



Royal Mail Group

Parcelforce Worldwide (PFW) Tracking API Technical User Guide

This API specification details the requirements for integrating with the Parcelforce Worldwide Tracking API (SOAP). It specifically covers how the PFW Tracking API can be used by business customers to perform parcel tracking enquiries and provides the technical information to build this integration.

25th February 2016

Version 1.2

Contents

1	Document Control.....	4
1.1	Terms and Abbreviations.....	4
1.2	Version History.....	4
2	Overview	5
3	Purpose.....	6
4	Introduction to PFW Tracking API.....	7
4.1	Overview	7
4.2	Interface Components	7
5	Integrating with the PFW Tracking API.....	8
5.1	Terms & Conditions.....	8
5.2	API Access.....	9
6	PFW Tracking Services.....	10
6.1	Business Services	10
7	Message Structure.....	11
8	Message Definition and Schemas	12
8.1	Notation.....	12
8.2	WSDL and Schemas	12
8.3	HTTP Header Information.....	13
8.3.1	Description	13
8.3.2	Request Message.....	13
8.3.3	Example Data	13
8.4	ParcelTrackingEnquiry.....	14
8.4.1	Example Data	16
8.5	ParcelTrackingEnquiryResponse.....	19
8.5.1	TrackResponse	21
8.5.2	SndRefResponse.....	24
8.5.3	ErrorResponse	25
8.5.4	Consignments.....	25
8.5.5	Customers	26
8.5.6	Example Data	27
8.6	TrackingEnquiry	35

8.6.1	Example Data	35
8.7	TrackingEnquiryResponse	37
8.7.1	Example Data	37
9	Error Handling	41
9.1	Overview	41
9.2	Technical Errors	41
9.2.1	Example Data	42
9.3	Business Errors	42
9.3.1	Example Data	43
10	Non-Functional Characteristics	44
10.1	Availability	44
10.1.1	Service Hours	44
10.1.2	Maintenance Windows	44
10.1.3	Unavailability	44
10.2	Performance	44
10.3	Security	44
11	Frequently Asked Questions	46
11.1	API vs Track-and-Trace Results	46
11.2	API Programming	46
11.3	Application Compatibility	46

1 Document Control

1.1 Terms and Abbreviations

Term	Meaning
HTTP	Hypertext Transfer Protocol
HTTPS	Hypertext Transfer Protocol over SSL
IP	Internet Protocol
PFW	Parcelforce Worldwide
SOAP	Originally an acronym for Simple Object Access Protocol, is a protocol specification for exchanging structured information in the implementation of web services
WSDL	Web Services Description Language
XML	Extensible Markup Language

Table 1 – Terms and Abbreviations

1.2 Version History

Version	Date	Author	Notes
1.0	01/02/2016	Mark Cornforth	Document created and baselined.
1.1	24/02/2016	Alex Robertson & Mark Cornforth	Document updated to include Single Tracking Enquiry service.
1.2	25/02/2016	Mark Cornforth	Document updated to include sample request and response data for making an API request for a foreign parcel label.

Table 2 – Document Version History

2 Overview

The Parcelforce Tracking API exposes a web service that allows customers enquire on the tracking status of mail items. There are two separate API operations available. The first API operation provides single item parcel tracking functionality based on Parcelforce consignment number, parcel label, foreign parcel label or senders reference for one account. The second API operation provides registration, parcel searching and multiple parcel searching functionality based on customer number (or sender reference) and account information.

There are no costs to customers for using the PFW Tracking API, however customers' own development costs must be covered by the customer developing the solution. Royal Mail Group will not accept any responsibility for these development, implementation and testing costs.

Note that following approval, any changes or additions to the outputs relating to Parcelforce despatches will also need to be discussed and validated before implementation. This includes the addition of new services.

3 Purpose

This document is to provide Royal Mail customers with guidelines and detailed specifications for integrating with the PFW Tracking SOAP web service.

The document details:

- The specification for the web service interface for customers who want to access tracking data for their mail items.
- Description of errors the API can return.
- Non-functional characteristics of the API including response times, service availability and security considerations.

This document is primarily intended to be read by developers and other technical roles involved with integrated customer systems' with the PFW Tracking API. This document should be read in conjunction with the following artefacts which are available from the Strategic Tracking API page on the [Royal Mail Developer Portal](#):

- PFW Tracking API WSDL
- PFW Tracking API Sample Data
- PFW Tracking API Reference Data

4 Introduction to PFW Tracking API

4.1 Overview

The PFW Tracking Service enables business customers to enquire on the tracking status of Parcelforce mail items. It provides an alternative mechanism to using the track and trace function on the Parcelforce website (<http://www.parcelforce.com/track-trace>).

4.2 Interface Components

Please see Figure 1 below for a graphical representation of the interface between Royal Mail Group and customers for the PFW Tracking API. This document covers what information is to be exchanged, how this information is structured and the means by which it is transferred.

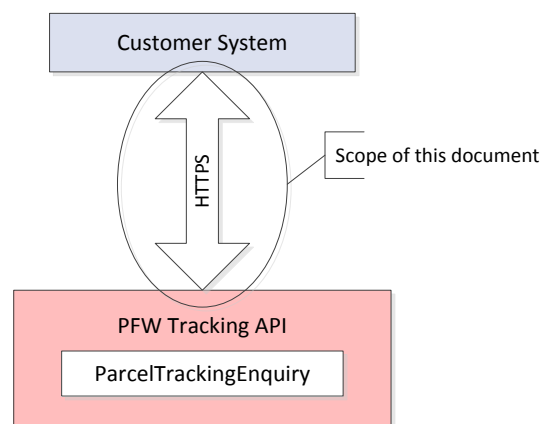


Figure 1 – PFW Tracking API

5 Integrating with the PFW Tracking API

The high-level process associated with integrating with the PFW Tracking API is represented and described in the diagram below.

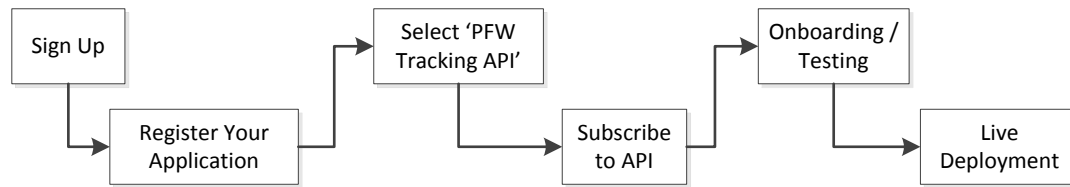


Figure 2 – Process for Integrating with the API

Access to the service is managed through RMG's API Management system.

New users of the system will need to:

1. Sign up for an account and accept the terms and conditions on the [Royal Mail Developer Portal](#).
2. Register the 'application' which will be calling the API. When the application is registered, it will be assigned a unique system-generated Client ID and Secret which is needed to securely access the API. It is important that these credentials are noted and securely stored.
3. Request to subscribe to the API. This will result in an e-mail being automatically generated and sent to the Royal Mail Customer Solutions team.
4. Once approved, testing can be performed against the API in a sandboxed onboarding environment that allows you to test the integration.
5. Once all required testing has completed in the onboarding environment, access to the Live production system will be provided at a mutually agreed date/time.

Existing users who already have an account with Royal Mail's API Management system will need to perform step 2 onwards if the application accessing the API is different to any currently registered applications. If the application accessing the API is already registered, existing customers will need to perform step 3 onwards.

5.1 Terms & Conditions

You must accept the Royal Mail Terms and Conditions when creating your customer account. These cover the ways in which the service may be used and any integration activities must abide by these.

Of particular note to developers:

- The onboarding environment may not be used for performance testing. This is a small scale system for functional testing only.
- Royal Mail Group expects customers to use the service in a responsible way; this includes refraining from continuously polling the API for updates.

