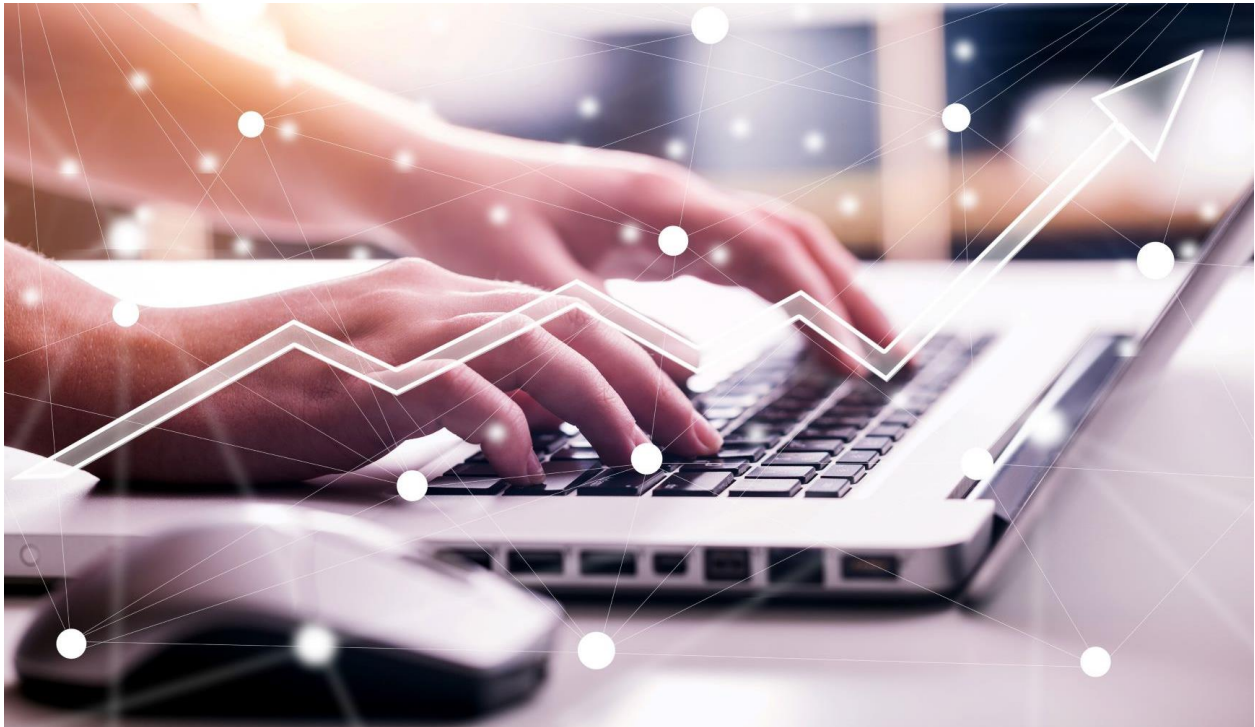


ExpressConnect Shipping Integration Guide

Version 3.23



TNT has moved under company law into FedEx, for example the former company TNT Express GmbH has merged into the company FedEx Express Deutschland GmbH. However, the below-mentioned service description will keep the label TNT due to technical reasons. The service described is belonging to the part of the company which previously was named TNT Express. It will not cover the products or services offered from the traditional portfolio of FedEx Express. To clarify the difference it was decided not to rename it. This is independent to the change of the company name.

Revision History

Date	Version	Description
12/09/2016	3.0 RIH	New version of technical user guide for ExpressConnect Shipping after major technical improvements
31/03/2017	3.1 RIH	Updated to include section on CData entry.
26/04/2017	3.2 RIH	Include additional error messages for cut off times.
26/07/2017	3.3 RIH	Correct MOD7 rules and field validation lengths
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18/08/2017	3.5 BL	Added php example
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06/09/2017	3.7 RIH	Updates with additional based on customer feedback
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20/12/2017	3.10 RIH	Improve the groupcode processing section instructions.
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12/03/2017	3.12 RIH	Collection Instructions and Delivery instructions are optional
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09/09/2020	3.19RIH	Suggested failure progressing added
17/06/2021	3.20RIH	Added PRINT failure Processing section
07/12/2021	3.21	New Layout and Logo
05/01/2023	3.22	Minor changes in layout and legal statement
18/07/2023	3.23	Upgrade of FOP version for local rendering PDF

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1.1 Introduction

ExpressConnect Shipping is part of the ExpressConnect family, providing B2B interfaces into TNT's operational and financial systems. The ExpressConnect Shipping interface is used to arrange a collection, rate a consignment and print the associated shipping documentation.

This manual provides a technical guide to the ExpressConnect Shipping interface. It is designed to help developers understand the interface sufficiently to program an application to arrange a collection with TNT. With the use of XML (extensible mark-up language) technology, this will provide shipping functionality for multiple consignment submissions. The majority of examples in the document will be XML based as it is easier to understand the data involved.

Return data from TNT will be formatted as XML, again in a predetermined structure. When this data is returned to a client, they may parse it for storage or presentation, as they require.

An ExpressConnect Login Id will be arranged by your TNT representative. The customer must supply a list of valid TNT accounts numbers to be used with the system. A secure connection is thus set up, using both authentication and secure protocols, to submit requests and to receive processed CONSIGNMENT labels based on the published URL:

<https://express.tnt.com/expressconnect/shipping/ship>

Sample scripts are provided to show how a connection can be achieved together with example requests and responses to illustrate the data required; see [Connecting to ExpressConnect Shipping](#). Consideration is given below to the networking and security requirements to ensure that this is successful.

This document is structured as follows:

- Registration
- Making a request to the TNT server
- Example XML Shipping Request Document
- Input XML Format - the structure and content of the request
- Processing the response - information about the data that will be returned
- Errors - possible error messages and the steps you can take to resolve them
- Connecting to ExpressConnect Shipping
- Appendices

All documents provided by TNT for the purpose of technical integration or deployed applications; is TNT PROPRIETARY INFORMATION shared with the customer to support the commercial relationship, not be shared beyond this purpose.

When information needed to be shared with a third party to support operations (for example 3PL), or any other technical third party such as but not limited to software developer; it is the customer sole responsibility to do so, and manage the relationship with their supplier in terms of confidentiality, extending TNT's requirements. Ensuring that their supplier does not retain any information after cease of relationship, nor use TNT information for purpose different than enabling the transactions stated in the commercial agreement.

1.2 Legend

The following conventions have been used throughout this document.

Normal	The majority of text in this document is in this style. Section in this style are part of the narrative of the document
Code	Sections or words in this text indicate a section of XML, XML element, or section of code.
[0..1]	<p>Digits within square brackets indicate the number of times an element may occur in an XML document. Examples include:</p> <p>[1] The element must appear once in the document</p> <p>[0..*]. The element may appear once, many times (unlimited) or not at all.</p> <p>[0..1] The element is optional. If it appears, it must appear only once.</p> <p>[1..5] The element may appear any number of times between 1 and 5 times</p>
xsd:string	This indicates one of the schema types, in this case a string. More information on defined schema data types can be found at http://www.w3.org/TR/xmlschema-2/#built-in-datatypes
...	<p>Means that the section has been omitted for the sake of clarity. This usually means that the omitted elements are described elsewhere or that the section where they appear is a repetition of a previous stanza.</p> <p>For example:</p> <pre><house> <room> <width unitOfMeasure="m">12</width> </room> <!-- the next room contains the same dimensions sections as the one above. --> <room>...</room> </house></pre>

1.3 Activities/functional features

This web service offers collection booking and shipping functionality for single or multiple consignment submissions available.

Consignments may be created on the system, and then the details later accessed, using the created consignment numbers in order to carry out various activities, such as rating, booking, and printing. The XML format required for these options is shown later.

Consignments can also be batched, according to their group code, and be booked together or printed as one summary manifest.

The five possible activities are:

Create

This stores the consignment on the ExpressConnect Shipping database for a period of one week. Consignments can then be referred to by consignment number in later processing. A Consignment Numbers will be returned for each successful consignment creation.

Ship

This activity allows the customer to send their consignment information directly into TNT's back end shipping management systems without the need for a collection request. This is especially useful for customers who have a regular collection arranged with TNT, and therefore do not need to raise a separate collection request each time they submit data through Express Connect. The <SHIP> tag is only valid for the V2.2 and above versions of the interface.

Rate

Using the same functionality as ExpressConnect Pricing, rates will be returned for the submitted consignments. A rate is the projected cost of sending a consignment via TNT for a given service. You will usually have a number of options with regards to the level of service you require for sending a consignment. Rating a consignment will return a rate for all available services unless a specific service is specified. The RATE activity is used to provide an estimated cost for the delivery of the consignment.

Book

Once the consignment details are complete, the consignments are sent up to the central booking system and a success/fail message returned. If the customer name and account details are not recognized then a First Time Trader flag will be returned, warning the customer to expect security checks (see appendix I for details). Consignments can be batched for booking by including the group code for the group of consignments.

In order to test booking without sending data to the TNT backend systems and actually creating a real booking it is possible to request a test id for your company in addition to the live userid.

Two different confirmations are available. ExpressConnect can be set up to provide an email to confirm it has received and processed information; this is on a per userid basis. And the TNT booking system can send an email to the sender/collection email address provided in the input XML to confirm the actual booking in the backend systems together with the actual booking reference number.

When a customer requests a shipment using v2.2, they may also specify an additional attribute to the <BOOK> tag called ShowBookingRef.

```
<BOOK ShowBookingRef="Y">
  <CONREF>ref2</CONREF>
</BOOK>
```

Setting the ShowBookingRef attribute to 'Y' will, when a collection request is raised successfully in TNT's collection booking system, return the booking reference number within the <BOOKINGREF> tag.

```
<BOOK>
  <CONSIGNMENT>
    <CONREF>ref2</CONREF>
    <CONNUMBER>GE857115020GB</CONNUMBER>
    <SUCCESS>Y</SUCCESS>
    <FIRSTTIMETRADER>Y</FIRSTTIMETRADER>
    <BOOKINGREF>CVT 803567</BOOKINGREF>
  </CONSIGNMENT>
</BOOK>
```

Print

There are four shipping documents available for the customer's submitted consignments: Consignment Note (Con note), (address) label, commercial invoice and manifest. These will be returned with a style sheet, viewable as a document in your web browser. The manifest that is printed can take the form of a summary manifest if the group code is used, as opposed to the individual consignment numbers or references. The XML data returned is the same for the manifest and summary manifest, but with a different XSL style sheet specified in the processing instruction.

Your consignment data will be passed to TNT in a predetermined XML format. You will get the data to TNT by opening an http socket level connection to a given URL and port (otherwise known as an HTTP connection), thus connecting your own web server with that of TNT. The XML document sent in must be passed as a URL encoded string.

Return data from TNT will be formatted as XML, again in a predetermined structure (in the case of printing, the XML will be associated with a style sheet, allowing the document to be displayed in a browser and printed). When the data is returned to you, you may parse it for storage or presentation, as required.

It is also possible for the printed documentation to be sent as HTML files to a given email address. This is useful when arranging consignments to be collected from a different site to the ExpressConnect installation.

1.4 Booking and Shipping failures

Occasionally, during peak times, you may experience a booking or a shipping failure, resulting in your bookings or Shipping request not being completed. If this occurs, you will be notified in the returned XML by the `<SUCCESS>N</SUCCESS>` indicator in the appropriate “ACTIVITY” element.

For example;

```
..
<BOOK>
<CONSIGNMENT>
<CONREF>Ref04_117a</CONREF>
<SUCCESS>N</SUCCESS>
<FIRSTTIMETRADER>Y</FIRSTTIMETRADER>
</CONSIGNMENT>
</BOOK>
<SHIP>
<CONSIGNMENT>
<CONREF>Ref04_117a</CONREF>
<SUCCESS>N</SUCCESS>
</CONSIGNMENT>
</SHIP>
...
```

Your application should monitor for these failed responses and re-submit any failing request.

When resubmitting a failed booking request, you must ensure to only provide either the CONREF or the CONNUMBER, not both.

If the order was “created” successfully, then there is no need to repeat this activity and the re-submission should only include the failed activities.

If you include a create “ACTIVITY” element, with the re-submission, please be aware that if you are assigning consignment numbers from your own, dedicated range then you will need to assign a new consignment number to each re-submission in order for the booking to be created successfully. Re-submitting any failing requests with the original consignment number will result in a duplicate consignment error.

Please note, it is always possible for any of the activities to fail and return a “`<SUCCESS>N</SUCCESS>`” and so your application should be developed to handle these responses.

2.Registration

Each customer is set up with a username and password, required for all communications with the system. The same username and password is used for ExpressConnect Shipping Pricing and Tracking.

Please contact your local TNT representative to complete a registration request.

3. Making a request to the TNT server

To make a Ship request, you must construct an XML file which conforms to the standard set out in this document. The submission will be validated to check for any problems with the structure of the XML. This facility is provided to allow you to self-diagnose problems with the XML.

Before sending an XML document over the internet to TNT, you should verify that you understand the XML format by successfully using the ExpressWeb Services Shippingsite provided by TNT, contact your TNT representative for further information. The audience for the website is intended to be developers who can use it as a tool to test their XML and to analyse results, prior to and during the development of client applications. It includes a Test Harness that allows the developer to submit sample XML to the service.

- ExpressConnect Shipping does NOT support non-ASCII characters.
- The demonstration site links to a production like environment so that it replicates exactly the results that the customer will achieve with their completed application.

Having made a successful submission of an XML document via the test page, you are ready to set up a socket connection and make a programmatic submission using HTTP POST to the following URL:

<https://express.tnt.com/expressconnect/shipping/ship>

Please be aware that all submissions to the aforementioned URL will require you to supply your user id and password in the body of the XML request.

More detailed information on connecting to the ExpressConnect servers can be found in [Connecting to ExpressConnect Shipping](#).

4.Example XML Ship requestdocument

An example is provided below of a typical Ship request. The request specifies a single consignment, with the standard activities.

There can be multiple <CONSIGNMENT>elements in a request, so each one must contain a unique <CONREF> element to act as a key to uniquely identify it. This is then used in responses to identify which one each returned price, error message, etc relates to.

```
<?xml version="1.0" encoding="UTF-8"?><ESHIPPER>
<LOGIN>
  <COMPANY>YOUR USERID</COMPANY>
  <PASSWORD>YOUR PASSWORD</PASSWORD>
  <APPID>EC</APPID>
  <APPVERSION>2.2</APPVERSION>
</LOGIN>
<CONSIGNMENTBATCH>
<SENDER>
  <COMPANYNAME>Sender Co 01-008</COMPANYNAME>
  <STREETADDRESS1>TEST DO NOT COLLECT1</STREETADDRESS1>
  <STREETADDRESS2>TEST DO NOT COLLECT2</STREETADDRESS2>
  <STREETADDRESS3>TEST DO NOT COLLECT3</STREETADDRESS3>
  <CITY>Atherstone</CITY>
  <PROVINCE>Warwickshire</PROVINCE>
  <POSTCODE>CV9 2ry</POSTCODE>
  <COUNTRY>GB</COUNTRY>
  <ACCOUNT>987654321</ACCOUNT>
  <VAT/>
  <CONTACTNAME>Mr Contact</CONTACTNAME>
  <CONTACTDIALCODE>01827</CONTACTDIALCODE>
  <CONTACTTELEPHONE>717733</CONTACTTELEPHONE>
  <CONTACTEMAIL>contact@tnt.com</CONTACTEMAIL>
  <COLLECTION>
    <COLLECTIONADDRESS>
      <COMPANYNAME>Collection Name</COMPANYNAME>
      <STREETADDRESS1>TEST DO NOT COLLECT4</STREETADDRESS1>
      <STREETADDRESS2>TEST DO NOT COLLECT5</STREETADDRESS2>
      <STREETADDRESS3>TEST DO NOT COLLECT6</STREETADDRESS3>
      <CITY>Atherstone</CITY>
      <PROVINCE>Warwickshire</PROVINCE>
      <POSTCODE>CV9 1TT</POSTCODE>
      <COUNTRY>GB</COUNTRY>
      <VAT/>
      <CONTACTNAME>Mr Contact</CONTACTNAME>
      <CONTACTDIALCODE>00000</CONTACTDIALCODE>
      <CONTACTTELEPHONE>700005</CONTACTTELEPHONE>
      <CONTACTEMAIL>contact@tnt.com</CONTACTEMAIL>
    </COLLECTIONADDRESS>
    <SHIPDATE>15/08/2016</SHIPDATE>
    <PREFCOLLECTTIME>
      <FROM>09:00</FROM>
      <TO>10:00</TO>
    </PREFCOLLECTTIME>
    <ALTCOLLECTTIME>
      <FROM>11:00</FROM>
      <TO>12:00</TO>
    </ALTCOLLECTTIME>
    <COLLINSTRUCTIONS>use rear gate 01-008</COLLINSTRUCTIONS>
  </COLLECTION>
</SENDER>
```

Continued below

```

</SENDER>
<CONSIGNMENT>
  <CONREF>ref01_008</CONREF>
  <DETAILS>
    <RECEIVER>
      <COMPANYNAME>Receiver Name</COMPANYNAME>
      <STREETADDRESS1>TEST DO NOT COLLECT7</STREETADDRESS1>
      <STREETADDRESS2>TEST DO NOT COLLECT8</STREETADDRESS2>
      <STREETADDRESS3>TEST DO NOT COLLECT9</STREETADDRESS3>
      <CITY>Amsterdam</CITY>
      <PROVINCE/>
      <POSTCODE>1012 AA</POSTCODE>
      <COUNTRY>NL</COUNTRY>
      <VAT>VAT-0123</VAT>
      <CONTACTNAME>Mr Bob</CONTACTNAME>
      <CONTACTDIALCODE>1672</CONTACTDIALCODE>
      <CONTACTTELEPHONE>987432</CONTACTTELEPHONE>
      <CONTACTEMAIL>email@tnt.com</CONTACTEMAIL>
    </RECEIVER>
    <DELIVERY>
      <COMPANYNAME>Delivery Name</COMPANYNAME>
      <STREETADDRESS1>TEST DO NOT COLLECT10</STREETADDRESS1>
      <STREETADDRESS2>TEST DO NOT COLLECT11</STREETADDRESS2>
      <STREETADDRESS3>TEST DO NOT COLLECT12</STREETADDRESS3>
      <CITY>Amsterdam</CITY>
      <PROVINCE/>
      <POSTCODE>1012 AA</POSTCODE>
      <COUNTRY>NL</COUNTRY>
      <VAT>VAT-0123</VAT>
      <CONTACTNAME>Mr Frank</CONTACTNAME>
      <CONTACTDIALCODE>1672</CONTACTDIALCODE>
      <CONTACTTELEPHONE>987432</CONTACTTELEPHONE>
      <CONTACTEMAIL>email@tnt.com</CONTACTEMAIL>
    </DELIVERY>
    <CUSTOMERREF>DISKS</CUSTOMERREF>
    <CONTYPE>N</CONTYPE>
    <PAYMENTIND>S</PAYMENTIND>
    <ITEMS>6</ITEMS>
    <TOTALWEIGHT>3.6</TOTALWEIGHT>
    <TOTALVOLUME>1.0</TOTALVOLUME>
    <CURRENCY>GBP</CURRENCY>
    <GOODSVALUE>180.00</GOODSVALUE>
    <INSURANCEVALUE>150.00</INSURANCEVALUE>
    <INSURANCECURRENCY>GBP</INSURANCECURRENCY>
    <SERVICE>15N</SERVICE>
    <OPTION>PR</OPTION>
    <DESCRIPTION>assorted office accessories</DESCRIPTION>
    <DELIVERYINST>Delivery Instructions TEST</DELIVERYINST>
  </DETAILS>
</CONSIGNMENT>
</PACKAG>

```

Continued below

```

    <PACKAGE>
      <ITEMS>3</ITEMS>
      <DESCRIPTION>box 1</DESCRIPTION>
      <LENGTH>0.1</LENGTH>
      <HEIGHT>0.2</HEIGHT>
      <WIDTH>0.3</WIDTH>
      <WEIGHT>0.4</WEIGHT>
      <ARTICLE>
        <ITEMS>1</ITEMS>
        <DESCRIPTION>paperclips</DESCRIPTION>
        <WEIGHT>.03</WEIGHT>
        <INVOICEVALUE>2.30</INVOICEVALUE>
        <INVOICEDESC>metal paperclips</INVOICEDESC>
        <HTS>ABC</HTS>
        <COUNTRY>GB</COUNTRY>
      </ARTICLE>
    </PACKAGE>
    <PACKAGE>
      <ITEMS>3</ITEMS>
      <DESCRIPTION>box 2</DESCRIPTION>
      <LENGTH>0.5</LENGTH>
      <HEIGHT>0.6</HEIGHT>
      <WIDTH>0.7</WIDTH>
      <WEIGHT>0.8</WEIGHT>
      <ARTICLE>
        <ITEMS>1</ITEMS>
        <DESCRIPTION>paperclips</DESCRIPTION>
        <WEIGHT>.03</WEIGHT>
        <INVOICEVALUE>2.30</INVOICEVALUE>
        <INVOICEDESC>metal paperclips</INVOICEDESC>
        <HTS>ABC</HTS>
        <COUNTRY>GB</COUNTRY>
      </ARTICLE>
    </PACKAGE>
  </DETAILS>
</CONSIGNMENT>
</CONSIGNMENTBATCH>
</SHIPMENT>

```

Continued below


```
<ACTIVITY>
  <CREATE>
    <CONREF>ref01_008</CONREF>
  </CREATE>
</RATE>
  <CONREF>ref01_008</CONREF>
</RATE>

  <BOOK>
    <CONREF>ref01_008</CONREF>
  </BOOK>
</SHIP>
  <CONREF>ref01_008</CONREF>
</SHIP>
<PRINT>
  <CONNOTE>
    <CONREF>ref01_008</CONREF>
  </CONNOTE>
  <LABEL>
    <CONREF>ref01_008</CONREF>
  </LABEL>
  <MANIFEST>
    <CONREF>ref01_008</CONREF>
  </MANIFEST>
  <INVOICE>
    <CONREF>ref01_008</CONREF>
  </INVOICE>
<EMAILTO>bob.yourname@tnt.com</EMAILTO>
<EMAILFROM>bob.yourname@tnt.com</EMAILFROM>
</PRINT>
<SHOW_GROUPCODE/>
</ACTIVITY>
</ESHIPPER>
```

N.B. XML is case sensitive. The element tags MUST all be upper case.

ExpressConnect encoding must be UTF-8, encoding="UTF-8".

5.Input XML format

The input XML format for ExpressConnect Shipping is a list of consignment requests.

The structure for a Ship request is described below in detail. Alternatively, refer to Appendix A which contains a summary of the points below.

Note

It should be noted that XML defines a number of characters which are reserved. These include the greater-than (>), less-than (<), ampersand (&), and percent (%) characters. Where these appear in the data which is being submitted to ExpressConnect, the characters must be escaped or the content surrounded with a CDATA section.

A common requirement is to submit an address which includes a company name such as: "Andrews & Plummer". The ampersand must therefore be escaped as per the XML rules (&) or alternatively the whole or part of the text must be wrapped in a CDATA section as follows:

```
...  
<name><![CDATA[Andrews & Plummer]]></name>
```

The request has the following structure:

- Header – always required, this defines the XML document
- Login – always required, this provides the security details
- Consignment batch – always required, this contains the:
 - Sender – always required, this defines the <SENDER>document
 - Ship request– A list of <CONSIGNMENT>elements for which this sender is sending consignments for. Normally there is just one.
- Activity – always required, this provides details on which functionality is required.

5.1 Header

The header section will begin every ExpressConnect Shipping request XML document submitted to TNT.

This contains the XML declaration, which contains the character encoding used for the document and the standalone attribute, which should be set to “no”:

```
<?xml version="1.0" encoding="UTF-8" standalone="no"?>
```

5.2 Login

Each LOGIN element contains the following information:

```
<LOGIN>
    <COMPANY>YOUR USERID</COMPANY>
    <PASSWORD>YOUR PASSWORD</PASSWORD>
    <APPID>EC</APPID>
    <APPVERSION>2.2</APPVERSION>
</LOGIN>
```

All elements are mandatory. It contains a COMPANY element which should contain your username as supplied by your TNT Representative.

The PASSWORD element contains the associated password for this use.

Failure to provide correct information will result in an invalid request.

The APPID element should be defaulted to “EC”, unless it has been previously agreed with your TNT Representative to use an alternative APPID. This element is used by various source applications to highlight where the request was made, it has no bearing on the functionality offered.

The <APPVERSION> element states the version of the interface that you are using. Your TNT Representative should provide the version number that you should use when you start your engagement.

5.2.1Interface / APPVERSION

ExpressConnect Shipping supports various version of the XML interface. This document will refer to different versions and the examples will often apply to the version the feature was introduced. You should use the latest version of the interface where possible, unless indicated to do so by your TNT Representative.

The existing version are:

Version	Comments
2.0	When you use the BOOK activity this will automatically perform both a Booking and shipping activity. The SHIP activity is not supported.
2.1	Improved validation, which in version 3.0 release has been made backwardly compatible to version 2.0.
2.2	<p>Introduction of the SHIP activity to allow you to manage when you wish to create a collection request separately from passing the shipping data to TNT. The SHIP activity allows you to send your consignment information directly into TNT's back end shipping management systems without the need for a collection request.</p> <p>When a customer requests a shipment using v2.2, they may also specify an additional attribute to the <BOOK> tag called ShowBookingRef.</p> <p>Setting the ShowBookingRef attribute to 'Y' will, when a collection request is raised successfully in TNT's collection booking system, return the booking reference number within the <BOOKINGREF> tag.</p>
3.0	<p>Introduction of the Division element, which allows selection of services for a particular TNT divisions.</p> <p>The support for supports Hazardous Goods has been increased. Please see Appendix N – Dangerous Goods processing</p>
3.1	<p>If you "rate" the shipment the transit times are also returned with the pricing data. Please see the The Transit times Section</p> <p>With the introduction of version 3.1, it is possible to supply the appropriate fields to populate the commercial Invoice. Please see The Commercial Invoice elements</p>

5.3 Consignment Batch

Each Consignment Batch element contains the following information:

```
...
<CONSIGNMENTBATCH>
  <SENDER>
    ...
  </SENDER>
  <CONSIGNMENT>
    ...
  </CONSIGNMENT>
  <CONSIGNMENT>
    ...
  </CONSIGNMENT>
</CONSIGNMENTBATCH>
```

A CONSIGNMENTBATCH contains a single SENDER element, which contains details about the sender and collection.

A CONSIGNMENTBATCH contains 1 or more CONSIGNMENTElements. This allows batching of Shipping requests. Each CONSIGNMENTElement contains the set of information needed to perform the functionality requested in the Activities element.

A CONSIGNMENTElement contains a keyattribute that identifies it uniquely *within the request*. The response will associate Shipping data and validation errors with their ACTIVITY through this key. The value of this key must be of type string and is supplied in CONREF element.

5.4 Sender

There is a single SENDER element per consignment Batch, and contains the following information:

```
<SENDER>
  <COMPANYNAME>Sender Co 01-008</COMPANYNAME>
  <STREETADDRESS1>TEST DO NOT COLLECT1</STREETADDRESS1>
  <STREETADDRESS2>TEST DO NOT COLLECT2</STREETADDRESS2>
  <STREETADDRESS3>TEST DO NOT COLLECT3</STREETADDRESS3>
  <CITY>Atherstone</CITY>
  <PROVINCE>Warwickshire</PROVINCE>
  <POSTCODE>CV9 2ry</POSTCODE>
  <COUNTRY>GB</COUNTRY>
  <ACCOUNT>987654321</ACCOUNT>
  <VAT/>
  <CONTACTNAME>Mr Contact</CONTACTNAME>
  <CONTACTDIALCODE>01827</CONTACTDIALCODE>
  <CONTACTTELEPHONE>717733</CONTACTTELEPHONE>
  <CONTACTEMAIL>contact@tnt.com</CONTACTEMAIL>
  <COLLECTION>
    <COLLECTIONADDRESS>
      <COMPANYNAME>Collection Name</COMPANYNAME>
      <STREETADDRESS1>TEST DO NOT COLLECT4</STREETADDRESS1>
      <STREETADDRESS2>TEST DO NOT COLLECT5</STREETADDRESS2>
      <STREETADDRESS3>TEST DO NOT COLLECT6</STREETADDRESS3>
      <CITY>Atherstone</CITY>
      <PROVINCE>Warwickshire</PROVINCE>
      <POSTCODE>CV9 1TT</POSTCODE>
      <COUNTRY>GB</COUNTRY>
      <VAT/>
      <CONTACTNAME>Mr Contact</CONTACTNAME>
      <CONTACTDIALCODE>00000</CONTACTDIALCODE>
      <CONTACTTELEPHONE>700005</CONTACTTELEPHONE>
      <CONTACTEMAIL>contact@tnt.com</CONTACTEMAIL>
    </COLLECTIONADDRESS>
    <SHIPDATE>15/08/2016</SHIPDATE>
    <PREFCOLLECTTIME>
      <FROM>09:00</FROM>
      <TO>10:00</TO>
    </PREFCOLLECTTIME>
    <ALTCOLLECTTIME>
      <FROM>11:00</FROM>
      <TO>12:00</TO>
    </ALTCOLLECTTIME>
    <COLLINSTRUCTIONS>use rear gate 01-008</COLLINSTRUCTIONS>
  </COLLECTION>
</SENDER>
```

The SENDER is made up of the following parts. Except where noted, every element is required once.

5.4.1 The sender address and contact elements

```

...
    <COMPANYNAME>Sender Co 01-008</COMPANYNAME>
    <STREETADDRESS1>TEST DO NOT COLLECT1</STREETADDRESS1>
    <STREETADDRESS2>TEST DO NOT COLLECT2</STREETADDRESS2>
    <STREETADDRESS3>TEST DO NOT COLLECT3</STREETADDRESS3>
    <CITY>Atherstone</CITY>
    <PROVINCE>Warwickshire</PROVINCE>
    <POSTCODE>CV9 2ry</POSTCODE>
    <COUNTRY>GB</COUNTRY>
    <ACCOUNT>987654321</ACCOUNT>
    <VAT/>
    <CONTACTNAME>Mr Contact</CONTACTNAME>
    <CONTACTDIALCODE>01827</CONTACTDIALCODE>
    <CONTACTTELEPHONE>717733</CONTACTTELEPHONE>
    <CONTACTEMAIL>contact@tnt.com</CONTACTEMAIL>
...

