code related to the Supplier's address.	
Name	0-1	The full name of the Supplier.	

List of the elements (simple ones alphabetically ordered, followed by aggregated ones alphabetically ordered) of the LINE:

Name (not XML tag)	Occurrence	Description	Type details (Type of coding, elements)
Line number	1-1	An unique identifier for the instruction for returns line.	
Quantity to return	1-1	The quantity that has to be returned.	
Quantity to return @Measurement unit	0-1	The unit of the "Quantity to return" (the measurement unit should be specified).	Code list
Article	1-1	Details about the article associated to this Instruction for returns line.	
GTIN	1-1	GTIN article identification code.	
Name	0-1	The name given to the article.	
Trace info	0-n	Information used for tracing one or more item instances. The block is repeated for each instance.	
Chip identifier	0-1	The registration identifier of an item instance. Example: the value of the serial TID (Tag Identifier) of the chip.	
Chip identifier @schemeID	0-1	The identifier for the registration scheme. Example: "TID".	
Item identifier	1-1	A URI identifier used for tracing an item instance. Example: EPC SGTIN serial number written on the RFID (e.g. urn:epc:id:sgtin:0614141.107346.2018).	
Item identifier @schemeID	0-1	The identifier for the trace scheme. For example "EPC SGTIN-96" (that is considered the default)	

## References on the WEB

<b>Document Name</b>	Instruction for returns
<b>Version</b>	2013-1
<b>XML Implementation</b>	<p>Technical guide: <a href="http://docs.oasis-open.org/ubl/os-UBL-2.0/UBL-2.0.pdf">http://docs.oasis-open.org/ubl/os-UBL-2.0/UBL-2.0.pdf</a></p> <p>XML Schema (eBIZ-TCF-v2013-1 customization of UBL 2.0): <a href="http://www.moda-ml.net/ebiz-retail/repository/schema/v2013-1/maindoc/eBiz-TCF-InstructionForReturns.xsd">http://www.moda-ml.net/ebiz-retail/repository/schema/v2013-1/maindoc/eBiz-TCF-InstructionForReturns.xsd</a></p> <p>Textile Clothing Footwear use profile:</p> <ul style="list-style-type: none"> <li>• PDF: <a href="http://www.moda-ml.net/ebiz-retail/repository/TCF-UseProfile/v2013-1/en/UBL-TCF-useprofile-Instructionforreturns.pdf">http://www.moda-ml.net/ebiz-retail/repository/TCF-UseProfile/v2013-1/en/UBL-TCF-useprofile-Instructionforreturns.pdf</a></li> <li>• HTML: <a href="http://www.moda-ml.net/ebiz-retail/repository/TCF-UseProfile/v2013-1/en/UBL-TCF-useprofile-Instructionforreturns.html">http://www.moda-ml.net/ebiz-retail/repository/TCF-UseProfile/v2013-1/en/UBL-TCF-useprofile-Instructionforreturns.html</a></li> </ul>
<b>EDI Implementation</b>	<a href="http://wwwa.pranke.com/en/services/wwsprofil/index.htm">http://wwwa.pranke.com/en/services/wwsprofil/index.htm</a>
<b>Sample instances</b>	of <a href="http://www.moda-ml.net/ebiz-retail/repository/istanze/v2013-1/en/DI511-059g-v1-InstructionForReturns.xml">http://www.moda-ml.net/ebiz-retail/repository/istanze/v2013-1/en/DI511-059g-v1-InstructionForReturns.xml</a>

## B.16. Document Returns Advice

Source: UBL and TexWeave/WWSProfil

### Scope

The returns advice message is used to announce a return of goods sent by the retailer function.

The message can include information related to the single item identification (for example for traceability purpose), such as the EPC number used in RFID.

The mandatory fields are absolutely necessary for this purpose. All other information should be provided if it is available without big effort.

### Data model details

List of information blocks:

Name (not XML tag)	Occurrence	Description
<b>HEADER</b>	1-1	Each information contained in this part is referred to the whole document.
<b>LINE/POSITION</b>	1-N	Returns advice line.

List of elements (alphabetically ordered) of HEADER:

Name (not XML tag)	Occurrence	Description	Type details (Type of coding, elements)
<b>Document date</b>	1-1	The date on which the Returns Advice was issued.	YYYY-MM-DD
<b>Document function</b>	0-1	The function performed by the present message with regards to the transmission (it is original when <i>false</i> , otherwise is a copy).	Boolean
<b>Document number</b>	1-1	An identifier for the Returns Advice assigned by the issuer.	
<b>Note</b>	0-1	Free-form text (note or similar information) applying to the document.	
<b>Number of lines</b>	0-1	The number of lines in the document.	
<b>Customer</b>	1-1	Details of the Customer (the legal buyer of goods).	
<b>Address</b>	0-1	The full address of the place where the Customer's physical location is (street name, city name, post code, country subdivision, country).	
<b>Contact</b>	0-1	A customer contact for this despatch.	
<b>GLN</b>	1-1	The GLN code related to the Customer's address (normally the headquarter of the Customer).	
<b>Name</b>	0-1	The full name of the Customer.	

Name (not XML tag)	Occurrence	Description	Type details (Type of coding, elements)
<b>Goods receive party</b>	<b>0-1</b>	<b>Details about the Goods receive party (the party that received the goods).</b>	
Address	0-1	The full address of place where the goods receive party's physical location is (street name, city name, post code, country subdivision, country).	
Contact	0-1	A Goods receive party contact.	
GLN	0-1	The GLN code related to the Goods receive party's address.	
Name	0-1	The full name of the Goods receive party.	
<b>Instruction for Returns Reference</b>	<b>0-1</b>	<b>A reference to a document that contains instruction for returns.</b>	
Date	0-1	The date on which the Instruction for Returns was issued.	YYYY-MM-DD
Number	1-1	The Instruction for Returns identifier.	
<b>Ship from</b>	<b>1-1</b>	<b>Details of the place where the goods have been sent from (e.g. branch A of the Customer).</b>	
Address	0-1	Address of place.	
GLN	1-1	GLN code of the place.	
<b>Shipment</b>	<b>1-1</b>	<b>Information about the for the shipment this dispatch of goods is related to (a shipment is an identifiable collection of one or more goods items to be transported between the Supplier party and the Customer party. It can be transported in different consignments (e.g., split for logistical purposes)).</b>	
Consignment identifier	1-1	An identifier for the consignment associated to this shipment.	
Despatch date	1-1	The actual despatch (pick-up) date.	YYYY-MM-DD
Identifier	1-1	The shipment identifier.	
Number of packages	0-1	Count of the number of pieces of transport handling equipment in a shipment, such as pallets, boxes, and cases.	
Packing type	0-1	The type of the transport handling units, expressed as a code (pallet, package, ...).	Code list
Total quantity	0-1	The total returned quantity (the measurement unit should be specified).	
Total quantity @Measurement unit	0-1	The measurement unit of the "Total quantity".	Code list
<b>Supplier</b>	<b>1-1</b>	<b>Details of the Supplier (he is always the party where goods were collected from).</b>	
Address	0-1	The full address of the place where the Supplier's physical location is (street name, city name, post code, country subdivision, country).	
Contact	0-1	A Supplier contact for this despatch.	
GLN	1-1	The GLN code related to the Supplier's address.	

Name (not XML tag)	Occurrence	Description	Type details (Type of coding, elements)
Name	0-1	The full name of the Supplier.	

List of the elements (simple ones alphabetically ordered, followed by aggregated ones alphabetically ordered) of the LINE:

Name (not XML tag)	Occurrence	Description	Type details (Type of coding, elements)
Line number	1-1	An unique identifier for the returns advice line.	
Returned quantity	1-1	The returned quantity (the measurement unit should be specified).	
Returned quantity @Measurement unit	0-1	The measurement unit of the "Returned quantity".	Code list
<b>Article</b>	<b>1-1</b>	<b>Details about the article associated to this Returns advice line</b>	
GTIN	1-1	GTIN article identification code.	
Name	0-1	The name given to the article.	
<b>Trace info</b>	<b>0-n</b>	<b>Information used for tracing one or more item instances. The block is repeated for each instance.</b>	
Chip identifier	0-1	The registration identifier of an item instance. Example: the value of the serial TID (Tag Identifier) of the chip.	
Chip identifier @schemeID	0-1	The identifier for the registration scheme. Example: "TID".	
Item identifier	1-1	A URI identifier used for tracing an item instance. Example: EPC SGTIN serial number written on the RFID (e.g. urn:epc:id:sgtin:0614141.107346.2018).	
Item identifier @schemeID	0-1	The identifier for the trace scheme. For example "EPC SGTIN-96" (that is considered the default)	
<b>Order reference</b>	<b>1-1</b>	<b>References of the Order associated to this returns advice line.</b>	
Customer order number	0-1	The Order identifier assigned by the Customer.	
Order line reference	1-1	The identifier (assigned by Customer) of an order line associated to this returns advice line.	YYYY-MM-DD

## References on the WEB

<b>Document Name</b>	Returns advice
<b>Version</b>	2013-1
<b>XML Implementation</b>	<p>Technical guide: <a href="http://docs.oasis-open.org/ubl/os-UBL-2.0/UBL-2.0.pdf">http://docs.oasis-open.org/ubl/os-UBL-2.0/UBL-2.0.pdf</a></p> <p>XML Schema (UBL 2.0): <a href="http://docs.oasis-open.org/ubl/os-UBL-2.0/xsd/maindoc/UBL-DespatchAdvice-2.0.xsd">http://docs.oasis-open.org/ubl/os-UBL-2.0/xsd/maindoc/UBL-DespatchAdvice-2.0.xsd</a></p> <p>Textile Clothing Footwear use profile:</p> <ul style="list-style-type: none"> <li>• PDF: <a href="http://www.moda-ml.net/ebiz-retail/repository/TCF-UseProfile/v2013-1/en/UBL-TCF-useprofile&gt;Returnsadvice.pdf">http://www.moda-ml.net/ebiz-retail/repository/TCF-UseProfile/v2013-1/en/UBL-TCF-useprofile&gt;Returnsadvice.pdf</a></li> <li>• HTML: <a href="http://www.moda-ml.net/ebiz-retail/repository/TCF-UseProfile/v2013-1/en/UBL-TCF-useprofile&gt;Returnsadvice.html">http://www.moda-ml.net/ebiz-retail/repository/TCF-UseProfile/v2013-1/en/UBL-TCF-useprofile&gt;Returnsadvice.html</a></li> </ul>
<b>EDI Implementation</b>	<a href="http://wwwa.pranke.com/en/services/wwsprofil/index.htm">http://wwwa.pranke.com/en/services/wwsprofil/index.htm</a>
<b>Sample instances</b>	of <a href="http://www.moda-ml.net/ebiz-retail/repository/istanze/v2013-1/en/DI511-059q-v1&gt;ReturnsAdvice.xml">http://www.moda-ml.net/ebiz-retail/repository/istanze/v2013-1/en/DI511-059q-v1&gt;ReturnsAdvice.xml</a>

## B.17. Document Price List

Source: UBL and TexWeave/WWSProfil

### Scope

The price list message is used to transfer price changes especially concerning sales prices from the supplier function to the retailer function. This can be either mark-downs or promotional activities.

The mandatory fields are absolutely necessary for this purpose. All other information should be provided if it is available without big effort.

### Data model details

List of information blocks:

Name (not XML tag)	Occurrence	Description
<b>HEADER</b>	1-1	Each information contained in this part is referred to the whole document.
<b>LINE/POSITION</b>	1-N	Price list line.

List of elements (alphabetically ordered) of HEADER:

Name (not XML tag)	Occurrence	Description	Type details (Type of coding, elements)
<b>Document date</b>	1-1	The date on which the Price List was issued.	YYYY-MM-DD
<b>Document number</b>	1-1	An identifier for the Price List assigned by the sender.	
<b>Note</b>	0-1	Free-form text (note or similar information) applying to the document.	
<b>Price List reference</b>	0-1	The identifier of a former price list message this document is related to.	
<b>Validity period</b>	0-1	The period during which (or the date from which) the information in the Price list is effective. If missing, from today is assumed.	
<b>Customer</b>	0-1	Details of the Customer (the legal Customer of goods, if he is different from the Recipient).	
<b>Address</b>	0-1	The full address of the place where the Customer's physical location is (street name, city name, post code, country subdivision, country).	
<b>Contact</b>	0-1	A customer contact.	
<b>GLN</b>	0-1	The GLN code related to the Customer's address.	
<b>Name</b>	0-1	The full name of the Customer.	
<b>Receiver</b>	1-1	Details of the Price List's recipient.	
<b>Address</b>	0-1	The full address of the Receiver (street name, city name, post code, country subdivision, country).	

Name (not XML tag)	Occurrence	Description	Type details (Type of coding, elements)
Contact	0-1	A receiver contact.	
GLN	1-1	The GLN code related to the Receiver's address.	
Name	0-1	The full name of the Receiver.	
<b>Sender</b>	<b>1-1</b>	<b>Details of the Price List's Sender.</b>	
Address	0-1	The full address of the place where the Sender's physical location is (street name, city name, post code, country subdivision, country)..	
Contact	0-1	A sender contact.	
GLN	1-1	The GLN code related to the Sender's address.	
Name	0-1	The full name of the Sender.	
<b>Supplier</b>	<b>0-1</b>	<b>Details of the Supplier (if he is different from the sender).</b>	
Address	0-1	The full address of the place where the Supplier's physical location is (street name, city name, post code, country subdivision, country).	
Contact	0-1	A supplier contact.	
GLN	0-1	The GLN code related to the Supplier's address.	
Name	0-1	The full name of the Supplier.	

List of the elements (simple ones alphabetically ordered, followed by aggregated ones alphabetically ordered) of the LINE:

Name (not XML tag)	Occurrence	Description	Type details (Type of coding, elements)
Line number	1-1	An unique identifier for the price list line.	
Line action	1-1	The function performed by the present line (it can be "add", "delete" or "change").	
<b>Article</b>	<b>1-1</b>	<b>Details about the article associated to this Price list line.</b>	
GTIN	1-1	GTIN article identification code.	
Name	0-1	The name given to the article.	
<b>Catalogue reference</b>	<b>0-1</b>	<b>The reference to the Catalogue to which this Price List is related</b>	
Issue date	0-1	The date on which the referenced Catalogue was issued.	
Number	1-1	The Catalogue identifier assigned by the Supplier.	
<b>Price list reference</b>	<b>0-1</b>	<b>The reference to a permanent list, like the prices for Italy.</b>	
Issue Date	0-1	The date on which the referenced Price list was issued.	
Number	1-1	The Price list identifier assigned by the Supplier.	

Name (not XML tag)	Occurrence	Description	Type details (Type of coding, elements)
<b>Prices</b>	<b>0-1</b>	<b>The prices of the article associated with this order line.</b>	
<b>Effective purchase price</b>	<b>0-1</b>	<b>The purchase price applied by the Supplier to the Customer (allowances and charges are included, VAT is excluded). It's referred to a single unit.</b>	
Effective purchase price @Currency	1-1	The currency of the "Effective purchase price".	ISO code
<b>List purchase price</b>	<b>0-1</b>	<b>The list purchase price referred to a single unit (any discounts will be applied to this price). The "Currency" must be specified (ISO code).</b>	
List purchase price @Currency	1-1	The currency of the "List purchase price".	ISO code
<b>Suggested retail price</b>	<b>0-1</b>	<b>The selling price (referred to a single unit) that the Supplier suggests to the retailer.</b>	
Suggested retail price @Currency	1-1	The currency that is used for the "Suggested retail price".	ISO code

## References on the WEB

<b>Document Name</b>	Price list
<b>Version</b>	2013-1
<b>XML Implementation</b>	<p>Technical guide: <a href="http://docs.oasis-open.org/ubl/os-UBL-2.0/UBL-2.0.pdf">http://docs.oasis-open.org/ubl/os-UBL-2.0/UBL-2.0.pdf</a></p> <p>XML Schema (UBL 2.0): <a href="http://docs.oasis-open.org/ubl/os-UBL-2.0/xsd/maindoc/UBL-Catalogue-2.0.xsd">http://docs.oasis-open.org/ubl/os-UBL-2.0/xsd/maindoc/UBL-Catalogue-2.0.xsd</a></p> <p>Textile Clothing Footwear use profile:</p> <ul style="list-style-type: none"> <li>PDF: <a href="http://www.moda-ml.net/ebiz-retail/repository/TCF-UseProfile/v2013-1/en/UBL-TCF-useprofile-Pricelist.pdf">http://www.moda-ml.net/ebiz-retail/repository/TCF-UseProfile/v2013-1/en/UBL-TCF-useprofile-Pricelist.pdf</a></li> <li>HTML: <a href="http://www.moda-ml.net/ebiz-retail/repository/TCF-UseProfile/v2013-1/en/UBL-TCF-useprofile-Pricelist.html">http://www.moda-ml.net/ebiz-retail/repository/TCF-UseProfile/v2013-1/en/UBL-TCF-useprofile-Pricelist.html</a></li> </ul>
<b>EDI Implementation</b>	<a href="http://wwwa.pranke.com/en/services/wwsprofil/index.htm">http://wwwa.pranke.com/en/services/wwsprofil/index.htm</a>
<b>Sample instances</b>	of <a href="http://www.moda-ml.net/ebiz-retail/repository/istanze/v2013-1/en/DI511-059n-v1-PriceList.xml">http://www.moda-ml.net/ebiz-retail/repository/istanze/v2013-1/en/DI511-059n-v1-PriceList.xml</a>

## B.18. Document Stock Availability Report

Source: UBL and eBIZ-TCF Pilots

### Scope

The availability information message is used by the supplier function to inform the retailer about the quantities of each item which are available. It is needed when the retailer want base his purchases taking into account the availabilities on the supplier side.

The mandatory fields are absolutely necessary for this purpose. All other information should be provided if it is available without big effort.

### Data model details

List of information blocks:

Name (not XML tag)	Occurrence	Description
HEADER	1-1	Each information contained in this part is referred to the whole document.
LINE/POSITION	1-N	Stock Availability Report line.

List of elements (alphabetically ordered) of HEADER:

Name (not XML tag)	Occurrence	Description	Type details (Type of coding, elements)
Availability period	1-1	The period the report is related to.	
Document date	1-1	The date on which the Stock Availability Report was issued.	YYYY-MM-DD
Document function	0-1	The function performed by the present message with regards to the transmission (it is original when <i>false</i> , otherwise is a copy).	Boolean
Document number	1-1	An identifier for the Stock Availability Report assigned by the issuer.	
Note	0-1	Free-form text (note or similar information) applying to the document.	
<b>Recipient</b>	<b>1-1</b>	<b>Details of the Recipient of the Stock Availability is (normally he is the Customer).</b>	
Address	0-1	The full address of the Recipient (street name, city name, post code, country subdivision, country).	
Contact	0-1	A Recipient's contact.	

Name (not XML tag)	Occurrence	Description	Type details (Type of coding, elements)
GLN	1-1	GLN code of the place where the physical location of the Recipient is.	
Name	0-1	The full name of the Recipient.	
Reporting party	1-1	Details of the party that will really use the Stock Availability Report (normally the branch of the Recipient for which the availability information is reported).	
Address	0-1	The full address of the place where the Reporting party's physical location is (street name, city name, post code, country subdivision, country).	
Contact	0-1	A reporting party's contact.	
GLN	1-1	The GLN code related to the Reporting party's address.	
Name	0-1	The full name of the reporting party.	
Sender	1-1	Details of the Sender of the Stock Availability Report (normally he is the Supplier).	
Address	0-1	The full address of the place where the Sender's physical location is (street name, city name, post code, country subdivision, country).	
Contact	0-1	A Sender's contact.	
GLN	1-1	The GLN code related to the Sender's address.	
Name	0-1	The full name of the Sender .	

List of the elements (simple ones alphabetically ordered, followed by aggregated ones alphabetically ordered) of the LINE:

Name (not XML tag)	Occurrence	Description	Type details of coding, elements
Availability date	0-1	The date from which the goods will be available. If not present, the goods are available now.	YYYY-MM-DD
Availability marker	1-1	A code that classifies the availability level of the good.	Code list
Line number	1-1	An unique identifier for the report line.	
Quantity on hand	1-1	The quantity available; it could be different from the "Stock quantity" (the measurement unit should be specified).	
Quantity on hand @Measurement unit	0-1	The measurement unit of the "Quantity on hand".	Code list
Article	1-1	Details about the article this availability report line is related to.	

Name (not XML tag)	Occurrence	Description	Type details (Type of coding, elements)
GTIN	1-1	GTIN article identification code.	
Name	0-1	The name given to the article.	

## References on the WEB

<b>Document Name</b>	Stock availability report
<b>Version</b>	2013-1
<b>XML Implementation</b>	<p>Technical guide: <a href="http://docs.oasis-open.org/ubl/os-UBL-2.0/UBL-2.0.pdf">http://docs.oasis-open.org/ubl/os-UBL-2.0/UBL-2.0.pdf</a></p> <p>XML Schema (eBIZ-TCF-v2013-1 customization of UBL 2.0): <a href="http://www.moda-ml.net/ebiz-retail/repository/schema/v2013-1/maindoc/eBiz-TCF-InventoryReport.xsd">http://www.moda-ml.net/ebiz-retail/repository/schema/v2013-1/maindoc/eBiz-TCF-InventoryReport.xsd</a></p> <p>Textile Clothing Footwear use profile:</p> <ul style="list-style-type: none"> <li>• PDF: <a href="http://www.moda-ml.net/ebiz-retail/repository/TCF-UseProfile/v2013-1/en/UBL-TCF-useprofile-Stockavailabilityreport.pdf">http://www.moda-ml.net/ebiz-retail/repository/TCF-UseProfile/v2013-1/en/UBL-TCF-useprofile-Stockavailabilityreport.pdf</a></li> <li>• HTML: <a href="http://www.moda-ml.net/ebiz-retail/repository/TCF-UseProfile/v2013-1/en/UBL-TCF-useprofile-Stockavailabilityreport.html">http://www.moda-ml.net/ebiz-retail/repository/TCF-UseProfile/v2013-1/en/UBL-TCF-useprofile-Stockavailabilityreport.html</a></li> </ul>
<b>EDI Implementation</b>	<a href="http://wwwa.pranke.com/en/services/wwsprofil/index.htm">http://wwwa.pranke.com/en/services/wwsprofil/index.htm</a>
<b>Sample instances</b>	<b>of</b> <a href="http://www.moda-ml.net/ebiz-retail/repository/istanze/v2013-1/en/DI511-059s-v1-StockAvailabilityReport.xml">http://www.moda-ml.net/ebiz-retail/repository/istanze/v2013-1/en/DI511-059s-v1-StockAvailabilityReport.xml</a>



Towards one eBusiness Language for fashion

## **APPENDIX C**

# **Reference Architecture 2.0 for eBusiness harmonisation in Textile/Clothing and Footwear sectors**

## APPENDIX C: Upstream textile clothing processes

### Scope

The goal behind the definitions is an easy implementation of the business processes and complete understanding of the activities behind the process descriptions.

The Actors or Company Functions participating in the different processes and processes activities are highlighted in each of the descriptions, and an activity diagram is described for a better comprehension.

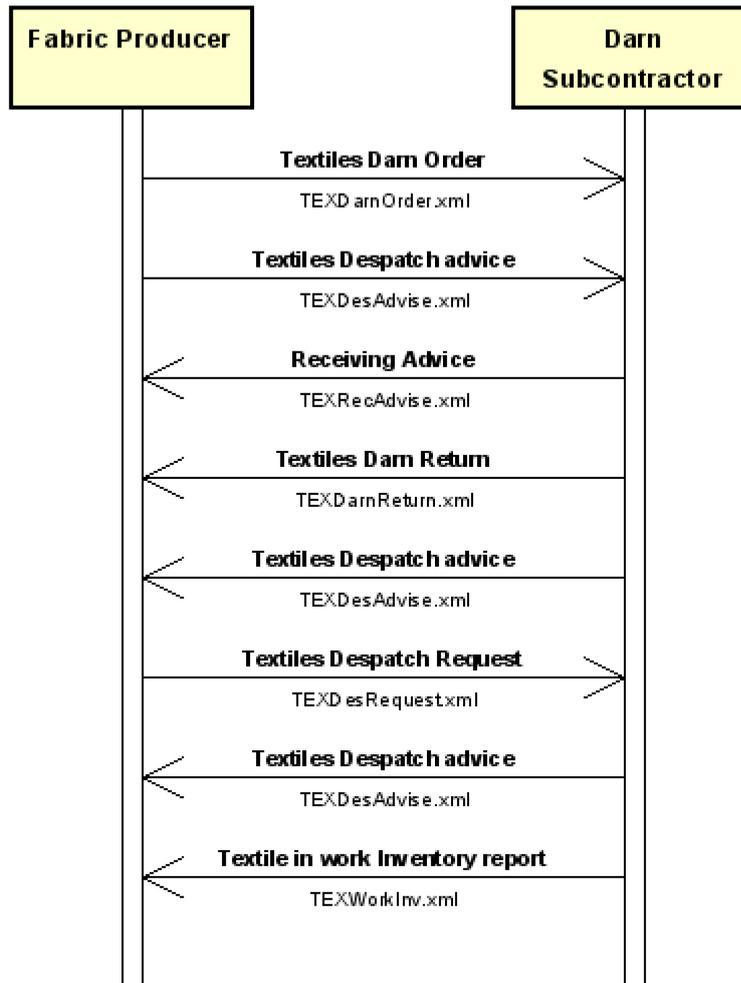
For the implementations of the activities the Moda-ML documents are used.