- Any customers who violate the terms and conditions for the service will result in their requests being throttled at a rate which Royal Mail Group seem acceptable. Excessive volumes of traffic over the configured throttling limit will result in transactions being rejected.

5.2 API Access

Both onboarding and live access to the API is obtained via the following URL:

<https://api.royalmail.net/parceltracking/v1>

Please note that the Client ID and Secret must be provided in the HTTP header of all API requests otherwise access to the API will be rejected and a HTTP 401 (Unauthorised) will be returned. The Client ID and Secret are obtained by registering an application on the RMG API Management site.

Please see section 9 for a full list of technical and business error codes which are returned from this API.

6 PFW Tracking Services

6.1 Business Services

The PFW Tracking API is a service offered to customers to allow them to enquire on the tracking status of their mail items which are being handled through the Parcelforce network.

The table below provides an overview of the business services that are supported by this interface.

Business Service	Web Service Operation	Description	Technology	Conversation Style
Single Parcel Tracking Service	TrackingEnquiry	Provides tracking information based on Parcelforce consignment number, parcel label, foreign parcel label or senders reference (for one account).	SOAP over HTTPS	Synchronous Request / Response
Multiple Parcel Tracking Service	ParcelTrackingEnquiry	Provides tracking information for multiple items based on a range of search criteria.	SOAP over HTTPS	Synchronous Request / Response

Table 3 – Business Services

7 Message Structure

The structure of the PFW Tracking API SOAP request and response messages is represented by the diagram below.

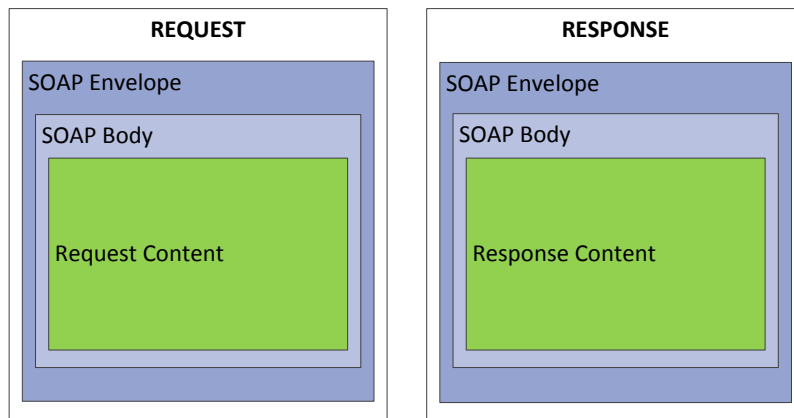


Figure 3 – API Structure

The PFW Tracking API operations are defined as SOAP operations, with separate request / response message parts. Technical details are documented in the WSDL and XSD schemas which accompany this document.

The definition of the data types used within the elements section of each service call is defined within the schemas.

8 Message Definition and Schemas

8.1 Notation

The API elements described in this section are described in XML Spy notation with graphical representation meanings explained in the table below.


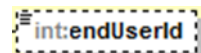


Graphical Representation	Meaning
	A solid line around an element indicates it is a mandatory field that will/must always be present.
	A dashed line around an element indicates the field is optional and may or may not be present. An optional element is one that indicates the data and enclosing XML tags may or may not be present in either a request or response.
	The <i>sequence</i> identifier represents an ordered set of elements.
	The <i>choice</i> identifier represents a selection of elements.

Figure 4 – Notation used to describe this API

8.2 WSDL and Schemas

The WSDL for the PFW Tracking API can be found on 'Royal Mail APIs' section of the [Royal Mail Developer Portal](#).

File	Description
PFW Tracking API (SOAP).wsdl	WSDL describing the functionality and data structures offered by the PFW Tracking API.

Table 4 – API WSDL & Schemas

8.3 HTTP Header Information

8.3.1 Description

The purpose of the HTTP header is to support security and logging functionally within the Royal Mail Group systems and it is mandatory that it is provided in the request message.

8.3.2 Request Message

All service requests to this API will be authorised in accordance with the Client ID and Secret passed in the HTTP headers. Please see table below for the elements which need to be populated in the HTTP header.

Parameter	Optional	Description
Accept	No	This attribute accepts requests in the application SOAP/XML format
X-IBM-Client-Id	No	Similar to a client username. Required to access the API.
X-IBM-Client-Secret	No	Similar to a client password. Required to access the API.

Table 5 – HTTP Header Information in the API Request

8.3.3 Example Data

Example request data for the HTTP Header:

Parameter	Value
Accept	application/soap+xml
X-IBM-Client-Id	f0e4f151-2041-4df2-b31d
X-IBM-Client-Secret	kT0IB2dK0wF6mK0rD8sD7oE7vP2mG7l

Table 6 – Example HTTP Header Information for API Request

8.4 ParcelTrackingEnquiry

The behaviour of the ParcelTrackingEnquiry operation is to provide tracking information for multiple items based on a range of search criteria. Please note that the API will only return tracking data over the previous 3 months and any data older than this will not be returned.

To invoke the ParcelTrackingEnquiry operation, the customer system must construct a SOAP request message as described in section 7. Please see diagram below for a representation of the ParcelTrackingEnquiry request message:

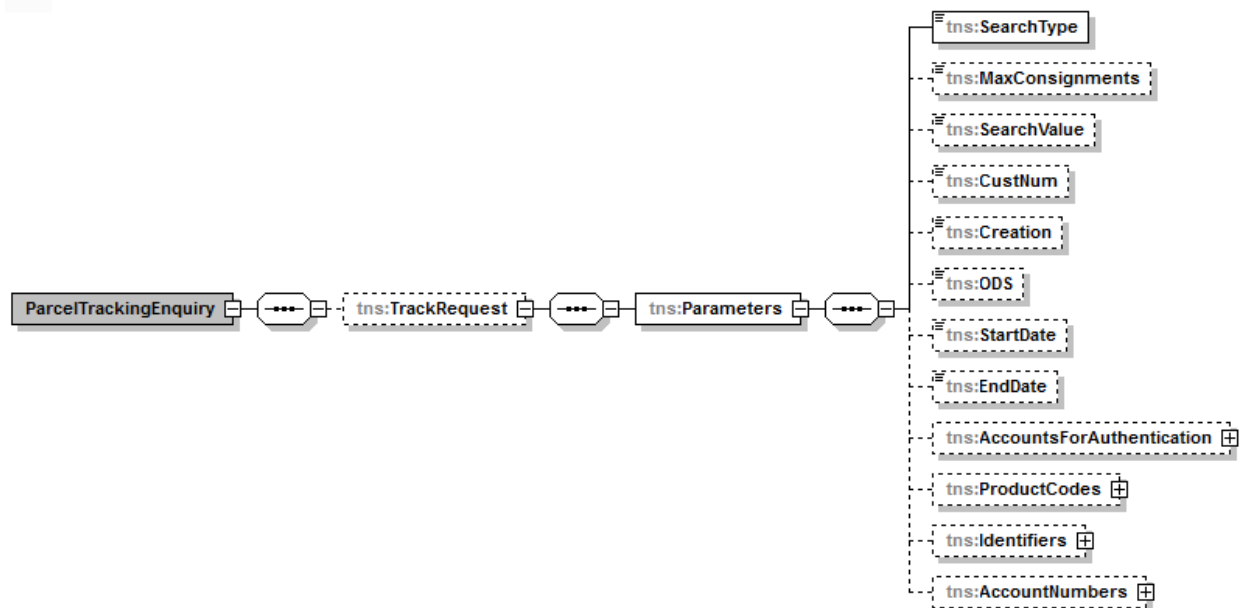


Figure 5 – ParcelTrackingEnquiry Message Structure

All elements in the table below are relative to the root ParcelTrackingEnquiry element.

