

ShoeCom/Shoenet messages used in the ShoeBiz system

Title: ShoeCom/Shoenet messages used in the
ShoeBiz system

Project: eBIZ-TCF

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1. Introduction

This document specifies the messages in the ShoeCom/Shoenet data model currently in use by the ShoeBiz system. Any external system aiming to interoperate with the ShoeBiz ICT platform should use this document as a reference.

Additionally, the basic transactions supported by the ShoeBiz system in the business-to-business interaction between two companies are also identified, thus allowing an external system to have a precise specification of the business processes supported.

2. ShoeCom data model

The ShoeCom data model constitutes the last version of the Shoenet data model, initially defined in the Shoenet Project (IST-2001-35393) by the Institute INESCOP (<http://www.inescop.es/>). It was part of the European Project Cec-madeshoe (<http://www.cec-made-shoe.com/>), which validated its suitability to the footwear sector. This data model, specified in XML and XSD, was licensed under the name ShoeCom being available in the internet at <http://www.shoenet.info/datamodel/shoecom.xsd>.

The ShoeCom data model is, at the time, the only data model specifically developed for the Footwear Industry, defining a significant set of electronic documents which satisfy the electronic integration needs in the sector. In fact, the following specific aspects of the Footwear sector (among others) were taken into consideration in the data model:

- Differentiation between models and components, allowing the specific description of shoe models and components necessary to the manufacturing of a shoe model;
- Identification of the way packaging of models is made;
- Identification of the different sizes of one model, as well as the respective quantities that are available or to be ordered;
- Description of the actual stage of manufacturing of one model or component.

Beyond that, it was successfully tested by Shoenet and Cec-made-shoe pilot projects, being the data model supported by CEC, the European Confederation of the Footwear Industry.

The data model defines a total of 17 documents:

1. Order
2. Delivery Note
3. Order Change Request
4. Order Response
5. Order Status Request
6. Order Status Report
7. Claim
8. Dispatch Advice
9. Receiving Advice
10. Request for Quotation
11. Quotation
12. Receiving Confirmation
13. Invoice
14. Credit Note
15. Preformed Invoice
16. Line Proposal
17. Technical Specification Report

This section of the document is organised in the following way:

1. Identification of the global structure of a ShoeCom document.
2. Identification of common elements in different ShoeCom documents.
3. Identification of each ShoeCom documents (except the Claim, Invoice, Credit Note, Preformed Invoice, Line Proposal documents).

The identification of these data elements is visually made because this is the best way to present them. Note also that, according to the corresponding XSD schema, some of the items in the data structure are of optional use (represented by dotted rectangles) and others are mandatory (represented by rectangles with a usual contour). However, all the elements represented in the following diagrams are those used by the ShoeBiz platform (except those with a red line).

2.1. Global Structure

A Shoecom document is a XML document which contains in its interior an instance of one of the document types defined (see next Figure). The attributes should be used as follows:

- Version – “1.0”
- messageId – identifies the message containing the document.
- responseTo – identifies the message that is the predecessor of the current message.
- documentIdentifier – identifies the kind of document, valid values are: “ShoeBizPT.Order”, “ShoeBizPT.OrderResponse”, etc.

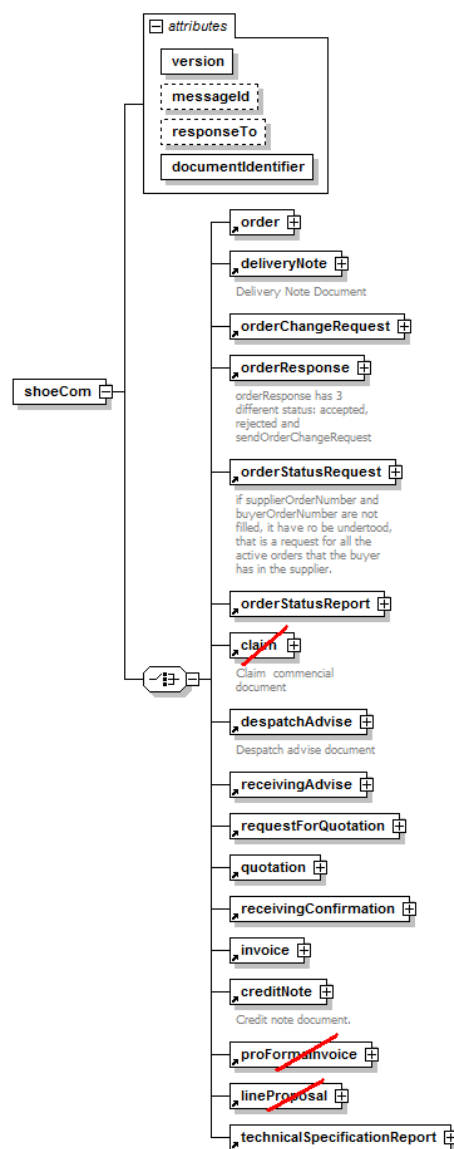


Figure 1 - Global Structure of a ShoeCom document.

2.2. Common Elements

The common elements are those data elements that frequently appear in the ShoeCom documents. The next table identifies these elements. Following figures present visually these elements.

Name	Description
<i>BuyerInfo</i>	Characterization of the organization that plays the buyer role. All the documents use this element.
<i>SupplierInfo</i>	Characterization of the organization that plays the supplier role. All the documents use this element.
<i>DeliverToInfo</i>	Characterization of the organization to whom things will be delivered.
<i>PaymentInformation</i>	Payment Information.
<i>Size</i>	Description of the size of a certain model.
<i>Model</i>	Global characterization of a shoe model.
<i>Component</i>	Global characterization of a component used in a shoe model.
<i>PersonInfo</i>	Characterization of a person. Usually appears as the contact person of an organization (Buyer, Supplier).
<i>AddressDetails</i>	Characterization of an address. The address appears as one of the description elements of an organization or person.
<i>BankingInfo</i>	Information on the bank accounts of an organization.
<i>ProductRecord</i>	Characterization of an order line (identifies the product that is requested in an order, as well as dates, quantities, ...)

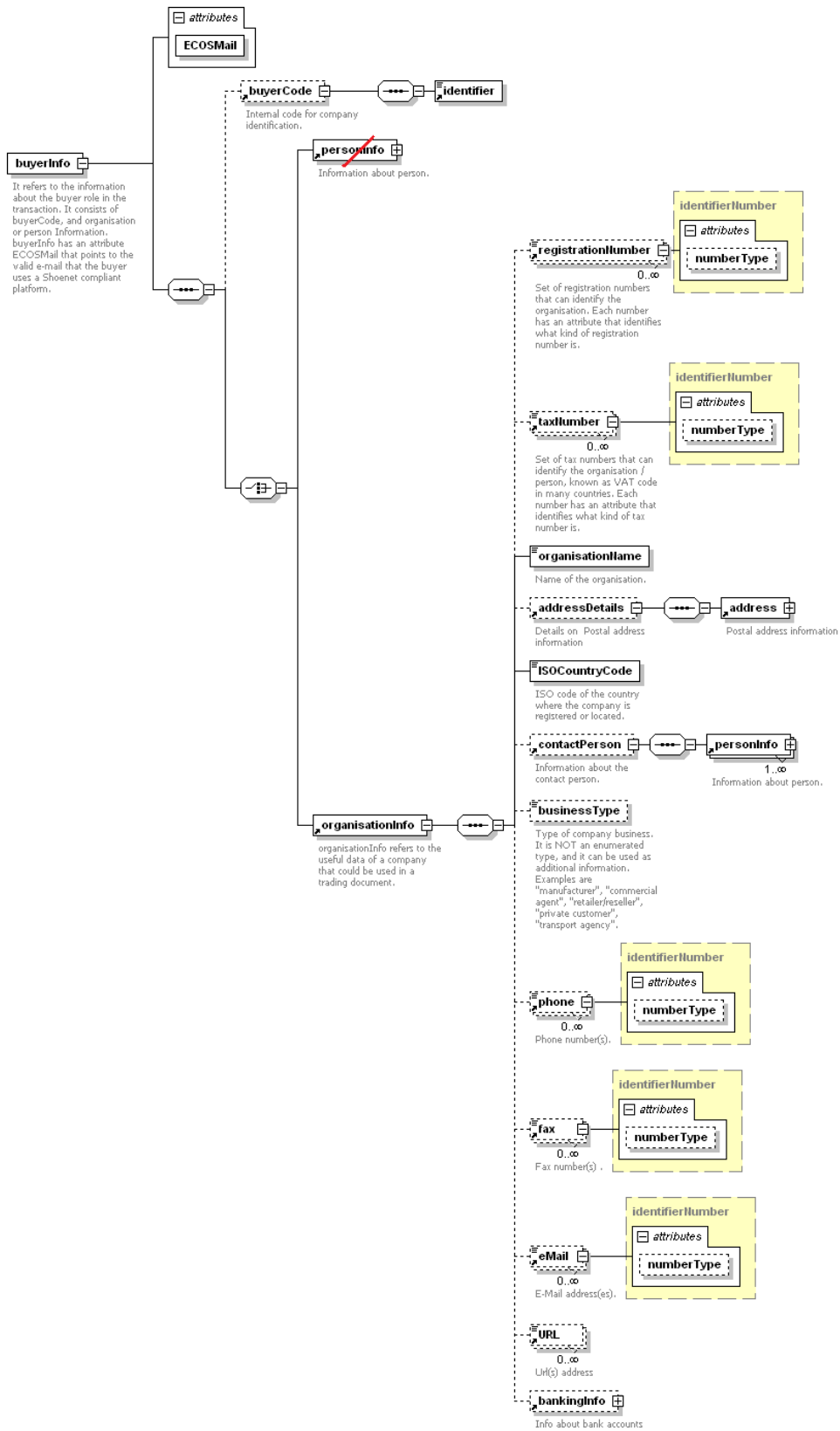


Figure 2 - BuyerInfo element.

