Service Data Format
Partner Systems Interface
Technical Implementation
Version 1.5
May 2015
## Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0 Introduction</td>
<td>2</td>
</tr>
<tr>
<td>2.0 Web Service</td>
<td>2</td>
</tr>
<tr>
<td>3. XML Format</td>
<td>4</td>
</tr>
<tr>
<td>3.1 Basic Structure</td>
<td>4</td>
</tr>
<tr>
<td>3.2 Format Types</td>
<td>4</td>
</tr>
<tr>
<td>3.3 New Service Order</td>
<td>5</td>
</tr>
<tr>
<td>3.4 Transaction Status</td>
<td>7</td>
</tr>
<tr>
<td>3.5 Claim Submission</td>
<td>9</td>
</tr>
<tr>
<td>3.6 Parts Ordering</td>
<td>10</td>
</tr>
<tr>
<td>3.6.1 Create Parts Order</td>
<td>10</td>
</tr>
<tr>
<td>3.6.2 Parts Order Status</td>
<td>11</td>
</tr>
<tr>
<td>3.6.3 Create Parts Return</td>
<td>13</td>
</tr>
<tr>
<td>3.6.4 Parts Return Status</td>
<td>14</td>
</tr>
<tr>
<td>3.7 Models and Parts</td>
<td>16</td>
</tr>
<tr>
<td>3.8 Ticket Retrieval</td>
<td>21</td>
</tr>
<tr>
<td>4.0 Process Flow</td>
<td>23</td>
</tr>
<tr>
<td>5.0 Manufacturer Specific Details</td>
<td>24</td>
</tr>
</tbody>
</table>
1.0 Introduction

This document provides technical details for implementing a standard system interface based on the Digital Europe Service Data Format (DSDF). The document is intended for use by manufacturers, service centres, and other service partners that wish to implement a standard interface based on DSDF version 1.2 or above.

This document should be read in conjunction with the DSDF data and record definition document.

The use of the word ‘transaction’ in this document means a single synchronous data transmission from one partner system to another.

2.0 Web Service

DSDF data exchange will be processed over web services where the following functionality can be provided by manufacturers:

- Creation of new repair tickets
- Retrieval of repair ticket details including status
- Updating of repair ticket details including status
- Claim submission based on an existing ticket or new ticket
- Parts ordering and parts ordering status
- Retrieval of model lists, parts lists, and part status information
- Return parts for repair or exchange

Service partners can also provide a web service host for the following functionality:

- Creation of new repair tickets
- Status update for existing tickets

Each partner implementing the web service should implement a single web service method:

string DSDF(string InXML)

The method, named DSDF, takes a single input parameter containing an XML data structure with a specific format (described below).

The method returns a single output value which contains an XML data structure with a specific format (also described below).

A DSDF transaction consists of a single call to the DSDF method with a single XML input parameter and a single XML output value returned synchronously as the result. Whilst all DSDF transactions are synchronous, the process flow defined by a number of DSDF transactions over time is naturally asynchronous.

The URL of the web service is necessarily partner specific but it should be based over Secure Sockets Layer (SSL) to provide a secure HTTP channel (HTTPS).

Each manufacturer implementing the DSDF interface will provide a web service with the DSDF() method. It is the preferred mechanism that all other service partners also provide an implementation of the web service host in order to receive new tickets and status updates.

However, in some cases it is necessary for partners to avoid the implementation of a web service host and an alternative polling mechanism can be used by agreement with the manufacturer.
For each partner implementing a web service host, the following details will need to be exchanged with the other communicating partners:

- URL of the production web service (and test service if available)
- Login ID and password

All services should accept passwords as both an MD5 hash (preferred) or as clear text. In some cases it may be necessary for a different type of password token to be used between partners and this should be agreed with the manufacturer.

The diagram below illustrates the possible architecture of web service clients and shared hosts between manufacturers and service partners.
3.0 XML Format

3.1 Basic Structure

DSDF transaction XML is structured using data fields defined by the DSDF data format. The mainData container is always mandatory but other containers are only relevant depending on the transaction type. Only fields that contain a value need to be specified and unused fields can be omitted. The ordering of the fields is of no significance.

The basic XML structure for a DSDF transaction is

```xml
<?xml version="1.0" encoding="utf-8"?>
<DSDF xmlns="http://www.digitaleurope.org/ns/dsdf">
  <mainData>
    <mainDataBatchDocumentType>Transaction Code</mainDataBatchDocumentType>
    <mainDataVersionNumber>12</mainDataVersionNumber>
    <mainDataManufacturerName>Manufacturer</mainDataManufacturerName>
    <mainDataManufacturerCountryID>ISO Country Code</mainDataManufacturerCountryID>
    <mainDataSystemUserAuthentication>MD5P or CLRP</mainDataSystemUserAuthentication>
    <mainDataSystemUserLogin>Login ID</mainDataSystemUserLogin>
    <mainDataSystemUserPassword>Password or Hash</mainDataSystemUserPassword>
    <mainDataSystemUserLanguage>ISO Language Code</mainDataSystemUserLanguage>
    Other mainData fields ...
  </mainData>
  Other Containers ...
</DSDF>
```

3.2 Format Types

The mainData field mainDataBatchDocumentType defines the type of transaction that the XML data contains:

- ORD – XML contains a new service order (ticket)
- ORU – XML contains an update to an existing ticket
- CLA – XML contains a claim submission based on an existing ticket reference or new claim data
- PAR – XML contains a spare part order
- MLR – XML contains a request for a list of models or parts or the status of a single part
- TLR – XML contains a request for a list of new tickets
- TRQ – XML contains a request for ticket details
- PSR – XML contains spare part order status request
- PRX – XML contains a parts return request
- PRR – XML contains a parts return status request

In processing these transaction types the following XML format types can be returned from the DSDF method:

- RET – XML contains the transaction status either OK or Error with error details
- ORD – XML contains a service order (ticket)
- MLS – XML contains a list of models or parts or details for a single part
- TLS – XML contains a list of ticket references
- PSS – XML contains spare part order status information
- PRS – XML contains parts return status information
In addition, the following transaction types are also supported but are not covered in this document. These transaction types may be manufacturer specific and you should check the required format and usage with the relevant manufacturer.

- CLU - Warranty Claim update
- PAU - Parts Order update
- STA - Status update request
- RAR - Repair Authorization Number request
- RAU - Repair Authorization Number update

3.3 New Service Order (Ticket)

A new ticket can originate from either the manufacturer or a service partner and should be notified to the manufacturer or service partner as appropriate. A new ticket transmitted to the assigned service partner should contain a status code (statusDataState) of TS to indicate that it is being submitted. A partner receiving a TS status code should send back a TC status code (in an ORU transaction) to confirm acceptance of the ticket.