Element	Occurs	Data Type	Description
TrackRequest	0-1	element	Container for the parcel tracking request
Parameters	1-1	element	Container for request information
SearchType	1-1	string	<p>Search type for the API request.</p> <p>Permitted values are:</p> <ul style="list-style-type: none"> • AUTHQ: Registration Authentication. Account Number / Contract Number pairs are passed into this request. The statuses of these accounts are returned in the response. • QFC: Query By Contracts. An array of accounts is passed into this request. All valid contracts and the status of these contracts are returned in the response. • QBAN: Query By Account Number. An array of accounts, date range and maximum number of consignments are passed into this request. Consignment details are returned. • QBSR: Query By Senders Reference. An array of accounts, date range, maximum number of consignments and a Customer Number are passed into this request. Consignment details are returned. • QBPT: Query By Product Code. An array of accounts, date range, maximum number of consignments and an array of Product Codes are passed into this request. Consignment details are returned. • QBMT: Query By Multiple Parcel ID's. An array of parcel identifiers (either Parcel ID's or Consignment Numbers) is passed into this request. Tracking details for all these identifiers are returned. <p>The multi tracking functions accept multiple accounts/parcels/dates as input parameters and require users with a valid account/contract to register online and login to use them.</p>
MaxConsignments	0-1	short	Maximum number of consignments
SearchValue	0-1	string	Not used in the existing implementation
CustNum	0-1	string	Customer number
Creation	0-1	string	Time and Date that the item was created. Not used in the existing implementation
ODS	0-1	string	Time and Date that the item was created in the database. Not used in the existing implementation.
StartDate	0-1	string	Start date in format "YYYY-MM-DD-hh.mm.ss.SSSSSS"
EndDate	0-1	string	End date in format "YYYY-MM-DD-hh.mm.ss.SSSSSS"
AccountsForAuthentication	0-1	element	Container for account authentication information

Element	Occurs	Data Type	Description
AccountsForAuthentication/AccountsForAuthentication	1-n	element	Container for accounts for authentication
AccountsForAuthentication/AccountsForAuthentication/ContractNumber	1-1	string	Customer contract number
AccountsForAuthentication/AccountsForAuthentication/AccountNumber	1-1	string	Customer account number
ProductCodes	0-1	element	Container for product codes
ProductCodes/ProductCode	1-n	string	Code associated with the product. Please see the PFW Tracking API Reference Data spreadsheet (available on the 'PFW Tracking API' page on the Royal Mail API (Developer) Portal) for a list of all product codes.
Identifiers	0-1	element	Container for identifiers
Identifiers/Identifier	1-n	string	Parcel ID or consignment number
AccountNumbers	0-1	element	Container for account numbers
AccountNumbers/AccountNumber	1-n	string	Customer account number

Table 7 – ParcelTrackingEnquiry Element

8.4.1 Example Data

Full XML examples of SOAP requests and responses are provided on the [Royal Mail API \(Developer\) Portal](#). This section provides examples for each of the request message types for the ParcelTrackingEnquiry operation.

8.4.1.1 Query By Senders Reference (SearchType = QBSR) Request

For a QBSR (Query By Senders Reference) enquiry, an array of accounts, date range, maximum number of consignments and a Customer Number are passed into the API request. Consignment details are returned in the response (see section 8.5.6.1 for details).

Please see below for an example:

```

<soap:Envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema" xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <ParcelTrackingEnquiry xmlns="urn:royalmail/ParcelTracking/2003/06/23">
      <TrackRequest>
        <Parameters>
          <CustNum>1775842-934232002</CustNum>
          <StartDate>1986-04-01-00.00.00.000000</StartDate>
          <EndDate>2015-11-17-23.59.59.000000</EndDate>
          <MaxConsignments>501</MaxConsignments>
          <SearchType>QBSR</SearchType>
          <AccountNumbers>
            <AccountNumber>ABR2536</AccountNumber>
          </AccountNumbers>
        </Parameters>
      </TrackRequest>
    </ParcelTrackingEnquiry>
  </soap:Body>
</soap:Envelope>

```


8.4.1.2 Query By Product Code (SearchType = QBPT) Request

For a Query By Product Code (QBPT) request, an array of accounts, date range, maximum number of consignments and an array of Product Codes are passed into the request. Consignment details are returned in the response (see section 8.5.6.2 for details).

Please see below for an example:

```
<soap:Envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema" xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <ParcelTrackingEnquiry xmlns="urn:royalmail/ParcelTracking/2003/06/23">
      <TrackRequest>
        <Parameters>
          <ProductCodes>
            <ProductCode>14</ProductCode>
          </ProductCodes>
          <StartDate>2015-12-01-00.00.00.000000</StartDate>
          <EndDate>2016-12-31-23.59.59.000000</EndDate>
          <MaxConsignments>501</MaxConsignments>
          <SearchType>QBPT</SearchType>
          <AccountNumbers>
            <AccountNumber>WOO7075</AccountNumber>
            <AccountNumber>WOO1765</AccountNumber>
          </AccountNumbers>
        </Parameters>
      </TrackRequest>
    </ParcelTrackingEnquiry>
  </soap:Body>
</soap:Envelope>
```

8.4.1.3 Query By Multiple Parcel ID's (SearchType = QBMT) Request

For a Query By Multiple Parcel ID's (QBMT) request, an array of parcel identifiers (either Parcel ID's or Consignment Numbers) are passed into the request. Tracking details for all these identifiers are returned in the response (see section 8.5.6.3 for details).

Please see below for an example:

```
<soap:Envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema" xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <ParcelTrackingEnquiry xmlns="urn:royalmail/ParcelTracking/2003/06/23">
      <TrackRequest>
        <Parameters>
          <SearchType>QBMT</SearchType>
          <Identifiers>
            <Identifier>PBWW0163043001</Identifier>
            <Identifier>PBWW0154510001</Identifier>
          </Identifiers>
        </Parameters>
      </TrackRequest>
    </ParcelTrackingEnquiry>
  </soap:Body>
</soap:Envelope>
```

8.4.1.4 Registration Authentication (SearchType = AUTHQ) Request

For a Registration Authentication (AUTHQ) request, Account Number / Contract Number pairs are passed into this request. The statuses of these accounts are returned in the response (see section 8.5.6.4 for details).

Please see below for an example:

```
<soap:Envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema" xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <ParcelTrackingEnquiry xmlns="urn:royalmail/ParcelTracking/2003/06/23">
      <TrackRequest>
        <Parameters>
          <SearchType>AUTHQ</SearchType>
          <AccountsForAuthentication>
            <AccountForAuthentication>
              <AccountNumber>WOO7075</AccountNumber>
              <ContractNumber>H775754</ContractNumber>
            </AccountForAuthentication>
          </AccountsForAuthentication>
        </Parameters>
      </TrackRequest>
    </ParcelTrackingEnquiry>
  </soap:Body>
</soap:Envelope>
```

8.4.1.5 Query By Contracts (SearchType = QFC) Request

For a Query By Contracts (QFC) request, an array of accounts is passed into the request. All valid contracts and the status of these contracts are returned in the response (see section 8.5.6.5 for details).

Please see below for an example:

```
<soap:Envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema" xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <ParcelTrackingEnquiry xmlns="urn:royalmail/ParcelTracking/2003/06/23">
      <TrackRequest>
        <Parameters>
          <MaxConsignments>0</MaxConsignments>
          <SearchType>QFC</SearchType>
          <AccountNumbers>
            <AccountNumber>WOO7075</AccountNumber>
          </AccountNumbers>
        </Parameters>
      </TrackRequest>
    </ParcelTrackingEnquiry>
  </soap:Body>
</soap:Envelope>
```

8.4.1.6 Query By Account Number (SearchType = QBAN) Request

For a Query By Account Number (QBAN) search, an array of accounts, date range and maximum number of consignments are passed into the request. Consignment details are returned in the response (see section 8.5.6.6 for details).