#### 1.1.1 Process: Fabric subcontracted darning

Process	Activity	Function	Documents
<b>Fabric subcontracted darning</b>	Subcontracted fabric darning	Fabric Producer Darn Subcontractor	Textile Darn Order Textile Despatch advice Receiving Advice Textile Darn Return Textile Despatch Request Textile in work Inventory report

<b>Process Name</b>	Fabric subcontracted darning
<b>Actors</b>	Fabric Producer function, Darn Subcontractor
<b>Description</b>	Process by which the Fabric Producer function commissions to a Subcontractor the screening and darning of the grey fabric.
<b>Activities</b>	<ul style="list-style-type: none"> <li>Subcontracted fabric darning</li> </ul>
<b>Reference to the related ebBP</b>	<a href="http://www.moda-ml.net/moda-ml/repository/ebBP/v2013-1/en/ebBP_fabricsubcontracteddarning-1_2013-1.xml">http://www.moda-ml.net/moda-ml/repository/ebBP/v2013-1/en/ebBP_fabricsubcontracteddarning-1_2013-1.xml</a>

### 1.1.1.1 Activity "Subcontracted fabric darning"



<b>Activity Name</b>	Subcontracted fabric darning
<b>Description</b>	activity by which a Contractor commissions the darning of grey fabric to a Subcontractor
<b>Transactions</b>	<ul style="list-style-type: none"> <li>• Textile Darn Order</li> <li>• Textile Despatch advice</li> <li>• Receiving Advice</li> <li>• Textile Darn Return</li> <li>• Textile Despatch Request</li> <li>• Textile in work Inventory report</li> </ul>
<b>Pre-conditions</b>	The Fabric Producer function has decided to commission the darning to a specialised Subcontractor
<b>Post-conditions</b>	The commission order has been executed and the finished (output) product has been delivered back (or made available) to the Commissioner

#### *Transactions inside the activity "Subcontracted fabric darning"*

**Action 1 (Request from Fabric Producer function to Darn Subcontractor)**

<b>Document Name</b>	Textile Darn Order
<b>Action Description</b>	This message is usable to commission the darning of grey fabric

**Action 2 (Request from Fabric Producer function to Darn Subcontractor)**

<b>Document Name</b>	Textile Despatch advice
<b>Action Description</b>	This message is usable to inform the Subcontractor about the fabric pieces sent for darning

**Action 3 (Response from Darn Subcontractor to Fabric Producer function)**

<b>Document Name</b>	Receiving Advice
<b>Action Description</b>	This message is usable to certify to the Commissioner the receipt of the material sent for the commission (see preceding activity)

**Action 4 (Request from Darn Subcontractor to Fabric Producer function)**

<b>Document Name</b>	Textile Darn Return
<b>Action Description</b>	This message is usable to report to the Commissioner the results of the inspection and the darning operations executed

**Action 5 (Request from Darn Subcontractor to Fabric Producer function)**

<b>Document Name</b>	Textile Despatch advice
<b>Action Description</b>	This message is usable to inform the Commissioner that the commissioned output product (fabric) is available

**Action 6 (Request from Fabric Producer function to Darn Subcontractor)**

<b>Document Name</b>	Textile Despatch Request
<b>Action Description</b>	This message is usable to schedule the delivery of the commissioned output product (fabric) at the Commissioner's premises

**Action 7 (Response from Darn Subcontractor to Fabric Producer function)**

<b>Document Name</b>	Textile Despatch advice
<b>Action Description</b>	This message is usable to inform the Commissioner that the commissioned output product (fabric) has been despatched

**Action 8 (Request from Darn Subcontractor to Fabric Producer function)**

<b>Document Name</b>	Textile in work Inventory report
<b>Action Description</b>	This message is usable to certify to the Commissioner the Stock and WIP amount of his materials

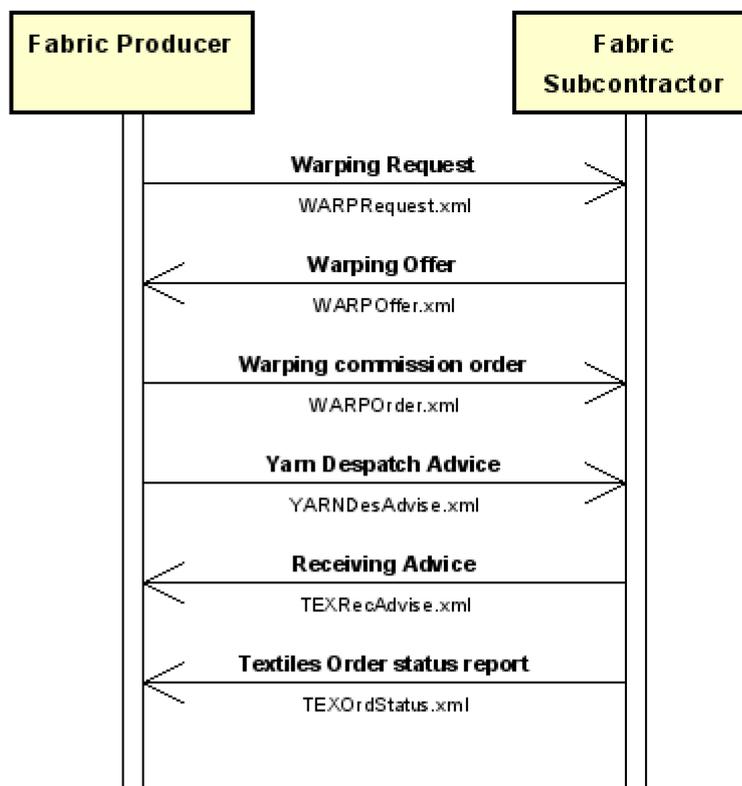
**1.1.2 Process: Fabric subcontracted manufacturing**

Process	Activity	Function	Documents
Fabric subcontracted manufacturing	Subcontracted warping	Fabric Producer Fabric Subcontractor	Warping Request Warping Offer Warping commission order

			<p>Yarn Despatch Advice Receiving Advice Textile Order status report</p>
	Subcontracted weaving	<p>Fabric Producer Fabric Subcontractor</p>	<p>Weaving Request Weaving Offer Weaving commission order Yarn Despatch Advice Receiving Advice Textile Order status report Textile Despatch advice Textile Despatch Request Textile in work Inventory report</p>
	Subcontracted fabric dyeing-finishing	<p>Fabric Producer Dyeing/Finishing Sub-contractor</p>	<p>Textile Dyeing-Finishing Request Textile Dyeing-Finishing Offer Textile Dyeing-Finishing Order Textile Despatch advice Receiving Advice Textile Order status report Textile Despatch Request Textile in work Inventory report</p>
	Subcontracted fabric printing	<p>Fabric Producer Print shop</p>	<p>Textile printing commission order Textile Despatch advice Receiving Advice Textile Order status report Textile Despatch Request Textile in work Inventory report</p>

<b>Process Name</b>	Fabric subcontracted manufacturing
<b>Actors</b>	Fabric Producer function, Fabric Subcontractor, Dyeing/Finishing Subcontractor, Print shop
<b>Description</b>	Fabric production process commissioned to subcontractors; the process starts from raw material and produces finished fabrics. The Fabric Producer function commissions to specialised Subcontractors some value-added operations of the manufacturing cycle because of specific know-how or scale economies. In this process 3 events are fundamental: the issue of the commission order, the swap of the material, the reporting of the order progress.
<b>Activities</b>	<ul style="list-style-type: none"> <li>• Subcontracted warping</li> <li>• Subcontracted weaving</li> <li>• Subcontracted fabric dyeing-finishing</li> <li>• Subcontracted fabric printing</li> </ul>

### 1.1.2.1 Activity "Subcontracted warping"



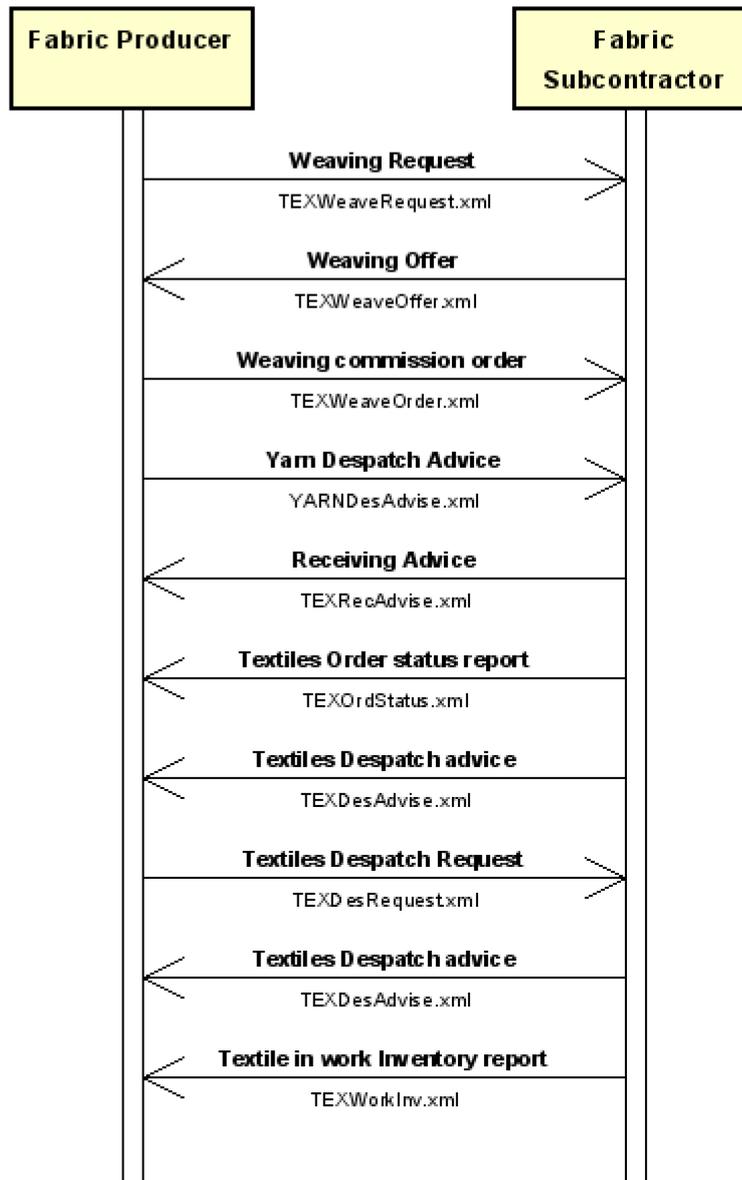
<b>Activity Name</b>	Subcontracted warping
<b>Description</b>	activity by which a Contractor commissions a ground warp to a Subcontractor
<b>Transactions</b>	<ul style="list-style-type: none"> <li>• Warping Request</li> <li>• Warping Offer</li> <li>• Warping commission order</li> <li>• Yarn Despatch Advice</li> <li>• Receiving Advice</li> <li>• Textile Order status report</li> </ul>

<b>Pre-conditions</b>	The Fabric Producer function has decided to commission the warping to a specialised Subcontractor
<b>Post-conditions</b>	The commission order has been executed and the finished (output) product has been delivered back (or made available) to the Commissioner
<b>Reference to the related ebBP</b>	<a href="http://www.moda-ml.net/moda-ml/repository/ebBP/v2013-1/en/ebBP_subcontractedwarping-1_2013-1.xml">http://www.moda-ml.net/moda-ml/repository/ebBP/v2013-1/en/ebBP_subcontractedwarping-1_2013-1.xml</a>

### ***Transactions inside the activity “Subcontracted warping”***

<b>Action 1 (Request from Fabric Producer function to Fabric Subcontractor)</b>	
<b>Document Name</b>	Warping Request
<b>Action Description</b>	This message is usable to request an offer for the ground warping of yarn
<b>Action 2 (Response from Fabric Subcontractor to Fabric Producer function)</b>	
<b>Document Name</b>	Warping Offer
<b>Action Description</b>	This message is usable to make an offer for the ground warping of yarn
<b>Action 3 (Request from Fabric Producer function to Fabric Subcontractor)</b>	
<b>Document Name</b>	Warping commission order
<b>Action Description</b>	This message is usable to commission the ground warping of yarn
<b>Action 4 (Request from Fabric Producer function to Fabric Subcontractor)</b>	
<b>Document Name</b>	Yarn Despatch Advice
<b>Action Description</b>	This message is usable to inform the Subcontractor about the yarn sent for ground warping
<b>Action 5 (Response from Fabric Subcontractor to Fabric Producer function)</b>	
<b>Document Name</b>	Receiving Advice
<b>Action Description</b>	This message is usable to certify to the Commissioner the receipt of the material sent for the commission (see preceding activity)
<b>Action 6 (Request from Fabric Subcontractor to Fabric Producer function)</b>	
<b>Document Name</b>	Textile Order status report
<b>Action Description</b>	This message is usable to report to the Commissioner the progress of his commission orders

### 1.1.2.2 Activity "Subcontracted weaving"



<b>Activity Name</b>	Subcontracted weaving
<b>Description</b>	activity by which a Contractor commissions the weaving of grey fabric to a Subcontractor
<b>Transactions</b>	<ul style="list-style-type: none"> <li>• Weaving Request</li> <li>• Weaving Offer</li> <li>• Weaving commission order</li> <li>• Yarn Despatch Advice</li> <li>• Receiving Advice</li> <li>• Textile Order status report</li> <li>• Textile Despatch advice</li> <li>• Textile Despatch Request</li> <li>• Textile in work Inventory report</li> </ul>

<b>Pre-conditions</b>	The Fabric Producer function has decided to commission the weaving to a specialised Subcontractor
<b>Post-conditions</b>	The commission order has been executed and the finished (output) product has been delivered back (or made available) to the Commissioner
<b>Reference to the related ebBP</b>	<a href="http://www.moda-ml.net/moda-ml/repository/ebBP/v2013-1/en/ebBP_subcontractedweaving-1_2013-1.xml">http://www.moda-ml.net/moda-ml/repository/ebBP/v2013-1/en/ebBP_subcontractedweaving-1_2013-1.xml</a>

### ***Transactions inside the activity "Subcontracted weaving"***

<b>Action 1 (Request from Fabric Producer function to Fabric Subcontractor)</b>	
<b>Document Name</b>	Weaving Request
<b>Action Description</b>	This message is usable to request an offer for the weaving of yarn
<b>Action 2 (Response from Fabric Subcontractor to Fabric Producer function)</b>	
<b>Document Name</b>	Weaving Offer
<b>Action Description</b>	This message is usable to make an offer for the weaving of yarn
<b>Action 3 (Request from Fabric Producer function to Fabric Subcontractor)</b>	
<b>Document Name</b>	Weaving commission order
<b>Action Description</b>	This message is usable to commission the weaving of yarn
<b>Action 4 (Request from Fabric Producer function to Fabric Subcontractor)</b>	
<b>Document Name</b>	Yarn Despatch Advice
<b>Action Description</b>	This message is usable to inform the Subcontractor about the yarn sent for weaving
<b>Action 5 (Response from Fabric Subcontractor to Fabric Producer function)</b>	
<b>Document Name</b>	Receiving Advice
<b>Action Description</b>	This message is usable to certify to the Commissioner the receipt of the material sent for the commission (see preceding activity)
<b>Action 6 (Request from Fabric Subcontractor to Fabric Producer function)</b>	
<b>Document Name</b>	Textile Order status report
<b>Action Description</b>	This message is usable to report to the Commissioner the progress of his commission orders
<b>Action 7 (Request from Fabric Subcontractor to Fabric Producer function)</b>	
<b>Document Name</b>	Textile Despatch advice
<b>Action Description</b>	This message is usable to inform the Commissioner that the commissioned output product (fabric) is available
<b>Action 8 (Request from Fabric Producer function to Fabric Subcontractor)</b>	
<b>Document Name</b>	Textile Despatch Request

**Action Description** This message is usable to schedule the delivery of the commissioned output product (fabric) at the Commissioner's premises

**Action 9 (Response from Fabric Subcontractor to Fabric Producer function)**

**Document Name** Textile Despatch advice

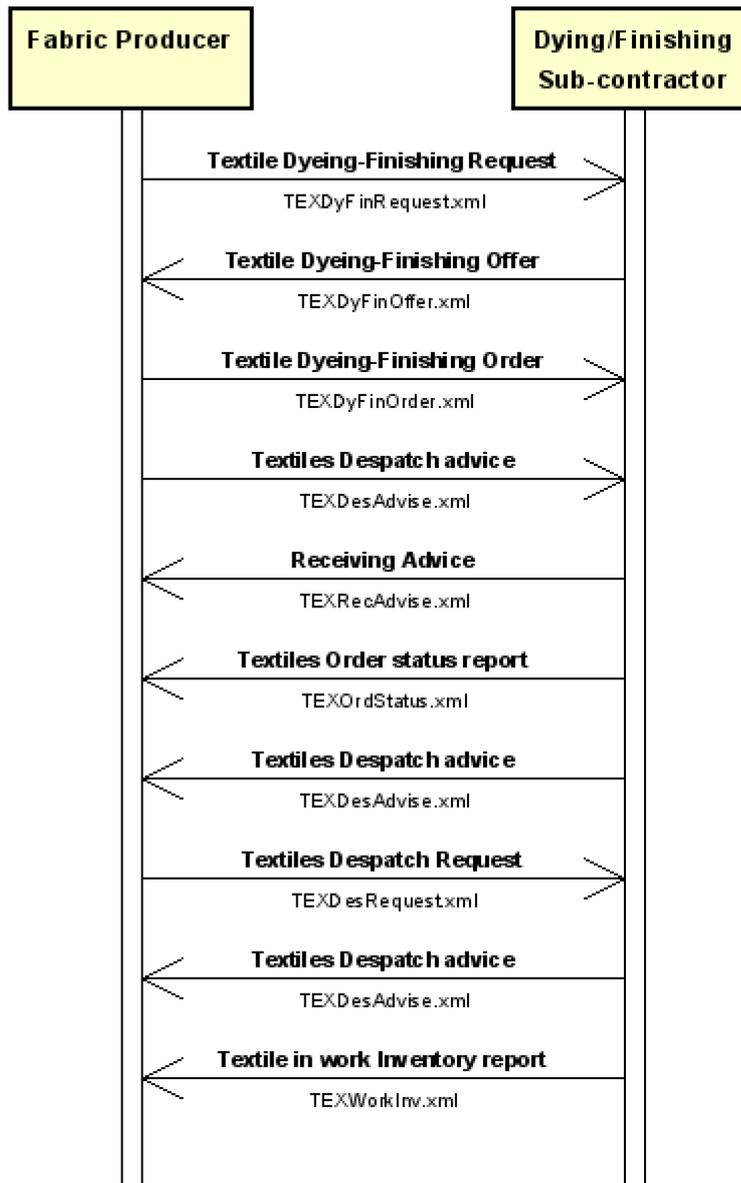
**Action Description** This message is usable to inform the Commissioner that the commissioned output product (fabric) has been despatched

**Action 10 (Request from Fabric Subcontractor to Fabric Producer function)**

**Document Name** Textile in work Inventory report

**Action Description** This message is usable to certify to the Commissioner the Stock and WIP amount of his materials

### 1.1.2.3 Activity "Subcontracted fabric dyeing-finishing"



<b>Activity Name</b>	Subcontracted fabric dyeing-finishing
<b>Description</b>	activity by which a Contractor commissions the dyeing-finishing of grey fabric to a Subcontractor
<b>Transactions</b>	<ul style="list-style-type: none"> <li>• Textile Dyeing-Finishing Request</li> <li>• Textile Dyeing-Finishing Offer</li> <li>• Textile Dyeing-Finishing Order</li> <li>• Textile Despatch advice</li> <li>• Receiving Advice</li> <li>• Textile Order status report</li> <li>• Textile Despatch Request</li> <li>• Textile in work Inventory report</li> </ul>
<b>Pre-conditions</b>	The Fabric Producer function has decided to commission the dyeing-finishing to a specialised Subcontractor

<b>Post-conditions</b>	The commission order has been executed and the finished (output) product has been delivered back (or made available) to the Commissioner
<b>Reference to the related ebBP</b>	<a href="http://www.moda-ml.net/moda-ml/repository/ebBP/v2013-1/en/ebBP_subcontractedfabricdyeingfinishing-1_2013-1.xml">http://www.moda-ml.net/moda-ml/repository/ebBP/v2013-1/en/ebBP_subcontractedfabricdyeingfinishing-1_2013-1.xml</a>

### *Transactions inside the activity “Subcontracted fabric dyeing-finishing”*

#### **Action 1 (Request from Fabric Producer function to Dyeing/Finishing Sub-contractor)**

<b>Document Name</b>	Textile Dyeing-Finishing Request
<b>Action Description</b>	This message is usable to request an offer for the dyeing-finishing of grey fabric

#### **Action 2 (Response from Dyeing/Finishing Sub-contractor to Fabric Producer function)**

<b>Document Name</b>	Textile Dyeing-Finishing Offer
<b>Action Description</b>	This message is usable to make an offer for the dyeing-finishing of grey fabric

#### **Action 3 (Request from Fabric Producer function to Dyeing/Finishing Sub-contractor)**

<b>Document Name</b>	Textile Dyeing-Finishing Order
<b>Action Description</b>	This message is usable to commission the dyeing-finishing of grey fabric

#### **Action 4 (Request from Fabric Producer function to Dyeing/Finishing Sub-contractor)**

<b>Document Name</b>	Textile Despatch advice
<b>Action Description</b>	This message is usable to inform the Subcontractor about the grey fabric sent for dyeing-finishing

#### **Action 5 (Response from Dyeing/Finishing Sub-contractor to Fabric Producer function)**

<b>Document Name</b>	Receiving Advice
<b>Action Description</b>	This message is usable to certify to the Commissioner the receipt of the material sent for the commission (see preceding activity)

#### **Action 6 (Request from Dyeing/Finishing Sub-contractor to Fabric Producer function)**

<b>Document Name</b>	Textile Order status report
<b>Action Description</b>	This message is usable to report to the Commissioner the progress of his commission orders

#### **Action 7 (Request from Dyeing/Finishing Sub-contractor to Fabric Producer function)**

<b>Document Name</b>	Textile Despatch advice
<b>Action Description</b>	This message is usable to inform the Commissioner that the commissioned output product (fabric) is available

#### **Action 8 (Request from Fabric Producer function to Dyeing/Finishing Sub-contractor)**

<b>Document Name</b>	Textile Despatch Request
<b>Action Description</b>	This message is usable to schedule the delivery of the commissioned output product (fabric) at the Commissioner's premises

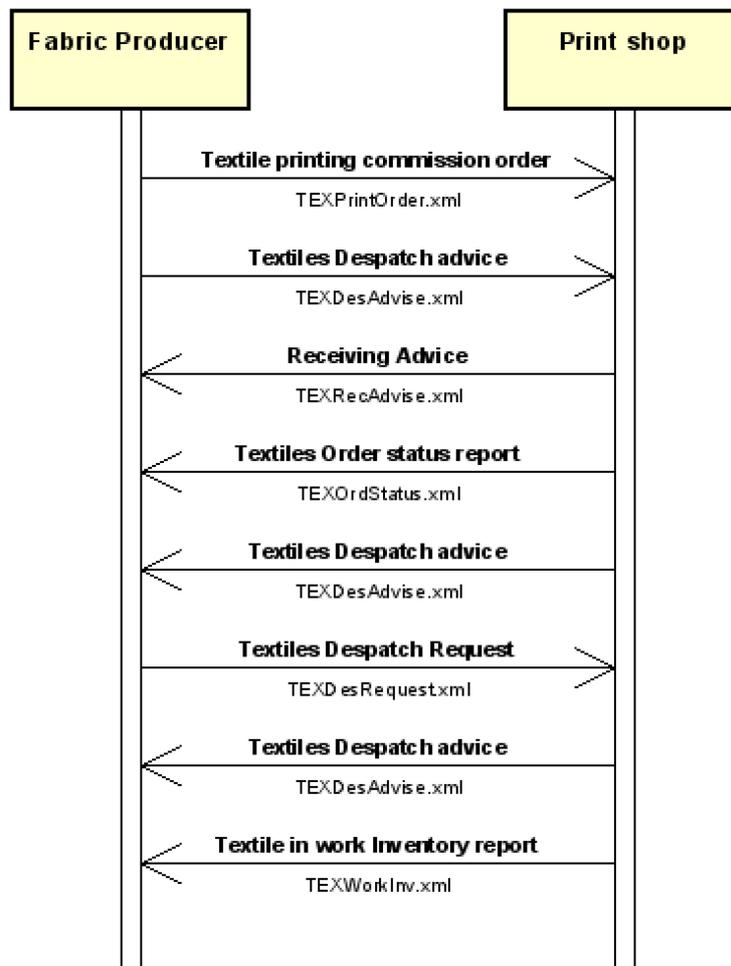
**Action 9 (Response from Dyeing/Finishing Sub-contractor to Fabric Producer function)**

<b>Document Name</b>	Textile Despatch advice
<b>Action Description</b>	This message is usable to inform the Commissioner that the commissioned output product (fabric) has been despatched

**Action 10 (Request from Dyeing/Finishing Sub-contractor to Fabric Producer function)**

<b>Document Name</b>	Textile in work Inventory report
<b>Action Description</b>	This message is usable to certify to the Commissioner the Stock and WIP amount of his materials

### 1.1.2.4 Activity "Subcontracted fabric printing"



<b>Activity Name</b>	Subcontracted fabric printing
<b>Description</b>	activity by which a Contractor commissions the printing of fabric to a Subcontractor
<b>Transactions</b>	<ul style="list-style-type: none"> <li>• Textile printing commission order</li> <li>• Textile Despatch advice</li> <li>• Receiving Advice</li> <li>• Textile Order status report</li> <li>• Textile Despatch Request</li> <li>• Textile in work Inventory report</li> </ul>
<b>Pre-conditions</b>	The Fabric Producer function has decided to commission the printing to a specialised Subcontractor
<b>Post-conditions</b>	The commission order has been executed and the finished (output) product has been delivered back (or made available) to the Commissioner
<b>Reference to the related ebBP</b>	<a href="http://www.moda-ml.net/moda-ml/repository/ebBP/v2013-1/en/ebBP_subcontractedfabricprinting-1_2013-1.xml">http://www.moda-ml.net/moda-ml/repository/ebBP/v2013-1/en/ebBP_subcontractedfabricprinting-1_2013-1.xml</a>

#### Transactions inside the activity "Subcontracted fabric printing"

**Action 1 (Request from Fabric Producer function to Print shop)**

<b>Document Name</b>	Textile printing commission order
<b>Action Description</b>	This message is usable to commission the printing of fabric

**Action 2 (Request from Fabric Producer function to Print shop)**

<b>Document Name</b>	Textile Despatch advice
<b>Action Description</b>	This message is usable to inform the Subcontractor about the fabric sent for printing

**Action 3 (Response from Print shop to Fabric Producer function)**

<b>Document Name</b>	Receiving Advice
<b>Action Description</b>	This message is usable to certify to the Commissioner the receipt of the material sent for the commission (see preceding activity)

**Action 4 (Request from Print shop to Fabric Producer function)**

<b>Document Name</b>	Textile Order status report
<b>Action Description</b>	This message is usable to report to the Commissioner the progress of his commission orders

**Action 5 (Request from Print shop to Fabric Producer function)**

<b>Document Name</b>	Textile Despatch advice
<b>Action Description</b>	This message is usable to inform the Commissioner that the commissioned output product (fabric) is available

**Action 6 (Request from Fabric Producer function to Print shop)**

<b>Document Name</b>	Textile Despatch Request
<b>Action Description</b>	This message is usable to schedule the delivery of the commissioned output product (fabric) at the Commissioner's premises

**Action 7 (Response from Print shop to Fabric Producer function)**

<b>Document Name</b>	Textile Despatch advice
<b>Action Description</b>	This message is usable to inform the Commissioner that the commissioned output product (fabric) has been despatched

**Action 8 (Request from Print shop to Fabric Producer function)**

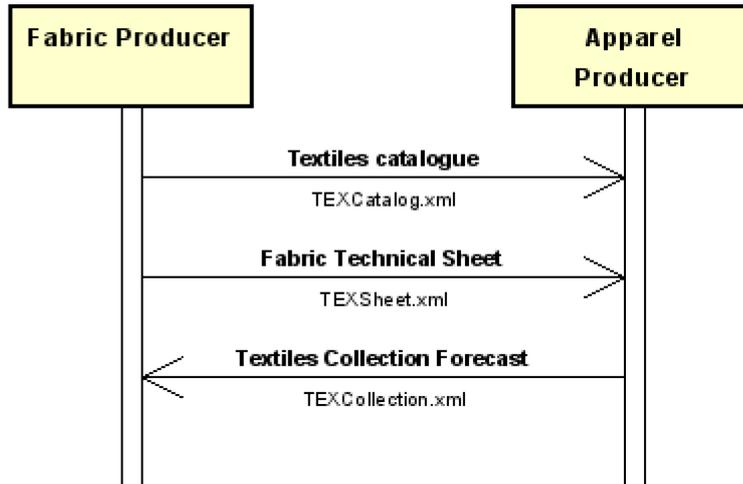
<b>Document Name</b>	Textile in work Inventory report
<b>Action Description</b>	This message is usable to certify to the Commissioner the Stock and WIP amount of his materials

### 1.1.3 Process: Fabric supply

Process	Activity	Function	Documents
Fabric supply	Selection of fabrics	Fabric Producer Apparel Producer	Textile catalogue Fabric Technical Sheet Textile Collection Forecast
	Purchase of fabrics	Apparel Producer Fabric Producer	Textile Purchase Order Textile Order Response Textile Order change Textile Order status rep.
	Fabric delivery with quality reporting by Producer	Apparel Producer Fabric Producer	Textile Despatch Request Textile Despatch advice Textile Quality Report
	Despatch of fabrics with groupage <i>(Alternative to the previous one)</i>	Apparel Producer Fabric Producer Fabric Controller Apparel Subcontractor	Textile Despatch Request Textile Despatch advice Garment Kit Despatch Request Garment Kit Despatch Advice
	Fabric delivery with quality reporting by Controller <i>(Alternative to the previous one)</i>	Apparel Producer Fabric Controller Fabric Producer Apparel Subcontractor	Textile Collection Forecast Textile Despatch Request Textile Despatch advice Piece control Order Textile Quality Report Receiving Advice
	Invoicing of fabrics	Fabric Producer Apparel Producer	Textile Invoice

<b>Process Name</b>	Fabric supply
<b>Actors</b>	Fabric Producer function, Apparel Producer function, Fabric Controller, Apparel Subcontractor
<b>Description</b>	process that describes the procurement of fabric by Clothing companies or Brand Retailers or other kind of Users (Home textile or automotive)
<b>Activities</b>	<ul style="list-style-type: none"> <li>• Selection of fabrics</li> <li>• Purchase of fabrics</li> <li>• Fabric delivery with quality reporting by Producer function</li> <li>• Despatch of fabrics with groupage</li> <li>• Fabric delivery with quality reporting by Controller</li> <li>• Invoicing of fabrics</li> </ul>

### 1.1.3.1 Activity "Selection of fabrics"



<b>Activity Name</b>	Selection of fabrics
<b>Description</b>	Activity of selection of the fabrics that the Clothing company (or any other User) insert in its Collection (includes the exchange of the products codes, the technical sheets, the anticipation or the forecast about articles to be purchased)
<b>Transactions</b>	<ul style="list-style-type: none"> <li>• Textile catalogue</li> <li>• Fabric Technical Sheet</li> <li>• Textile Collection Forecast</li> </ul>
<b>Pre-conditions</b>	The Clothing company must select and reserve the fabric articles to employ in its apparel collection
<b>Post-conditions</b>	The Textile company knows in advance the fabric articles of its catalogue that will be put into production
<b>Reference to the related ebBP</b>	<a href="http://www.moda-ml.net/moda-ml/repository/ebBP/v2013-1/en/ebBP_selectionoffabrics-1_2013-1.xml">http://www.moda-ml.net/moda-ml/repository/ebBP/v2013-1/en/ebBP_selectionoffabrics-1_2013-1.xml</a>

#### Transactions inside the activity "Selection of fabrics"

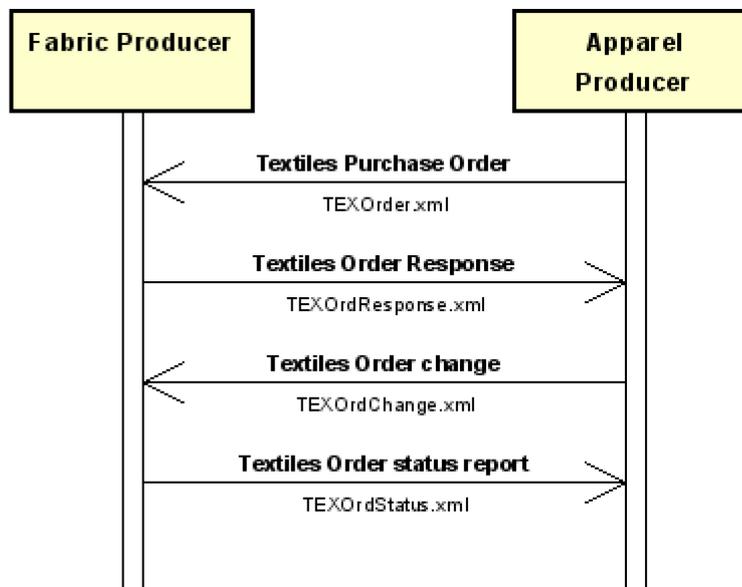
<b>Action 1 (Request from Fabric Producer function to Apparel Producer function)</b>	
<b>Document Name</b>	Textile catalogue
<b>Action Description</b>	This document is usable both as a sales catalogue and to exchange in advance the product data between the Supplier and the Customer, in order to synchronize their product data-bases. It lists the articles composing the Fabric Producer function's offer (codes, descriptions, prices and sales conditions) and can include some of the technical data (composition, weight and width, construction specifications, ...).
<b>Action 2 (Request from Fabric Producer function to Apparel Producer function)</b>	
<b>Document Name</b>	Fabric Technical Sheet
<b>Action</b>	This document is used to provide the Customer (Buyer) with the technical

**Description** data relevant to describe and characterize the fabric article; i.e.: general data, construction details, measurements of colour fastness, dimensional stability and mechanical properties

**Action 3 (Request from Apparel Producer function to Fabric Producer function)**

<b>Document Name</b>	Textile Collection Forecast
<b>Action Description</b>	This document is used to notify to the Fabric Producer function the articles of his Offer that are considered for future acquisition or use in the Apparel Season Collection. The same document can also be used by the Client to request the Fabric Technical Sheet and/or notify the buyer's article code to the Producer function.