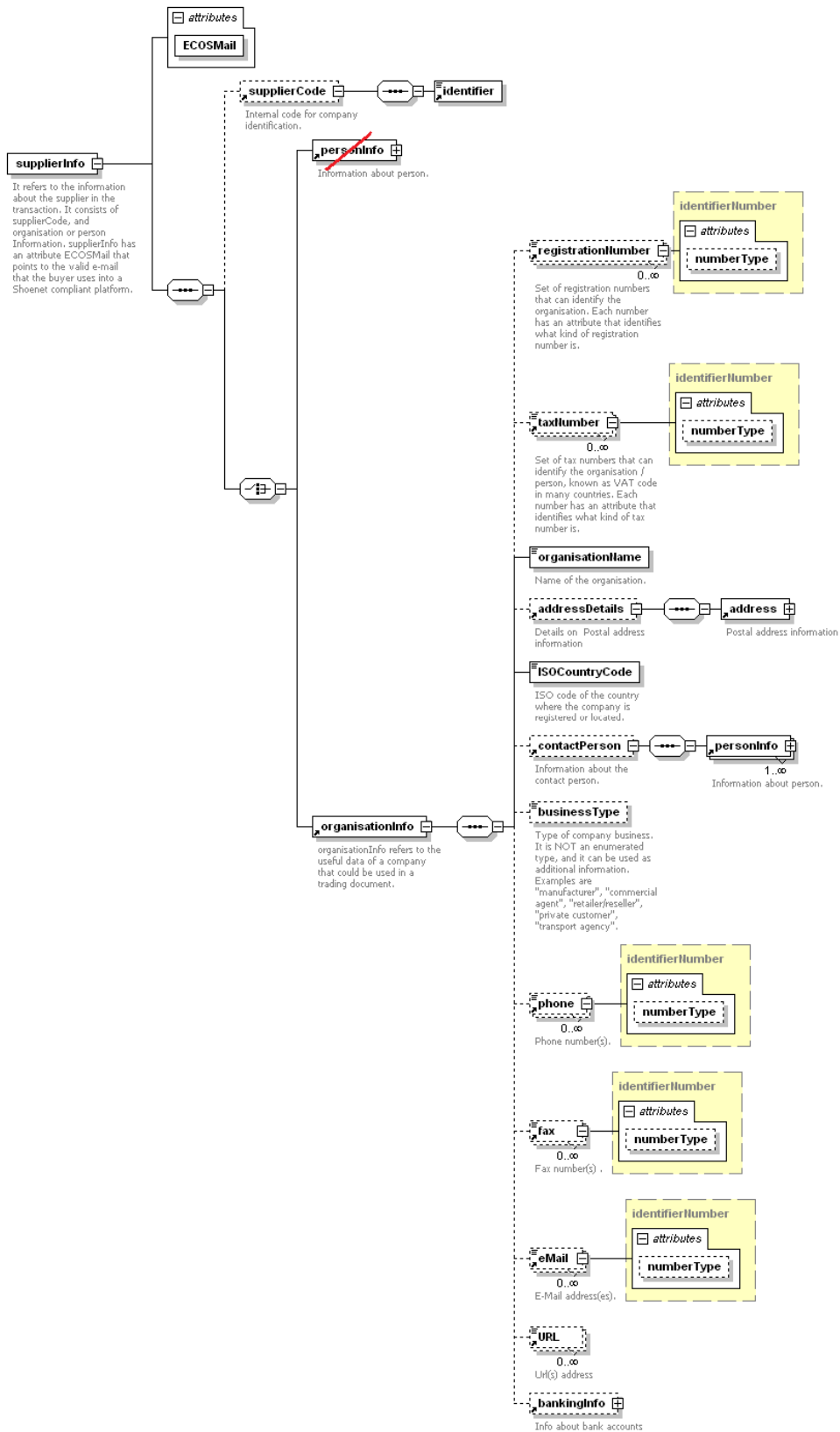


Figure 3 - SupplierInfo element.

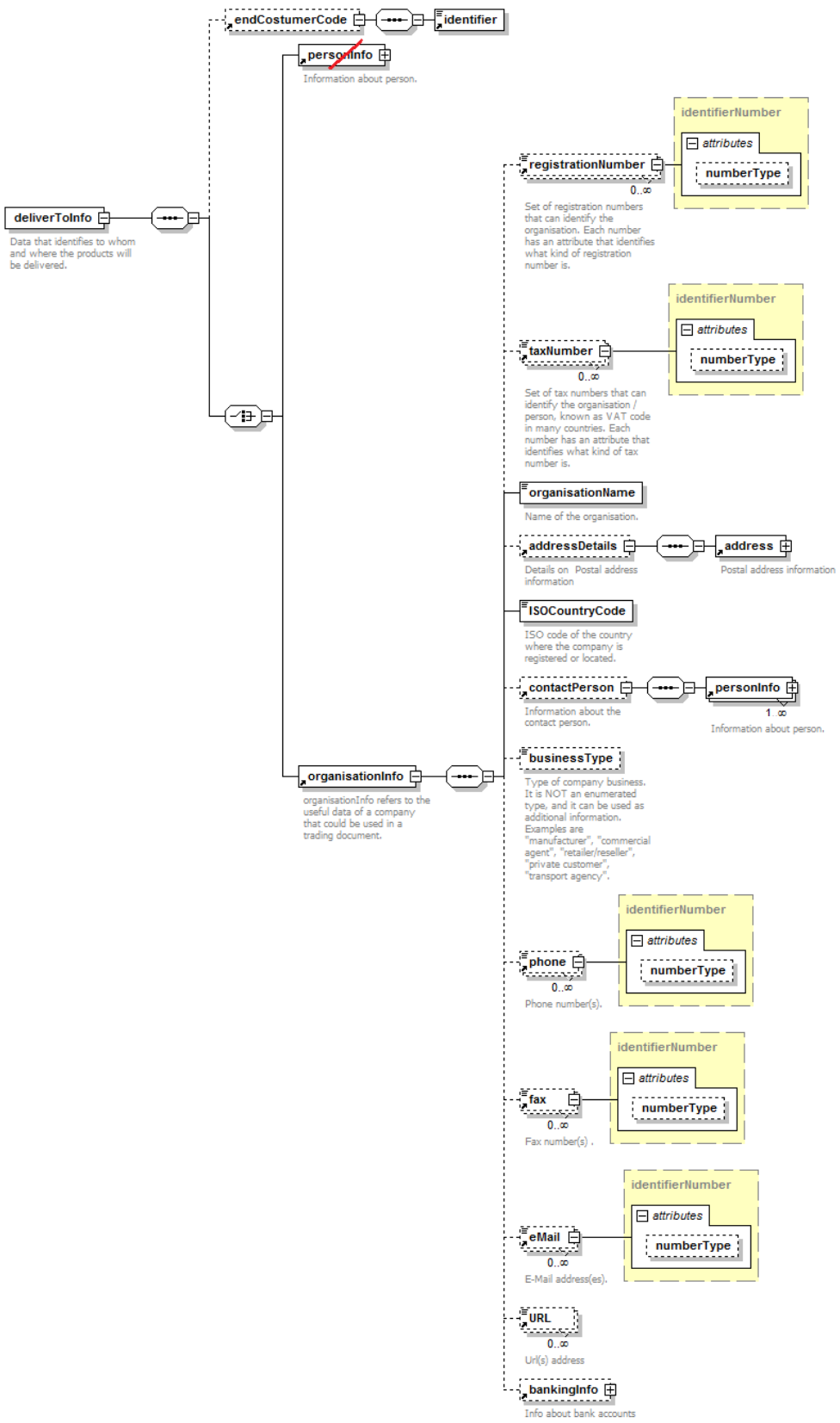


Figure 4 - DeliverToInfo element.

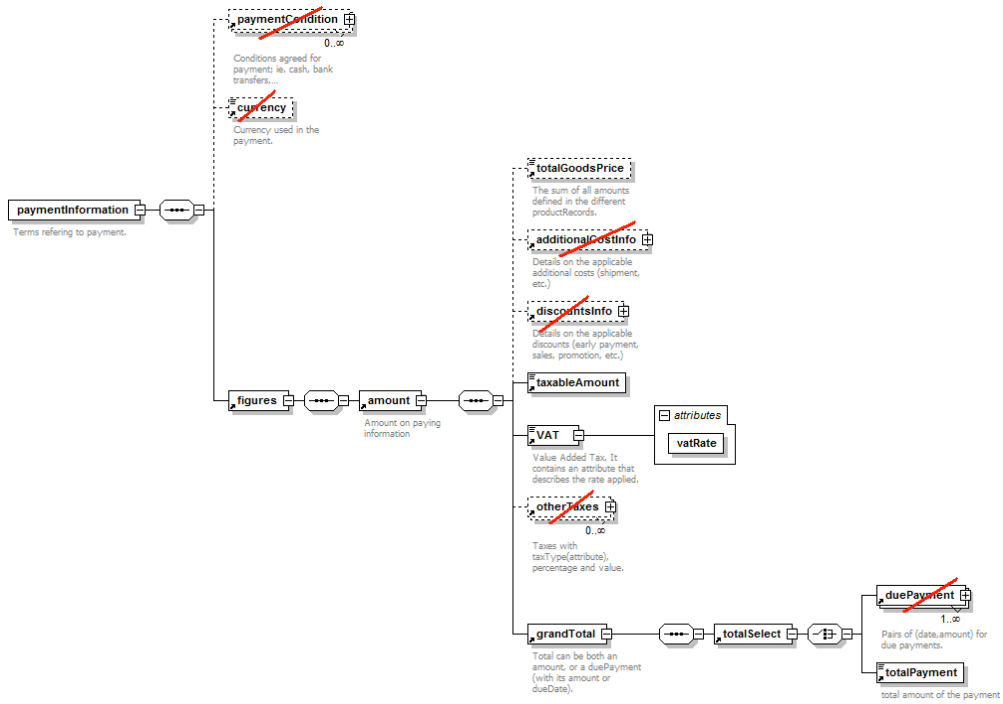


Figure 5 - PaymentInformation element.

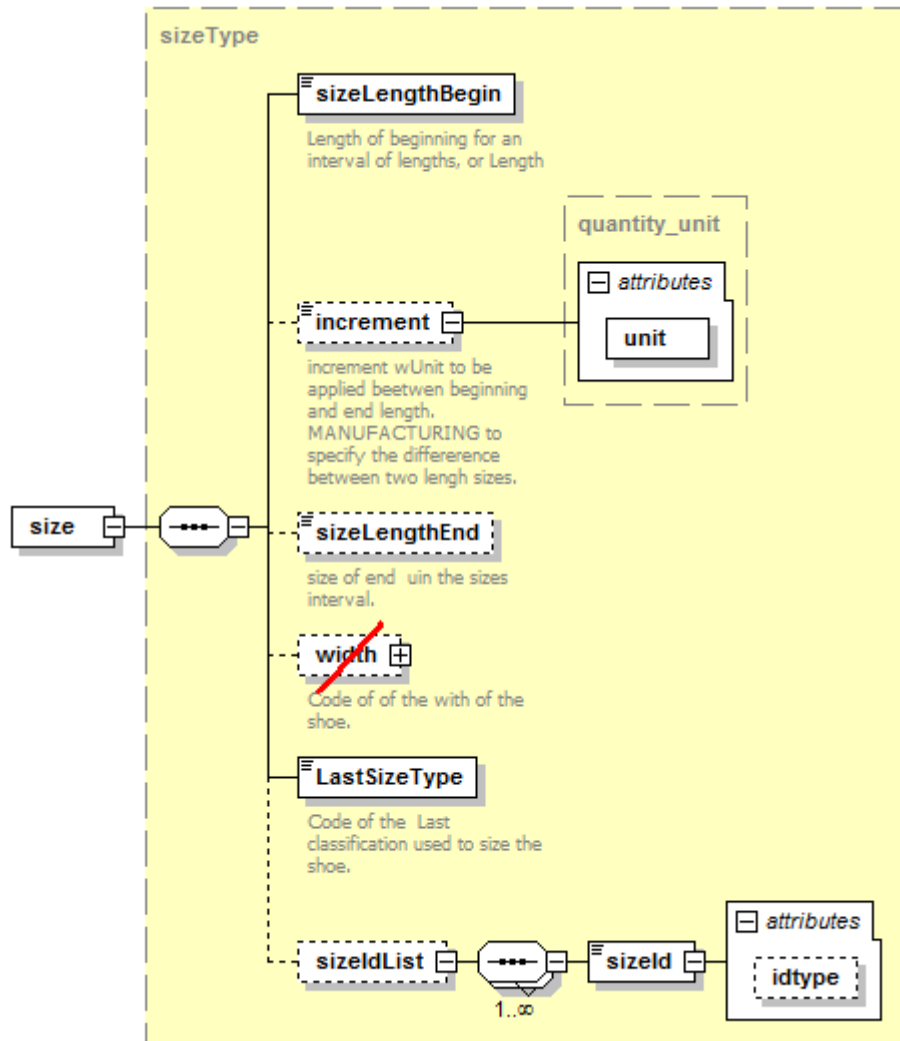


Figure 6 - Size element.

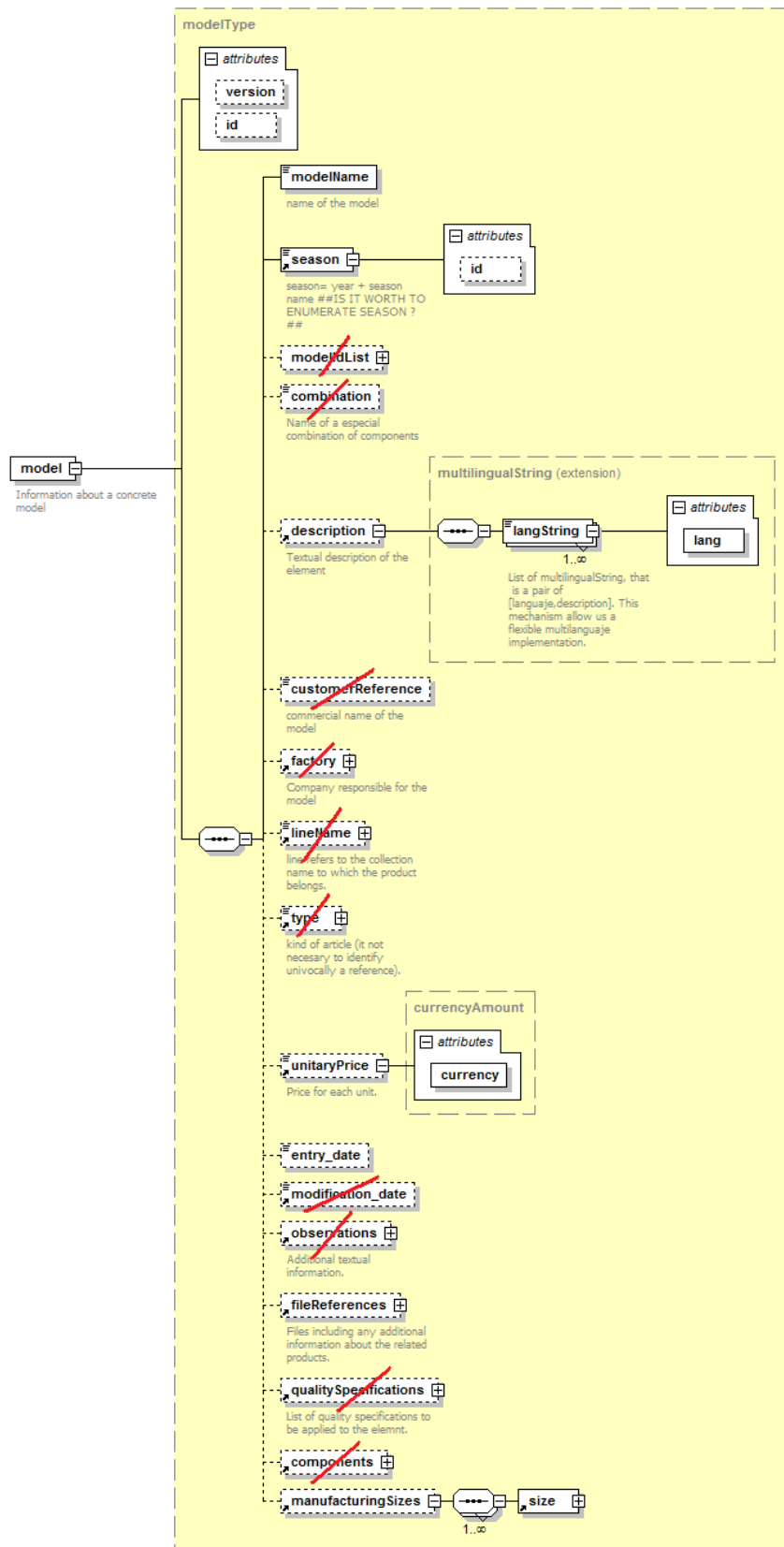


Figure 7 - Model element.

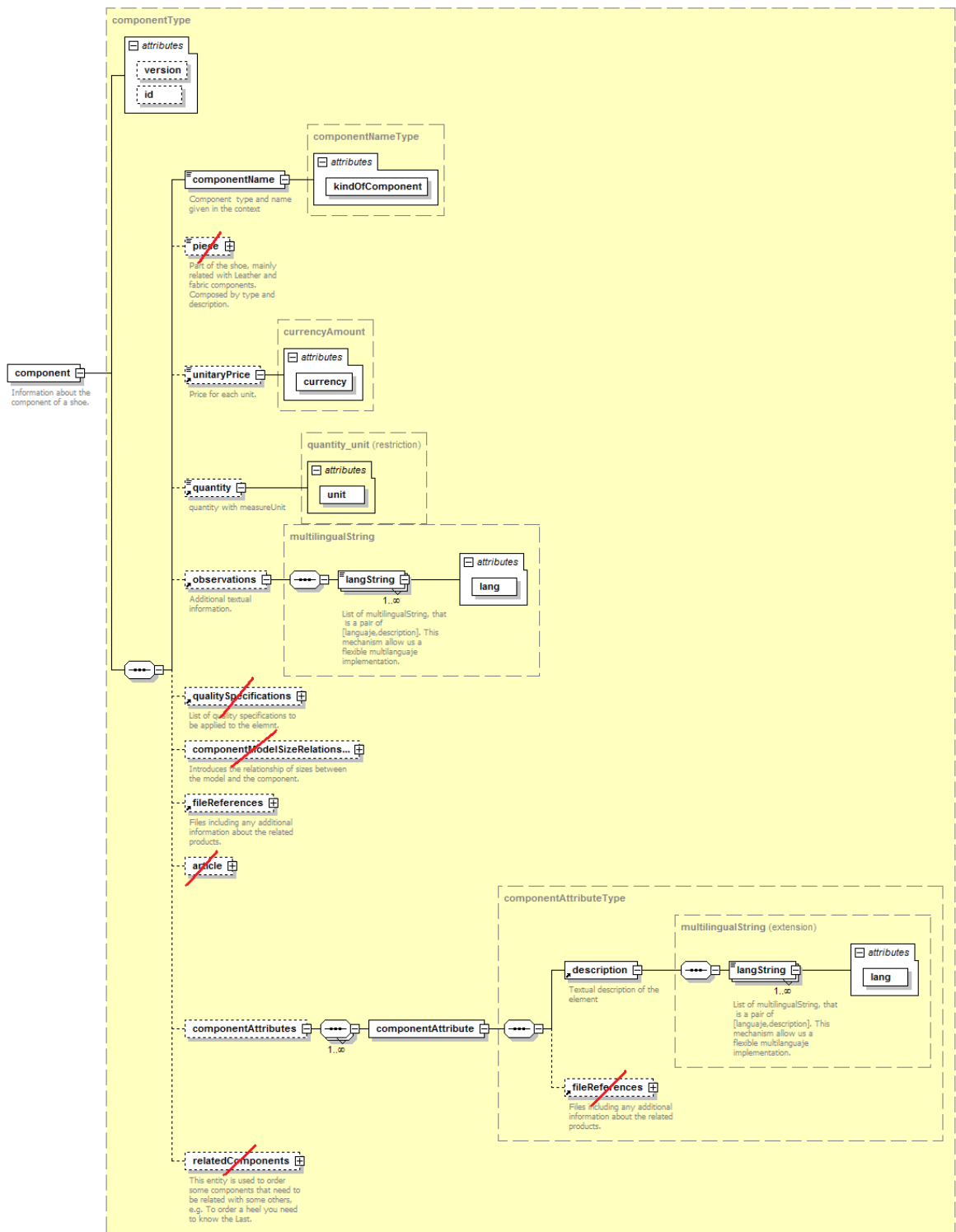


Figure 8 - Component element.

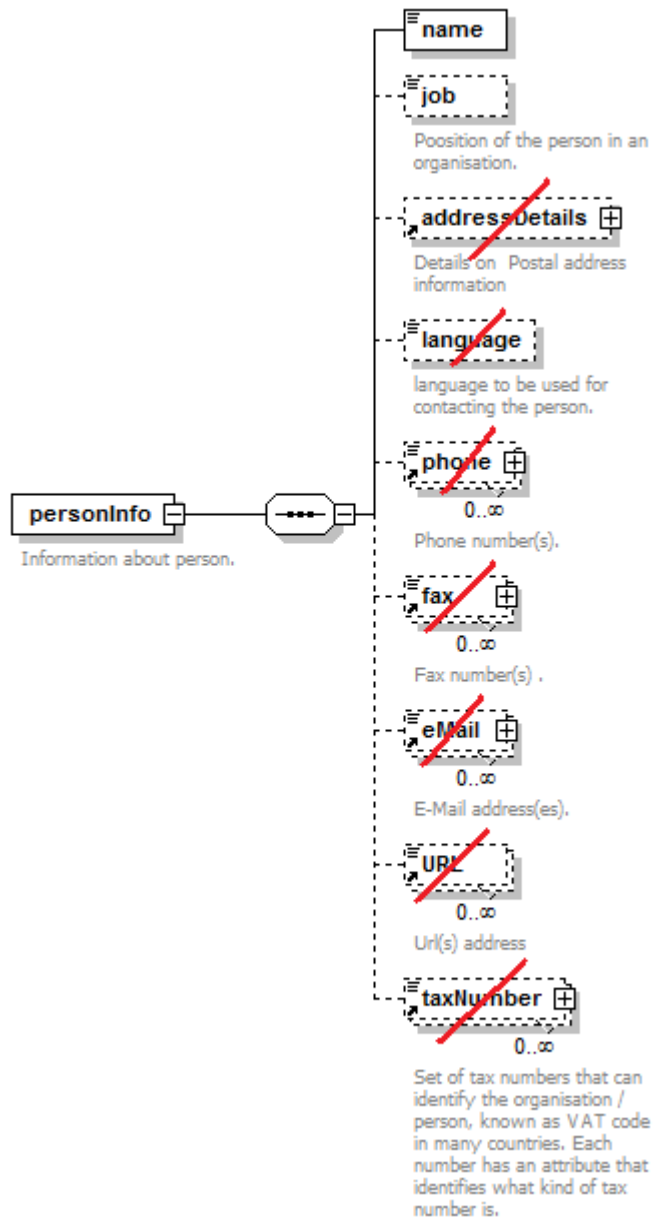


Figure 9 - PersonInfo element.

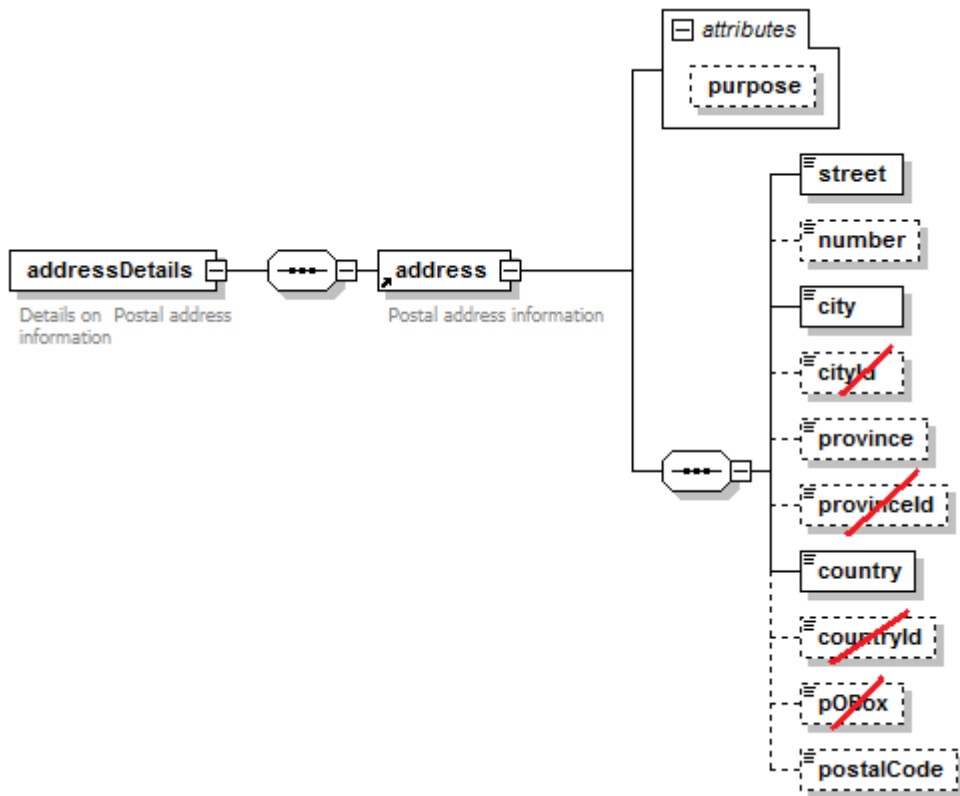


Figure 10 - AddressDetails element.

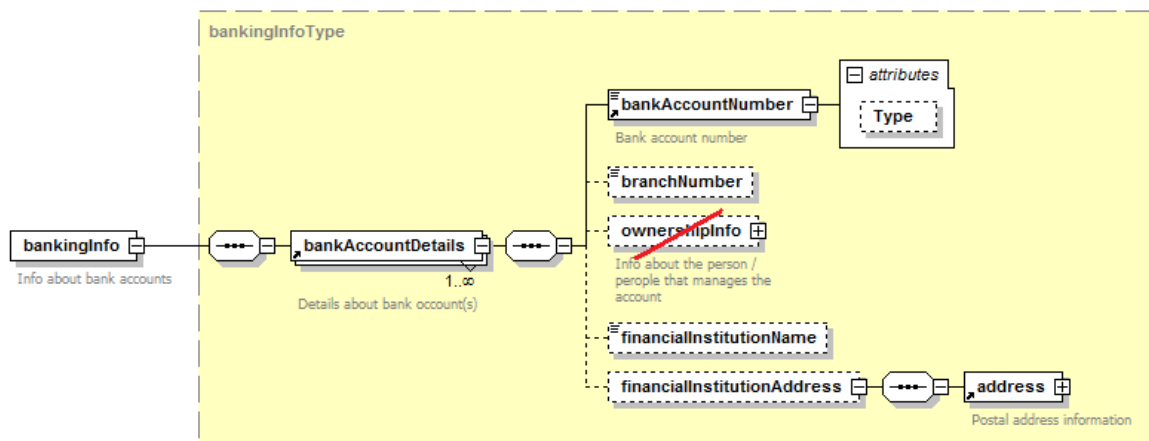


Figure 11 - BankingInfo element.

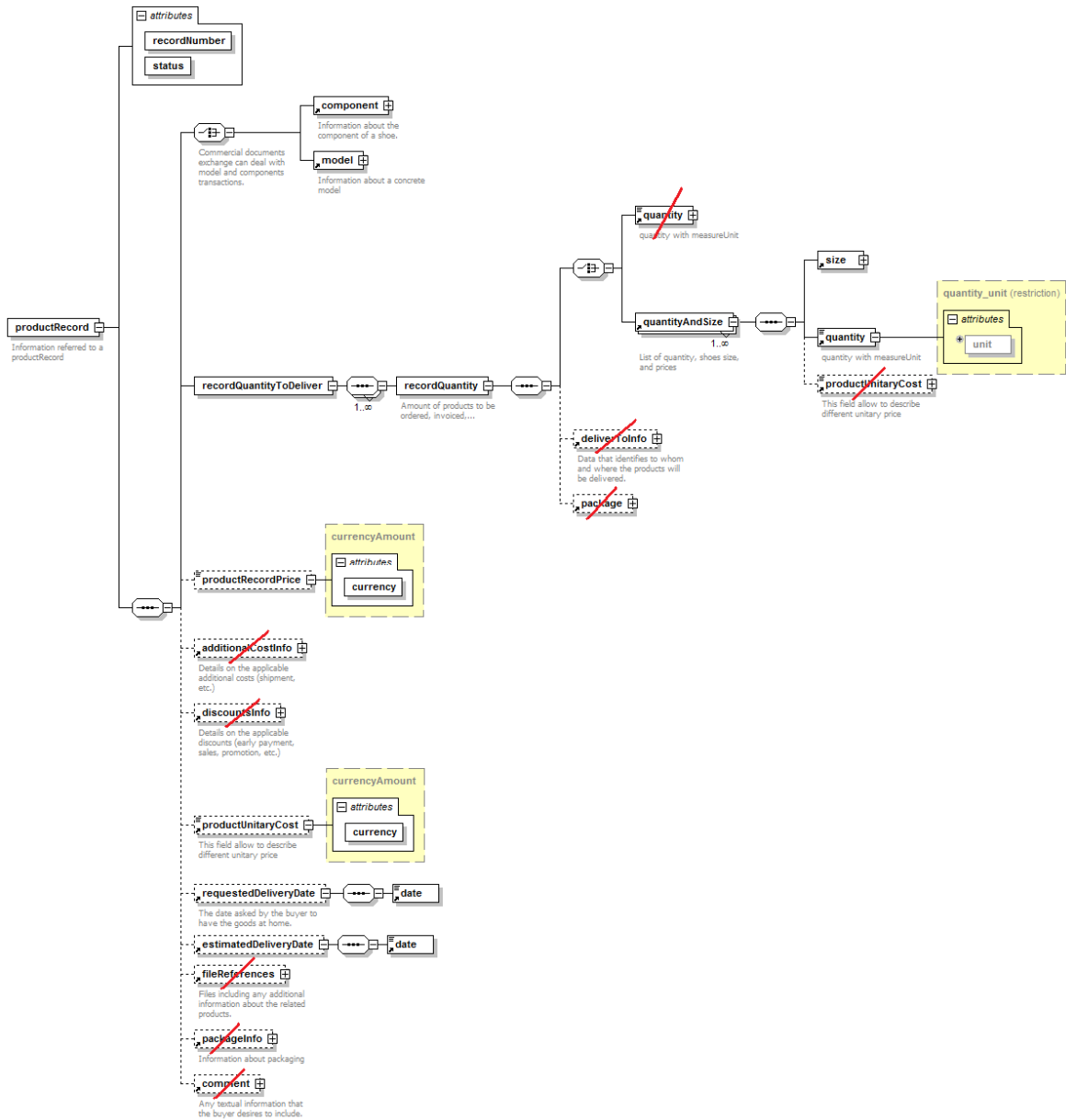


Figure 12 - ProductRecord element.

2.3. Business Documents

Name
<i>RequestForQuotation</i>
<i>Quotation</i>
<i>Order</i>
<i>OrderResponse</i>
<i>OrderChangeRequest</i>
<i>OrderStatusRequest</i>
<i>OrderStatusReport</i>
<i>DeliveryNote</i>
<i>ReceivingAdvise</i>
<i>DespatchAdvise</i>
<i>ReceivingConfirmation</i>
<i>Invoice</i>
<i>CreditNote</i>
<i>TechnicalSpecificationReport</i>

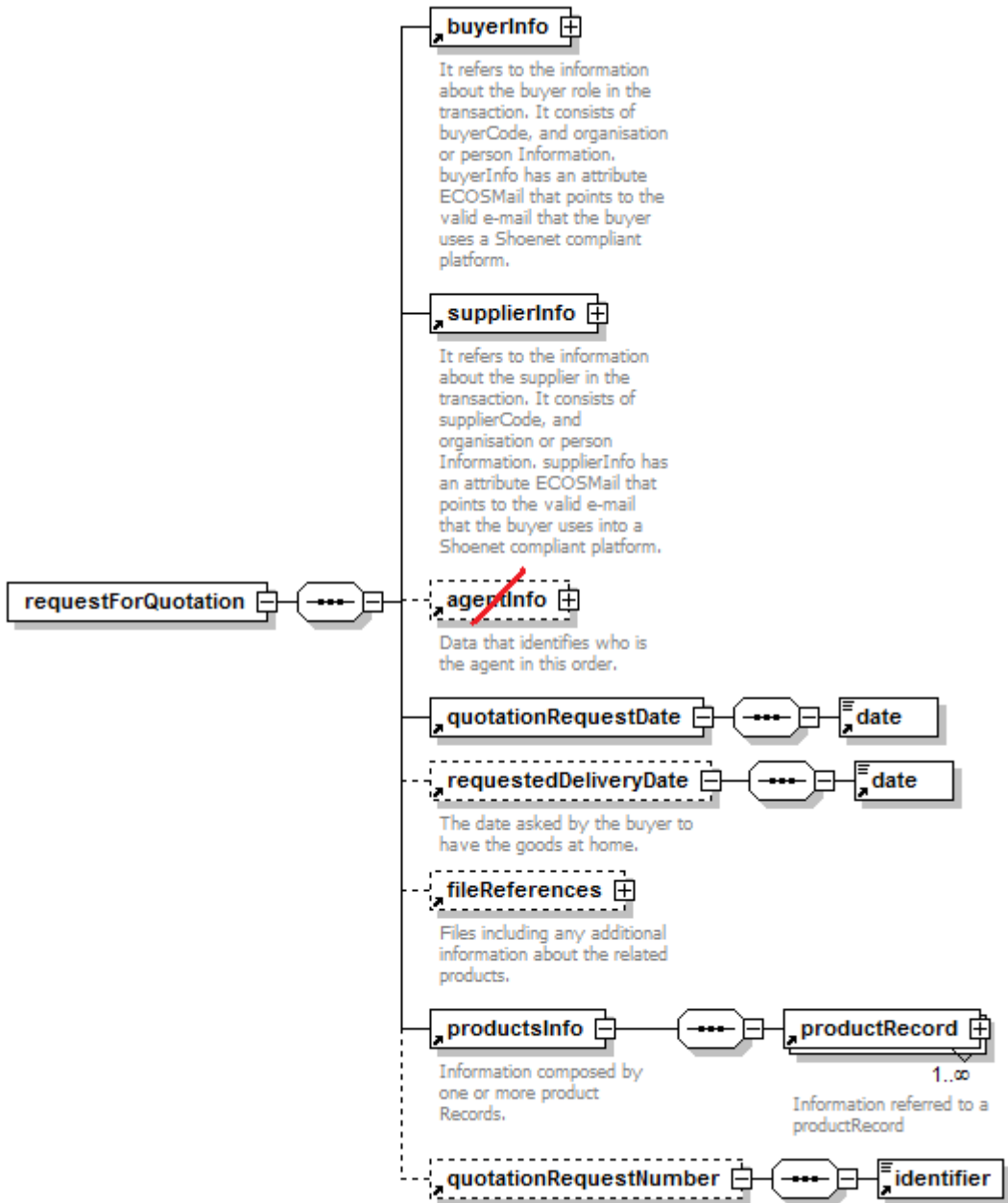


Figure 13 - RequestForQuotation element.

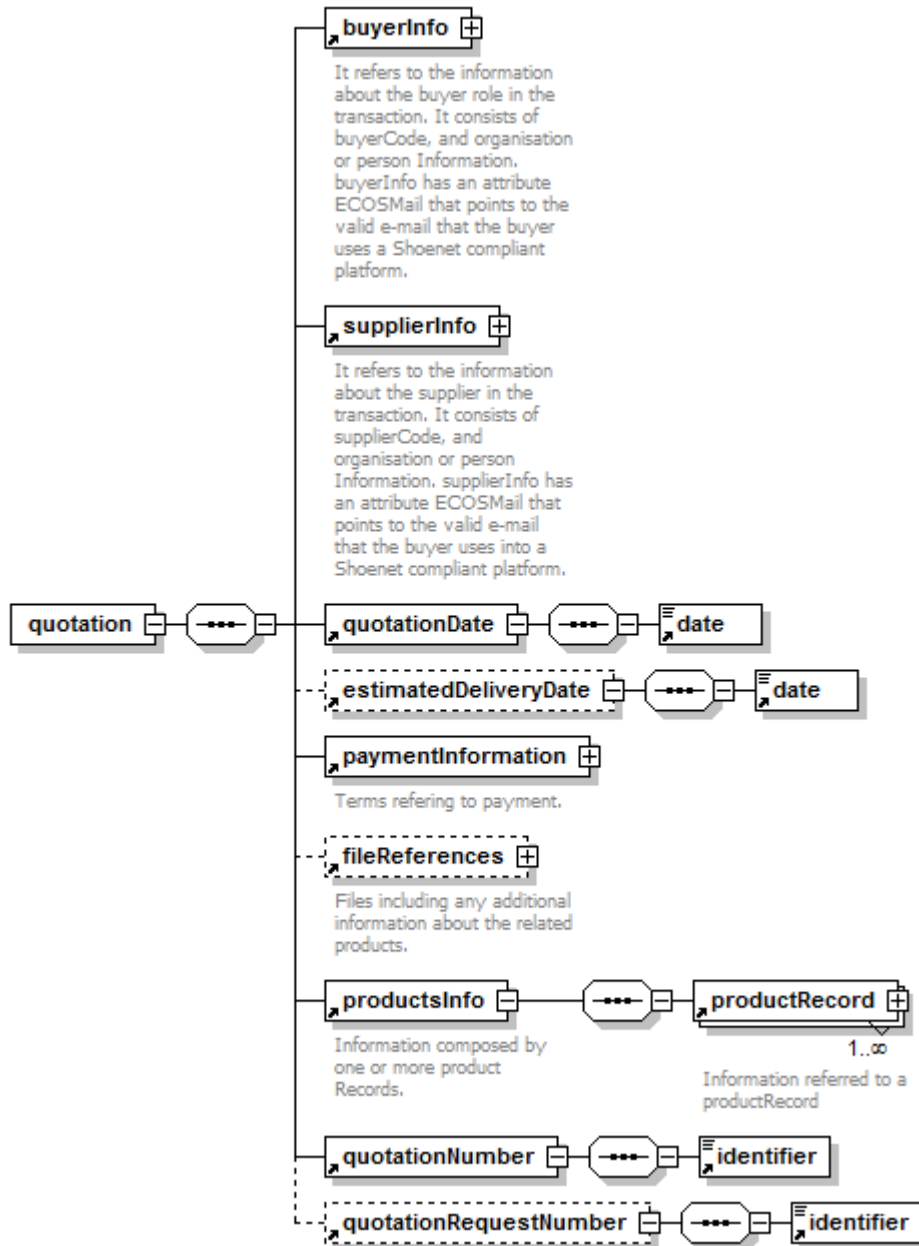


Figure 14 - Quotation element.

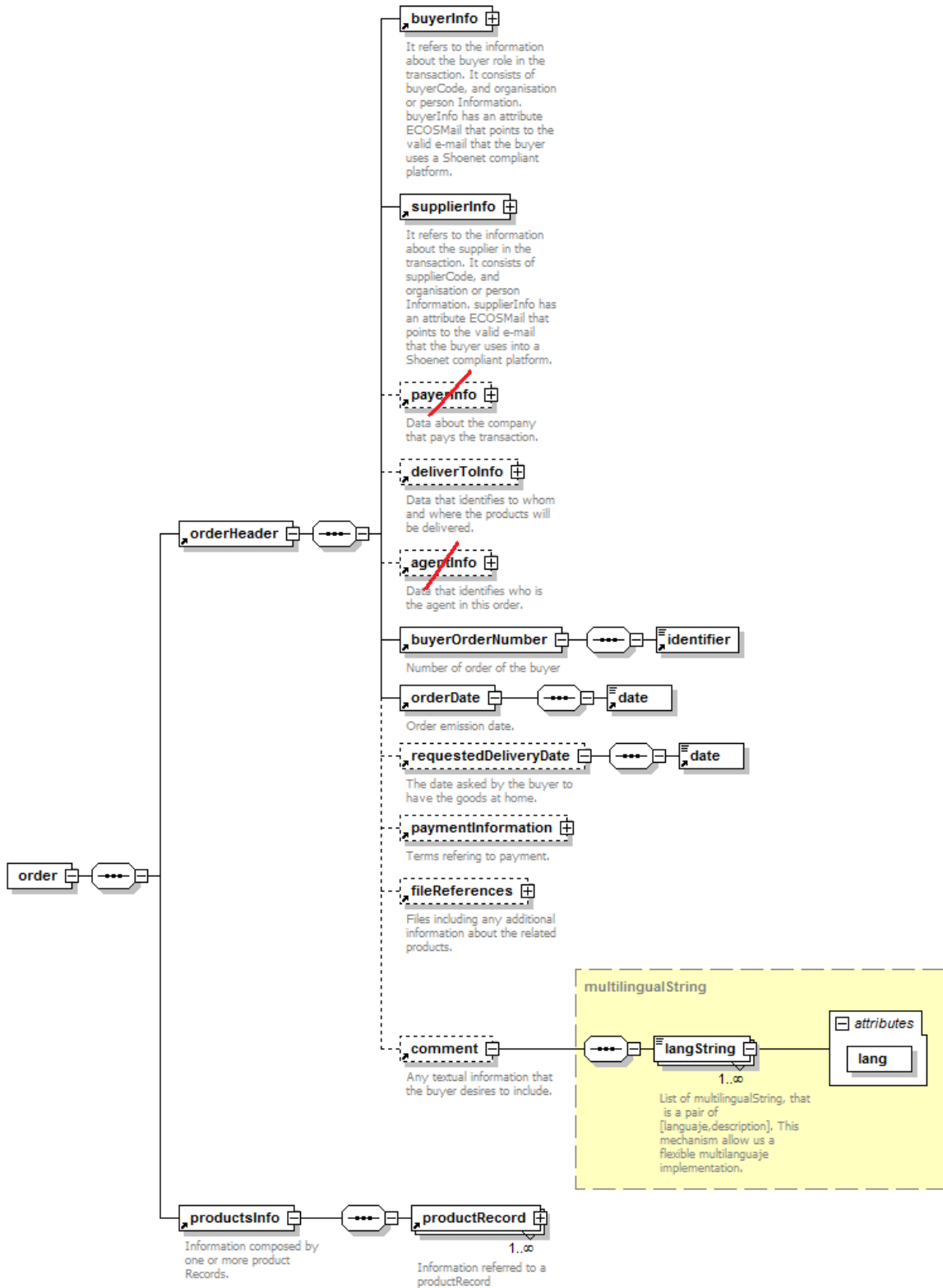


Figure 15 - Order element.

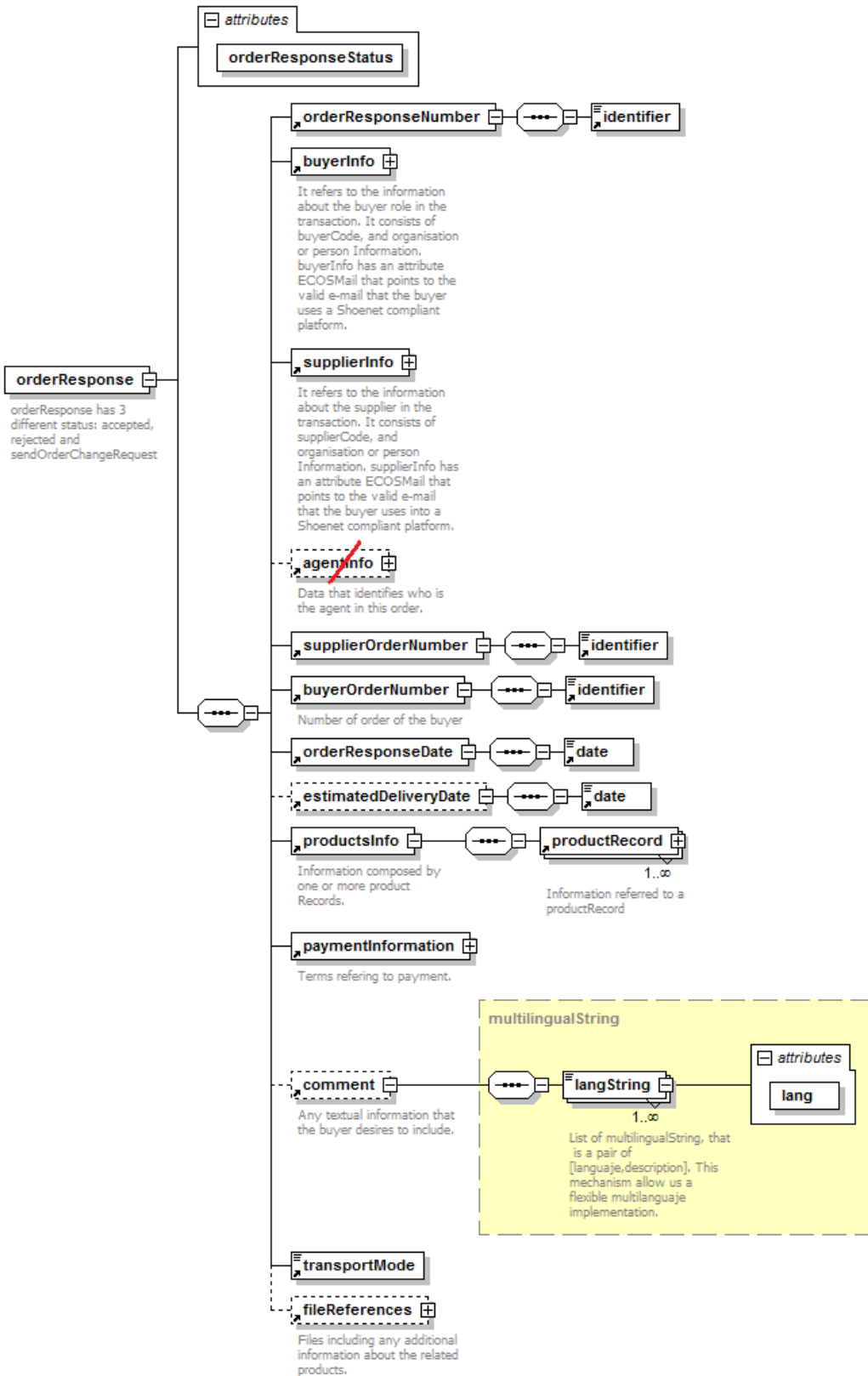


Figure 16 - OrderResponse element.

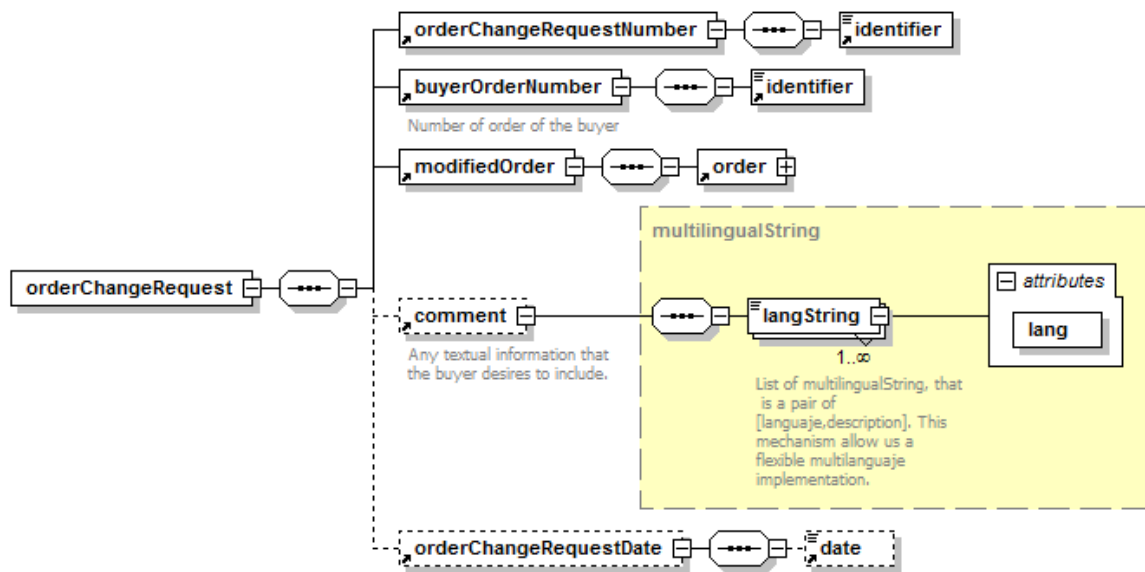


Figure 17 - OrderChangeRequest element.

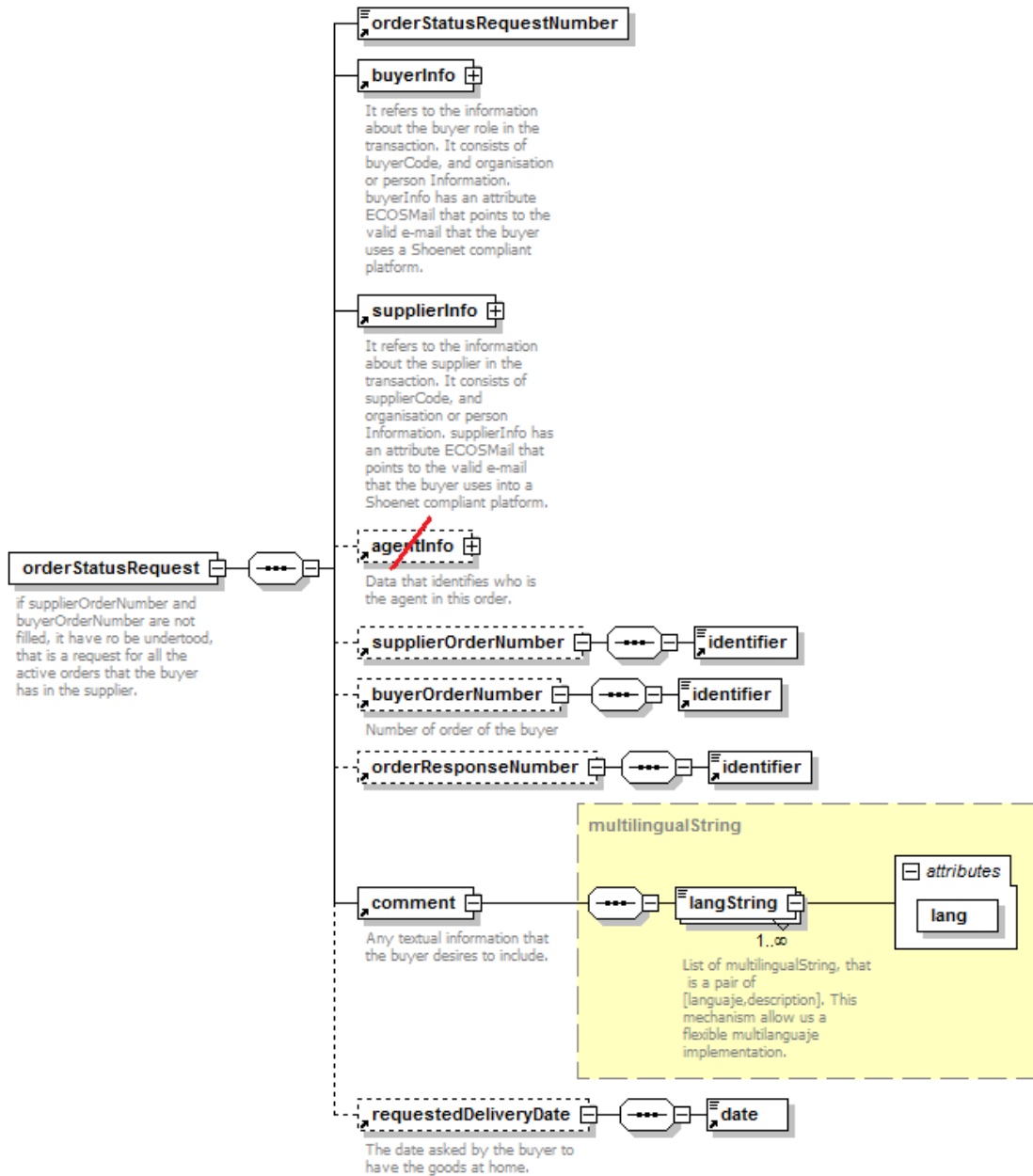


Figure 18 - OrderStatusRequest element.

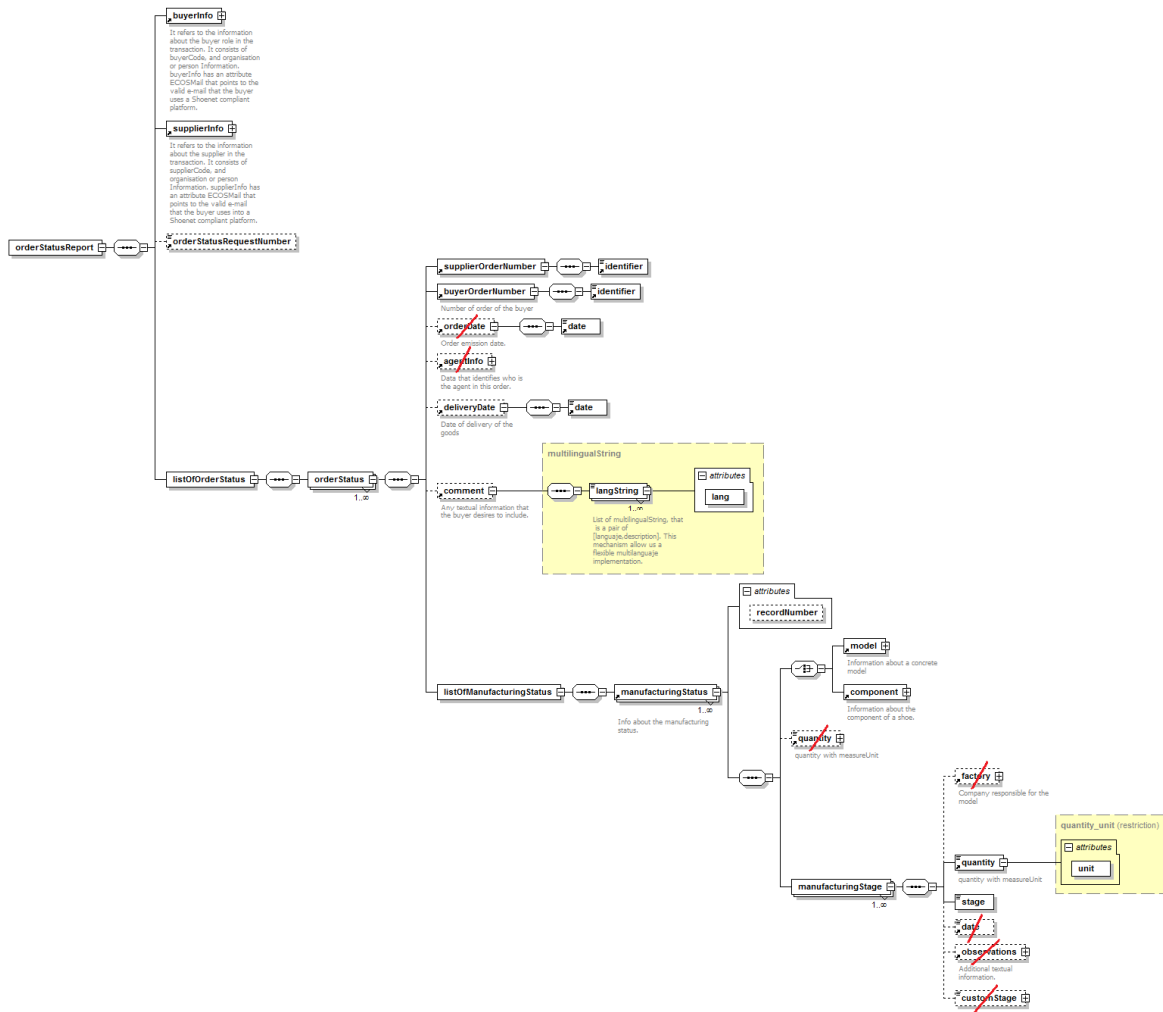


Figure 19 - OrderStatusReport element.

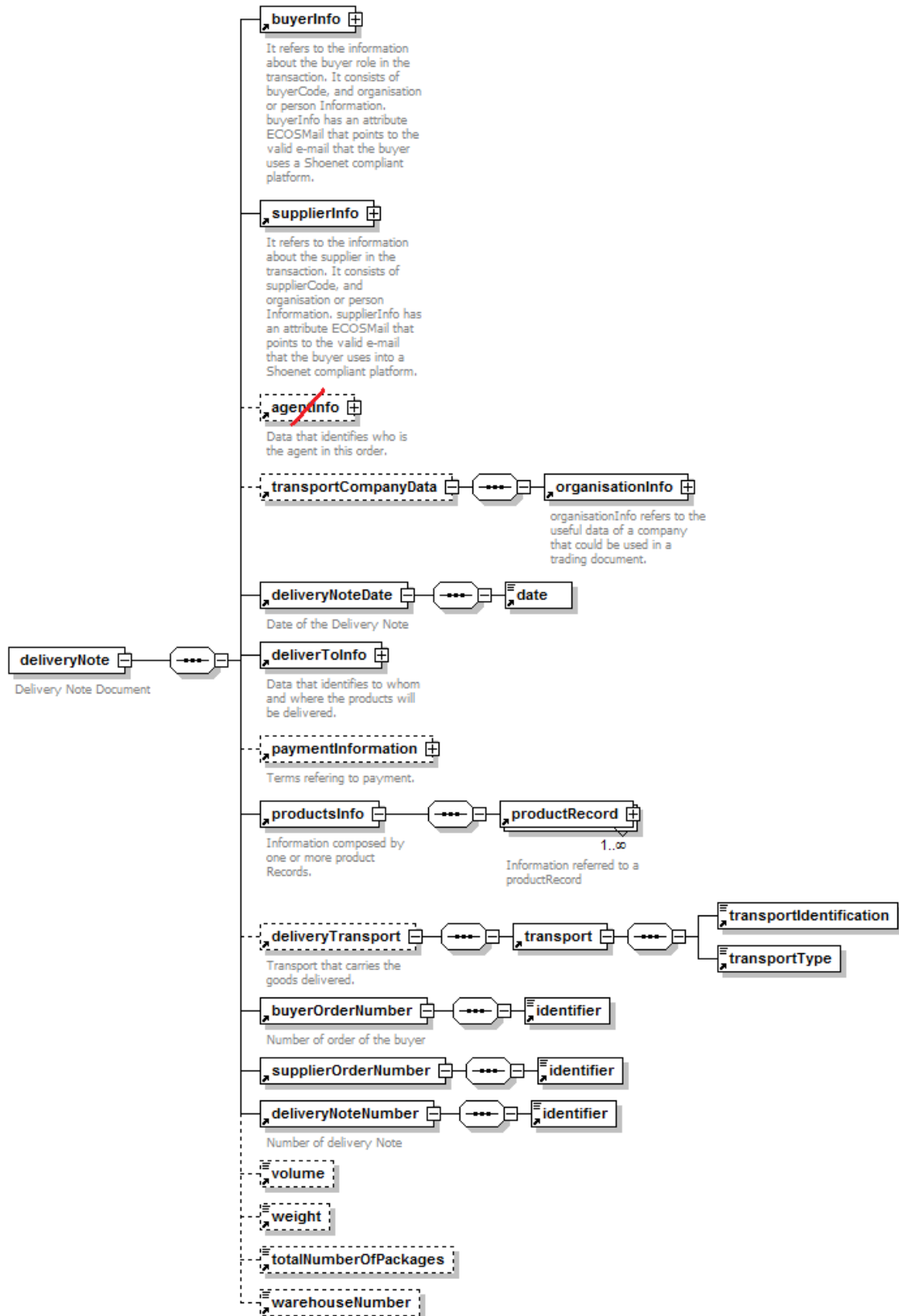


Figure 20 - DeliveryNote element.

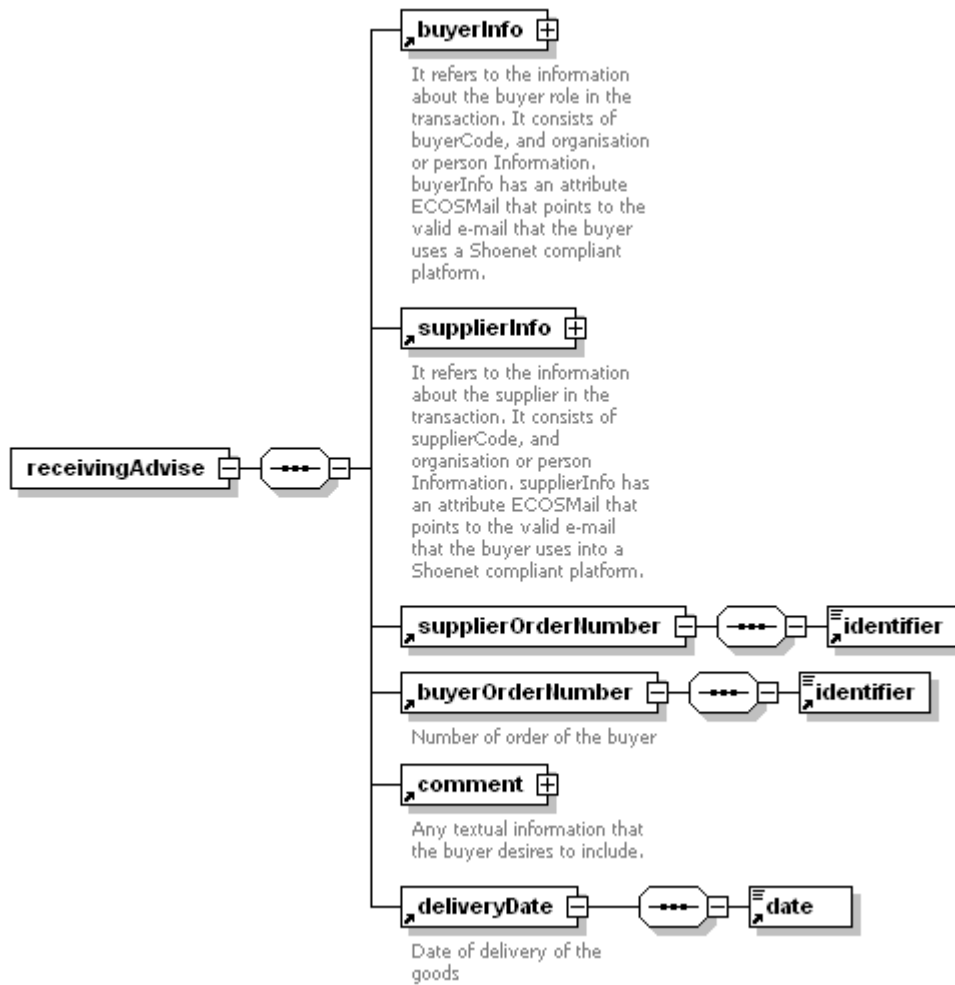


Figure 21 - ReceivingAdvise element.

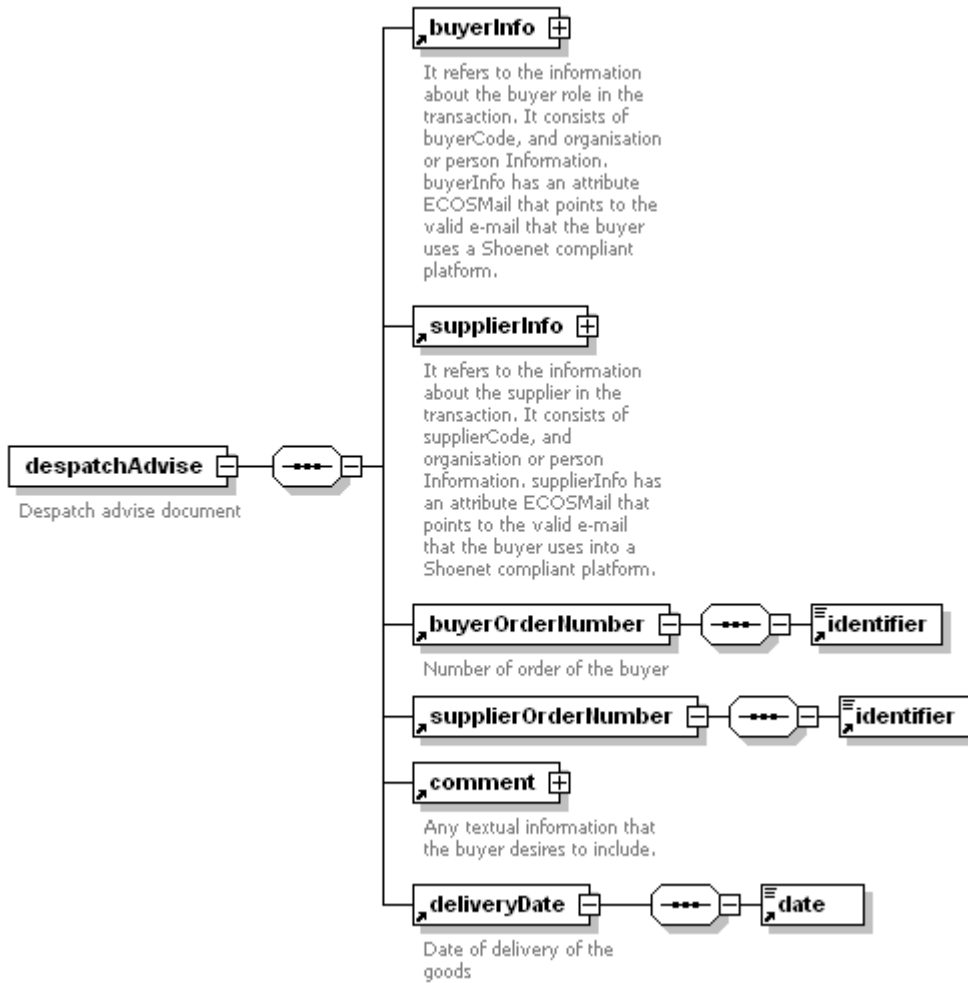


Figure 22 - DespatchAdvise element.

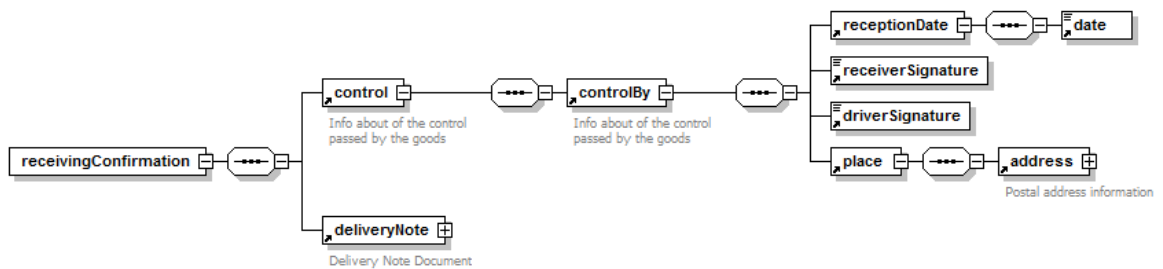


Figure 23 - ReceivingConfirmation element.

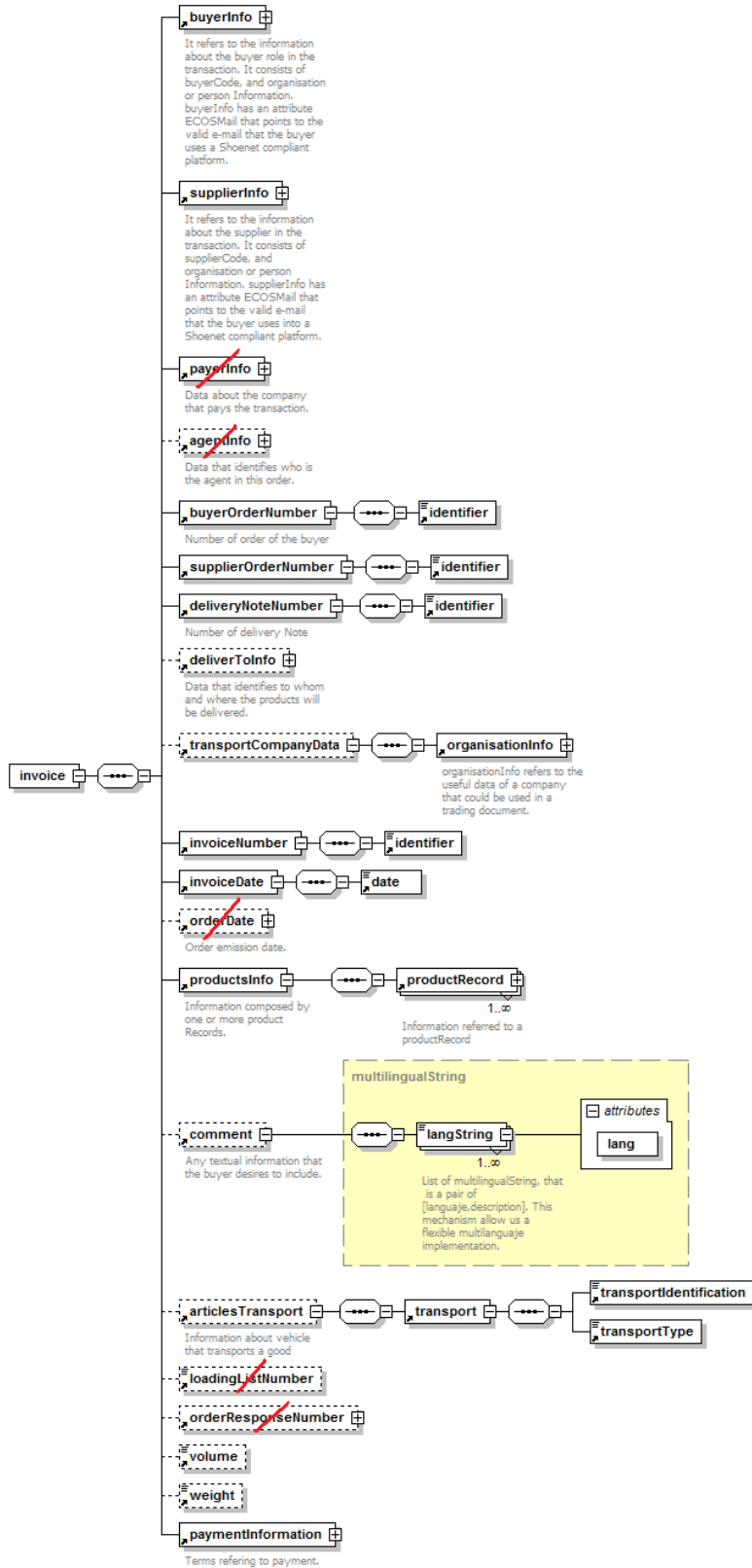


Figure 24 - Invoice element.

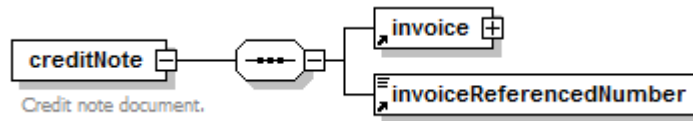


Figure 25 - CreditNote element.

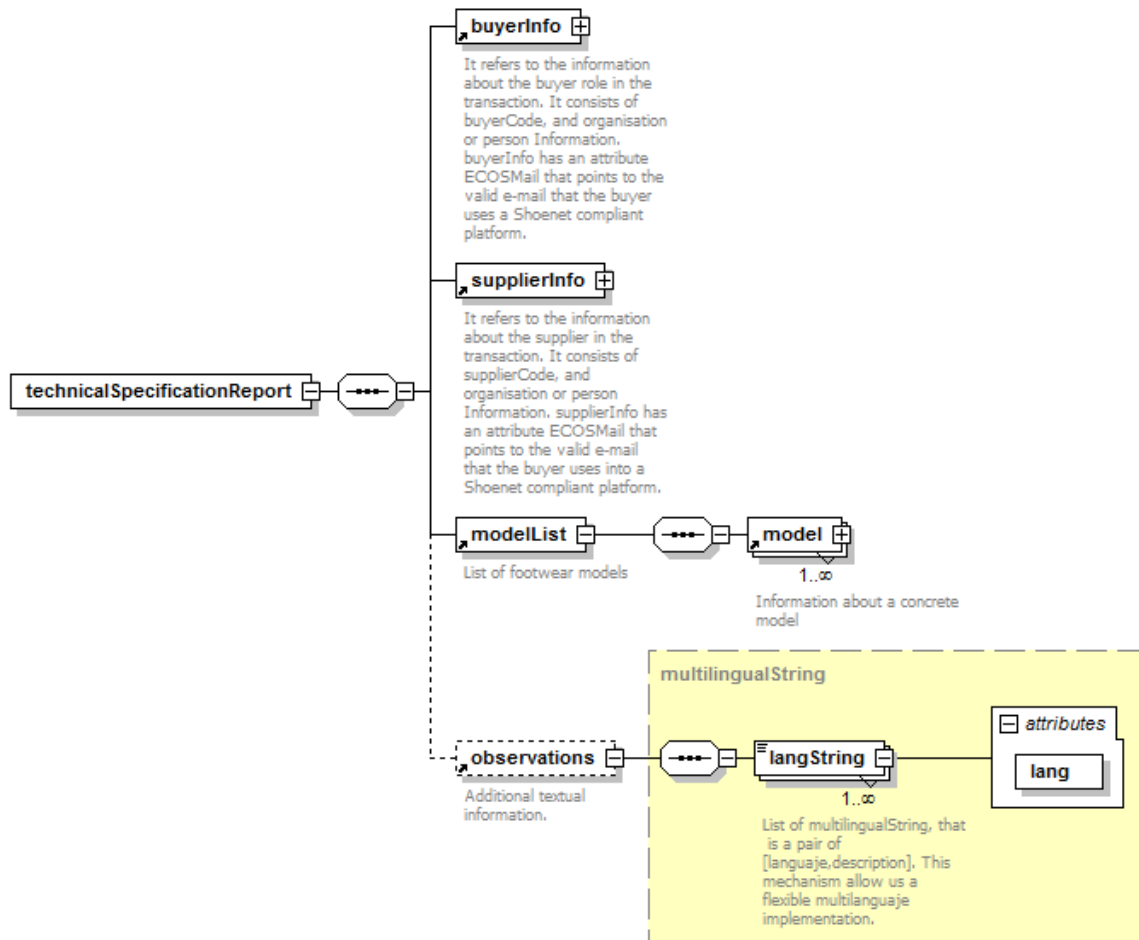


Figure 26 - TechnicalSpecificationReport element.

3. ShoeBiz transactions

The basic transactions supported by the ShoeBiz system are the following:

- *Request For Quote*
- *Create Purchase Order*
- *Change Purchase Order*
- *Query Order Status*
- *Distribute Order Status*
- *Manage Order Delivery*

3.1. Request For Quote

The Buyer entity sends the RequestForQuotation document to the Seller entity. The Seller entity replies by sending the Quotation Document. This cycle may be repeated over and over again.

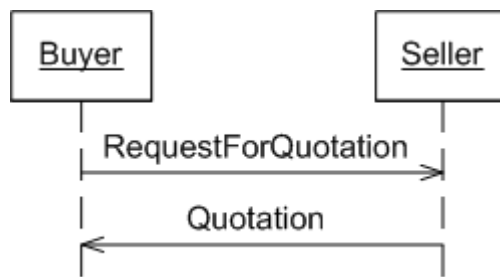


Figure 27- Request For Quote.

3.2. Create Purchase Order

The Buyer entity sends the Order document to the Seller entity. The Seller replies by sending the OrderResponse, accepting or refusing the request. This cycle may be repeated over and over again (e.g. in negotiations). The Order document may be created from the Quotation document previously received.

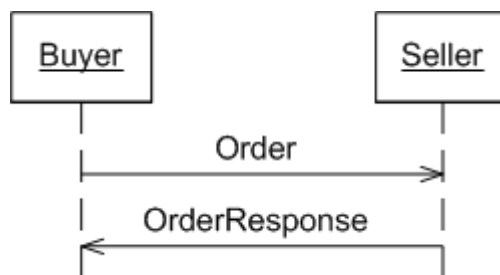


Figure 28- Create Purchase Order, part 1.

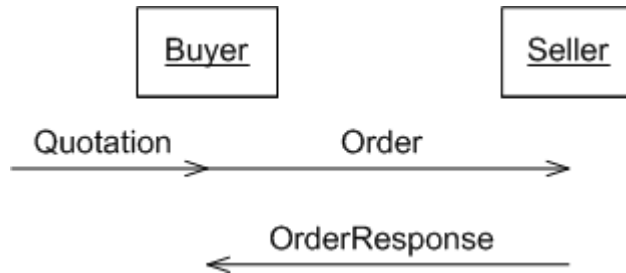


Figure 29- Create Purchase Order, part 2.

3.3. Change Purchase Order

The Buyer entity sends the OrderChangeRequest to the Seller entity. The Seller replies by sending the OrderResponse. This cycle may be repeated over and over again. The OrderChangeRequest document is created from the Order document that we intend to change.

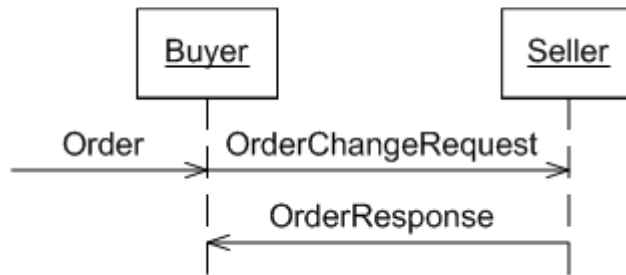


Figure 30- Change Purchase Order.

3.4. Query Order Status

The Buyer entity sends the OrderStatusRequest document to the Seller entity. The Seller replies with the sending of the OrderStatusReport document. This cycle may be repeated over and over again. The OrderStatusRequest document is created from the OrderResponse document, which describes the object Order of which we intend to know the processing actual stage.

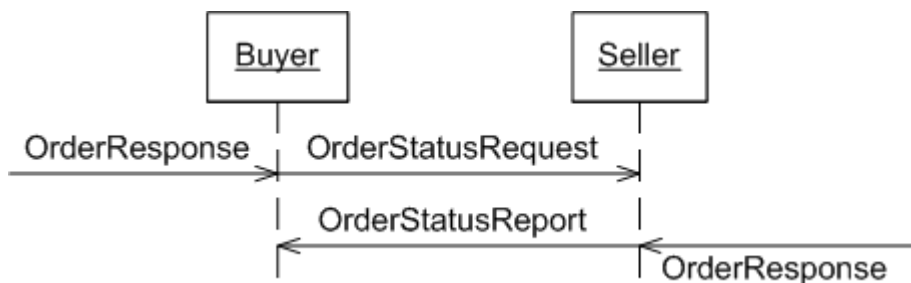


Figure 31- Query Order Status.

3.5. Distribute Order Status

The Seller entity sends the OrderStatusReport document to the Buyer entity. This cycle may be repeated over and over again. The OrderStatusReport document is

created from the OrderResponse, which describes the object Order of which we intend to indicate the stage.

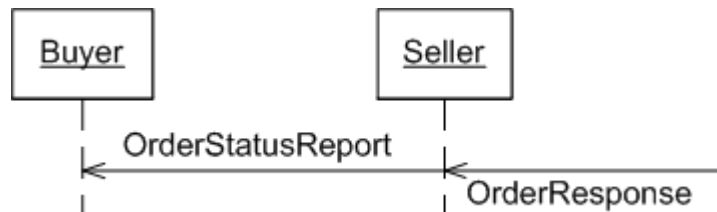


Figure 32- Distribute Order Status.

3.6. Manage Order Delivery

The Seller entity sends the DeliveryNote document to the Buyer entity. The DeliveryNote document is created from the OrderResponse document, which describes the object Order that is being dispatched.

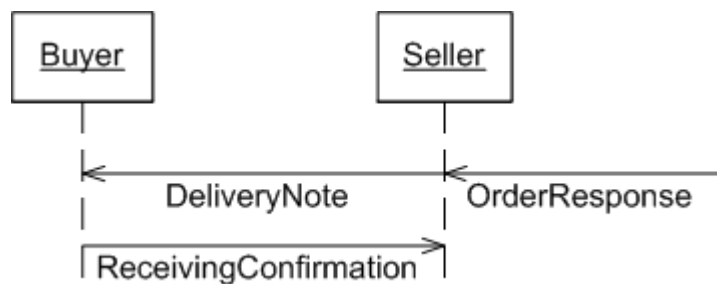


Figure 33- Manage Order Delivery, part 1.

The Seller entity sends the DespachAdvise document to the Buyer entity. The DespachAdvise document is created from the OrderResponse document, which describes the object Order that is being dispatched.

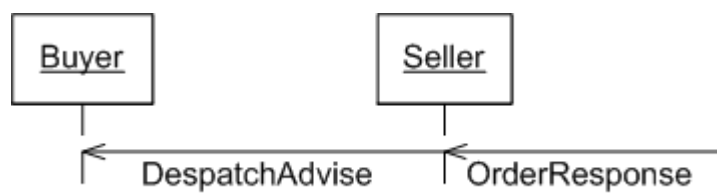


Figure 34- Manage Order Delivery, part 2.

The Buyer entity sends the ReceivingAdvise document to the Seller entity. The ReceivingAdvise document is created from the OrderResponse document, which describes the object Order that has been received.

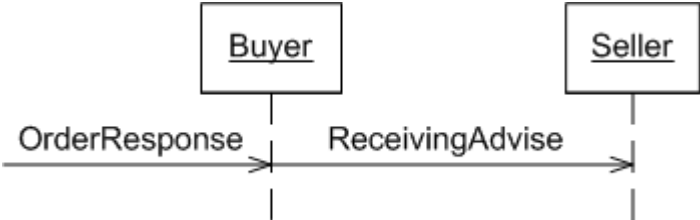


Figure 35- Manage Order Delivery, part 3.