Please see below for an example:

```
<soap:Envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema" xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <ParcelTrackingEnquiry xmlns="urn:royalmail/ParcelTracking/2003/06/23">
      <TrackRequest>
        <Parameters>
          <StartDate>2015-01-01-00.00.00.000000</StartDate>
          <EndDate>2016-12-31-23.59.59.000000</EndDate>
          <MaxConsignments>501</MaxConsignments>
          <SearchType>QBAN</SearchType>
          <AccountNumbers>
            <AccountNumber>WOO1765</AccountNumber>
          </AccountNumbers>
        </Parameters>
      </TrackRequest>
    </ParcelTrackingEnquiry>
  </soap:Body>
</soap:Envelope>
```

8.5 ParcelTrackingEnquiryResponse

The response for a requested ParcelTrackingEnquiry operation is constructed as a SOAP response message as described in Section 7. Please note that the API will only return tracking data over the previous 3 months and any data older than this will not be returned.

Please see diagram below for a representation of the ParcelTrackingEnquiryResponse message:

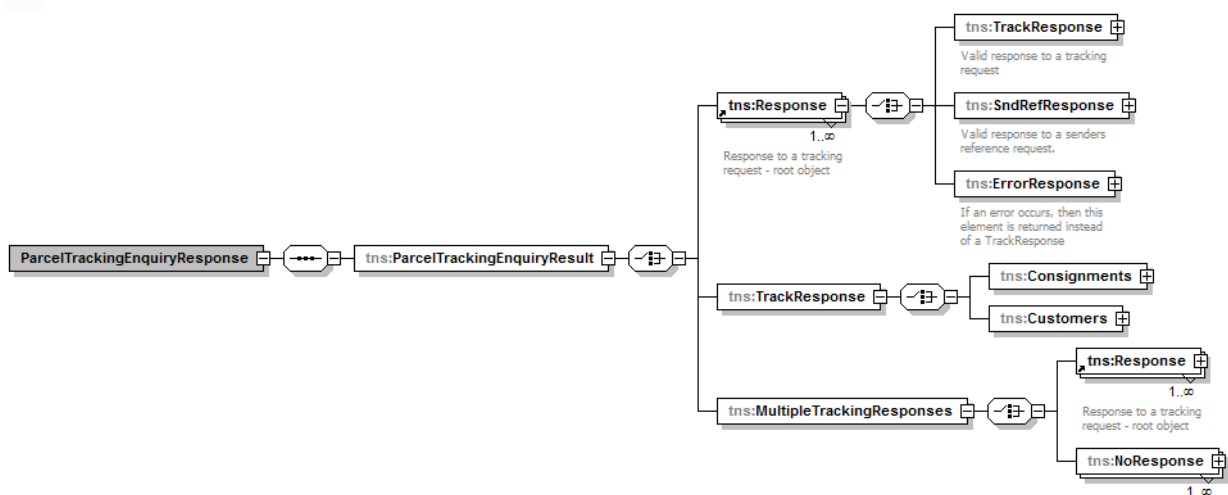


Figure 6 – ParcelTrackingEnquiryResponse Structure

All elements in the table below are relative to the root ParcelTrackingEnquiryResponse element.

Element	Occurs	Data Type	Description
ParcelTrackingEnquiryResult	1-1	element	Container for the parcel tracking enquiry response and which will either contain a 'Response', 'TrackResponse' or 'MultipleTrackingResponses' element.
ParcelTrackingEnquiryResult/Response	1-n	element	Container for a response to a parcel tracking enquiry and which will either contain a 'TrackResponse', 'SndRefResponse' or 'ErrorResponse' element.
ParcelTrackingEnquiryResult/Response/TrackResponse	1-1	element	Container for a valid response to a tracking request. See section 8.5.1 for details.
ParcelTrackingEnquiryResult/Response/SndRefResponse	1-1	element	Container for a valid response to a senders reference request. See section 8.5.2 for details.
ParcelTrackingEnquiryResult/Response/ErrorResponse	1-1	element	If an error occurs, then this element is returned instead of a TrackResponse. See section 8.5.3 for details.
ParcelTrackingEnquiryResult/TrackResponse	1-1	element	Container for consignment and customer details.
ParcelTrackingEnquiryResult/TrackResponse/Consignments	1-1	element	Container for consignment information. See section 8.5.4 for details.
ParcelTrackingEnquiryResult/TrackResponse/Customers	1-1	element	Container for customer information. See section 8.5.5 for details.
ParcelTrackingEnquiryResult/MultipleTrackingResponses	1-1	element	Container for multiple tracking responses which will either return a 'Response' or 'NoResponse' element.
ParcelTrackingEnquiryResult/MultipleTrackingResponses/Response	1-n	element	Container for a response to a parcel tracking enquiry and which will either contain a 'TrackResponse', 'SndRefResponse' or 'ErrorResponse' element.
ParcelTrackingEnquiryResult/MultipleTrackingResponses/Response/TrackResponse	1-1	element	Container for a valid response to a tracking request. See section 8.5.3 for details.
ParcelTrackingEnquiryResult/MultipleTrackingResponses/Response/SndRefResponse	1-1	element	Valid response to a sender's reference request. See section 8.5.4 for details.
ParcelTrackingEnquiryResult/MultipleTrackingResponses/Response/ErrorResponse	1-1	element	If an error occurs, then this element is returned instead of a TrackResponse. See section 8.5.5 for details.
ParcelTrackingEnquiryResult/MultipleTrackingResponses/NoResponse	1-n	element	Container when it is not possible to return a tracking response. Not currently used in the implementation of the API
ParcelTrackingEnquiryResult/MultipleTrackingResponses/Identifier	1-1	string	Parcel ID or consignment number. Not currently used in the implementation of the API.

Table 8 – ParcelTrackingEnquiryResponse Element

8.5.1 TrackResponse

The TrackResponse element acts as a container for the tracking response details and is represented by the diagram below.

