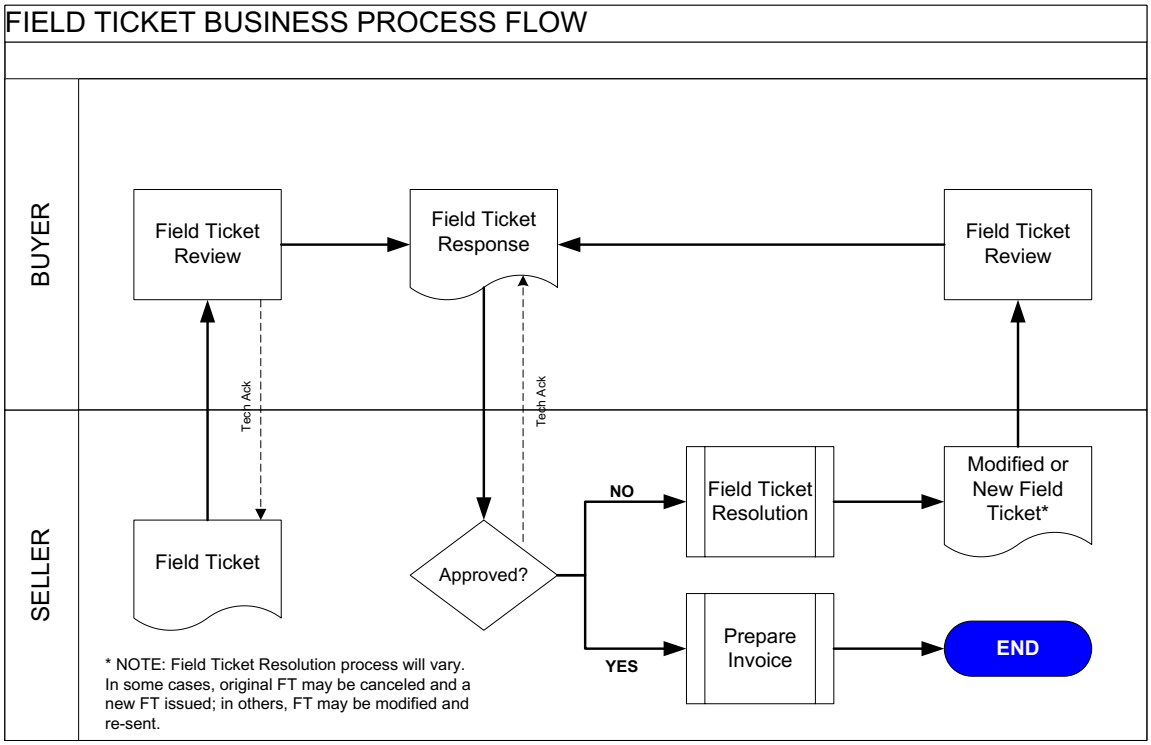
# FIELD TICKET PROCESS BUSINESS PROCESS GUIDELINE (BPG) FIELD TICKET PROJECT TEAM PROPOSAL (PTP) GUIDELINES

Below is the Business Process Diagram for the Field Ticket transaction. This is not the only method in which the process may occur; however, it represents a primary process. A third party acting as an agent for the buyer or seller may be involved but the primary actors are considered to be the buyer and seller.




**Process Model -** Seller completes work at a customer site. A field ticket is generated for Buyer review and approval.

Buyer review may occur on-site and in collaboration with the Seller, at which point the Seller may modify the Field Ticket prior to approval. Alternatively, Buyer review and approval may occur off-site. The seller creates an XML field ticket and sends it to the Buyer.

The Buyer processes the XML field ticket and sends a Field Ticket Response, accepting or disputing the field ticket information in whole or in part. For each Field Ticket sent by the Seller, the Buyer needs to issue a Field Ticket Response. Disputes are handled in accordance with mutually agreed dispute resolution process. If necessary, once disputes are resolved, a corrected (or new) field ticket is generated and sent to the Buyer.