An example of a new service order is:

```xml
<xml version="1.0" encoding="utf-8"?>
<DSDF xmlns="http://www.digitaleurope.org/ns/dsdf">
<mainData>
<mainDataBatchDocumentType>ORD</mainDataBatchDocumentType>
<mainDataVersionNumber>12</mainDataVersionNumber>
<mainDataManufacturerName>PANASONIC</mainDataManufacturerName>
<mainDataManufacturerCountryID>DE</mainDataManufacturerCountryID>
<mainDataSystemUserAuthentication>MD5P</mainDataSystemUserAuthentication>
<mainDataSystemUserLogin>MyLoginCode</mainDataSystemUserLogin>
<mainDataSystemUserPassword>F881D820A5078301EF5AAFCC63AD4A16</mainDataSystemUserPassword>
<mainDataSystemUserLanguage>DE</mainDataSystemUserLanguage>
<mainDataCustomerIDSystem>12345678</mainDataCustomerIDSystem>
<mainDataIncidentNumberSystem>10012345678</mainDataIncidentNumberSystem>
</mainData>

<productData>
<productDataBrand>PANASONIC</productDataBrand>
<productDataProductTypeNumber>TX-P42GW20</productDataProductTypeNumber>
<productDataSerialNumber>5H92200684</productDataSerialNumber>
<productDataPurchaseDate>2011-08-20</productDataPurchaseDate>
</productData>

<repairData>
<repairDataRepairOOWRequested>N</repairDataRepairOOWRequested>
<repairDataErrorConditionCode>1</repairDataErrorConditionCode>
<repairDataErrorSymptomCode>123</repairDataErrorSymptomCode>
<repairDataErrorDescription>Picture out of focus</repairDataErrorDescription>
<repairDataHandlingType>HS</repairDataHandlingType>
<repairDataRepairPreferredAppointmentDate>2012-09-25</repairDataRepairPreferredAppointmentDate>
<repairDataRepairPreferredAppointmentTime>09:00</repairDataRepairPreferredAppointmentTime>
</repairData>

<statusDataGroup>
<statusData>
<statusDataState>TS</statusDataState>
<statusDataTimeStamp>2012-09-22T09:15:00</statusDataTimeStamp>
</statusData>
<statusData>
<statusDataMessageSequenceNumber>10</statusDataMessageSequenceNumber>
<statusDataState>A11</statusDataState>
<statusDataTimeStamp>2012-09-22T09:15:00</statusDataTimeStamp>
</statusData>
</statusDataGroup>
```
<ownerAddressData>
  <ownerAddressDataSalutation>Herr</ownerAddressDataSalutation>
  <ownerAddressDataFirstName>Stefan</ownerAddressDataFirstName>
  <ownerAddressDataName>Schmidt</ownerAddressDataName>
  <ownerAddressDataStreet>Hanauer Landstr. 98</ownerAddressDataStreet>
  <ownerAddressDataCity>Hamburg</ownerAddressDataCity>
  <ownerAddressDataCountry>DE</ownerAddressDataCountry>
  <ownerAddressDataZipcode>22525</ownerAddressDataZipcode>
  <ownerAddressDataContactPhone>01234 123456</ownerAddressDataContactPhone>
  <ownerAddressDataContactEMail>Stefan.Schmidt@schmidt.de</ownerAddressDataContactEMail>
</ownerAddressData>
<dealerAddressData>
  <dealerAddressDataName>Marcus Starkoff GmbH</dealerAddressDataName>
  <dealerAddressDataStreet>Zittauer Str. 31</dealerAddressDataStreet>
  <dealerAddressDataZipcode>12245</dealerAddressDataZipcode>
  <dealerAddressDataCity>Berlin</dealerAddressDataCity>
  <dealerAddressDataCountry>DE</dealerAddressDataCountry>
</dealerAddressData>
</DSDF>

Note that a container which can be repeated (such as statusData) will have a group name as an outer container and these names are derived from the main container name with ‘Group’ appended (e.g. statusDataGroup).

When repeating containers have a message sequence number (such as statusDataMessageSequenceNumber) then this must be specified if the data record should be persisted across multiple transactions.

In this example, the TS status code does not need to be persisted across further transmissions and the sequence number is omitted. The A11 status code (Appointment Proposed) should be persisted across further transmissions (in this example) so the sequence number 10 has been specified. In further transmissions the same sequence number should be used so that the receiving system can determine where the record has been modified or has been deleted. Any record with a sequence number should be deleted if it does not appear in subsequent transmissions. It is acceptable to reuse sequence numbers after one has been deleted by being omitted from a transmission (but cannot be reused during the same delete transaction).
### 3.4 Transaction Status

When a new ticket transaction is processed, the DSDF method will return an XML structure with a `mainDataBatchDocumentType` of RET.

RET-XML = DSDF(NewTicketXML)

The basic XML structure for a RET type is

```xml
<?xml version="1.0" encoding="utf-8"?>
<DSDF xmlns="http://www.digitaleurope.org/ns/dsdf">
  <mainData>
    <mainDataBatchDocumentType>RET</mainDataBatchDocumentType>
    <mainDataVersionNumber>12</mainDataVersionNumber>
    <mainDataManufacturerName>Manufacturer</mainDataManufacturerName>
    <mainDataManufacturerCountryID>ISO Country Code</mainDataManufacturerCountryID>
    <mainDataSystemResultCode>0 or 1</mainDataSystemResultCode>
    <mainDataSystemResultInfo>Additional information about the result</mainDataSystemResultInfo>
    Other mainData fields ...
  </mainData>
</DSDF>
```

This XML RET type is used as a general structure to return the transaction result.

The `mainDataSystemResultCode` field is

- 0 – The transaction/transmission was successful
- 1 – The transaction failed and error information is specified in one or more `statusData` records

The `mainDataSystemResultInfo` field is for additional information about the result of a transaction and may contain a transaction type dependant reference.

Where a `mainData` DSDF reference field exists then this should be used to return the receiving partner’s reference if it is known at the time.