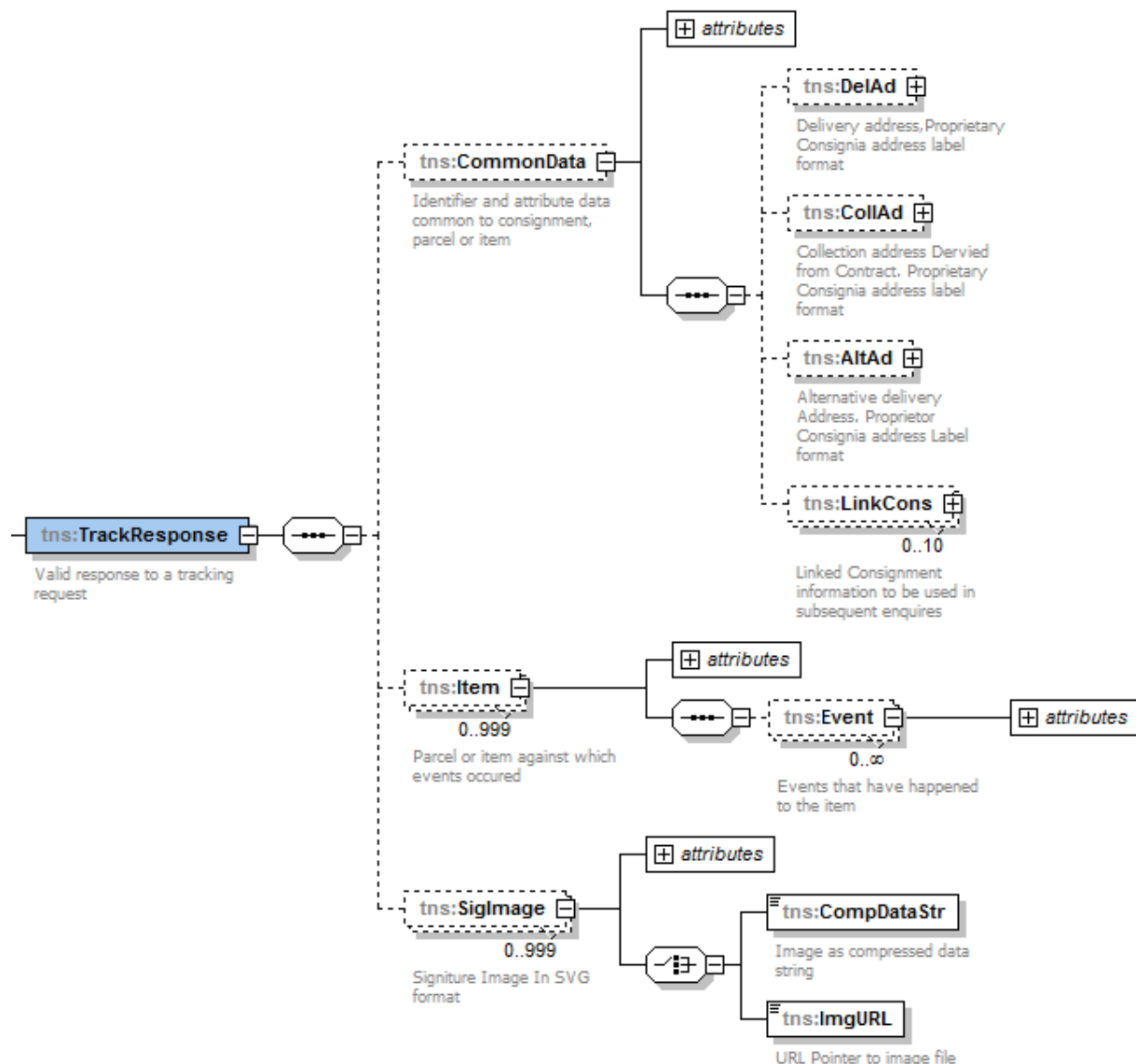


Figure 7 – TrackResponse Structure

All elements in the table below are relative to the TrackResponse element.

Element	Occurs	Data Type	Description
CommonData	0-1	element	Container for identifier and attribute data common to consignment, parcel or item.
CommonData/{Id}	1-1	(attribute) string	Reference to consignment, parcel or package
CommonData/{SendRef}	0-1	(attribute) string	Senders reference
CommonData/{CustName}	0-1	(attribute) string	Customer name and owner of the contract
CommonData/{Service}	0-1	(attribute) string	The basic service upon which the item/consignment was posted e.g Parcelforce 24

Element	Occurs	Data Type	Description
CommonData/{Prod}	0-1	(attribute) string	The particular product in relation to the underlying service e.g Res Delivery Afternoon 24 or retail PF 24, which are both, based on the Parcelforce 24 Service
CommonData/{ItemAdv}	1-1	(attribute) integer	Number of items advised (may be for collection or in the case of larger customers these could be loaded into containers.) i.e. based on pre-advice.
CommonData/{ItemCol}	1-1	(attribute) integer	Actual number of items in the consignment based on consignments/parcels tracked in the system.
CommonData/{ItemDel}	1-1	(attribute) integer	Number of items delivered
CommonData/{ForeignId}	0-1	(attribute) string	Originating Foreign label for inbound international items
CommonData/{RecName}	0-1	(attribute) string	The name of the person/business to which the consignment/parcel/package was addressed.
CommonData/{Brand}	1-1	(attribute) string	Brand information which will be either PE for Parcelforce tracks and RM for RoyalMail tracks.
CommonData/{SpecInst}	0-1	(attribute) string	Special Instructions associated to the item/consignment.
CommonData/{Origin}	0-1	(attribute) string	Country of origin for inbound international items.
CommonData/{ExpectDelDate}	0-1	(attribute) date	Expected delivery date for this item/consignment in the format "YYYY-MM-DD".
CommonData/{ExpectDelTime}	0-1	(attribute) time	Expected Delivery Time for this item/consignment in the format "hh:mm:ss".
CommonData/{DateSent}	0-1	(attribute) string	Date and Time the consignment was despatched from the customer in format in format "YYYY-MM-DD hh:mm:ss".
CommonData/DelAd	0-1	element	Delivery address in proprietary Consignia address label format.
CommonData/DelAd/AddLabel	1-1	string	Proprietary address label format from POL
CommonData/DelAd/PoCde	1-1	string	Postcode for international items
CommonData/DelAd/Cntry	1-1	string	Country for international items
CommonData/CollAd	0-1	element	Collection address derived from Contract. Proprietary Consignia address label format.
CommonData/CollAd/AddLabel	1-1	string	Proprietary address label format from POL
CommonData/CollAd/PoCde	1-1	string	Postcode for international items
CommonData/CollAd/Cntry	1-1	string	Country for international items
CommonData/AltAd	0-1	element	Alternative delivery address in proprietary Consignia address label format.
CommonData/AltAd/AddLabel	1-1	string	Proprietary address label format from POL
CommonData/AltAd/PoCde	1-1	string	Postcode for international items
CommonData/AltAd/Cntry	1-1	string	Country for international items
CommonData/LinkCons	0-10	element	Linked consignment information to be used in subsequent enquires.
CommonData/LinkCons/{LinkConsId}	0-1	(attribute) integer	Unique ID for this linked consignment
CommonData/LinkCons/{Id}	0-1	(attribute) string	Reference to consignment, parcel or package
CommonData/LinkCons/{Creation}	0-1	(attribute) dateTime	Time and Date that the item was created in the database in the format "YYYY-MM-DD-hh.mm.ss.SSSSSS".
CommonData/LinkCons/{ODS}	0-1	(attribute) dateTime	Date and time the record was transferred to the database in the format "YYYY-MM-DD-hh.mm.ss.SSSSSS".
Item	0-999	element	Parcel or item against which events occurred
Item/{ItemId}	1-1	(attribute) string	Identifier associated with the parcel or item
Item/{Signatory}	0-1	(attribute) string	The name of the signatory for this item
Item/{SigKey}	0-1	(attribute) string	Signature key used to identify the signature image relevant to this item

Element	Occurs	Data Type	Description
Item/{Status}	0-1	(attribute) string	Current status of the item as held by the responding tracking repository. Valid values are: <ul style="list-style-type: none"> Accepted Advised Assumed Lost Closed Default Customs Retain Delivered Destroyed Default Non Delivery Empty Held Handed Over In progress Lost Open Refused Acceptance Seized Loading Suspended Site visit
Item/Event	0-n	element	Container for events associated with this item
Item/Event/{EvtLoc}	1-1	(attribute) string	The location at which the event was recorded.
Item/Event/{EvtDes}	1-1	(attribute) string	Description associated with the event. Please see the PFW Tracking API Reference Data spreadsheet (available on the 'PFW Tracking API' page on the Royal Mail API (Developer) Portal) for a list of all events which can be returned.
Item/Event/{EvtCode}	0-1	(attribute) string	Code associated with the event. Not returned in the API response.
Item/Event/{EvtTime}	1-1	(attribute) time	The time the event occurred in the format "hh:mm:ss"
Item/Event/{EvtDate}	1-1	(attribute) date	The date the event occurred in the format "YYYY-MM-DD"
Item/Event/{EvtInst}	0-1	(attribute) string	Optional instructions for the end user, e.g. call this number.
SigImage	0-999	element	Signature image In SVG format
SigImage/{SigKey}	1-1	(attribute) string	Signature key used to identify the signature image relevant to an item / items.
SigImage/CompDataStr	1-1	string	Image as compressed data string.
SigImage/ImgURL	1-1	string	URL pointer to the image file.

Table 9 – TrackResponse Element

8.5.2 SndRefResponse

The SndRefResponse element acts as a container for a valid response to a sender's reference request and is represented by the diagram below.