The business process assumes that a Field Ticket can be Accepted or Rejected in its entirety, meaning that partial acceptance or rejection is not supported at this time. The Field Ticket is wholly OK or it is wholly rejected.

Each Field Ticket will have a unique identifying number, each Field Ticket Response will have a unique identifying number and will reference the Field Ticket that the response is for.

## Use Case: Correct Field Ticket

| | |
|---|---|
| **Business process name** | Correct Field Ticket |
| **Identifier** | PIDX XML Field Ticket and Field Ticket Response |
| **Actors** | Buyer, Seller<br>Intermediary may be involved as an agent for the buyer and/or seller |
| **Definitions** | ***Trading Partner:*** The Buyer or Seller<br>***Intermediary:*** Organization between Trading Partners that may handle routing and/or act on behalf of Trading Partner at different stages in the business process workflow<br>***Message:*** Payload along with TRP protocol envelope<br>***Payload:*** Field Ticket/Field Ticket Response data<br>***Routing Hub:*** Intermediary that routes messages but does not participate in business process workflow.<br>***Network:*** Intermediary that acts on behalf of buyer or seller and is a participant in the business process workflow.<br>***Field Ticket:*** The Field Ticket is an estimated statement of products and services delivered, work performed, quantity and financials. It provides legal documentation of details associated with delivered products and services and captures Buyer agreement of delivery. It is the basis for invoice creation, invoice reconciliation and may serve other functions internally.<br>***Field Ticket Response:*** The Field Ticket Response message refers to Field Ticket data payload and is transmitted by buyer to seller to indicate that the field ticket has been approved or is in dispute. |
| **Description** | Seller issues field ticket for products/services delivered. Buyer approves field ticket per procedures set forth during contract negotiations. |
| **Pre-condition** | The Seller has provided goods or services according to the conditions set in the contract and/or order. |
| **Post-conditions** | Approved field ticket is provided electronically to both seller and buyer. |
| **Scenario** | The supplier provides goods or services to the customer. The Seller will generate the field ticket for the goods or services delivered.<br><br>The Buyer reviews field ticket for accuracy.<br><br>Upon conclusion of review process, Buyer issues Field Ticket Response to accept/approve field ticket. |
| **Recommended Best Practices** | • Buyer should issue one Field Ticket Response to accept/approve Field Ticket at the successful conclusion of review process.<br>• Field Ticket and Field Ticket Response should be transmitted via the same communication channel. |
| **Assumptions** | • Approval at the header level of the Field Ticket Response is approval for all lines on the referencing Field Ticket<br>• Individual line items on the Field Ticket Response may or may not have status codes when the header level is Approved. |

## Use Case: Disputed Field Ticket

| | |
|---|---|
| **Business process name** | Disputed Field Ticket |
| **Identifier** | PIDX XML Field Ticket and Field Ticket Response |
| **Actors** | Buyer, Seller<br>Intermediary may be involved as an agent for the buyer and/or seller |
| **Definitions** | ***Trading Partner:*** The Buyer or Seller<br>***Intermediary:*** Organization between Trading Partners that may handle routing and/or act on behalf of Trading Partner at different stages in the business process workflow<br>***Message:*** Payload along with TRP protocol envelope<br>***Payload:*** Field Ticket/Field Ticket Response data<br>***Routing Hub:*** Intermediary that routes messages but does not participate in business process workflow.<br>***Network:*** Intermediary that acts on behalf of buyer or seller and is a participant in the business process workflow.<br>***Field Ticket:*** The Field Ticket is an estimated statement of products and services delivered, work performed, quantity and financials. It provides legal documentation of details associated with delivered products and services and captures Buyer agreement of delivery. It is the basis for invoice creation, invoice reconciliation and may serve other functions internally.<br>***Field Ticket Response:*** The Field Ticket Response message refers to Field Ticket data payload and is transmitted by buyer to seller to indicate that the field ticket has been approved or is in dispute. |
| **Description** | Seller issues field ticket for products/services delivered electronically for Buyer review and approval. Buyer finds error(s) during review process and issues Field Ticket Response to reject Invoice. Dispute resolution process begins. |
| **Pre-condition** | The Seller has provided goods or services according to the conditions set in the contract and/or order. The Buyer has received the goods or services.<br><br>Mutually agreed Field Ticket dispute resolution process is in place. |
| **Post-conditions** | Trading partners will address issues per agreed dispute resolution process and continue field ticket to payment process as appropriate. |
| **Scenario** | The Seller provides goods or services to the Buyer. The Seller will generate the field ticket for the goods or services delivered.<br><br>The Buyer reviews the field ticket for accuracy.<br><br>Buyer review process results in a disputed field ticket. Buyer issues Field Ticket Response to **reject/dispute entire Field Ticket**. Rejection/Dispute may be system- or human-generated, depending on where the error is identified during review process.<br><br>Reasons for dispute may be listed at the line item level or pertain to the entire Field Ticket. |
| **Remarks** | Responses to a disputed Field Ticket may include:<br>• Original field ticket is accepted by Buyer following discussion with Seller<br>• Seller may cancel original field ticket<br>• Seller may re-send corrected field ticket |