An example of a RET return is:

```xml
<?xml version="1.0" encoding="utf-8"?>
<DSDF xmlns="http://www.digitaleurope.org/ns/dsdf">
  <mainData>
    <mainDataBatchDocumentType>RET</mainDataBatchDocumentType>
    <mainDataVersionNumber>12</mainDataVersionNumber>
    <mainDataManufacturerName>PANASONIC</mainDataManufacturerName>
    <mainDataManufacturerCountryID>DE</mainDataManufacturerCountryID>
    <mainDataSystemResultCode>0</mainDataSystemResultCode>
    <mainDataIncidentNumberSystem>10101391</mainDataIncidentNumberSystem>
  </mainData>
</DSDF>
```
If an error occurs during the processing of a transaction then error information will be returned in `statusData` records as standard DSDF status codes or as manufacturer specific DSDF status codes beginning with X.

All descriptions should be returned in the requested language (`mainDataSystemUserLanguage`) where possible. The use of manufacturer specific codes should still allow the calling partner to handle the errors in a general manner. Standard codes should be used where one exists for the same error condition.

For example:

```xml
<?xml version="1.0" encoding="utf-8"?>
<DSDF xmlns="http://www.digitaleurope.org/ns/dsdf">
<mainData>
  <mainDataBatchDocumentType>RET</mainDataBatchDocumentType>
  <mainDataVersionNumber>12</mainDataVersionNumber>
  <mainDataManufacturerName>PANASONIC</mainDataManufacturerName>
  <mainDataManufacturerCountryID>DE</mainDataManufacturerCountryID>
  <mainDataSystemResultCode>1</mainDataSystemResultCode>
</mainData>
<statusDataGroup>
  <statusData>
    <statusDataTimeStamp>2012-09-26T17:22:37</statusDataTimeStamp>
    <statusDataState>143</statusDataState>
    <statusDataCommentInternal>Nicht für den Kunden Autorisierte Login</statusDataCommentInternal>
  </statusData>
  <statusData>
    <statusDataTimeStamp>2012-09-26T17:22:39</statusDataTimeStamp>
    <statusDataState>132</statusDataState>
    <statusDataCommentInternal>Nicht für dieses Modell genehmigt</statusDataCommentInternal>
  </statusData>
</statusDataGroup>
</DSDF>
```

Status codes beginning with 'I' are defined as interface status codes and I11 is defined as 'Interface function not implemented'. Therefore, if a manufacturer does not implement all transaction types then code I11 should be returned as a status code with an additional comment if necessary.
3.5 Claim submission

A warranty claim can be submitted to a manufacturer using the CLA transaction type. The CLA type can be used in two main ways; to submit a claim based on an existing service order ticket or to submit a standalone claim without an existing ticket. A mixture of the two methods can be used so that an existing server order ticket is used for the base information and additional claim information is supplemented with the transaction.

If a claim is not standalone and involves a repair ticket then it is simpler to process ORD and ORU transactions on the ticket and then to submit the claim with a basic CLA transaction.

For example:

```xml
<?xml version="1.0" encoding="utf-8"?>
<DSDF xmlns="http://www.digitaleurope.org/ns/dsdf"
<mainData>
<mainDataBatchDocumentType>CLA</mainDataBatchDocumentType>
<mainDataVersionNumber>12</mainDataVersionNumber>
<mainDataManufacturerName>PANASONIC</mainDataManufacturerName>
<mainDataManufacturerCountryID>DE</mainDataManufacturerCountryID>
<mainDataSystemUserAuthentication>MD5P</mainDataSystemUserAuthentication>
<mainDataSystemUserLogin>MyLoginCode</mainDataSystemUserLogin>
<mainDataSystemUserPassword>F881DB20A507B8301EF5AFC63AD4A16</mainDataSystemUserPassword>
<mainDataSystemUserLanguage>DE</mainDataSystemUserLanguage>
<mainDataCustomerIDSystem>10012345678</mainDataCustomerIDSystem>
<mainDataIncidentNumberSystem>12345678</mainDataIncidentNumberSystem>
</mainData>
</DSDF>
```

This CLA transaction is used to submit a claim based on an existing ticket.

In general a repair ticket can be specified by either `mainDataIncidentNumberSystem` (where the leading system is the manufacturer system) or by the workshop’s reference using both `mainDataCustomerIDSystem` and `mainDataIncidentNumberWorkshop`. It is not necessary to specify both `mainDataIncidentNumberSystem` and `mainDataIncidentNumberWorkshop`.

For a CLA transaction, the DSDF method will return a RET XML type to indicate success or failure with `statusData` records when relevant.
3.6 Parts Ordering

Parts ordering covers the basic transaction to create a spare parts order and also transactions to check the status of an order and to process the returning of parts involved in an exchange or repair scheme.

3.6.1 Create Parts Order

The PAR transaction can be used to submit a spare parts order where a spare part order can be linked to an existing repair ticket or can be a standalone parts order (e.g. for stock).

The basic XML structure for a PAR transaction is:

```xml
<?xml version="1.0" encoding="utf-8"?>
<DSDF xmlns="http://www.digitaleurope.org/ns/dsdl">
  <mainData>
    <mainDataBatchDocumentType>PAR</mainDataBatchDocumentType>
    <mainDataVersionNumber>12</mainDataVersionNumber>
    <mainDataManufacturerName>Manufacturer</mainDataManufacturerName>
    <mainDataManufacturerCountryID>ISO Country Code</mainDataManufacturerCountryID>
    <mainDataSystemUserAuthentication>MDSP or CLR</mainDataSystemUserAuthentication>
    <mainDataSystemUserLogin>Login ID</mainDataSystemUserLogin>
    <mainDataSystemUserPassword>Password or Hash</mainDataSystemUserPassword>
    <mainDataCustomerIDSystem>Manufacturer customer/account number</mainDataCustomerIDSystem>
    <mainDataCustomerIDCall>Optional manufacturer location number for order delivery</mainDataCustomerIDCall>
    <mainDataIncidentNumberSystem>Optional repair ticket number if linked to repair</mainDataIncidentNumberSystem>
    <mainDataIncidentNumberCall>Parts order reference or purchase order number</mainDataIncidentNumberCall>
  </mainData>
  <partDataGroup>
    <partData>
      <partDataMessageSequenceNumber>Part 1 Sequence Number</partDataMessageSequenceNumber>
      <partDataMaterialQuantity>Part 1 Quantity</partDataMaterialQuantity>
      <partDataOrderReference>Part 1 Reference (optional)</partDataOrderReference>
    </partData>
  </partDataGroup>
</DSDF>
```

Additional optional part fields ...

Additional part records ...