```

The sender element represents your company address and contact information. These sections contain the following elements, all of type string:

- The name of company at the given premises
- addressLine1 is the first line of the address. This line usually contains a building name or number
- Address lines 2 and 3 are optional. They may contain additional information to help locate the address
- The city for the address
- The province is also known as the region or county.
- The postcode of the address
- The ISO 3166-1 Alpha-2 country code. More information can be found in Appendix F: ISO 3166-1 Alpha 2 country codes
- Your TNT account as supplied by your TNT representative, 9 digits for standard account and 10 digits for UK domestic. The account number must be authorised to be used by the userid and password supplied in the LOGIN element.
- Your VAT number. More information can be found in Appendix G: VAT codes
- The name of the contact
- The contacts telephone number made up of the area code and phone number.
- The contacts email address. The Advance shipper notification emails will be sent to the contacts email address is supplied.

To ship with TNT, we must know the exact location that you are shipping to/from, in TNT terms. The full town name must be supplied using TNT spelling. Please work with your TNT representative to ensure your town names match TNT's. If the town contains local characters, then it is recommended to use these. For example, Köln

5.4.2 The Collection element

The collection element contains the Collection address and booking details.

5.4.2.1 The Collection address element

The collection address provides the address details from which consignment will be collected by our driver. This should only be supplied if it differs from the sender address. As the definition for the all address are identical, please refer to [The sender address and contact elements](#)

```
<COLLECTION>
  <COLLECTIONADDRESS>
    <COMPANYNAME>Collection Name</COMPANYNAME>
    <STREETADDRESS1>TEST DO NOT COLLECT4</STREETADDRESS1>
    <STREETADDRESS2>TEST DO NOT COLLECT5</STREETADDRESS2>
    <STREETADDRESS3>TEST DO NOT COLLECT6</STREETADDRESS3>
    <CITY>Atherstone</CITY>
    <PROVINCE>Warwickshire</PROVINCE>
    <POSTCODE>CV9 1TT</POSTCODE>
    <COUNTRY>GB</COUNTRY>
    <VAT/>
    <CONTACTNAME>Mr Contact</CONTACTNAME>
    <CONTACTDIALCODE>00000</CONTACTDIALCODE>
    <CONTACTTELEPHONE>700005</CONTACTTELEPHONE>
    <CONTACTEMAIL>contact@tnt.com</CONTACTEMAIL>
  </COLLECTIONADDRESS>
  ...
</COLLECTION>
```


5.4.2.2 The Collection/Opening times details

The order must be made before the cut-off time for arranging a collection for the shipping date (collection date).

```

        <SHIPDATE>15/08/2016</SHIPDATE>
        <PREFCOLLECTTIME>
            <FROM>09:00</FROM>
            <TO>10:00</TO>
        </PREFCOLLECTTIME>
        <ALTCOLLECTTIME>
            <FROM>11:00</FROM>
            <TO>12:00</TO>
        </ALTCOLLECTTIME>
        <COLLINSTRUCTIONS>use rear gate 01-008</COLLINSTRUCTIONS>
    </COLLECTION>
</SENDER>

```

The shipment date is the date which you wish the parcels to be collected, and it must be supplied in the format DD/MM/CCYY. It is a mandatory field.

Collections is raised for every consignment (with exception of customers with scheduled collection).

The earliest time the goods may be collected (Goods ready time) should be supplied in the “PREFCOLLECTTIME” / “FROM” element, in the format HH:MM.

The latest time the goods can be collected must be supplied in the “PREFCOLLECTTIME” / “TO” element, in the format HH:MM.

If your company has a lunchtime, then please supply the morning opening times in the “PREFCOLLECTTIME” element and the afternoon opening times in the “ALTCOLLECTTIME”.

These details are validated against the time the TNT truck will be within your area and these times must overlap.

Please supply any special instruction which need to be passed to the collection driver in the <COLLINSTRUCTIONS> element.

5.5 Consignment

There can be one to 50 CONSIGNMENT elements per consignment Batch but it is recommended that no more than 3 CONSIGNMENT elements are supplied, unless you have set a large timeout period. The element contains the following information:

```
<CONSIGNMENT>
  <CONREF>ref01_008</CONREF>
  <DETAILS>
    <RECEIVER>
      ...
    </RECEIVER>
    <DELIVERY>
      ...
    </DELIVERY>
    <CUSTOMERREF>DISKS</CUSTOMERREF>
    <CONTYPE>N</CONTYPE>
    <PAYMENTIND>S</PAYMENTIND>
    <ITEMS>6</ITEMS>
    <TOTALWEIGHT>3.6</TOTALWEIGHT>
    <TOTALVOLUME>1.0</TOTALVOLUME>
    <CURRENCY>GBP</CURRENCY>
    <GOODSVALUE>180.00</GOODSVALUE>
    <INSURANCEVALUE>150.00</INSURANCEVALUE>
    <INSURANCECURRENCY>GBP</INSURANCECURRENCY>
    <SERVICE>15N</SERVICE>
    <OPTION>PR</OPTION>
    <DESCRIPTION>assorted office accessories</DESCRIPTION>
    <DELIVERYINST>Delivery Instructions TEST</DELIVERYINST>
    <PACKAGE>
      ...
    </PACKAGE>
    <PACKAGE>
      ...
    </PACKAGE>
  </DETAILS>
</CONSIGNMENT>
```

5.5.1 The ConRef element

A CONSIGNMENT element contains a key attribute that identifies it uniquely within the request. The response will associate Shipping data and validation errors with their ACTIVITY through this key. The value of this key must be of type string and is supplied in CONREF element.

```
<CONREF>ref01_008</CONREF>
```

5.5.2 The Receiver address element

The receiver address provides the address details of the company receiver the consignment. As the definition for the all address are identical, please refer to [The sender address and contact elements](#)

```
<RECEIVER>
  <COMPANYNAME>Receiver Name</COMPANYNAME>
  <STREETADDRESS1>TEST DO NOT COLLECT7</STREETADDRESS1>
  <STREETADDRESS2>TEST DO NOT COLLECT8</STREETADDRESS2>
  <STREETADDRESS3>TEST DO NOT COLLECT9</STREETADDRESS3>
  <CITY>Amsterdam</CITY>
  <PROVINCE/>
  <POSTCODE>1012 AA</POSTCODE>
  <COUNTRY>NL</COUNTRY>
  <VAT>VAT-0123</VAT>
  <CONTACTNAME>Mr Bob</CONTACTNAME>
  <CONTACTDIALCODE>1672</CONTACTDIALCODE>
  <CONTACTTELEPHONE>987432</CONTACTTELEPHONE>
  <CONTACTEMAIL>email@tnt.com</CONTACTEMAIL>
</RECEIVER>
```

5.5.3 The Delivery address element

The delivery address provides the address details for which consignment will be delivered by our driver. This should only be supplied if it differs from the receiver address. As the definition for the all address are identical, please refer to [The sender address and contact elements](#)

```
<DELIVERY>
  <COMPANYNAME>Delivery Name</COMPANYNAME>
  <STREETADDRESS1>TEST DO NOT COLLECT10</STREETADDRESS1>
  <STREETADDRESS2>TEST DO NOT COLLECT11</STREETADDRESS2>
  <STREETADDRESS3>TEST DO NOT COLLECT12</STREETADDRESS3>
  <CITY>Amsterdam</CITY>
  <PROVINCE/>
  <POSTCODE>1012 AA</POSTCODE>
  <COUNTRY>NL</COUNTRY>
  <VAT>VAT-0123</VAT>
  <CONTACTNAME>Mr Frank</CONTACTNAME>
  <CONTACTDIALCODE>1672</CONTACTDIALCODE>
  <CONTACTTELEPHONE>987432</CONTACTTELEPHONE>
  <CONTACTEMAIL>email@tnt.com</CONTACTEMAIL>
</DELIVERY>
```

5.6The CONNUMBERelement

This element contains your consignment number, if your application generates its own TNT consignment number.

```
<CONNUMBER>GE100312111WW</CONNUMBER>
```

You userid must be configured to allow user generated consignment numbers and so contact your TNT representative to arrange for this feature.

5.7The CUSTOMERREF element

This element contains your consignment reference. This will be printed on the shipping documentations and can be used to track your consignment.

```
<CUSTOMERREF>DISKS</CUSTOMERREF>
```

5.8The CONTTYPE element

This element identify whether you are shipping a “D” Document (paper/manuals/reports) or “N” Non-document (packages).

```
<CONTTYPE>N</CONTTYPE>
```

Document services are not offered for a number of TNT domestic shipments. For domestic shipment within these countries please use a CONTTYPE of “N” for Non-document.

5.9 The PAYMENTIND element

This identifies whether this is an import (receiver pays) or export (sender pays) shipment.

```
<PAYMENTIND>S</PAYMENTIND>
```

Figure 18

A PAYMENTIND type of “S” represents a sender pays shipments, “R” represents a receiver. If this element is not supplied, then the payment type is defaulted to sender.

Within ExpressConnect shipping there is limited support for ‘Receiver pays’ shipments. In order to create a receiver pays shipment you must first register the following details with TNT:

1. The <ACCOUNT> and <ACCOUNTCOUNTRY> combinations that you would like activated for receiver pays. This need to be added to our database and associated with your userid and password before receiver pays is activate for these accounts. The TNT representative will arrange this.

Once the above details have been registered, simply amend the following in the INPUT XML to send a receiver pays shipment:

- i. Within the DETAILS parent element set the <PAYMENTIND> field to ‘R’:

```
<PAYMENTIND>R</PAYMENTIND>
```

- ii. Within the SENDER parent element enter the sender’s account in the <ACCOUNT> field:

```
<ACCOUNT>111</ACCOUNT>
```

- iii. Within the RECEIVER parent element add 2 additional tags for the receiver’s account and account country:

```
<RECEIVER>
  <COMPANYNAME>Receivers Co. Ltd.</COMPANYNAME>
  <STREETADDRESS1>Head Office </STREETADDRESS1>
  <STREETADDRESS2>Hoofddorp</STREETADDRESS2>
  <STREETADDRESS3></STREETADDRESS3>
  <CITY>Amsterdam</CITY>
  <PROVINCE></PROVINCE>
  <POSTCODE>1100 KG</POSTCODE>
  <COUNTRY>NL</COUNTRY>
  <VAT></VAT>
  <CONTACTNAME>Mr Frank</CONTACTNAME>
  <CONTACTDIALCODE>39 203</CONTACTDIALCODE>
  <CONTACTTELEPHONE>987432</CONTACTTELEPHONE>
  <CONTACTEMAIL>FrankA@rec.com</CONTACTEMAIL>
  <ACCOUNT>123</ACCOUNT>
  <ACCOUNTCOUNTRY>NL</ACCOUNTCOUNTRY>
</RECEIVER>
```

5.10 The ITEMS element

This element will contain the number of items within the shipment.

```
<ITEMS>1</ITEMS>
```

Figure 15

This is a mandatory element.

The ITEMS element should match the total number of items defined in the packages elements.

5.11 The WEIGHT and VOLUME elements

These elements describe the total weight and volume of the consignment being shipped.

```
<TOTALWEIGHT>3.6</TOTALWEIGHT>  
<TOTALVOLUME>1.0</TOTALVOLUME>
```

Figure 13

The WEIGHT element contains the total weight of the shipment in Kilograms and is a mandatory element.

The VOLUME element contains the total volume of the shipment in cubic metres and is a mandatory element for Non-documents, CONTYPE = 'N'.

These totals should match the sum of the weights and volume supplies in the packages elements. The totals from the PACKAGE elements will be used if greater than the consignment supplied totals.

5.12 The CURRENCY and GOODSVALUE elements

These elements identify the value of the goods being shipped and the associated currency.

```
<CURRENCY>GBP</CURRENCY>  
<GOODSVALUE>180.00</GOODSVALUE>
```

The currency is represented by the 3 digit ISO 4217 Alpha-3 currency codes.

The value of goods must be supplied if you wish to insure the shipment.

5.13 The INSURANCE CURRENCY and VALUE elements

These elements are for Enhanced Liability in countries where insurance is not available.

```
<INSURANCEVALUE>150.00</INSURANCEVALUE>  
<INSURANCECURRENCY>GBP</INSURANCECURRENCY>
```

Insurance value MUST NOT be more than 110% of the goods value for non-documents or 500 Euros for documents. The maximum insurance value is 25,000 Euros.

5.14 The SERVICE element

The particular service that the shipment is being moved under.

```
<SERVICE>09N</SERVICE>
```

The values in this section will be provided by your TNT representative.

5.15 The OPTIONelement

Please specify any additional Service options that are required for this Shipment.

```
<!-- Service options maximum of 5 -->
      <OPTION>PR</OPTION>
      <OPTION>EQ</OPTION>
<OPTION>XBB</OPTION>
<OPTION>HZ</OPTION>
<OPTION>BB</OPTION>
```

There can be up to 5 options supplied, if insurance has not be specified. The values in this section will be provided by your TNT representative.

5.16 The DESCRIPTIONelement

Please describe the consignment goods being shipped. This is not used for custom purposes.

```
<DESCRIPTION>assorted office accessories</DESCRIPTION>
```

For UK domestic shipments, the Carton Code is populated from the first 2 characters of the description. This must be used to attract the correct rate when invoicing the consignment for Palletised goods.

5.17 The DELIVERYINST element

Please supply any instructions that must be passed to the TNT delivery driver when delivering the consignment.

```
<DELIVERYINST>Delivery Instructions TEST</DELIVERY
```

For UK dangerous domestic shipments, the UN Number must be supplied in the first 4 characters of the DELIVERYINST.

5.18The Dangerous Goods elements

If you have been authorised to ship dangerous / hazardous goods with TN, you can supply these details using the elements below:

```
<HAZARDOUS>Y</HAZARDOUS>  
<UNNUMBER>1845</UNNUMBER>  
<PACKINGGROUP>II</PACKINGGROUP>
```

For UK dangerous domestic shipments, the UN Number must be supplied in the first 4 characters of the DELIVERYINST, as well.

For International shipments please ensure the appropriate option code is also supplied.

Please refer to the TNT terms and conditions for further information on Dangerous/Hazard. If you are approved to ship dangerous goods please supply an associated UN number. UN numbers are four-digit identifiers for hazardous/dangerous substances, and articles (such as explosives, flammable liquids, toxic substances, etc.).

If you wish to obtain an estimate cost for the shipment please contact your TNT representative as Rating for dangerous goods is not supported via ExpressConnect Shipping.

It is the shipper's responsibility to identify, classify, package, mark, label, and complete documentation for dangerous goods according to all national and international governmental regulations.

5.18.1 The PACKAGE element

The PACKAGE element provides details on the package line. There must be at least one **Package** per Consignment when entered in detail form. There may not be more than 50 **Packages** per Consignment when entered in detail form with no more than 99 **items for a consignment**..

```
<PACKAGE>
  <ITEMS>3</ITEMS>
  <DESCRIPTION>box 1</DESCRIPTION>
  <LENGTH>0.1</LENGTH>
  <HEIGHT>0.2</HEIGHT>
  <WIDTH>0.3</WIDTH>
  <WEIGHT>0.4</WEIGHT>
  <ARTICLE>
    <ITEMS>1</ITEMS>
    <DESCRIPTION>paperclips</DESCRIPTION>
    <WEIGHT>.03</WEIGHT>
    <INVOICEVALUE>2.30</INVOICEVALUE>
    <INVOICEDESC>metal paperclips</INVOICEDESC>
    <HTS>ABC</HTS>
    <COUNTRY>GB</COUNTRY>
  </ARTICLE>
</PACKAGE>
```

At least one package **MUST** exist per consignment, **UNLESS** the consignment is internal to the EU

The PACKAGE element describes a group of parcels (package) with the same details and dimensions. All parcels must be identical.

The ITEMS is the total number of parcels and each one will need to be label.

DESCRIPTION describes the package.

The LENGTH, HEIGHT and WIDTH are supplied in meters.

The WEIGHT is in Kilos.

As a standard the following maximums are applied

Max weight per package	70kg
Max length per package	2.4m
Max height per package	1.5m
Max width per package	1.2m

On request, these limits can be raised for each customer. If this is required, please contact your TNT representative who will arrange this for you.

5.18.1.1 The ARTICLE element

If the consignment is customs controlled, you should supply details on the article / goods being shipped.

```
<ARTICLE>
  <ITEMS>1</ITEMS>
  <DESCRIPTION>paperclips</DESCRIPTION>
  <WEIGHT>.03</WEIGHT>
  <INVOICEVALUE>2.30</INVOICEVALUE>
  <INVOICEDESC>metal paperclips</INVOICEDESC>
  <HTS>123456</HTS>
  <COUNTRY>GB</COUNTRY>
</ARTICLE>
```

Articles are not mandatory and there can be no more than 99 Articles elements per Package. There can be up to 9999 items per article line.

The <COUNTRY> contains details on the country of original manufacture. This is an ISO 3166-1 Alpha-2 country code. More information can be found in Appendix F: ISO 3166-1 Alpha 2 country codes.

For each article you need to capture the Tariff code. A tariff code is a product-specific code as documented in the Harmonised System (HS) maintained by the World Customs Organisation (WCO). Tariff codes exist for almost every product involved in global commerce. The Harmonized Item Description and Coding System (HS) is an international standard maintained by the World Customs Organization (WCO) that classifies traded products. Items are identified by a 6-digit harmonized number that is recognized by countries that have adopted the harmonized system.

The Tariff code is supplied in the <HTS> element.

None of the values entered into the Items fields will be validated against the number of packages/articles submitted with a consignment, the customer is responsible for making these values correspond if desired.

5.18.1.2 The Commercial Invoice elements

If the consignment is customs controlled, you can supply details to be printed on the Commercial Invoice

```
....
</ARTICLE>
</PACKAGE>
<!--Element INVOICENUMBER, PURCHASEORDERNUMBER, INCOTERMS, INSURANCECHARGES, DISCOUNT, FREIGHTCHARGES,
OTHERCHARGES is optional-->
<INVOICENUMBER>Inv1</INVOICENUMBER>
<PURCHASEORDERNUMBER>PO1232123</PURCHASEORDERNUMBER>
<INCOTERMS>CIF</INCOTERMS>
<DISCOUNT>100</DISCOUNT>
<INSURANCECHARGES>50</INSURANCECHARGES>
<FREIGHTCHARGES>200</FREIGHTCHARGES>
<OTHERCHARGES>20</OTHERCHARGES>
</DETAILS>
</CONSIGNMENT>
.....
```

All these fields are optional.

5.19ACTIVITY Elements

This element allows you to state what you wish to do with the data you have passed in this call or passed previously to TNT.

```
<ACTIVITY>
  <CREATE>
    <CONREF>ref01_008</CONREF>
  </CREATE>
  <RATE>
    <CONREF>ref01_008</CONREF>
  </RATE>
  <BOOK>
    <CONREF>ref01_008</CONREF>
  </BOOK>
  <SHIP>
    <CONREF>ref01_008</CONREF>
  </SHIP>
  <PRINT>
    <CONNOTE>
      <CONREF>ref01_008</CONREF>
    </CONNOTE>
    <LABEL>
      <CONREF>ref01_008</CONREF>
    </LABEL>
    <MANIFEST>
      <CONREF>ref01_008</CONREF>
    </MANIFEST>
    <INVOICE>
      <CONREF>ref01_008</CONREF>
    </INVOICE>
    <EMAILTO>bob.yourname@tnt.com</EMAILTO>
    <EMAILFROM>bob.yourname@tnt.com</EMAILFROM>
  </PRINT>
</SHOW_GROUPCODE/>
</ACTIVITY>
```

5.19.1Create Elements

This stores the consignment on the ExpressConnect Shipping database for a period of one week. A Consignment Number will be returned for each successful consignment creation.

```
<CREATE>
  <CONREF>ref01_008</CONREF>
</CREATE>
```

You may create up to 50 consignments in a single call but due to response times and timeouts it is recommended that you process a maximum of 3 create per call. The same is true for all activities. You must state the unique key <CONREF> supplied in the <CONSIGNMENT> element to identify which consignment you wish to create.

You must supply a <CREATE> for all consignments that you require processing.

5.19.2Ship Elements

To use the SHIP activity, the order must have previously been successfully created, using the CREATE activity. These activities can be performed in the same call. The SHIP activity allows you to send your consignment information directly into TNT's back end shipping management systems without the need for a collection request. Please note that the <COLLECTION> elements are mandatory and so need to be supplied even if using just the <SHIP> activity.

This is especially useful if you are on a regular collection and so not need to raise a separate collection request each new consignment, submitted through Express Connect.

```
<SHIP>  
  <CONREF>ref01_008</CONREF>  
</SHIP>
```

The <SHIP> tag is only valid for the V2.2 and above versions of the interface.

If you have created the consignment in a previous call or you use your own consignment number, you can ship using a unique consignment number.

```
<SHIP>  
  <CONNUMBER>GE889350673NL</CONNUMBER>  
</SHIP>
```

In order to test shipping without sending data to the TNT backend systems and actually creating a real consignment it is possible to request a test id for your company in addition to the live userid.

5.19.3RATE Elements

Using the same functionality as ExpressConnect Pricing, you can request an indicative rate for your consignment. A rate is the projected cost of sending a consignment via TNT for a given service. You will usually have a number of options with regards to the level of service you require for sending a consignment.

```
<RATE>  
  <CONREF>ref01_008</CONREF>  
</RATE>
```

Again, if you have created the consignment in a previous call or you use your own consignment number, you can ship using a unique consignment number.

```
<RATE>  
  <CONNUMBER>GE889350673NL</CONNUMBER>  
</RATE>
```

5.19.4BOOK Elements

This element allows you to arrange a collection for your parcels.

You can book a batch of consignments using the group code or Individual consignments using either the <CONREF> or <CONNUMBER>.

For more information on the group code please refer to [Appendix I – Group Codes](#).

Two different confirmations are available. ExpressConnect can be set up to provide an email to confirm it has received and processed information; this is on a per userid basis. The TNT booking system can send an email to the sender/collection email address provided in the input XML to confirm the actual booking in the backend systems together with the actual booking reference number.

When a customer requests a shipment using v2.2, they may also specify an additional attribute to the <BOOK> tag called ShowBookingRef.

```
<BOOK ShowBookingRef="Y">  
<CONREF>ref2</CONREF>  
</BOOK>
```

Setting the ShowBookingRef attribute to 'Y' will, when a collection request is raised successfully in TNT's collection booking system, return the booking reference number within the <BOOKINGREF> tag.

The element EMAILREQD which holds a character either 'Y' or 'N' indicating that a booking confirmation email is required or not.

```
<BOOK EMAILREQD="Y" ShowBookingRef="Y">  
<CONREF>ref2</CONREF>  
</BOOK>
```

The default value is "N".

It normally takes approximately 1 hour before this email is generated by the appropriate TNT booking application. Please see [Appendix F - Example Booking confirmation from backend systems](#)

In order to test booking without sending data to the TNT backend systems and actually creating a real booking it is possible to request a test id for your company in addition to the live userid.

5.19.5PRINT Elements

There are four shipping documents available for each submitted consignments: Consignment Note (Con note), (address) label, commercial invoice and manifest. These will be returned with a style sheet, viewable as a document in your web browser.

The manifest that is printed can take the form of a summary manifest if the group code is used, as opposed to the individual consignment numbers or references. The XML data returned is the same for the manifest and summary manifest, but with a different XSL style sheet specified in the processing instruction. For more information on the group code please refer to [Appendix I – Group Codes](#).

It is also possible for the printed documentation to be sent as HTML files to a given email address, using the email from and to elements. This allows you specify the email sender to imply it is generated from your application. This is useful when arranging consignments to be collected from a different site to the ExpressConnect installation. Please refer to [Appendix H – Returns Paperwork](#)

```
<PRINT>
  <CONNOTE>
    <CONREF>ref 1</CONREF>
  </CONNOTE>
  <LABEL>
    <CONREF>ref 1</CONREF>
  </LABEL>
  <MANIFEST>
    <CONREF>ref 1</CONREF>
  </MANIFEST>
  <INVOICE>
    <CONREF>ref 1</CONREF>
  </INVOICE>
  <EMAILTO>bob.yourname@tnt.com</EMAILTO>
  <EMAILFROM>bob.yourname@tnt.com</EMAILFROM>
</PRINT>
```

Again, if you have created the consignment in a previous call or you use your own consignment number, you can print using a unique consignment number.

To generate all possible shipment documents please specify the <REQUIRED> element.

```
<PRINT>
<REQUIRED>
  <CONREF>ref 2</CONREF>
</REQUIRED>
</PRINT>
```

Please refer to [Shipping Documentation responses](#) for more information on the shipment documents.

5.19.6SHOW_GROUPCODE Elements

To display the groupcode in the output XML (For further information on Group codes see [Appendix I – Group Codes](#)).

```
<SHOW_GROUPCODE />
```


6.Processing the XML Response

You will be returned an access code and your code needs to take this access code and send it back as part of a character string into the TNT server - in exactly the same way that you sent the XML document. The character string you send it in will depend upon which XML document you wish to retrieve. The options using the example access key '12345' are:

GET_RESULT:12345

GET_CONNOTE:12345

GET_LABEL:12345

GET_MANIFEST:12345

GET_INVOICE:12345

So, if you require the consignment note XML you will actually be sending through the socket the message:

“xml_in=GET_CONNOTE:12345”

The XML files are stored on the TNT ExpressConnect server for a period of 26 days, if later retrieval is necessary.

For the Create, Rate, Ship and Book activities, the return data will be contained within one XML document – “RESULT”. This will also contain which and whether a shipping document has been successfully created.

The Print XM, to allow you to generate the shipping documentation will be contained without their own XML documents, retrieve as above. Please refer to [Shipping Documentation responses](#) on how to process the shipping document XML returns.

Please note the current maximum length of the access key is 10 numeric characters, but TNT may need to increase this length in future releases depending on the popularity of the solution.

6.1 Processing the RESULT XML Response

The XML document contains whether an activity was successful or failed.

```
<?xml version="1.0" encoding="utf-8" standalone="yes"?>
<document>
<GROUPCODE>1736</GROUPCODE>
<CREATE>
<CONREF>ref01_008</CONREF>
<CONNUMBER>GE000003364GB</CONNUMBER>
<SUCCESS>Y</SUCCESS>
</CREATE>
<RATE>
<PRICE>
<RATEID>ref01_008</RATEID>
<SERVICE>15N</SERVICE>
<SERVICEDESC>Express</SERVICEDESC>
<OPTION>IN</OPTION>
<OPTIONDESC>Insurance</OPTIONDESC>
<CURRENCY>GBP</CURRENCY>
<RATE>996.61</RATE>
<RESULT>Y</RESULT>
</PRICE>
</RATE>
<BOOK>
<CONSIGNMENT>
<CONREF>ref01_008</CONREF>
<CONNUMBER>GE000003364GB</CONNUMBER>
<SUCCESS>Y</SUCCESS>
<FIRSTTIMETRADER>Y</FIRSTTIMETRADER>
</CONSIGNMENT>
</BOOK>
<SHIP>
<CONSIGNMENT>
<CONREF>ref01_008</CONREF>
<CONNUMBER>GE000003364GB</CONNUMBER>
<SUCCESS>Y</SUCCESS>
</CONSIGNMENT>
</SHIP>
<PRINT>
<CONNOTE>CREATED</CONNOTE>
<LABEL>CREATED</LABEL>
<MANIFEST>CREATED</MANIFEST>
<INVOICE>CREATED</INVOICE>
</PRINT>
</document>
```

The <GROUPCODE> element is using is group code process, for more information on group codes please refer to [Appendix J – Group Codes](#).

You may also receive a run time error:

```
<?xml version="1.0" encoding="utf-8" standalone="yes"?>
<runtime_error>
<error_reason>The request to ExpressConnect Shipping has failed. Please contact your local
service centre for further assistance</error_reason>
<error_srcText>For input string: "sion="1.0" encoding="UTF-8"
standalone="yes"?><runtime_error><error_reason>login details not
recognised</error_reason></runtime_error>"</error_srcText>
</runtime_error>
```

If the validation fails, the reason will be supplied:

```
<?xml version="1.0" encoding="utf-8" standalone="yes"?>
<document>
<PRINT />
<ERROR>
<CODE>301</CODE>
<DESCRIPTION>Receiver company name must be entered</DESCRIPTION>
<SOURCE>Consignment reference: ref01_008</SOURCE>
</ERROR>
</document>
```

Please refer to [Errors](#) for more information.

6.1.1 CREATE response element

The create element must be success to allow any other activity to be performed.

```
<CREATE>
<CONREF>ref01_008</CONREF>
<CONNUMBER>GE000003364GB</CONNUMBER>
<SUCCESS>Y</SUCCESS>
</CREATE>
```

The <CONREF> identifies which consignment was created and the response includes the unique consignment number.

6.1.2 The Transit times Section

When using interface (appVersion) version 3.1 and above, we return information on the transit times and the collection window.

```
<estimatedTimeOfArrival>2019-01-21T07:30:00</estimatedTimeOfArrival>
<serviceCallCutOffTimes>
  <callCutOffDateAndTime>2019-01-18T17:30:00</callCutOffDateAndTime>
  <icaStartDateAndTime>2019-01-18T11:00:00</icaStartDateAndTime>
  <icaEndDateAndTime>2019-01-18T18:30:00</icaEndDateAndTime>
</serviceCallCutOffTimes>
```

The following information is returned:

- The **estimatedTimeOfArrival** is when we estimate we will be able to deliver the shipment
- The **callCutOffDateAndTime** is when you must have made the Booking to select this transit time/service.
- The **icaStartDateAndTime** is beginning of collection time
- The **icaEndDateAndTime** is the end of collection time

6.1.3RATE response element

The RATE element returns the indicative price for the shipment..

```
<RATE>
<PRICE>
<RATEID>ref01_008</RATEID>
<SERVICE>15N</SERVICE>
<SERVICEDESC>Express</SERVICEDESC>
<OPTION>IN</OPTION>
<OPTIONDESC>Insurance</OPTIONDESC>
<CURRENCY>GBP</CURRENCY>
<RATE>996.61</RATE>
<RESULT>Y</RESULT>
</PRICE>
</RATE>
```

The price list element will contain a result. The rate identified supplied by the customer is returned along with the service and options codes/descriptions, rate (excluding V.A.T.) and a result code. If the result code is N then no rate was available for that service.