| | |
|---|---|
| | Standard rejection reasons for field ticket rejection include:<br>• Missing or invalid data + x-path reference<br>• Duplicate Field Ticket Number<br>• Item not received<br>• Product or Service Price Dispute<br>• Item doesn't match contract<br>• Quantity Variance<br>• Purchase Order closed or invalid dates<br>• Other<br><br>A "free form" text area is available and should always be used if "Other" is selected. This may occur if a Buyer has non-standard reasons for disputing a field ticket.<br><br>See comments in Appendix A on new response code values from the 2019 Enhancing PIDX Field Ticket Response Schema project. |
| **Recommended Best Practices** | • Reason/Code "Other" and free form text should only be used when an appropriate standard reason is unavailable.<br>• To the extent possible, all known reasons should be identified for the point of failure including status codes for all lines on the Field Ticket, i.e. when processing the Field Ticket, if more than one dispute is found on the Field Ticket, all disputed line items should be identified for accuracy, the processing of the Field Ticket Response should not stop at the first occurrence of a dispute, the whole Field Ticket should be processed.<br>• Field Ticket and Field Ticket Response should be transmitted via the same communication channel.<br>• Each Field Ticket transaction will receive a corresponding Field Ticket Response transaction. |

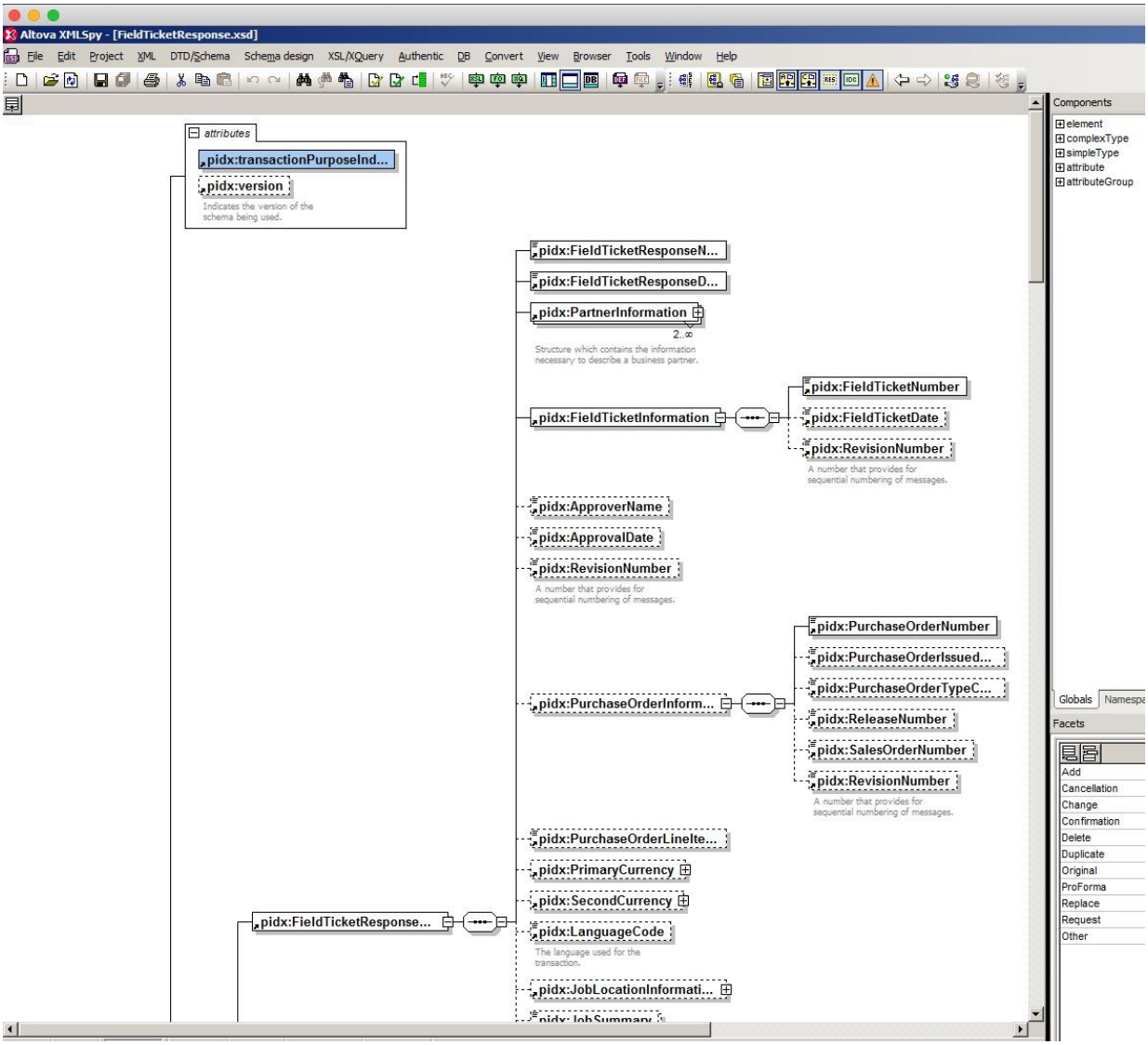
# APPENDIX A - ENHANCING PIDX FIELD TICKET RESPONSE SCHEMA

This document is the specification review for the changes to the FieldTicketResponse Schema (V1.61) as documented in the Project Team Proposal for the above project.

## Current Schema Design

The PIDX FieldTicketResponse schema has status and transaction codes already defined. At the transaction header level there are transaction indicator codes as shown here:

## Message Header transactionPurposeIndicator attribute

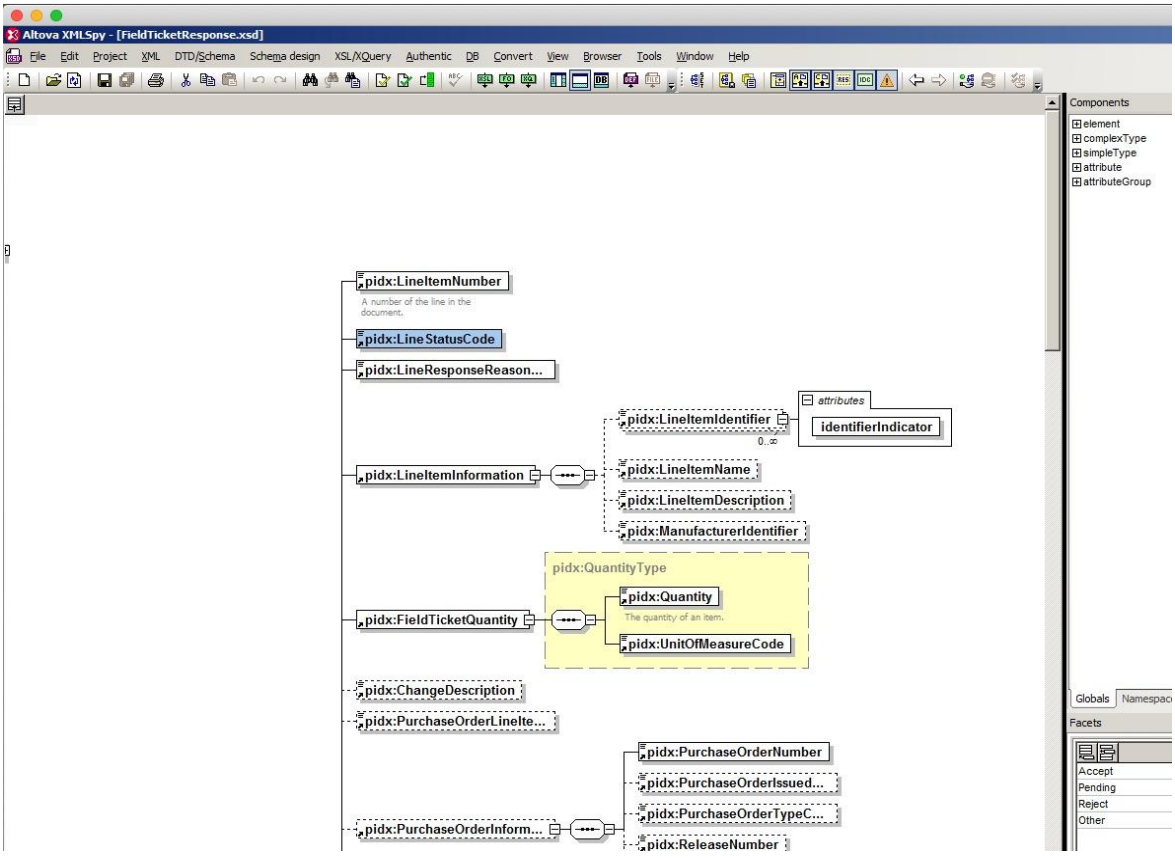


The current transaction purpose codes are defined globally for all PIDX schemas and documents and are included in the schema definition file PIDXCodeLists.xsd.:

```
<simpleType name="TransactionPurposeIndicatorType">
        <restriction base="NMTOKEN">
            <enumeration value="Add"/>
            <enumeration value="Cancellation"/>
            <enumeration value="Change"/>
            <enumeration value="Confirmation"/>
            <enumeration value="Delete"/>
            <enumeration value="Duplicate"/>
            <enumeration value="Original"/>
            <enumeration value="ProForma"/>
            <enumeration value="Replace"/>
            <enumeration value="Request"/>
            <enumeration value="Other"/>
        </restriction>
</simpleType>
```

## Line Item LineStatusCode Data Element

Line item status codes are already defined in the schema as shown below:



These codes are defined in the schema definition file PIDXCodeLists.xsd.:

```
<simpleType name="LineStatusCodeType">
        <restriction base="NMTOKEN">
            <enumeration value="Accept"/>
            <enumeration value="Pending"/>
            <enumeration value="Reject"/>
            <enumeration value="Other"/>
        </restriction>
</simpleType>
```

### Line Item LineResponseReasonCode Data Element

This required line item data element is a free format text field that can be set to any value of any length. Currently there is no enumerated list of reason codes to restrict this data element to.
These status codes at the header and line item levels are used by many PIDX Schemas such as Invoice, Order and Quote.

### PtP Requirements

The PtP calls for a review on whether there needs to be changes made to the FieldTicketResponse schema to handle the requirements of the changes to process flows documented by the project.

On first technical review, by using the three data elements discussed above with their default list of values and the capability to assign any value to the LineResponseReasonCode data element, the current schema design can be utilized without change to accommodate almost all the status messaging called for in the PtP.

The PtP calls for the following status codes to be added to the PIDX Schemas. There are codes that can be used which already exist which will meet some of the requirements. Where there are FieldTicketResponse specific codes, changes to the FieldTicketResponse schema only need to be made. Comments on how these can be accommodated in the FieldTicketResponse schema are shown in the table below.

***1XX Series - Field Ticket Service Request***
***2XX Series - Field Ticket Service Performance***
***3XX Series - Field Ticket Invoice Status***

| Status Code - Description<br><br>Comments | Header or Line Item | Comments on potential Schema Changes Proposed |
|---|---|---|
| 101 - Operator Request Manual<br><br>Operator request for services submitted manually, i.e. phone call. | Header | *transactionPurposeIndicator* already has a status code for **Request.** Need some form of flag to show it is a Manual request |
| 102 - Operator Request Electronic<br><br>Operator request for services submitted electronic, IoT, electronic communications, etc. | Header | *transactionPurposeIndicator* already has a status code for **Request.** Default is for electronic |
| 103 - Acknowledgement<br><br>Acknowledgement by supplier that services can be performed. | Header | *transactionPurposeIndicator* already has a status code for **Confirmation** (as Acknowledgement) |
| 104 - Plan<br><br>Supplier plan for services to be perform. | Header | *transactionPurposeIndicator* already has a status code for **ProForma** (could be used as Plan) |
| 200 - Started<br><br>Service Work has started | Line | *LineStatusCode* set to **Pending**<br>Set *LineResponseReasonCode* to **Service Work Started** |
| 201 - Complete<br><br>Supplier notification of services complete | Line | *LineStatusCode* set to **Pending**<br>Set *LineResponseReasonCode* to **Service Work Complete** |
| 202 - Confirmation of Services By Operator<br><br>Signed ticket or electronic confirmation. Of services Does not indicate that the field ticket or lines, i.e. service price, quantities, performance, etc. was approved by operator | Line | *LineStatusCode* set to **Accept**<br>Set *LineResponseReasonCode* to **Confirmation of Services by Operator** |
| 250 - Rejected Service Request<br><br>Rejection of a request for services by a supplier | Line | *LineStatusCode* set to **Reject**<br>Set *LineResponseReasonCode* to **Supplier Rejects Request for Services by Operator** |
| 251 - Rejected Performance<br><br>Rejection of services performed by supplier by operator | Line | *LineStatusCode* set to **Reject**<br>Set *LineResponseReasonCode* to **Rejection By Operator** |
| 252 - Rejected No Signature | Line | *LineStatusCode* set to **Reject**<br>Set *LineResponseReasonCode* to **No Confirmation or Signature** |

| | | |
|---|---|---|
| Rejection of field ticket as result of no confirmation, i.e., electronic confirmation or manual signature | | |
| 253 - Rejected Charge Coding Error<br><br>Rejection of field ticket as a result of incorrect charge code, i.e. WBS, Cost Center, Network, Project, or other cost object, etc. | Line | *LineStatusCode* set to **Reject**<br>Set *LineResponseReasonCode* to **Incorrect Charge Code** |
| 254 - Rejected United Of Measurement<br><br>Rejection of field ticket as a result of incorrect line item unit of measurement | Line | *LineStatusCode* set to **Reject**<br>Set *LineResponseReasonCode* to **Incorrect UOM** |
| 255 - Rejected User ID<br><br>Rejection of field ticket as a result of incorrect user id | Line | *LineStatusCode* set to **Reject**<br>Set *LineResponseReasonCode* to **Incorrect User ID** |
| 256 - Rejected Price<br><br>Rejection of field ticket as a result of incorrect line price issue. | Line | *LineStatusCode* set to **Reject**<br>Set *LineResponseReasonCode* to **Incorrect Line Price Issue.** |
| 300 - Approval<br><br>Invoice approval status as it related to a field ticket | Header | Need to understand if this is applicable, Invoice Response should be used to show invoice approval. There can be many field tickets per invoice, this would require many field ticket responses sent with the same one invoice number to implement this process |
| 301 - Payment<br><br>Invoice payment status as it relates to a field ticket. | Header | Need to understand if this is applicable, Remittance Advice should be used to show payment status. Often a single payment covers more than one invoice and one invoice can cover many field tickets |

Sample PIDX XML Documents showing some of the status code implementations from the table are shown Appendix B.