**1.1.3.2 Activity "Purchase of fabrics"**



<b>Activity Name</b>	Purchase of fabrics
<b>Description</b>	Activity of purchase of fabrics includes monitoring of the advancements of the order.
<b>Transactions</b>	<ul style="list-style-type: none"> <li>• Textile Purchase Order</li> <li>• Textile Order Response</li> <li>• Textile Order change</li> <li>• Textile Order status report</li> </ul>
<b>Pre-conditions</b>	The Clothing company has defined the fabric articles that will order (article identifiers, quantities, delivery dates)
<b>Post-conditions</b>	The Textile company has processed and executed the order received
<b>Reference to the related ebBP</b>	<a href="http://www.moda-ml.net/moda-ml/repository/ebBP/v2013-1/en/ebBP_purchaseoffabrics-1_2013-1.xml">http://www.moda-ml.net/moda-ml/repository/ebBP/v2013-1/en/ebBP_purchaseoffabrics-1_2013-1.xml</a>

**Transactions inside the activity "Purchase of fabrics"**

**Action 1 (Request from Apparel Producer function to Fabric Producer function)**

<b>Document Name</b>	Textile Purchase Order
<b>Action Description</b>	The message is issued by the Apparel Producer function to purchase fabric articles.

**Action 2 (Response from Fabric Producer function to Apparel Producer function)**

<b>Document Name</b>	Textile Order Response
<b>Action Description</b>	The message is issued by the Fabric Producer function in response to a purchase order. The Producer function must, in any case, return an Order Response for any Order received, where, for each item, he notifies the acceptance as it is (C), the variation (V) or the cancellation (A).

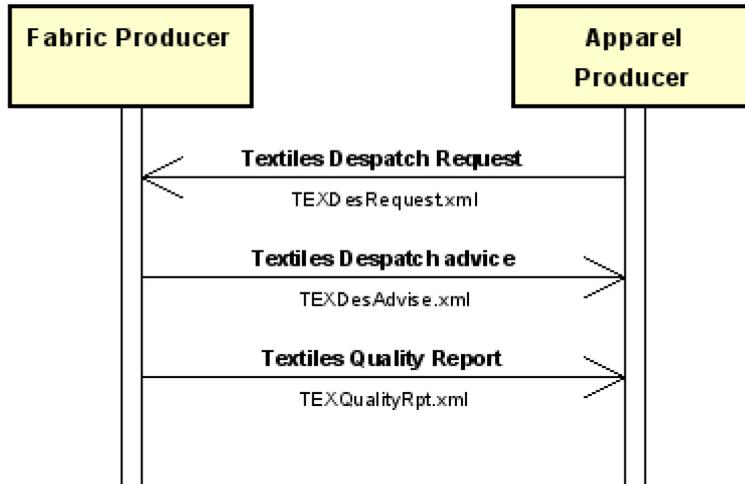
**Action 3 (Request from Apparel Producer function to Fabric Producer function)**

<b>Document Name</b>	Textile Order change
<b>Action Description</b>	The Apparel Producer function sends to the Fabric Producer function an Order Change any time he must modify some conditions of his previous Order (e.g. to cancel items not delivered in time) or amend errors (e.g. invalid prices).

**Action 4 (Request from Fabric Producer function to Apparel Producer function)**

<b>Document Name</b>	Textile Order status report
<b>Action Description</b>	The message is issued by the Fabric Producer function to report to his Client the status of his Orders and the updated delivery dates, with the possibility of splitting an order line into several consignments.

### 1.1.3.3 Activity "Fabric delivery with quality reporting by Producer"



<b>Activity Name</b>	Fabric delivery with quality reporting by Producer function
<b>Description</b>	Activity of delivering the fabrics to the Clients or their SubContractors without the intervention of a Controller
<b>Transactions</b>	<ul style="list-style-type: none"> <li>• Textile Despatch Request</li> <li>• Textile Despatch advice</li> <li>• Textile Quality Report</li> </ul>
<b>Pre-conditions</b>	The Clothing producer function agrees to accept the fabric pieces with self-certification of the Fabric Supplier function
<b>Post-conditions</b>	The fabric pieces are delivered to the Clothing producer function with the only quality certification made by the Fabric supplier function
<b>Reference to the related ebBP</b>	<a href="http://www.moda-ml.net/moda-ml/repository/ebBP/v2013-1/en/ebBP_fabricdeliverywithqualityreportingbyproducer-1_2013-1.xml">http://www.moda-ml.net/moda-ml/repository/ebBP/v2013-1/en/ebBP_fabricdeliverywithqualityreportingbyproducer-1_2013-1.xml</a>

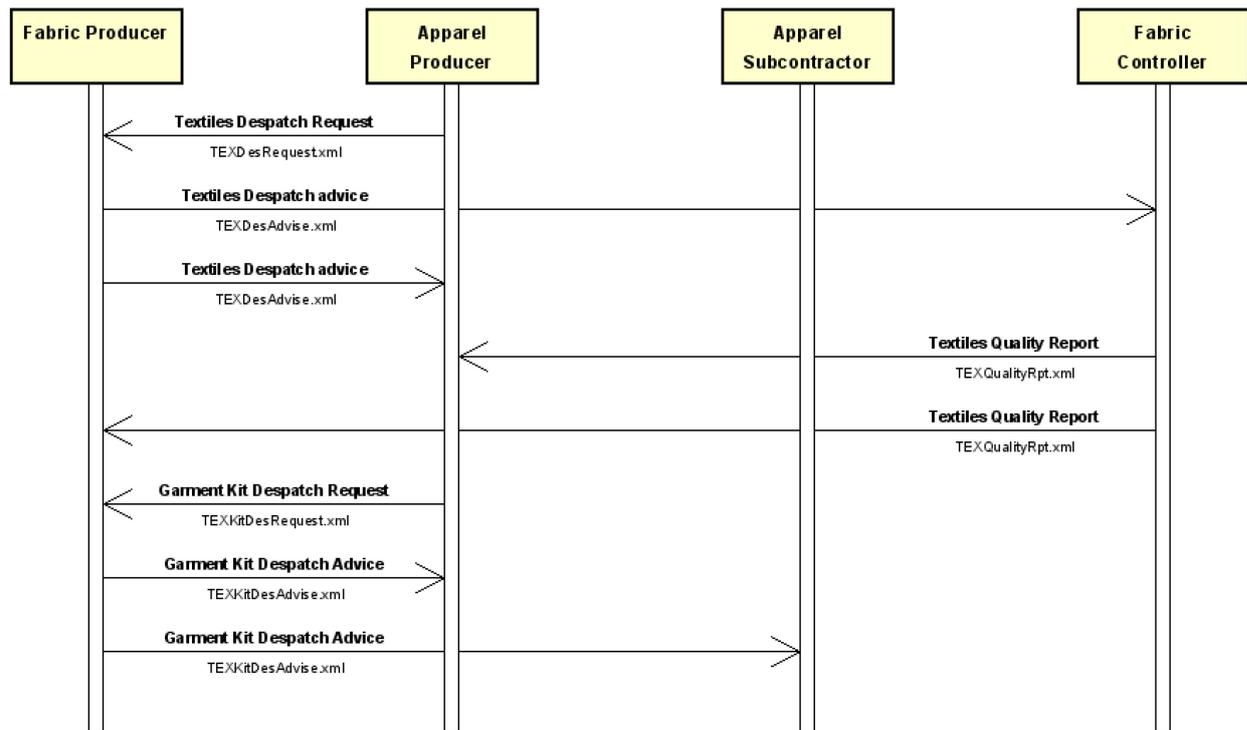
#### Transactions inside the activity "Fabric delivery with quality reporting by Producer"

<b>Action 1 (Request from Apparel Producer function to Fabric Producer function)</b>	
<b>Document Name</b>	Textile Despatch Request
<b>Action Description</b>	The message is issued to plan the delivery of the fabric pieces that are in the "ready for despatch" status (see the document "Textile Order Status"). This document enables the Buyer function to modify some date of its Order (delivery dates and places)
<b>Action 2 (Response from Fabric Producer function to Apparel Producer function)</b>	
<b>Document Name</b>	Textile Despatch advice
<b>Action Description</b>	The message is issued to anticipate the details the articles actually despatched.
<b>Action 3 (Request from Fabric Producer function to Apparel Producer function)</b>	
<b>Document</b>	Textile Quality Report

**Name**

**Action Description** The message is issued by the Fabric Producer function as "quality certificate" of the fabric piece, mainly to anticipate the details on the existence, position and classification of faults in order to accelerate and improve the following apparel manufacturing.

**1.1.3.4 Activity "Despatch of fabrics with groupage"**



<b>Activity Name</b>	Despatch of fabrics with groupage
<b>Description</b>	In this scenario, the Fabric Producer functions agree to send fabrics and accessories ordered by the Apparel Producer function to a Logistics Company or directly to the Apparel Subcontractor specified by the Apparel Producer function. The Apparel Producer function send a Despatch Request of the "kit" to the Fabric Producer function or to the Logistics company so that it can make the "groupage (fabric, buttons, fastners...)" and send it to the specified Subcontractor. At this point, the Logistics company (or the Fabric Producer function) sends the Despatch Advice to the Apparel Producer function to confirm the shipping; the same document is sent to the Subcontractor to anticipate the information about the material it will receive.
<b>Transactions</b>	<ul style="list-style-type: none"> <li>• Textile Despatch Request</li> <li>• Textile Despatch advice</li> <li>• Textile Quality Report</li> <li>• Garment Kit Despatch Request</li> </ul>

	<ul style="list-style-type: none"> <li>• Garment Kit Despatch Advice</li> </ul>
<b>Pre-conditions</b>	The Clothing company has contracted the Fabric Producer function or a Logistics company for the "groupage" service (fabric pieces and accessories grouped together in the apparel kit)
<b>Post-conditions</b>	The fabric pieces are delivered to the SubContractor of the Clothing company controlled and assembled in apparel kits
<b>Reference to the related ebBP</b>	<a href="http://www.moda-ml.net/moda-ml/repository/ebBP/v2013-1/en/ebBP_despatchoffabricswithgroupage-1_2013-1.xml">http://www.moda-ml.net/moda-ml/repository/ebBP/v2013-1/en/ebBP_despatchoffabricswithgroupage-1_2013-1.xml</a>

### ***Transactions inside the activity "Despatch of fabrics with groupage"***

<b>Action 1 (Request from Apparel Producer function to Fabric Producer function)</b>	
<b>Document Name</b>	Textile Despatch Request
<b>Action Description</b>	The message is issued to plan the delivery of the fabric pieces that are in the "ready for despatch" status (see the document "Textile Order Status"). This document enables the Buyer function to modify some date of its Order (delivery dates and places)
<b>Action 2 (Request from Fabric Producer function to Fabric Controller)</b>	
<b>Document Name</b>	Textile Despatch advice
<b>Action Description</b>	The message is issued to anticipate to the Fabric Controller the details the articles actually despatched.
<b>Action 3 (Request from Fabric Producer function to Apparel Producer function)</b>	
<b>Document Name</b>	Textile Despatch advice
<b>Action Description</b>	The message is issued to notify to the Apparel Producer function the details the articles physically dispatched to the Fabric Controller
<b>Action 4 (Request from Fabric Controller to Apparel Producer function)</b>	
<b>Document Name</b>	Textile Quality Report
<b>Action Description</b>	The message is issued by the Fabric Quality Controller as "quality certificate" of the fabric piece, mainly to anticipate the details on the existence, position and classification of faults in order to accelerate and improve the following apparel manufacturing.
<b>Action 5 (Request from Fabric Controller to Fabric Producer function)</b>	
<b>Document Name</b>	Textile Quality Report
<b>Action Description</b>	The message is issued by the Fabric Quality Controller as "quality certificate" to inform the Fabric Producer function about the result of its quality inspection
<b>Action 6 (Request from Apparel Producer function to Fabric Producer function)</b>	
<b>Document Name</b>	Garment Kit Despatch Request
<b>Action Description</b>	The Apparel Producer function send the Despatch Request of the "kit" to the Fabric Producer function (ALTERNATIVE: to the Logistics company) so that it can make the "groupage (fabric, buttons, fastners...)" and send it to the specified Subcontractor.

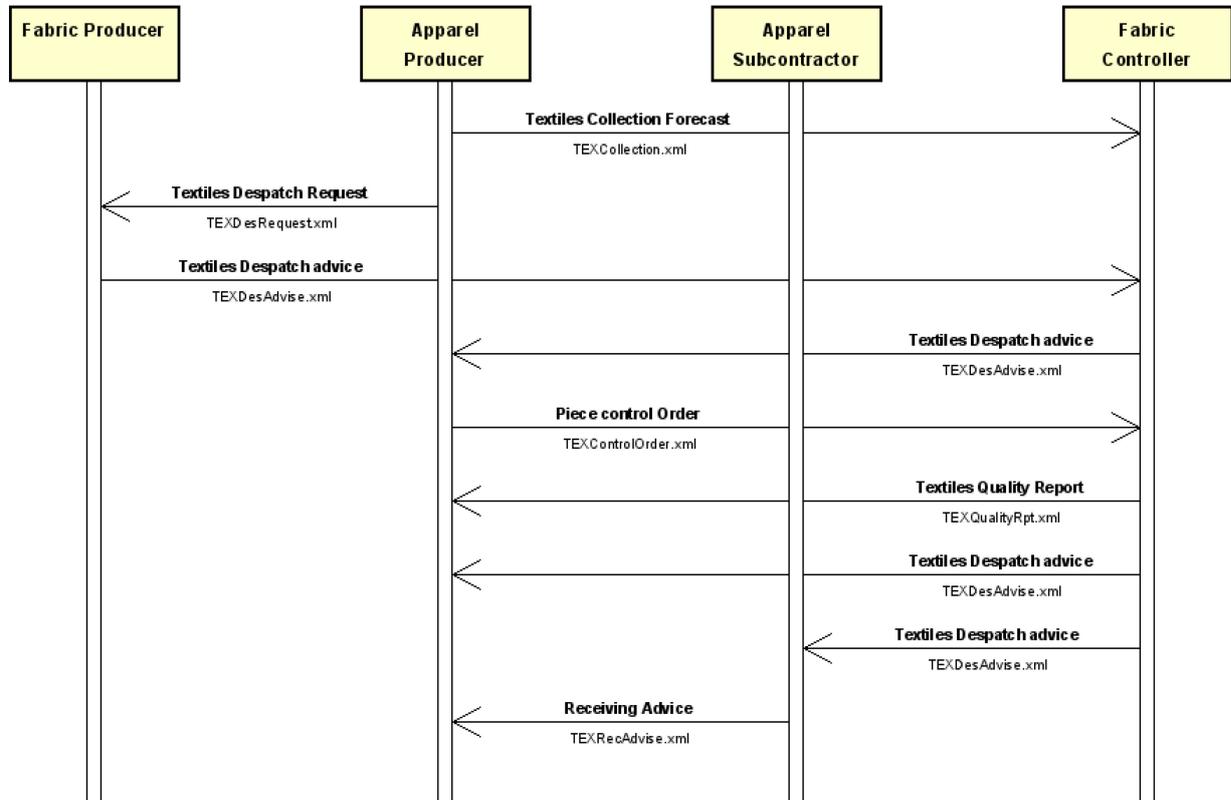
**Action 7 (Response from Fabric Producer function to Apparel Producer function)**

<b>Document Name</b>	Garment Kit Despatch Advice
<b>Action Description</b>	The Fabric Producer function (ALTERNATIVE: the Logistics company) sends the Despatch Advice to the Apparel Producer function to confirm the shipping of the “kit” to the SubContractor.

**Action 8 (Request from Fabric Producer function to Apparel Subcontractor)**

<b>Document Name</b>	Garment Kit Despatch Advice
<b>Action Description</b>	The Fabric Producer function (ALTERNATIVE: the Logistics company) sends the Despatch Advice to the Subcontractor to anticipate the information about the material it will receive.

**1.1.3.5 Activity "Fabric delivery with quality reporting by Controller"**



<b>Activity Name</b>	Fabric delivery with quality reporting by Controller
<b>Description</b>	Activity of delivering the fabrics to the Clients or their SubContractors after the intervention of a Controller (inspection of the pieces)
<b>Transactions</b>	<ul style="list-style-type: none"> <li>• Textile Collection Forecast</li> <li>• Textile Despatch Request</li> <li>• Textile Despatch advice</li> <li>• Piece control Order</li> <li>• Textile Quality Report</li> <li>• Receiving Advice</li> </ul>
<b>Pre-conditions</b>	The Clothing company has contracted, for the inspection of the pieces, a

	Controller which receives the pieces from the Textile producer function
<b>Post-conditions</b>	The fabric pieces are delivered to the final destination (Clothing company or Apparel Subcontractor) already certified.
<b>Reference to the related ebBP</b>	<a href="http://www.moda-ml.net/moda-ml/repository/ebBP/v2013-1/en/ebBP_fabricdeliverywithqualityreportingbycontroller-1_2013-1.xml">http://www.moda-ml.net/moda-ml/repository/ebBP/v2013-1/en/ebBP_fabricdeliverywithqualityreportingbycontroller-1_2013-1.xml</a>

**Transactions inside the activity "Fabric delivery with quality reporting by Controller"**

**Action 1 (Request from Apparel Producer function to Fabric Controller)**

<b>Document Name</b>	Textile Collection Forecast
<b>Action Description</b>	In this business scenario the message is used to notify the Fabric Controller about the fabric articles he will inspect in the season.

**Action 2 (Request from Apparel Producer function to Fabric Producer function)**

<b>Document Name</b>	Textile Despatch Request
<b>Action Description</b>	The message is issued to plan the delivery of the fabric pieces that are in the "ready for despatch" status (see the document "Textile Order Status"). This document enables the Buyer function to modify some date of its Order (delivery dates and places)

**Action 3 (Request from Fabric Producer function to Fabric Controller)**

<b>Document Name</b>	Textile Despatch advice
<b>Action Description</b>	The message is issued to anticipate the details the articles actually despatched.

**Action 4 (Request from Fabric Controller to Apparel Producer function)**

<b>Document Name</b>	Textile Despatch advice
<b>Action Description</b>	The message here is used to notify the Apparel Producer function about the upload of the pieces for quality control

**Action 5 (Response from Apparel Producer function to Fabric Controller)**

<b>Document Name</b>	Piece control Order
<b>Action Description</b>	The document Piece Control Order is used by the Apparel Producer function to specify the type of inspection and accessory treatments requested for each fabric piece and the final destination of the fabric piece.

**Action 6 (Request from Fabric Controller to Apparel Producer function)**

<b>Document Name</b>	Textile Quality Report
<b>Action Description</b>	The message is issued by the Fabric Controller as "quality certificate" of the fabric piece, mainly to anticipate the details on the existence, position and classification of faults in order to accelerate and improve the following apparel manufacturing.

**Action 7 (Request from Fabric Controller to Apparel Producer function)**

<b>Document Name</b>	Textile Despatch advice
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<b>Action Description</b>	The message is issued to anticipate the details the fabric pieces that are to be dispatched after quality control. The physical dispatch can be either to the Client (Apparel Producer function) or to a Subcontractor; in the second instance, this is for information only.
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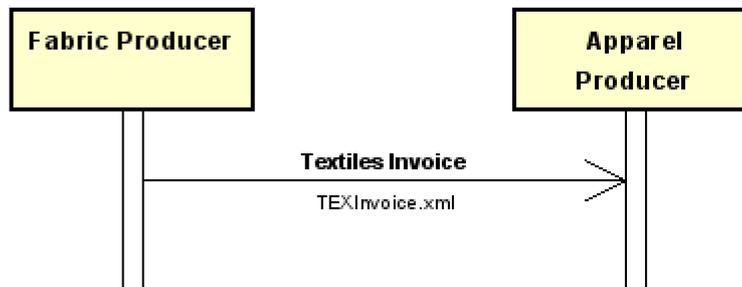
#### Action 8 (Request from Fabric Controller to Apparel Subcontractor)

<b>Document Name</b>	Textile Despatch advice
<b>Action Description</b>	The message is issued to anticipate the details the fabric pieces that are to be dispatched after quality control when the physical dispatch is to a Subcontractor.

#### Action 9 (Request from Apparel Subcontractor to Apparel Producer function)

<b>Document Name</b>	Receiving Advice
<b>Action Description</b>	The Receiving Advice can be used by the Subcontractor either to confirm the regular receipt of the fabric pieces or to notify discrepancies between what was declared by the Sender and what was received.

### 1.1.3.6 Activity "Invoicing of fabrics"



<b>Activity Name</b>	Invoicing of fabrics
<b>Description</b>	Activity that brings to completion the trading between the Fabric Producer function and the Apparel Producer function, enabling the Fabric Producer function to debit the product supplied and any additional service performed.
<b>Transactions</b>	<ul style="list-style-type: none"> <li>Textile Invoice</li> </ul>
<b>Pre-conditions</b>	The Fabric Producer function has satisfied the Apparel Producer function's order under any quantitative/qualitative condition.
<b>Post-conditions</b>	The commercial transaction is concluded
<b>Reference to the related ebBP</b>	<a href="http://www.moda-ml.net/moda-ml/repository/ebBP/v2013-1/en/ebBP_invoicingoffabrics-1_2013-1.xml">http://www.moda-ml.net/moda-ml/repository/ebBP/v2013-1/en/ebBP_invoicingoffabrics-1_2013-1.xml</a>

### Transactions inside the activity "Invoicing of fabrics"

#### Action 1 (Request from Fabric Producer function to Apparel Producer function)

<b>Document Name</b>	Textile Invoice
<b>Action Description</b>	The message can be used by the Fabric Producer function to debit its Client for any kind of supply or service. This document can be used to debit standard fabric supply using the option "textItem", and additional



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goods or services (stocks, batch rests, ...) using the option "prodServItem",  
even in the same invoice

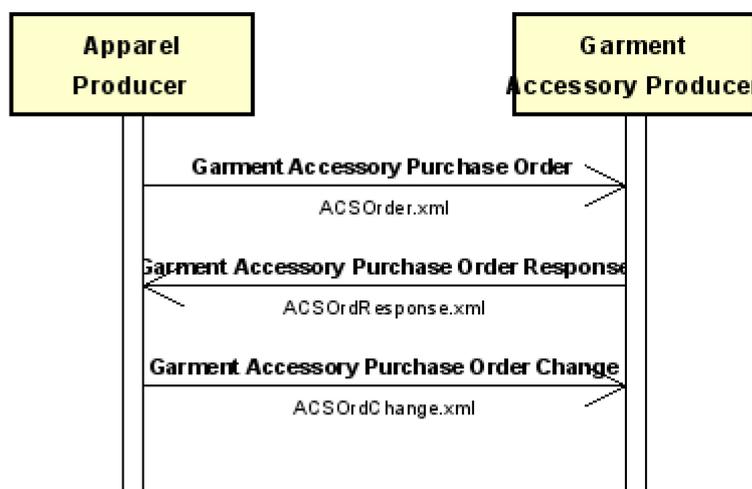
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### 1.1.4 Process: Garment accessory supply

Process	Activity	Function	Documents
Garment accessory supply	Purchase of Garment accessory	Apparel Producer Garment Accessory Producer	Garment Accessory Purchase Order Garment Accessory Purchase Order Response Garment Accessory Purchase Order Change
	Delivery of Garment accessories	Garment Accessory Producer Apparel Producer	Garment accessory Despatch Advice Garment accessory Despatch Request

<b>Process Name</b>	Garment accessory supply
<b>Actors</b>	Apparel Producer function, Garment Accessory Producer function
<b>Description</b>	process that describes the procurement of garment accessories by Clothing companies or Brand Retailers or other kind of Users (Home textile or automotive)
<b>Activities</b>	<ul style="list-style-type: none"> <li>• Purchase of Garment accessory</li> <li>• Delivery of Garment accessories</li> </ul>
<b>Reference to the related ebBP</b>	<a href="http://www.moda-ml.net/moda-ml/repository/ebBP/v2013-1/en/ebBP_garmentaccessorysupply-1_2013-1.xml">http://www.moda-ml.net/moda-ml/repository/ebBP/v2013-1/en/ebBP_garmentaccessorysupply-1_2013-1.xml</a>

#### 1.1.4.1 Activity "Purchase Garment accessory"



<b>Activity Name</b>	Purchase of Garment accessory
<b>Description</b>	Activity of purchase of garment accessories, includes monitoring of the advancements of the order.
<b>Transactions</b>	<ul style="list-style-type: none"> <li>• Garment Accessory Purchase Order</li> <li>• Garment Accessory Purchase Order Response</li> <li>• Garment Accessory Purchase Order Change</li> </ul>
<b>Pre-conditions</b>	The Clothing company has defined the garment accessories that will order (article identifiers, quantities, delivery dates)
<b>Post-conditions</b>	The Garment Accessory Producer function has processed and executed the order received

***Transactions inside the activity “Purchase of Garment accessory”***

**Action 1 (Request from Apparel Producer function to Garment Accessory Producer function)**

<b>Document Name</b>	Garment Accessory Purchase Order
<b>Action Description</b>	The message is issued by the Apparel Producer function to purchase garment accessories

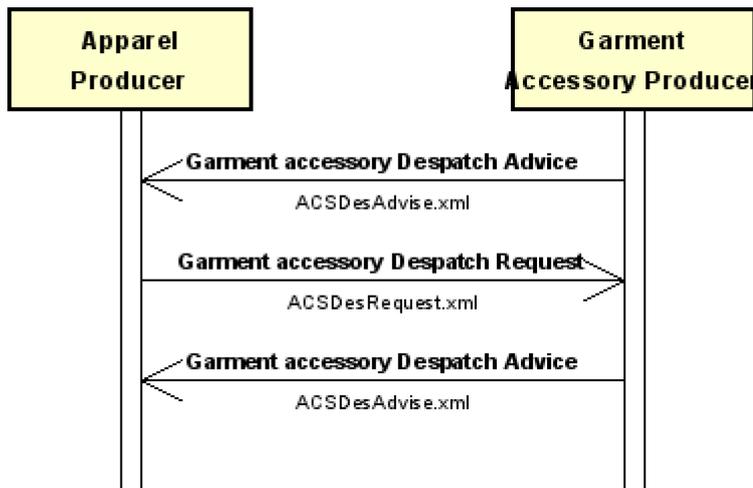
**Action 2 (Response from Garment Accessory Producer function to Apparel Producer function)**

<b>Document Name</b>	Garment Accessory Purchase Order Response
<b>Action Description</b>	The message is issued by the Garment Accessory Producer function in response to a purchase order. The Producer function must, in any case, return an Order Response for any Order received.