6.1.3.1RATE response element – UK Domestic

UK Domestic RATE requests return additional information on the rate..

```
<RATE>
<priceResponse>
<generatedByName>10.210.137.238</generatedByName>
<generatedById>10.210.137.238</generatedById>
<discount></discount>
<requestDateTime></requestDateTime>
<errorDescription></errorDescription>
<quoteReference>1608-000000</quoteReference>
<availableCollectionDate>2016-08-11T00:00:00</availableCollectionDate>
<hazardousGoodsAllowed>false</hazardousGoodsAllowed>
<collectionDepot></collectionDepot>
<ratingDepot>051</ratingDepot>
<accountName>JOHN GOOD LTD</accountName>
<divisionNumber>010</divisionNumber>
<noteType>3</noteType>
<enhancedLiabilityIndicator>false</enhancedLiabilityIndicator>
<options>CF</options>
<bookingStatus>QuoteViaWeb</bookingStatus>
<quoteComment>Generated via Web Request</quoteComment>
<availableDeliveries>
<date>2016-08-12T00:00:00</date>
<reference>1</reference>
<ratedServices>
<ratedService>
<deliveredReference></deliveredReference>
```

Continued below

```

<availableDeliveries>
<date>2016-08-12T00:00:00</date>
<reference>1</reference>
<ratedServices>
<ratedService>
<deliveryReference></deliveryReference>
<code>1</code>
<description>EXPRESS</description>
<division>D</division>
<charge>89.41</charge>
<guaranteed>true</guaranteed>
<discount>0.00</discount>
<surcharges>
<category>CF</category>
<description>CF Surcharge</description>
<charge>5.00</charge>
<commodityCode></commodityCode>
<category>D</category>
<description>Residential Supplement - delivery</description>
<charge>2.00</charge>
<commodityCode></commodityCode>
<category>8</category>
<description>Express Index</description>
<charge>5.75</charge>
<commodityCode></commodityCode>
<category>G</category>
<description>2012 CPI Supplement</description>
<charge>3.60</charge>
<commodityCode></commodityCode>
<category>J</category>
<description>2013 CPI Supplement</description>
<charge>2.70</charge>
<commodityCode></commodityCode>
<category>K</category>
<description>2014 CPI Supplement</description>
<charge>1.90</charge>
<commodityCode></commodityCode>
<category>M</category>
<description>2015 CPI Supplement</description>
<charge>1.00</charge>
<commodityCode></commodityCode>
</surcharges>
<deliveryDate>2016-08-12T00:00:00</deliveryDate>
<accepted>true</accepted>
<commodityCode></commodityCode>
</ratedService>
<ratedService>
<deliveryReference></deliveryReference>
<code>AM</code>
<description>12:00 EXPRESS</description>
<division>D</division>
<charge>97.09</charge>
<guaranteed>true</guaranteed>
<discount>0.00</discount>
<surcharges>
....
</surcharges>
<deliveryDate>2016-08-12T00:00:00</deliveryDate>
<accepted>false</accepted>
<commodityCode></commodityCode>
</ratedService>
<ratedService>
...
</ratedService>

```

6.1.3.1.1 *generatedByName, generatedById, requestDateTime and quoteReference elements*

The generatedByName, generatedById, requestDateTime and quoteReference, are used to uniquely identify the rating response.

```
<generatedByName>10.210.132.246</generatedByName>  
<generatedById>10.210.132.246</generatedById>  
<requestDateTime>2012-07-27T08:56:16</requestDateTime>  
<quoteReference>1207-000200</quoteReference>
```

6.1.3.1.2 *The availableCollectionDate element*

The next available collection date after the supplied shipping date will be returned in the availableCollectionDate element

```
<availableCollectionDate>2012-07-27T00:00:00</availableCollectionDate>
```

The date format is CCYY-MM-DD.

6.1.3.1.3 *The collectionDepot, ratingDepot, accountName, divisionNumber, noteType, enhancedLiabilityIndicator, options, bookingStatus and quoteComment elements*

There are a number of elements that have been retained in the interface for backward compatibility or to be used within TNT solutions using the same interface, they should not be coded into the user solution. These elements provide information on the shipment based on the supplied input.

```
<collectionDepot>051</collectionDepot>  
<ratingDepot></ratingDepot>  
<accountName>Fredrick Bloggs Ltd.</accountName>  
<divisionNumber>010</divisionNumber>  
<noteType>3</noteType>  
<enhancedLiabilityIndicator>false</enhancedLiabilityIndicator>  
<options>CZ</options>  
<bookingStatus>QuoteViaWeb</bookingStatus>  
<quoteComment>Generated via Web Request</quoteComment>
```

6.1.3.1.4 *The availableDeliveries section*

There is an `availableDeliveries` section for each delivery date based on the services determined that the user may select to delivery the shipment based on the details supplied. Normally there will be one section returned for the next working day. This section contains all the serviced that can be used to delivery on this date, these are detailed in the `ratedServices`.

```
<availableDeliveries>
  <date>2012-07-30T00:00:00</date>
  <reference>1</reference>
  <ratedServices>
    <ratedService>
      ...
    </ratedService>
    ...
  </ratedServices>
</availableDeliveries>
```

6.1.3.1.5 The `ratedServices` and `ratedService` sections

The `ratedServices` section can contain up to 10 `ratedService` elements. Each service that can be rated and is feasibility used to delivery the shipment described in the price check.

```
<ratedServices>
<ratedService>
<deliveryReference>1</deliveryReference>
<code>1</code>
<description>EXPRESS</description>
<division>D</division>
<charge>90.71</charge>
<guaranteed>true</guaranteed>
<discount>0.00</discount>
<surcharges>
  ...
</surcharges>
<deliveryDate>2012-07-30T00:00:00</deliveryDate>
<accepted>true</accepted>
<commodityCode></commodityCode>
</ratedService>
<ratedService>
  ...
</ratedService>
  ...
</ratedServices>
```

The service code and description are returned in the code and description elements. The charge amount is in Pound sterling, as is the discount that has been provided. The delivery date format is CCYY-MM-DD

6.1.3.1.6 The surcharges sections

The surcharges section can contain up to 10 surcharges that applies to this shipment.

```
<surcharges>
<category>CZ</category>
<description>CFwd and Hazardous Supplement</description>
<charge>41.00</charge>
<commodityCode></commodityCode>
<category>ELCF</category>
<description>Enhanced Liability with CF</description>
<charge>3.00</charge>
<commodityCode></commodityCode>
<category>D</category>
<description>Residential Supplement - delivery</description>
<charge>7.50</charge>
<commodityCode></commodityCode>
<category>8</category>
<description>Express Index</description>
<charge>11.11</charge>
<commodityCode></commodityCode>
</surcharges>
```

The surcharges category, associate description, charge code and where appropriate commodity code are returned for each rated service. The charge amount is in Pound sterling.

6.1.4BOOK response element

This element highlights whether the book activity was successful or failed.

By setting the ShowBookingRef attribute to 'Y' in the request, and if the collection request is raised successfully in TNT's collection booking system, the return the booking reference number will be returned within the <BOOKINGREF> tag. This is not available for UK domestic bookings.

```
<BOOK>
<CONSIGNMENT>
<CONREF>ref2</CONREF>
<CONNUMBER>GE857115020GB</CONNUMBER>
<SUCCESS>Y</SUCCESS>
<FIRSTTIMETRADER>Y</FIRSTTIMETRADER>
<BOOKINGREF>CVT 803567</BOOKINGREF>
</CONSIGNMENT>
</BOOK>
```

Please refer to [Appendix L – First Time Trader Requirements](#) for more information on the <FIRSTTIMETRADER> element.

6.1.5SHIP response element

This element highlights whether the Ship activity was successful or failed.

```
<SHIP>
<CONSIGNMENT>
<CONREF>ref01_008</CONREF>
<CONNUMBER>GE000003364GB</CONNUMBER>
<SUCCESS>Y</SUCCESS>
</CONSIGNMENT>
</SHIP>
```

6.1.6PRINT response element

This element highlights which shipping documents are available

```
<PRINT>  
<CONNOTE>CREATED</CONNOTE>  
<LABEL>CREATED</LABEL>  
<MANIFEST>CREATED</MANIFEST>  
<INVOICE>CREATED</INVOICE>  
</PRINT>
```

6.2 Recommend Failure Processing

If you do not receive a <SUCCESS>Y</SUCCESS> element, the recommended additional processing is dependent on the activity.

6.2.1 Create Processing

The create activity will return the error, that caused the create to be unsuccessful, e.g.

```
<ERROR>
  <CODE>229</CODE>
  <DESCRIPTION>The shipment date cannot be in the past</DESCRIPTION>
</ERROR>
```

Please correct the submission data, based on the error message and resubmit the requests.

6.2.2 Rate failure Processing

If the rate activity fails it is recommend that you call ExpressConnect Pricing to obtain the rate.

6.2.3 Book failure Processing

The create activity has been successfully but the book activity has failed:

```
<?xml version="1.0" encoding="utf-8" standalone="yes"?>
<document>
  <GROUPCODE>1736</GROUPCODE>
  <CREATE>
    <CONREF>ref01_008</CONREF>
    <CONNUMBER>GE000003364GB</CONNUMBER>
    <SUCCESS>Y</SUCCESS>
  </CREATE>
  <BOOK>
    <CONSIGNMENT>
      <CONREF>ref01_008</CONREF>
      <SUCCESS>N</SUCCESS>
    </CONSIGNMENT>
  </BOOK>
```

This means the shipment has been created on the ExpressConnect database, but the booking has not been made. You need to resubmit the Book but not the create. If you submit a create then you will create a duplicate shipment. If you supply your own consignment number, then the system will generate a duplicate consignment number error.

Please submit just the Book activity using the returned CONNUMBER from the successful create. Do not perform a create or supply the shipment data (<CONSIGNMENT> element).

```
<?xml version="1.0" encoding="UTF-8"?><ESHIPPER>
<LOGIN>
    <COMPANY>YOUR USERID</COMPANY>
    <PASSWORD>YOUR PASSWORD</PASSWORD>
    <APPID>EC</APPID>
    <APPVERSION>2.2</APPVERSION>
</LOGIN>
<CONSIGNMENTBATCH>
<SENDER>
    <COMPANYNAME>Sender Co 01-008</COMPANYNAME>
    <STREETADDRESS1>TEST DO NOT COLLECT1</STREETADDRESS1>
    <STREETADDRESS2>TEST DO NOT COLLECT2</STREETADDRESS2>
    <STREETADDRESS3>TEST DO NOT COLLECT3</STREETADDRESS3>
    <CITY>Atherstone</CITY>
    <PROVINCE>Warwickshire</PROVINCE>
    ...
    ...
    <SHIPDATE>15/08/2016</SHIPDATE>
    <PREFCOLLECTTIME>
        <FROM>09:00</FROM>
        <TO>10:00</TO>
    </PREFCOLLECTTIME>
    <ALTCOLLECTTIME>
        <FROM>11:00</FROM>
        <TO>12:00</TO>
    </ALTCOLLECTTIME>
    <COLLINSTRUCTIONS>use rear gate 01-008</COLLINSTRUCTIONS>
</COLLECTION>
</SENDER>
</CONSIGNMENTBATCH>
<ACTIVITY>
    <BOOK>
        <CONNUMBER>GE000003364GB</CONNUMBER>
    </BOOK>
</ACTIVITY>
</ESHIPPER>
```

6.2.4SHIP failure Processing

If the Ship activity returns a <SUCCESS>N</SUCCESS>, please follow the same reprocess as per BOOK but with a SHIP activity. The SHIP and BOOK can be in the same submission.

6.3 Recommend Print Failure Processing

If you do receive a http “500” return code when performing a Get_document call such as ...

```
xml_in = 'GET_CONNOTE:'+AccessCode;
```

This is usually caused by the fact the document has not been requested in the initial request activities.

```
<PRINT>
  <CONNOTE>
    <CONREF>ref 1</CONREF>
  </CONNOTE>
  <LABEL>
    <CONREF>ref 1</CONREF>
  </LABEL>
  <MANIFEST>
    <CONREF>ref 1</CONREF>
  </MANIFEST>
  <INVOICE>
    <CONREF>ref 1</CONREF>
  </INVOICE>
  <EMAILTO>bob.yourname@tnt.com</EMAILTO>
  <EMAILFROM>bob.yourname@tnt.com</EMAILFROM>
</PRINT>
```

It is possible to create these documents by submitting just the PRINT activity using the returned CONNUMBER from the successful create. Do not perform a create or supply the shipment data (<CONSIGNMENT> element).

```

<?xml version="1.0" encoding="UTF-8"?><ESHIPPER>
<LOGIN>
    <COMPANY>YOUR USERID</COMPANY>
    <PASSWORD>YOUR PASSWORD</PASSWORD>
    <APPID>EC</APPID>
    <APPVERSION>2.2</APPVERSION>
</LOGIN>
<CONSIGNMENTBATCH>
<SENDER>
    <COMPANYNAME>Sender Co 01-008</COMPANYNAME>
    <STREETADDRESS1>TEST DO NOT COLLECT1</STREETADDRESS1>
    <STREETADDRESS2>TEST DO NOT COLLECT2</STREETADDRESS2>
    <STREETADDRESS3>TEST DO NOT COLLECT3</STREETADDRESS3>
    <CITY>Atherstone</CITY>
    <PROVINCE>Warwickshire</PROVINCE>
    ...
    ...
    <SHIPDATE>15/08/2016</SHIPDATE>
    <PREFCOLLECTTIME>
        <FROM>09:00</FROM>
        <TO>10:00</TO>
    </PREFCOLLECTTIME>
    <ALTCOLLECTTIME>
        <FROM>11:00</FROM>
        <TO>12:00</TO>
    </ALTCOLLECTTIME>
    <COLLINSTRUCTIONS>use rear gate 01-008</COLLINSTRUCTIONS>
</COLLECTION>
</SENDER>
</CONSIGNMENTBATCH>
<ACTIVITY>
    <PRINT>
    <CONNOTE>
        <CONNUMBER>GE000003364GB</CONNUMBER>
    </CONNOTE>
    <LABEL>
        <CONNUMBER>GE000003364GB</CONNUMBER>
    </LABEL>
    <MANIFEST>
        <CONNUMBER>GE000003364GB</CONNUMBER>
    </MANIFEST>
    <INVOICE>
        <CONNUMBER>GE000003364GB</CONNUMBER>
    </INVOICE>
    <EMAILTO>bob.yourname@tnt.com</EMAILTO>
    <EMAILFROM>bob.yourname@tnt.com</EMAILFROM>
    </PRINT>
</ACTIVITY>
</ESHIPPER>

```

After which you should be able to successfully “Get” the appropriate document:

```
xml_in = 'GET_CONNOTE:' + AccessCode;
```

Please use the AccessCode returned from the request containing the print activity rather than the original request.

7.Shipping Documentation responses

If a print request is successfully processed, XML documents will be created and should be retrieved by the customer using the access key. This XML can be printed by either writing print software using the data inside the XML or by simply parsing the XML documents with a suitable parser that conforms to the standards recommended by the W3C (World Wide Web Consortium). The printed documentation is created using stylesheets. An XSL (Extensible Stylesheet Language) *stylesheet processor* accepts a document or data in XML referencing an XSL stylesheet and presents that XML source content as intended by the said stylesheet.

Three methods of producing the documentation are possible.

- Development your own solution
- Using the TNT stylesheets in an XML compliant browser
- Producing HTML with a compliant XML / XSL parser

The current TNT document stylesheets can be located at:

<https://express.tnt.com/expresswebservices-website/stylesheets/HTMLConsignmentNoteRenderer.xsl>
<https://express.tnt.com/expresswebservices-website/stylesheets/HTMLAddressLabelRenderer.xsl>
<https://express.tnt.com/expresswebservices-website/stylesheets/HTMLManifestRenderer.xsl>
<https://express.tnt.com/expresswebservices-website/stylesheets/HTMLSummaryManifestRenderer.xsl>
<https://express.tnt.com/expresswebservices-website/stylesheets/HTMLCommercialInvoiceRenderer.xsl>

7.1 Development your own solution

By implementing the XML/XSL standards, TNT has divorced the data from the presentation, for enhanced flexibility and platform neutrality. If you wish to produce the required documentation through your own software solution, then please note that the formats must conform to the standards implemented by TNT. Your documentation will need to be passed to your local TNT representative for approval by TNT operations.

It is possible to host certain elements, for example stylesheets, on the client server. This is not recommended as it means that the locally held elements will need to be refreshed in the event of changes being made to the centrally held item.

7.2 Using the TNT stylesheets in an XML compliant browser

Producing the documentation using this option is by far the easiest to adopt, because TNT have already done the work of creating the presentation.

Simply open the returned print XML, as an .xml file in the browser and the documentation will be automatically rendered.

Each XML print document will contain a reference to an XSL stylesheet held on the TNT webservers e.g.

```
<?xml version="1.0" standalone="yes"?>
<?xml-stylesheet href="https://express.tnt.com/expresswebservices-website/stylesheets/HTMLCommercialInvoiceRenderer.xsl"
type="text/xsl"?>
```

The second line tells the XML browser that there is a stylesheet designed to process and format the XML for display or print. The 'href' provides the address of the stylesheet and the 'type' tells the browser that the stylesheet is written in XSL.

<!--If you wish to retrieve documentation using the older version 2.0 stylesheets, which do not support receiver pays functionality, then please reference the following declaration -->

```
<?xml-stylesheet href="https://express.tnt.com/expresswebservices-website/stylesheets/HTMLCommercialInvoiceRenderer.xsl"
type="text/xsl"?>
```

7.3 Producing HTML with a compliant XML / XSL parser

If you use a browser other than IE or another XML supporting browser, then the XML can still be parsed with the stylesheets to produce HTML. This can then be rendered in any version 3.0+ browser supporting JavaScript.

The most compatible method of producing the HTML is using the Microsoft MSXML parser. This is the internal COM parser used within IE. It is however available in a free redistributable version, from the Microsoft web site, additional information can be found at.

<https://msdn.microsoft.com/en-us/data/bb190600.aspx>

Other parsers are available from IBM and Datachannel, both supporting the W3C DOM.

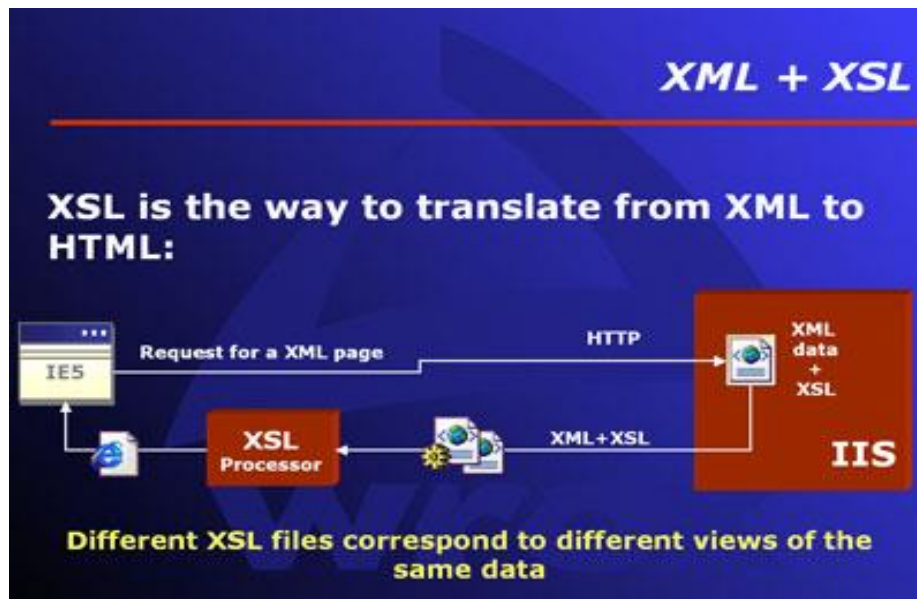
IBM's browser is available at <http://www.ibm.com>

XML4J – a platform independent parser written in Java

XML4C – another IBM parser written in C++

Datachannel, who originally wrote the Microsoft parser also produce an XML parser available for download at

<http://www.datachannel.com>



7.4 Documentation requirement rules

There are four shipping documents that can be produced. These are described below with ‘rules’ for their production – required information and suggested layout. If unsure as to which documents are required, the customer has the option of passing in the conrefs/consignment numbers in the <PRINT><REQUIRED> element. This will then return documents based on the rule table below:

Required Documents

ConsignmentType	Origin and destination countries both within the EU?	Documents to be printed
Document	N/A	Labels, connotes, manifest
Non-Doc	Y	Labels, manifest
Non-Doc	N	Labels, connotes, manifest, commercial invoice

The (commercial) invoice is the primary document required by the Customs officials dealing with international transactions. It is used as a customs declaration provided by the person or corporation that is exporting an item across international borders.

Most large export companies have their own invoice and it is recommended that they use theirs, but ExpressConnect Shipping will provide one if required.

Please note that it is also hereby certified and agreed that, as TNT Express (including any other carrier involved in the transportation of the goods) does not have any possibility to control the accuracy of the information displayed on the commercial invoice, the shipper, consignee and buyer release TNT Express from all and any liability in connection with said information (including but not limited the declared value of the shipped goods) and agree to indemnify and hold TNT Express harmless from any and all claims, actions and judgment incurred in connection therewith.

7.5 Consignment Note

A consignment note is a document that functions as a receipt for the goods to be shipped, and as evidence of the contract of carriage by setting out the rights and obligations of the consignor and the carrier, as well as placing limitations on the carrier's liability for loss, damage or delay to the goods. It is not a document of title to the goods.

The xml response for the consignment note can be retrieve in Java script using

```
// Retrieve Consignment note
xml_in = 'GET_CONNOTE:' + AccessCode;
var ConNoteXML=SendXml(xml_in);
```

and has the following structure:

```
<?xml version="1.0" encoding="utf-8" standalone="yes"?>
<?xml-stylesheet href="https://express.tnt.com/expresswebservices-
website/stylesheets/HTMLConsignmentNoteRenderer.xsl"

type="text/xsl"?>
<CONSIGNMENTBATCH>
<BARCODEURL>/barbecue/barcode?type=code39&height=70&width=1&data=
```



Continued below.

```
</SENDER>
<COLLECTION>
<COMPANYNAME>
<![CDATA[Collection Name]]>
</COMPANYNAME>
<STREETADDRESS1>
<![CDATA[TEST DO NOT COLLECT4]]>
</STREETADDRESS1>
<STREETADDRESS2>
<![CDATA[TEST DO NOT COLLECT5]]>
</STREETADDRESS2>
<STREETADDRESS3>
<![CDATA[TEST DO NOT COLLECT6]]>
</STREETADDRESS3>
<CITY>
<![CDATA[Atherstone]]>
</CITY>
<PROVINCE>
<![CDATA[Warwickshire]]>
</PROVINCE>
<POSTCODE>CV9 1TT</POSTCODE>
<COUNTRY>UNITED KINGDOM</COUNTRY>
<CONTACTNAME>
<![CDATA[Mr Contact]]>
</CONTACTNAME>
<CONTACTDIALCODE>00000</CONTACTDIALCODE>
<CONTACTTELEPHONE>700005</CONTACTTELEPHONE>
<CONTACTEMAIL>contact@tnt.com</CONTACTEMAIL>
</COLLECTION>
<CARRIAGEFORWARD>N</CARRIAGEFORWARD>
</HEADER>
<RECEIVER>
<COMPANYNAME>
<![CDATA[Receiver Name]]>
</COMPANYNAME>
<STREETADDRESS1>
<![CDATA[TEST DO NOT COLLECT7]]>
</STREETADDRESS1>
<STREETADDRESS2>
<![CDATA[TEST DO NOT COLLECT8]]>
</STREETADDRESS2>
<STREETADDRESS3>
<![CDATA[TEST DO NOT COLLECT9]]>
</STREETADDRESS3>
<CITY>
<![CDATA[Amsterdam]]>
</CITY>
<POSTCODE>1012 AA</POSTCODE>
<COUNTRY>NETHERLANDS</COUNTRY>
<CONTACTNAME>
<![CDATA[Mr Bob]]>
</CONTACTNAME>
<CONTACTDIALCODE>1672</CONTACTDIALCODE>
<CONTACTTELEPHONE>987432</CONTACTTELEPHONE>
<CONTACTEMAIL>email@tnt.com</CONTACTEMAIL>
<VAT>VAT-0123</VAT>
</RECEIVER>
<DELIVERY>
```

Continued below.

```
<DELIVERY>
<COMPANYNAME>
<![CDATA[Delivery Name]]>
</COMPANYNAME>
<STREETADDRESS1>
<![CDATA[TEST DO NOT COLLECT10]]>
</STREETADDRESS1>
<STREETADDRESS2>
<![CDATA[TEST DO NOT COLLECT11]]>
</STREETADDRESS2>
<STREETADDRESS3>
<![CDATA[TEST DO NOT COLLECT12]]>
</STREETADDRESS3>
<CITY>
<![CDATA[Amsterdam]]>
</CITY>
<POSTCODE>1012 AA</POSTCODE>
<COUNTRY>NETHERLANDS</COUNTRY>
<CONTACTNAME>
<![CDATA[Mr Frank]]>
</CONTACTNAME>
<CONTACTDIALCODE>1672</CONTACTDIALCODE>
<CONTACTTELEPHONE>987432</CONTACTTELEPHONE>
<CONTACTEMAIL>email@tnt.com</CONTACTEMAIL>
<VAT>VAT-0123</VAT>
</DELIVERY>
<TOTALVOLUME units="m3">1.0</TOTALVOLUME>
<TOTALWEIGHT units="kg">1.4</TOTALWEIGHT>
<CUSTOMERREF>
<![CDATA[DISKS]]>
</CUSTOMERREF>
<CONSIGNMENTTYPE>N</CONSIGNMENTTYPE>
<CONNUMBER>GE000003143GB</CONNUMBER>
<SERVICE>15N Express</SERVICE>
<INSURANCEVALUE>150.00</INSURANCEVALUE>
<GOODSDESC1>
<![CDATA[assorted office accessories]]>
</GOODSDESC1>
<TOTALITEMS>2</TOTALITEMS>
<GOODSVALUE>180.00</GOODSVALUE>
<DELIVERYINST>
<![CDATA[Delivery Instructions TEST]]>
</DELIVERYINST>
<OPTION1>PR Priority</OPTION1>
<OPTION2></OPTION2>
<OPTION3></OPTION3>
<OPTION4></OPTION4>
<OPTION5></OPTION5>
<CURRENCY>GBP</CURRENCY>
<INSURANCECURRENCY>GBP</INSURANCECURRENCY>
<PAYMENTIND>S</PAYMENTIND>
<CONREF>ref01_008</CONREF>
<STATCODE>ABC</STATCODE>
</CONSIGNMENT>
</CONSIGNMENTBATCH>
```

When the xml is "Viewed" in a browser they appear like this (International):

1.From (Collection Address)			
Sender's Account No : 11111111 Name : Collection Name Address : TEST DO NOT COLLECT TEST DO NOT COLLECT , TEST DO NOT COLLECT City : Atherstone Postal/Zip Code : CV9 1TT Province : Warwickshire Location : UNITED KINGDOM Contact : Mr Contact Tel no : 01827 717733			
		Please quote this Number if you have an enquiry. * GE332771366GB *	
2.To (Receiver Address)		A. Delivery Address	
Name : Receiver Company Name Address : TEST DO NOT COLLECT TEST DO NOT COLLECT , TEST DO NOT COLLECT City : Hoofddorp Postal/Zip Code : 2132 LS Province : NETHERLANDS Location : NETHERLANDS Contact Name : Mr Contact Tel no : 01827 717733		Name : Delivery Company Name Address : TEST DO NOT COLLECT & cancelle TEST DO NOT COLLECT & cancelle , TEST DO NOT COLLECT & cancelle City : Hoofddorp Postal/Zip Code : 2132 LS Province : NETHERLANDS Location : NETHERLANDS Contact Name : Mr Contact Tel no : 01827 717733	
3.Goods		B. Dutiable Shipment Details	
General Description : assorted office accessories Harmonized Tariff Code : ABC Total Packages : 5 Total Weight : 2.200 kg Total Volume : 0.439 m3		Receivers VAT/TVA/BTW/ MWST No. : Invoice Value of Dutiables Currency : GBP Value : 180.00	
4. Services		C. Special Delivery Instructions	
Service : 15N Express Options : 15N ExpressPR Priority NON DANGEROUS GOODS <p style="text-align: center;">SENDER PAYS</p> Insurance Currency : GBP Value : 150.00 Sender's Signature : _____ Date : _____		Please pass to reception window - 3rd on the left D. Customer Reference Customer supplied ref E. Invoice Receiver (Receiver's Account Number)	
<small>OUR LIABILITY FOR LOSS, DAMAGE AND DELAY IS LIMITED BY THE CMR CONVENTION OR THE WARSAW CONVENTION WHICHEVER IS APPLICABLE. THE SENDER AGREES THAT CARRIAGE OF THIS CONSIGNMENT IS SUBJECT TO THE TERMS AND CONDITIONS WHICH CAN BE VIEWED AT WWW.TNT.COM. IF NO SERVICES OR BILLING OPTIONS ARE SELECTED THE FASTEST AVAILABLE SERVICE WILL BE CHARGED TO THE SENDER.</small>		<div style="border: 1px solid black; padding: 5px;"> Received by TNT by (Name) : _____ Date : ____/____/____ </div> <div style="border: 1px solid black; padding: 5px; text-align: center;"> CUSTOM'S COPY <small>Please Keep For Reference</small> </div>	

ExpressConnect 3.0

UK Domestic

 EXPRESS Div 010 TNT EXPRESS HOUSE, HOLLY LANE, ATHERSTONE, WARWICKSHIRE CV9 2RYA TELEPHONE : 01827 303030 Customer Copy		CONSIGNMENT NOTE NUMBER  90504343		 BOOK COLLECTIONS ONLINE www.tnt.co.uk OR CALL CUSTOMER SERVICES ON 0800 100 600																												
SENDER'S ACCOUNT NUMBER: 0300302541																																
FROM (Sender) Karuna Action 1 Alexandra Terrace Alexandra Road RAMSBOTTOM BL0 9AL UNITED KINGDOM CONTACT NAME: Lewis Tonks TEL NO: 07725361752		UK DELIVERY OPTIONS Service (Carriage Forward): 1 Express increased transit liability cover is not required DOES THE CONSIGNMENT CONTAIN DANGEROUS GOODS? NO YES UN NUMBER: DANGEROUS GOODS DELIVERIES ARE NOT GUARANTEED																														
CUSTOMER REFERENCE Test do		<table border="1"> <thead> <tr> <th rowspan="2">Goods Description</th> <th rowspan="2">Number of items</th> <th rowspan="2">Weight Kilos</th> <th colspan="3">Dimensions (cms)</th> </tr> <tr> <th>Length</th> <th>Width</th> <th>Height</th> </tr> </thead> <tbody> <tr> <td>WHISTL</td> <td>1</td> <td>10.0</td> <td>0.01</td> <td>0.01</td> <td>0.01</td> </tr> <tr> <td colspan="6"> Total number of items and weight </td> </tr> <tr> <td colspan="6"> 1 10.00 Consignment subject to volumetric measurement </td> </tr> </tbody> </table>				Goods Description	Number of items	Weight Kilos	Dimensions (cms)			Length	Width	Height	WHISTL	1	10.0	0.01	0.01	0.01	Total number of items and weight						1 10.00 Consignment subject to volumetric measurement					
Goods Description	Number of items	Weight Kilos	Dimensions (cms)																													
			Length	Width	Height																											
WHISTL	1	10.0	0.01	0.01	0.01																											
Total number of items and weight																																
1 10.00 Consignment subject to volumetric measurement																																
TO (Receiver) Test Warwickshire Depot Brownsover Road Warwickshire CV11 5QU CONTACT NAME: Whistl TEL NO: 08435092454																																

If producing your own, they must contain all the information shown on the templates above, both on the receiver copy and on the customs copy.. If you create your own documentation it must be signed off by operations, your TNT representative can arrange this for you.

