RP3901 XML Invoice Cancellation Usage Guideline

Introduction

This Usage Guideline captures the procedure for implementing the PIDX Invoice Cancellation Business Process using the PIDX Invoice and PIDX Invoice Response documents. The purpose of this document is to enable consistent implementations of this Business Process across the PIDX community, and thus ensure standardization and the efficiencies desired from using the PIDX standards.

For success, this Business Process relies on the choreography of the PIDX Invoice and PIDX Invoice Response documents.

When a Trading Partner receives a request to cancel an invoice, it must respond to the sender of the cancellation request informing them either that:

- The request has been accepted and the invoice has been cancelled from within their system.
- The request has been rejected and the invoice has not be cancelled from within their system.

Usage Guideline

The key to requesting and responding to an invoice cancellation is the use of the **Invoice** and **InvoiceResponse TransactionPurposeIndicator** attribute.

The Business Process, illustrated below, shows that the **Invoice TransactionPurposeIndicator** attribute uses the value **Cancellation** to request from the Trading Partner that an existing invoice be deleted from the system.
The Trading Partner responds with an `InvoiceResponse` document with the `TransactionPurposeIndicator` attribute set to `Cancellation` and the `InvoiceResponseStatusCode` element set to `Accept` or `Reject` to indicate whether the cancellation action could be performed.

Each invoice transaction, regardless of purpose, is seen as a unique document. In this Business Process therefore, the `InvoiceProperties`, `InvoiceNumber` element must contain the number of the Invoice Cancellation document.

The invoice number of the document to be cancelled is found within the `InvoiceProperties`, `ReferenceInformation` element.

When the request to cancel an invoice is made, the invoice document must contain the minimum amount of information necessary for the receiving Trading Partner to find and delete the requested invoice from their system:

<table>
<thead>
<tr>
<th>Description</th>
<th>Element</th>
</tr>
</thead>
<tbody>
<tr>
<td>Invoice Number (Cancellation)</td>
<td><code>&lt;Invoice&gt;&lt;InvoiceProperties&gt;&lt;InvoiceNumber&gt;</code></td>
</tr>
<tr>
<td>Invoice Date</td>
<td><code>&lt;Invoice&gt;&lt;InvoiceProperties&gt;&lt;InvoiceDate&gt;</code></td>
</tr>
<tr>
<td>Partner Information</td>
<td><code>&lt;Invoice&gt;&lt;InvoiceProperties&gt;&lt;PartnerInformation&gt;&lt;PartnerIdentifier&gt;</code></td>
</tr>
<tr>
<td>Invoice Number (Original)</td>
<td><code>&lt;Invoice&gt;&lt;InvoiceProperties&gt;&lt;ReferenceInformationReferenceInformationIndicator=&quot;OriginalInvoiceNumber&quot;&gt;</code></td>
</tr>
</tbody>
</table>

When responding to the invoice cancellation request the invoice response document must contain the minimum amount of information necessary for the sending Trading Partner to find the invoice in their system and take the appropriate action based on the value of the `InvoiceResponseStatusCode`:

<table>
<thead>
<tr>
<th>Description</th>
<th>Element</th>
</tr>
</thead>
<tbody>
<tr>
<td>Invoice Response Number</td>
<td><code>&lt;InvoiceResponse&gt;&lt;InvoiceResponseProperties&gt;&lt;InvoiceResponseNumber&gt;</code></td>
</tr>
<tr>
<td>Status Code (Header)</td>
<td><code>&lt;InvoiceResponse&gt;&lt;InvoiceResponseProperties&gt;&lt;StatusCode&gt;</code></td>
</tr>
<tr>
<td>Response Reason Comments (Header)</td>
<td><code>&lt;InvoiceResponse&gt;&lt;InvoiceResponseProperties&gt;&lt;InvoiceResponseReason&gt;&lt;ResponseReasonComments&gt;</code></td>
</tr>
<tr>
<td>Invoice Response Date</td>
<td><code>&lt;InvoiceResponse&gt;&lt;InvoiceResponseProperties&gt;&lt;InvoiceResponseDate&gt;</code></td>
</tr>
<tr>
<td>Partner Information</td>
<td><code>&lt;InvoiceResponse&gt;&lt;InvoiceResponseProperties&gt;&lt;PartnerInformation&gt;&lt;PartnerIdentifier&gt;</code></td>
</tr>
<tr>
<td>Invoice Number (Cancellation)</td>
<td><code>&lt;InvoiceResponse&gt;&lt;InvoiceResponseProperties&gt;&lt;InvoiceNumber&gt;</code></td>
</tr>
<tr>
<td>Invoice Number (Original)</td>
<td><code>&lt;Invoice&gt;&lt;InvoiceProperties&gt;&lt;ReferenceInformationReferenceInformationIndicator=&quot;OriginalInvoiceNumber&quot;&gt;</code></td>
</tr>
</tbody>
</table>
Data within the elements **InvoiceResponseDetails** and **InvoiceResponseSummary** would not be required within the **InvoiceResponse**.

If, while processing the invoice cancellation request, the buyer’s system encounters an error then an invoice response document should be returned with a **StatusCode** code value of **Reject** to the supplier.

The **TransactionPurposeIndicator** is used in both documents to indicate the purpose of the document.

**Note:** When adding a new invoice the **TransactionPurposeIndicator** should be **Add** or **Original**.

**Element Usage**

The **InvoiceResponseNumber** is a unique number issued to each invoice response by the sender of the Invoice Response document.

The **StatusCode** is used to indicate the invoice response, “Accept”, “Reject”. The use of any other codes in the **StatusCode** element is not defined.

The **ResponseReasonCode** is used to categorize the reason for an invoice rejection, “Missing Content”, “Disputed Content”, “Routing Error”, “Other”.

A textual description, **ResponseReasonComments**, must also accompany the rejection reason code, **ResponseReasonCode**, to indicate why the cancellation request was rejected.

The **InvoiceResponseDate** is the date on which the document was generated by the sender of the invoice response document.

The **PartnerIdentifier** is the unique identifier for each trader partner. This is the same information that was transmitted and received in the original invoice.

The **InvoiceNumber** is the reference number of the invoice cancellation document.

The **ReferenceInformation OriginalInvoiceNumber** is the invoice number of the invoice to be cancelled.

The **InvoiceDate** is the date that this invoice document was generated. It does not refer to the date of the original invoice.

**Summary**

This Usage Guideline meets the requirements for the PIDX Invoice Cancellation Process defined by PIDX BPWG laid out as an objective for the PIDX BMWG at the Fall 2005 conference.

The Usage Guideline shows how the PIDX invoice and PIDX InvoiceResponse documents are choreographed to execute the invoice cancellation process. The document shows how Trading Partners use both these data formats to ensure more consistent implementations across multiple trading partners.

It is envisaged that the implementation of this process will further deepen integrations between Trading Partners, and further eliminate manual steps in the existing process.
Appendices

1. Sample Cancellation Usage - Accept

This example illustrates a very simple example of using the Invoice document to cancel an invoice and using the invoice response to indicate acceptance.

```
<-- edited with XML Spy v4.4 U (http://www.xmlspy.com) -->
<pix:Invoice
 xmlns:pix="http://www.PIDX.org/pidXML/v1.2"
xmns.xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="http://www.PIDX.org/pidXML/v1.2
C:\Temp/PIDXSchema/Invoice.xsd" pix:transactionPurposeIndicator="Cancellation"
pix:version="1.0">
  <pix:InvoiceNumber>36431</pix:InvoiceNumber>
  <pix:InvoiceDate>2005-07-24</pix:InvoiceDate>
  <pix:PartnerInformation partnerRoleIndicator="SoldTo">
    <pix:PartnerIdentifier partnerIdentifierIndicator="AssignedByBuyer">000000002</pix:PartnerIdentifier>
    <pix:PartnerName>Well Inc</pix:PartnerName>
    <pix:AddressInformation>
      <pix:AddressLine>W Loop S, 765</pix:AddressLine>
      <pix:CityName>Houston</pix:CityName>
      <pix:StateProvince>TX</pix:StateProvince>
      <pix:PostalCode>77027</pix:PostalCode>
    </pix:AddressInformation>
    <pix:ContactInformation contactInformationIndicator="OrderContact">
      <pix:ContactName>Tim Morgan</pix:ContactName>
    </pix:ContactInformation>
  </pix:PartnerInformation>
  <pix:PartnerInformation partnerRoleIndicator="Seller">
    <pix:PartnerIdentifier partnerIdentifierIndicator="AssignedBySeller">432156789</pix:PartnerIdentifier>
    <pix:PartnerName>Big M Little Organ, Inc</pix:PartnerName>
    <pix:AddressInformation>
      <pix:AddressLine>P.O. Box 99999</pix:AddressLine>
      <pix:CityName>Midland</pix:CityName>
      <pix:StateProvince>TX</pix:StateProvince>
      <pix:PostalCode>79711-0365</pix:PostalCode>
    </pix:AddressInformation>
    <pix:ContactInformation>
      <pix:ContactName></pix:ContactName>
    </pix:ContactInformation>
  </pix:PartnerInformation>
  <pix:InvoiceTypeCode>ProductOrService</pix:InvoiceTypeCode>
  <pix:PrimaryCurrency>
    <pix:CurrencyCode>USD</pix:CurrencyCode>
  </pix:PrimaryCurrency>
  <pix:JobLocationInformation>
    <pix:JobLocationIdentifier jobLocationIdentifierIndicator="Other"/>
    <pix:JobLocationDescription>Well #9, Andrews</pix:JobLocationDescription>
  </pix:JobLocationInformation>
</pix:Invoice>
```
<pix:ServiceDateTime dateTypeIndicator="ServicePeriodStart">2005-07-20T00:00:00</pix:ServiceDateTime>

<pix:ReferenceInformation referenceInformationIndicator="OriginalInvoiceNumber">ABCD1234</pix:ReferenceInformation>

<pix:InvoiceProperties>
  <pix:InvoiceDetails>
    <pix:InvoiceLineItem id="1">
      <pix:LineItemNumber>1</pix:LineItemNumber>
      <pix:LineItemIdentifier identifierIndicator="AssignedBySeller">15-</A</pix:LineItemIdentifier>
      <pix:LineItemDescription>15% HCl</pix:LineItemDescription>
      <pix:LineItemInformation>
        <pix:Pricing>
          <pix:UnitPrice>
            <pix:MonetaryAmount>1.21</pix:MonetaryAmount>
            <pix:UnitOfMeasureCode>GAL</pix:UnitOfMeasureCode>
          </pix:UnitPrice>
        </pix:Pricing>
      </pix:LineItemInformation>
    </pix:InvoiceLineItem>
    <pix:InvoiceLineItem id="2">
      <pix:LineItemNumber>2</pix:LineItemNumber>
      <pix:LineItemIdentifier identifierIndicator="AssignedBySeller">BC-</A</pix:LineItemIdentifier>
      <pix:LineItemDescription>Fe/AS-2X, Anti-
        Sludge</pix:LineItemDescription>
      <pix:LineItemInformation>
        <pix:Pricing>
          <pix:UnitPrice>
            <pix:MonetaryAmount>21.35</pix:MonetaryAmount>
            <pix:UnitOfMeasureCode>GAL</pix:UnitOfMeasureCode>
          </pix:UnitPrice>
        </pix:Pricing>
      </pix:LineItemInformation>
    </pix:InvoiceLineItem>
    <pix:InvoiceLineItem id="3">
      <pix:LineItemNumber>3</pix:LineItemNumber>
      <pix:LineItemIdentifier identifierIndicator="AssignedBySeller">BC-</A</pix:LineItemIdentifier>
      <pix:LineItemDescription>I-8, Corrosion</pix:LineItemDescription>
      <pix:LineItemInformation>
        <pix:Pricing>
          <pix:UnitPrice>
            <pix:MonetaryAmount>213.50</pix:MonetaryAmount>
            <pix:UnitOfMeasureCode>GAL</pix:UnitOfMeasureCode>
          </pix:UnitPrice>
        </pix:Pricing>
      </pix:LineItemInformation>
    </pix:InvoiceLineItem>
  </pix:InvoiceDetails>
</pix:InvoiceProperties>

Original invoice number (potentially different from Cancellation)
Inhibitor</idx:LineItemDescription>
   </idx:LineItemInformation>
   </idx:Pricing>
   </idx:UnitPrice>
   </idx:MonetaryAmount>40.70</idx:MonetaryAmount>
   </idx:UnitOfMeasureCode>EA</idx:UnitOfMeasureCode>
   </idx:UnitPrice>
   </idx:Pricing>
   </idx:LineItemTotal>
   </idx:MonetaryAmount>81.40</idx:MonetaryAmount>
   </idx:LineItemTotal>
</idx:InvoiceLineItem>
</idx:InvoiceDetails>
</idx:InvoiceSummary>
   </idx:TotalLineItems>3</idx:TotalLineItems>
   </idx:InvoiceTotal>
   </idx:InvoiceTotal>
   </idx:Invoice>

---

Invoice Response document

```xml
<?xml version="1.0"?>
<idx:InvoiceResponse
   xmlns:idx="http://www.PIDX.org/pidXML/v1.2"
   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xsi:schemaLocation="http://www.PIDX.org/pidXML/v1.2 C:\TPM\DraftInvoiceResponsev1_0.xsd"
   idx:transactionPurposeIndicator="Cancellation" idx:version="1.0">
   <idx:InvoiceResponseProperties>
     <idx:InvoiceResponseNumber>000000002</idx:InvoiceResponseNumber>
     <idx:StatusCode>Accept</idx:StatusCode>
     <idx:InvoiceResponseDate>2005-07-26</idx:InvoiceResponseDate>
     <idx:PartnerInformation partnerRoleIndicator="SoldTo">
       <idx:PartnerIdentifier
           partnerIdentifierIndicator="AssignedByBuyer">000000002</idx:PartnerIdentifier>
       </idx:PartnerInformation>
       <idx:PartnerInformation partnerRoleIndicator="Seller">
         <idx:PartnerIdentifier
             partnerIdentifierIndicator="AssignedBySeller">432156789</idx:PartnerIdentifier>
       </idx:PartnerInformation>
     </idx:PartnerInformation>
   </idx:InvoiceResponseProperties>
</idx:InvoiceResponse>
```
In Voice Cancellation Usage

Business Messages Work Group

```xml
<pidx:InvoiceNumber>36431</pidx:InvoiceNumber>
<pidx:InvoiceDate>2005-07-24</pidx:InvoiceDate>
</pidx:InvoiceInformation>
<pidx:ReferenceInformation
referenceInformationIndicator="OriginalInvoiceNumber">ABCD1234</pidx:ReferenceInformation>
</pidx:InvoiceResponseProperties>
<pidx:InvoiceResponseDetails>
<pidx:InvoiceResponseLineItem/>
</pidx:InvoiceResponseDetails>
<pidx:InvoiceResponseSummary/>
</pidx:InvoiceResponse>
```

Cancellation Invoice #
2. Sample Cancellation Usage – Reject

This example shows the same invoice cancellation that was used above, now being rejected.

```
<partnerInformation partnerRoleIndicator="SoldTo">
  <partnerIdentifierIndicator="AssignedByBuyer">000000002</partnerIdentifierIndicator>
  <partnerInformation/>
</partnerInformation>

<partnerInformation partnerRoleIndicator="Seller">
  <partnerIdentifierIndicator="AssignedBySeller">432156789</partnerIdentifierIndicator>
  <partnerInformation/>
</partnerInformation>

<ReferenceInformation>
  <ReferenceInformationIndicator="OriginalInvoiceNumber">ABCD1234</ReferenceInformationIndicator>
  <InvoiceResponseProperties/>
  <InvoiceResponseDetails/>
  <InvoiceResponseLineItem/>
  <InvoiceResponseDetails/>
  <InvoiceResponseSummary/>
</ReferenceInformation>
```

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