**Action 3 (Request from Apparel Producer function to Garment Accessory Producer function)**

<b>Document Name</b>	Garment Accessory Purchase Order Change
<b>Action Description</b>	The Apparel Producer function sends to the Garment Accessory Producer function an Order Change any time he must modify some conditions of his previous Order (e.g. to cancel items not delivered in time) or amend errors (e.g. invalid prices).

### 1.1.4.2 Activity "Delivery of Garment accessories"



<b>Activity Name</b>	Delivery of Garment accessories
<b>Description</b>	Activity of delivering the garment accessory to the Clients.
<b>Transactions</b>	<ul style="list-style-type: none"> <li>• Garment accessory Despatch Advice</li> <li>• Garment accessory Despatch Request</li> </ul>
<b>Pre-conditions</b>	The Clothing producer function function agrees to accept the garment accessories with self-certification of the fabric supplier function
<b>Post-conditions</b>	The garment accessories are delivered to the Clothing producer function with the only quality certification made by the fabric supplier function.

#### Transactions inside the activity "Delivery of Garment accessories"

##### Action 1 (Request from Garment Accessory Producer function to Apparel Producer function)

<b>Document Name</b>	Garment accessory Despatch Advice
<b>Action Description</b>	The message is issued to notify to the Apparel Producer function that the garment accessories are available for despatch. This document enables the Buyer function to plan the deliveries.

##### Action 2 (Request from Apparel Producer function to Garment Accessory Producer function)

<b>Document Name</b>	Garment accessory Despatch Request
<b>Action Description</b>	The message is issued to plan the delivery of the garment accessories. This document enables the Buyer function to modify some date of its Order (delivery dates and places)

##### Action 3 (Response from Garment Accessory Producer function to Apparel Producer function)

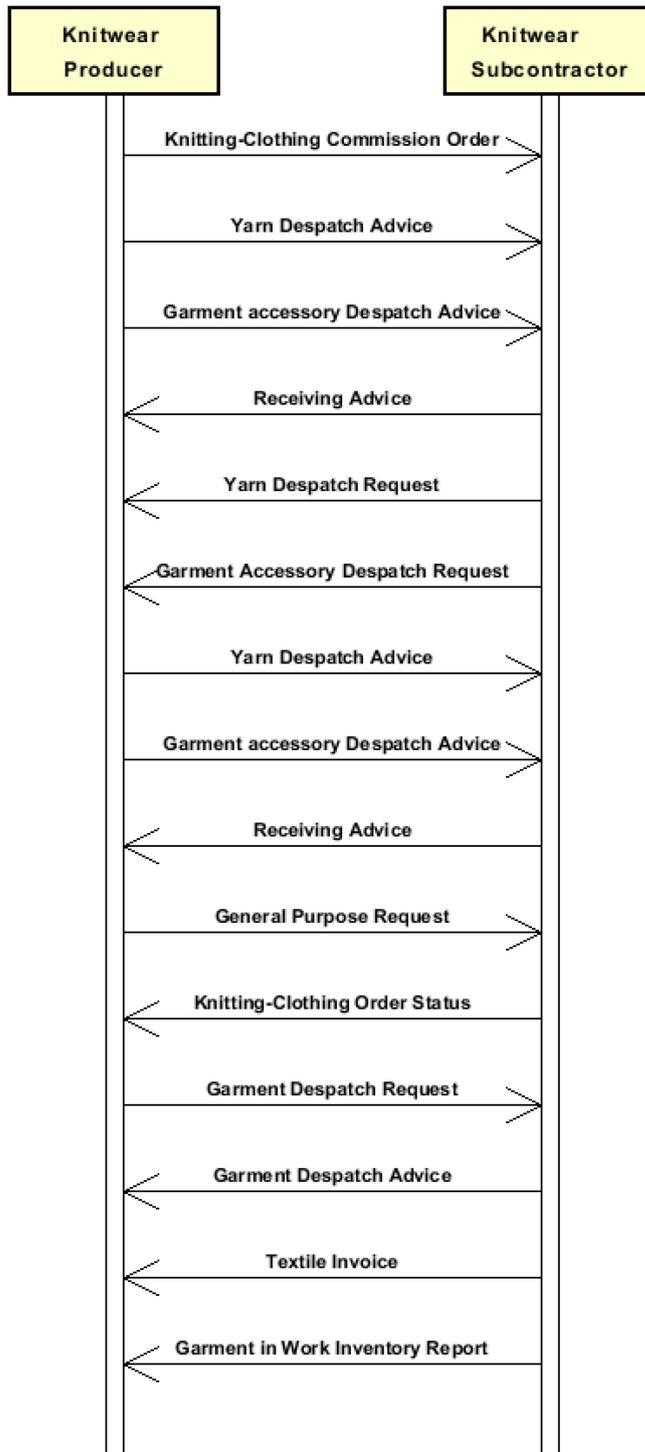
<b>Document Name</b>	Garment accessory Despatch Advice
<b>Action Description</b>	The message is issued to anticipate the details the articles actually despatched.

### 1.1.5 Process: Knitwear subcontracted manufacturing

Process	Activity	Function	Documents
Knitwear subcontracted manufacturing	Knitting and assembling	Knitwear Producer Knitwear Subcontractor	Knitting-Clothing Commission Order Yarn Despatch Advice Garment accessory Despatch Advice Receiving Advice Yarn Despatch Request Garment accessory Despatch Request General purpose request Knitting-Clothing Order Status Garment Despatch Request Garment Despatch Advice Textile Invoice Garment in work Inventory report
	Knitwear finishing	Knitwear Producer Knitwear Subcontractor	Knitting-Clothing Commission Order Garment Despatch Advice Receiving Advice General purpose request Knitting-Clothing Order Status Garment Despatch Request Textile Invoice Garment in work Inventory report

<b>Process Name</b>	Knitwear subcontracted manufacturing
<b>Actors</b>	Knitwear Producer function, Knitwear Subcontractor
<b>Description</b>	Subcontracted production of the knitwear; the input of the process is yarn and accessories; the phases of the process include knitting, cutting, assembling and finishing (washing, ironing, labelling, etc...)
<b>Activities</b>	<ul style="list-style-type: none"> <li>• Knitting and assembling</li> <li>• Knitwear finishing</li> </ul>
<b>Reference to the related ebBP</b>	<a href="http://www.moda-ml.net/moda-ml/repository/ebBP/v2013-1/en/ebBP_knitwearsubcontractedmanufacturing-1_2013-1.xml">http://www.moda-ml.net/moda-ml/repository/ebBP/v2013-1/en/ebBP_knitwearsubcontractedmanufacturing-1_2013-1.xml</a>

### 1.1.5.1 Activity "Knitting and assembling"



<b>Activity Name</b>	Knitting and assembling
<b>Description</b>	Activity concerning the production process for the knitwear; the main steps of the process are knitting, cutting, assembling.
<b>Transactions</b>	<ul style="list-style-type: none"> <li>• Knitting-Clothing Commission Order</li> <li>• Yarn Despatch Advice</li> <li>• Garment accessory Despatch Advice</li> </ul>

	<ul style="list-style-type: none"> <li>• Receiving Advice</li> <li>• Yarn Despatch Request</li> <li>• Garment accessory Despatch Request</li> <li>• General purpose request</li> <li>• Knitting-Clothing Order Status</li> <li>• Garment Despatch Request</li> <li>• Garment Despatch Advice</li> <li>• Textile Invoice</li> <li>• Garment in work Inventory report</li> </ul>
<b>Pre-conditions</b>	The knitwear Producer function externalises the knitting and assembling operations
<b>Post-conditions</b>	The knitting and assembling commission order has been executed

### ***Transactions inside the activity “Knitting and assembling”***

#### **Action 1 (Request from Knitwear Producer function to Knitwear Subcontractor)**

<b>Document Name</b>	Knitting-Clothing Commission Order
<b>Action Description</b>	The knitting-clothing Commission order is used by the Knitwear Producer function to commit to a Sub-contractor the manufacturing of knitwear or clothing articles

#### **Action 2 (Request from Knitwear Producer function to Knitwear Subcontractor)**

<b>Document Name</b>	Yarn Despatch Advice
<b>Action Description</b>	The message is issued to anticipate the details of the yarn articles actually despatched to the subcontractor for the execution of the subcontracted operation

#### **Action 3 (Request from Knitwear Producer function to Knitwear Subcontractor)**

<b>Document Name</b>	Garment accessory Despatch Advice
<b>Action Description</b>	The message is issued to anticipate the details of the accessory articles actually despatched to the subcontractor for the execution of the subcontracted operation

#### **Action 4 (Response from Knitwear Subcontractor to Knitwear Producer function)**

<b>Document Name</b>	Receiving Advice
<b>Action Description</b>	The Receiving Advice can be used by the Receiver of goods (received for commissioned works) either to confirm the regular receipt of goods or to notify discrepancies between what was declared by the Sender and what was received and accepted.

#### **Action 5 (Request from Knitwear Subcontractor to Knitwear Producer function)**

<b>Document Name</b>	Yarn Despatch Request
<b>Action Description</b>	The message is issued to require an additional delivery of the yarn articles to the subcontractor for the execution of the subcontracted operation

#### **Action 6 (Request from Knitwear Subcontractor to Knitwear Producer function)**

<b>Document Name</b>	Garment accessory Despatch Request
<b>Action</b>	The message is issued to require an additional delivery of the accessory

**Description** articles to the subcontractor for the execution of the subcontracted operation

**Action 7 (Request from Knitwear Producer function to Knitwear Subcontractor)**

**Document Name** Yarn Despatch Advice

**Action Description** The message is issued to reply to a request of additional delivery of yarn articles for the execution of the subcontracted operation

**Action 8 (Request from Knitwear Producer function to Knitwear Subcontractor)**

**Document Name** Garment accessory Despatch Advice

**Action Description** The message is issued to reply to a request of additional delivery of accessories for the execution of the subcontracted operation

**Action 9 (Response from Knitwear Subcontractor to Knitwear Producer function)**

**Document Name** Receiving Advice

**Action Description** The Receiving Advice can be used by the Receiver of goods (received for commissioned works) either to confirm the regular receipt of goods or to notify discrepancies between what was declared by the Sender and what was received and accepted.

**Action 10 (Request from Knitwear Producer function to Knitwear Subcontractor)**

**Document Name** General purpose request

**Action Description** This document is used by the Commissioner to request the status of its commission orders

**Action 11 (Request from Knitwear Subcontractor to Knitwear Producer function)**

**Document Name** Knitting-Clothing Order Status

**Action Description** The message is issued by the Subcontractor to report to his Client the status of his Commission Orders and the updated delivery dates

**Action 12 (Request from Knitwear Producer function to Knitwear Subcontractor)**

**Document Name** Garment Despatch Request

**Action Description** This message is a request issued by the Commissioner for delivery planning of the product commissioned

**Action 13 (Response from Knitwear Subcontractor to Knitwear Producer function)**

**Document Name** Garment Despatch Advice

**Action Description** The message is issued by the Sub-contractor to anticipate the despatch of the articles manufactured under commissioned order

**Action 14 (Request from Knitwear Subcontractor to Knitwear Producer function)**

**Document Name** Textile Invoice

**Action Description** This document allows the Sub-contractor to request payment for its works

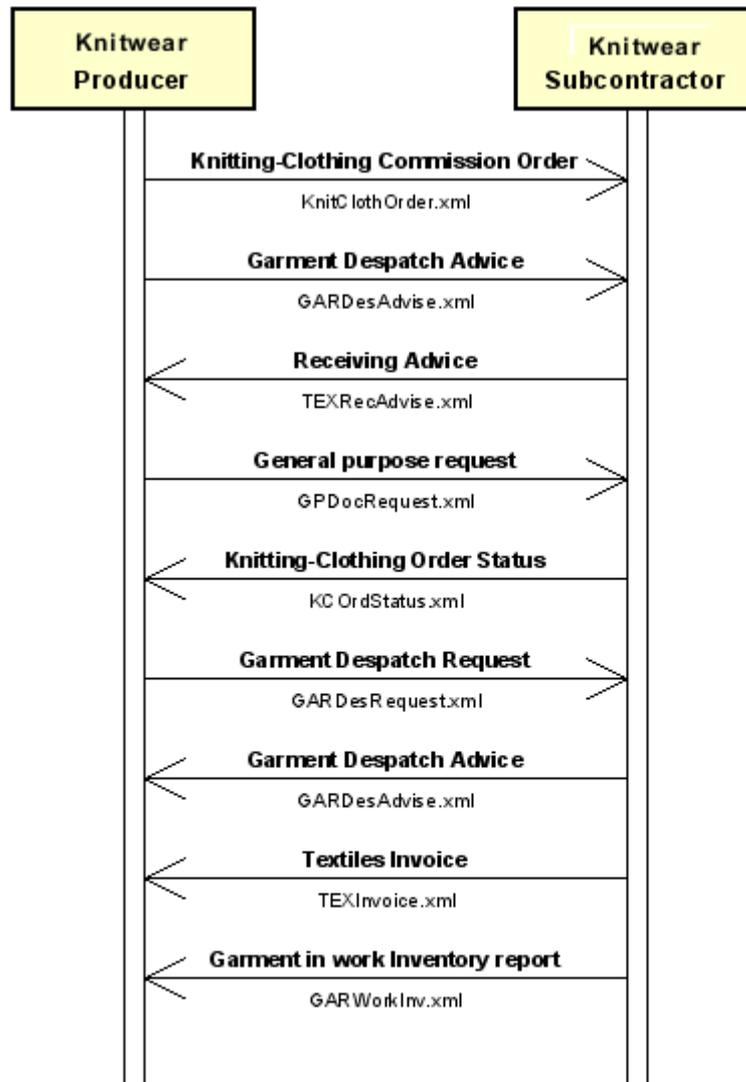
**Action 15 (Request from Knitwear Subcontractor to Knitwear Producer function)**

**Document Name** Garment in work Inventory report

**Action** This document can be used by a Subcontractor to inform his Client

**Description** (Commission issuer), periodically or on demand, about the quantity of pre-works or in-work items (Client's property) stocked at the Subcontractor's premises.

### 1.1.5.2 Activity "Knitwear finishing"



<b>Activity Name</b>	Knitwear finishing
<b>Description</b>	Activity concerning the final processing of knitwear (washing, shrinking, ironing, labelling, ..)
<b>Transactions</b>	<ul style="list-style-type: none"> <li>• Knitting-Clothing Commission Order</li> <li>• Garment Despatch Advice</li> <li>• Receiving Advice</li> <li>• General purpose request</li> <li>• Knitting-Clothing Order Status</li> <li>• Garment Despatch Request</li> </ul>

	<ul style="list-style-type: none"> <li>• Textile Invoice</li> <li>• Garment in work Inventory report</li> </ul>
<b>Pre-conditions</b>	The knitwear Producer function externalises the finishing operations operations.
<b>Post-conditions</b>	The knitwear finishing commission order has been executed

### ***Transactions inside the activity "Knitwear finishing"***

<b>Action 1 (Request from Knitwear Producer function to Knitwear Subcontractor)</b>	
<b>Document Name</b>	Knitting-Clothing Commission Order
<b>Action Description</b>	The knitting-clothing commission order is used by the Knitwear Producer function to commit to a Sub-contractor the finishing of knitwear or clothing articles
<b>Action 2 (Request from Knitwear Producer function to Knitwear Subcontractor)</b>	
<b>Document Name</b>	Garment Despatch Advice
<b>Action Description</b>	The message is issued to anticipate the details of the knitwear articles actually despatched to the subcontractor for the execution of the subcontracted operation
<b>Action 3 (Response from Knitwear Subcontractor to Knitwear Producer function)</b>	
<b>Document Name</b>	Receiving Advice
<b>Action Description</b>	The Receiving Advice can be used by the Receiver of goods (received for commissioned works) either to confirm the regular receipt of goods or to notify discrepancies between what was declared by the Sender and what was received and accepted.
<b>Action 4 (Request from Knitwear Producer function to Knitwear Subcontractor)</b>	
<b>Document Name</b>	General purpose request
<b>Action Description</b>	This document is used by the Commissioner to request the status of its commission orders
<b>Action 5 (Response from Knitwear Subcontractor to Knitwear Producer function)</b>	
<b>Document Name</b>	Knitting-Clothing Order Status
<b>Action Description</b>	The message is issued by the Subcontractor to report to his Client the status of his Commission Orders and the updated delivery dates
<b>Action 6 (Request from Knitwear Producer function to Knitwear Subcontractor)</b>	
<b>Document Name</b>	Garment Despatch Request
<b>Action Description</b>	This message is a request issued by the Commissioner for delivery planning of the product commissioned
<b>Action 7 (Response from Knitwear Subcontractor to Knitwear Producer function)</b>	
<b>Document Name</b>	Garment Despatch Advice
<b>Action Description</b>	The message is issued by the Sub-contractor to anticipate the despatch of the articles finished under commissioned order

**Action 8 (Request from Knitwear Subcontractor to Knitwear Producer function)**

<b>Document Name</b>	Textile Invoice
<b>Action Description</b>	This document allows the Sub-contractor to request payment for its works

**Action 9 (Request from Knitwear Subcontractor to Knitwear Producer function)**

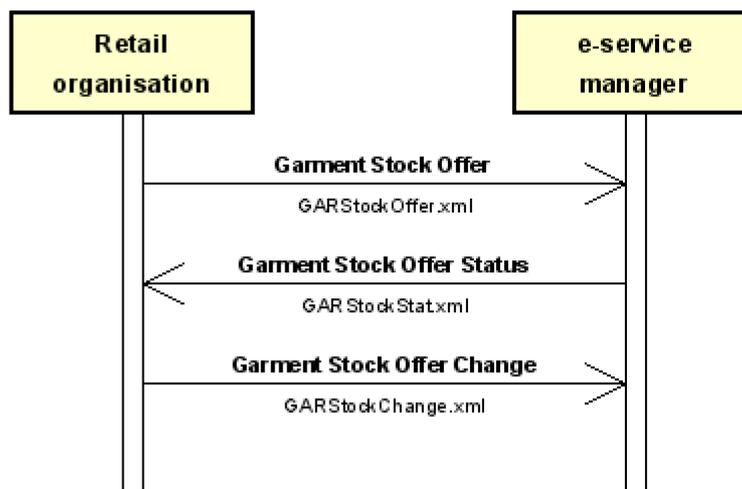
<b>Document Name</b>	Garment in work Inventory report
<b>Action Description</b>	This document can be used by a Subcontractor to inform his Client (Commission issuer), periodically or on demand, about the quantity of pre-works or in-work items (Client's property) stocked at the Subcontractor's premises.

### 1.1.6 Process: On line stock service

Process	Activity	Actors	Documents
On line stock service	Offer stocks on-line	Retail organisation e-service manager	Garment Stock Offer Garment Stock Offer Status Garment Stock Offer Change

<b>Process Name</b>	On line stock service
<b>Actors</b>	Retail organisation, e-service manager
<b>Description</b>	On line service to offer/retrieve of stocks of textile/Clothing products
<b>Activities</b>	<ul style="list-style-type: none"> <li>Offer stocks on-line</li> </ul>
<b>Reference to the related ebBP</b>	<a href="http://www.moda-ml.net/moda-ml/repository/ebBP/v2013-1/en/ebBP_onlinestockservice-1_2013-1.xml">http://www.moda-ml.net/moda-ml/repository/ebBP/v2013-1/en/ebBP_onlinestockservice-1_2013-1.xml</a>

#### 1.1.6.1 Activity "Offer stocks on-line"



<b>Activity Name</b>	Offer stocks on-line
<b>Description</b>	Offer stocks of textile/Clothing products
<b>Transactions</b>	<ul style="list-style-type: none"> <li>Garment Stock Offer</li> <li>Garment Stock Offer Status</li> <li>Garment Stock Offer Change</li> </ul>

#### Transactions inside the activity "Offer Stocks on-line"

**Action 1 (Request from Retail organisation to e-service manager)**

**Document Name** Garment Stock Offer

**Action Description**

**Action 2 (Response from e-service manager to Retail organisation)**

**Document Name** Garment Stock Offer Status

**Action Description**

**Action 3 (Request from Retail organisation to e-service manager)**

**Document Name** Garment Stock Offer Change

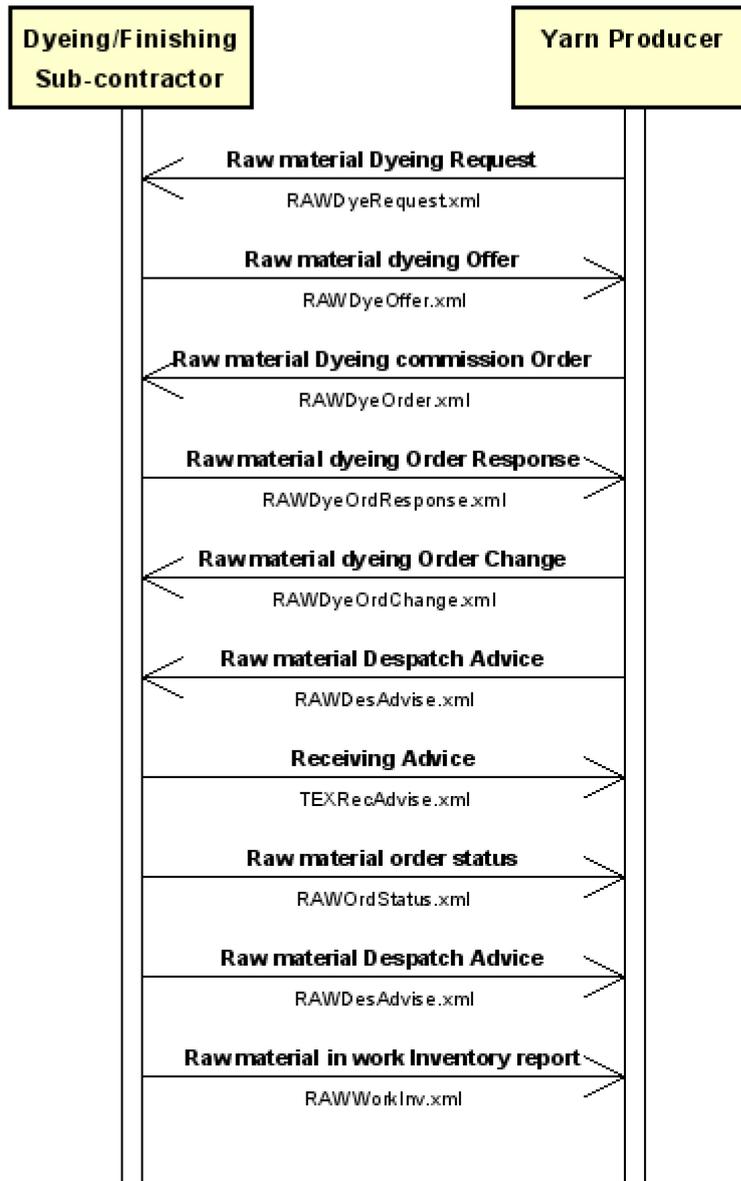
**Action Description**

### 1.1.7 Process: Yarn subcontracted manufacturing

Process	Activity	Function	Documents
Yarn subcontracted manufacturing	Subcontracted dyeing of raw material	Yarn Producer Dyeing/Finishing Sub-contractor	Raw material Dyeing Request Raw material dyeing Offer Raw material Dyeing commission Order Raw material dyeing Order Response Raw material dyeing Order Change Raw material Despatch Advice Receiving Advice Raw material order stat. Raw material in work Inventory report
	Subcontracted spinning of raw material	Yarn Producer Yarn Subcontractor	Spinning Request Spinning Offer Spinning Commission Order Spinning Order Response Spinning Order Change Raw material Despatch Advice Receiving Advice Yarn Order Status Rep. Yarn Despatch Advice Yarn in work Inventory Report
	Subcontracted yarn twisting	Yarn Producer Yarn Subcontractor	Twisting Request Twisting Offer Yarn Twisting Commission Order Yarn Despatch Advice Receiving Advice Yarn Order Status Rep. Yarn in work Inventory Rep.
	Subcontracted yarn dyeing	Yarn Producer Dyeing/Finishing Sub-contractor	Yarn Dyeing Request Yarn Dyeing Offer Yarn dyeing commission order Yarn dyeing Order Response Yarn dyeing Order Change Yarn Despatch Advice Receiving Advice Yarn Order Status Rep. Yarn in work Inventory report

<b>Process Name</b>	Yarn subcontracted manufacturing
<b>Actors</b>	Yarn Producer function, Dyeing/Finishing Sub-contractor, Yarn Subcontractor
<b>Description</b>	Yarn production process commissioned to subcontractors; the process starts from raw material and produces finished yarns. The Yarn Producer function commissions to specialised Subcontractors some value-added operations of the manufacturing cycle because of specific know-how or scale economies. In this process 3 events are fundamental: the issue of the commission order, the swap of the material, the reporting of the order progress.
<b>Activities</b>	<ul style="list-style-type: none"> <li>• Subcontracted dyeing of raw material</li> <li>• Subcontracted spinning of raw material</li> <li>• Subcontracted yarn twisting</li> <li>• Subcontracted yarn dyeing</li> </ul>

### 1.1.7.1 Activity "Subcontracted dyeing of raw material"



<b>Activity Name</b>	Subcontracted dyeing of raw material
<b>Description</b>	Activity of commissioning to a Subcontractor the dyeing of raw material.
<b>Transactions</b>	<ul style="list-style-type: none"> <li>• Raw material Dyeing Request</li> <li>• Raw material dyeing Offer</li> <li>• Raw material Dyeing commission Order</li> <li>• Raw material dyeing Order Response</li> <li>• Raw material dyeing Order Change</li> <li>• Raw material Despatch Advice</li> <li>• Receiving Advice</li> <li>• Raw material order status</li> <li>• Raw material in work Inventory report</li> </ul>
<b>Pre-conditions</b>	The Yarn Producer function has decided to commission the dyeing of raw material to a specialised Subcontractor
<b>Post-conditions</b>	The commission order has been executed and the finished (output)

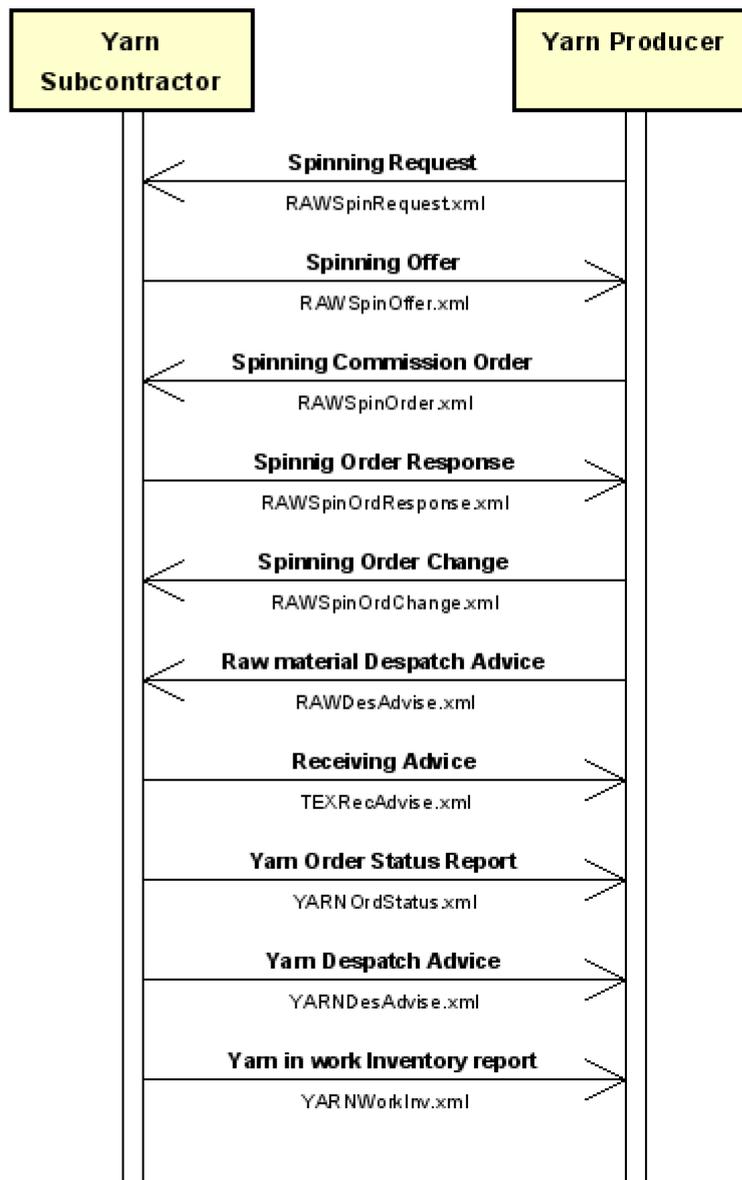
	product has been delivered back (or made available) to the Commissioner
<b>Reference to the related ebBP</b>	<a href="http://www.moda-ml.net/moda-ml/repository/ebBP/v2013-1/en/ebBP_subcontracteddyeingofrawmaterial-1_2013-1.xml">http://www.moda-ml.net/moda-ml/repository/ebBP/v2013-1/en/ebBP_subcontracteddyeingofrawmaterial-1_2013-1.xml</a>

***Transactions inside the activity “Subcontracted dyeing of raw material”***

<b>Action 1 (Request from Yarn Producer function to Dyeing/Finishing Sub-contractor)</b>	
<b>Document Name</b>	Raw material Dyeing Request
<b>Action Description</b>	This message is usable to request an offer for the dyeing of raw material
<b>Action 2 (Response from Dyeing/Finishing Sub-contractor to Yarn Producer function)</b>	
<b>Document Name</b>	Raw material dyeing Offer
<b>Action Description</b>	This message is usable to make an offer for the dyeing of raw material
<b>Action 3 (Request from Yarn Producer function to Dyeing/Finishing Sub-contractor)</b>	
<b>Document Name</b>	Raw material Dyeing commission Order
<b>Action Description</b>	This message is usable to commission the dyeing of raw material
<b>Action 4 (Response from Dyeing/Finishing Sub-contractor to Yarn Producer function)</b>	
<b>Document Name</b>	Raw material dyeing Order Response
<b>Action Description</b>	This message is usable in response to a commission order for the dyeing of raw material
<b>Action 5 (Request from Yarn Producer function to Dyeing/Finishing Sub-contractor)</b>	
<b>Document Name</b>	Raw material dyeing Order Change
<b>Action Description</b>	This message is usable to change a commission order for the dyeing of raw material
<b>Action 6 (Request from Yarn Producer function to Dyeing/Finishing Sub-contractor)</b>	
<b>Document Name</b>	Raw material Despatch Advice
<b>Action Description</b>	This message is usable to inform the Subcontractor about the raw material sent for dyeing
<b>Action 7 (Response from Dyeing/Finishing Sub-contractor to Yarn Producer function)</b>	
<b>Document Name</b>	Receiving Advice
<b>Action Description</b>	This message is usable to certify to the Commissioner the receipt of the material sent for the commission (see preceding activity)
<b>Action 8 (Request from Dyeing/Finishing Sub-contractor to Yarn Producer function)</b>	
<b>Document Name</b>	Raw material order status
<b>Action Description</b>	This message is usable to report to the Commissioner the progress of his commission orders
<b>Action 9 (Request from Dyeing/Finishing Sub-contractor to Yarn Producer function)</b>	
<b>Document</b>	Raw material Despatch Advice

<b>Name</b>	
<b>Action Description</b>	This message is usable to inform the Commissioner that the commissioned output product (raw material) has been despatched
<b>Action 10 (Request from Dyeing/Finishing Sub-contractor to Yarn Producer function)</b>	
<b>Document Name</b>	Raw material in work Inventory report
<b>Action Description</b>	This message is usable to certify to the Commissioner the Stock and WIP amount of his materials

### 1.1.7.2 Activity "Subcontracted spinning of raw material"



<b>Activity Name</b>	Subcontracted spinning of raw material
<b>Description</b>	Activity of commissioning to a Subcontractor the spinning of raw material.
<b>Transactions</b>	<ul style="list-style-type: none"> <li>• Spinning Request</li> </ul>

	<ul style="list-style-type: none"> <li>• Spinning Offer</li> <li>• Spinning Commission Order</li> <li>• Spinning Order Response</li> <li>• Spinning Order Change</li> <li>• Raw material Despatch Advice</li> <li>• Receiving Advice</li> <li>• Yarn Order Status Report</li> <li>• Yarn Despatch Advice</li> <li>• Yarn in work Inventory report</li> </ul>
<b>Pre-conditions</b>	The Yarn Producer function has decided to commission the spinning to a specialised Subcontractor
<b>Post-conditions</b>	The commission order has been executed and the finished (output) product has been delivered back (or made available) to the Commissioner
<b>Reference to the related ebBP</b>	<a href="http://www.moda-ml.net/moda-ml/repository/ebBP/v2013-1/en/ebBP_subcontractedspinningofrawmaterial-1_2013-1.xml">http://www.moda-ml.net/moda-ml/repository/ebBP/v2013-1/en/ebBP_subcontractedspinningofrawmaterial-1_2013-1.xml</a>

### ***Transactions inside the activity “Subcontracted spinning of raw material”***

#### **Action 1 (Request from Yarn Producer function to Yarn Subcontractor)**

<b>Document Name</b>	Spinning Request
<b>Action Description</b>	This message is usable to request an offer for the spinning of raw material

#### **Action 2 (Response from Yarn Subcontractor to Yarn Producer function)**

<b>Document Name</b>	Spinning Offer
<b>Action Description</b>	This message is usable to make an offer for the spinning of raw material

#### **Action 3 (Request from Yarn Producer function to Yarn Subcontractor)**

<b>Document Name</b>	Spinning Commission Order
<b>Action Description</b>	This message is usable to commission the spinning of raw material

#### **Action 4 (Response from Yarn Subcontractor to Yarn Producer function)**

<b>Document Name</b>	Spinning Order Response
<b>Action Description</b>	This message is usable in response to a commission order for the spinning of raw material

#### **Action 5 (Request from Yarn Producer function to Yarn Subcontractor)**

<b>Document Name</b>	Spinning Order Change
<b>Action Description</b>	This message is usable to change a commission order for the spinning of raw material

#### **Action 6 (Request from Yarn Producer function to Yarn Subcontractor)**

<b>Document Name</b>	Raw material Despatch Advice
<b>Action</b>	This message is usable to inform the Subcontractor about the raw material

**Description** sent for spinning

**Action 7 (Response from Yarn Subcontractor to Yarn Producer function)**

**Document Name** Receiving Advice

**Action Description** This message is usable to certify to the Commissioner the receipt of the material sent for the commission (see preceding activity)

**Action 8 (Request from Yarn Subcontractor to Yarn Producer function)**

**Document Name** Yarn Order Status Report

**Action Description** This message is usable to report to the Commissioner the progress of his commission orders

**Action 9 (Request from Yarn Subcontractor to Yarn Producer function)**

**Document Name** Yarn Despatch Advice

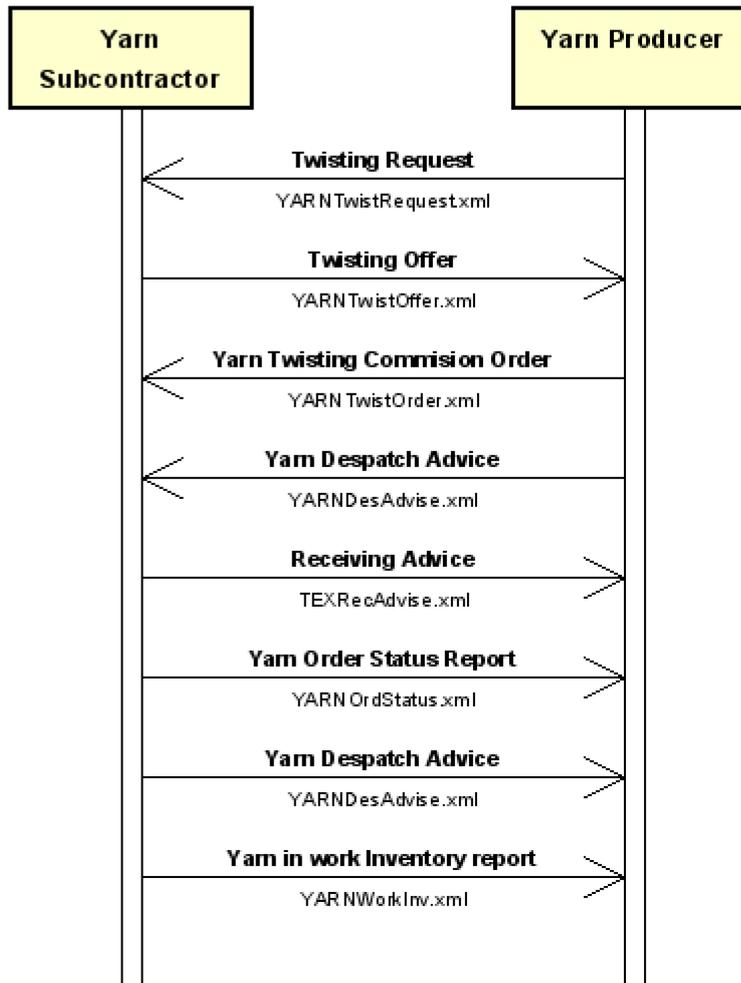
**Action Description** This message is usable to inform the Commissioner that the commissioned output product (yarn) has been despatched

**Action 10 (Request from Yarn Subcontractor to Yarn Producer function)**

**Document Name** Yarn in work Inventory report

**Action Description** This message is usable to certify to the Commissioner the Stock and WIP amount of his materials

### 1.1.7.3 Activity "Subcontracted yarn twisting"



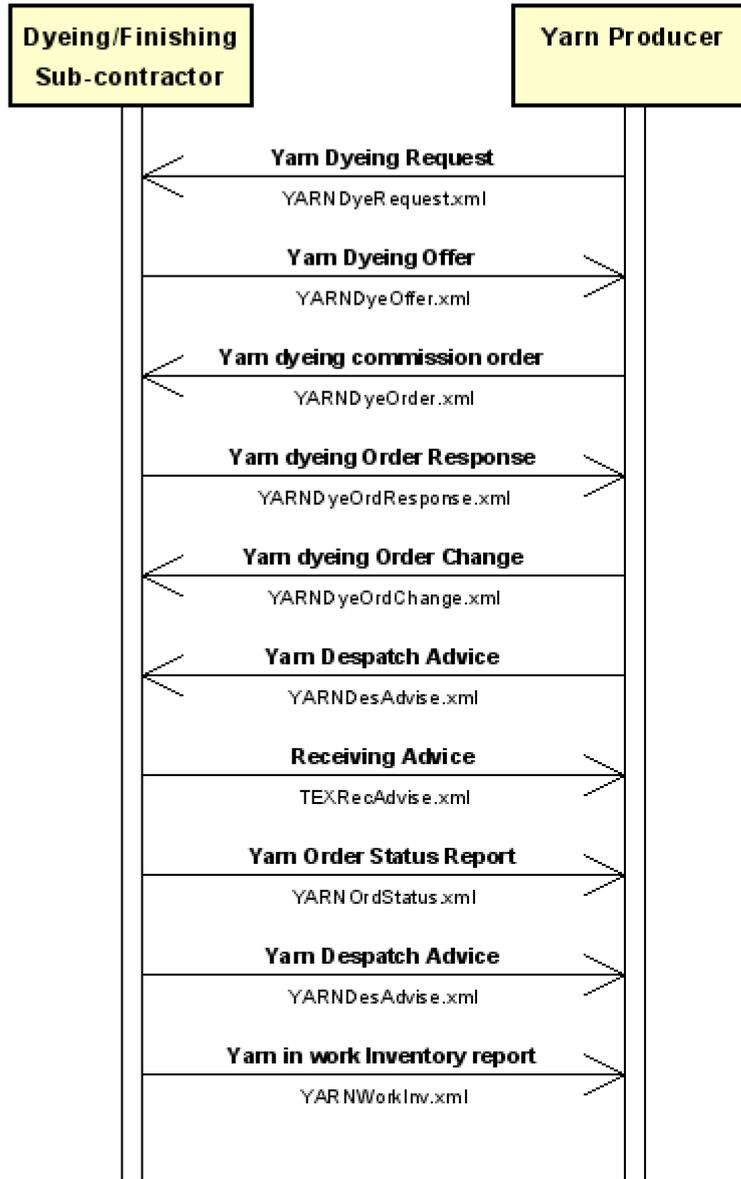
<b>Activity Name</b>	Subcontracted yarn twisting
<b>Description</b>	Activity of commissioning to a Subcontractor the twisting of yarn.
<b>Transactions</b>	<ul style="list-style-type: none"> <li>• Twisting Request</li> <li>• Twisting Offer</li> <li>• Yarn Twisting Commission Order</li> <li>• Yarn Despatch Advice</li> <li>• Receiving Advice</li> <li>• Yarn Order Status Report</li> <li>• Yarn in work Inventory report</li> </ul>
<b>Pre-conditions</b>	The Yarn Producer function has decided to commission the twisting to a specialised Subcontractor
<b>Post-conditions</b>	The commission order has been executed and the finished (output) product has been delivered back (or made available) to the Commissioner
<b>Reference to the related ebBP</b>	<a href="http://www.moda-ml.net/moda-ml/repository/ebBP/v2013-1/en/ebBP_subcontractedyarntwisting-1_2013-1.xml">http://www.moda-ml.net/moda-ml/repository/ebBP/v2013-1/en/ebBP_subcontractedyarntwisting-1_2013-1.xml</a>

#### **Transactions inside the activity "Subcontracted yarn twisting"**

**Action 1** (Request from Yarn Producer function to Yarn Subcontractor)

<b>Document Name</b>	Twisting Request
<b>Action Description</b>	This message is usable to request an offer for the twisting of yarn
<b>Action 2 (Response from Yarn Subcontractor to Yarn Producer function)</b>	
<b>Document Name</b>	Twisting Offer
<b>Action Description</b>	This message is usable to make an offer for the twisting of yarn
<b>Action 3 (Request from Yarn Producer function to Yarn Subcontractor)</b>	
<b>Document Name</b>	Yarn Twisting Commission Order
<b>Action Description</b>	This message is usable to commission the twisting of yarn
<b>Action 4 (Request from Yarn Producer function to Yarn Subcontractor)</b>	
<b>Document Name</b>	Yarn Despatch Advice
<b>Action Description</b>	This message is usable to inform the Subcontractor about the yarn sent for twisting
<b>Action 5 (Response from Yarn Subcontractor to Yarn Producer function)</b>	
<b>Document Name</b>	Receiving Advice
<b>Action Description</b>	This message is usable to certify to the Commissioner the receipt of the material sent for the commission (see preceding activity)
<b>Action 6 (Request from Yarn Subcontractor to Yarn Producer function)</b>	
<b>Document Name</b>	Yarn Order Status Report
<b>Action Description</b>	This message is usable to report to the Commissioner the progress of his commission orders
<b>Action 7 (Request from Yarn Subcontractor to Yarn Producer function)</b>	
<b>Document Name</b>	Yarn Despatch Advice
<b>Action Description</b>	This message is usable to inform the Commissioner that the commissioned output product (yarn) has been despatched
<b>Action 8 (Request from Yarn Subcontractor to Yarn Producer function)</b>	
<b>Document Name</b>	Yarn in work Inventory report
<b>Action Description</b>	This message is usable to certify to the Commissioner the Stock and WIP amount of his materials

#### 1.1.7.4 Activity "Subcontracted yarn dyeing"



<b>Activity Name</b>	Subcontracted yarn dyeing
<b>Description</b>	Activity of commissioning to a Subcontractor the dyeing of yarn.
<b>Transactions</b>	<ul style="list-style-type: none"> <li>• Yarn Dyeing Request</li> <li>• Yarn Dyeing Offer</li> <li>• Yarn dyeing commission order</li> <li>• Yarn dyeing Order Response</li> <li>• Yarn dyeing Order Change</li> <li>• Yarn Despatch Advice</li> <li>• Receiving Advice</li> <li>• Yarn Order Status Report</li> <li>• Yarn in work Inventory report</li> </ul>
<b>Pre-conditions</b>	The Yarn Producer function has decided to commission the dyeing to a specialised Subcontractor

<b>Post-conditions</b>	The commission order has been executed and the finished (output) product has been delivered back (or made available) to the Commissioner
<b>Reference to the related ebBP</b>	<a href="http://www.moda-ml.net/moda-ml/repository/ebBP/v2013-1/en/ebBP_subcontractedyarndyeing-1_2013-1.xml">http://www.moda-ml.net/moda-ml/repository/ebBP/v2013-1/en/ebBP_subcontractedyarndyeing-1_2013-1.xml</a>

### ***Transactions inside the activity “Subcontracted yarn dyeing”***

#### **Action 1 (Request from Yarn Producer function to Dyeing/Finishing Sub-contractor)**

**Document Name** Yarn Dyeing Request

**Action Description** This message is usable to request an offer for the dyeing of yarn

#### **Action 2 (Response from Dyeing/Finishing Sub-contractor to Yarn Producer function)**

**Document Name** Yarn Dyeing Offer

**Action Description** This message is usable to make an offer for the dyeing of yarn

#### **Action 3 (Request from Yarn Producer function to Dyeing/Finishing Sub-contractor)**

**Document Name** Yarn dyeing commission order

**Action Description** This message is usable to commission the dyeing of yarn

#### **Action 4 (Response from Dyeing/Finishing Sub-contractor to Yarn Producer function)**

**Document Name** Yarn dyeing Order Response

**Action Description** This message is usable in response to a commission order for the dyeing of yarn

#### **Action 5 (Request from Yarn Producer function to Dyeing/Finishing Sub-contractor)**

**Document Name** Yarn dyeing Order Change

**Action Description** This message is usable to change a commission order for the dyeing of yarn

#### **Action 6 (Request from Yarn Producer function to Dyeing/Finishing Sub-contractor)**

**Document Name** Yarn Despatch Advice

**Action Description** This message is usable to inform the Subcontractor about the yarn sent for dyeing

#### **Action 7 (Response from Dyeing/Finishing Sub-contractor to Yarn Producer function)**

**Document Name** Receiving Advice

**Action Description** This message is usable to certify to the Commissioner the receipt of the material sent for the commission (see preceding activity)

#### **Action 8 (Request from Dyeing/Finishing Sub-contractor to Yarn Producer function)**

**Document Name** Yarn Order Status Report

**Action Description** This message is usable to report to the Commissioner the progress of his commission orders

#### **Action 9 (Request from Dyeing/Finishing Sub-contractor to Yarn Producer function)**

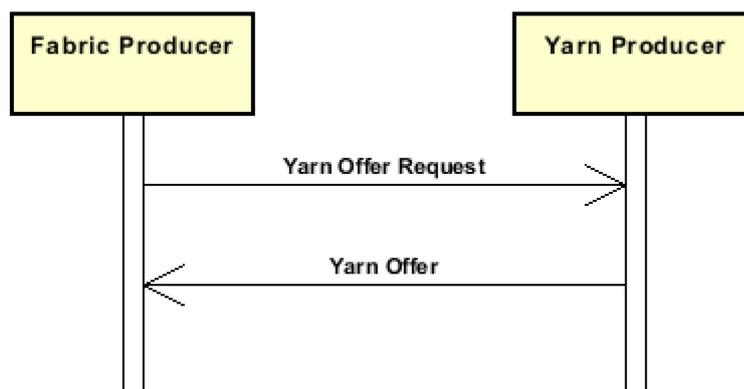
<b>Document Name</b>	Yarn Despatch Advice
<b>Action Description</b>	This message is usable to inform the Commissioner that the commissioned output product (yarn) has been despatched
<b>Action 10 (Request from Dyeing/Finishing Sub-contractor to Yarn Producer function)</b>	
<b>Document Name</b>	Yarn in work Inventory report
<b>Action Description</b>	This message is usable to certify to the Commissioner the Stock and WIP amount of his materials

### 1.1.8 Process: Yarn supply

Process	Activity	Function	Documents
Yarn supply	Selection of yarn	Fabric/Apparel Producer Yarn Producer	YarnOfferRequest YarnOffer YarnTechSheet
	Purchase of yarn	Fabric Producer Yarn Producer	Yarn Purchase Order Yarn Purchase Order Response Yarn Purchase Order Change Yarn Order Status Report YarnQualityReport
	Delivery of yarn	Fabric Producer Yarn Producer	Yarn Despatch Request Yarn Despatch Advice

<b>Process Name</b>	Yarn supply
<b>Actors</b>	Fabric Producer function, Yarn Producer function
<b>Description</b>	Process of supplying of yarns (usually for production of fabrics, knitwear; sometimes directly to clothing suppliers and other industrial users and to final customers)
<b>Activities</b>	<ul style="list-style-type: none"> <li>• Selection of yarn</li> <li>• Purchase of yarn</li> <li>• Delivery of yarn</li> </ul>

#### 1.1.8.1 Activity "Selection of yarn"



<b>Activity Name</b>	Selection of yarn
<b>Description</b>	<p>The Fabric Producer function sends to the Yarn Producer function a request for products specifying the technical parameters that can satisfy his requirements.</p> <p>The Yarn Producer function returns an offer complying with the request.</p>

<b>Description</b>	<ul style="list-style-type: none"> <li>• Yarn Offer Request</li> <li>• Yarn Offer</li> </ul>
<b>Pre-conditions</b>	The Fabric Producer function has identified the technical parameters of the yarns needed and is searching for an offer that can satisfy his requirements
<b>Post-conditions</b>	The Yarn Producer function has provided all the technical informations for the products matching the requirements of the Buyer function the Fabric Producer function has all the informations about the yarn articles for wich he will place an order (article identifier, quantity, delivery dates, ..)
<b>Reference to the related ebBP</b>	<a href="http://www.moda-ml.net/moda-ml/repository/ebBP/v2013-1/en/ebBP_selectionofyarn-1_2013-1.xml">http://www.moda-ml.net/moda-ml/repository/ebBP/v2013-1/en/ebBP_selectionofyarn-1_2013-1.xml</a>

### ***Transactions inside the activity "Selection of yarn"***

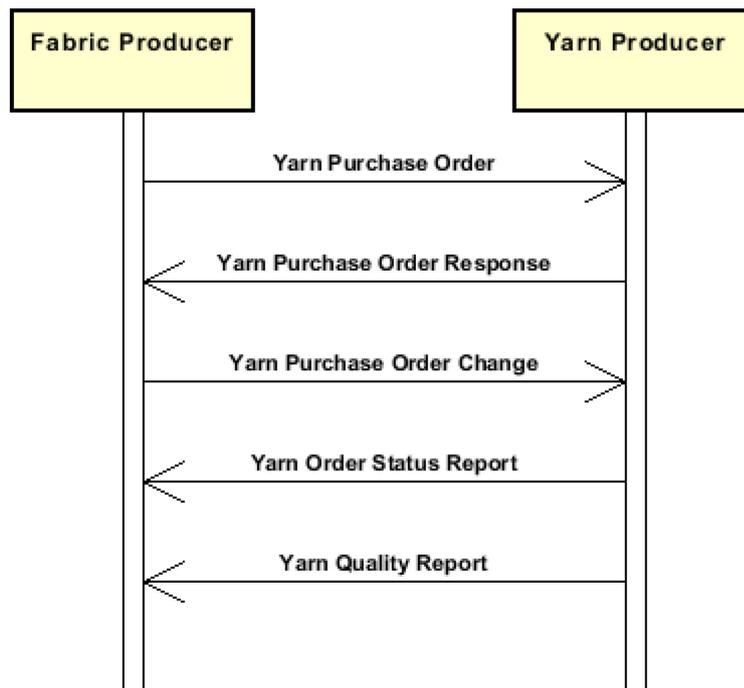
#### **Action 1 (Request from Fabric Producer function to Yarn Producer function)**

<b>Action Name</b>	Request for a specific kind of yarn
<b>Action Description</b>	the Fabric or Knitwear Producer function sends this enquiry to the Yarn Producer function about the kind of yarn he needs, by specifying a selection of manufacturing characteristics and mechanical-physical-chemical properties with the desired values of the ad-hoc parameters.

#### **Action 2 (Response from Yarn Producer function to Fabric Producer function)**

<b>Action Name</b>	Offer (or Catalogue) of yarn articles with enclosed Technical Sheet
<b>Action Description</b>	<p>the Yarn Producer function sends this document reporting all the data that identify the yarn articles matching the Request and certify their manufacturing characteristics and its mechanical-physical-chemical properties.</p> <p>In many cases the values declared for these parameters may be the average of several test measurements with a coefficient of variation (CV).</p>

### 1.1.8.2 Activity "Purchase of yarn"



<b>Activity Name</b>	Purchase of yarn
<b>Description</b>	Activity of purchase of yarns, includes monitoring of the advancements of the order; a Quality Report can be sent by the Yarn <b>Producer function</b> prior to the despatch of products, when an agreement has been made between the Parties.
<b>Transactions</b>	<ul style="list-style-type: none"> <li>• Yarn Purchase Order</li> <li>• Yarn Purchase Order Response</li> <li>• Yarn Purchase Order Change</li> <li>• Yarn Order Status Report</li> <li>• Yarn Quality Report</li> </ul>
<b>Pre-conditions</b>	The Fabric Producer function has defined the yarn articles that will order (article identifiers, quantities, delivery dates)
<b>Post-conditions</b>	The Yarn Producer function has processed and executed the order received
<b>Reference to the related ebBP</b>	<a href="http://www.moda-ml.net/moda-ml/repository/ebBP/v2013-1/en/ebBP_purchaseofyarn-1_2013-1.xml">http://www.moda-ml.net/moda-ml/repository/ebBP/v2013-1/en/ebBP_purchaseofyarn-1_2013-1.xml</a> □

#### Transactions inside the activity "Purchase of yarn"

##### Action 1(Request from **Fabric Producer function** to **Yarn Producer function**)

<b>Action Name</b>	Yarn Purchase Order
<b>Action Description</b>	The message is issued by the Fabric Producer function to purchase yarn articles.

##### Action 2(Response from **Yarn Producer function** to **Fabric Producer function**)

**Action Name** Yarn Purchase Order Response

**Action Description** The message is issued by the Yarn Producer function in response to a purchase order. The Producer function must, in any case, return an Order Response for any Order received, where, for each item, he notifies the acceptance as it is (C), the variation (V) or the cancellation (A).

**Action 3 (Request from Fabric Producer function to Yarn Producer function)**

**Action Name** Yarn Purchase Order Change

**Action Description** The Fabric Producer function sends to the Yarn Producer function an Order Change any time he must modify some conditions of his previous Order (eg. to cancel items not delivered in time) or amend errors (eg. invalid prices).

**Action 4 (Request from Yarn Producer function to Fabric Producer function)**

**Action Name** Yarn Order Status Report

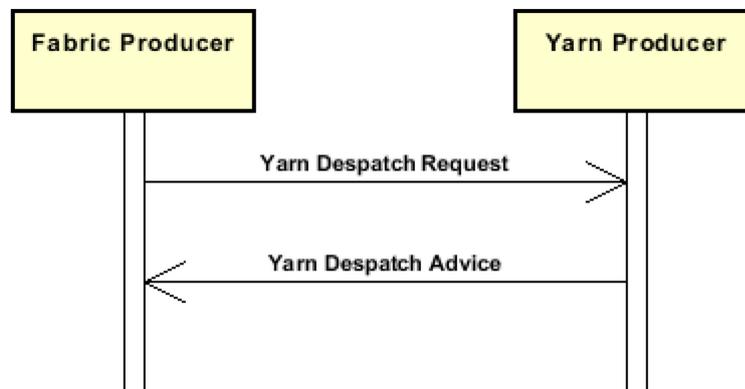
**Action Description** The message is issued by the Yarn Producer function to report to his Client the status of his Orders and the updated delivery dates, with the possibility of splitting an order line into several consignments.

**Action 5 (Response from Yarn Producer function to Fabric Producer function)**

**Action Name** Yarn Quality Report

**Action Description** The message is issued by the Yarn Producer function function to certify the technical characteristics of yarn

**1.1.8.3 Activity "Delivery of yarn"**



<b>Activity Name</b>	Delivery of yarn
<b>Description</b>	Activity of delivering the yarn to the Clients This activity does not include the provision of a quality report to the Client and the invoicing
<b>Description</b>	<ul style="list-style-type: none"> <li>• Yarn Despatch Request</li> <li>• Yarn Despatch Advice</li> </ul>
<b>Pre-conditions</b>	The Fabric Producer function agrees to accept the yarn products with self-certification of the Yarn supplier function
<b>Post-conditions</b>	The yarn products are delivered to the Fabric Producer function with the only quality certification made by the Yarn supplier function
<b>Reference to</b>	<a href="http://www.moda-ml.net/moda-ml/repository/ebBP/v2013-">http://www.moda-ml.net/moda-ml/repository/ebBP/v2013-</a>

the related 1/en/ebBP\_deliveryofyarn-1\_2013-1.xml□  
ebBP

### ***Transactions inside the activity "Delivery of yarn"***

#### **Action 1 (Request from Fabric Producer function to Yarn Producer function)**

<b>Document Name</b>	Yarn Despatch Request
<b>Action Description</b>	The message is issued to plan the delivery of the yarn products that are in the "ready for despatch" status (see the document "Yarn Order Status"). This document enables the Buyer to modify some date of its Order (delivery dates and places)

#### **Action 2 (Response from Yarn Producer function to Fabric Producer function)**

<b>Document Name</b>	Yarn Despatch Advice
<b>Action Description</b>	The message is issued to anticipate the details the articles actually despatched.

#### **Action 3 (Request from Fabric Producer function to Yarn Producer function)**

<b>Action Name</b>	Yarn Purchase Order Change
<b>Action Description</b>	The Fabric Producer function sends to the Yarn Producer function an Order Change any time he must modify some conditions of his previous Order (eg. to cancel items not delivered in time) or amend errors (eg. invalid prices).

#### **Action 4 (Request from Yarn Producer function to Fabric Producer function)**

<b>Action Name</b>	Yarn Order Status Report
<b>Action Description</b>	The message is issued by the Yarn Producer function to report to his Client the status of his Orders and the updated delivery dates, with the possibility of splitting an order line into several consignments.

#### **Action 5 (Response from Yarn Producer function to Fabric Producer function)**

<b>Action Name</b>	Yarn Quality Report
<b>Action Description</b>	The message is issued by the Yarn supplier function to certify the technical characteristics of yarn

## **APPENDIX D**

# **Reference Architecture 2.0 for eBusiness harmonisation in Textile/Clothing and Footwear sectors**

## APPENDIX D: Reference to data models for upstream Textile/Clothing

List of the sources for the reference data models of the upstream scenario of Textile Clothing.

This documentation, XML Schema and User Guides (examples and XSL stylesheets when available), is produced and maintained by the owners of the IPR of such documents.

The purpose of this list is to give a clear reference to them.

The Moda-ML document set is released as a public 2013-1 version.

Document Name	Textile Darn Order
Version	2013-1
XMLSchema	<a href="http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/TEXDarnOrder.xsd">http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/TEXDarnOrder.xsd</a>
User Guide	<a href="http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G012-MODA-ML-TextileDarnOrder.pdf">http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G012-MODA-ML-TextileDarnOrder.pdf</a>

Document Name	Textile Despatch advice
Version	2013-1
XMLSchema	<a href="http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/TEXDesAdvise.xsd">http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/TEXDesAdvise.xsd</a>
User Guide	<a href="http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G006-MODA-ML-TextileDespatchadvice.pdf">http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G006-MODA-ML-TextileDespatchadvice.pdf</a>

Document Name	Receiving Advice
Version	2013-1
XMLSchema	<a href="http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/TEXRecAdvise.xsd">http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/TEXRecAdvise.xsd</a>
User Guide	<a href="http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G025-MODA-ML-ReceivingAdvice.pdf">http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G025-MODA-ML-ReceivingAdvice.pdf</a>

Document Name	Textile dye Return
Version	2013-1
XMLSchema	<a href="http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/TEXDarnReturn.xsd">http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/TEXDarnReturn.xsd</a>
User Guide	<a href="http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G013-MODA-ML-TextiledyeReturn.pdf">http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G013-MODA-ML-TextiledyeReturn.pdf</a>

<b>Document Name</b>	Textile Despatch Request
<b>Version</b>	2013-1
<b>XMLSchema</b>	<a href="http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/TEXDesRequest.xsd">http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/TEXDesRequest.xsd</a>
<b>User Guide</b>	<a href="http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G005-MODA-ML-TextileDespatchRequest.pdf">http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G005-MODA-ML-TextileDespatchRequest.pdf</a>

<b>Document Name</b>	Textile in work Inventory report
<b>Version</b>	2013-1
<b>XMLSchema</b>	<a href="http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/TEXWorkInv.xsd">http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/TEXWorkInv.xsd</a>
<b>User Guide</b>	<a href="http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G027-MODA-ML-TextileinworkInventoryreport.pdf">http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G027-MODA-ML-TextileinworkInventoryreport.pdf</a>

<b>Document Name</b>	Warping Request
<b>Version</b>	2013-1
<b>XMLSchema</b>	<a href="http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/WARPRequest.xsd">http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/WARPRequest.xsd</a>
<b>User Guide</b>	<a href="http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G051-MODA-ML-WarpingRequest.pdf">http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G051-MODA-ML-WarpingRequest.pdf</a>

<b>Document Name</b>	Warping Offer
<b>Version</b>	2013-1
<b>XMLSchema</b>	<a href="http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/WARPOffer.xsd">http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/WARPOffer.xsd</a>
<b>User Guide</b>	<a href="http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G059-MODA-ML-WarpingOffer.pdf">http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G059-MODA-ML-WarpingOffer.pdf</a>

<b>Document Name</b>	Warping commission order
<b>Version</b>	2013-1
<b>XMLSchema</b>	<a href="http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/WARPOrder.xsd">http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/WARPOrder.xsd</a>
<b>User Guide</b>	<a href="http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G022-MODA-ML-Warpingcommissionorder.pdf">http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G022-MODA-ML-Warpingcommissionorder.pdf</a>

<b>Document Name</b>	Yarn Despatch Advice
<b>Version</b>	2013-1
<b>XMLSchema</b>	<a href="http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/YARNDesAdvise.xsd">http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/YARNDesAdvise.xsd</a>

<b>User Guide</b>	<a href="http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G016-MODA-ML-YarnDespatchAdvice.pdf">http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G016-MODA-ML-YarnDespatchAdvice.pdf</a>
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<b>Document Name</b>	Textile Order status report
<b>Version</b>	2013-1
<b>XMLSchema</b>	<a href="http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/TEXOrdStatus.xsd">http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/TEXOrdStatus.xsd</a>
<b>User Guide</b>	<a href="http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G003-MODA-ML-TextileOrderstatusreport.pdf">http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G003-MODA-ML-TextileOrderstatusreport.pdf</a>

<b>Document Name</b>	Weaving Request
<b>Version</b>	2013-1
<b>XMLSchema</b>	<a href="http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/TEXWeaveRequest.xsd">http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/TEXWeaveRequest.xsd</a>
<b>User Guide</b>	<a href="http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G052-MODA-ML-WeavingRequest.pdf">http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G052-MODA-ML-WeavingRequest.pdf</a>

<b>Document Name</b>	Weaving Offer
<b>Version</b>	2013-1
<b>XMLSchema</b>	<a href="http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/TEXWeaveOffer.xsd">http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/TEXWeaveOffer.xsd</a>
<b>User Guide</b>	<a href="http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G060-MODA-ML-WeavingOffer.pdf">http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G060-MODA-ML-WeavingOffer.pdf</a>

<b>Document Name</b>	Weaving commission order
<b>Version</b>	2013-1
<b>XMLSchema</b>	<a href="http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/TEXWeaveOrder.xsd">http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/TEXWeaveOrder.xsd</a>
<b>User Guide</b>	<a href="http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G023-MODA-ML-Weavingcommissionorder.pdf">http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G023-MODA-ML-Weavingcommissionorder.pdf</a>

<b>Document Name</b>	Textile Dyeing-Finishing Request
<b>Version</b>	2013-1
<b>XMLSchema</b>	<a href="http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/TEXDyFinRequest.xsd">http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/TEXDyFinRequest.xsd</a>
<b>User Guide</b>	<a href="http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G053-MODA-ML-TextileDyeing-FinishingRequest.pdf">http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G053-MODA-ML-TextileDyeing-FinishingRequest.pdf</a>

<b>Document Name</b>	Textile Dyeing-Finishing Offer
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<b>Version</b>	2013-1
<b>XMLSchema</b>	<a href="http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/TEXDyFinOffer.xsd">http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/TEXDyFinOffer.xsd</a>
<b>User Guide</b>	<a href="http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G061-MODA-ML-TextileDyeing-FinishingOffer.pdf">http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G061-MODA-ML-TextileDyeing-FinishingOffer.pdf</a>

<b>Document Name</b>	Textile Dyeing-Finishing Order
<b>Version</b>	2013-1
<b>XMLSchema</b>	<a href="http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/TEXDyFinOrder.xsd">http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/TEXDyFinOrder.xsd</a>
<b>User Guide</b>	<a href="http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G017-MODA-ML-TextileDyeing-FinishingOrder.pdf">http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G017-MODA-ML-TextileDyeing-FinishingOrder.pdf</a>

<b>Document Name</b>	Textile printing commission order
<b>Version</b>	2013-1
<b>XMLSchema</b>	<a href="http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/TEXPrintOrder.xsd">http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/TEXPrintOrder.xsd</a>
<b>User Guide</b>	<a href="http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G024-MODA-ML-Textileprintingcommissionorder.pdf">http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G024-MODA-ML-Textileprintingcommissionorder.pdf</a>

<b>Document Name</b>	Textile catalogue
<b>Version</b>	2013-1
<b>XMLSchema</b>	<a href="http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/TEXCatalog.xsd">http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/TEXCatalog.xsd</a>
<b>User Guide</b>	<a href="http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G009-MODA-ML-Textilecatalogue.pdf">http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G009-MODA-ML-Textilecatalogue.pdf</a>

<b>Document Name</b>	Fabric Technical Sheet
<b>Version</b>	2013-1
<b>XMLSchema</b>	<a href="http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/TEXSheet.xsd">http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/TEXSheet.xsd</a>
<b>User Guide</b>	<a href="http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G008-MODA-ML-FabricTechnicalSheet.pdf">http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G008-MODA-ML-FabricTechnicalSheet.pdf</a>

<b>Document Name</b>	Textile Collection Forecast
<b>Version</b>	2013-1
<b>XMLSchema</b>	<a href="http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/TEXCollection.xsd">http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/TEXCollection.xsd</a>
<b>User Guide</b>	<a href="http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G010-MODA-ML-TextileCollectionForecast.pdf">http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G010-MODA-ML-TextileCollectionForecast.pdf</a>

<b>Document Name</b>	Textile Purchase Order
<b>Version</b>	2013-1
<b>XMLSchema</b>	<a href="http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/TEXOrder.xsd">http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/TEXOrder.xsd</a>
<b>User Guide</b>	<a href="http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G001-MODA-ML-TextilePurchaseOrder.pdf">http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G001-MODA-ML-TextilePurchaseOrder.pdf</a>

<b>Document Name</b>	Textile Order Response
<b>Version</b>	2013-1
<b>XMLSchema</b>	<a href="http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/TEXOrdResponse.xsd">http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/TEXOrdResponse.xsd</a>
<b>User Guide</b>	<a href="http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G002-MODA-ML-TextileOrderResponse.pdf">http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G002-MODA-ML-TextileOrderResponse.pdf</a>

<b>Document Name</b>	Textile Order change
<b>Version</b>	2013-1
<b>XMLSchema</b>	<a href="http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/TEXOrdChange.xsd">http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/TEXOrdChange.xsd</a>
<b>User Guide</b>	<a href="http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G004-MODA-ML-TextileOrderchange.pdf">http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G004-MODA-ML-TextileOrderchange.pdf</a>

<b>Document Name</b>	Textile Quality Report
<b>Version</b>	2013-1
<b>XMLSchema</b>	<a href="http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/TEXQualityRpt.xsd">http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/TEXQualityRpt.xsd</a>
<b>User Guide</b>	<a href="http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G007-MODA-ML-TextileQualityReport.pdf">http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G007-MODA-ML-TextileQualityReport.pdf</a>

<b>Document Name</b>	Garment Kit Despatch Request
<b>Version</b>	2013-1
<b>XMLSchema</b>	<a href="http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/TEXKitDesRequest.xsd">http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/TEXKitDesRequest.xsd</a>
<b>User Guide</b>	<a href="http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G019-MODA-ML-GarmentKitDespatchRequest.pdf">http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G019-MODA-ML-GarmentKitDespatchRequest.pdf</a>

<b>Document Name</b>	Garment Kit Despatch Advice
<b>Version</b>	2013-1
<b>XMLSchema</b>	<a href="http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/TEXKitDesAdvise.xsd">http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/TEXKitDesAdvise.xsd</a>

<b>User Guide</b>	<a href="http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G018-MODA-ML-GarmentKitDespatchAdvice.pdf">http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G018-MODA-ML-GarmentKitDespatchAdvice.pdf</a>
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<b>Document Name</b>	Piece control Order
<b>Version</b>	2013-1
<b>XMLSchema</b>	<a href="http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/TEXControlOrder.xsd">http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/TEXControlOrder.xsd</a>
<b>User Guide</b>	<a href="http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G062-MODA-ML-PiececontrolOrder.pdf">http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G062-MODA-ML-PiececontrolOrder.pdf</a>

<b>Document Name</b>	Textile Invoice
<b>Version</b>	2013-1
<b>XMLSchema</b>	<a href="http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/TEXInvoice.xsd">http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/TEXInvoice.xsd</a>
<b>User Guide</b>	<a href="http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G011-MODA-ML-TextileInvoice.pdf">http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G011-MODA-ML-TextileInvoice.pdf</a>

<b>Document Name</b>	Garment Accessory Purchase Order
<b>Version</b>	2013-1
<b>XMLSchema</b>	<a href="http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/ACSOOrder.xsd">http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/ACSOOrder.xsd</a>
<b>User Guide</b>	<a href="http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G034-MODA-ML-GarmentAccessoryPurchaseOrder.pdf">http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G034-MODA-ML-GarmentAccessoryPurchaseOrder.pdf</a>

<b>Document Name</b>	Garment Accessory Purchase Order Response
<b>Version</b>	2013-1
<b>XMLSchema</b>	<a href="http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/ACSOrdResponse.xsd">http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/ACSOrdResponse.xsd</a>
<b>User Guide</b>	<a href="http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G035-MODA-ML-GarmentAccessoryPurchaseOrderResponse.pdf">http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G035-MODA-ML-GarmentAccessoryPurchaseOrderResponse.pdf</a>

<b>Document Name</b>	Garment Accessory Purchase Order Change
<b>Version</b>	2013-1
<b>XMLSchema</b>	<a href="http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/ACSOrdChange.xsd">http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/ACSOrdChange.xsd</a>
<b>User Guide</b>	<a href="http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G036-MODA-ML-GarmentAccessoryPurchaseOrderChange.pdf">http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G036-MODA-ML-GarmentAccessoryPurchaseOrderChange.pdf</a>

<b>Document Name</b>	Garment accessory Despatch Advice
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<b>Version</b>	2013-1
<b>XMLSchema</b>	<a href="http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/ACSDesAdvise.xsd">http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/ACSDesAdvise.xsd</a>
<b>User Guide</b>	<a href="http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G037-MODA-ML-GarmentaccessoryDespatchAdvice.pdf">http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G037-MODA-ML-GarmentaccessoryDespatchAdvice.pdf</a>

<b>Document Name</b>	Garment accessory Despatch Request
<b>Version</b>	2013-1
<b>XMLSchema</b>	<a href="http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/ACSDesRequest.xsd">http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/ACSDesRequest.xsd</a>
<b>User Guide</b>	<a href="http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G038-MODA-ML-GarmentaccessoryDespatchRequest.pdf">http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G038-MODA-ML-GarmentaccessoryDespatchRequest.pdf</a>

<b>Document Name</b>	Knitting-Clothing Commission Order
<b>Version</b>	2013-1
<b>XMLSchema</b>	<a href="http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/KnitClothOrder.xsd">http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/KnitClothOrder.xsd</a>
<b>User Guide</b>	<a href="http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G040-MODA-ML-Knitting-ClothingCommissionOrder.pdf">http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G040-MODA-ML-Knitting-ClothingCommissionOrder.pdf</a>

<b>Document Name</b>	Yarn Despatch Request
<b>Version</b>	2013-1
<b>XMLSchema</b>	<a href="http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/YARNDesRequest.xsd">http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/YARNDesRequest.xsd</a>
<b>User Guide</b>	<a href="http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G033-MODA-ML-YarnDespatchRequest.pdf">http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G033-MODA-ML-YarnDespatchRequest.pdf</a>

<b>Document Name</b>	General purpose request
<b>Version</b>	2013-1
<b>XMLSchema</b>	<a href="http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/GPDocRequest.xsd">http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/GPDocRequest.xsd</a>
<b>User Guide</b>	<a href="http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G039-MODA-ML-Generalpurposerequest.pdf">http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G039-MODA-ML-Generalpurposerequest.pdf</a>

<b>Document Name</b>	Knitting-Clothing Order Status
<b>Version</b>	2013-1
<b>XMLSchema</b>	<a href="http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/KCOrdStatus.xsd">http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/KCOrdStatus.xsd</a>
<b>User Guide</b>	<a href="http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G041-MODA-ML-Knitting-ClothingOrderStatus.pdf">http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G041-MODA-ML-Knitting-ClothingOrderStatus.pdf</a>

Document Name	Garment Despatch Request
Version	2013-1
XMLSchema	<a href="http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/GARDesRequest.xsd">http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/GARDesRequest.xsd</a>
User Guide	<a href="http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G043-MODA-ML-GarmentDespatchRequest.pdf">http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G043-MODA-ML-GarmentDespatchRequest.pdf</a>

Document Name	Garment Despatch Advice
Version	2013-1
XMLSchema	<a href="http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/GARDesAdvise.xsd">http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/GARDesAdvise.xsd</a>
User Guide	<a href="http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G028-MODA-ML-GarmentDespatchAdvice.pdf">http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G028-MODA-ML-GarmentDespatchAdvice.pdf</a>

Document Name	Garment in work Inventory report
Version	2013-1
XMLSchema	<a href="http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/GARWorkInv.xsd">http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/GARWorkInv.xsd</a>
User Guide	<a href="http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G044-MODA-ML-GarmentinworkInventoryreport.pdf">http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G044-MODA-ML-GarmentinworkInventoryreport.pdf</a>

Document Name	Garment Stock Offer
Version	2013-1
XMLSchema	<a href="http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/GARStockOffer.xsd">http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/GARStockOffer.xsd</a>
User Guide	<a href="http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G029-MODA-ML-GarmentStockOffer.pdf">http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G029-MODA-ML-GarmentStockOffer.pdf</a>

Document Name	Garment Stock Offer Status
Version	2013-1
XMLSchema	<a href="http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/GARStockStat.xsd">http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/GARStockStat.xsd</a>
User Guide	<a href="http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G063-MODA-ML-GarmentStockOfferStatus.pdf">http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G063-MODA-ML-GarmentStockOfferStatus.pdf</a>

Document Name	Garment Stock Offer Change
Version	2013-1
XMLSchema	<a href="http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/GARStockChange.xsd">http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/GARStockChange.xsd</a>

<b>User Guide</b>	<a href="http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G030-MODA-ML-GarmentStockOfferChange.pdf">http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G030-MODA-ML-GarmentStockOfferChange.pdf</a>
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<b>Document Name</b>	Raw material Dyeing Request
<b>Version</b>	2013-1
<b>XMLSchema</b>	<a href="http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/RAWDyeRequest.xsd">http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/RAWDyeRequest.xsd</a>
<b>User Guide</b>	<a href="http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G047-MODA-ML-RawmaterialDyeingRequest.pdf">http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G047-MODA-ML-RawmaterialDyeingRequest.pdf</a>

<b>Document Name</b>	Raw material dyeing Offer
<b>Version</b>	2013-1
<b>XMLSchema</b>	<a href="http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/RAWDyeOffer.xsd">http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/RAWDyeOffer.xsd</a>
<b>User Guide</b>	<a href="http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G054-MODA-ML-RawmaterialdyeingOffer.pdf">http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G054-MODA-ML-RawmaterialdyeingOffer.pdf</a>

<b>Document Name</b>	Raw material Dyeing commission Order
<b>Version</b>	2013-1
<b>XMLSchema</b>	<a href="http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/RAWDyeOrder.xsd">http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/RAWDyeOrder.xsd</a>
<b>User Guide</b>	<a href="http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G046-MODA-ML-RawmaterialDyeingcommissionOrder.pdf">http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G046-MODA-ML-RawmaterialDyeingcommissionOrder.pdf</a>

<b>Document Name</b>	Raw material dyeing Order Response
<b>Version</b>	2013-1
<b>XMLSchema</b>	<a href="http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/RAWDyeOrdResponse.xsd">http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/RAWDyeOrdResponse.xsd</a>
<b>User Guide</b>	<a href="http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G066-MODA-ML-RawmaterialdyeingOrderResponse.pdf">http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G066-MODA-ML-RawmaterialdyeingOrderResponse.pdf</a>

<b>Document Name</b>	Raw material dyeing Order Change
<b>Version</b>	2013-1
<b>XMLSchema</b>	<a href="http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/RAWDyeOrdChange.xsd">http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/RAWDyeOrdChange.xsd</a>
<b>User Guide</b>	<a href="http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G067-MODA-ML-RawmaterialdyeingOrderChange.pdf">http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G067-MODA-ML-RawmaterialdyeingOrderChange.pdf</a>

<b>Document Name</b>	Raw material Despatch Advice
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<b>Version</b>	2013-1
<b>XMLSchema</b>	<a href="http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/RAWDesAdvise.xsd">http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/RAWDesAdvise.xsd</a>
<b>User Guide</b>	<a href="http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G042-MODA-ML-RawmaterialDespatchAdvice.pdf">http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G042-MODA-ML-RawmaterialDespatchAdvice.pdf</a>

<b>Document Name</b>	Raw material order status
<b>Version</b>	2013-1
<b>XMLSchema</b>	<a href="http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/RAWOrdStatus.xsd">http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/RAWOrdStatus.xsd</a>
<b>User Guide</b>	<a href="http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G064-MODA-ML-Rawmaterialorderstatus.pdf">http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G064-MODA-ML-Rawmaterialorderstatus.pdf</a>

<b>Document Name</b>	Raw material in work Inventory report
<b>Version</b>	2013-1
<b>XMLSchema</b>	<a href="http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/RAWWorkInv.xsd">http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/RAWWorkInv.xsd</a>
<b>User Guide</b>	<a href="http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G065-MODA-ML-RawmaterialinworkInventoryreport.pdf">http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G065-MODA-ML-RawmaterialinworkInventoryreport.pdf</a>

<b>Document Name</b>	Spinning Request
<b>Version</b>	2013-1
<b>XMLSchema</b>	<a href="http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/RAWSpinRequest.xsd">http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/RAWSpinRequest.xsd</a>
<b>User Guide</b>	<a href="http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G048-MODA-ML-SpinningRequest.pdf">http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G048-MODA-ML-SpinningRequest.pdf</a>

<b>Document Name</b>	Spinning Offer
<b>Version</b>	2013-1
<b>XMLSchema</b>	<a href="http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/RAWSpinOffer.xsd">http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/RAWSpinOffer.xsd</a>
<b>User Guide</b>	<a href="http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G056-MODA-ML-SpinningOffer.pdf">http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G056-MODA-ML-SpinningOffer.pdf</a>

<b>Document Name</b>	Spinning Commission Order
<b>Version</b>	2013-1
<b>XMLSchema</b>	<a href="http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/RAWSpinOrder.xsd">http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/RAWSpinOrder.xsd</a>
<b>User Guide</b>	<a href="http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G045-MODA-ML-SpinningCommissionOrder.pdf">http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G045-MODA-ML-SpinningCommissionOrder.pdf</a>

Document Name	Spinnig Order Response
Version	2013-1
XMLSchema	<a href="http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/RAWSpinOrdResponse.xsd">http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/RAWSpinOrdResponse.xsd</a>
User Guide	<a href="http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G070-MODA-ML-SpinnigOrderResponse.pdf">http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G070-MODA-ML-SpinnigOrderResponse.pdf</a>

Document Name	Spinning Order Change
Version	2013-1
XMLSchema	<a href="http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/RAWSpinOrdChange.xsd">http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/RAWSpinOrdChange.xsd</a>
User Guide	<a href="http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G055-MODA-ML-SpinningOrderChange.pdf">http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G055-MODA-ML-SpinningOrderChange.pdf</a>

Document Name	Yarn Order Status Report
Version	2013-1
XMLSchema	<a href="http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/YARNOrdStatus.xsd">http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/YARNOrdStatus.xsd</a>
User Guide	<a href="http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G015-MODA-ML-YarnOrderStatusReport.pdf">http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G015-MODA-ML-YarnOrderStatusReport.pdf</a>

Document Name	Yarn in work Inventory report
Version	2013-1
XMLSchema	<a href="http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/YARNWorkInv.xsd">http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/YARNWorkInv.xsd</a>
User Guide	<a href="http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G026-MODA-ML-YarninworkInventoryreport.pdf">http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G026-MODA-ML-YarninworkInventoryreport.pdf</a>

Document Name	Twisting Request
Version	2013-1
XMLSchema	<a href="http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/YARNTwistRequest.xsd">http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/YARNTwistRequest.xsd</a>
User Guide	<a href="http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G049-MODA-ML-TwistingRequest.pdf">http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G049-MODA-ML-TwistingRequest.pdf</a>

Document Name	Twisting Offer
Version	2013-1
XMLSchema	<a href="http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/YARNTwistOffer.xsd">http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/YARNTwistOffer.xsd</a>

<b>User Guide</b>	<a href="http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G057-MODA-ML-TwistingOffer.pdf">http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G057-MODA-ML-TwistingOffer.pdf</a>
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<b>Document Name</b>	Yarn Twisting Commission Order
<b>Version</b>	2013-1
<b>XMLSchema</b>	<a href="http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/YARNTwistOrder.xsd">http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/YARNTwistOrder.xsd</a>
<b>User Guide</b>	<a href="http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G020-MODA-ML-YarnTwistingCommissionOrder.pdf">http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G020-MODA-ML-YarnTwistingCommissionOrder.pdf</a>

<b>Document Name</b>	Yarn Dyeing Request
<b>Version</b>	2013-1
<b>XMLSchema</b>	<a href="http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/YARNDyeRequest.xsd">http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/YARNDyeRequest.xsd</a>
<b>User Guide</b>	<a href="http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G050-MODA-ML-YarnDyeingRequest.pdf">http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G050-MODA-ML-YarnDyeingRequest.pdf</a>

<b>Document Name</b>	Yarn Dyeing Offer
<b>Version</b>	2013-1
<b>XMLSchema</b>	<a href="http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/YARNDyeOffer.xsd">http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/YARNDyeOffer.xsd</a>
<b>User Guide</b>	<a href="http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G058-MODA-ML-YarnDyeingOffer.pdf">http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G058-MODA-ML-YarnDyeingOffer.pdf</a>

<b>Document Name</b>	Yarn dyeing commission order
<b>Version</b>	2013-1
<b>XMLSchema</b>	<a href="http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/YARNDyeOrder.xsd">http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/YARNDyeOrder.xsd</a>
<b>User Guide</b>	<a href="http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G021-MODA-ML-Yarndyeingcommissionorder.pdf">http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G021-MODA-ML-Yarndyeingcommissionorder.pdf</a>

<b>Document Name</b>	Yarn dyeing Order Response
<b>Version</b>	2013-1
<b>XMLSchema</b>	<a href="http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/YARNDyeOrdResponse.xsd">http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/YARNDyeOrdResponse.xsd</a>
<b>User Guide</b>	<a href="http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G068-MODA-ML-YarndyeingOrderResponse.pdf">http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G068-MODA-ML-YarndyeingOrderResponse.pdf</a>

<b>Document Name</b>	Yarn dyeing Order Change
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<b>Version</b>	2013-1
<b>XMLSchema</b>	<a href="http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/YARNDyeOrdChange.xsd">http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/YARNDyeOrdChange.xsd</a>
<b>User Guide</b>	<a href="http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G069-MODA-ML-YarndyeingOrderChange.pdf">http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G069-MODA-ML-YarndyeingOrderChange.pdf</a>

<b>Document Name</b>	Yarn Offer Request
<b>Version</b>	2013-1
<b>XMLSchema</b>	<a href="http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/YARNOfferRequest.xsd">http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/YARNOfferRequest.xsd</a>
<b>User Guide</b>	<a href="http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G073-MODA-ML-YarnOfferRequest.pdf">http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G073-MODA-ML-YarnOfferRequest.pdf</a>

<b>Document Name</b>	Yarn Offer
<b>Version</b>	2013-1
<b>XMLSchema</b>	<a href="http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/YARNOffer.xsd">http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/YARNOffer.xsd</a>
<b>User Guide</b>	<a href="http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G074-MODA-ML-YarnOffer.pdf">http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G074-MODA-ML-YarnOffer.pdf</a>

<b>Document Name</b>	Yarn Purchase Order
<b>Version</b>	2013-1
<b>XMLSchema</b>	<a href="http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/YARNOrder.xsd">http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/YARNOrder.xsd</a>
<b>User Guide</b>	<a href="http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G014-MODA-ML-YarnPurchaseOrder.pdf">http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G014-MODA-ML-YarnPurchaseOrder.pdf</a>

<b>Document Name</b>	Yarn Purchase Order Response
<b>Version</b>	2013-1
<b>XMLSchema</b>	<a href="http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/YARNOrdResponse.xsd">http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/YARNOrdResponse.xsd</a>
<b>User Guide</b>	<a href="http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G031-MODA-ML-YarnPurchaseOrderResponse.pdf">http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G031-MODA-ML-YarnPurchaseOrderResponse.pdf</a>

<b>Document Name</b>	Yarn Purchase Order Change
<b>Version</b>	2013-1
<b>XMLSchema</b>	<a href="http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/YARNOrdChange.xsd">http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/YARNOrdChange.xsd</a>
<b>User Guide</b>	<a href="http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G032-MODA-ML-YarnPurchaseOrderChange.pdf">http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G032-MODA-ML-YarnPurchaseOrderChange.pdf</a>

<b>Document Name</b>	Yarn Quality Report
<b>Version</b>	2013-1
<b>XMLSchema</b>	<a href="http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/YARNQualityRpt.xsd">http://www.moda-ml.net/moda-ml/repository/schema/v2013-1/YARNQualityRpt.xsd</a>
<b>User Guide</b>	<a href="http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G075-MODA-ML-YarnQualityReport.pdf">http://www.moda-ml.net/moda-ml/repository/guide/v2013-1/en/G075-MODA-ML-YarnQualityReport.pdf</a>



Towards one eBusiness Language for fashion

## **APPENDIX E**

# **Reference Architecture 2.0 for eBusiness harmonisation in Textile/Clothing and Footwear sectors**

## APPENDIX E: Upstream footwear processes

### Scope

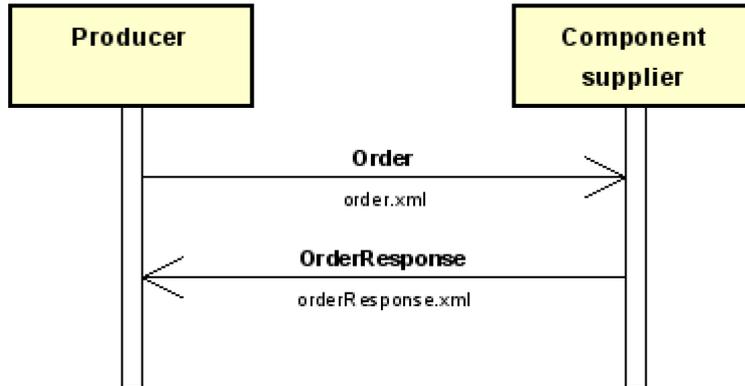
The goal behind the definitions is a complete understanding of the activities behind the process descriptions and an easy implementation of the business processes and the related documents. The Actors participating in the different processes and processes activities are highlighted in each of the descriptions, and an activity diagram is described for a better comprehension.

For the implementations of the activities, the Shoenet documents are used.

#### 1.1.1 Process: component supply

<b>Process Name</b>	Component supply
<b>Actors</b>	<b>Producer function, component supplier function</b>
<b>Description</b>	Components are ordered by the supplier function and the process is monitored by status reports. Finally the delivery is announced and confirmed.
<b>Activities</b>	<ul style="list-style-type: none"> <li>• transfer of order</li> <li>• status report</li> <li>• technical specifications</li> <li>• delivery</li> </ul>
<b>Reference to the related ebBP</b>	<a href="http://spring.bologna.enea.it/eBIZ-footwear/repository/ebbp/v2013-1/en/ebBP_Componentsupply-1_v2013-1.xml">http://spring.bologna.enea.it/eBIZ-footwear/repository/ebbp/v2013-1/en/ebBP_Componentsupply-1_v2013-1.xml</a>

### 1.1.1.1 Activity "Transfer of order"

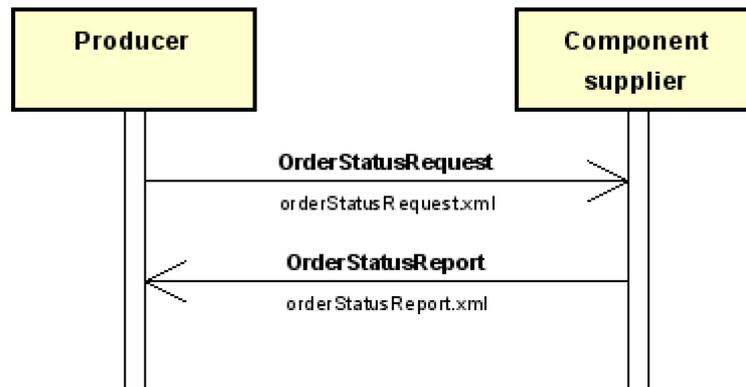


<b>Activity Name</b>	Transfer of order
<b>Description</b>	The order is sent from the producer function to the component supplier function and confirmed by the order response.
<b>Transactions</b>	Order transfer
<b>Post-conditions</b>	Order data is available in both systems

#### **Transactions inside the activity "Transfer of order"**

<b>Action 1</b> (Request from Producer function to Component Supplier function)	
<b>Document Name</b>	Order
<b>Action Description</b>	The order is sent from producer function to component supplier function.
<b>Action 2</b> (Response from Component Supplier function to Producer function)	
<b>Document Name</b>	Order Response
<b>Action Description</b>	The order is confirmed by the component supplier function.

### 1.1.1.2 Activity "Status Report"



<b>Activity Name</b>	Status report
<b>Description</b>	At certain points of the process the producer function requests the status of the fulfilment of the order. The supplier function answers with status report.
<b>Transactions</b>	Status transfer
<b>Pre-conditions</b>	Producer function needs information about the order status.
<b>Post-conditions</b>	Order status is available at the producer function.

#### **Transactions inside the activity "Status Report"**

##### **Action 1** (Request from Producer function to Component Supplier function)

**Document Name** Order status request

**Action Description** The producer function requests a report about the status of his order.

##### **Action 2** (Response from Component Supplier function to Producer function)

**Document Name** Order status report

**Action Description** The status request is answered by the status report.

### 1.1.1.3 Activity "Technical Specifications"

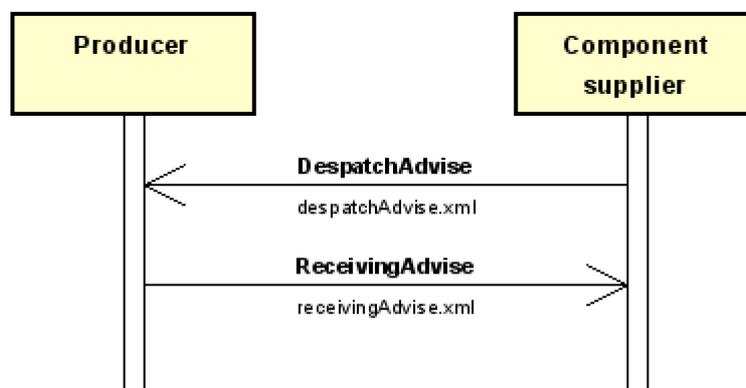


<b>Activity Name</b>	Technical specifications
<b>Description</b>	The detailed technical specifications of the produced components are transferred from supplier function to producer function.
<b>Transactions</b>	Specifications transfer
<b>Pre-conditions</b>	Production is finished
<b>Post-conditions</b>	Detailed technical information about components is available at the producer functionproducer.

#### Transactions inside the activity "Technical Specifications"

<b>Action 1</b> (Request from Component Supplier function to Producer function)	
<b>Document Name</b>	Technical specifications report
<b>Action Description</b>	The technical details of the components are reported

### 1.1.1.4 Activity "Delivery"



<b>Activity Name</b>	Delivery
<b>Description</b>	Delivery of components is advised and confirmed.

<b>Transactions</b>	Delivery transfer
<b>Pre-conditions</b>	Supplier function dispatched the components
<b>Post-conditions</b>	Delivery is confirmed

***Transactions inside the activity "Delivery"***

**Action 1 (Request from Component Supplier function to Producer function)**

<b>Document Name</b>	Despatch advice
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<b>Action Description</b>	The delivery is announced by the despatch advice
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**Action 2 (Request from Producer function to Component Supplier function)**

<b>Document Name</b>	Receiving advice
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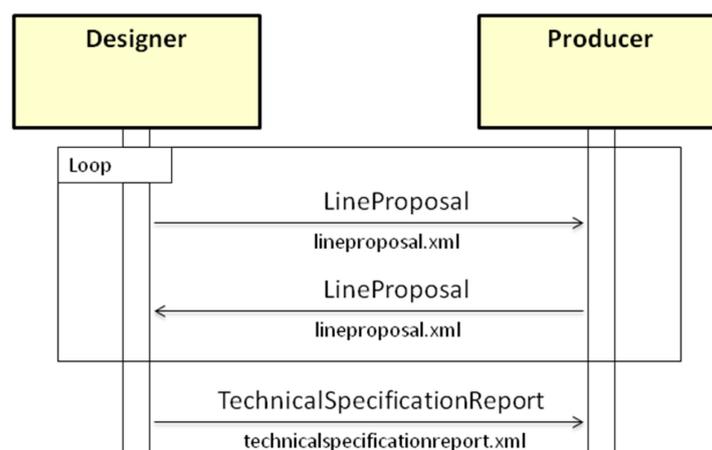
<b>Action Description</b>	After goods receive the producer function reports back the products which arrived with the delivery announced in the despatch advice.
---------------------------	---

## 1.1.2 Process: Product Design

<b>Process Name</b>	Product Design
<b>Actors</b>	<b>Designer, Producer function, Component supplier function.</b>
<b>Description</b>	Sketches, comments and 3D information (including EFNET3) are exchanged between the designer and the producer function in order to reach an agreement in the final design. Based on the design, the materials and quality specifications are exchanged. Once the final design and technical characteristics are agreed, a pre-series order and the technical specifications are sent to the component supplier functions for prototype manufacturing. As a final step, and once the prototype component has been delivered, the component supplier function can send back to the producer function the technical modifications that could have been applied to the original design during the prototype manufacturing.
<b>Activities</b>	<ul style="list-style-type: none"> <li>• Transfer of Model Design</li> <li>• Pre-series order</li> <li>• Status report</li> <li>• Delivery</li> <li>• Technical Specifications</li> </ul>
<b>Reference to the related ebBP</b>	<a href="http://spring.bologna.enea.it/eBIZ-footwear/repository/ebbp/v2013-1/en/ebBP_Design-1_v2013-1.xml">http://spring.bologna.enea.it/eBIZ-footwear/repository/ebbp/v2013-1/en/ebBP_Design-1_v2013-1.xml</a>

The "Product Design" process model uses different activities that have been described in the previous process models, such as Technical Specification, Status report or Delivery. Please refer to these previous descriptions for more information.

### 1.1.2.1 Activity "Transfer of Model Design"



<b>Activity Name</b>	Transfer of Model Design
<b>Description</b>	The LineProposal documents are exchanged between the Designer and the Producer function, filtering and improving the model. Once an agreement is reached, the designer send the Producer function the technical specification of the

	model.
<b>Transactions</b>	Line Proposal transfer TechnicalSpecificationReport
<b>Pre/conditions</b>	The Producer function have decided to commission the product design to a specialised Designer.
<b>Post-conditions</b>	N/A

### ***Transactions inside the activity " Transfer of Model Design"***

#### **Action 1 (Information sent from Designer to Producer function)**

<b>Document Name</b>	LineProposal
<b>Action Description</b>	<b>A lineproposal document with pictures, and including different design material is sent from the Designer to the Producer function.</b>

#### **Action 2 (Response from Producer function to Designer)**

<b>Document Name</b>	LineProposal
<b>Action Description</b>	<b>Information about changes in the model, comments on materials, etc... can be sent from the Producer function to the designer.</b>

#### **Action 3 (Information sent from Designer to Producer function)**

<b>Document Name</b>	TechnicalSpecificationReport
<b>Action Description</b>	<b>A definitive technical description of the model is sent from the Designer to the Producer function, including information for manufacturing.</b>

### **1.1.2.2 Activity "Pre-series order"**

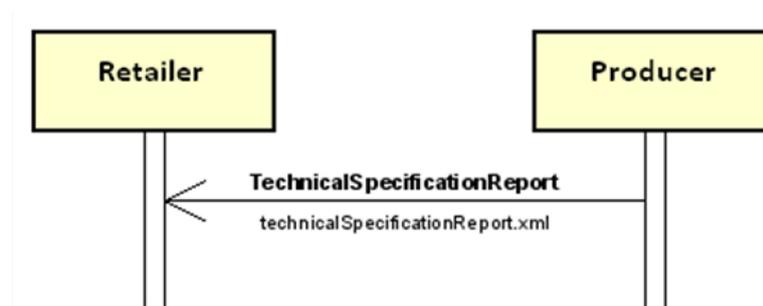
<b>Activity Name</b>	Pre-series order
<b>Description</b>	The pre-series order activity is equivalent to the "transfer of order". The only difference is that the objective is a very limited production number of elements, that will be used for comfort and/or market tests.
<b>Transactions</b>	Order transfer
<b>Post-conditions</b>	Order data is available in both systems

### 1.1.3 Process: Customised made shoes for health sector

<b>Process Name</b>	Product Design
<b>Actors</b>	<b>Producer function, Retailer function, Customer</b>
<b>Description</b>	In this process the producer function issues the retailer function with the technology needed to be able to sale customised products. The diagnosis and monitoring systems allow the orthopaedic technician to characterize the patient's feet, required for the shoe design. The technicians can also use 3D scanners (foot scanners) and product configurators to allow the customer to select the model of the shoe. Usually the information in these systems can be updated by means of a Technical Specification document. The Retailer function helps the customer to configure the custom article, and orders the product(s). In this process, the delivery of the product is deferred due to the product still don't exists and have to be manufactured on purpose. Logistics acquire special importance in this process, unique item production is the usual case, and the customer is waiting for its purchased article. In this process only the product delivery in shop is modelled, although the delivery can be also performed on the customer address.
<b>Activities</b>	<ul style="list-style-type: none"> <li>• Technical Specification for custom product</li> <li>• Transfer of custom product order</li> <li>• Custom Component Supply</li> <li>• Status report for custom product</li> <li>• Delivery of custom product</li> </ul>
<b>Reference to the related ebBP</b>	<a href="http://www.moda-ml.net/ebiz-retail/repository/ebbp/v2013-1/en/ebBP_customproductsale-1_2013-1.xml">http://www.moda-ml.net/ebiz-retail/repository/ebbp/v2013-1/en/ebBP_customproductsale-1_2013-1.xml</a>

The "Customised made shoes for health sector" process model instantiate the process model "Component supply" as part of the execution of the process of ordering, manufacturing and delivering the customised product. This instantiation is made under the activity "Custom Component Supply". Please refer to the "Component Supply" description for more information.

#### 1.1.3.1 Activity "Technical Specifications" for custom product



<b>Activity Name</b>	Technical specifications for custom product
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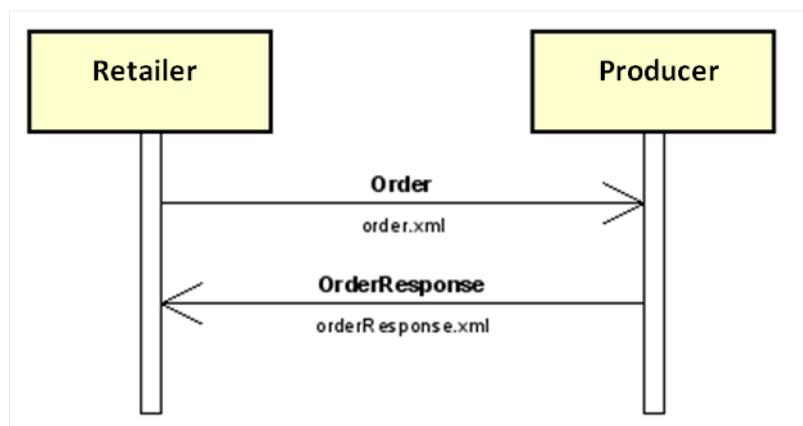
<b>Description</b>	The detailed technical specifications and options of the custom product are transferred from Producer function to Retailer function.
<b>Transactions</b>	Specifications transfer
<b>Pre-conditions</b>	Custom product specifications and options are decided
<b>Post-conditions</b>	

**Transactions inside the activity "Technical Specifications for custom product "**

**Action 1 (Request from Component Producer function to Retailer function)**

<b>Document Name</b>	Technical specifications report
<b>Action Description</b>	The technical details of the model and components are reported, including the different customisation possibilities

**1.1.3.2 Activity "Transfer of custom product order"**



<b>Activity Name</b>	Transfer of custom product order
<b>Description</b>	The order is sent from the Retailer function to the Producer function and confirmed by the order response.
<b>Transactions</b>	Order transfer
<b>Post-conditions</b>	Order data is available in both systems

**Transactions inside the activity "Transfer of custom product order"**

**Action 1 (Request from Producer function to Component Supplier function)**

<b>Document Name</b>	Order
<b>Action Description</b>	The order is sent from Retailer function to Producer function.

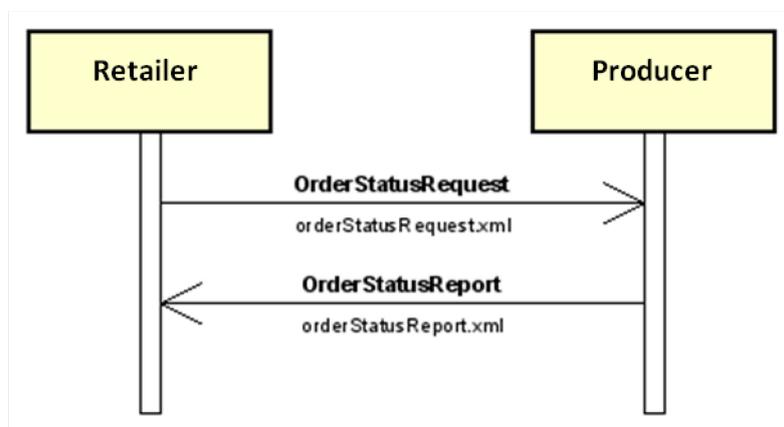
**Action 2 (Response from Component Supplier function to Producer function)**

<b>Document Name</b>	Order Response
<b>Action Description</b>	The order is confirmed by the Producer function.

### 1.1.3.3 Activity "Custom Component Supply"

The activity Custom Component Supply consists in an instantiation of the Process model "Component Supply", where the main difference is the number of components ordered and the information of the components ordered themselves (as they can contain some customised properties). Apart from this information, the instantiated process activities are similar.

### 1.1.3.4 Activity "Status Report" for custom product

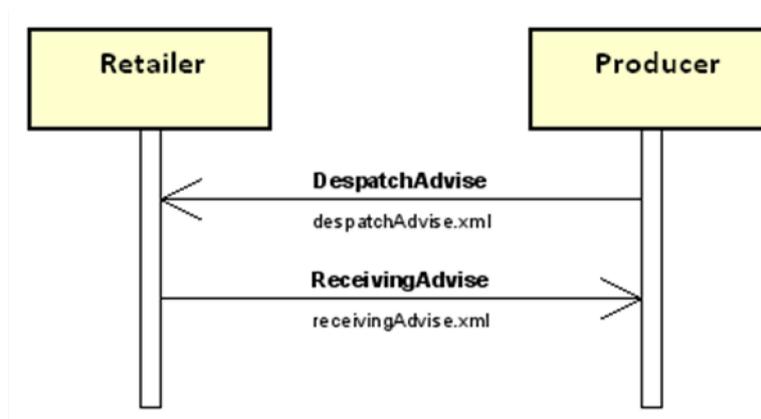


<b>Activity Name</b>	Status report for custom product
<b>Description</b>	At certain points of the process the Retailer function requests the status of the fulfilment of the manufacturing of the custom product. The Producer function answers with status report, that can be based on the different statuses of the component providers of the custom product.
<b>Transactions</b>	Status transfer
<b>Pre-conditions</b>	Retailer function needs information about the order status.
<b>Post-conditions</b>	Order status is available at the Retailer function.

### Transactions inside the activity "Status Report for custom product "

<b>Action 1</b> (Request from Retailer function to Producer function)	
<b>Document Name</b>	Order status request
<b>Action Description</b>	The producer function requests a report about the status of his order.
<b>Action 2</b> (Response from Producer function to Retailer function)	
<b>Document Name</b>	Order status report
<b>Action Description</b>	The status request is answered by the status report.

### 1.1.3.5 Activity "Delivery" of custom product



<b>Activity Name</b>	Delivery for custom product
<b>Description</b>	Delivery of custom product is advised and confirmed.
<b>Transactions</b>	Delivery transfer
<b>Pre-conditions</b>	Producer function dispatched the components
<b>Post-conditions</b>	Delivery is confirmed

#### Transactions inside the activity "Delivery for custom product "

<b>Action 1</b> (Request from Producer function to Retailer function)	
<b>Document Name</b>	Despatch advice
<b>Action Description</b>	The delivery is announced by the despatch advice
<b>Action 2</b> (Request from Retailer function to Producer function)	
<b>Document Name</b>	Receiving advice
<b>Action Description</b>	After goods receive the producer function reports back the products which arrived with the delivery announced in the despatch advice.

### 1.1.4 Process: Fashion custom made shoes

<b>Process Name</b>	Fashion custom made shoes
<b>Actors</b>	Producer function, Retailer function, Customer
<b>Description</b>	In this process the producer function issues the retailer function with the technology needed to be able to sale customised products. This can imply 3D scanners, but also advanced product configurators like augmented reality applications. The orphotaedic technical uses Usually the information in these systems can be updated by means of a Technical Specification document. The Retailer function helps the customer to configure the custom article, and orders the product(s). In this process, the delivery of the product is deferred due to the product still don't exists and have to be manufactured on purpose. Logistics acquire special importance in this process, unique item production is the usual case, and the

	customer is waiting for its purchased article. The invoicing normally is charge-on-delivery based, In this case only the product delivery in shop is modelled, although the delivery can be also performed on the customer address.
<b>Activities</b>	<ul style="list-style-type: none"> <li>• Technical Specification for custom product</li> <li>• Transfer of custom product order</li> <li>• Custom Component Supply</li> <li>• Status report for custom product</li> <li>• Delivery of custom product</li> </ul>
<b>Reference to the related ebBP</b>	<a href="http://www.moda-ml.net/ebiz-retail/repository/ebbp/v2013-1/en/ebBP_customproductsale-2_2013-2.xml">http://www.moda-ml.net/ebiz-retail/repository/ebbp/v2013-1/en/ebBP_customproductsale-2_2013-2.xml</a>

The "Fashion custom made shoes" process model instantiate the process model "Component supply" as part of the execution of the process of ordering, manufacturing and delivering the customised product. This instantiation is made under the activity "Custom Component Supply". It also uses different activities described at the Process Model "Customised made shoes for health seactor". Please refer to these sections for more information.



Towards one eBusiness Language for fashion

# **APPENDIX F**

## **Reference Architecture 2.0**

### **for eBusiness harmonisation in**

### **Textile/Clothing and Footwear**

### **sectors**

[www.ebiz-tcf.eu](http://www.ebiz-tcf.eu)

## APPENDIX F: Reference to data models for upstream Footwear

<b>Document Names</b>	<p>Order          Delivery Note          Order Change Request          Order Response          Order Status Request          Order Status Report          Claim          Despatch Advise          Receiving Advise          Request For Quotation          Quotation          Receiving Confirmation          Invoice          Credit Note          Proforma Invoice          Line Proposal          Technical Specification Report</p>
<b>Version</b>	Shoenet V2.1, released on 01-04-2013
<b>XMLSchema</b>	<p>Root elements:</p> <ul style="list-style-type: none"> <li>- order</li> <li>- deliveryNote</li> <li>- orderChangeRequest</li> <li>- orderResponse</li> <li>- orderStatusRequest</li> <li>- orderStatusReport</li> <li>- claim</li> <li>- despatchAdvise</li> <li>- receivingAdvise</li> <li>- requestForQuotation</li> <li>- quotation</li> <li>- receivingConfirmation</li> <li>- invoice</li> <li>- creditNote</li> <li>- proFormaInvoice</li> <li>- lineProposal</li> <li>- technicalSpecificationReport</li> </ul> <p>All the roots can be extracted from the XML Schema Shoecom.xsd available in <a href="http://www.shoenet.info/datamodel/shoecom.xsd">http://www.shoenet.info/datamodel/shoecom.xsd</a></p> <p>For customised product processes the XML Schema to be used is <a href="http://www.shoenet.info/datamodel/shoecom_customv1.02.xsd">http://www.shoenet.info/datamodel/shoecom_customv1.02.xsd</a></p>
<b>User Guide</b>	<p>From <a href="http://www.shoenet.info/documents.aspx">http://www.shoenet.info/documents.aspx</a></p> <p>- "ShoeCom messages used in the ShoeBiz system, 03-02-2009.pdf"</p> <p>- "Shoecom-examples-4-2-2009.zip"</p> <p>- "Shoecom-examples-v2.zip"</p>
<b>Other references</b>	The website of the software developed under Cec-made-shoe European project: <a href="http://scn.inescporto.pt/">http://scn.inescporto.pt/</a>



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The website of the Shoebiz system: <http://svr-shoebiz.ctcp.pt>

The website of portuguese project for the promotion of ICT in footwear, textile and clothing sectors: <http://www.tecmoda.org>



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## **APPENDIX G**

# **Reference Architecture 2.0 for eBusiness harmonisation in Textile/Clothing and Footwear sectors**



## APPENDIX G: Data models for Business Middleware layer

### G.1. Data models for ebXML CPPA standard

#### Source

“Collaboration-Protocol Profile and Agreement Specification Version 3.0”, August 2006, work of the OASIS ebXML Collaboration Protocol Profile and Agreement Technical Committee

#### Scope

The standard ebXML CPPA specifies the data models for a Collaboration Party Profile (CPP) XML document and for Collaboration Partner Agreement (CPA) XML document. The CPA document contains data that follow the same data model of a CPP XML document, and which are obtained by matching two CPP documents.