7.6 Address labels

To be attached to the package/s out for collection. Allows barcode scanning and tracking of consignments during delivery movement.

It is recommended to use a routing label which can be produced using an alternative Webserver Expresslabel, access and assistance this can be arranged by your TNT representative. Further details can be found at:

<https://express.tnt.com/expresswebservices-website/app/routinglabelrequest.html>

The xml response for the label can be retrieve in Java script using

// Retrieve label

```
xml_in = 'GET_LABEL:' + AccessCode;
var LabelXML = SendXml(xml_in);
```

and has the following structure:

```
<?xml version="1.0" encoding="utf-8" standalone="yes"?>
<?xml-stylesheet href="https://express.tnt.com/expresswebservices-website
/stylesheet/HTMLAddressLabelRenderer.xsl" type="text/xsl"?>
<CONSIGNMENTBATCH>
<BARCODEURL>/barbecue/barcode?type=code39&height=70&width=1&data=
```

Continued below.

```

<COLLECTION>
<COMPANYNAME>
<![CDATA[Collection Name]]>
</COMPANYNAME>
<STREETADDRESS1>
<![CDATA[TEST DO NOT COLLECT4]]>
</STREETADDRESS1>
<STREETADDRESS2>
<![CDATA[TEST DO NOT COLLECT5]]>
</STREETADDRESS2>
<STREETADDRESS3>
<![CDATA[TEST DO NOT COLLECT6]]>
</STREETADDRESS3>
<CITY>
<![CDATA[Atherstone]]>
</CITY>
<PROVINCE>
<![CDATA[Warwickshire]]>
</PROVINCE>
<POSTCODE>CV9 1TT</POSTCODE>
<COUNTRY>UNITED KINGDOM</COUNTRY>
<CONTACTNAME>
<![CDATA[Mr Contact]]>
</CONTACTNAME>
<CONTACTDIALCODE>00000</CONTACTDIALCODE>
<CONTACTTELEPHONE>700005</CONTACTTELEPHONE>
<CONTACTEMAIL>contact@tnt.com</CONTACTEMAIL>
</COLLECTION>
<CARRIAGEFORWARD>N</CARRIAGEFORWARD>
</HEADER>
<RECEIVER>
<COMPANYNAME>
<![CDATA[Receiver Name]]>
</COMPANYNAME>
<STREETADDRESS1>
<![CDATA[TEST DO NOT COLLECT7]]>
</STREETADDRESS1>
<STREETADDRESS2>
<![CDATA[TEST DO NOT COLLECT8]]>
</STREETADDRESS2>
<STREETADDRESS3>
<![CDATA[TEST DO NOT COLLECT9]]>
</STREETADDRESS3>
<CITY>
<![CDATA[Amsterdam]]>
</CITY>
<POSTCODE>1012 AA</POSTCODE>
<COUNTRY>NETHERLANDS</COUNTRY>
<CONTACTNAME>
<![CDATA[Mr Bob]]>
</CONTACTNAME>
<CONTACTDIALCODE>1672</CONTACTDIALCODE>
<CONTACTTELEPHONE>987432</CONTACTTELEPHONE>
<CONTACTEMAIL>email@tnt.com</CONTACTEMAIL>
<VAT>VAT-0123</VAT>
</RECEIVER>
<DELIVERY>

```

Continued below.

```

<DELIVERY>
<COMPANYNAME>
<![CDATA[Delivery Name]]>
</COMPANYNAME>
<STREETADDRESS1>
<![CDATA[TEST DO NOT COLLECT10]]>
</STREETADDRESS1>
<STREETADDRESS2>
<![CDATA[TEST DO NOT COLLECT11]]>
</STREETADDRESS2>
<STREETADDRESS3>
<![CDATA[TEST DO NOT COLLECT12]]>
</STREETADDRESS3>
<CITY>
<![CDATA[Amsterdam]]>
</CITY>
<POSTCODE>1012 AA</POSTCODE>
<COUNTRY>NETHERLANDS</COUNTRY>
<CONTACTNAME>
<![CDATA[Mr Frank]]>
</CONTACTNAME>
<CONTACTDIALCODE>1672</CONTACTDIALCODE>
<CONTACTTELEPHONE>987432</CONTACTTELEPHONE>
<CONTACTEMAIL>email@tnt.com</CONTACTEMAIL>
<VAT>VAT-0123</VAT>
</DELIVERY>
<TOTALVOLUME units="m3">1.0</TOTALVOLUME>
<TOTALWEIGHT units="kg">1.4</TOTALWEIGHT>
<CUSTOMERREF>
<![CDATA[DISKS]]>
</CUSTOMERREF>
<CONSIGNMENTTYPE>N</CONSIGNMENTTYPE>
<CONNUMBER>GE000003143GB</CONNUMBER>
<SERVICE>15N Express</SERVICE>
<INSURANCEVALUE>150.00</INSURANCEVALUE>
<GOODSDESC1>
<![CDATA[assorted office accessories]]>
</GOODSDESC1>
<TOTALITEMS>2</TOTALITEMS>
<GOODSVALUE>180.00</GOODSVALUE>
<DELIVERYINST>
<![CDATA[Delivery Instructions TEST]]>
</DELIVERYINST>
<OPTION1>PR Priority</OPTION1>
<OPTION2></OPTION2>
<OPTION3></OPTION3>
<OPTION4></OPTION4>
<OPTION5></OPTION5>
<CURRENCY>GBP</CURRENCY>
<INSURANCECURRENCY>GBP</INSURANCECURRENCY>
<PAYMENTIND>S</PAYMENTIND>
<CONREF>ref01_008</CONREF>
<STATCODE>ABC</STATCODE>
<PACKAGE>

```

Continued below.

```
<PACKAGE>
<GOODSDESC>box 1</GOODSDESC>
<LENGTH units="cm">10.0</LENGTH>
<HEIGHT units="cm">20.0</HEIGHT>
<WIDTH units="cm">30.0</WIDTH>
<WEIGHT units="Kg">0.4</WEIGHT>
<ITEMS>3</ITEMS>
<VOLUME units="m3">0.019</VOLUME>
<PACKAGEINDEX>1</PACKAGEINDEX>
<PACKAGEMAX>2</PACKAGEMAX>
<ARTICLE>
<PACKAGECODE>2127</PACKAGECODE>
<INVOICEDESC>
<![CDATA[metal paperclips]]>
</INVOICEDESC>
<INVOICEVALUE>2.30</INVOICEVALUE>
<ITEMS>1</ITEMS>
<DESCRIPTION>
<![CDATA[paperclips]]>
</DESCRIPTION>
<WEIGHT units="Kg">0.03</WEIGHT>
<HTS>ABC</HTS>
<ORIGINCOUNTRY>GB</ORIGINCOUNTRY>
</ARTICLE>
</PACKAGE>
<PACKAGE>
<GOODSDESC>box 2</GOODSDESC>
<LENGTH units="cm">50.0</LENGTH>
<HEIGHT units="cm">60.0</HEIGHT>
<WIDTH units="cm">70.0</WIDTH>
<WEIGHT units="Kg">0.8</WEIGHT>
<ITEMS>3</ITEMS>
<VOLUME units="m3">0.63</VOLUME>
<PACKAGEINDEX>2</PACKAGEINDEX>
<PACKAGEMAX>2</PACKAGEMAX>
<ARTICLE>
<PACKAGECODE>2128</PACKAGECODE>
<INVOICEDESC>
<![CDATA[metal paperclips]]>
</INVOICEDESC>
<INVOICEVALUE>2.30</INVOICEVALUE>
<ITEMS>1</ITEMS>
<DESCRIPTION>
<![CDATA[paperclips]]>
</DESCRIPTION>
<WEIGHT units="Kg">0.03</WEIGHT>
<HTS>ABC</HTS>
<ORIGINCOUNTRY>GB</ORIGINCOUNTRY>
</ARTICLE>
</PACKAGE>
</CONSIGNMENT>
</CONSIGNMENTBATCH>
```

Viewed in the browser, the standard label appear like this:

<p>Sender : TNT Account : 11111111 Collection Name TEST DO NOT COLLECT TEST DO NOT COLLECT TEST DO NOT COLLECT Atherstone Warwickshire CV9 1TTUNITED KINGDOM Contact : Mr Contact Tel : 01827717733</p>		<p style="text-align: right;">ExpressConnect 3.0</p> <p style="text-align: center;">  * G E 3 3 2 7 7 1 3 6 6 G B *</p> <p>Sender Ref : Customer supplied ref</p>	
<p>Delivery : Delivery Company Name TEST DO NOT COLLECT & cancelle TEST DO NOT COLLECT & cancelle TEST DO NOT COLLECT & cancelle Hoofddorp 2132 LSNETHERLANDS Contact : Mr Contact Tel : 01827717733</p>		<p>Shipping Date :28/06/2019 Description of Goods : metal paperclips Dimensions : 10cm x 30cm x 20cm</p>	
<p>Special Delivery Instructions : Please pass to reception window - 3rd on the left</p>		<p>NON DANGEROUS GOODS</p>	
<p>Service & Options (15N) Express (PR) Priority</p>	<p>No. of Pieces 1 of 5 Package Weight 0.600Kg</p>	<p>OUR LIABILITY FOR LOSS, DAMAGE AND DELAY IS LIMITED BY THE CMR CONVENTION OR THE WARSAW CONVENTION WHICHEVER IS APPLICABLE. THE SENDER AGREES THAT CARRIAGE OF THIS CONSIGNMENT IS SUBJECT TO THE TERMS AND CONDITIONS WHICH CAN BE VIEWED AT WWW.TNT.COM IF NO SERVICES OR BILLING OPTIONS ARE SELECTED THE FASTEST AVAILABLE SERVICE WILL BE CHARGED TO THE SENDER.</p>	

Below is an example of a UK domestic label:

Express		Telephone 01827 303030 
Coll. Depot: RAMSBOTTOM030 Sender A/c: 0300302541 Cons. No: 90504343 Weight (kg): 10.0 Item No.: 001 of 001 Coll. Date: 28/06/2019	051	
Deliver to: Whistl Test Warwickshire Depot Brownover Road Nuneaton Warwickshire CV11 5QU UNITED KINGDOM	Special Instructions:	
	Customer Reference: Test do	
	CV11 5QU	
6030030030254190504343001051 		

Address Label

Please fold this page and attach it to your parcel

If producing your own, they must contain all the information shown below. If you create your own it must be signed off by operations, your TNT representative can arrange this for you.

7.7Detail Manifest

The manifest is the form that lists the consignments traveling on a particular mode of transport on a particular date.

The xml response for the detail manifest can be retrieve in Java script using

```
// Retrieve manifest
xml_in = 'GET_MANIFEST:'+AccessCode;
var ManifestXML=SendXml(xml_in);
```

and has the following structure:

```
<?xml version="1.0" encoding="utf-8" standalone="yes"?>
<?xml-stylesheet href="https://express.tnt.com/expresswebservices-
website/stylesheet/HTMLManifestRenderer.xsl" type="text/xsl"?>
<CONSIGNMENTBATCH>
<BARCODEURL>/barbecue/barcode?type=code39&height=70&width=1&data=
```

Continued below.


```

<COLLECTION>
<COMPANYNAME>
<![CDATA[Collection Name]]>
</COMPANYNAME>
<STREETADDRESS1>
<![CDATA[TEST DO NOT COLLECT4]]>
</STREETADDRESS1>
<STREETADDRESS2>
<![CDATA[TEST DO NOT COLLECT5]]>
</STREETADDRESS2>
<STREETADDRESS3>
<![CDATA[TEST DO NOT COLLECT6]]>
</STREETADDRESS3>
<CITY>
<![CDATA[Atherstone]]>
</CITY>
<PROVINCE>
<![CDATA[Warwickshire]]>
</PROVINCE>
<POSTCODE>CV9 1TT</POSTCODE>
<COUNTRY>UNITED KINGDOM</COUNTRY>
<CONTACTNAME>
<![CDATA[Mr Contact]]>
</CONTACTNAME>
<CONTACTDIALCODE>00000</CONTACTDIALCODE>
<CONTACTTELEPHONE>700005</CONTACTTELEPHONE>
<CONTACTEMAIL>contact@tnt.com</CONTACTEMAIL>
</COLLECTION>
<CARRIAGEFORWARD>N</CARRIAGEFORWARD>
</HEADER>
<RECEIVER>
<COMPANYNAME>
<![CDATA[Receiver Name]]>
</COMPANYNAME>
<STREETADDRESS1>
<![CDATA[TEST DO NOT COLLECT7]]>
</STREETADDRESS1>
<STREETADDRESS2>
<![CDATA[TEST DO NOT COLLECT8]]>
</STREETADDRESS2>
<STREETADDRESS3>
<![CDATA[TEST DO NOT COLLECT9]]>
</STREETADDRESS3>
<CITY>
<![CDATA[Amsterdam]]>
</CITY>
<POSTCODE>1012 AA</POSTCODE>
<COUNTRY>NETHERLANDS</COUNTRY>
<CONTACTNAME>
<![CDATA[Mr Bob]]>
</CONTACTNAME>
<CONTACTDIALCODE>1672</CONTACTDIALCODE>
<CONTACTTELEPHONE>987432</CONTACTTELEPHONE>
<CONTACTEMAIL>email@tnt.com</CONTACTEMAIL>
<VAT>VAT-0123</VAT>
</RECEIVER>

```

Continued below.

```



<DELIVERY>
<COMPANYNAME>
<![CDATA[Delivery Name]]>
</COMPANYNAME>
<STREETADDRESS1>
<![CDATA[TEST DO NOT COLLECT10]]>
</STREETADDRESS1>
<STREETADDRESS2>
<![CDATA[TEST DO NOT COLLECT11]]>
</STREETADDRESS2>
<STREETADDRESS3>
<![CDATA[TEST DO NOT COLLECT12]]>
</STREETADDRESS3>
<CITY>
<![CDATA[Amsterdam]]>
</CITY>
<POSTCODE>1012 AA</POSTCODE>
<COUNTRY>NETHERLANDS</COUNTRY>
<CONTACTNAME>
<![CDATA[Mr Frank]]>
</CONTACTNAME>
<CONTACTDIALCODE>1672</CONTACTDIALCODE>
<CONTACTTELEPHONE>987432</CONTACTTELEPHONE>
<CONTACTEMAIL>email@tnt.com</CONTACTEMAIL>
<VAT>VAT-0123</VAT>
</DELIVERY>
<TOTALVOLUME units="m3">1.0</TOTALVOLUME>
<TOTALWEIGHT units="kg">1.4</TOTALWEIGHT>
<CUSTOMERREF>
<![CDATA[DISKS]]>
</CUSTOMERREF>
<CONSIGNMENTTYPE>N</CONSIGNMENTTYPE>
<CONNUMBER>GE000003143GB</CONNUMBER>
<SERVICE>15N Express</SERVICE>
<INSURANCEVALUE>150.00</INSURANCEVALUE>
<GOODSDESC1>
<![CDATA[assorted office accessories]]>
</GOODSDESC1>
<TOTALITEMS>2</TOTALITEMS>
<GOODSVALUE>180.00</GOODSVALUE>
<DELIVERYINST>
<![CDATA[Delivery Instructions TEST]]>
</DELIVERYINST>
<OPTION1>PR Priority</OPTION1>
<OPTION2></OPTION2>
<OPTION3></OPTION3>
<OPTION4></OPTION4>
<OPTION5></OPTION5>
<CURRENCY>GBP</CURRENCY>
<INSURANCECURRENCY>GBP</INSURANCECURRENCY>
<PAYMENTIND>S</PAYMENTIND>
<CONREF>ref01_008</CONREF>
<STATCODE>ABC</STATCODE>
<PACKAGE>

```


Continued below.

```
<PACKAGE>
<GOODSDESC>box 1</GOODSDESC>
<LENGTH units="cm">10.0</LENGTH>
<HEIGHT units="cm">20.0</HEIGHT>
<WIDTH units="cm">30.0</WIDTH>
<WEIGHT units="Kg">0.4</WEIGHT>
<ITEMS>3</ITEMS>
<VOLUME units="m3">0.019</VOLUME>
<PACKAGEINDEX>1</PACKAGEINDEX>
<PACKAGEMAX>2</PACKAGEMAX>
<ARTICLE>
<PACKAGECODE>2127</PACKAGECODE>
<INVOICEDESC>
<![CDATA[metal paperclips]]>
</INVOICEDESC>
<INVOICEVALUE>2.30</INVOICEVALUE>
<ITEMS>1</ITEMS>
<DESCRIPTION>
<![CDATA[paperclips]]>
</DESCRIPTION>
<WEIGHT units="Kg">0.03</WEIGHT>
<HTS>ABC</HTS>
<ORIGINCOUNTRY>GB</ORIGINCOUNTRY>
</ARTICLE>
</PACKAGE>
<PACKAGE>
<GOODSDESC>box 2</GOODSDESC>
<LENGTH units="cm">50.0</LENGTH>
<HEIGHT units="cm">60.0</HEIGHT>
<WIDTH units="cm">70.0</WIDTH>
<WEIGHT units="Kg">0.8</WEIGHT>
<ITEMS>3</ITEMS>
<VOLUME units="m3">0.63</VOLUME>
<PACKAGEINDEX>2</PACKAGEINDEX>
<PACKAGEMAX>2</PACKAGEMAX>
<ARTICLE>
<PACKAGECODE>2128</PACKAGECODE>
<INVOICEDESC>
<![CDATA[metal paperclips]]>
</INVOICEDESC>
<INVOICEVALUE>2.30</INVOICEVALUE>
<ITEMS>1</ITEMS>
<DESCRIPTION>
<![CDATA[paperclips]]>
</DESCRIPTION>
<WEIGHT units="Kg">0.03</WEIGHT>
<HTS>ABC</HTS>
<ORIGINCOUNTRY>GB</ORIGINCOUNTRY>
</ARTICLE>
</PACKAGE>
</CONSIGNMENT>
</CONSIGNMENTBATCH>
```

Viewed in the browser it appears like this:

COLLECTION MANIFEST (DETAIL) OTHERS (SENDER PAYS)	
<div style="text-align: center;">  </div> <div style="text-align: center;"> Shipment Date: 28/06/2019 Pickup Id: ExpressConnect 3 </div> <div style="text-align: right;"> Printed on: 26/05/2019 </div>	
Sender Account Sender Name & Address	: 11111111 : Sender & TEST DO NOT COLLECT C : TNT Express , TNT House , Holly Lane : Atherstone , Warwickshire , CV9 2ry , UNITED KINGDOM
<div style="display: flex; justify-content: space-between;"> <div>  *GE332771366GB* </div> <div> Special Instructions Please pass to reception window - 3rd on the left </div> <div> NON DANGEROUS GOODS SENDER PAYS </div> </div>	
Sender Contact & Tel	: Mr Contact : 01827 717733
Sender Ref: Customer supplied ref	
Receiver Name & Address	: Receiver Company Name : TEST DO NOT COLLECT , TEST DO NOT COLLECT , TEST DO NOT : COLLECT Hoofddorp , 2132 LS , NETHERLANDS
Receiver Contact & Tel	: Mr Contact : 01827 717733
Collection Name & Address	: Collection Name : TEST DO NOT COLLECT , TEST DO NOT COLLECT , TEST DO NOT : COLLECT Atherstone , Warwickshire , CV9 1TT , UNITED KINGDOM
Delivery Name & Address	: Delivery Company Name : TEST DO NOT COLLECT & cancellé , TEST DO NOT COLLECT & cancellé , : TEST DO NOT COLLECT & cancellé Hoofddorp , 2132 LS , NETHERLANDS
Service Options	: 15N Express : PR Priority
No Pieces : 5 Weight : 2.200 kg Insurance Value : 150.00 GBP Invoice Value : 180.00 GBP	
Goods Description : assorted office accessories	
Description (incl. packing and marks) metal paperclips metal paperclips	Dimensions (L x W x H) 10 cm x 30 cm x 20 cm 50 cm x 70 cm x 60 cm
Total Consignment Volume 0.439 m3	
<hr/>	
Sender's Signature _____ Received by TNT Services _____	Date ____/____/____ Date ____/____/____ Time ____:____ hrs
<small>OUR LIABILITY FOR LOSS, DAMAGE AND DELAY IS LIMITED BY THE CMR CONVENTION OR THE WARSAW CONVENTION WHICHEVER IS APPLICABLE. THE SENDER AGREES THAT CARRIAGE OF THIS CONSIGNMENT IS SUBJECT TO THE TERMS AND CONDITIONS WHICH CAN BE VIEWED AT WWW.TNT.COM. IF NO SERVICES OR BILLING OPTIONS ARE SELECTED THE FASTEST AVAILABLE SERVICE WILL BE CHARGED TO THE SENDER.</small>	


An example of a UK domestic Collection Manifest is below


COLLECTION MANIFEST			
Sender Account : 0300302541		Shipment Date : 28/06/2019	
Sender Name: TEST			
& Address The Cube Coe Street RAMSBOTTOM BL0 9AL UNITED KINGDOM			
 90504343		Special Instructions : TEST	
Sender Contact :		Steven Kramer	Tel : 44 8448472600
Sender Ref :		Test do not collect 1234	
Receiver's VAT No :			
Receiver Name & Address THE SENDER AGREES THAT THE GENERAL CONDITIONS, ACCESSIBLE VIA THE HELP TEXT, ARE ACCEPTABLE AND GOVERN THIS CONTRACT. IF NO SERVICE OR BILLING OPTION IS SELECTED THE FASTEST AVAILABLE SERVICE WILL BE CHARGED TO THE SENDER.		Test Warwickshire Depot Brownover Road Nuneaton Warwickshire CV11 5QU UNITED KINGDOM Receiver Contact : Test	
Items 1		Weight : 10.000 kg	Dimensions (HxWxD) 0.01 x 0.01 x 0.01
Insurance Value :			
Goods Description : 0.01 x 0.01 x 0.01			
		Total Consignment Volume : 0.001 m3	

7.8 Summary Manifest

The summary manifest lists all of the consignments traveling on a particular mode of transport on a particular date, as a part of a batch.

Viewed in the browser it appears like this:

COLLECTION MANIFEST (SUMMARY)


Sender Account: 
 Sender Name: :Sender Co
 S. Address: :Sender House, Manor Road, Marcellin, Atherstone, Warwickshire, CV9 2FY, United Kingdom.
 Group code: :29667

Page: 1 of 1
 Date: 11/06/2005

Con. Nr.	No. of Pieces	Weight (kg)	Shipper Ref.	Receiver	City	Destination	Service
GE00023051G8	2	1.4	FIAT	Comp 1	Milano	Italy	15N Global Express
GE00023053G8	4	1	FIAT	Comp 1	Milano	Italy	15N Global Express
GE00023057G8	4	40	FIAT	Comp 1	Milano	Italy	15N Global Express
GE00023058G8	10	22	FIAT	Comp 1	Milano	Italy	15N Global Express
GE00023059G8	2560	640	FIAT	Comp 1	Milano	Italy	15N Global Express
GE00023070G8	2	1.4	FIAT	Comp 1	Milano	Italy	15N Global Express
GE00023071G8	4	1	FIAT	Comp 1	Milano	Italy	15N Global Express
GE00023074G8	4	40	FIAT	Comp 1	Milano	Italy	15N Global Express
GE00023078G8	10	22	FIAT	Comp 1	Milano	Italy	15N Global Express
GE00023079G8	2560	640	FIAT	Comp 1	Milano	Italy	15N Global Express
GE00023080G8	2	1.4	FIAT	Comp 1	Milano	Italy	15N Global Express
GE00023089G8	4	1	FIAT	Comp 1	Milano	Italy	15N Global Express
GE00023093G8	4	40	FIAT	Comp 1	Milano	Italy	15N Global Express
GE00023096G8	10	22	FIAT	Comp 1	Milano	Italy	15N Global Express
GE00023098G8	2560	640	FIAT	Comp 1	Milano	Italy	15N Global Express

Account 147621 Totals :

15	7740	2113.200
----	------	----------

Sender Sender Co Totals :

15	7740	2113.200
----	------	----------

Grand Totals :

15	7740	2113.200
----	------	----------

Sender's Signature _____

Date ____/____/____

Received by TNT _____

Date ____/____/____ Time ____:____ hrs

Print Date : 25/6/2005

Print Time : 17:5

TNT'S LIABILITY FOR LOSS, DAMAGE AND DELAY IS LIMITED BY THE CMR CONVENTION OR THE WARSAW CONVENTION, WHICHEVER IS APPLICABLE. THE SENDER AGREES THAT THE GENERAL CONDITIONS, ACCESSIBLE VIA THE TNT HELP, ARE ACCEPTABLE AND GOVERN THIS CONTRACT. IF NO SERVICE OR BILLING OPTION IS SELECTED THEN THE FASTEST AVAILABLE SERVICE WILL BE CHARGED TO THE SENDER.

7.9 Commercial invoice

The seller issues a commercial invoice to the buyer stating the cost of the goods being supplied plus any other charges that might be involved, *e.g.* insurance, freight. This type of invoice is raised when a commercial transaction has taken place. One commercial invoice is produced per consignment.

The xml response for the Commercial Invoice can be retrieve in Java script using

```
// Retrieve Invoice
```

```
xml_in = 'GET_INVOICE:' + AccessCode;
```

```
var INVOICEXML=SendXml(xml_in);
```

and has the following structure:

```
<?xml version="1.0" encoding="utf-8" standalone="yes"?>
<?xml-stylesheet href="https://express.tnt.com/expresswebservices-
website/stylesheets/HTMLCommercialInvoiceRenderer.xsl" type="text/xsl"?>
<CONSIGNMENTBATCH>
<CONSIGNMENT originCountry="GB" marketType="INTERNATIONAL">
<HEADER last="true">
<SHIPMENTDATE>15/08/2016</SHIPMENTDATE>
<SENDER>
<COMPANYNAME>
<![CDATA[Sender Co 01-008]]>
</COMPANYNAME>
<STREETADDRESS1>
<![CDATA[TEST DO NOT COLLECT1]]>
</STREETADDRESS1>
<STREETADDRESS2>
<![CDATA[TEST DO NOT COLLECT2]]>
</STREETADDRESS2>
<STREETADDRESS3>
<![CDATA[TEST DO NOT COLLECT3]]>
</STREETADDRESS3>
<CITY>
<![CDATA[Atherstone]]>
</CITY>
<PROVINCE>
<![CDATA[Warwickshire]]>
</PROVINCE>
<POSTCODE>CV9 2ry</POSTCODE>
<COUNTRY>UNITED KINGDOM</COUNTRY>
<CONTACTNAME>
<![CDATA[Mr Contact]]>
</CONTACTNAME>
<CONTACTDIALCODE>01827</CONTACTDIALCODE>
<CONTACTTELEPHONE>717733</CONTACTTELEPHONE>
<CONTACTEMAIL>contact@tnt.com</CONTACTEMAIL>
<ACCOUNT>987654321</ACCOUNT>
</SENDER>
<COLLECTION>
<CONSIGNMENT>
```

Continued below.

```

<COLLECTION>
<COMPANYNAME>
<![CDATA[Collection Name]]>
</COMPANYNAME>
<STREETADDRESS1>
<![CDATA[TEST DO NOT COLLECT4]]>
</STREETADDRESS1>
<STREETADDRESS2>
<![CDATA[TEST DO NOT COLLECT5]]>
</STREETADDRESS2>
<STREETADDRESS3>
<![CDATA[TEST DO NOT COLLECT6]]>
</STREETADDRESS3>
<CITY>
<![CDATA[Atherstone]]>
</CITY>
<PROVINCE>
<![CDATA[Warwickshire]]>
</PROVINCE>
<POSTCODE>CV9 1TT</POSTCODE>
<COUNTRY>UNITED KINGDOM</COUNTRY>
<CONTACTNAME>
<![CDATA[Mr Contact]]>
</CONTACTNAME>
<CONTACTDIALCODE>00000</CONTACTDIALCODE>
<CONTACTTELEPHONE>700005</CONTACTTELEPHONE>
<CONTACTEMAIL>contact@tnt.com</CONTACTEMAIL>
</COLLECTION>
<CARRIAGEFORWARD>N</CARRIAGEFORWARD>
</HEADER>
<RECEIVER>
<COMPANYNAME>
<![CDATA[Receiver Name]]>
</COMPANYNAME>
<STREETADDRESS1>
<![CDATA[TEST DO NOT COLLECT7]]>
</STREETADDRESS1>
<STREETADDRESS2>
<![CDATA[TEST DO NOT COLLECT8]]>
</STREETADDRESS2>
<STREETADDRESS3>
<![CDATA[TEST DO NOT COLLECT9]]>
</STREETADDRESS3>
<CITY>
<![CDATA[Amsterdam]]>
</CITY>
<POSTCODE>1012 AA</POSTCODE>
<COUNTRY>NETHERLANDS</COUNTRY>
<CONTACTNAME>
<![CDATA[Mr Bob]]>
</CONTACTNAME>
<CONTACTDIALCODE>1672</CONTACTDIALCODE>
<CONTACTTELEPHONE>987432</CONTACTTELEPHONE>
<CONTACTEMAIL>email@tnt.com</CONTACTEMAIL>
<VAT>VAT-0123</VAT>
</RECEIVER>
<POSTCODE>

```

Continued below.


```

<DELIVERY>
<COMPANYNAME>
<![CDATA[Delivery Name]]>
</COMPANYNAME>
<STREETADDRESS1>
<![CDATA[TEST DO NOT COLLECT10]]>
</STREETADDRESS1>
<STREETADDRESS2>
<![CDATA[TEST DO NOT COLLECT11]]>
</STREETADDRESS2>
<STREETADDRESS3>
<![CDATA[TEST DO NOT COLLECT12]]>
</STREETADDRESS3>
<CITY>
<![CDATA[Amsterdam]]>
</CITY>
<POSTCODE>1012 AA</POSTCODE>
<COUNTRY>NETHERLANDS</COUNTRY>
<CONTACTNAME>
<![CDATA[Mr Frank]]>
</CONTACTNAME>
<CONTACTDIALCODE>1672</CONTACTDIALCODE>
<CONTACTTELEPHONE>987432</CONTACTTELEPHONE>
<CONTACTEMAIL>email@tnt.com</CONTACTEMAIL>
<VAT>VAT-0123</VAT>
</DELIVERY>
<TOTALVOLUME units="m3">1.0</TOTALVOLUME>
<TOTALWEIGHT units="kg">1.4</TOTALWEIGHT>
<CUSTOMERREF>
<![CDATA[DISKS]]>
</CUSTOMERREF>
<CONSIGNMENTTYPE>N</CONSIGNMENTTYPE>
<CONNUMBER>GE000003143GB</CONNUMBER>
<SERVICE>15N Express</SERVICE>
<INSURANCEVALUE>150.00</INSURANCEVALUE>
<GOODSDESC1>
<![CDATA[assorted office accessories]]>
</GOODSDESC1>
<TOTALITEMS>2</TOTALITEMS>
<GOODSVALUE>180.00</GOODSVALUE>
<DELIVERYINST>
<![CDATA[Delivery Instructions TEST]]>
</DELIVERYINST>
<OPTION1>PR Priority</OPTION1>
<OPTION2></OPTION2>
<OPTION3></OPTION3>
<OPTION4></OPTION4>
<OPTION5></OPTION5>
<CURRENCY>GBP</CURRENCY>
<INSURANCECURRENCY>GBP</INSURANCECURRENCY>
<PAYMENTIND>S</PAYMENTIND>
<CONREF>ref01_008</CONREF>
<STATCODE>ABC</STATCODE>
</PACKAGE>

```

Continued below.

```
<PACKAGE>
<GOODSDESC>box 1</GOODSDESC>
<LENGTH units="cm">10.0</LENGTH>
<HEIGHT units="cm">20.0</HEIGHT>
<WIDTH units="cm">30.0</WIDTH>
<WEIGHT units="Kg">0.4</WEIGHT>
<ITEMS>3</ITEMS>
<VOLUME units="m3">0.019</VOLUME>
<PACKAGEINDEX>1</PACKAGEINDEX>
<PACKAGEMAX>2</PACKAGEMAX>
<ARTICLE>
<PACKAGECODE>2127</PACKAGECODE>
<INVOICEDESC>
<![CDATA[metal paperclips]]>
</INVOICEDESC>
<INVOICEVALUE>2.30</INVOICEVALUE>
<ITEMS>1</ITEMS>
<DESCRIPTION>
<![CDATA[paperclips]]>
</DESCRIPTION>
<WEIGHT units="Kg">0.03</WEIGHT>
<HTS>ABC</HTS>
<ORIGINCOUNTRY>GB</ORIGINCOUNTRY>
</ARTICLE>
</PACKAGE>
<PACKAGE>
<GOODSDESC>box 2</GOODSDESC>
<LENGTH units="cm">50.0</LENGTH>
<HEIGHT units="cm">60.0</HEIGHT>
<WIDTH units="cm">70.0</WIDTH>
<WEIGHT units="Kg">0.8</WEIGHT>
<ITEMS>3</ITEMS>
<VOLUME units="m3">0.63</VOLUME>
<PACKAGEINDEX>2</PACKAGEINDEX>
<PACKAGEMAX>2</PACKAGEMAX>
<ARTICLE>
<PACKAGECODE>2128</PACKAGECODE>
<INVOICEDESC>
<![CDATA[metal paperclips]]>
</INVOICEDESC>
<INVOICEVALUE>2.30</INVOICEVALUE>
<ITEMS>1</ITEMS>
<DESCRIPTION>
<![CDATA[paperclips]]>
</DESCRIPTION>
<WEIGHT units="Kg">0.03</WEIGHT>
<HTS>ABC</HTS>
<ORIGINCOUNTRY>GB</ORIGINCOUNTRY>
</ARTICLE>
</PACKAGE>
</CONSIGNMENT>
</CONSIGNMENTBATCH>
```

Viewed in the browser it appears like this:

<u>SENDER ADDRESS (Seller/Exporter)</u> Sender & TEST DO NOT COLLECT C TNT Express TNT House Holly Lane Atherstone Warwickshire CV9 2ry UNITED KINGDOM		<u>INVOICE</u>	
<u>SENDER CONTACT (Seller/Exporter)</u> Name : Mr Contact Telephone : 01827 717733 Email : contact@tnt.com		<u>Invoice Number</u> : <u>Shipping Date</u> : 28/06/2019 <u>Consignment Number</u> : GE332771366GB <u>Purchase Order Number</u> : <u>Invoice Currency</u> : GBP <u>Sender VAT number</u> : <u>Receiver VAT Number</u> :	
<u>RECEIVER ADDRESS (Buyer/Importer)</u> Receiver Company Name TEST DO NOT COLLECT TEST DO NOT COLLECT TEST DO NOT COLLECT Hoofddorp 2132 LS NETHERLANDS		<u>DELIVER TO ADDRESS (if different from RECEIVER)</u> Delivery Company Name TEST DO NOT COLLECT & cancelle TEST DO NOT COLLECT & cancelle TEST DO NOT COLLECT & cancelle Hoofddorp 2132 LS NETHERLANDS	
<u>RECEIVER CONTACT (Buyer/Importer)</u> Name : Mr Contact Telephone : 01827 717733 Email : contact@tnt.com		<u>DELIVER TO CONTACT (if different from RECEIVER)</u> Name : Mr Contact Telephone : 01827 717733 Email : contact@tnt.com	

Quantity	Units	Total Weight	Description of Goods	HS Tariff Code	Country/Territory of Origin	Unit Value	Total Value
1		0.600 Kg	metal paperclips	ABC	GB	90.00	90.00
1		0.200 Kg	metal paperclips	ABC	GB	90.00	90.00

Total Weight	2.200 kg	Discount	100
		Invoice Sub-Total	180.00
		Freight Charges	200
		Insurance Charges	50
		Other Charges	20
INCO Terms	CIF	Invoice Total	350

8.Errors

There are a number of different errors that may occur when using ExpressConnect Shipping. Many of these are likely to be encountered in the initial development phase and are concerned with the format of the XML message and the presence of data items.

The remaining messages are concerned with validation of the data items and the availability of the service. The error messages are shown below:

It would be sensible to ensure that your code is capable of handling all of the potential error messages returned by ExpressConnect Shipping.

8.1Application generated errors

The standard behaviour is for you will to receive a response and then for you to check the result (with GET_RESULT) to see if there are errors returned.

In some cases, errors are returned directly in the response with an error.

8.1.1Request errors

These are displayed as errors in response, for example Key value not written correctly.

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<runtime_error>
<error_reason>No data received at gateway from client error</error_reason>
<error_srcText></error_srcText>
</runtime_error>
```

8.1.2XML errors

These errors occur if the XML is badly formatted, contains a typo and are returned via GET_RESULT. For example, if the Element <STREETADDRESS> contains a typo.

```
<?xml version="1.0" standalone="yes"?>
<parse_error>
<error_reason>Element content is invalid according to the DTD/Schema. Expecting: STREETADDRESS3,
CITY.</error_reason>
<error_line>13</error_line>
<error_linepos>26</error_linepos>
<error_srcText>
<![CDATA[    <ASTREETADDRESS3 />]]>
</error_srcText>
</parse_error>
```

8.1.3 Validation errors

These errors occur if there is an issue with the data supplied in the XML and are returned via GET_RESULT. For example, the XML contained the insurance element with a value, but the goods value element is missing

```
<?xml version="1.0" encoding="utf-8" standalone="yes"?>
<document>
<ERROR>
<CODE>351</CODE>
<DESCRIPTION>Goods value must be entered if insurance value supplied</DESCRIPTION>
<SOURCE>Consignment reference: ref0204</SOURCE>
</ERROR>
</document>
```

For possible validation or verification errors please see Table of application generated error codes, messages and resolutions on the following pages.

8.2 Table of application generated error codes, messages and resolutions

The Default Message column contains the English language message that is returned with each code. This value is intended to be used by systems integrators. For content management you should use the error code.

An element is considered empty if it contains no value or only whitespace. Therefore all of the following elements are empty:

```
<emptyElement/>

<emptyElement></emptyElement>

<emptyElement></emptyElement>
```

For Shipping

Error Code	Error Description	Resolution
1	No data received at gateway from client error	<p>The request failed to receive a valid request – please resend or contact your local service centre for further assistance</p> <p>This error is returned when the http request is received by the ExpressConnect application without an XML payload.</p> <p>We have found that this can be caused by multiple reasons, including but not limited to:</p> <ul style="list-style-type: none"> • Temporary network issue. Solved by resending request • Expired/Invalid certificate. Solved by installing the express.tnt.com certificate • By remove the linefeed character from the TNT transaction ID • Sending the xml payload as a form/url encoded parameter, but not setting the request header. Solved by setting the content type header appropriately. • Truncating the returned Requestid when requesting the result. <p>Please re-check the your connection codes to connect the TNT server. Review the sample connection codes in this guide</p>
2	The request to ExpressConnect Shipping has failed. Please contact your local service centre for further assistance	Please contact your local service centre for further assistance
3	The {invalidfield.name} specified must be numeric	Please pass numeric data in the highlighted field
101	Error Reading Configuration file	Contact TNT Help Desk
102	Failure to load XML	Check that XML contains DTD in declaration
103	ConsignmentBatch Skipped - More Than 99 Packages	Maximum of 99 packages per consignment only
104	Length Exceeds maximum allowed - Skipped to next consignment	Max length permitted for a package is 2.4m
105	Height Exceeds maximum allowed - Skipped to next consignment	Max height permitted for a package is 1.5m
106	Width Exceeds Mamimum Allowed - Skipped to next consignment	Max width permitted for a package is 1.2m
107	Weight Exceeds maximum allowed - Skipped to next consignment	Max weight permitted for a package is 70 kg
108	Maximum Number Of Articles Exceeded - Skipped to next Consignment	Maximum of 99 articles elements per package only
110	Maximum Number Of Consignments exceeded	Refer to customer documentation for maximum limits set *

Error Code	Error Description	Resolution
113	Empty Consignment Reference found	ConRefs must be supplied
114	Duplicate Consignment Reference not allowed	ConRefs must be unique and are mandatory
115	Consignment Reference Not Recognized	Ensure that conrefs given in the Activity elements correspond to those in the Consignment batches
116	Consignment Number Not Recognized	Ensure that connumbers given in the Activity elements correspond to those consignments created less than 8 days ago.
118	Cannot Rate a receiver pays shipment	Unless you "own" the receiver account number it is not possible to see the estimated cost of the shipment.
119	If the origin or destination of a consignment is outside of the EU, the consignment must contain at least one package	Add a package to the Input XML
120	Duplicate consignment references not allowed for groupcode {groupcode}, conref {conref}	Maximum of 99 packages per consignment only
200	A user ID must be entered	Enter the Customer ID in the input XML
201	A company name must be entered	Enter company name in the input XML
202	The first line of the sender address must be entered	The three lines of the origin address can not all be empty
203	A town for the sender address must be entered	Enter a sender town
204	A post code for the sender address must be entered	Enter a sender post code
205	A country code for the sender address must be entered	Enter a valid sender country code
206	Invalid country code for the sender address entered	Enter a valid sender country code
207	Sender account must be numeric	Enter a valid sender account number
208	The sender address contact name must be entered	Enter a Senders Contact Name
209	The sender address contact dial code must be entered	Enter a sender contact dial code
210	The sender address contact dial code is too long	This field may only hold 7 digits
211	The sender address contact telephone number must be entered	Enter a sender contact telephone number
212	The sender address contact telephone number is too long	This field may only hold 9 digits
213	unable to determine the pick up depot from sender address	Check sender address details are valid
214	Sender account number must be entered	Enter an account number associated with this customer
215	The collection address company name must be entered	Enter collection company name
216	First line of the collection address must be entered	The three lines of the collection address can not all be empty if these tags are used
217	A town for the collection address must be entered	Enter a collection town
218	The collection address post code must be entered	Enter a collection post code
219	The collection address country code must be entered	Enter a valid collection country code
220	Invalid collection address country code entered	Enter a valid collection country code
221	The collection address contact name must be entered	Enter a collection contact name
222	The collection address contact dial code must be entered	Enter a collection contact dial code
223	The collection address contact dial code is too long	This field may only hold 7 digits
224	The collection address contact telephone must be entered	Enter a collection contact telephone number

Error Code	Error Description	Resolution
225	The collection address contact telephone is too long	This field may only hold 9 digits
226	unable to determine pick up depot from collection address	Check collection address details are valid
227	The account number is invalid	The account number entered is not associated with this customer
228	Shipment date is invalid	Enter the shipment date in DD/MM/YYYY format
229	The shipment date cannot be in the past	Enter a shipment date that is not in the past
230	The shipment date cannot be more than {max.days.ahead.booking.allowed} days in the future	Enter a date not more than 14 days in the future
231	Collections can not be made on this date	The Country Cannot make a collection on the requested day
232	A preferred From collection-time must be entered	Enter a valid time in HHMM format
233	The preferred From collection-time is invalid	The Preferred collection times must be completed in HHMM format
234	A preferred To collection-time must be entered	Enter a valid time in HHMM format
235	The preferred To collection -time is invalid	The Preferred collection times must be completed in HHMM format
236	Collection times must overlap with {depot.opening.time} and {depot.closing.time}	Enter a preferred collection time between 09:00 and 16:00
237	The alternate From collection time must be entered	Enter a valid time in HHMM format
238	The alternate From collection time is invalid	The alternate collection times must be completed in HHMM format
239	The alternate To collection time is invalid	Enter a valid time in HHMM format
240	The alternate To collection time is invalid	The alternate collection times must be completed in HHMM format
241	Alternate collection times must be between 09:00 and 16:00	Enter an alternate collection time between 09:00 and 16:00
242	The preferred and alternate collection times must not overlap	Check your collection times do not overlap
243	Unable to allocate unique identifier - contact administrator	There has been an internal error in ExpressConnect, please contact the administrator
244	Group Code {groupcode} does not exist	Check that the correct group code has been entered for an existing batch.
246	Error validating consignments for group code {groupcode}	Check that there are cons defined for this group code.
247	Cutoff time today for submitting shipping requests, {cutoff.date}, has passed	Please contact you TNT representative as the booking time has passed for the current day and we are unable to take your booking via ExpressConnect.
248	The collection instruction is too long. Max length 24 characters	The collection instruction can be a maximum of 24 characters in length.
300	Consignment reference must be entered	Enter a reference for the consignment
301	The receiver company name must be entered	Enter receiver company name in the input XML
302	The first line of the receiver address must be entered	The three lines of the receiver address can not all be empty
303	Receiver town must be entered	Enter a receiver town
304	The receiver address post code must be entered	Enter a receiver post code
305	The receiver address country code must be entered	Enter a valid receiver country code
306	An invalid receiver country code has been entered	Enter a valid receiver country code
307	The receiver address contact name must be entered	A recipient name must be entered
308	The receiver address dial code must be entered	Enter a receiver contact dial code

Error Code	Error Description	Resolution
309	The receiver address dial code is too long	This field may only hold 7 digits
310	The receiver address contact telephone number must be entered	Enter a receiver contact telephone number
311	The receiver address contact telephone number is too long	This field may only hold 9 digits
312	Unable to determine the TNT delivery depot from the receiver address	Check receiver address details are valid
313	The delivery address company name must be entered	Enter delivery company name in the input XML
314	The first line of the delivery address must be entered	The three lines of the delivery address can not all be empty
315	A delivery address town name must be entered	Enter a delivery town
316	A delivery address post code must be entered	Enter a delivery post code
317	A delivery address country code must be entered	Enter a valid delivery country code
318	The delivery address country code is invalid	Enter a valid delivery country code
319	A delivery address contact name must be entered	A delivery name must be entered
320	A delivery address contact dial code must be entered	Enter a delivery contact dial code
321	The delivery address contact dial code is too long	This field may only hold 7 digits
322	A delivery address contact telephone number must be entered	Enter a delivery contact telephone number
323	The delivery address contact telephone number is too long	This field may only hold 9 digits
324	The delivery address company name must be entered	Check delivery address details are valid
325	Domestic shipments are not allowed for this country	The origin and destination countries must be different
326	The consignment type must be entered, N (non-documents) or D (documents)	Enter a consignment type of 'N' (non-document) or 'D' (document)
327	Consignment type must be N (non-documents) or D (documents)	Enter a consignment type of 'N' (non-document) or 'D' (document)
328	Payment indicator must be S (sender) or R (receiver)	Terms of payments may only be (S)ender or (R)eceiver
329	The receivers account number is required for receiver pays shipments	If Terms of payment is 'R' then the receivers account must be entered
330	Receivers pays shipments not allowed for this account number	Receiver pays shipments are not allowed for this account
331	Total items must be entered	A Numeric value must be inserted into the item field
332	Total items must be numeric	A Numeric value must be inserted into the item field
333	Total items must be greater than zero	A Numeric value greater than zero must be inserted into the item field
334	The total weight must be entered	A Numeric value must be inserted into the weight field
335	The total weight must be numeric	A Numeric value must be inserted into the weight field
336	The total weight must be greater than zero	A Numeric value greater than zero must be inserted into the weight field
337	The total volume must be entered for non-document shipments	If con type is Non Doc, then enter a volume
338	The total volume must be numeric	A Numeric value must be inserted into the volume field
339	The total volume must be greater than zero	A Numeric value greater than zero must be inserted into the volume field
340	The goods value must be numeric	A Numeric value must be inserted into the goods value field
341	The goods value must be greater than zero	A Numeric value greater than zero must be inserted into the goods value field

Error Code	Error Description	Resolution
342	The goods value currency must be entered	If Goods Value is entered a valid currency must be entered also
343	The goods value currency is invalid	Enter a Valid Currency Code
344	The goods value must be entered if the currency is given	If a Currency is entered, then a value must be entered also
345	The insurance value must be numeric	A Numeric value must be inserted into the insurance value field
346	The insurance value must be greater than zero	A Numeric value greater than zero must be inserted into the insurance value field
347	The insurance value currency must be entered	Enter an insurance currency along with the insurance value
348	An invalid insurance currency has been entered	Enter a valid Currency Code
349	The insurance value must be entered if currency given	Enter an insurance value to go with the insurance currency
350	The insurance value must not exceed 110% of goods value	Enter an insurance value which is not greater than 110% of the goods value
351	The goods value must be entered if insurance value has been supplied	Enter an goods value if insurance value is supplied
352	An invalid service has been entered	Enter a valid service code
353	An invalid option code has been entered for this shipping service	Enter valid options
354	Duplicate option codes have been entered	Remove the duplicated option code
355	The receivers account number must be numeric	The account number must be numeric
356	The receivers account number is invalid	The account number is not associated with the userid
357	The receiver account country code is invalid	This is an internal TNT error and so please contact your TNT representative
358	The receiver account country code must be entered	The country code associate with the receiver is invalid
359	The receiver account country code must be entered	For receiver pays shipments a valid receiver account is required
360	User not allowed to enter own consignment numbers	The customer is not registered to allow them to use this functionality. Contact your TNT representative to arrange this if required.
361	User entered an invalid consignment number	The last digit (check digit) on the consignment number is invalid. Enter a valid consignment number
362	Duplicate consignment numbers entered	Enter a different consignment number
363	A UN Number must be provided if shipment is hazardous	Provide a UN Number for the hazardous shipment(UK Domestic shipments only)
364	User are not authorised to ship hazardous goods	Contact your local CIT Representative to seek authorisation to ship Hazardous goods. (UK Domestic Shipments Only)
365	Preferred Collection times must be between 09:00 and 23:59	Your preferred collection windows must match TNT availability
366	Alternate Collection times must be between 09:00 and 23:59 and not overlap with Preferred collection times	Your Alternative (afternoon) collection windows must match TNT availability
367	An invalid delivery address country code entered	The country code associate with the delivery is invalid
368	The UN Number is too long	The UN number must be 4 characters in length
369	An insurance value must be entered	The insurance value must be supplied.
400	The package items must be entered	Enter a numeric value in the items field of the package
401	The package items must be numeric	A Numeric value must be inserted into the package field
402	The package items must be greater than zero	A Numeric value greater than zero must be inserted into the package field
403	The package description must be entered	Enter some descriptive text in the package description field
404	The package length must be entered	A length for the package must be entered

Error Code	Error Description	Resolution
405	The package length must be numeric	A Numeric value must be inserted into the package length field
406	The package length must be greater than zero	A Numeric value greater than zero must be inserted into the package length field
407	The package width must be entered	A Width for the package must be entered
408	The package width must be numeric	A Numeric value must be inserted into the package width field
409	The package width must be greater than zero	A Numeric value greater than zero must be inserted into the package width field
410	The package height must be entered	A height for the package must be entered
411	The package height must be numeric	A Numeric value must be inserted into the package height field
412	The package Height must be greater than zero	A Numeric value greater than zero must be inserted into the package height field
413	The package weight must be entered	A weight for the package must be entered
414	The package weight must be numeric	A Numeric value must be inserted into the package weight field
415	The package weight must be greater than zero	A Numeric value greater than zero must be inserted into the package weight field
500	Article Items must be entered	The number of items for the article must be entered
501	Article items must be numeric	A Numeric value must be inserted into the article items field
502	Article Items must be greater than zero	A Numeric value greater than zero must be inserted into the article items field
503	Article description must be entered	The description for the article must be entered
504	Article weight must be entered	The weight for the article must be entered
505	Article weight must be numeric	A Numeric value must be inserted into the article weight field
506	Article weight must be greater than zero	A Numeric value greater than zero must be inserted into the article weight field
507	Article invoice value must be entered	The invoice value for the article must be entered
508	Article invoice value must be numeric	A Numeric value must be inserted into the article invoice field
509	Article invoice value must be greater than zero	A Numeric value greater than zero must be inserted into the article invoice field
510	Article invoice description must be entered	The invoice description for the article must be entered
511	Article origin country must be entered	The origin country of the article must be entered
512	An invalid article origin country code entered	Enter a valid origin country of the article
521	Invalid sender postcode format. Required: {postcode.masks}	Please correct the postocde to the match the required format
522	Invalid collection postcode format. Required: {postcode.masks}	Please correct the postocde to the match the required format
524	Invalid receiver postcode format. Required: {postcode.masks}	Please correct the postocde to the match the required format
525	Invalid delivery postcode format. Required: {postcode.masks}	Please correct the postocde to the match the required format
526	The collection address town and postcode has not been supplied	Please supply the address details
527	The collection address town could not be found	Please supplied town (& postcode combination) in the required TNT spelling - please contact you TNT Representative for more assistance.
528	The collection address town is not unique	Please supplied town (& postcode combination) is not unique - please contact you TNT Representative for more assistance.
529	The collection address province length is too long	The province can be a maximum of 30 characters in length
530	The collection address postcode is not allowed for the selected country	The postcode is not required
531	The collection address province could not be found	The supplied province could not be found - please contact you TNT Representative for more assistance.

Error Code	Error Description	Resolution
532	The collection address postcode is invalid	The supplied postcode is classed as invalid - please contact you TNT Representative for more assistance.
533	The collection address postcode is not unique	The supplied postcode is not unique - please contact you TNT Representative for more assistance.
534	The collection address town postcode combination is invalid	The supplied Town & Postcode combination is classed as invalid - please contact you TNT Representative for more assistance.
535	The collection address postcode is not in within a valid range	We are unable to find this postcode for your supplied town
536	The collection address postcode could not be found	We are unable to find this postcode
537	The collection address country code is not valid	The country code must be a valid ISO country code.
538	The collection address is not unique	The supplied address details are not unique - please contact you TNT Representative for more assistance.
539	The collection postcode is below the minimum length	The Postcode length does not match the required Postcode length
540	The sender address town and postcode has not been supplied	Please supply the address details
541	The sender address town could not be found	Please supplied town (& postcode combination) in the required TNT spelling - please contact you TNT Representative for more assistance.
542	The sender address town is not unique	Please supplied town (& postcode combination) is not unique - please contact you TNT Representative for more assistance.
543	The sender address province length is too long	The province can be a maximum of 30 characters in length
544	The sender address postcode is not allowed for the selected country	The postcode is not required
545	The sender address province could not be found	The supplied province could not be found - please contact you TNT Representative for more assistance.
546	The sender address postcode is invalid	The supplied postcode is classed as invalid - please contact you TNT Representative for more assistance.
547	The sender address postcode is not unique	The supplied postcode is not unique - please contact you TNT Representative for more assistance.
548	The sender address town postcode combination is invalid	The supplied Town & Postcode combination is classed as invalid - please contact you TNT Representative for more assistance.
549	The sender address postcode is not in within a valid range	We are unable to find this postcode for your supplied town
550	The sender address postcode could not be found	We are unable to find this postcode
551	The sender address country code is not valid	The country code must be a valid ISO country code.
552	The sender address is not unique	The supplied address details are not unique - please contact you TNT Representative for more assistance.
553	The sender address postcode does not have the minimum length	The Postcode length does not match the required Postcode length
554	The receiver address town and postcode has not been supplied	Please supply the address details
555	The receiver address town could not be found	Please supplied town (& postcode combination) in the required TNT spelling - please contact you TNT Representative for more assistance.
556	The receiver address town is not unique	Please supplied town (& postcode combination) is not unique - please contact you TNT Representative for more assistance.
557	The receiver address province length is too long	The province can be a maximum of 30 characters in length
558	The receiver address postcode is not allowed for the selected country	The postcode is not required
559	The receiver address province could not be found	The supplied province could not be found - please contact you TNT Representative for more assistance.
560	The receiver address postcode is invalid	The supplied postcode is classed as invalid - please contact you TNT Representative for more assistance.
561	The receiver address postcode is not unique	The supplied postcode is not unique - please contact you TNT Representative for more assistance.
562	The receiver address town postcode combination is invalid	The supplied Town & Postcode combination is classed as invalid - please contact you TNT Representative for more assistance.
563	The receiver address postcode is not in within a valid range	We are unable to find this postcode for your supplied town

Error Code	Error Description	Resolution
564	The receiver address postcode could not be found	We are unable to find this postcode
565	The receiver address country code is not valid	The country code must be a valid ISO country code.
566	The receiver address is not unique	The supplied address details are not unique - please contact you TNT Representative for more assistance.
567	The receiver address postcode does not have the minimum length	The Postcode length does not match the required Postcode length
568	The delivery address town and postcode has not been supplied	Please supply the address details
569	The delivery address town could not be found	Please supplied town (& postcode combination) in the required TNT spelling - please contact you TNT Representative for more assistance.
570	The delivery address town is not unique	Please supplied town (& postcode combination) is not unique - please contact you TNT Representative for more assistance.
571	The delivery address province length is too long	The province can be a maximum of 30 characters in length
572	the delivery address postcode not allowed for the selected country	The postcode is not required
573	The delivery address province was not found	The supplied province could not be found - please contact you TNT Representative for more assistance.
574	The delivery address postcode is invalid	The supplied postcode is classed as invalid - please contact you TNT Representative for more assistance.
575	The delivery address postcode is not unique	The supplied postcode is not unique - please contact you TNT Representative for more assistance.
576	The delivery address town and postcode combination is invalid	The supplied Town & Postcode combination is classed as invalid - please contact you TNT Representative for more assistance.
577	The delivery address postcode not within a valid range	We are unable to find this postcode for your supplied town
578	The delivery address postcode could not be found	We are unable to find this postcode
579	The delivery address country code is not valid	The country code must be a valid ISO country code.
580	The delivery address is not unique	The supplied address details are not unique - please contact you TNT Representative for more assistance.
581	The delivery address postcode does not have the minimum length	The Postcode length does not match the required Postcode length
582	Delivery in depot not valid	This is an internal TNT error and so please contact your TNT representative
583	The self collection TNT depot is not valid	This is an internal TNT error and so please contact your TNT representative
584	Unable to calculate transit time	This is an internal TNT error and so please contact your TNT representative
600	The sender address contact email is too long, maximum length is 50	Please correct the field as requested.
601	The collection address contact email is too long, maximum length is 50	Please correct the field as requested.
602	The receiver address contact email is too long, maximum length is 50	Please correct the field as requested.
603	The delivery contact email is too long, maximum length is 50	Please correct the field as requested.
604	The sender address account number is too long, maximum length is 10	Please correct the field as requested.
605	receiver address account number is too long, maximum length is 10	Please correct the field as requested.
606	One or more of the option codes are too long, maximum length is 3	Please correct the field as requested.
607	The application id is too long, maximum length is 2	Please correct the field as requested.
608	The application version is too long, maximum length is 5	Please correct the field as requested.
609	The package quantity is too long, maximum length is 5	Please correct the field as requested.
610	The article quantity is too long, maximum length is 3	Please correct the field as requested.

Error Code	Error Description	Resolution
611	The currency code is too long, maximum length is 3	Please correct the field as requested.
612	The article country code is too long, maximum length is 3	Please correct the field as requested.
613	The article invoice description is too long, maximum length is 78	Please correct the field as requested.
614	The sender address vat number is too long, maximum length is 20	Please correct the field as requested.
615	The receiver address vat number is too long, maximum length is 20	Please correct the field as requested.
616	The collection address vat number is too long, maximum length is 20	Please correct the field as requested.
617	The delivery vat number is too long, maximum length is 20	Please correct the field as requested.
618	The sender address, address line 1 is too long, maximum length is 30	Please correct the field as requested.
619	The sender address, address line 2 is too long, maximum length is 30	Please correct the field as requested.
620	The sender address, address line 3 is too long, maximum length is 30	Please correct the field as requested.
621	The sender address postcode is too long, maximum length is 9	Please correct the field as requested.
622	The sender address country code is too long, maximum length is 3	Please correct the field as requested.
623	The sender address town is too long, maximum length is 30	Please correct the field as requested.
624	The sender address province is too long, maximum length is 30	Please correct the field as requested.
625	The sender address company name is too long, maximum length is 50	Please correct the field as requested.
626	The sender address contact name is too long, maximum length is 22	Please correct the field as requested.
627	The receiver address, address line 1 is too long, maximum length is 30	Please correct the field as requested.
628	The receiver address, address line 2 is too long, maximum length is 30	Please correct the field as requested.
629	The receiver address, address line 3 is too long, maximum length is 30	Please correct the field as requested.
630	The receiver address postcode is too long, maximum length is 9	Please correct the field as requested.
631	The receiver address country code is too long, maximum length is 3	Please correct the field as requested.
632	The receiver address town is too long, maximum length is 30	Please correct the field as requested.
633	The receiver address province is too long, maximum length is 30	Please correct the field as requested.
634	The receiver address company name is too long, maximum length is 50	Please correct the field as requested.
635	The receiver address contact name is too long, maximum length is 22	Please correct the field as requested.
636	The collection address address line 1 is too long, maximum length is 30	Please correct the field as requested.
637	The collection address address line 2 is too long, maximum length is 30	Please correct the field as requested.
638	The collection address address line 3 is too long, maximum length is 30	Please correct the field as requested.
639	The collection address postcode is too long, maximum length is 9	Please correct the field as requested.
640	The collection address country code is too long, maximum length is 3	Please correct the field as requested.
641	The collection address town is too long, maximum length is 30	Please correct the field as requested.

Error Code	Error Description	Resolution
642	The collection address province is too long, maximum length is 30	Please correct the field as requested.
643	The collection address company name is too long, maximum length is 50	Please correct the field as requested.
644	The collection address contact name is too long, maximum length is 22	Please correct the field as requested.
645	The delivery address, address line 1 is too long, maximum length is 30	Please correct the field as requested.
646	The delivery address, address line 2 is too long, maximum length is 30	Please correct the field as requested.
647	The delivery address, address line 3 is too long, maximum length is 30	Please correct the field as requested.
648	The delivery address postcode code is too long, maximum length is 9	Please correct the field as requested.
649	The delivery address country code is too long, maximum length is 3	Please correct the field as requested.
650	The delivery address town is too long, maximum length is 30	Please correct the field as requested.
651	The delivery address province is too long, maximum length is 30	Please correct the field as requested.
652	The delivery address company name is too long, maximum length is 50	Please correct the field as requested.
653	The delivery address contact name is too long, maximum length is 22	Please correct the field as requested.
654	The package width is too long, maximum length is 7	Please correct the field as requested.
655	The package length is too long, maximum length is 7	Please correct the field as requested.
656	The package height is too long, maximum length is 7	Please correct the field as requested.
657	The package weight is too long, maximum length is 9	Please correct the field as requested.
658	The package description is too long, maximum length is 60	Please correct the field as requested.
659	The article weight is too long, maximum length is 9	Please correct the field as requested.
660	The article description is too long, maximum length is 60	Please correct the field as requested.
661	The consignment delivery instructions are too long, maximum length is 60	Please correct the field as requested.
662	The consignment total weight is too long, maximum length is 8	Please correct the field as requested.
663	The consignment total volume is too long, maximum length is 8	Please correct the field as requested.
664	The consignment user reference is too long, maximum length is 24	Please correct the field as requested.
665	The consignment service is too long, maximum length is 4	Please correct the field as requested.
666	The application version value must be 2.2 or greater	
667	The consignment description is too long, maximum length is 90	Please correct the field as requested.
668	The ExpressConnect application version must be entered	
669	Sender address postcode masks/format not found for the selected country	This is an internal TNT error and so please contact your TNT representative
670	Collection address postcode masks/format not found for the selected country	This is an internal TNT error and so please contact your TNT representative
671	Receiver address postcode masks/format not found for the selected country	This is an internal TNT error and so please contact your TNT representative
672	Delivery address postcode masks/format not found for the selected country	This is an internal TNT error and so please contact your TNT representative

Error Code	Error Description	Resolution
673	The sender address province is not allowed for the selected country	TNT does not require province for selected country
674	The collection address province is not allowed for the selected country	TNT does not require province for selected country
675	The receiver address province is not allowed for the selected country	TNT does not require province for selected country
676	The delivery address province is not allowed for the selected country	TNT does not require province for selected country
677	Sender town location is too short	This is an internal TNT error and so please contact your TNT representative
678	Collection town location is too short	This is an internal TNT error and so please contact your TNT representative
679	Receiver town location is too short	This is an internal TNT error and so please contact your TNT representative
680	Delivery town location is too short	This is an internal TNT error and so please contact your TNT representative
681	Packaging group must be provided if shipment is hazardous	The UN number and packaging group should be supplied for Dangerous Goods
682	ConsignmentBatch Skipped - More Than 3 Packages	No longer used
683	ConsignmentBatch Skipped - More Than 20 Packages	Please supply upto 20 package lines
689	Consignment Skipped - More Than 99 Items in Packages	Please supply a maximum of 99 packages.
690	There must be one hour difference between preferred collection times.	Please correct the collection times supplied.
691	There must be one hour difference between alternate collection times.	Please correct the collection times supplied.
692	If the collection date is today, preferred collection end time must be greater than now + 1 hour	Please correct the collection times supplied.
693	If the collection date is today, alternate collection end time must be greater than now + 1 hour	Please correct the collection times s
694	Sender / Collection address must be in the same country.	Please ensure the send and pickup addresses are located in the same country. We do not support 3 rd party billing.
695	Receiver / Delivery address must be in the same country	Please ensure the receiver and delivery addresses are in the same country. We do not support 3 rd party billing.
997	Shipping request XML unmarshall failed with parsing error.	Please correct the supplied XML
998	Shipping request XML unmarshall failed with unknown error.	Please correct the supplied XML
999	login details not recognised	Your userid and password do not match the details stored for your user.

The following errors may be returned if you select the Rating activity.

Error Code	Error Description	Default Message	Resolution
1	The XML in the request is not formatted correctly.	Failure to format incoming XML string	Ensure the XML in the request is of the correct structure. Refer to the XSD and available documentation to rectify.
2	The services returned in the response may not all be valid due to a failure to validate the possible services.	Failure to specify available Services: those returned might not all apply	Resubmit the request for all services.
3	The options returned in the response may not all be valid due to a failure to validate the possible options.	Failure to specify available Options: those returned might not all apply	Resubmit the request for all options.
4	Failure to retrieve details of the service or options.	Failure to retrieve Service/Option details	Resubmit the request. If the problem persists, contact the TNT helpdesk.
5	A timeout occurred when making a call to the database.	Price Check Failure: Time out on database.	Resubmit the request. If the problem persists contact the TNT helpdesk.
6	An error occurred on the TNT server.	Price Check Failure: Error in server	Resubmit the request. If the problem persists contact the TNT helpdesk.
7	No rates available for the request	Price Check Failure: No Rates Returned.	Source and destination addresses need to be serviceable by TNT.
8	Mandatory fields missing or invalid in the request XML.	FIELD/S MISSING OR INVALID. MANDATORY FIELDS ARE ORIGINCOUNTRY, DESTCOUNTRY, CONTYPE,ITEMS,WEIGHT AND VOLUME(IF NONDOC).	Ensure the XML in the request is of the correct structure and contains all mandatory fields. Refer to the XSD and available documentation to rectify.
9	No price requests found in the XML	No Price Requests Found	Refer to the XSD and available documentation to rectify.
10	The account number entered is not associated with this customer	Invalid Account Number	Enter a valid account number.
11	The country code in the request XML is invalid.	Invalid Country Code	Ensure the country code matches one of those in the TNT dataset.
12	The town group specified in the request XML is invalid.	Invalid Town Group	TownGroup code must match a code in the TNT Towngroup dataset.
13	The rates returned are standard rates and do not include any account specific prices.	Standard Rates	If account specific rates are required then account details should be populated in the request XML.

Error Code	Error Description	Default Message	Resolution
14	Domestic price requests are not supported in the country specified.	Invalid Domestic Consignment	Domestic shipments should be within supported TNT countries.
15	The value of the Insurance element should be a number.	Insurance value must be numeric	Ensure the value of the Insurance element is a number.
16	Options have been specified in the request XML without an associated service code.	Service required with options	Ensure a service code is specified for the requested options.
17	The system was unable to retrieve the service and option for the request.	Unable to retrieve service/option	Refer to the XSD and available documentation to rectify.
18	The service specified in the request is invalid.	Service is invalid	Ensure the service in the request matches a code in the TNT dataset.
19	The system was unable to parse the request XML.	Pricing request failed with parsing error.	Ensure the XML is of a valid structure. Refer to the XSD and available documentation to rectify.
20	The request XML was not recognised as a Express Connect request.	XML supplied is not recognised as an ExpressConnect request.	Refer to the XSD and available documentation to rectify.
21	No data was received from the client.	No data received at gateway from client error	Resubmit the request.
22	The maximum number of options per service has been exceeded.	Exceeded maximum number of allowed options	A maximum of 5 options per service are allowed.
101	Origin address town not supplied	Origin address town not supplied	Supply origin address town
102	Origin address town and postcode not supplied	Origin address town and postcode not supplied	Supply origin address town and postcode.
103	Origin address town has not been recognized.	Origin address town not found	Ensure that the specified origin town is a valid town.
104	Origin address town results in more than one match	Origin address town not unique	Ensure the origin town is entered correctly. Do not use partial town names.
105	The origin address province maximum length has been exceeded.	Origin address province length exceeded	Maximum 30 characters.
106	Origin address postcode has been entered for a country that does not accept postcodes as part of the address.	Origin address postcode not allowed for selected country	Remove the origin postcode element from the request.
107	Origin address province not found	Origin address province not found	Ensure origin province is entered correctly or remove the origin province element.
108	The origin postcode is invalid in the request.	Origin address postcode invalid	Ensure the origin postcode element is entered correctly.

Error Code	Error Description	Default Message	Resolution
109	Origin address postcode has an invalid format. For example CV9 XTT is incorrect for a UK postcode.	Origin address postcode invalid format	Ensure the origin postcode element is entered correctly and is no longer than 9 characters.
110	Origin address postcode matches more than one town. This may occur if a partial postcode is entered.	Origin address postcode not unique	Ensure the origin postcode is entered correctly.
111	Origin address has an invalid town / postcode combination. For example if you entered a London postcode for Birmingham.	Origin address town/postcode combination invalid	Ensure origin postcode and/or town are entered correctly.
112	Origin address postcode is not within the valid range of postcodes for the town.	Origin address postcode not in valid range	Ensure origin postcode and/or town are entered correctly.
113	Origin postcode is missing from the request XML.	Origin address postcode not found	Ensure origin postcode is entered correctly
114	Origin country not found in the XML	Origin address country not supplied	Country is mandatory in the request.
115	Origin address country is not valid ISO 3166-1 ALPHA-2. (2 character alpha).	Origin address country not valid ISO.	Ensure origin country is entered correctly.
116	Origin address town results in more than one match.	Origin address not unique	Ensure origin town and/or postcode are entered correctly. Do not use partial town or postcodes.
117	Origin address postcode is below minimum length for selected country	Origin address postcode is below minimum length for selected country	Ensure origin town and/or postcode are entered correctly. Do not use partial town or postcodes.
201	Destination address town not supplied	Destination address town not supplied	Supply destination address town
202	Destination address town and postcode not supplied	Destination address town and postcode not supplied	Supply destination address town and postcode.
203	Destination address town has not been recognized.	Destination address town not found	Ensure that the specified destination town is a valid town.
204	Destination address town results in more than one match	Destination address town not unique	Ensure the destination town is entered correctly. Do not use partial town names.
205	The Destination address province maximum length has been exceeded.	Destination address province length exceeded	Maximum 30 characters.

Error Code	Error Description	Default Message	Resolution
206	Destination address postcode has been entered for a country that does not accept postcodes as part of the address.	Destination address postcode not allowed for selected country	Remove the destination postcode element from the request.
207	Destination address province not found	Destination address province not found	Ensure destination province is entered correctly or remove the destination province element.
208	The Destination postcode is invalid in the request.	Destination address postcode invalid	Ensure the destination postcode element is entered correctly.
209	Destination address postcode has an invalid format. For example CV9 XTT is incorrect for a UK postcode.	Destination address postcode invalid format	Ensure the destination postcode element is entered correctly and is no longer than 9 characters.
210	Destination address postcode matches more than one town. This may occur if a partial postcode is entered.	Destination address postcode not unique	Ensure the destination postcode is entered correctly.
211	Destination address has an invalid town / postcode combination. For example if you entered a London postcode for Birmingham.	Destination address town/postcode combination invalid	Ensure destination postcode and/or town are entered correctly.
212	Destination address postcode is not within the valid range of postcodes for the town.	Destination address postcode not in valid range	Ensure destination postcode and/or town are entered correctly.
213	Destination postcode is missing from the request XML.	Destination address postcode not found	Ensure destination postcode is entered correctly
214	Destination country not found in the XML	Destination address country not supplied	Country is mandatory in the request.
215	Destination address country is not valid ISO 3166-1 ALPHA-2. (2 character alpha).	Destination address country not valid ISO.	Ensure destination country is entered correctly.
216	Destination address town results in more than one match.	Destination address not unique	Ensure destination town and/or postcode are entered correctly. Do not use partial town or postcodes.
217	Destination address postcode is below the minimum length for selected country	Destination address postcode is below minimum length for selected country	Ensure destination town and/or postcode are entered correctly. Do not use partial town or postcodes.
301	The depot ID for the origin depot is not valid.	Delivery in depot id is not valid	Depot ID should be one of the valid TNT towngroup codes contained within the towngroup dataset.

Error Code	Error Description	Default Message	Resolution
302	The depot ID for the self collect delivery address is not valid.	Self collect depot id is not valid	Depot ID should be one of the valid TNT towngroup codes contained within the towngroup dataset.
401	The TNT backend system was unable to determine the route between the source and destination addresses.	Unable to determine traffic lane for route	Contact TNT helpdesk.
999	The user name and password specified in the request have not been recognised.	login details not recognised	Enter the correct username and password combination. Contact the TNT helpdesk if the problem persists.

9.Connecting to ExpressConnect Shipping

ExpressConnect Shipping is a HTTP web service, which defines an XML interface for data transfer. The XSD for the service can be found in the Shipping section of the website. Before sending an XML document through a straight socket connection, you must verify that you can access TNT's ExpressConnect applications by successfully viewing the test/demonstration web site provided by TNT. This is located at

<https://express.tnt.com/expresswebservices-website/app/landing.html>

The demonstration site does NOT support foreign (non-ASCII) characters.

The demonstration site simulates a simple customer interface to the back-end ExpressConnect server. It is useful for developers to use as a tool to test their XML and analyse their return XML results, prior to and during the development of their front-end application.

When testing ExpressConnect Shipping, the results come back in five separate packages. The XML results document holds the information pertaining to consignments created, rated or booked. The other four hold information required for consignment documentation: consignment notes, labels, manifest, and invoice. These four XML documents include a reference to an XSL style sheet¹ in the XML heading. If they are opened as XML files in IE6.0 or above, they will be automatically formatted and displayed as TNT shipping documents.

Having made a successful submission of an XML document via the test page, you are ready to set up a socket connection and make a real XML submission using the code similar to

Open a socket connection to the following address and port number.

Domain Name	https://express.tnt.com/expressconnect/shipping/ship	express.tnt.com
IP Address	164.39.122.33	
Port	81	

Send the following lines, data between quotes. N.B. 1 blank line should be sent after Content-length line.