Additional part fields can be specified for the following reasons:

- To update additional part fields on a linked repair ticket
- To provide further part information required for the ordering process (e.g. exchange orders)
An example PAR transaction is:

```xml
<?xml version="1.0" encoding="utf-8"?>
<DSDF xmlns="http://www.digitaleurope.org/ns/dsdf">
  <mainData>
    <mainDataBatchDocumentType>PAR</mainDataBatchDocumentType>
    <mainDataVersionNumber>12</mainDataVersionNumber>
    <mainDataManufacturerName>PANASONIC</mainDataManufacturerName>
    <mainDataManufacturerCountryID>DE</mainDataManufacturerCountryID>
    <mainDataSystemUserAuthentication>MD5P</mainDataSystemUserAuthentication>
    <mainDataSystemUserLogin>MyLoginCode</mainDataSystemUserLogin>
    <mainDataSystemUserPassword>FD81D820A5078301EF5AFC763AD4A16</mainDataSystemUserPassword>
    <mainDataCustomerIDSystem>12345678</mainDataCustomerIDSystem>
    <mainDataCustomerIDCall>12345678-2</mainDataCustomerIDCall>
    <mainDataIncidentNumberSystem>10012345678</mainDataIncidentNumberSystem>
    <mainDataIncidentNumberCall>PurchaseRef1234</mainDataIncidentNumberCall>
  </mainData>
  <partDataGroup>
    <partData>
      <partDataMessageSequenceNumber>10</partDataMessageSequenceNumber>
      <partDataMaterialCode>RFKNEX773EC</partDataMaterialCode>
      <partDataMaterialQuantity>1</partDataMaterialQuantity>
      <partDataOrderType>X</partDataOrderType>
      <partDataConditionCode>1</partDataConditionCode>
      <partDataSymptomCode>123</partDataSymptomCode>
      <partDataSectionCode>ANT</partDataSectionCode>
      <partDataDefectCode>A</partDataDefectCode>
      <partDataRepairCode>1</partDataRepairCode>
      <partDataPositionNumber>POS1</partDataPositionNumber>
      <partDataBoardDescription>PCB2</partDataBoardDescription>
    </partData>
    <partData>
      <partDataMessageSequenceNumber>20</partDataMessageSequenceNumber>
      <partDataMaterialCode>TXNSN11DHK</partDataMaterialCode>
      <partDataMaterialQuantity>1</partDataMaterialQuantity>
    </partData>
  </partDataGroup>
</DSDF>

Since this parts order is linked to an existing repair ticket then the parts will be added to the ticket and the defect information will be updated with the specified details.

Some manufacturers may run an exchange part ordering process and in this case the partDataOrderType field specifies the required ordering type (Normal or eXchange) when the exchange process is optional.

Also, some manufacturers may require further repair information to be supplied with some types of parts orders and in these cases any additional data required will be taken from the linked repair ticket. If additional repair data is required and there is no linked repair or the data is missing then an error will be returned.

For the PAR transaction type, a RET XML structure will be returned providing any error information in statusData records. A successful parts orders transaction will return a system reference for the order in the mainDataSystemResultInfo field.

3.6.2 Parts Order Status

The status of a parts order can be obtained using a PSR transaction. You can reference the parts order with either mainDataIncidentNumberSystem - The parts order system reference returned from the PAR transaction
or mainDataIncidentNumberCall – The parts order reference provided with the PAR transaction.

You need to provide mainDataIncidentNumberSystem or mainDataIncidentNumberCall but do not have to provide both.

```xml
<?xml version="1.0" encoding="utf-8"?>
<DSDF xmlns="http://www.digitaleurope.org/ns/dsdf"

<mainData>
<mainDataBatchDocumentType>PSR</mainDataBatchDocumentType>
<mainDataVersionNumber>14</mainDataVersionNumber>
<mainDataManufacturerName>Manufacturer</mainDataManufacturerName>
<mainDataManufacturerCountryID>ISO Country Code</mainDataManufacturerCountryID>
<mainDataSystemUserAuthentication>MDSP or CLRP</mainDataSystemUserAuthentication>
<mainDataSystemUserLogin>Login ID</mainDataSystemUserLogin>
<mainDataSystemUserPassword>Password or Hash</mainDataSystemUserPassword>
<mainDataCustomerIDSystem>System parts order reference (returned from PAR)</mainDataCustomerIDSystem>
<mainDataIncidentNumberSystem>Parts order reference or purchase order number</mainDataIncidentNumberSystem>

</mainData>
</DSDF>

A successful PSR transaction will return a PSS XML structure:

```xml
<?xml version="1.0" encoding="utf-8"?>
<DSDF xmlns="http://www.digitaleurope.org/ns/dsdf"

<mainData>
<mainDataBatchDocumentType>PSS</mainDataBatchDocumentType>
<mainDataVersionNumber>14</mainDataVersionNumber>
<mainDataManufacturerName>Manufacturer</mainDataManufacturerName>
<mainDataManufacturerCountryID>ISO Country Code</mainDataManufacturerCountryID>
<mainDataSystemResultCode>System parts order reference</mainDataSystemResultCode>
<mainDataCustomerIDSystem>Manufacturer location number for delivery</mainDataCustomerIDSystem>
<mainDataIncidentNumberSystem>Parts order reference or purchase order number</mainDataIncidentNumberSystem>

</mainData>

/partDataGroup

/partData

/partDataMessageSequenceNumber>Part sequence number</partDataMessageSequenceNumber>
/partDataMaterialCode>Part code</partDataMaterialCode>
/partDataMaterialName>Part description</partDataMaterialName>
/partDataMaterialPrice>Part price</partDataMaterialPrice>
/partDataMaterialCurrency>Part price currency</partDataMaterialCurrency>
/partDataMaterialQuantity>Part quantity</partDataMaterialQuantity>
/partDataOrderType>Order type code</partDataOrderType>
/partDataMaterialInvoiceNumber>Manufacturer invoice number where applicable</partDataMaterialInvoiceNumber>
/partDataDeliveryStatus>Current status code</partDataDeliveryStatus>
/partDataDeliveryDate>Expected dispatch date</partDataDeliveryDate>
/partDataOrderItemNumber>Manufacturer unique number for the order item</partDataOrderItemNumber>
/partDataReturnDestination>Manufacturer number for return destination where applicable</partDataReturnDestination>

</partData>

/attachmentDataGroup

/attachmentData

/attachmentDataMessageSequenceNumber>Part sequence number</attachmentDataMessageSequenceNumber>
/attachmentDataDocType>REP</attachmentDataDocType>
/attachmentDataURL>Repair report URL</attachmentDataURL>
/attachmentDataBase64Data>or repair report content</attachmentDataBase64Data>

</attachmentData>

</attachmentDataGroup>

</DSDF>
```
The partDataOrderItemNumber and partDataReturnDestination fields are provided so that, if required, a parts return request can be processed. The associated attachment (via the part sequence number) is an optional repair report that can be made available for returning parts. This is either in the form of a URL or as a document in base64 format. Typically the repair report would be printed and returned with a part involved in an exchange or repair scheme (see below).