## Recommended Approach

Changes to the underlying Header and Line Item enumerated elements (TransactionPurposeIndictatorType and LineStatusCodeType) will affect many message schemas as mentioned above (Order, Invoice etc.) and if it can be avoided it will lessen the impact of changes to the FieldTicketResponse implementation.

Since almost all the necessary data fields and enumerated values already exist in V1.61 of the FieldTicketResponse schema, the recommended approach is to write a

guideline on how to use these data elements and attributes in order to implement the PtP status messaging described in this PtP. An implementation guide showing the process flow and sample messaging for each scenario listed in the table above should be included in the guideline.

Once written, the guideline should be reviewed by the Project Team for completeness and for sign off and then published as an official PIDX Implementation Guide.

## Outstanding Questions and Comments

The Operator Request Electronic code can be implemented using the *transactionPurposeIndicator* attribute with a value set to **Request.** All PIDX XML documents are by default Electronic.

For the Operator Request Manual code, some form of flag to show it is a Manual request will need to be implemented. A discussion on the requirement for this flag needs to take place with the Project Team so it can be understood how best to implement this from the process flow.

# APPENDIX B - SAMPLE STATUS MESSAGING TO MEET THE PTP REQUIREMENTS

| | | |
|---|---|---|
| 103 - Acknowledgement<br><br>Acknowledgement by supplier that services can be performed. | Header | *transactionPurposeIndicator* already has a status code for **Confirmation** (as Acknowledgement) |

| | | |
|---|---|---|
| 200 - Started<br><br>Service Work has started | Line | *LineStatusCode* set to **Pending**<br>Set *LineResponseReasonCode* to **Service Work Started** |

```
<?xml version="1.0" encoding="UTF-8"?>
<pidx:FieldTicketResponse pidx:transactionPurposeIndicator="Confirmation" pidx:version="1.61" xsi:schemaLocation="
http://www.pidx.org/schemas/v1.61 FieldTicketResponse.xsd" xmlns:pidx="http://www.pidx.org/schemas/v1.61" xmlns:xsi="
http://www.w3.org/2001/XMLSchema-instance">
  <pidx:FieldTicketResponseProperties>
    <pidx:FieldTicketResponseNumber>770002534</pidx:FieldTicketResponseNumber>
    <pidx:FieldTicketResponseDate>2019-02-14</pidx:FieldTicketResponseDate>
    <pidx:PartnerInformation partnerRoleIndicator="ThirdParty" definitionOfOther="String">
    <pidx:PartnerInformation partnerRoleIndicator="FinalRecipient" definitionOfOther="String">
    <pidx:PartnerInformation partnerRoleIndicator="Consignee" definitionOfOther="String">
    <pidx:FieldTicketInformation>
      <pidx:FieldTicketNumber>340001234</pidx:FieldTicketNumber>
    </pidx:FieldTicketInformation>
  </pidx:FieldTicketResponseProperties>
  <pidx:FieldTicketResponseDetails>
    <pidx:FieldTicketResponseLineItem>
      <pidx:LineItemNumber>0001</pidx:LineItemNumber>
      <pidx:LineStatusCode>Pending</pidx:LineStatusCode>
      <pidx:LineResponseReasonCode>Service Work Started</pidx:LineResponseReasonCode>
      <pidx:LineItemInformation/>
      <pidx:FieldTicketQuantity>
    </pidx:FieldTicketResponseLineItem>
    <pidx:FieldTicketResponseLineItem>
      <pidx:LineItemNumber>0002</pidx:LineItemNumber>
      <pidx:LineStatusCode>Pending</pidx:LineStatusCode>
      <pidx:LineResponseReasonCode>Service Work Started</pidx:LineResponseReasonCode>
      <pidx:LineItemInformation/>
      <pidx:FieldTicketQuantity>
    </pidx:FieldTicketResponseLineItem>
    <pidx:FieldTicketResponseLineItem>
      <pidx:LineItemNumber>0003</pidx:LineItemNumber>
      <pidx:LineStatusCode>Accept</pidx:LineStatusCode>
      <pidx:LineResponseReasonCode>Confirmation of Services by Operator</pidx:LineResponseReasonCode>
      <pidx:LineItemInformation/>
      <pidx:FieldTicketQuantity>
    </pidx:FieldTicketResponseLineItem>
  </pidx:FieldTicketResponseDetails>
  <pidx:FieldTicketResponseSummary>
    <pidx:TotalLineItems>3</pidx:TotalLineItems>
  </pidx:FieldTicketResponseSummary>
</pidx:FieldTicketResponse>
```

| | | |
|---|---|---|
| 102 - Operator Request Electronic<br><br>Operator request for services submitted electronic, IoT, electronic communications, etc. | Header | *transactionPurposeIndicator* already has a status code for **Request.** Default is for electronic |

| | | |
|---|---|---|
| 251 - Rejected Performance<br><br>Rejection of services performed by supplier by operator | Line | *LineStatusCode* set to **Reject**<br>Set *LineResponseReasonCode* to **Rejection By Operator** |

| | | |
|---|---|---|
| 256 - Rejected Price<br><br>Rejection of field ticket as a result of incorrect line price issue. | Line | *LineStatusCode* set to **Reject**<br>Set *LineResponseReasonCode* to **Incorrect Line Price Issue.** |

```
<?xml version="1.0" encoding="UTF-8"?>
<pidx:FieldTicketResponse pidx:transactionPurposeIndicator="Request" pidx:version="1.61" xsi:schemaLocation="
http://www.pidx.org/schemas/v1.61 FieldTicketResponse.xsd" xmlns:pidx="http://www.pidx.org/schemas/v1.61" xmlns:xsi="
http://www.w3.org/2001/XMLSchema-instance">
  <pidx:FieldTicketResponseProperties>
    <pidx:FieldTicketResponseNumber>770002534</pidx:FieldTicketResponseNumber>
    <pidx:FieldTicketResponseDate>2019-02-14</pidx:FieldTicketResponseDate>
    <pidx:PartnerInformation partnerRoleIndicator="ThirdParty" definitionOfOther="String">
    <pidx:PartnerInformation partnerRoleIndicator="FinalRecipient" definitionOfOther="String">
    <pidx:PartnerInformation partnerRoleIndicator="Consignee" definitionOfOther="String">
    <pidx:FieldTicketInformation>
      <pidx:FieldTicketNumber>340001234</pidx:FieldTicketNumber>
    </pidx:FieldTicketInformation>
  </pidx:FieldTicketResponseProperties>
  <pidx:FieldTicketResponseDetails>
    <pidx:FieldTicketResponseLineItem>
      <pidx:LineItemNumber>0001</pidx:LineItemNumber>
      <pidx:LineStatusCode>Reject</pidx:LineStatusCode>
      <pidx:LineResponseReasonCode>Rejection By Operator</pidx:LineResponseReasonCode>
      <pidx:LineItemInformation/>
      <pidx:FieldTicketQuantity>
    </pidx:FieldTicketResponseLineItem>
    <pidx:FieldTicketResponseLineItem>
      <pidx:LineItemNumber>0002</pidx:LineItemNumber>
      <pidx:LineStatusCode>Reject</pidx:LineStatusCode>
      <pidx:LineResponseReasonCode>Incorrect Line Price Issue</pidx:LineResponseReasonCode>
      <pidx:LineItemInformation/>
      <pidx:FieldTicketQuantity>
    </pidx:FieldTicketResponseLineItem>
  </pidx:FieldTicketResponseDetails>
  <pidx:FieldTicketResponseSummary>
    <pidx:TotalLineItems>2</pidx:TotalLineItems>
  </pidx:FieldTicketResponseSummary>
</pidx:FieldTicketResponse>
```