```
"POST Shipping/ship HTTP/1.0"
"Accept: */*"
"User-Agent: Ship_socket/1.0";
"Content-type: application/x-www-form-urlencoded";
"Content-length: X";    (replace X with the length of data plus 7 for "xml_in=")
""
"xml_in=XML document"    (this is the content of message)
```

XML document is the XML corresponding to the specified format (see later section).

Once the above data has been sent, read from the socket until no more data is available. The data returned will consist of some header information followed by a blank line, and then the shipping return code. This unique code is your key with which you can retrieve the various XML documents that your shipping request has produced.

The return string will look like this: COMPLETED:nnnnnnnnnn
where nnnnnnnnnn is a unique number.

You will then send this number back in to the TNT server for each XML document – results XML, consignment XML, label XML, manifest XML or invoice XML – that you need.

A code example of how this may be performed and the correct format of the requests are included below.

¹ The manifest document will refer to a different style sheet if it is a summary manifest.

9.1VB Script sample

ExpressConnect can be called from within a VB script. The sample script performs the following operations:

- Access the request XML from a folder on the local 'C:' drive
- Parse the basic XML to encode all non ASCII characters to their Hex equivalent. This is required to correctly handle special characters such as "ß©@¼Üää".
- Send the encoded XML to ExpressConnect and retrieve the access code. The access code is a unique number that identifies the data for this submission. This is used in subsequent calls to retrieve the document, and summary information XML in subsequent calls.
- Make five separate calls to ExpressConnect to retrieve the summary result information and the four consignment documents, consignment notes, labels, commercial invoice and manifest.

The following characters have special meaning in XML strings and these need to be encoded by your own application before being included in the request XML submitted: & < > " ' .

To include these characters replace the character in your XML with the following literal string:

```
&    &amp;
<    &lt;
>    &gt;
"    &quot;
'    &apos;
.    &period;
```

For example to pass the literal 'Jack & Jill' you need to pass in the XML: 'Jack & Jill'

The example can be run from your own server to show a successful connection and the format of the response XML. Customers are free to utilize this code within their own application if they wish but please note that we cannot offer support for this.

```
'FILE: Sample_HTTP_shipping_request.vbs
'AUTH: Paul Horsley
' Folders required C:\expressconnect
' Folders required C:\expressconnect\original // Put your request XML message here with file
name "TEST.xml"
' Ensure the <SHIPDATE> tag has a date of today or in the future, in the format "DD/MM/YYYY"

Const TristateTrue = -1
Const TristateFalse = 0

xml_out = ""

'note ----- The shipping request XML document
dim objText
dim objfilesys
dim objSite
Dim iAccessCodeLen

Dim sfolder
Dim sfilename
Dim sUrl
```

```

Dim xml_in
Dim AccessCode
iAccessCodeLen = 7

sUrl = "https://express.tnt.com/expressconnect/shipping/ship"

sfolder = "C:\expressconnect\"
Wscript.Echo WScript.Scriptname & " : Calling TNT Express Connect Shipping @ " & sUrl
sFileName = "TEST.xml"

set objfilesys = wscript.createObject("scripting.filesystemobject")
' For input files with ANSI encoding

' Set the format argument to "TristateTrue" (-1) for Unicode files, or "TristateFalse" (0) for
ASCII files
set objText = objfilesys.opentextfile(objfilesys.BuildPath(sfolder , "original\" & sfilename ), 1
,False ,TristateFalse)
' Read in the request XML to xml_in variable
xml_in = objText.ReadAll
objText.close

' Encode the request XML
xml_in = HEXThisStream(xml_in)

' Send the encoded XML and place the result in AccessCode variable
AccessCode = Sendxml (xml_in ,"Shipping Connection response")

' Store the result in the "C:\expressconnect\" folder
PersistXmlTestResults sfolder , "AccessCode=" & AccessCode, "AccessCode"

' Extract just the numeric access code from the response
AccessCode = Right( AccessCode,iAccessCodeLen)

' Display the returned AccessCode. The access code is a unique number that identifies the data for
this submission.
' This is used in subsequent calls to retrieve the document, and summary information XML in
subsequent calls.
MsgBox "AccessCode - " & AccessCode

' Retrieve the consignment document XML
' The document XML will only be available if the appropriate tag has been included in the
<PRINT> node
' of the original request XML. For all four documents to be available the following XML would
need to be included
' with the appropriate reference or consignment number. "ref12" in the example below:
'
'       <PRINT>
'           <CONNOTE>
'               <CONREF>ref12</CONREF>

```



```

'          </CONNOTE>
'          <LABEL>
'              <CONREF>ref12</CONREF>
'          </LABEL>
'          <MANIFEST>
'              <CONREF>ref12</CONREF>
'          </MANIFEST>
'          <INVOICE>
'              <CONREF>ref12</CONREF>
'          </INVOICE>
'      </PRINT>

```

*' Retrieve the consignment note XML if the <CONNOTE> tag has been included
' in the <PRINT> node*

```

Xml_In="GET_CONNOTE:" & AccessCode
SendXml Xml_In, "Get_Connote"

```

*' Retrieve the commercial invoice XML if the <INVOICE> tag has been included
' in the <PRINT> node*

```

Xml_In="GET_INVOICE:" & AccessCode
SendXml Xml_In, "Get_Invoice"

```

*' Retrieve the manifest XML if the <MANIFEST> tag has been included
' in the <PRINT> node*

```

Xml_In="GET_MANIFEST:" & AccessCode
SendXml Xml_In, "Get_Manifest"

```

*' Retrieve the label XML if the <LABEL> tag has been included
' in the <PRINT> node*

```

Xml_In="GET_LABEL:" & AccessCode
SendXml Xml_In, "Get_Label"

```

' Retrieve the result summary information XML

```

Xml_In="GET_RESULT:" & AccessCode
SendXml Xml_In, "Get_Result_"

```

' Process finished
MsgBox "Done all"

' Encode the request XML before submitting to ExpressConnect

```

Function HEXThisStream ( sInput )

```

```

    Dim i, k          ' Numeric variables

```

```

    Dim s, staticChars, t    ' String variable

```

' Create a string of safe / status characters taht do not need encoding

```

    staticChars =

```

```

    "abcdefghijklmnopqrstuvwxyzABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789"

```

```

' Test if the input string is NULL then exit, return a blank string
if IsNull(sInput) then
    HEXThisStream = ""
    exit function
end if

' Copy sInput string into local var s
s = sInput

' Iterate the s var content 1 character at a time
For i = 1 To Len ( s )
    ' Get the numeric ascii value for the current character
    k = Asc ( Mid ( s , i , 1 ) )
    ' Test If the current character is one of the staticChars
    If InStr( 1 , staticChars , Chr ( k ) , 1 ) > 0 Then
        ' If Test = true
        ' Add current character to temp string
        t = t & Chr(k)
    Else
        ' If test = False
        ' Test if the current character is a space
        If k = 32 Then ' ASCII representation of Space char
            ' If True
            ' add "+" character to the temp string
            t = t & "+"
        Else
            ' If False
            ' add a fixed "%" character + the HEXidecimal value fixed to a lenght of 2
            ' ( additional 0 included as a pad character / used when HEX returns a single
            ' and encoding needs a double byte ("0D", "0A" etc etc)
            t = t & "%" & Right ( "0" & ( Hex ( k ) ) , 2 )
        End If
    End If
Next

' Copy the temp string output to the function handle
HEXThisStream = t
End Function

' Send the encoded XML to ExpressConnect
Function SendXML(xmlin , sxmlType)
    Dim xmlout
    'note ----- create a socket connection object
    dim httpOb

    set httpOb = WScript.CreateObject("Microsoft.XMLHTTP")

```

```

'note ----- open socket connection to given IP address and entry file
httpObj.Open "POST", sUrl , false, "", ""

'note -----display error message if socket opening fails
if Err Then
    Wscript.Echo "Error connecting: "&Err.Number&" "& Err.Description
else
    'note ----- if opening socket works send XML
    httpObj.setRequestHeader "Content-Type","application/x-www-form-urlencoded"

xmlin = "xml_in=" & xmlin
    ' Send the XML to ExpressConnect
    httpObj.Send xmlin

    'note ----- store returned XML result
    xmlout = httpObj.responseText
    PersistXmlTestResults sFolder , xmlout , sxmlType
end if

'note ----- release socket object
set httpObj = Nothing

SendXML = xmlout
End Function

' Write the retrieved XML to the "C:\expressconnect\" folder
Function PersistXmlTestResults(sFldr , Xml , xmlType)
Dim fs
Dim oFile
Dim ioFile

Set fs=CreateObject("Scripting.FileSystemObject")
ioFile = fs.BuildPath(sFldr , xmlType & ".xml")
set oFile=fs.CreateTextFile(ioFile, True , True)

oFile.write xml
oFile.close

set fs = nothing

End Function

```

9.2VB.net CONNECTION CODE EXAMPLE

Function RemoteConnection_TNT_EC SHIPPING(ByVal sXMLUNICODE As String, ByVal strid As String) As String

Dim sResponse As String

' Create a request using a URL that can receive a post.

Dim request As WebRequest = WebRequest.Create(getECUrl)

' Set the Method property of the request to POST.

request.Method = "POST"

' Create POST data and convert it to a byte array, *** USE UTF-8 ***

Dim byteArray As Byte() = Encoding.UTF8.GetBytes(sXMLUNICODE)

'SET CONNECTIVITY TIME OUT

request.Timeout = 100000

'SET AUTHENTICATION TYPE

request.AuthenticationLevel = System.Net.Security.AuthenticationLevel.MutualAuthRequested

' Set the ContentType property of the WebRequest.

request.ContentType = "application/x-www-form-urlencoded"

' Set the ContentLength property of the WebRequest.

request.ContentLength = byteArray.Length

Dim dataStream As Stream

Try

dataStream = request.GetRequestStream()

Catch ex As Exception

Return "Failure to process Shipping request, Please see results tab for more details."

End Try

' Get the request stream.

' Write the data to the request stream.

dataStream.Write(byteArray, 0, byteArray.Length)

' Close the Stream object.

dataStream.Close()

' Call into TNT and get the response.

Dim response As WebResponse

Try

```
response = request.GetResponse()
```

```
Catch ex As Exception
```

```
Return "Failure to process Shipping request, " & ex.Message
```

```
End Try
```

```
' Get the stream containing content returned by the server.
```

```
dataStream = response.GetResponseStream()
```

```
' Open the stream using a StreamReader for easy access.
```

```
Dim reader As New StreamReader(dataStream, Encoding.UTF8)
```

```
' Read the content.
```

```
Dim responseFromServer As String = reader.ReadToEnd()
```

```
' Display the content.
```

```
sResponse = responseFromServer
```

```
' Clean up the streams.
```

```
reader.Close()
```

```
'CLOSE DATA STREAM AS PART OF CLEANUP
```

```
dataStream.Close()
```

```
'CLOSE RESPONSE OBJECT AS PART OF CLEANUP
```

```
response.Close()
```

```
Return sResponse
```

```
End Function
```

9.3 JAVASCRIPT CONNECTION CODE EXAMPLE

JavaScript that performs the full five-call 'conversation' with the TNT server, sending in the returned access code to retrieve the separate XML documents.

```
<% @ Language=JScript %>

<%
function SendXml(xml_in) {

// Send XML to TNT gateway
httpOb.Open("POST", "https://express.tnt.com/expressconnect/shipping/ship", false);
httpOb.setRequestHeader("Content-Type", "application/x-www-form-urlencoded");
httpOb.Send("xml_in="+escape(xml_in));
// Retrieve response from TNT Gateway
var HttpResult = httpOb.responseText;
return(HttpResult);
}

var xml_in = Request.Form("xml_in")

// Create instance of Microsoft XML Http Protocol object
var httpOb = Server.CreateObject("Microsoft.XMLHTTP");

// Retrieve access code from TNT Gateway
var AccessCode=SendXml(xml_in);
AccessCode=AccessCode.substring(9);

// Retrieve result file from TNT Gateway to show full results from transactions
xml_in = 'GET_RESULT:'+AccessCode;
var ResultXML=SendXml(xml_in);

// Retrieve Consignment note
xml_in = 'GET_CONNOTE:'+AccessCode;
var ConNoteXML=SendXml(xml_in);

// Retrieve Label
xml_in = 'GET_LABEL:'+AccessCode;
var LabelXML=SendXml(xml_in);

// Retrieve Manifest
xml_in = 'GET_MANIFEST:'+AccessCode;
var ManifestXML=SendXml(xml_in);

// Retrieve Invoice
xml_in = 'GET_INVOICE:'+AccessCode;
var InvoiceXML=SendXml(xml_in);

// Write all the results to files on our server
var FSO=Server.CreateObject("Scripting.FileSystemObject");

xFileName="ShippingResultFiles/xmlresults"+AccessCode+".xml";
xConNoteName="ShippingResultFiles/xmlconnote"+AccessCode+".xml";
xInvoiceName="ShippingResultFiles/xmlInvoice"+AccessCode+".xml";
xLabelName="ShippingResultFiles/xmlLabel"+AccessCode+".xml";
```

```
xManifestName="ShippingResultFiles/xmlManifest"+AccessCode+".xml";

var xmlresultfile = FSO.CreateTextFile(Server.MapPath(xFileName),false);
xmlresultfile.Write (ResultXML);
xmlresultfile.Close();

var xmlconfile = FSO.CreateTextFile(Server.MapPath(xConNoteName),false);
xmlconfile.Write (ConNoteXML);
xmlconfile.Close();

var xmlresultfile = FSO.CreateTextFile(Server.MapPath(xInvoiceName),false);
xmlresultfile.Write (InvoiceXML);
xmlresultfile.Close();

var xmlresultfile = FSO.CreateTextFile(Server.MapPath(xLabelName),false);
xmlresultfile.Write (LabelXML);
xmlresultfile.Close();

var xmlresultfile = FSO.CreateTextFile(Server.MapPath(xManifestName),false);
xmlresultfile.Write (ManifestXML);
xmlresultfile.Close();

//Choose what we want to see
//var DisplayObject = ResultXML;
//Response.Write(DisplayObject);

%>
```

9.4C# EXAMPLE

The following example code uses superagent to wrap http calls <http://visionmedia.github.io/superagent/> but you can use instead the `//default http node.js module`, this has been tested with node.js v6.5.0

```
#!/usr/bin/env node

'use strict';

//this example uses superagent to wrap http calls http://visionmedia.github.io/superagent/ you can use instead the
//default http node.js module
//tested with node.js v6.5.0

var fs = require('fs');
var request = require('superagent'); // require superagent module

//variables
var url = 'https://express.tnt.com/expressconnect/shipping/ship';
var accessCode;

//get xml
var xmlRequest = "[inputXMLString]" //fs.readFileSync('./example.xml').toString());

//initial call to server with callback
console.log('-- INITIAL CALL --');
sendRequest(xmlRequest, function (err, response) {
  if (err) { return console.log(err) }; //log error in console if there is one.
  console.log(response.text); //log server response

  //stripe out the request id number
  var responseSplit = response.text.split(':'); // split the answer string to be able to fill below properties
  accessCode = responseSplit[1];

  //call the service again to get the result
  console.log('-- GET_RESULT --');
  var resultRequest = "GET_RESULT:" + accessCode;
  sendRequest(resultRequest, function (err, response) {
    if (err) { return console.log(err) }; //log error in console if there is one.
    console.log(response.text); //log server response
  });
});

//generic function to call service
function sendRequest(body, callback) {
  var serviceResponse = new Object();
  request
    .post(url)
    .send('xml_in=' + body)
    .set('Content-Type', 'application/x-www-form-urlencoded')
    .end(function (err, res) {
      if (err) { return callback(err); } // check if error occurred if so return callback with error object
      if (!res.ok) { return callback(res.error); } // check if status was not ok if so return callback with response error
      serviceResponse.rawResponse = res; //store full server response
      serviceResponse.text = res.text; //store server body reply
    });
}
```



```
        callback(null, serviceResponse);  
    });  
};
```

9.5C# EXAMPLE

The following example code performs a shipping request and receive the result in c#.

```
//example in dotnetcore 1.0
//should run as well in other .Net framework versions

using System;
using System.IO;
using System.Net.Http;
using System.Collections.Generic;

namespace ConsoleApplication
{
    public class Program
    {
        public static void Main(string[] args)
        {
            //define variables
            string accessCodeReply;
            string accessCode;
            string resultReply;
            string connoteReply;

            try
            {
                //Load XML into variable
                Console.WriteLine("-- INITIAL CALL --");
                string xml_in = "[inputXMLstring]"; //File.ReadAllText(@"./example.xml"); //utf-8 only

                accessCodeReply = CallWebservice(xml_in);
                Console.WriteLine(string.Format("REPLY_FROM_SERVER: {0}", accessCodeReply));
                //validate reply
                if (accessCodeReply.StartsWith("COMPLETE:"))
                {
                    accessCode = accessCodeReply.Substring(9);
                }
                else
                {
                    throw new ArgumentException(string.Format("Webservice call ended in an error: {0}", accessCodeReply));
                }

                //call get result
                Console.WriteLine("-- GET_RESULT --");
                resultReply = CallWebservice(string.Format("GET_RESULT:{0}", accessCode));
                Console.WriteLine(resultReply);
                //call get connote
                Console.WriteLine("-- GET_CONNOTE --");
                connoteReply = CallWebservice(string.Format("GET_CONNOTE:{0}", accessCode));
                Console.WriteLine(connoteReply);
            }
            catch (System.Exception ex)
            {
                //write exception message to console
            }
        }
    }
}
```

```
        Console.WriteLine(ex.Message.ToString());
        if (ex.InnerException.Message != string.Empty)
        {
            Console.WriteLine(ex.InnerException.Message.ToString());
        }
    }
}

//function to call the webservice
private static string CallWebservice(string body)
{
    //string serverUrl = "https://express.tnt.com/expressconnect/shipping/ship";
    string serverUrl = "https://iconnection.tnt.com/shippergate2.asp";

    try
    {
        //Call Express Connect
        using (var client = new HttpClient())
        {
            //define dictionary to send body "xml_in=<..."
            var values = new Dictionary<string, string>
            {
                {"xml_in", body}
            };

            //urlencode content
            var content = new FormUrlEncodedContent(values);

            //call webservice
            var result = client.PostAsync(serverUrl, content).Result;
            return result.Content.ReadAsStringAsync().Result;
        }
    }
    catch (System.Exception)
    {
        throw;
    }
}
```

9.6PHP Example

The following example code performs a shipping request and gets the returned result. Then it requests the documents and renders these into html using the stylesheet in the returned xml.

```
// Function to connect to ExpressConnect post the XML and return the result.
function connectToEC3($xml_input) {
    $url = "https://express.tnt.com/expressconnect/shipping/ship";
    $ch = curl_init();
    curl_setopt($ch, CURLOPT_URL, $url);
    curl_setopt($ch, CURLOPT_POST, true);
    curl_setopt($ch, CURLOPT_HTTPHEADER, array('Content-Type: application/x-www-form-urlencoded'));
    curl_setopt($ch, CURLOPT_RETURNTRANSFER, true);
    curl_setopt($ch, CURLOPT_POSTFIELDS, "xml_in=" . urlencode($xml_input));
    $result = curl_exec($ch);
    curl_close($ch);
    return $result;
}

// Then a function to visualize the returned xml in html page
function showXMLasHTML($xml_received){
    //get stylesheet location from xml
    $dom = new DOMDocument();
    $dom->loadXml($xml_received);
    $xpath = new DOMXPath($dom);
    $styleLocation = $xpath->evaluate('string(//processing-instruction()[name() = "xml-stylesheet"])');
    $last = explode("\n", $styleLocation, 3);
    $xslLocation = $last[1];
    $xslt = new xsltProcessor;
    $xslt->importStyleSheet(DomDocument::load($xslLocation));
    $html = $xslt->transformToXML(DomDocument::loadXML($xml_received));
    return $html;
}

// The initial posting of $xml_in to EC server (contains xml request)
$resultTab = connectToEC3($xml_in);

// Get the result details after posting the XML(only use the numbers from the initial response)
$resultTab2 = connectToEC3("GET_RESULT:" . preg_replace("/[^0-9]/", "", $resultTab));
```

```
// Get documentation (connote, label, manifest and invoice)
$connoteTab = connectToEC3("GET_CONNOTE:" . preg_replace("/[^0-9]/", "", $resultTab));
$labelTab = connectToEC3("GET_LABEL:" . preg_replace("/[^0-9]/", "", $resultTab));
$manifestTab = connectToEC3("GET_MANIFEST:" . preg_replace("/[^0-9]/", "", $resultTab));
$invoiceTab = connectToEC3("GET_INVOICE:" . preg_replace("/[^0-9]/", "", $resultTab));

// Show documentation
echo "Connote:<br>";
print showXMLasHTML($connoteTab);

echo "Label:<br>";
print showXMLasHTML($labelTab);

echo "Manifest:<br>";
print showXMLasHTML($manifestTab);

echo "Invoice:<br>";
print showXMLasHTML($invoiceTab);
```

10. Appendix A: XML elements definition (input)

These tables contain all of the possible Input XML nodes and some information about their use. All elements are mandatory and must contain just one instance unless stated in the table below. If the data is optional then the element does not need to be provided.

XML elements which do not contain a value but are merely a container for other elements are noted as **Container element**, the elements contained therein are described in the rows immediately below. Please remember that field values should be escaped using the `![CDATA[]]` notation. At a minimum, all address fields should be escaped. Failure to escape these areas could result in unexpected problems if the value in an element contains an Ampersand (&).

For all data types described with a type prefix of 'xsd:' see [XSD Data Types](#).

For all data types in the form 'stringMinLengthXMaxLengthY', 'stringMaxLengthY', 'integerMin0Max9', 'doubleMaxExclusiveX' or 'longMaxLengthX' see Section **Error! Reference source not found.** Custom Data Types.

XML Element /attribute	Data required	Description	Constraints	Max Length	Parent Element
ESHIPPER	Y	Top level element			None
LOGIN	Y	Holds login elements			ESHIPPER
COMPANY	Y	Company Id	As allocated by TNT		LOGIN
PASSWORD	Y	Company Password	As allocated by TNT		LOGIN
APPID	Y	Application Id	The APPID element should be defaulted to "IN", unless it has been previously agreed with your TNT Representative to use an alternative APPID. This element is used by various source applications to highlight where the request was made, it has no bearing on the functionality offered.		LOGIN
APPVERSION	Y	Application Version	Please use 3.0 unless specified to use an alternative interface version.		LOGIN
CONSIGNMENTBATCH	Y	Holds one collection			ESHIPPER

XML Element /attribute	Data required	Description	Constraints	Max Length	Parent Element
GROUPCODE (optional)	Y	Groupcode to use for the subsequent consignments, so that they can be treated as a batch. (For further information on Group codes see appendix XII).	Returned via an earlier request.		CONSIGNMENTBATCH
SENDER	Y	Holds details of the sender and information relating to the collection.			CONSIGNMENTBATCH
COMPANYNAME	Y	Full company name	This must match up with the name registered against your TNT account. This will ensure your consignment passes our Name & Address validation on the mainframe systems.	50	SENDER
STREETADDRESS1	Y	First line of address		30	SENDER
STREETADDRESS2	N	Second line of address		30	SENDER
STREETADDRESS3	N	Third line of address		30	SENDER
CITY	Y	Town name	Town MUST be submitted.	30	SENDER
PROVINCE	N	Province name		30	SENDER
POSTCODE	N	Postcode	Postcode MUST be submitted unless country is a non-postcode country.	9	SENDER
COUNTRY	Y	Country	Must be TNT country code	3	SENDER
ACCOUNT	Y	Company account upon which collection is to be booked/rated	Must be numeric and be registered against the customer's logon details on the ExpressConnect database	13	SENDER
VAT	N	Company VAT number		20	SENDER
CONTACTNAME	Y	Name of person to be contacted if needed		22	SENDER
CONTACTDIALCODE	Y	This person's dial code		7	SENDER
CONTACTTELEPHONE	Y	This person's telephone number		9	SENDER
CONTACTEMAIL	N	This person's email address.		30	SENDER

XML Element /attribute	Data required	Description	Constraints	Max Length	Parent Element
COLLECTION	Y	Holds collection related elements			SENDER
COLLECTIONADDRESS	N	Holds Collection Address elements – can only be used if details, not consignment numbers, being passed in consignmentbatch			COLLECTION
COMPANYNAME	Y	Full company name		50	COLLECTION ADDRESS
STREETADDRESS1	Y	First line of address		30	COLLECTION ADDRESS
STREETADDRESS2	N	Second line of address		30	COLLECTION ADDRESS
STREETADDRESS3	N	Third line of address		30	COLLECTION ADDRESS
CITY	Y	Town name	Town MUST be submitted.	30	COLLECTION ADDRESS
PROVINCE	N	Province name		30	COLLECTION ADDRESS
POSTCODE	N	Postcode	Postcode MUST be submitted unless country is a non-postcode country.	9	COLLECTION ADDRESS
COUNTRY	Y	Country	Must be TNT country code	3	COLLECTION ADDRESS
VAT	N	Company VAT number		20	COLLECTION ADDRESS
CONTACTNAME	Y	Name of person to be contacted if needed		22	COLLECTION ADDRESS
CONTACTDIALCODE	Y	This person's dial code		7	COLLECTION ADDRESS
CONTACTTELEPHONE	Y	This person's telephone number		9	COLLECTION ADDRESS
CONTACTEMAIL	N	This person's email address		30	COLLECTION ADDRESS
SHIPDATE	Y	Date on which collection is to be shipped	Must be formatted dd/mm/yyyy. Cannot be in the past.	12	COLLECTION
PREFCOLLECTTIME	Y	Preferred period of time for collection – holds from and to elements			COLLECTION
ALTCOLLECTTIME (Optional)	N	Alternative collection – holds from and to elements			COLLECTION
COLLINSTRUCTIONS	N	Collection Instructions		24	COLLECTION

XML Element /attribute	Data required	Description	Constraints	Max Length	Parent Element
CONFIRMATIONEMAILADDRESS (Optional)	N	An email address that will be used should the EMAILREQD attribute of the BOOK element be set to 'Y'	Must be a valid email address if specified	60	COLLECTION
FROM	N	Start of time period	Must be entered as hhmm in 24-hour clock format. Times must be between 0900 and 1600. If one time is specified, the other must also be entered.	4	PREFCOLLECT TIME
TO	N	End of time period	As above	4	PREFCOLLECT TIME
FROM	N	Start of time period	As above	4	ALTCOLLECT TIME
TO	N	End of time period	As above	4	ALTCOLLECT TIME
CONSIGNMENT (may be multiple)	Y	Holds conref element and EITHER detail element or consignment number element	Can be omitted ONLY if the <GROUPCODE> element is included in the <BOOK> activity. (For further information on Group codes see appendix XII).		CONSIGNMENT BATCH
CONREF	Y	Customer's reference for a consignment, used for identifying data returned by ExpressConnect Shipping only – not stored.	Must be unique within a document i.e. each con submitted must have its own conref	20	CONSIGNMENT
DETAILS	Y	Holds consignment detail elements	Either Details or Connumber element MUST be present (Details if Sender element is present within this consignmentbatch)		CONSIGNMENT
RECEIVER	Y	Holds receiver details elements			DETAILS

XML Element /attribute	Data required	Description	Constraints	Max Length	Parent Element
COMPANYNAME	Y	Full company name	If receiver pays then this must match up with the name registered against the receiver TNT account.	50	RECEIVER
STREETADDRESS1	Y	First line of address		30	RECEIVER
STREETADDRESS2	N	Second line of address		30	RECEIVER
STREETADDRESS3	N	Third line of address		30	RECEIVER
CITY	Y	Town name	Town MUST be submitted.	30	RECEIVER
PROVINCE	N	Province name		30	RECEIVER
POSTCODE	N	Postcode	Postcode MUST be submitted unless country is a non-postcode country.	9	RECEIVER
COUNTRY	Y	Country	Must be TNT country code	3	RECEIVER
VAT	N	Company VAT number		20	RECEIVER
CONTACTNAME	Y	Name of person to be contacted if needed		22	RECEIVER
CONTACTDIALCODE	Y	This person's dial code		7	RECEIVER
CONTACTTELEPHONE	Y	This person's telephone number		9	RECEIVER
CONTACTEMAIL	N	This person's email address. (See Appendix VIII for more information).		30	RECEIVER
ACCOUNT (Optional)	N	Receiver's account to be billed	Only include for Receiver pays	13	RECEIVER
ACCOUNTCOUNTRY (Optional)	N	Country of account	As above	3	RECEIVER
DELIVERY	N	Holds Delivery Address elements – can only be used if details, not consignment numbers, being passed in consignmentbatch			DETAILS
COMPANYNAME	Y	Full company name		50	DELIVERY
STREETADDRESS1	Y	First line of address		30	DELIVERY
STREETADDRESS2	N	Second line of address		30	DELIVERY
STREETADDRESS3	N	Third line of address		30	DELIVERY
CITY	Y	Town name	Town MUST be submitted.	30	DELIVERY
PROVINCE	N	Province name		30	DELIVERY
POSTCODE	N	Postcode	Postcode MUST be submitted unless country is	9	DELIVERY

XML Element /attribute	Data required	Description	Constraints	Max Length	Parent Element
			a non-postcode country.		
COUNTRY	Y	Country	Must be TNT country code	3	DELIVERY
VAT	N	Company VAT number		20	DELIVERY
CONTACTNAME	Y	Name of person to be contacted if needed		22	DELIVERY
CONTACTDIALCODE	Y	This person's dial code		7	DELIVERY
CONTACTTELEPHONE	Y	This person's telephone number		9	DELIVERY
CONTACTEMAIL	N	This person's email address		30	DELIVERY
CONNUMBER (optional for registered customers only)	Y	Customers own consignment number	The number can be entered with or without the UPU (Universal Postal Union) characters. If entered without these characters Express Connect will generate them based on sender and receiver country. (See Appendix I – Modulus 11 or 7 Check Digit for info on check digit).	13	DETAILS
CUSTOMERREF	N	Customer reference		24	DETAILS
CONTYPE	Y	Consignment Type	MUST be 'N' (Non-Doc) or 'D' (Doc)	1	DETAILS
PAYMENTIND	Y	Payment Indicator	MUST be 'S' (sender pays) or 'R' (receiver pays)	1	DETAILS
ITEMS	Y	Total number of packages in consignment	Must be an integer	3	DETAILS
TOTALWEIGHT	Y	Total weight of all packages	Must be numeric and in kilograms	4.3	DETAILS
TOTALVOLUME	Y	Total Volume of all packages	Must be in meters. TotalVolume is mandatory. For a DOC shipment a volume of 0.0 must be entered	3.3	DETAILS

XML Element /attribute	Data required	Description	Constraints	Max Length	Parent Element
CURRENCY	N	Currency to be used	If either the goodsvalue element, insurancevalue or both contain data, then currency must contain a valid TNT currency code	3	DETAILS
GOODSVALUE	N	Value of consignment in specified currency	As above	12.2	DETAILS
INSURANCEVALUE N.B. The insurance does not currently impact the rates returned, but has been included for future development purposes	N	Insurance value of consignment in specified currency	As above. Insurance value MUST NOT be more than 110% of the goods value for non-documents or 500 Euros for documents.	12.2	DETAILS
INSURANCECURRENCY	N	Insurance currency	If an insurance value is included but no insurance currency is entered, the currency from the CURRENCY field will be used.	3	DETAILS
DIVISION	N	The TNT division that the service belongs. If this is not supplied ExpressConnect will calculate the appropriate division code. This is used for special divisions such as "S"	Must be valid TNT division code.	3	DETAILS
SERVICE	Y	The TNT service required	Must be valid TNT service code. Only International and UK domestic services are available as a default. Other domestic services can be activated at a country level on request through	3	DETAILS

XML Element /attribute	Data required	Description	Constraints	Max Length	Parent Element
			your TNT representative.		
OPTION (may be up to 5 Option elements)	N	Options required on this service, only the first 5 will be processed.	Must be valid TNT option code. Note specific rules apply to ITLL option (IT) see Appendix IV	3	DETAILS
DESCRIPTION	N	Description of Consignment		90	DETAILS
DELIVERYINST	N	Delivery Instructions		60	DETAILS
CUSTOMCONTROLIN	N	Customs Controlled Indicator		1	DETAILS
HAZARDOUS	N	Indicates if the shipment contains dangerous goods. (Available for UK domestic only)	'Y' or 'N'	1	DETAILS
UNNUMBER	N	The UN classification for the dangerous goods being carried Please see Appendix N – Dangerous Goods processing	4 digit numeric	4	DETAILS
PACKINGGROUP	N	The PACKING GROUP classification for the dangerous goods being carried Please see Appendix N – Dangerous Goods processing	4 characters	4	DETAILS
PACKAGE (multiple package elements allowed)	Y	Holds elements related to the package	At least one package MUST exist per consignment, UNLESS the consignment is internal to the EU		DETAILS
ITEMS	Y	Number of Packages of package type	Must be an integer	4	PACKAGE
DESCRIPTION	Y	Package description		60	PACKAGE
LENGTH	Y	Length of package	Must be in meters. Max length = 2.4m	1.2	PACKAGE
HEIGHT	Y	Height of package	Must be in meters. Max height = 1.5m	1.2	PACKAGE

XML Element /attribute	Data required	Description	Constraints	Max Length	Parent Element
WIDTH	Y	Width of package	Must be in meters. Max width = 1.2m	1.2	PACKAGE
WEIGHT	Y	Weight of package	Must be in kilograms. Max weight = 70kg	2.3	PACKAGE
ARTICLE (Optional – multiple allowed)	Y	Holds article related elements			PACKAGE
ITEMS	Y	Number of items in article		4	ARTICLE
DESCRIPTION	Y	Article description		60	ARTICLE
WEIGHT	Y	Weight of article	Must be in kilograms	2.3	ARTICLE
INVOICEVALUE	Y	Invoice Value of article	Must be in the currency stated previously	12.2	ARTICLE
INVOICEDESC	Y	Invoice Description of article		60	ARTICLE
HTS	N	HTS number		15	ARTICLE
COUNTRY	N	Country of article's origin	Must be valid TNT country code	3	ARTICLE
EMRN	N	Export Management Reference Number		25	ARTICLE
ACTIVITY	Y	Holds different activity elements			ESHIPPER
CREATE (optional)	Y	Holds the conref elements indicating which consignments are to be created			ACTIVITY
CONREF (optional – multiple allowed)	Y	The consignment ref corresponding to consignments in the document which are to be created		20	CREATE
RATE (optional)	Y	Holds the conref and connumber elements indicating which consignments are to be rated			ACTIVITY
CONREF (optional – multiple allowed)	Y	The consignment ref corresponding to consignments in the document which are to be rated		20	RATE
CONNUMBER (optional – multiple allowed)	Y	Consignment number corresponding to previously created consignments in the document which are to be		15	RATE

XML Element /attribute	Data required	Description	Constraints	Max Length	Parent Element
		rated. (See Appendix XI for info on check digit).			
BOOK (optional)	Y	Holds the conref elements indicating which consignments are to be booked, or a GROUPCODE element to book a batch of consignments. (For further information on Group codes see appendix XII).			ACTIVITY
ShowBookingRef (attribute)	N	Indicates that express connect should return the collection booking service reference number for 2.2 shipments	'Y' or 'N'	1	ACTIVITY
EMAILREQD attribute	N	<p>The element CONFIRMATIONEMAILADDRESS specify the field which comes under the parent element COLLECTION and used for providing the email address where you need the booking confirmation.</p> <p>The element EMAILREQD which holds a character either 'Y' or 'N' indicating that a booking confirmation email is required or not.</p> <p>The default value is "N"</p>		1	N/A
CONREF (optional – multiple allowed)	Y	The consignment ref corresponding to consignments in the document which are to be booked		20	BOOK
CONNUMBER (optional – multiple allowed)	Y	Consignment number corresponding to previously created consignments in the document which are to be booked. (See Appendix XI for info on check digit).		15	BOOK
GROUPCODE (optional)	Y	Group code for batch of consignments to book. (For further information	Exclusive, cannot be used with CONREF		BOOK

XML Element /attribute	Data required	Description	Constraints	Max Length	Parent Element
		on Group codes see appendix XII).	or CONNUMBER		
SHIP (optional)	Y	Holds the conref elements indicating which consignments are to be shipped For further information please see Ship Elements			ACTIVITY
CONREF (optional – multiple allowed)	Y	The consignment ref corresponding to consignments in the document which are to be shipped		20	SHIP
CONNUMBER (optional – multiple allowed)	Y	Consignment number corresponding to previously created consignments in the document which are to be shipped. (See Appendix XI for info on check digit).		15	SHIP
PRINT (optional)	Y	Holds the print type elements			ACTIVITY
REQUIRED (optional)	Y				PRINT
CONREF (optional – multiple allowed)	Y	The consignment ref corresponding to consignments in the document which are to have all required documents Printed (see rules in printing section)		20	REQUIRED
CONNUMBER (optional – multiple allowed)	Y	Consignment number corresponding to previously created consignments in the document which are to have all required documents Printed (see rules in printing section). (See Appendix XI for info on check digit).		15	REQUIRED
CONNOTE (optional)	Y				PRINT
CONREF (optional – multiple allowed)	Y	The consignment ref corresponding to consignments in the document which are to have consignment notes printed		20	CONNOTE

XML Element /attribute	Data required	Description	Constraints	Max Length	Parent Element
CONNUMBER (optional – multiple allowed)	Y	Consignment number corresponding to previously created consignments in the document which are to have consignment notes printed. (See Appendix XI for info on check digit).		15	CONNOTE
LABEL (optional)	Y				PRINT
CONREF (optional – multiple allowed)	Y	The consignment ref corresponding to consignments in the document which are to have labels printed		20	LABEL
CONNUMBER (optional – multiple allowed)	Y	Consignment number corresponding to previously created consignments in the document which are to have labels printed. (See Appendix XI for info on check digit).		15	LABEL
MANIFEST (optional)	Y				PRINT
CONREF (optional – multiple allowed)	Y	The consignment ref corresponding to consignments in the document which are to appear on a manifest		20	MANIFEST
CONNUMBER (optional – multiple allowed)	Y	Consignment number corresponding to previously created consignments in the document which are to appear on a manifest. (See Appendix XI for info on check digit).		15	MANIFEST
GROUPCODE (optional)	Y	Group code for batch of consignments to print as a summary manifest. (For further information on Group codes see appendix XII).	Exclusive, cannot be used with CONREF or CONNUMBER		MANIFEST
INVOICE (optional)	Y				PRINT
CONREF (optional – multiple allowed)	Y	The consignment ref corresponding to consignments in the document which are to appear on an invoice		20	INVOICE
CONNUMBER (optional – multiple allowed)	Y	Consignment number corresponding to		15	INVOICE

XML Element /attribute	Data required	Description	Constraints	Max Length	Parent Element
		previously created consignments in the document which are to appear on an invoice. (See Appendix XI for info on check digit).			
EMAILTO (optional)	Y	Email address to send documentation to. (For more information see appendix IX).	Valid email address, must have requested some documentation to be produced		PRINT
Type attribute	Y	Define the type of email to be sent if multiple types are defined, otherwise send default	Email types defined and submitted for addition to system via local CIT coordinator		EMAILTO
EMAILFROM (optional)	Y	Email address that the returns email will have set as the reply address. This is in case customers try to reply to the email.	Valid email address, must have requested some documentation to be produced		PRINT
SHOW_GROUPCODE	N	Element to indicate that the group code should be included in the returned XML. (For further information on Group codes see appendix XII).			ACTIVITY

11. Appendix B: XSD Data Types

XSD DATA TYPE	DESCRIPTION
dateTime	<p>Data expected in the format CCYY-MM-DDThh:mm:ss where CC indicates century, YY year, MM month in 2 digit format, DD day of the month, hh hour of the day, mm minutes and ss seconds.</p> <p>For example 5:30 p.m. on 30th December 2008 would be 2008-12-30T17:30:00. This data type describes instances identified by the combination of a date and a time. It is described in Chapter 5.4 of ISO 8601 and the W3C XML Schema Recommendation. Its lexical space is the extended format: [-]CCYY-MM-DDThh:mm:ss[Z](+ -)hh:mm]</p>
double	Numeric data with decimal places in the range -9007199254740991..9007199254740991.
int	Numeric data without decimal places in the range -2147483648..2147483647
long	Numeric data without decimal places in the range -9223372036854775808..9223372036854775807
string	XML compatible alphanumeric data.
boolean	1 – true, 0 - false

11.1 Custom Data Types

CUSTOM DATA TYPE	DESCRIPTION
stringMinLengthXMaxLengthY	Data type of type xsd:string with a minimum length of X and a maximum length of Y. If 'MinLength' is not specified in the data type name (e.g. stringMaxLength4) there is no minimum length.
integerMin0Max9	Data type of type xsd:int with a minimum value of 0 and a maximum value of 9.
doubleMaxExclusiveX	Data type of type xsd:double with a value that must be less than X. E.g. For 'doubleMaxExclusive100' the value cannot exceed 99.99.
longMaxLengthX	Data type of type xsd:long with a maximum length of X. E.g. For 'longMaxLength10' the maximum value is 9999999999 (ten 9's).

Notes**Max weight**

As a standard the following are limited to:

Max weight per package	70kg
Max length per package	2.4m
Max height per package	1.5m
Max width per package	1.2m

On request, these limits can be raised for each customer. If this is required please contact your TNT representative who will arrange this for you.

12. Appendix C MANDATORY FIELDS (INPUT XML)

- Company
- Password
- Appid
- Appversion
- (Sender) CompanyName
- (Sender) StreetAddress1
- (Sender) City
- (Sender) Postcode (unless the country is a non-postcode country)
- (Sender) Country
- (Sender) Account
- (Sender) Contact name
- (Sender) ContactDialCode
- (Sender) ContactTelephone

If CollectionAddress element is used

- (Collection) CompanyName
- (Collection) StreetAddress1
- (Collection) City
- (Collection) Postcode (unless the country is a non-postcode country)
- (Collection) Country
- (Collection) Account
- (Collection) Contact name
- (Collection) ContactDialCode
- (Collection) ContactTelephone

- Ship Date
- Conref
- Connumber
- (Receiver) CompanyName
- (Receiver) StreetAddress1
- (Receiver) City
- (Receiver) Postcode (unless the country is a non-postcode country)
- (Receiver) Country
- (Receiver) Account
- (Receiver) Contact name
- (Receiver) ContactDialCode
- (Receiver) ContactTelephone

If Delivery element is used

- (Delivery) CompanyName
- (Delivery) StreetAddress1
- (Delivery) City
- (Delivery) Postcode (unless the country is a non-postcode country)
- (Delivery) Country
- (Delivery) Account
- (Delivery) Contact name
- (Delivery) ContactDialCode
- (Delivery) ContactTelephone
- ConType (Consignment type)

- TotalWeight
- TotalVolume
- Consignment Items
- Service
- Package (unless the origin and destination countries are both within the EU). If included the following fields are mandatory
 - (Package) Items
 - (Package) Description
 - (Package) Length
 - (Package) Height
 - (Package) Weight
 - (Package) Width
 - (Package) ArticleCount
- Articles are not mandatory, but if included the following fields are mandatory
 - (Article) Items
 - (Article) Description
 - (Article) Weight
 - (Article) Invoicevalue
 - (Article) InvoiceDesc

13. Appendix D DATA RULES (INPUT XML)

A summary/reminder of the data input rules are listed below:

- Sender **Account** is mandatory
- **ConRef** must be unique – suggest generating unique values for each submission of consignments and must not contain special characters i.e. &, <, >, “.
- **ConType** (Consignment type) must be either ‘N’ (NonDoc) or ‘D’ (Doc).
- All **measurements** must be in meters(m) and kilograms(kg), input as figures only
- e.g. 301 grams input as ‘0.301’.
- **Dates** must be entered in DD/MM/YYYY format.
- **ShipmentDate** cannot be more than two weeks in advance
- **CollectionTimes** must be entered in 24 hour clock format as HHMM
- e.g. 3:21 p.m. input as 1521.
- **CollectionTimes** are only mandatory for booking. However, if one of the pair is entered, the other must also be. If the alternative times are entered, but the preferred are not, the alternative times are used. If they are found to hold no values when the collection is being booked, the default of 0900 – 1600 is assumed.
- **PaymentInd** is not a mandatory element. However, if included, this must contain the value ‘S’ (Sender pays) or ‘R’ (Receiver pays).
- If **Contype** is ‘N’ then the Volume is mandatory.
- If the **GoodsValue** field contains a value, the **Currency** field must contain a value.
- If the **InsuranceValue** field contains a value, the **Currency** field must contain a value.
- The **InsuranceValue** may not be more than 110% of the **GoodsValue** for non document consignments and not more than 500 Euros for document consignments
- The insurance does not currently impact the rates returned, but has been included for future development purposes
- There may be 0–5 **Option** elements included, each of which must contain a value.
- ITLL is available as an option. There are specific rules regarding its availability (see relevant section)
- There must be at least one **Package** per Consignment when entered in detail form.
- There may not be more than 50 **Packages** per Consignment when entered in detail form with no more than 99 **items**.
- Each **Package weight** is limited to a maximum of 70kg. (Unless a prior arranged limit has been agreed – this can be coordinated through your TNT representative)
- **Articles** are not mandatory.
- There may not be more than 99 **Articles elements** per Package.
- None of the values entered into the **Items** fields will be validated against the number of packages/articles submitted with a consignment, the customer is responsible for making these values correspond if desired.
- For valid country/currency/towns/service/option codes and postcode masks see Appendix III, for retrieval of TNT datasets.
- Non UK **Domestic** services are not available as default (UK Domestic services are available as default). Domestic services can be activated at a country level through a request to your TNT representative. The TNT representative will need to supply a list of domestic services / options available for the specified country.
- There may be up to 50 **Consignment** elements.
- Customers can enter their own consignment numbers if they have been registered to do so. ExpressConnect will check the number for a valid check digit, a modulus 7 or 11 check digit should be used (see appendix XI for further details). The consignment number can be added with or without the UPU (Universal Postal Union) characters at the beginning and end of the number. If UPU characters are not added ExpressConnect will generate them based on the origin and destination country. The TNT representative will coordinate registration for this functionality if required.
- Special characters may be used i.e. &, ‘, “, <, >. Details of encoding can be found in the Appendices.

14. Appendix E: ISO 3166-1 Alpha-2 Country Codes

Country names	ISO 3166-1-alpha-2 code
A	
AFGHANISTAN	AF
ÅLANDISLANDS	AX
ALBANIA	AL
ALGERIA	DZ
AMERICAN SAMOA	AS
ANDORRA	AD
ANGOLA	AO
ANGUILLA	AI
ANTARCTICA	AQ
ANTIGUA AND BARBUDA	AG
ARGENTINA	AR
ARMENIA	AM
ARUBA	AW
AUSTRALIA	AU
AUSTRIA	AT
AZERBAIJAN	AZ
B	
BAHAMAS	BS
BAHRAIN	BH
BANGLADESH	BD
BARBADOS	BB
BELARUS	BY
BELGIUM	BE
BELIZE	BZ
BENIN	BJ
BERMUDA	BM
BHUTAN	BT
BOLIVIA	BO
BOSNIA AND HERZEGOVINA	BA
BOTSWANA	BW
BOUVET ISLAND	BV
BRAZIL	BR

BRITISH INDIAN OCEAN TERRITORY	IO
BRUNEI DARUSSALAM	BN
BULGARIA	BG
BURKINA FASO	BF
BURUNDI	BI
C	
CAMBODIA	KH
CAMEROON	CM
CANADA	CA
CAPE VERDE	CV
CAYMANISLANDS	KY
CENTRALAFRICANREPUBLIC	CF
CHAD	TD
CHILE	CL
CHINA	CN
CHRISTMAS ISLAND	CX
COCOS (KEELING) ISLANDS	CC
COLOMBIA	CO
COMOROS	KM
CONGO	CG
CONGO, THE DEMOCRATIC REPUBLIC OF THE	CD
COOKISLANDS	CK
COSTA RICA	CR
CÔTE D'IVOIRE	CI
CROATIA	HR
CUBA	CU
CYPRUS	CY
CZECH REPUBLIC	CZ
D	
DENMARK	DK
DJIBOUTI	DJ
DOMINICA	DM
DOMINICAN REPUBLIC	DO
E	
ECUADOR	EC
EGYPT	EG
EL SALVADOR	SV
EQUATORIAL GUINEA	GQ
ERITREA	ER
ESTONIA	EE
ETHIOPIA	ET
F	

FALKLAND ISLANDS (MALVINAS)	FK
FAROE ISLANDS	FO
FIJI	FJ
FINLAND	FI
FRANCE	FR
FRENCH GUIANA	GF
FRENCH POLYNESIA	PF
FRENCH SOUTHERN TERRITORIES	TF
G	
GABON	GA
GAMBIA	GM
GEORGIA	GE
GERMANY	DE
GHANA	GH
GIBRALTAR	GI
GREECE	GR
GREENLAND	GL
GRENADA	GD
GUADELOUPE	GP
GUAM	GU
GUATEMALA	GT
GUERNSEY	GG
GUINEA	GN
GUINEA-BISSAU	GW
GUYANA	GY
H	
HAITI	HT
HEARD ISLAND AND MCDONALDISLANDS	HM
HOLY SEE (VATICAN CITYSTATE)	VA
HONDURAS	HN
HONG KONG	HK
HUNGARY	HU
I	
ICELAND	IS
INDIA	IN
INDONESIA	ID
IRAN, ISLAMIC REPUBLIC OF	IR
IRAQ	IQ
IRELAND	IE
ISLE OF MAN	IM
ISRAEL	IL
ITALY	IT

J

JAMAICA	JM
JAPAN	JP
JERSEY	JE
JORDAN	JO

K

KAZAKHSTAN	KZ
KENYA	KE
KIRIBATI	KI
KOREA, DEMOCRATIC PEOPLE'S REPUBLIC OF	KP
KOREA, REPUBLIC OF	KR
KUWAIT	KW
KYRGYZSTAN	KG

L

LAO PEOPLE'S DEMOCRATIC REPUBLIC	LA
LATVIA	LV
LEBANON	LB
LESOTHO	LS
LIBERIA	LR
LIBYAN ARAB JAMAHIRIYA	LY
LIECHTENSTEIN	LI
LITHUANIA	LT
LUXEMBOURG	LU

M

MACAO	MO
MACEDONIA, THE FORMER YUGOSLAV REPUBLIC OF	MK
MADAGASCAR	MG
MALAWI	MW
MALAYSIA	MY
MALDIVES	MV
MALI	ML
MALTA	MT
MARSHALL ISLANDS	MH
MARTINIQUE	MQ
MAURITANIA	MR
MAURITIUS	MU
MAYOTTE	YT
MEXICO	MX
MICRONESIA, FEDERATED STATES OF	FM
MOLDOVA	MD

MONACO	MC
MONGOLIA	MN
MONTENEGRO	ME
MONTSERRAT	MS
MOROCCO	MA
MOZAMBIQUE	MZ
MYANMAR	MM
N	
NAMIBIA	NA
NAURU	NR
NEPAL	NP
NETHERLANDS	NL
NETHERLANDS ANTILLES	AN
NEW CALEDONIA	NC
NEW ZEALAND	NZ
NICARAGUA	NI
NIGER	NE
NIGERIA	NG
NIUE	NU
NORFOLK ISLAND	NF
NORTHERN MARIANA ISLANDS	MP
NORWAY	NO
O	
OMAN	OM
P	
PAKISTAN	PK
PALAU	PW
PALESTINIAN TERRITORY, OCCUPIED	PS
PANAMA	PA
PAPUA NEW GUINEA	PG
PARAGUAY	PY
PERU	PE
PHILIPPINES	PH
PITCAIRN	PN
POLAND	PL
PORTUGAL	PT
PUERTO RICO	PR
Q	
QATAR	QA
R	
RÉUNION	RE
ROMANIA	RO

RUSSIAN FEDERATION	RU
RWANDA	RW
S	
SAINT BARTHÉLEMY	BL
SAINT HELENA	SH
SAINT KITTS AND NEVIS	KN
SAINT LUCIA	LC
SAINT MARTIN	MF
SAINT PIERRE AND MIQUELON	PM
SAINT VINCENT AND THE GRENADINES	VC
SAMOA	WS
SAN MARINO	SM
SAO TOME AND PRINCIPE	ST
SAUDI ARABIA	SA
SENEGAL	SN
SERBIA	RS
SEYCHELLES	SC
SIERRA LEONE	SL
SINGAPORE	SG
SLOVAKIA	SK
SLOVENIA	SI
SOLOMON ISLANDS	SB
SOMALIA	SO
SOUTH AFRICA	ZA
SOUTH GEORGIA AND THE SOUTH SANDWICH ISLANDS	GS
SPAIN	ES
SRI LANKA	LK
SUDAN	SD
SURINAME	SR
SVALBARD AND JAN MAYEN	SJ
SWAZILAND	SZ
SWEDEN	SE
SWITZERLAND	CH
SYRIANARABREPUBLIC	SY
T	
TAIWAN, PROVINCE OF CHINA	TW
TAJIKISTAN	TJ
TANZANIA, UNITED REPUBLIC OF	TZ
THAILAND	TH
TIMOR-LESTE	TL
TOGO	TG
TOKELAU	TK

TONGA	TO
TRINIDAD AND TOBAGO	TT
TUNISIA	TN
TURKEY	TR
TURKMENISTAN	TM
TURKS AND CAICOS ISLANDS	TC
TUVALU	TV
U	
UGANDA	UG
UKRAINE	UA
UNITED ARAB EMIRATES	AE
UNITED KINGDOM	GB
UNITED STATES	US
UNITED STATES MINOR OUTLYING ISLANDS	UM
URUGUAY	UY
UZBEKISTAN	UZ
V	
VANUATU	VU
VATICAN CITYSTATE	see HOLY SEE
VENEZUELA	VE
VIET NAM	VN
VIRGINISLANDS, BRITISH	VG
VIRGIN ISLANDS, U.S.	VI
W	
WALLIS AND FUTUNA	WF
WESTERN SAHARA	EH
Y	
YEMEN	YE
Z	
ZAMBIA	ZM
ZIMBABWE	ZW

15. Appendix E: VAT codes

Country (including code)	VAT number format	VAT in local languages
Austria (AT)	U12345678 (9 characters. The first character is always 'U')	US _t
Belgium (BE)	1234567890 (10 characters. Prefix with zero '0' if the customer provides a 9 digit VAT number)	BTW, TVA, NWS _t
Bulgaria (BG)	123456789, 1234567890 (9 or 10 characters)	ДДС
Croatia (HR)	12345678901 (11 characters)	PDV
Republic of Cyprus (CY)	12345678X (9 characters. The last character must always be a letter)	ΦΠΑ
Czech Republic (CZ)	12345678, 123456789, 1234567890, (8, 9 or 10 characters. If more than 10 characters are provided delete the first 3 as these are a tax code)	DPH
Denmark, except the Faroe Islands and Greenland (DK)	12345678 (8 characters)	moms
Estonia (EE)	123456789 (9 characters)	km
Finland, but excluding the Åland Islands (FI)	12345678 (8 characters)	ALV, Moms
France, including Monaco but excluding Guadeloupe, Martinique, Réunion, St. Pierre and Miquelon, and French Guiana (FR)	12345678901, X1234567890, 1X123456789, XX123456789, (11 characters. May include alphabetical characters (any except O or I) as first or second or first and second characters.)	TVA
Germany, except Büsingen and the Isle of Heligoland (DE)	123456789 (9 characters)	MwSt., Ust.
Greece (EL)	123456789 (9 characters)	ΦΠΑ
Hungary (HU)	12345678 (8 characters)	ÁFA
Ireland (IE)	1234567X, 1X23456X, 1234567XX, (8 or 9 characters. Includes one or two alphabetical characters (last, or second and last, or last 2))	CBL, VAT
Italy, except the communes of Livigno and Campione d'Italia and the Italian waters of Lake Lugano (IT)	12345678901 (11 characters)	IVA
Latvia (LV)	12345678901 (11 characters)	PVN
Lithuania (LT)	123456789, 123456789012, (9 or 12 characters)	PVM
Luxembourg (LU)	12345678 (8 characters)	TVA
Malta (MT)	12345678 (8 characters)	VAT
Netherlands (NL)	123456789B01 (12 characters. The tenth character is always B)	BTW

Country (including code)	VAT number format	VAT in local languages
Poland (PL)	1234567890 (10 characters)	PTU, VAT
Portugal, including the Azores and Madeira (PT)	123456789 (9 characters)	IVA
Romania (RO)	12, 123, 1234, 12345, 123456, 1234567, 12345678, 123456789, 1234567890, (from 2 to 10 characters)	TVA
Slovak Republic (SK)	1234567890 (10 characters)	DPH
Slovenia (SI)	12345678 (8 characters)	DDV
Spain, including the Balearic Islands but excluding Ceuta, Melilla and the Canary Islands (ES)	X12345678, 12345678X, X1234567X, (9 characters. Includes one or two alphabetical characters (first or last or first and last.))	IVA
Sweden (SE)	123456789012 (12 characters)	Moms

16. Appendix F - Example Booking confirmation from backend systems

Please note, this is not available for UK Domestic shipments.

Email sent automatically if the EMAILREQD attribute is set on the BOOK element (see [Activities/functional features](#))

Email sent from: **collection.request@tnt.com**

Dear Customer,
Thank you for choosing to work with TNT.
We would like to confirm the collection request details that
have been raised with the following details

Company Name: COLLECTION NAME
Address: TEST DO NOT COLLECT4
 TEST DO NOT COLLECT5
 TEST DO NOT COLLECT6
Town: ATHERSTONE
 WARWICKSHIRE

Contact Name: Mr Contact
Collection Date: 25.07.2016
Open and Close time collection address: 09.00 10.00

Your collection request number is: CVT 818154

For more information please visit <http://www.TNT.com> or call (+44) 1827 711711

For more information on our shipping terms please visit our website.

Note: This e-mail was sent from a notification-only e-mail address
that cannot accept incoming e-mail. Please do not reply to
this message.

17. Appendix G - Advanced Shipping Notification

If a receiver's email <CONTACTEMAIL> is entered within the <RECEIVER> element of the shipping input XML an automatic Advanced Shipping Notification email is sent to the specified email address. The format of the email is as follows:

Dear Customer,

TNT Test has arranged a shipment for you.

The shipment will be collected from them on November 26, 2015 and has
TNT consignment number: 536554443.

Do you want to follow your package?

[Track your shipment](#)

SHIPMENT DETAILS OVERVIEW:

From Bob test company line 1	To TNT Express France 1 The address 2 the address
KOBLENZ	PARIS 01
56017 DE	75001 FR

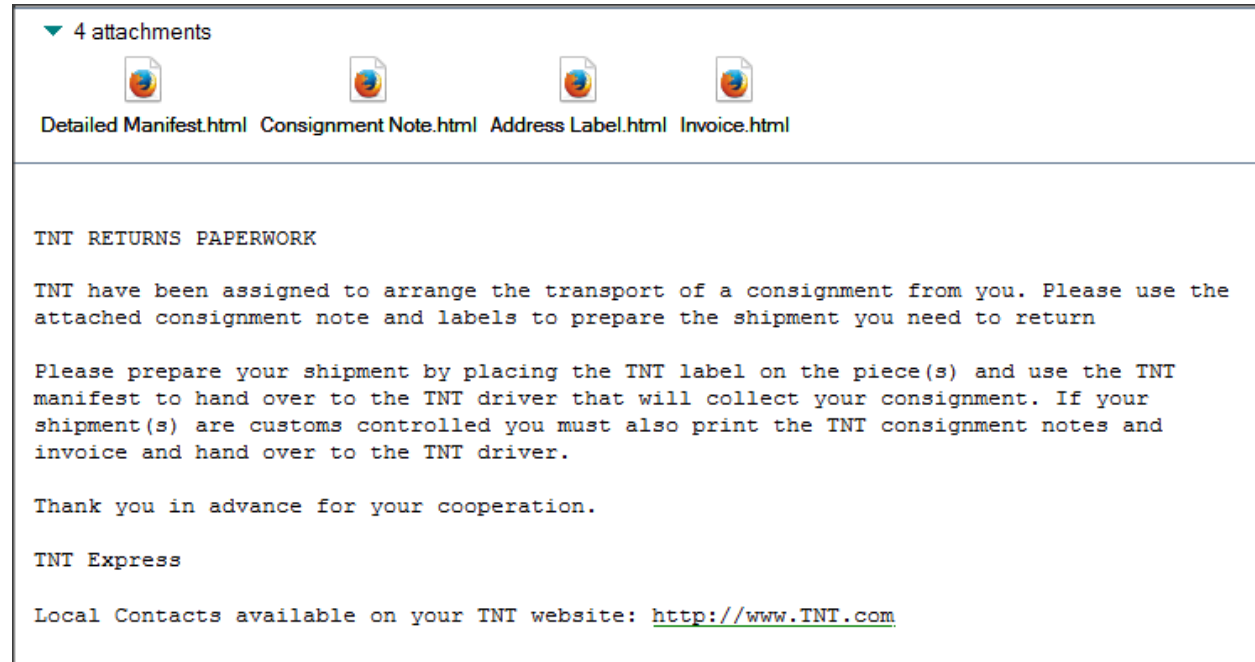
Pieces : 1
Weight : 1 KG
Shipment reference :
Description : document

18. Appendix H – Returns Paperwork

If the <EMAILTO> and <EMAILFROM> elements in the print activity of the shipping input XML is filled with a valid email address an email is sent to the specified email address with the documentation files as HTML attachments. The format of the email is shown below..

From: <EMAILFROM> value

Subject : **Returns paperwork for your consignment**



19. Appendix I – Modulus 11 or 7 Check Digit

To validate a consignment number, a modulus 11 or 7 check digit is used.

This method creates a digit which will be appended to the end of a consignment number. The digit is created from each of the other digits in the consignment.

19.1 Modulus 11 Check Digit

Steps taken:

- Assign weights to the digits. In the case of Express Connect, the weights are 8, 6, 4, 2, 3, 5, 9 and 7
- Multiply each digit in the consignment by it's assigned weight.
- Add together the results.
- Divide the result by 11
- Subtract the remainder from 11 – leaving behind the check digit.

Example for modulus 11:

Con: 40392321

$$4 * 8 = 32$$

$$0 * 6 = 0$$

$$3 * 4 = 12$$

$$9 * 2 = 18$$

$$2 * 3 = 6$$

$$3 * 5 = 15$$

$$2 * 9 = 18$$

$$1 * 7 = 7$$

$$32 + 0 + 12 + 18 + 6 + 15 + 18 + 7 = 108$$

$$108 / 11 = 9.81818182$$

$$0.81818182 * 11 = 9$$

$$11 - 9 = 2$$

Check digit = 2

NOTE: if the remainder is 0 or 1, the subtraction will result in either 10 or 11 (two digit check digits are not allowed). To resolve this, if the check digit is 11, then it is changed to 5. If the check digit is 10, then it is changed to 0.

(Continued)

Modulus 11

4 0 3 9 2 3 2 1

Con Id

8 6 4 2 3 5 9 7

Weights

32 0 12 18 6 15 18 7

Derived values (Digit *
Weight)

108

Sum

9

Sum MOD 11 : (Remainder)

2

Modulus Eleven Check Digit (11 - Remainder)
when 11 substitute 5, when 10 substitute 0 ...

19.2 Modulus 7 Check Digit

Steps taken:

- Divide the consignment number by 7
- Multiple the integer by 7
- Subtract this value from the consignment Number – leaving behind the check digit.

$A = (\text{Integer}(\text{consignment number} / 7) * 7)$

Check digit = consignment number - A

Modulus 7

40392321

Con Id

5770331

Con Id / 7 : (Weighted Con)

40392317

Weighted Con * 7 : (Mod7 Con)

4

Modulus Seven Check Digit (Con Id - Mod7 Con)

20. Appendix J – Group Codes

To reduce the paperwork generated by ExpressConnect, you can replace the Detail Manifest with a Summary manifest. To group consignments together for the purpose of printing the summary manifest it is necessary to use the <GROUPCODE> tag. The consignments are allocated to a GroupCode during the day and the Summary manifest is then printed using the GroupCode id.

Please note there should be one group code per TNT sender account number. If multiple account numbers are supplied under one group code then only the first account number will be used.

Submit the first consignment to ExpressConnect that is to be grouped and include the <SHOW_GROUPCODE/> tag in the <ACTIVITY> section as shown below:

```
<ACTIVITY>
  <CREATE>
    <CONREF>ref01_008</CONREF>
  </CREATE>
  <BOOK>
    <CONREF>ref01_008</CONREF>
  </BOOK>
  <SHIP>
    <CONREF>ref01_008</CONREF>
  </SHIP>
  <PRINT>
    <CONNOTE>
      <CONREF>ref01_008</CONREF>
    </CONNOTE>
    <LABEL>
      <CONREF>ref01_008</CONREF>
    </LABEL>
  </PRINT>
  <SHOW_GROUPCODE/>
</ACTIVITY>
```

The first order of the day is sent to TNT and TAG <SHOW_GROUPCODE/> is present.
Successful results from TNT would show:

```
<GROUPCODE>9799763</GROUPCODE>
<CREATE>
<CONREF>TEST1</CONREF>
<CONNUMBER>GE466478018SE</CONNUMBER>
<SUCCESS>Y</SUCCESS>
</CREATE>
<PRINT>
* Returns confirm of requested printables....
</PRINT>
</document>
```

The user's system should store this returned GROUPCODE and insert it into all following orders that should be grouped under this TNT generated / assigned code.

On subsequent calls to ExpressConnect that are to be grouped include the groupcode in the request XML as below:
(please note do not include the <GROUPCODE> tag in the initial request with contained the TAG <SHOW_GROUPCODE/>).

<!--Example request with group code -->

```
<LOGIN>
  <COMPANY>YOUR USERID</COMPANY>
  <PASSWORD>YOUR PASSWORD</PASSWORD>
  <APPID>EC</APPID>
  <APPVERSION>2.2</APPVERSION>
</LOGIN>
<CONSIGNMENTBATCH>
<GROUPCODE>9799763</GROUPCODE>
<SENDER>
<COMPANYNAME>BT Europe AB</COMPANYNAME>
```

The consignment reference or consignment number used must be unique within the group.

The groupcode returned in the results XML will then be the same as the primary/initial request.

```
<GROUPCODE>9799763</GROUPCODE>
<CREATE>
<CONREF>TEST2</CONREF>
<CONNUMBER>GE857193866SE</CONNUMBER>
<SUCCESS>Y</SUCCESS>
</CREATE>
<PRINT>
* Returns confirm of requested printables....
</PRINT>
</document>
```

It is recommended that the SHIP and BOOK activities are performed at the time of the “CREATE”, rather than waiting to perform this at the time of printing the Summary manifest. It is possible to perform SHIP and BOOK activities using the GroupCode:

```
<BOOK EMAILREQD="Y" ShowBookingRef="Y">
  <GROUPCODE>12345678</GROUPCODE>
</BOOK>
<SHIP>
  <GROUPCODE>12345678</GROUPCODE>
</SHIP>
```

If this approach is used please ensure you call ExpressConnect with very large timeout values. Once a consignment has been allocated to a GroupCode then it is not possible to remove it, and so there are no processing advantages in delaying these commands. ExpressConnect like most web services is not suitable for major batch processing.

To print the summary manifest, include the groupcode in the <ACTIVITY> section for the manifest print as shown below. For Summary Manifest print requests, the CONSIGNMENT elements can be omitted, i.e.,

```
<ESHIPPER>
  <LOGIN>
    <!-- mandatory -->
    <COMPANY>YOUR USERID</COMPANY>
    <PASSWORD>YOUR PASSWORD</PASSWORD>
    <APPID>EC</APPID>
    <APPVERSION>2.2</APPVERSION>
  </LOGIN>
  <CONSIGNMENTBATCH>
    <SENDER>


...

    </SENDER>
  </CONSIGNMENTBATCH>
  <ACTIVITY>
    <PRINT>
      <MANIFEST>
        <- - Print summary manifest for the batch with the groupcode 12345678 - -
      >
        <GROUPCODE>12345678</GROUPCODE>
      </MANIFEST>
    </PRINT>
  </ACTIVITY>
</ESHIPPER>
```

This submission will then return a 'COMPLETE:xxxxxxxx' message. To retrieve the summary manifest XML submit the following:

GET_MANIFEST:xxxxxxxx where 'xxxxxxxx' is the returned access ID

This will then return the summary manifest XML including a reference to the required style sheets at the top.

COLLECTION MANIFEST (SUMMARY)							
							
Page: 1 of 1							
Sender Account : [REDACTED]							
Sender Name : 2.2 IN Test 111111111111							
& Address : TEST Street 1 sender, TEST Sender Addr 2, Sender Addr 3, Amsterdam, , 1100 AA, Netherlands.							
Group code : 6580913							
Date: 15/08/2012							
Con Nr.	No. of Places	Weight (kg)	Shipper Ref.	Receiver	City	Destination	Service
GE857193968NL	2	1.4	REF 12 111111	BE Receiver Name 1111	Munich	Germany	15N Express
GE857193971NL	2	1.4	REF 12 111111	BE Receiver Name 1111	Munich	Germany	15N Express
Account [REDACTED] Totals :							
	2	4	2.800				
Sender 2.2 IN Test 111111111111 Totals :							
	2	4	2.800				
Grand Totals :							
	2	4	2.800				
Sender's Signature _____				Date ____/____/____			
Received by TNT _____				Date ____/____/____ Time ____:____ hrs			

21. Appendix K – Security/connectivity requirements

The SSL site certificate for <https://express.tnt.com> will be renewed each year and this is the certificate used by Express Connect. Currently our root certificate and certificate are supplied by Verisign/Symantec. This 2048-bit RSA public root certificate is something that the operating system providers, such as Microsoft or Apple, provide as part of their operating system software. The certificates are updated with the regular specific browser updates and operating system service pack updates.

Your CIT representative will contact you prior to the certificate being renewed and it is vital that you know whether your application environment will automatically renew the certificate or whether you need to manually add the certificate to the trust store. This can be undertaken by the update mechanism used within your environment. Normally the Trusted Root Certification Authorities list would be updated by routine patching of the client OS or browser upgrades.

TNT if required can provide the certificates or urls to Symantec to download the root certificate.

As part of the software installation please ensure you have fully documented the steps required to install a new certificate to your application environment.

The error “No Data Received at gateway from Client” is returned when no XML payload has been received by the ExpressConnect application. This can occur if the certificate is not valid or expired.

22. Appendix L – First Time Trader Requirements

The first time trade flag is used to highlight TNT's "RIGHT OF INSPECTION".

If are shipping with TNT, you must agree that we or any governmental authority including customs may open and inspect your shipment at any time.

By default we inspect all "1st time shippers" initial parcels.

Important information for 1st time TNT Shipping Users

- 1.** Please leave the package open for inspection by the driver. This is standard policy with all first time customers and is an important part of our security procedure. Unfortunately we cannot accept packages, which have not been inspected by our driver.
- 2.** If your package is not a document and is traveling outside the European Union, you will need to prepare a Commercial Invoice to accompany it. Please give the Commercial Invoice to the driver when your package is collected.
- 3.** As this is the first time you have dealt with us, we will be happy to call you when your package has been delivered.

Thank you.

23. Appendix M – XML markup Language characters

XML has 5 "special" characters that are markup characters and must be escaped <>'&" The old version of ExpressConnect use to handle these characters without the need for them to be escaped. This is not good practice and so this feature has been removed.

There are two ways to do this, escape each one in turn < (<), & (&), > (>), " ("), and ' (').

For example

```
<COMPANYNAME>Test &amp; Test again</COMPANYNAME>
```

For a company name of "Test & Test again".

The other simpler approach is to escape the full string using CDATA. CDATA is a section of element content that is marked for the parser to interpret as only character data, not markup.

For example

```
<COMPANYNAME><![CDATA[Test & Test again]]></COMPANYNAME>
```

For a company name of "Test & Test again".

24. Appendix N – Dangerous Goods processing

Dangerous Goods are articles or substances which are capable of posing a significant risk to health, safety, property or the environment. The consequences of not being aware of what we are transporting can be far reaching and can affect everyone to the possible extent of loss of life. It is therefore necessary that all regulations and instructions are followed carefully.

Transport of Dangerous Goods on the TNT Express Networks is strictly prohibited except to and from the Dangerous Goods Approved Countries by Dangerous Goods Approved Customers. These Dangerous Goods shipments must be in compliance with all applicable regulations and any TNT Express specific requirements.

If you have been approved by TNT to ship Dangerous Goods, then we now support 3 additional fields within ExpressConnect:

```
<HAZARDOUS>Y</HAZARDOUS>  
<UNNUMBER>1845</UNNUMBER>  
<PACKINGGROUP>II</PACKINGGROUP>
```

Lithium batteries are considered as hazardous goods due to the fact that they can overheat and ignite under certain conditions. Customers must declare any shipments of Lithium Batteries or electronic devices containing Lithium Batteries, by using the LB option code.

Certain types of Lithium Batteries are classed as “Excepted” and the normal Dangerous Goods policy does not apply in these circumstances.

- Dangerous Goods Customer Approval is not required.
- Dangerous Goods Country Approval is not required.
- Accepted on the TNT Express Fixed Networks (Road & Air).
- Accepted for transport on the Commercial Linehails.

For Excepted Lithium Batteries, the Dangerous Goods flag should be set to Yes and HZ should not be applied. An LB option should be applied.

The Proper shipping name must be supplied in the Special Instructions element. For example for UN 3481 “Lithium Ion Batteries in compliance with Section II of PI 966”

Additional details can be located on our tnt.com web site under the “how to ship” section.

Stat. No: _____ Check _____		C. Special Delivery Instructions	
Total Packages: 1 Total Weight: 11.000Kg Total Volume: 11.000 m³		UN3091 Lithium Metal Batteries, in compliance with section II of PI 970	
4. Services		D. Customer Reference	
Service: 10:00 Express (non-doc) DANGEROUS GOODS			
Options: Excepted Lithium Batteries		E. Invoice Receiver (Receiver's Account number)	
UN number 3091	Packing group II	Received by TNT by (Name): _____	Receiver Copy
SENDER PAYS			

You must use the ExpressLabel web service for your labelling solution and not the supplied label in ExpressConnect.

Please work with your CIT representative if you are shipping dangerous goods or Lithium batteries.

It's the shipper's responsibility to ensure dangerous goods are correctly declared, packed and labelled with the right documentation for the countries of origin, transit and destination.

25. Appendix O – D PDF render

This section will assist you in generating/rendering the ExpressConnect documents in a PDF format.

On the Shipping section of the test harness:

<https://express.tnt.com/expresswebservices-website/app/landing.html>

There is a **PDF XSL files** download option.

The steps to render the response XML locally into PDF is mentioned below:

- Extract FOPGenerator.zip in your specified drive. (the zip file is download via **PDF XSL files**)
- Download all the style sheets and save then in your local system.
- The save the response xml documentation xml to your local machine.
- Open Command Prompt pointing to FOPGenerator.zip extracted location.
- Run the below command with the full path of the previously saved 'xsl' stylesheets, 'xml' and also the full path name where the pdf needs to be generated locally on your machine.

Syntax: `java -cp "fop-2.8.jar;lib/*"; FOPPdfDemo [xsl Stylesheet Path] [xml full Path] [Pdf Output File Path with File name]`

Example:

```
java -cp "fop-2.8.jar;lib/*"; FOPPdfDemo D:/Local_Rendering/XSL/PDFAddressLabelRenderer.xsl  
D:/Local_Rendering/XML/AddressLabel.xml D:/Local_Rendering/AddressLabelRenderer.pdf  
Downloads:
```

FOP API , FOPPdfDemo Class and PDF Stylesheets downloads are available in a link available in test harness.