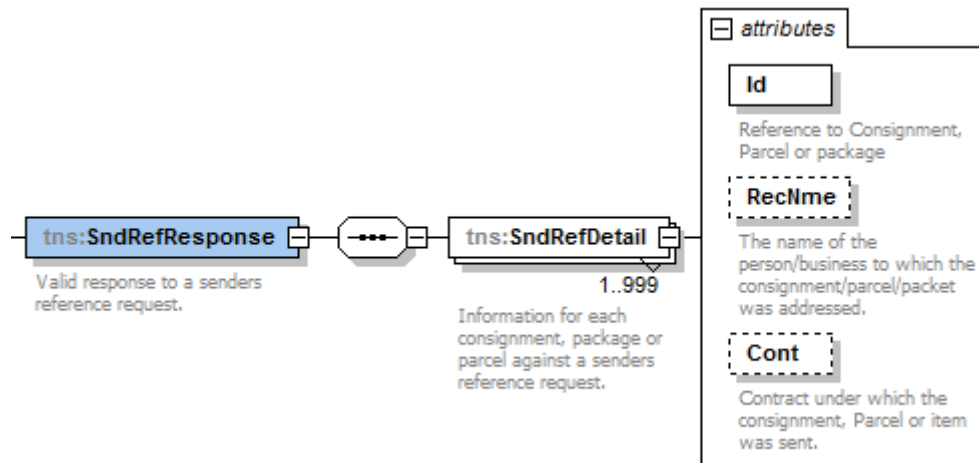


Figure 8 – SndRefResponse Structure

All elements in the table below are relative to the SndRefResponse element.

Element	Occurs	Data Type	Description
SndRefDetail	1-999	element	Container for information for each consignment, package or parcel against a senders reference request.
SndRefDetail/{Id}	1-1	(attribute) string	Reference to consignment, parcel or package
SndRefDetail/{RecNme}	0-1	(attribute) string	The name of the person/business to which the consignment/parcel/package was addressed.
SndRefDetail/{Cont}	0-1	(attribute) string	Contract under which the consignment, parcel or item was sent.

Table 10 – SndRefResponse Element

8.5.3 ErrorResponse

The ErrorResponse element acts as a container for error information and is represented by the diagram below.

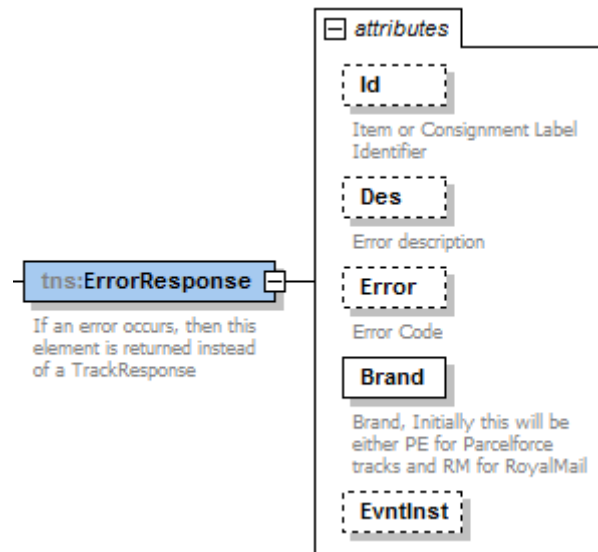


Figure 9 – ErrorResponse Structure

All elements in the table below are relative to the ErrorResponse element.

Element	Occurs	Data Type	Description
ErrorResponse/{Id}	0-1	(attribute) string	Item or consignment label identifier
ErrorResponse/{Des}	0-1	(attribute) string	Description of the error condition
ErrorResponse/{Error}	0-1	(attribute) string	Code associated with the error condition
ErrorResponse/{Brand}	1-1	(attribute) string	Brand identifier. This will be either PE for Parcellforce tracks and RM for RoyalMail tracks.
ErrorResponse/{EvtInst}	0-1	(attribute) string	Instructions for the event.

Table 11 – ErrorResponse Element

8.5.4 Consignments

The Consignments element acts as a container for consignment information and is represented by the diagram below.

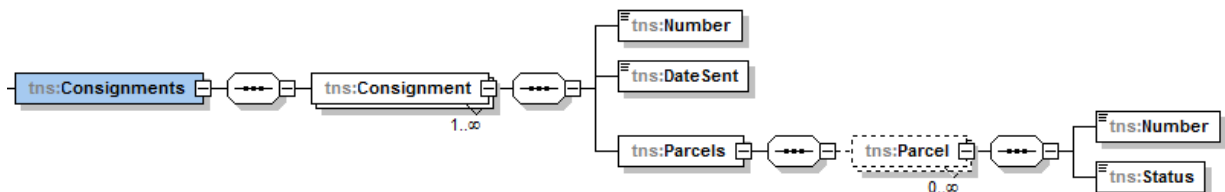


Figure 10 – Consignments Structure

All elements in the table below are relative to the Consignments element.

Element	Occurs	Data Type	Description
Consignment	1-n	element	Container for consignment details
Consignment/Number	1-1	string	Consignment or parcel number
Consignment/DateSent	1-1	string	Date the consignment or parcel was sent in format "YYYY-MM-DD hh:mm:ss".
Consignment/Parcels	1-1	element	Container for consignment or parcel information
Consignment/Parcels/Parcel	0-1	element	Container for consignment or parcel details
Consignment/Parcels/Parcel/Number	1-1	string	Consignment or parcel number
Consignment/Parcels/Parcel/Status	1-1	string	Consignment or parcel tracking status. Valid values are: <ul style="list-style-type: none"> Accepted Advised Assumed Lost Closed Default Customs Retain Delivered Destroyed Default Non Delivery Empty Held Handed Over In progress Lost Open Refused Acceptance Seized Loading Suspended Site visit

Table 12 – Consignments Element

8.5.5 Customers

The Customers element acts as a container for customer information and is represented by the diagram below.

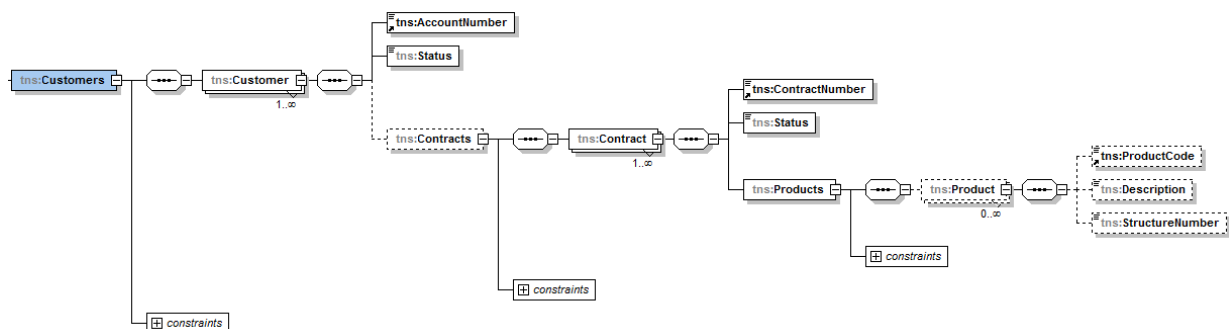


Figure 11 – Customers Structure

All elements in the table below are relative to the Customers element.

Element	Occurs	Data Type	Description
Customer	1-n	element	Container for customer details
Customer/AccountNumber	1-1	string	Customer account number

Element	Occurs	Data Type	Description
Customer/Status	1-1	string	Customer status.
Customer/Contracts	0-1	element	Container for customer contracts
Customer/Contracts/Contract	1-n	element	Container for customer contract details
Customer/Contracts/Contract/ContractNumber	1-1	string	Customer contract number
Customer/Contracts/Contract/Status	1-1	string	Contract status.
Customer/Contracts/Contract/Products	1-1	element	Container for available products under the contract
Customer/Contracts/Contract/Products/ProductCode	0-1	string	Code associated with the product. Please see the PFW Tracking API Reference Data spreadsheet (available on the 'PFW Tracking API' page on the Royal Mail API (Developer) Portal) for a list of all product codes.
Customer/Contracts/Contract/Products/Description	0-1	string	Description of the product. Please see the PFW Tracking API Reference Data spreadsheet (available on the 'PFW Tracking API' page on the Royal Mail API (Developer) Portal) for a list of all product descriptions.
Customer/Contracts/Contract/Products/StructureNumber	0-1	string	Structure number associated with the product. Please see the PFW Tracking API Reference Data spreadsheet (available on the 'PFW Tracking API' page on the Royal Mail API (Developer) Portal) for a list of all product structure numbers.

Table 13 – Customers Element

8.5.6 Example Data

Full XML examples of SOAP requests and responses are provided on the [Royal Mail API \(Developer\) Portal](#). This section provides a simplified example to illustrate the ParcelTrackingEnquiryResponse message.

8.5.6.1 Query By Senders Reference (SearchType = QBSR) Response

For a QBSR (Query By Senders Reference) enquiry, an array of accounts, date range, maximum number of consignments and a Customer Number are passed into the API request. Consignment details are returned in the response as shown in the example below:

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:xsd="http://www.w3.org/2001/XMLSchema">
  <soap:Body>
    <ParcelTrackingEnquiryResponse xmlns="urn:royalmail/ParcelTracking/2003/06/23">
      <ParcelTrackingEnquiryResult>
        <TrackResponse xmlns="xmllib.intranet.point/trackingv11.xsd">
          <Consignments>
            <Consignment>
              <Number>XF6665975</Number>
              <DateSent>12-22-2015 08:00:57</DateSent>
              <Parcels>
                <Parcel>
                  <Number>PBXF6665975002</Number>
                  <Status>Delivered</Status>
                </Parcel>
                <Parcel>
                  <Number>PBXF6665975001</Number>
                  <Status>Delivered</Status>
                </Parcel>
                <Parcel>
                  <Number>PBXF6665975003</Number>
                  <Status>In progress</Status>
                </Parcel>
              </Parcels>
            </Consignment>
          </Consignments>
        </TrackResponse>
      </ParcelTrackingEnquiryResult>
    </ParcelTrackingEnquiryResponse>
  </soap:Body>
</soap:Envelope>
```

```

    </Consignments>
  </TrackResponse>
</ParcelTrackingEnquiryResult>
</ParcelTrackingEnquiryResponse>
</soap:Body>
</soap:Envelope>

```

8.5.6.2 Query By Product Code (SearchType = QBPT) Response

For a Query By Product Code (QBPT) request, an array of accounts, date range, maximum number of consignments and an array of Product Codes are passed into the request. Consignment details are returned in the response as shown in the example below:

```

<soap:Envelope xmlns:xsd="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <ParcelTrackingEnquiryResponse xmlns="urn:royalmail/ParcelTracking/2003/06/23">
      <ParcelTrackingEnquiryResult>
        <TrackResponse xmlns="xmllib.intranet.point/trackingv11.xsd">
          <Consignments>
            <Consignment>
              <Number>YY0140073</Number>
              <DateSent>01-08-2016 21:11:48</DateSent>
              <Parcels>
                <Parcel>
                  <Number>PBYY0140073002</Number>
                  <Status>In progress</Status>
                </Parcel>
              </Parcels>
            </Consignment>
            <Consignment>
              <Number>YY0140144</Number>
              <DateSent>01-13-2016 21:10:49</DateSent>
              <Parcels>
                <Parcel>
                  <Number>PBYY0140144001</Number>
                  <Status>In progress</Status>
                </Parcel>
              </Parcels>
            </Consignment>
            <Consignment>
              <Number>YY0140201</Number>
              <DateSent>01-18-2016 21:12:43</DateSent>
              <Parcels>
                <Parcel>
                  <Number>PBYY0140201001</Number>
                  <Status>In progress</Status>
                </Parcel>
              </Parcels>
            </Consignment>
            <Consignment>
              <Number>YY0140229</Number>
              <DateSent>01-20-2016 21:11:16</DateSent>
              <Parcels>
                <Parcel>
                  <Number>PBYY0140229001</Number>
                  <Status>Delivered</Status>
                </Parcel>
              </Parcels>
            </Consignment>
            <Consignment>
              <Number>XF7118494</Number>
              <DateSent>01-06-2016 08:00:43</DateSent>
              <Parcels>
                <Parcel>
                  <Number>PBXF7118494001</Number>
                  <Status>In progress</Status>
                </Parcel>
              </Parcels>
            </Consignment>
          </Consignments>
        </TrackResponse>
      </ParcelTrackingEnquiryResult>
    </ParcelTrackingEnquiryResponse>
  </soap:Body>
</soap:Envelope>

```

```

<Number>XF7120250</Number>
<DateSent>01-06-2016 08:00:43</DateSent>
<Parcels>
  <Parcel>
    <Number>PBXF7120250001</Number>
    <Status>In progress</Status>
  </Parcel>
</Parcels>
</Consignment>
<Consignment>
  <Number>XF7123185</Number>
  <DateSent>01-06-2016 08:00:43</DateSent>
  <Parcels>
    <Parcel>
      <Number>PBXF7123185001</Number>
      <Status>In progress</Status>
    </Parcel>
    <Parcel>
      <Number>PBXF7123185002</Number>
      <Status>In progress</Status>
    </Parcel>
  </Parcels>
</Consignment>
</Consignments>
</TrackResponse>
</ParcelTrackingEnquiryResult>
</ParcelTrackingEnquiryResponse>
</soap:Body>
</soap:Envelope>

```

8.5.6.3 Query By Multiple Parcel ID's (SearchType = QBMT) Response

For a Query By Multiple Parcel ID's (QBMT) request, an array of parcel identifiers (either Parcel ID's or Consignment Numbers) are passed into the request. Tracking details for all these identifiers are returned in the response as shown in the example below:

```

<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:xsd="http://www.w3.org/2001/XMLSchema">
  <soap:Body>
    <ParcelTrackingEnquiryResponse xmlns="urn:royalmail/ParcelTracking/2003/06/23">
      <ParcelTrackingEnquiryResult>
        <MultipleTrackingResponses xmlns="">
          <Response xmlns="http://xmlib.intranet.point/trackingv11.xsd">
            <TrackResponse>
              <CommonData Id="PBWW0163043001" CustNme="DIRECT LTD" DateSent="01-13-2016
09:25:47" Cont="P125024" Service="Express 24" Prod="Express 24" ItemAdv="00000" ItemCol="00001" ItemDel="00000"
Brand="PE">
                <DelAd>
                  <AddLabel>FAO: E.DRIVER - HO, TRADE HOUSE, MEAD AVENUE, HOUNDSTONE
BUSINESS PARK, YEOVIL</AddLabel>
                  <PoCde>BA22 8XX</PoCde>
                  <Cntry>United Kingdom</Cntry>
                </DelAd>
                <CollAd>
                  <AddLabel>ORCHARD FARM, MILE ROAD, CARLETON RODE, NORWICH</AddLabel>
                  <PoCde>NR16 1NE</PoCde>
                  <Cntry>United Kingdom</Cntry>
                </CollAd>
              </CommonData>
              <Item ItemId="PBWW0163043001" Status="In progress">
                <Event EvntLoc="Bristol North Depot" EvntDes="Prepared for delivery" EvntTime="04:50:00"
EvntDate="2016-01-14"/>
                <Event EvntLoc="Bristol North Depot" EvntDes="Arrived at delivery depot"
EvntTime="03:50:00" EvntDate="2016-01-14"/>
              </Item>
            </TrackResponse>
          </Response>
          <Response xmlns="http://xmlib.intranet.point/trackingv11.xsd">
            <TrackResponse>
              <CommonData Id="PBWW0154510001" CustNme="DIRECT LTD" DateSent="01-12-2016
14:57:16" Cont="P125024" Service="Express 24" Prod="Express 24" ItemAdv="00000" ItemCol="00001" ItemDel="00000"

```

```

Brand="PE">
    <DelAd>
        <AddLabel>UNIT 3, COTTON ROAD, WINCHEAP INDUSTRIAL ESTATE,
CANTERBURY</AddLabel>
        <PoCde>CT1 3RB</PoCde>
        <Cntry>United Kingdom</Cntry>
    </DelAd>
    <CollAd>
        <AddLabel>TRADE HOUSE, MEAD AVENUE, HOUNDSTONE BUSINESS PARK,
YEOVIL</AddLabel>
        <PoCde>BA22 8XX</PoCde>
        <Cntry>United Kingdom</Cntry>
    </CollAd>
</CommonData>
<Item ItemId="PBWW0154510001" Status="In progress">
    <Event EvntLoc="Medway Depot" EvntDes="Prepared for delivery" EvntTime="04:54:00"
EvntDate="2016-01-13"/>
    <Event EvntLoc="Medway Depot" EvntDes="Arrived at delivery depot" EvntTime="04:52:00"
EvntDate="2016-01-13"/>
    <Event EvntLoc="Bristol North Depot" EvntDes="On route to hub" EvntTime="16:17:00"
EvntDate="2016-01-12"/>
    <Event EvntLoc="Bristol North Depot" EvntDes="Collected" EvntTime="13:28:00"
EvntDate="2016-01-12"/>
</Item>
</TrackResponse>
</Response>
</MultipleTrackingResponses>
</ParcelTrackingEnquiryResult>
</ParcelTrackingEnquiryResponse>
</soap:Body>
</soap:Envelope>

```

8.5.6.4 Registration Authentication (SearchType = AUTHQ) Response

For a Registration Authentication (AUTHQ) request, Account Number / Contract Number pairs are passed into this request. The statuses of these accounts are returned in the response as shown in the example below:

```

<soap:Envelope xmlns:xsd="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <ParcelTrackingEnquiryResponse xmlns="urn:royalmail/ParcelTracking/2003/06/23">
      <ParcelTrackingEnquiryResult>
        <TrackResponse xmlns="xmllib.intranet.point/trackingv11.xsd">
          <Customers>
            <Customer>
              <AccountNumber>WOO7075</AccountNumber>
              <Status>Y</Status>
              <Contracts>
                <Contract>
                  <ContractNumber>R639361</ContractNumber>
                  <Status>T</Status>
                </Contract>
                <Contract>
                  <ContractNumber>R639379</ContractNumber>
                  <Status>T</Status>
                </Contract>
                <Contract>
                  <ContractNumber>P125024</ContractNumber>
                  <Status>Y</Status>
                </Contract>
              <Products>
                <Product>
                  <ProductCode>STE</ProductCode>
                  <Description>Express 10</Description>
                  <StructureNumber>0000000014</StructureNumber>
                </Product>
                <Product>
                  <ProductCode>SUP</ProductCode>
                  <Description>Express 48</Description>
                  <StructureNumber>0000000035</StructureNumber>
                </Product>
              </Products>
            </Customer>
          </Customers>
        </TrackResponse>
      </ParcelTrackingEnquiryResult>
    </ParcelTrackingEnquiryResponse>
  </soap:Body>
</soap:Envelope>

```

```

        <Product>
          <ProductCode>SND</ProductCode>
          <Description>Express 24</Description>
          <StructureNumber>0000000043</StructureNumber>
        </Product>
      </Products>
    </Contract>
    <Contract>
      <ContractNumber>H775754</ContractNumber>
      <Status>Y</Status>
      <Products>
        <Product>
          <ProductCode>STW</ProductCode>
          <Description>Express AM</Description>
          <StructureNumber>0000000022</StructureNumber>
        </Product>
        <Product>
          <ProductCode>KPA</ProductCode>
          <Description>Express 24 Sunday Delivery</Description>
          <StructureNumber>0000048974</StructureNumber>
        </Product>
      </Products>
    </Contract>
    <Contract>
      <ContractNumber>P333387</ContractNumber>
      <Status>Y</Status>
      <Products/>
    </Contract>
    <Contract>
      <ContractNumber>R391432</ContractNumber>
      <Status>Y</Status>
      <Products/>
    </Contract>
    <Contract>
      <ContractNumber>R639353</ContractNumber>
      <Status>Y</Status>
      <Products/>
    </Contract>
    <Contract>
      <ContractNumber>R075808</ContractNumber>
      <Status>T</Status>
    </Contract>
    <Contract>
      <ContractNumber>R838658</ContractNumber>
      <Status>T</Status>
    </Contract>
  </Contracts>
</Customer>
</Customers>
</TrackResponse>
</ParcelTrackingEnquiryResult>
</ParcelTrackingEnquiryResponse>
</soap:Body>
</soap:Envelope>

```

8.5.6.5 Query By Contracts (SearchType = QFC) Response

For a Query By Contracts (QFC) request, an array of accounts is passed into the request. All valid contracts and the status of these contracts are returned in the response as shown in the example below:

```

<soap:Envelope xmlns:xsd="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <ParcelTrackingEnquiryResponse xmlns="urn:royalmail/ParcelTracking/2003/06/23">
      <ParcelTrackingEnquiryResult>
        <TrackResponse xmlns="xmllib.intranet.point/trackingv11.xsd">
          <Customers>
            <Customer>
              <AccountNumber>WOO7075</AccountNumber>
              <Status>Y</Status>
            </Customer>
          </Customers>
        </TrackResponse>
      </ParcelTrackingEnquiryResult>
    </ParcelTrackingEnquiryResponse>
  </soap:Body>
</soap:Envelope>

```

```

</Contracts>
  <Contract>
    <ContractNumber>R639361</ContractNumber>
    <Status>T</Status>
  </Contract>
  <Contract>
    <ContractNumber>R639379</ContractNumber>
    <Status>T</Status>
  </Contract>
  <Contract>
    <ContractNumber>P125024</ContractNumber>
    <Status>Y</Status>
    <Products>
      <Product>
        <ProductCode>STE</ProductCode>
        <Description>Express 10</Description>
        <StructureNumber>0000000014</StructureNumber>
      </Product>
      <Product>
        <ProductCode>SUP</ProductCode>
        <Description>Express 48</Description>
        <StructureNumber>0000000035</StructureNumber>
      </Product>
      <Product>
        <ProductCode>SND</ProductCode>
        <Description>Express 24</Description>
        <StructureNumber>0000000043</StructureNumber>
      </Product>
    </Products>
  </Contract>
  <Contract>
    <ContractNumber>P333387</ContractNumber>
    <Status>Y</Status>
    <Products>
      <Product>
        <ProductCode>STW</ProductCode>
        <Description>Express AM</Description>
        <StructureNumber>0000000022</StructureNumber>
      </Product>
    </Products>
  </Contract>
  <Contract>
    <ContractNumber>H775754</ContractNumber>
    <Status>Y</Status>
    <Products>
      <Product>
        <ProductCode>KPA</ProductCode>
        <Description>Express 24 Sunday Delivery</Description>
        <StructureNumber>0000048974</StructureNumber>
      </Product>
    </Products>
  </Contract>
  <Contract>
    <ContractNumber>R391432</ContractNumber>
    <Status>Y</Status>
    <Products/>
  </Contract>
  <Contract>
    <ContractNumber>R075808</ContractNumber>
    <Status>T</Status>
  </Contract>
  <Contract>
    <ContractNumber>R838658</ContractNumber>
    <Status>T</Status>
  </Contract>
  <Contract>
    <ContractNumber>R639353</ContractNumber>
    <Status>Y</Status>
    <Products/>
  </Contract>
</Contracts>
</Customer>
</Customers>
</TrackResponse>
</ParcelTrackingEnquiryResult>

```



```
</ParcelTrackingEnquiryResponse>
</soap:Body>
</soap:Envelope>
```

8.5.6.6 Query By Account Number (SearchType = QBAN) Response

For a Query By Account Number (QBAN) search, an array of accounts, date range and maximum number of consignments are passed into the request. Consignment details are returned in the response as shown in the example below:

```
<soap:Envelope xmlns:xsd="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <