USE CASE: ABC Scenario Samples

Introduction
The content for the set of samples with the suffix - ABC is set up to show a complete cycle of xCBL 3.0 messages related to the ordering and invoicing of goods. The cycle starts with availability and price check messages followed by various messages for material ordering, modification to the order and order status checking, and is completed with the advanced shipment notice and invoice.

ABC Enterprise Company is purchasing parts from Dunn Manufacturing, that they use in the manufacturing of their own product, which is sold on the B2C market. ABC Enterprises is an Integrated Buyer using BuySite and Dunn Manufacturing is Hosted Supplier that uses SupplyOrder. SupplyOrder hosts multiple supply companies in a MarketSite.

This set of documents are all xCBL 3.0.

All of the Actors listed below along with the Part Numbers and Amounts are Fictional.

Actors in the Scenario

Buyer/ Payee: Company purchasing parts used in the manufacturing of their product. This will also be the billing address.

ABC Enterprises
PO Box
Alpine, NY 20012
Telephone: 655-456-8911

Ship To: The plant where the ABC Company puts together their product.

ABC Enterprises
255 Marble Court
Marble Court Industrial Complex
Building G
New York, NY 20001
Telephone: 655-456-8901
**Supplier/ Seller/ Payee:** Seller of parts used in making other products.

**Dunn Manufacturing**
Order Department
Orange, CA  95006
Telephone: 212-345-4784

**Buyers Financial Institution - Payer Party**
**Kelly Finance**
4 Corner Blvd
Alpine, NY  20012
Telephone:  655-466-0023

**Supplier/ Seller Financial Institution - Payee Party**
**Barker Financial Institution**
5000 Craggy Lot
Suite 400
Orange, CA  95006
Telephone: 212-345-2113

**AvailabilityCheck Transactions - stand alone**

**Pre-Conditions:** Buyer and Supplier are known users of MarketSite.

- The Buyer, ABC Enterprises (BuyerSide) sends an **AvailabilityCheckRequest** to Dunn Manufacturing, to communicate Buyer’s product requirements.
- Dunn Manufacturing (SupplierSide) sends back a **AvailabilityCheckResponse** giving their answer. This request is only used to request the availability of goods. All the items in the list are offered by a single supplier to a single buyer.

The **AvailabilityCheckRequest** is designed to seek the availability of goods or materials only. There is no support for ordering in the design of this document. All creation of purchase **Orders** of shipments are handled by the **Order** document.

**Example Documents:** AvailabilityCheckRequestSample-ABC.xml and AvailabilityCheckResultSample-ABC.xml

**PriceCheck Transactions - stand alone**

- The Buyer, ABC Enterprises, sends out a **PriceCheckRequest** to the Seller for items they need pricing information on.

In the **PriceCheckRequestDetail** the information about each item is the part numbers and quantity. When this information comes back in the Result document, it will include the pricing information within the **ResultPrice** element.

This scenario is a US company to a US company, the currency of the document is assumed to be USD (US Dollars), but if this were from a US company to an international company, this information would be very important to the transaction.

- Dunn Manufacturing sends back the **PriceCheckResults** that has the price information for the items listed in the **PriceCheckRequest**.

In the **PricedCheckResultDetail** the pricing information is contained for each item.
The pair of documents are set up to be used alone. They can precede an order, as when the order contact needs pricing information because it is not in the catalog, or the pricing information is out of date.

### Basic Procurement - Order & OrderResponse Document Exchange

In this scenario we are assuming the **Order** that is sent out is a discrete or stand-alone **Order** and is a one-time commitment to the Supplier for goods.

This could be made by the Buyer filling a shopping cart on a by a browser interface.

- Seller may or may not send out an **OrderRequest** to the Buyer to see if they are ready to purchase parts that may or may not have been contracted for in previous transactions.
- The **OrderRequest** document is not mandatory in the transaction flow.

The **OrderRequest** does not reference any other documents, but has its own Unique ID, which both the Buyer and Seller can insert their own numbering:

```xml
<OrderRequestNumber>
  <BuyerOrderRequestNumber>REF-002-99-0-3000</BuyerOrderRequestNumber>
  <SellerOrderRequestNumber>REF002-44556677</SellerOrderRequestNumber>
</OrderRequestNumber>
```

- Buyer sends an **Order** to Supplier for parts.

  **Order Data Requirements:**
  - Quantity to be shipped.
  - Dates to be shipped
  - Part numbers or descriptions
  - Price and type of currency
  - Purchase Order Number (Order Number)
  - Buyer Party information
  - Ship to locations

The Buyer sends an **Order** it can reference the **OrderRequest** (but does not have to). It will reference the Account Code of the Buyer.

In referencing the Buyer and Sellers **OrderRequest** Numbers, the following code example will make it clear.

```xml
<ListOfReferenceCoded>
  <ReferenceCoded>
    <ReferenceTypeCoded>RequestNumber</ReferenceTypeCoded>
    <PrimaryReference>
      <Reference>
        <RefNum>REF-002-99-0-3000</RefNum>
        <RefDate>20010104T09:00:00</RefDate>
      </Reference>
    </PrimaryReference>
    <ReferenceDescription>Buyers OrderRequest Number</ReferenceDescription>
  </ReferenceCoded>
</ListOfReferenceCoded>
```
The Order also has its own unique ID, which will be used to reference the Order in other documents. This number is also known as the Purchase Order Number.

If the Seller has their own unique number for this order, it goes inside the SellerOrderNumber which is an optional element inside of OrderNumber.

The Order contains the list of items being purchased by the Buyer. Each ItemDetail describes a separate item being purchased. The Basel itemDetail includes line numbers, item identifiers, part numbers, and quantity. The ItemDetail also includes the pricing information, delivery information and notes both general and structured. You can also attach documents pertaining to the item here.

ChangeOrder Transactions

A ChangeOrder is Buyer-initiated. It is optional, and answered with an OrderResponse.

- Buyer sends ChangeOrder, Seller responses with an OrderResponse.

In this scenario, the Buyer is sending a ChangeOrder to increase the quantity ordered from 1 to 5 of item number 2.

- Supplier sends an OrderResponse to Buyer that they have received the Order. (This is not a mandatory document, and ChangeOrder can be sent with a response.)

A ChangeOrder has to reference an Order Document. That is done using the OrderReference element to reference the Order Number or PO number as it is known as:

```
<OrderReference>
  <Reference>
    <RefNum>4500005693</RefNum>
    <RefDate>20010203T12:00:00</RefDate>
  </Reference>
</OrderReference>
```
In this scenario, the Buyer, ABC Enterprises changes their requested quantity for item 2 from 1 to 5. The document lists the ItemDetail and then an ItemDetailChanges which contains the changed information.

**Status Checks of an Order**

The Buyer can send out OrderStatusRequest to the Supplier to check on status. In this case, ABC Enterprises sends an OrderStatusRequest to Dunn Manufacturing to find out what the status of the order is.

- **Buyer sends out OrderStatusRequest to Supplier for the status of goods to be shipped is.** The OrderStatusRequest references the original Order within the Detail of the OrderStatus document.

- **Seller sends back a OrderStatusResult document with the status of the order. It does not give a detail list of items from the Order, just a StatusEventCode.** The code choices are: Pending, NotAccepted, Dispatched, Other.

At this point the goods are ready to be shipped and received.

**AdvanceShipNotice Document**

The Seller Dunn Manufacturing sends out an ASN document when the goods are prepared for shipping. This document has its own unique ID and it references the Purchase Order the goods are being shipped against. The ASN document then gives the status of the order being shipped along with shipping dates. Within the Detail of the ASN, you will find the allowance or charge section. The ASNItemDetail is repeatable because it is within a ListOfASNItemDetail.

**The summary of the AdvanceShipNotice document.**

There is a total of lines, which is the count of Line Items.

There is a total of transport packages in the element TransportPackagingTotals. Which is the total of packages within this ASN document that will be shipped. Within this element, you put the information regarding the transportation of these packages in total, not line item differences. That goes up inside each line item. This sample does not have values for all of the elements that are possible in this area. The possible elements are: GrossVolume, TotalGrossWeight, TotalNetWeight, TotalTareWeight.

**Invoice**

Dunn Manufacturing, the Supplier, sends an Invoice to ABC Enterprises for the parts shipped. The Invoice references the PurchaseOrderNumber, lists the items shipped and contains the total amount payable. This starts the payment transactions, which will be part of another document.