3.6.3 Create Parts Return

Parts return can be used to process the return of parts involved in an exchange part scheme or to return a part that needs to be repaired in 1:1 repair process.

The PRX transaction can be used to batch parts together into one or more boxes and process them as a single return to the same destination. A PRX transaction consists of one pickupLogAddressData record for contact information, one pickupLogData per box being returned and one partData record for each part being returned. The parts are associated to their containing box with the pickupLogDataTransportDataMessageSequenceNumber and partDataLogSequenceNumber fields.

```xml
<?xml version="1.0" encoding="utf-8"?>
<DSDF xmlns="http://www.digitaleurope.org/ns/dsdf">
  <mainData>
    <mainDataBatchDocumentType>PRX</mainDataBatchDocumentType>
    <mainDataVersionNumber>14</mainDataVersionNumber>
    <mainDataManufacturerName>Manufacturer</mainDataManufacturerName>
    <mainDataManufacturerCountryID>ISO Country Code</mainDataManufacturerCountryID>
    <mainDataSystemUserAuthentication>MDSP or CLRP</mainDataSystemUserAuthentication>
    <mainDataSystemUserLogin>Login ID</mainDataSystemUserLogin>
    <mainDataSystemUserPassword>Password or Hash</mainDataSystemUserPassword>
    <mainDataSystemUserLanguage>ISO Language Code</mainDataSystemUserLanguage>
    <mainDataCustomerIDSystem>Manufacturer customer/account number</mainDataCustomerIDSystem>
    <mainDataCustomerIDCall>Optional manufacturer location number for pickup</mainDataCustomerIDCall>
    <mainDataIncidentNumberWorkshop>Workshop return reference</mainDataIncidentNumberWorkshop>
  </mainData>
  <pickupLogAddressData>
    <pickupLogAddressDataContactPerson>Workshop contact name</pickupLogAddressDataContactPerson>
    <pickupLogAddressDataContactPhone>Workshop contact telephone</pickupLogAddressDataContactPhone>
  </pickupLogAddressData>
  <pickupLogDataGroup>
    <pickupLogData>
      <pickupLogDataTransportDataMessageSequenceNumber>Box number</pickupLogDataTransportDataMessageSequenceNumber>
      <pickupLogDataTransportDataShippingDataPackagingWeight>Box weight (Kg)</pickupLogDataTransportDataShippingDataPackagingWeight>
      <pickupLogDataTransportDataPreferredPickupDate>YYYY-MM-DD (first box)</pickupLogDataTransportDataPreferredPickupDate>
      <pickupLogDataTransportDataPreferredPickupTime>hh:mm (first box)</pickupLogDataTransportDataPreferredPickupTime>
      <pickupLogDataTransportDataShippingDataInformationGeneral>Note (first)</pickupLogDataTransportDataShippingDataInformationGeneral>
    </pickupLogData>
  </pickupLogDataGroup>
  <partDataGroup>
    <partData>
      <partDataLogSequenceNumber>Box number</partDataLogSequenceNumber>
      <partDataOrderItemNumber>Manufacturer unique number for the order item (from PSS)</partDataOrderItemNumber>
      <partDataReturnDestination>Manufacturer number for return destination (from PSS)</partDataReturnDestination>
    </partData>
  </partDataGroup>
</DSDF>
```

There should be only one pickupLogAddressData record. There may be more than one pickupLogData records if more than one box is being sent in the batch to the same destination.
The pickupLogDataTransportDataPreferredPickupDate, pickupLogDataTransportDataPreferredPickupTime, and pickupLogDataTransportDataShippingDataInformationGeneral apply to the whole batch of boxes and should only be specified on the first pickupLogData record or be the same on all pickupLogData records.

There must be at least the same number of partData records as pickupLogData records. The number of records will be the same if there is only one part in each box or there will be more partData records that pickupLogData records where there is more than one part in at least one of the boxes.

If mainDataCustomerIDCall is not specified then it is assumed to be the same as mainDataCustomerIDSystem. The location mainDataCustomerIDCall associated with orders from partDataOrderItemNumber must match.

The partDataReturnDestination must match the one returned from a PSR order status transaction and they must be all the same for all parts in the batch being returned. If there are different destinations that parts have to be returned to, then a PRX transaction should be processed for each different destination.

A successful parts return transaction will return a system return reference number for the new parts return.

### 3.6.4 Parts Return Status

Parts return status can be requested with a PRR transaction.

```xml
<?xml version="1.0" encoding="utf-8"?>
<DSDF xmlns="http://www.digitaleurope.org/ns/dsdf">
  <mainData>
    <mainDataBatchDocumentType>PRR</mainDataBatchDocumentType>
    <mainDataVersionNumber>14</mainDataVersionNumber>
    <mainDataManufacturerName>Manufacturer</mainDataManufacturerName>
    <mainDataManufacturerCountryID>ISO Country Code</mainDataManufacturerCountryID>
    <mainDataSystemUserAuthentication>MDSP or CLRP</mainDataSystemUserAuthentication>
    <mainDataSystemUserLogin>Login ID</mainDataSystemUserLogin>
    <mainDataSystemUserPassword>Password or Hash</mainDataSystemUserPassword>
    <mainDataSystemUserLanguage>ISO Language Code</mainDataSystemUserLanguage>
    <mainDataCustomerIDSystem>Manufacturer customer/account number</mainDataCustomerIDSystem>
    <mainDataIncidentNumberSystem>System return reference (returned from PRX)</mainDataIncidentNumberSystem>
  </mainData>
</DSDF>
```
A successful PRR transaction will return a PRS XML structure:

```xml
<?xml version="1.0" encoding="utf-8"?>
<DSDF xmlns="http://www.digitaleurope.org/ns/dsdf">
  <mainData>
    <mainDataBatchDocumentType>PRS</mainDataBatchDocumentType>
    <mainDataVersionNumber>14</mainDataVersionNumber>
    <mainDataManufacturerName>Manufacturer</mainDataManufacturerName>
    <mainDataManufacturerCountryID>ISO Country Code</mainDataManufacturerCountryID>
    <mainDataSystemUserAuthentication>MDSP or CLRP</mainDataSystemUserAuthentication>
    <mainDataSystemUserLogin>MD5P or CLRP</mainDataSystemUserLogin>
    <mainDataSystemUserPassword>Password or Hash</mainDataSystemUserPassword>
    <mainDataSystemUserLanguage>ISO Language Code</mainDataSystemUserLanguage>
    <mainDataCustomerIDSystem>Manufacturer customer/account number</mainDataCustomerIDSystem>
    <mainDataCustomerIDCall>Manufacturer location number for pickup</mainDataCustomerIDCall>
    <mainDataIncidentNumberSystem>System return reference</mainDataIncidentNumberSystem>
    <mainDataIncidentNumberWorkshop>Workshop return reference</mainDataIncidentNumberWorkshop>
  </mainData>
  <pickupLogAddressData>
    <pickupLogAddressDataContactPerson>Workshop contact name</pickupLogAddressDataContactPerson>
    <pickupLogAddressDataContactPhone>Workshop contact telephone</pickupLogAddressDataContactPhone>
  </pickupLogAddressData>
  <pickupLogDataGroup>
    <pickupLogDataTransportDataMessageSequenceNumber>Box number</pickupLogDataTransportDataMessageSequenceNumber>
    <pickupLogDataTransportDataShippingDataPackagingWeight>Box weight (Kg)</pickupLogDataTransportDataShippingDataPackagingWeight>
    <pickupLogDataTransportDataPreferredPickupDate>YYYY-MM-DD</pickupLogDataTransportDataPreferredPickupDate>
    <pickupLogDataTransportDataPreferredPickupTime>hh:mm</pickupLogDataTransportDataPreferredPickupTime>
    <pickupLogDataTransportDataShippingDataInformationGeneral>Note</pickupLogDataTransportDataShippingDataInformationGeneral>
  </pickupLogDataGroup>
  <partDataGroup>
    <partDataLogSequenceNumber>Box number</partDataLogSequenceNumber>
    <partDataOrderItemNumber>Manufacturer unique number for the order item</partDataOrderItemNumber>
    <partDataReturnDestination>Manufacturer number for return destination</partDataReturnDestination>
  </partDataGroup>
  <attachmentDataGroup>
    <attachmentDataMessageSequenceNumber>Box Number</attachmentDataMessageSequenceNumber>
    <attachmentDataDocType>SHP</attachmentDataDocType>
    <attachmentDataURL>Shipment Label URL</attachmentDataURL>
    <attachmentDataBase64Data>or shipment label content</attachmentDataBase64Data>
  </attachmentDataGroup>
  <statusDataGroup>
    <statusDataState>Status for return shipment e.g. 311, 322</statusDataState>
  </statusDataGroup>
</DSDF>
```
3.7 Models and Parts

An MLR (material request) transaction can be used to request a list of models, parts, or the status of a single part.

The basic structure for an MLR transaction is:

```xml
<?xml version="1.0" encoding="utf-8"?>
<DSDF xmlns="http://www.digitaleurope.org/ns/dsdf">
  <mainData>
    <mainDataBatchDocumentType>MLR</mainDataBatchDocumentType>
    <mainDataVersionNumber>12</mainDataVersionNumber>
    <mainDataManufacturerName>Manufacturer</mainDataManufacturerName>
    <mainDataManufacturerCountryID>ISO Country Code</mainDataManufacturerCountryID>
    <mainDataSystemUserAuthentication>MD5P or CLRP</mainDataSystemUserAuthentication>
    <mainDataSystemUserLogin>MD5P or CLRP</mainDataSystemUserLogin>
    <mainDataSystemUserPassword>Password or Hash</mainDataSystemUserPassword>
    <mainDataSystemLanguageCode>ISO Language Code</mainDataSystemLanguageCode>
    <mainDataSystemDataUpdateDate>An optional update date</mainDataSystemDataUpdateDate>
  </mainData>
  <partData>
    <partDataMaterialType>MM, PP, PS, PV, BP, or BM</partDataMaterialType>
    <partDataMaterialCode>Material search</partDataMaterialCode>
  </partData>
</DSDF>
```

If `mainDataSystemDataUpdateDate` is specified then the materials returned will be only those updated on or after the specified date. This allows partner systems to implement a periodic differential parts maintenance process.

The `partDataMaterialType` field specifies the type of material list to return:

- **MM** = List of models based on a search string in `partDataMaterialCode`
- **PP** = List of parts based on a search string in `partDataMaterialCode`
- **PS** = Part status information for a single part with part code in `partDataMaterialCode`
- **PV** = List of parts in workshop virtual stock based on a search string in `partDataMaterialCode`
- **BP** = List of parts associated with a specified model (BOM) with model code in `partDataMaterialCode`
- **BM** = List of models associated with a specified part (BOM) with part code in `partDataMaterialCode`

When `partDataMaterialCode` contains a * character then this is treated as a wildcard and a matching list is returned (e.g. TX*).

The second character of the `partDataMaterialType` code (M,P,S,V) indicates the format of the returned XML:

- **M** = List of models
- **P** = List of parts with base price information
- **S** = Single part with specific price and availability information
- **V** = List of parts with specific price and invoice information
The material list is returned in an MLS XML structure. An example for models is:

```xml
<?xml version="1.0" encoding="utf-8"?>
<DSDF xmlns="http://www.digitaleurope.org/ns/dsdf"

<mainData>
<mainDataBatchDocumentType>MLR</mainDataBatchDocumentType>
<mainDataVersionNumber>12</mainDataVersionNumber>
<mainDataManufacturerName>PANASONIC</mainDataManufacturerName>
<mainDataManufacturerCountryID>DE</mainDataManufacturerCountryID>
<mainDataSystemUserAuthentication>MD5P</mainDataSystemUserAuthentication>
<mainDataSystemUserLogin>MyLoginCode</mainDataSystemUserLogin>
<mainDataSystemUserPassword>F881D820A5078301EF5AAFCC63AD4A16</mainDataSystemUserPassword>
<mainDataSystemUserLanguage>DE</mainDataSystemUserLanguage>
</mainData>
<partData>
<partDataMaterialType>MM</partDataMaterialType>
<partDataMaterialCode>TX-14B*</partDataMaterialCode>
</partData>
</DSDF>
```

The above MLR transaction returns the following MLS material list

```xml
<?xml version="1.0" encoding="utf-8"?>
<DSDF xmlns="http://www.digitaleurope.org/ns/dsdf"

<mainData>
<mainDataBatchDocumentType>MLS</mainDataBatchDocumentType>
<mainDataVersionNumber>12</mainDataVersionNumber>
<mainDataManufacturerName>PANASONIC</mainDataManufacturerName>
<mainDataManufacturerCountryID>DE</mainDataManufacturerCountryID>
<mainDataSystemResultCode>0</mainDataSystemResultCode>
</mainData>
<partDataGroup>
<partData>
<partDataMaterialCode>TX-14B3TC</partDataMaterialCode>
<partDataMaterialName>TVC 14" MONO CON TXT</partDataMaterialName>
</partData>
<partData>
<partDataMaterialCode>TX-14B4TF</partDataMaterialCode>
<partDataMaterialName>COLOUR TELEVISION</partDataMaterialName>
</partData>
</partDataGroup>
</DSDF>
```
An example of an MLR transaction for virtual stock is:

```xml
<?xml version="1.0" encoding="utf-8"?>
<DSDF xmlns="http://www.digitaleurope.org/ns/dsdf">
  <mainData>
    <mainDataBatchDocumentType>MLR</mainDataBatchDocumentType>
    <mainDataVersionNumber>12</mainDataVersionNumber>
    <mainDataManufacturerName>PANASONIC</mainDataManufacturerName>
    <mainDataManufacturerCountryID>DE</mainDataManufacturerCountryID>
    <mainDataSystemUserAuthentication>MD5P</mainDataSystemUserAuthentication>
    <mainDataSystemUserLogin>MyLoginCode</mainDataSystemUserLogin>
    <mainDataSystemUserPassword>F881D820A5078301EF5AAFCC63AD4A16</mainDataSystemUserPassword>
    <mainDataCustomerIDSystem>12345678</mainDataCustomerIDSystem>
  </mainData>
  <partData>
    <partDataMaterialType>PV</partDataMaterialType>
  </partData>
</DSDF>
```

The MLR transaction above returns the following MLS material list.

```xml
<?xml version="1.0" encoding="utf-8"?>
<DSDF xmlns="http://www.digitaleurope.org/ns/dsdf">
  <mainData>
    <mainDataBatchDocumentType>MLS</mainDataBatchDocumentType>
    <mainDataVersionNumber>12</mainDataVersionNumber>
    <mainDataManufacturerName>PANASONIC</mainDataManufacturerName>
    <mainDataManufacturerCountryID>DE</mainDataManufacturerCountryID>
    <mainDataSystemResultCode>0</mainDataSystemResultCode>
  </mainData>
  <partDataGroup>
    <partData>
      <partDataMaterialName>PAPER BAG PACK UPRIGHT IN BOX</partDataMaterialName>
      <partDataMaterialPrice>1.23</partDataMaterialPrice>
      <partDataMaterialCurrency>EUR</partDataMaterialCurrency>
      <partDataMaterialQuantity>12</partDataMaterialQuantity>
      <partDataMaterialInvoiceNumber>0647019778</partDataMaterialInvoiceNumber>
    </partData>
    <partData>
      <partDataMaterialCode>DBU2</partDataMaterialCode>
      <partDataMaterialName>DUST BAGS PKTS 5</partDataMaterialName>
      <partDataMaterialPrice>1.00</partDataMaterialPrice>
      <partDataMaterialCurrency>EUR</partDataMaterialCurrency>
      <partDataMaterialQuantity>92</partDataMaterialQuantity>
      <partDataMaterialInvoiceNumber>0123456789</partDataMaterialInvoiceNumber>
    </partData>
  </partDataGroup>
</DSDF>
```

Note that the material list for virtual stock also contains the invoice number in `partDataMaterialInvoiceNumber`.
An example of an MLR transaction for part status information is:

```xml
<?xml version="1.0" encoding="utf-8"?>
<DSDF xmlns="http://www.digitaleurope.org/ns/dsdf">
  <mainData>
    <mainDataBatchDocumentType>MLR</mainDataBatchDocumentType>
    <mainDataVersionNumber>12</mainDataVersionNumber>
    <mainDataManufacturerName>PANASONIC</mainDataManufacturerName>
    <mainDataManufacturerCountryID>DE</mainDataManufacturerCountryID>
    <mainDataSystemUserAuthentication>MD5P</mainDataSystemUserAuthentication>
    <mainDataSystemUserLogin>MyLoginCode</mainDataSystemUserLogin>
    <mainDataSystemUserPassword>F881D820A5078301EF5AAFCC63AD4A16</mainDataSystemUserPassword>
    <mainDataSystemUserLanguage>DE</mainDataSystemUserLanguage>
  </mainData>
  <partData>
    <partDataMaterialType>PS</partDataMaterialType>
    <partDataMaterialCode>VXY1591</partDataMaterialCode>
  </partData>
</DSDF>

The example part status MLR transaction returns the following MLS list:

```xml
<?xml version="1.0" encoding="utf-8"?>
<DSDF xmlns="http://www.digitaleurope.org/ns/dsdf">
  <mainData>
    <mainDataBatchDocumentType>MLS</mainDataBatchDocumentType>
    <mainDataVersionNumber>12</mainDataVersionNumber>
    <mainDataManufacturerName>PANASONIC</mainDataManufacturerName>
    <mainDataManufacturerCountryID>DE</mainDataManufacturerCountryID>
    <mainDataSystemResultCode>0</mainDataSystemResultCode>
  </mainData>
  <partData>
    <partDataMaterialCode>VXY1591</partDataMaterialCode>
    <partDataMaterialName>MECHA UNIT (EXCHANGEABLE)</partDataMaterialName>
    <partDataMaterialPrice>56.74</partDataMaterialPrice>
    <partDataMaterialCurrency>EUR</partDataMaterialCurrency>
    <partDataOrderType>X</partDataOrderType>
    <partDataMaterialQuantity>1</partDataMaterialQuantity>
    <partDataMaterialSubstitute>VXY1626</partDataMaterialSubstitute>
    <partDataMaterialStatus>A</partDataMaterialStatus>
    <partDataDeliveryDate>2012-10-09</partDataDeliveryDate>
  </partData>
</DSDF>

The status information includes a confirmed price, ordering type, any part substitution, and the latest delivery date. The `partDataMaterialStatus` field will be one of:

- A – Part is available for latest delivery on `partDataDeliveryDate`
- N – Part is not currently available now but could be available at a future date
- D – Part is discontinued and will never be available

The pricing information is customer specific for a single part and will reflect the parts order price for that specific customer.

For a list of parts, general guide price information may be returned and might not be customer specific. To confirm a customer specific price, the part status information should be retrieved for a single part.
An example parts list MLR where `partDataMaterialType=PP` and `partDataMaterialCode=J0B1075A00*` is

```xml
<?xml version="1.0" encoding="utf-8"?>
<DSDF xmlns="http://www.digitaleurope.org/ns/dsdf">
  <mainData
    mainDataBatchDocumentType="MLS"
    mainDataVersionNumber="12"
    mainDataManufacturerName="PANASONIC"
    mainDataManufacturerCountryID="DE"
    mainDataSystemResultCode="0">
    <partDataGroup>
      <partData
        partDataMaterialCode="J0B1075A0051"
        partDataMaterialName="FM DISCRIMINATOR"
        partDataMaterialPrice="1.22"
        partDataMaterialCurrency="EUR"
        partDataOrderType="N"/>
      <partData
        partDataMaterialCode="J0B1075A0077"
        partDataMaterialName="CERAMIC FILTER"
        partDataMaterialPrice="1.94"
        partDataMaterialCurrency="EUR"
        partDataOrderType="N"/>
    </partDataGroup>
  </mainData>
</DSDF>
```

For BOM parts information (`partDataMaterialType=BP`) the returned MLS format is the same as for a parts list (PP). For BOM model information (`partDataMaterialType=BM`) the returned MLS format is the same as for a model list (MM).
3.8 Ticket Retrieval

While the preferred method of receiving new tickets is via a web service host implemented by each service partner, an alternative polling mechanism exists for partners where a host solution is not possible and the polling solution has been agreed. A transaction type (TRQ) also exists to request the details for a single repair ticket and this may be useful for a number of scenarios.

The TLR transaction requests a list of new tickets for a service partner where the tickets have not yet been submitted to the partner.

```xml
<?xml version="1.0" encoding="utf-8"?>
<DSDF xmlns="http://www.digitaleurope.org/ns/dsdf">
  <mainData>
    <mainDataBatchDocumentType>TLR</mainDataBatchDocumentType>
    <mainDataVersionNumber>12</mainDataVersionNumber>
    <mainDataManufacturerName>PANASONIC</mainDataManufacturerName>
    <mainDataManufacturerCountryID>DE</mainDataManufacturerCountryID>
    <mainDataSystemUserAuthentication>MD5P</mainDataSystemUserAuthentication>
    <mainDataSystemUserLogin>MyLoginCode</mainDataSystemUserLogin>
    <mainDataSystemUserPassword>F881D820A5078301EF5AAFCC63AD4A16</mainDataSystemUserPassword>
    <mainDataCustomerIDSystem>12345678</mainDataCustomerIDSystem>
  </mainData>
</DSDF>
```

This example TLR transaction returns the following TLS list:

```xml
<?xml version="1.0" encoding="utf-8"?>
<DSDF xmlns="http://www.digitaleurope.org/ns/dsdf">
  <mainData>
    <mainDataBatchDocumentType>TLS</mainDataBatchDocumentType>
    <mainDataVersionNumber>12</mainDataVersionNumber>
    <mainDataManufacturerName>PANASONIC</mainDataManufacturerName>
    <mainDataManufacturerCountryID>DE</mainDataManufacturerCountryID>
    <mainDataSystemResultCode>0</mainDataSystemResultCode>
    <mainDataGroup>
      <mainDataItem>
        <mainDataIncidentNumberSystem>10101028</mainDataIncidentNumberSystem>
        <mainDataCustomerIDSystem>12345678</mainDataCustomerIDSystem>
        <mainDataIncidentNumberWorkshop>WS-1234</mainDataIncidentNumberWorkshop>
      </mainDataItem>
      <mainDataItem>
        <mainDataIncidentNumberSystem>10101029</mainDataIncidentNumberSystem>
        <mainDataCustomerIDSystem>12345678</mainDataCustomerIDSystem>
      </mainDataItem>
    </mainDataGroup>
</mainData>
</DSDF>
```

Note the use of `mainDataItem` to represent the list of `mainData` container records within `mainDataGroup`. This is to avoid a clash with the header `mainData` container and avoid any processing ambiguity.

A ticket will continue to be returned by a TLR transaction until an update (ORU) is processed for the ticket.

If `mainDataSystemDataUpdateDate` is specified in a TLR transaction then all tickets created on or after the specified date will be returned in the TLS list regardless of whether they are new or have been updated.
To request the details for a single ticket, the following TRQ transaction can be used:

```xml
<?xml version="1.0" encoding="utf-8"?>
<DSDF xmlns="http://www.digitaleurope.org/ns/dsdf"
     xmlns="http://www.digitaleurope.org/ns/dsdf">
  <mainData>
    <mainDataBatchDocumentType>TRQ</mainDataBatchDocumentType>
    <mainDataVersionNumber>12</mainDataVersionNumber>
    <mainDataManufacturerName>PANASONIC</mainDataManufacturerName>
    <mainDataManufacturerCountryID>DE</mainDataManufacturerCountryID>
    <mainDataSystemUserAuthentication>MD5P</mainDataSystemUserAuthentication>
    <mainDataSystemUserLogin>MyLoginCode</mainDataSystemUserLogin>
    <mainDataSystemUserPassword>F881D820A5078301EF5AFC63AD4A16</mainDataSystemUserPassword>
    <mainDataSystemUserLanguage>DE</mainDataSystemUserLanguage>
    <mainDataIncidentNumberSystem>10101029</mainDataIncidentNumberSystem>
  </mainData>
</DSDF>
```

The returned XML will contain an ORD document type which will have the same content as an ORD transaction transmitted for a new ticket. It is normal for the calling system to make a subsequent ORU transaction to confirm receipt (status TC) and to provide the workshop reference. This update would trigger the removal of the ticket number from the TLS list.
4.0 Process Flow

Apart from the basic handshaking using the TS and TC status codes, further process flow definition using specific status codes is beyond the scope of this document since it is likely to be manufacturer and incident specific.

However, an example of a typical high level process flow for a manufacturer originated ticket is:

![Diagram of process flow for manufacturer originated ticket]

An example of a typical high level process flow for a service partner originated ticket is:

![Diagram of process flow for service partner originated ticket]
5.0 Manufacturer Specific Details

The following details can be specific to each manufacturer and further details should be provided to service partners for their implementation:

- Production web service URL and authentication information
- Test web service URL and authentication information and/or details for an alternative testing mechanism
- Manufacturer specific status codes for errors (starting with X)
- Any other manufacturer specific status codes (starting Y or Z)
- Any specific process flow and status code requirements
- Technical support contact details