#### Data model details

List of top-level elements (alphabetically ordered):

Name (not XML tag)	Occurrence	Description
Collaboration Role	1-N	Associates a Party with a specific role in a particular Business Collaboration Process. An aggregated element.
Comment	0-N	Textual note that can be added to serve any purpose the author desires. A simple element.
Delivery Channel	1-N	A delivery channel specifies the communication (transport) protocol (such as HTTP, SMTP, etc.) and its characteristics (secure, reliable delivery) and the message envelope and document exchange protocol (regarding reliable or non-reliable messaging, synchronous or asynchronous communication, document-level security, etc.). An aggregated element.
Packaging	1-N	The Packaging element provides specific information about how the Message Header and payload constituent(s) are packaged for transmittal over the transport.
Party Info	1-N 2-N	Identifies the organization whose capabilities are described in the CPP and includes all the details about the Party. More than one Party Info element may be provided in a CPP if the organization chooses to represent itself as subdivisions with different characteristics. At least two Party Info elements are required in a CPA (one for each Party to the CPA). An aggregated element.
Signature	0-N	Enables the CPA to be digitally signed using technology that conforms with the XML Digital Signature specification [XMLDSIG]. The Signature element is the root of a subtree of elements used for signing the CPP.



List of nested elements of Collaboration Role

Name (not XML tag)	Occurrence	Description	Type details (Type of coding, elements)
Process Specification	1-N	Link to an ebBP process specification document	URI-Link
Role	1-1	Identifies which role in the Process Specification the Party is capable of supporting	URI-Link
Service	1-1	Defines the value of the Service element in the ebXML Message Header or a similar element in the Message Header of an alternative message service.	Aggregated type
CanSend (and CanReceive)	0-N	Identifies an action message that a Party is capable of sending (receiving).	Aggregated type
BusinessTransactionCharacteristics	1-1	Describes the security characteristics and other attributes of the delivery channel, as derived from the ProcessSpecification(s) whose messages are transported using the delivery channel. The attributes of the BusinessTransactionCharacteristics element, MAY be used to override the values of the corresponding attributes in the Process-Specification document.	Aggregated type
ActionContext	1-1	Provides a mapping from the action attribute in the ThisPartyActionBinding element to the corresponding Business Process implementation-specific naming strategy, if any. If the Process-Specification document is defined by the ebXML Business Process Specification Schema, the ActionContext element MUST be present.	String

List of nested elements of Delivery Channel.

Name (not XML tag)	Occurrence	Description	Type details (Type of coding, elements)
MessagingCharacteristics	1-1	Describes the attributes associated with messages delivered over a given delivery channel. The collaborating Parties can stipulate that these attributes be fixed for all messages sent through the delivery channel, or they can agree that these attributes be variable on a "per message" basis.	Aggregated type
Transport	1-N	Defines the Party's network communication capabilities: mechanisms the Party uses to send messages, mechanisms it uses to receive messages, or both. The Transport element	Aggregated type



*Harmonising eBusiness processes and data exchanges*  
for SMEs in the textile/clothing and footwear sectors in the Single Market

Name (not XML tag)	Occurrence	Description	Type details (Type of coding, elements)
		consists of zero or one TransportSender element and zero or one TransportReceiver element. A Transport that contains both TransportSender and TransportReceiver elements is said to be bi-directional in that it can be used for sending and receiving messages.	
DocExchange	1-N	Provides information that the Parties must agree on regarding exchange of documents between them. This information includes the messaging service properties. The DocExchange element is comprised of zero or one ebXMLSenderBinding child element and zero or one ebXMLReceiverBinding child element. It must have at least one child element. CPP and CPA composition tools and CPA deployment tools verify the presence of a child element.	Aggregated type
ebXMLSenderBinding and ebXMLReceiverBinding	1-1	Describes properties related to sending and receiving messages with the ebXML Message Service	Aggregated type
ReliableMessaging	1-1	Specifies the properties of reliable ebXML Message exchange.	Aggregated type
Retries and RetryInterval	1-1	Specify the permitted number of retries and the interval, expressed as an XML Schema duration, between retries of sending a reliably delivered Message following a timeout waiting for the Acknowledgment. The purpose of the RetryInterval element is to improve the likelihood of success on retry by deferring the retry until any temporary conditions that caused the error might be corrected. The RetryInterval applies to the time between sending of the original message and the first retry, as well as the time between all subsequent retries.	String
SenderNonRepudiation	1-1	Conveys the message sender's requirements and certificate for non-repudiation. Non-repudiation both proves who sent a Message and prevents later repudiation of the contents of the Message.	XML Digital Signature
SenderDigitalEnvelope	1-1	Provides the sender's requirements for message encryption using the digital-envelope method. Digital-envelope is a procedure in which the Message is encrypted by symmetric encryption (shared secret key) and the secret key is sent to the Message recipient encrypted with the recipient's public key.	XML Encryption
Certificate and ds:KeyInfo	1-N	Defines certificate information for use in this CPP. One or more Certificate elements can be provided for use in the various security functions in the CPP. The Certificate element has a single child element: ds:KeyInfo. The ds:KeyInfo element may contain a complete chain of	XML Digital Signature



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for SMEs in the textile/clothing and footwear sectors in the Single Market

Name (not XML tag)	Occurrence	Description	Type details (Type of coding, elements)
		certificates, but the leaf certificate is the Certificate element containing the key used in various asymmetric cryptographic operations.	
SecurityDetails	1-N	Defines a set of TrustAnchors and an associated SecurityPolicy for use in this CPP.	Aggregated type

List of nested elements of Packaging.

Name (not XML tag)	Occurrence	Description	Type details (Type of coding, elements)
Choice of CompositeList or Constituent	1-1 or 1-N	A choice that can be a CompositeList, which is a container for the specific way in which the simple parts are combined into groups (MIME multipart) or encapsulated within security-related MIME content-types, or a choice that can be simply a Constituent. When one Constituent element occurs, the Packaging consists of just the SimplePart to which the Constituent refers.	Aggregated type
SimplePart	1-N	Provides a repeatable list of the constituent parts, primarily identified by the MIME content-type value. The same SimplePart element can be referenced from (i.e., reused in) multiple Packaging elements.	URI-Link

List of nested elements of Party Info.

Name (not XML tag)	Occurrence	Description	Type details (Type of coding, elements)
Party ID	1-1	Identifies logically the party in a CPP or CPA document	GLN code for the downstream; VAT number for the up-stream
Party Ref	0-1	Additional information about a party, contained in a URL from which the info can be obtained.	URI-Link



## References on the WEB

<b>ebCPPA</b>	CPPA Technical Specification: WP402-035-v1-CPPA_Technical_Specification_V3.0_draft.doc  OASIS ebXML Collaboration Protocol Profile and Agreement Technical Committee <a href="http://www.oasis-open.org/committees/tc_home.php?wg_abbrev=ebxml-cppa">http://www.oasis-open.org/committees/tc_home.php?wg_abbrev=ebxml-cppa</a>
<b>XML Signature</b>	XML Signature Syntax and Processing, Worldwide Web Consortium, <a href="http://www.w3.org/TR/xmlsig-core/">http://www.w3.org/TR/xmlsig-core/</a> .
<b>XML Schema</b>	XML Schema Part 2: Datatypes, Worldwide Web Consortium, <a href="http://www.w3.org/TR/xmlschema-2/">http://www.w3.org/TR/xmlschema-2/</a> .

## Examples

<b>CPP</b>	A Collaboration Partner Profile ( <a href="http://www.moda-ml.net/ebiz-retail/repository/cppa/cpp/CPP_IT-12345678909.xml">http://www.moda-ml.net/ebiz-retail/repository/cppa/cpp/CPP_IT-12345678909.xml</a> )
<b>CPA</b>	A Collaboration Partner Agreement ( <a href="http://www.moda-ml.net/ebiz-retail/repository/cppa/cpa/CPA_IT-12345678909_RO-98765432101_2013-04-09.xml">http://www.moda-ml.net/ebiz-retail/repository/cppa/cpa/CPA_IT-12345678909_RO-98765432101_2013-04-09.xml</a> )
<b>ebBP</b>	A business process ( <a href="http://www.moda-ml.net/ebiz-retail/repository/ebbp/v2013-1/en/ebBP_cyclicreplenishmentprogramcrp-1_2013-1.xml">http://www.moda-ml.net/ebiz-retail/repository/ebbp/v2013-1/en/ebBP_cyclicreplenishmentprogramcrp-1_2013-1.xml</a> )



## G.2. Data Models for WSDL standard

### Source

“Web Services Description Language (WSDL)” Version 1.1, W3C Standard, 15 March 2001

### Scope

WSDL is an XML format for describing network services as a set of endpoints operating on messages containing either document-oriented or procedure-oriented information.

### Data model details

Name (not XML tag)	Occurrence	Description
Binding	0-N	Defines message format and protocol details for operations and messages defined by a particular Port Type.
Definitions	root	ROOT of the WSDL
Message	0-N	A message consist of one or more logical parts. Each part is associated with a type. The set of message-typing attributes is extensible.
Port Type	0-N	A named set of abstract operations and the abstract messages involved.
Service	0-N	Groups a set of related ports.
Types	0-N	Data type definitions that are relevant for the exchanged messages.

List of nested elements (alphabetically ordered) of Message

Name (not XML tag)	Occurrence	Description	Type details (Type of coding, elements)
@name	1	Provides a unique name.	
Part	0-N	A flexible mechanism for describing the logical abstract content of a message.	

List of nested elements (alphabetically ordered) of Port Type

Name (not XML tag)	Occurrence	Description	Type details (Type of coding, elements)
Operation	0-N	A transmission primitive that an endpoint can support	tOperation



<b>Operation @name</b>	<b>1</b>	<b>Name of the operation.</b>	
------------------------	----------	-------------------------------	--

List of nested elements (alphabetically ordered) of Binding

**Note:** Inside the Binding Element there are extensibility elements, used to specify some concrete information. In case of use of SOAP binding (that is the recommended choose, in this report) the extensibility element to use is **soap:binding**, where soap refers to the namespace: <http://schemas.xmlsoap.org/wsdl/soap/>

Name (not XML tag)	Occurrence	Description	Type details (Type of coding, elements)
Operation	0-N	Specifies binding information for the operation with the same name within the binding's Port Type	tBindingOperation
soap:binding	0-N	Signify that the binding is bound to the SOAP protocol format.	
soap:binding@style	0-1	The value of this attribute can be 'rpc' (for messages containing parameters and return values) or 'document' ((message containing documents). The recommended value in case of xml business documents is document.	
soap:binding@transport	1	Indicates which transport of SOAP this binding corresponds to. The URI value <a href="http://schemas.xmlsoap.org/soap/http">http://schemas.xmlsoap.org/soap/http</a> corresponds to the HTTP binding in the SOAP specification.	

List of nested elements (alphabetically ordered) of Operation (tBindingOperation Type)

**Note:** in case of use of SOAP binding (that is the recommended choose, in this report) the extensibility element to use is **soap:operation**.

Name (not XML tag)	Occurrence	Description	Type details (Type of coding, elements)
fault	0-1	Specifies, in details, the structure of the fault message.	
input	0-1	Specifies, in details, the structure of the input message	
output	0-1	Specifies, in details, the structure of the output message.	
soap:operation	0-N	Provides information for the operation as a whole.	



soap:operation@style	0-1	Indicates whether the operation is RPC-oriented (messages containing parameters and return values) or document-oriented (message containing documents). The recommended value in case of xml business documents is document. If the style is the same specified in soap:binding@style, it can be omitted here.	
soap:operation@soapAction	0-1	Specifies the value of the SOAP Action header for this operation. For the HTTP protocol binding of SOAP, this is value required. For other SOAP protocol bindings, it MUST NOT be specified.	

List of nested elements (alphabetically ordered) of input / output

**Note:** in case of use of SOAP binding (that is the recommended choose, in this report) the extensibility elements to use are **soap:body** and **soap:header**.

Name (not XML tag)	Occurrence	Description	Type details (Type of coding, elements)
soap:body	0-N	Specifies how the message parts appear inside the SOAP Body element.	
soap:body@use	1	Indicates whether the message parts are encoded using some encoding rules ('encoded'), or whether the parts define the concrete schema of the message ('literal'). The recommended value in case of xml business documents is literal.	
soap:body@encodingStyle	0-1	Is a list of URIs, each separated by a single space. The URI's represent encodings used within the message, in order from most restrictive to least restrictive	
soap:header	0-N	Allows header to be defined that are transmitted inside the Header element of the SOAP Envelope.	

## References on the WEB

WSDL	WSDL Version 1.1 Specifications: <a href="http://www.w3.org/TR/wsd/">http://www.w3.org/TR/wsd/</a>
	WSDL Version 1.1 Schema: <a href="http://schemas.xmlsoap.org/wsd/">http://schemas.xmlsoap.org/wsd/</a>



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## **APPENDIX H**

# **Reference Architecture 2.0 for eBusiness harmonisation in Textile/Clothing and Footwear sectors**





## APPENDIX H: Data Models for Messaging Middleware Layer

### Source

ebMS v3.0, SOAP v. 1.1 and 1.2

### Scope

The scope is to describe the content of the message envelope as used in eBIZ implementations, which follow either the ebXML-based approach or the SMTP/POP-based approach<sup>1</sup>. This data model is not a reference data model, but is presented as a “best practice”. The aim of its presentation is to provide for means for comparison and subsequent harmonisation between the structure and the data contents of SOAP envelopes used in the three different middle-ware approaches adopted by pilot projects.

### Context

The SOAP-envelope used in the eBIZ implementations is to be adopted in the following communication context:

- Each SOAP message carries at most one Business Document.
- Direct Peer-to-Peer communication, without intermediate routing (also within the Peers). That is, the originator and the recipient of a SOAP-message are the originator and the recipient of the business document carried with the SOAP-message.

### Data model details

List of top-level elements:

Name (not XML tag)	Occurrence	Description	Names used in the SMTP/POP-based approach
SOAP Header	1-1	The SOAP Header contains meta-information related to the message. In ebMS the SOAP Header allows to specify information about the current business collaboration. Document-level security characteristics (e.g., digital signature) are defined in the header as well.	Interchange element
SOAP Body	1-1	The SOAP Body contains the business document.	-

List of nested elements (alphabetically ordered) of Soap Header<sup>2</sup>

<sup>1</sup> The SMTP/POP-based approach will be adapted and will include SOAP message envelope.

<sup>2</sup> The optional security-related elements are omitted.



Name (not XML tag)	Occurrence	Description	Type details (Type of coding, elements)	Names used in the SMTP/POP-based approach
Sender ID	1-1	The ID of the originator of the business document	See best practices	SenderGLN (Interchange element)
Receiver ID	1-1	The ID of the recipient of the business document	See best practices	RecipientGLN (Interchange element)
Message ID	1-1	An unique identifier of the single message	See best practices	InterchangeID (Interchange element)
Message Time Stamp	1-1	Date and time, when the message is generated	ISO 8601	Interchange Time Stamp (Interchange element)
Conversation ID	0-1	A conversation is a sequence of exchanged messages between two partners on a single communication channel.	See best practices	---
Document Type	1-1	The type of the business document exchanged with the SOAP message.	See best practices	Document Type (Interchange element)

## References on the WEB

**SOAP** <http://www.w3.org/2003/05/soap-envelope>

**ebMS** <http://docs.oasis-open.org/ebxml-msg/ebms/v3.0/ns/core/200704/>

## Best Practices

Conventions and local agreements used in eBIZ implementations within the ebXML-based approach.



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Name	Description
<b>Party ID</b>	<p>ebMS standard defines the <i>PartyId</i> fields to identify the two parties, sender and receiver, involved in the messages exchange.</p> <p><i>PartyId</i> is defined as an element with a <i>type</i> attribute. This attribute is important to understand which convention we have to adopt to recognize and to interpret the <i>PartyId</i> in a correct manner.</p> <p>The OASIS ebCORE TC proposed the following syntax to define the <i>PartyId</i> and its type:</p> <pre>&lt;PartyId type="urn:oasis:names:tc:ebcore:partyid-type:iso6523:[ICD number]"&gt;   [Organisation Code] &lt;/PartyId&gt;</pre> <p>Where:</p> <ul style="list-style-type: none"> <li>- ISO 6523 defines a "Structure for the Identification of Organisations (SIO)". This is a syntax for uniquely identifying organizations in computer data interchange;</li> <li>- [ICD number] (International Code Designator) 4 digit value, which uniquely identifies the authority which issued the code to the organisation;</li> <li>- [Organisation Code] VAT number, GS1 GLN or an official code to identify the enterprise.</li> </ul> <p>Examples</p> <ul style="list-style-type: none"> <li>- Italian enterprise with "VAT NUMBER": 12345678909. The ISO 6523 ICD number is 0097 for the Italy.  <pre>&lt;PartyId type="urn:oasis:names:tc:ebcore:partyid-type:iso6523:0097"&gt;   12345678909 &lt;/PartyId&gt;</pre> </li> <li>- Enterprise with GS1 GLN code 9876543210123 GS1 GLN is 0088 in ISO 6523.  <pre>&lt;PartyId type="urn:oasis:names:tc:ebcore:partyid-type:iso6523:0088"&gt;   9876543210123 &lt;/PartyId&gt;</pre> </li> </ul>
<b>Type of Message ID</b>	<p>The Message ID is an identifier of the exchanged message. In ebMS, it has to be a valid RFC 2822 identifier.</p> <p>A suggested implementation is the following:  <pre>&lt;Prefix&gt;+&lt;Process State&gt;+&lt;Message Number&gt;+@"+&lt;Sender ID&gt;</pre>       where:</p> <p>The &lt;Prefix&gt; indicates the message handler type (eg. "MSH2", etc.).</p> <p>The &lt;Process State&gt; is a number indicating which step of a process is being implemented with this message exchange (this presupposes that the process is formalised in a certain way, even on paper). Need to agree on process steps regarding the processes of the Business Layers of the architecture.</p> <p>The &lt;Message Number&gt; – locally generated serial number by the sender. The "@" sign is used to respect the RFC 2822 specification.</p> <p>The &lt;Sender ID&gt; is the identifier of the party which is sending the message (see best practice "Type of Party ID").</p>
<b>Type of Conversation ID</b>	<p>User-defined string</p>
<b>Document Type</b>	<p>The name of the root element of the business document that is being carried with the SOAP message (e.g., ml:TexOrder).</p>



## Limitations and harmonisation issues

This use of SOAP applies only within the context described above (ebXML on SMTP, AS4 Web service on HTTP).

When messages are forwarded across intermediaries (four corner exchanges) there are four entities: immediate sender/recipient and ultimate sender/recipient. In this case it is suggested to refer to the outcomes of OASIS BDXR TC which is profiling ebMS 3.0 for four-corner exchanges.

In the EU e-CODEX [H1] project (input to BDX's activities), where ebMS *From* and *To* identifiers are the inner corners #2 and #3 (the immediate recipient and the ultimate sender), the true initial sender and true final recipient could be encoded using mechanisms such as the ones in section 2.3.2.1.2 of [H2].

The current approach allows for the transmission of a single business document within a SOAP-message. In order to overcome these limitations, the reference data model for this approach should include the following additional content and use different structure.

- (a) Routing between Connectivity Hubs or internal End-user routing: the IDs of the originator and recipients of the SOAP messages should be added as optional parameters in the message envelopes, and should be used when the corresponding parties are different from the originator and recipient of the business messages.
- (b) Sending of multiple business documents within the same SOAP-message. In this case, if only one document is sent, then it is in the SOAP BODY (as above), if more documents are sent, then they are sent as separate attachments in the SOAP payload. The following elements can be added to the SOAP BODY element.

Name (not XML tag)	Occurrence	Description	Type details (Type of coding, elements)
Number of Documents	0-1	Indicates the number of documents sent as attachment payloads. It is mandatory if the business documents are exchanged as attachments.	Number
Documents Types	0-1	The type of the business document exchanged with the SOAP message.	Aggregated type, having as many elements as the number of attached documents. The sub-elements are the types of the attached documents.

## Examples

**ebMS envelope** A sample of SOAP envelope used for MSH2:

Template: [http://www.moda-ml.net/moda-ml/repository/soap/msh-soap/ebMS\\_UserMessage.xml](http://www.moda-ml.net/moda-ml/repository/soap/msh-soap/ebMS_UserMessage.xml)

Example, soap envelope with an empty order document and two



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different PartyId: [http://www.moda-ml.net/moda-ml/repository/soap/msh-soap/EBMS\\_IT-98765432101\\_2.xml](http://www.moda-ml.net/moda-ml/repository/soap/msh-soap/EBMS_IT-98765432101_2.xml)

## References

[H1] <http://www.e-codex.eu/>

[H2] [http://www.e-codex.eu/news-and-media/media/deliverables.html?eID=dam\\_frontend\\_push&docID=125](http://www.e-codex.eu/news-and-media/media/deliverables.html?eID=dam_frontend_push&docID=125)



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## **APPENDIX I**

# **Reference Architecture 2.0 for eBusiness harmonisation in Textile/Clothing and Footwear sectors**

## APPENDIX I: Methodology for RA documentation

### 1.1 Organisation of the specifications

The goal of the activities related to the methodology has been to establish a coherent and homogeneous framework for representation and documentation of existing specifications.

The starting point for the architecture is the **business layer** of the architecture that consists in a harmonised documentation for all the standards/specifications selected by the project, i.e. MODA-ML, TexWeave, Shoenet, EFNET, GS1, UBL, etc.

With the aim to facilitate the adoption of ebXML tools for business process description, such documentation has been organised on the following basic assumptions:

- 1) For each area of the supply chain a specification has been identified as a reference for a **set of business processes**.
- 2) Each business process consists of a **set of activities** that identify a group of transactions that are necessary to achieve a firm point in the collaborative process.
- 3) Each activity is a sequence of one or more **simple document-exchange transactions**, between two or more actors (each transaction is considered as a '*request*'; only transactions that exist, and must exist, only after a specific request are considered as '*responses*'). The transaction describes the use of a specific document in a specific business context.
- 4) Each simple document-exchange transaction is an ordered triple, consisting of an **actor in the role of sender**, a **business document** and an **actor in the role of receiver**.
- 5) Each business document is represented by a **data model** (structured **content** and the corresponding **data types**); it can be implemented with XML syntax or other syntax (like EANCOM for EDI).

The documentation of each specification is organised following the nesting of scenarios on different abstraction levels according to the following schema:

1. Supply chain description (set of processes)
  - 1.1. Process X (set of activities)
    - 1.1.1. Activity X.Y (sequence of simple document-exchange transactions)
      - 1.1.1.1. Transactions X.Y.1
2. Document models necessary for all the processes
3. Lacking elements

### 1.2 Resources and documentation

In order to maintain at a reasonable amount of pages this report and in order to avoid IPR conflicts, the syntactic specifications will be referenced through the on-line documentations provided by their developers (that will continue to maintain them with continuous version improvements) with a clear overview through the three appendixes (A, B, C):

- the data models of the TC and FW **upstream** areas are supported through WEB references to the online documentation (XML Schemas, User guides)

published and maintained by the owners of the related IPRs (Shoenet and Moda-ML web sites);

- the data models of the **downstream** area, due to the lack of an established sectorial specification, are described with a detailed syntax independent description of the data models (an abstract data model), a reference to online technical guides for syntaxes based on XML and EDI (respectively OASIS UBL 2.0 and WWS Profil specifications) and a Use Profile to specify how to use UBL (that is a generic XML based eBusiness language) in the context of TCF industry that have been developed on purpose in order to offer a core of inter-sectorial specifications.

It is to note that the structure of the downstream documentation is due to the fact that UBL is a non sector specific language; in order to reduce the ambiguity arising from different uses and interpretations of the data dictionary to fit the TCF domain, it is necessary to suggest a common way to use it; this is represented by the Use Profiles of UBL for the TCF industry that propose a restriction of the specifications of generic UBL documents for the needs of the TCF domain. It is important to understand that the UBL Use Profile for eBIZ is the real technical content of the specifications, it constitute the only specification that can assure interoperability between systems.

It is to note that a corresponding online documentation is available.

A machine-treatable model of the processes is available on-line based on ebBP documents and documented with UML diagrams, they allow automatic processing of the reference scenarios.

As a result of this approach, the users have the following sources for the architecture:

- report “Architecture Report for eBusiness harmonisation in Textile/Clothing and Footwear sectors” (this document, released by the eBIZ-TCF project has been updated in CEN WS eBIZ) and its online synthetic representation on the eBIZ web site
- on-line documentation of the Moda-ML [9], ShoeNet [7][14] [15] and UBL [11] specifications for document models and related implementations (XML Schema, User guides, XSL stylesheets, XML sample, etc); managed by their owners
- on-line user guides for the UBL Use profile for Textile Clothing Footwear sector, with a samples file, developed by the eBIZ
- on-line business process models represented through ebBP documents [12] developed by the eBIZ.

### 1.3 General criteria about versioning

The eBIZ architecture has been released with successive versions along the project activities.

Each successive version is released through a corresponding version of the architecture report (this document); the on-line sources are updated when necessary at the same Internet references.

This final version is finalised and ‘frozen’, no more change are available after its publication.

After the conclusion of the initial eBIZ-TCF project any further improvement produces a new version with different resources (XML Schema for example) to be used to check for consistency; in this way who knows to be fully aligned with the final eBIZ version can be sure to maintain his status; on the contrary, improvements will be

identified by different version identifiers and different URLs to identify the related resources (like XML Schemas).

eBIZ maintains a complete back-compatibility between successive versions, especially regarding the XML Schema and Data Models.

## 1.4 The life cycle of the specifications

The specifications reported in the architecture, as all the others, have a **life cycle** and are subject to changes and to an evolutive process that, in the field of eBusiness, ends only when they are abandoned and lose any type of interest for the market.

So far it is important to understand some key points:

- the documental specifications (data models) reported and referenced in the architecture are referred as they are in the actual versions;
- their evolution and maintenance is a job of the communities that are technically managing them;
- different versions of a specification are usual, in many cases the back-compatibility is assured but it is a good practice to have a clear identification of the version we are dealing with.

As a principle, the view proposed in this architecture reasonably will be still valid when new future developments of the mentioned specifications will be in place, but this cannot be assured.

The **eBIZ Interest Group**, managed by the industry associations and comprising other stakeholders including representation from initiatives such as SHOENET and Moda-ML and standards bodies such as CEN/ISSS and GS1, will maintain the overall Reference Architecture.

This group will continually improve the specifications supporting the European TC/F industry by responding to requests for updates, new scenarios and other improvements that are submitted to it. New versions will be released periodically, clearly identifying the changes which will always be implemented in a way that makes them compatible with previous versions.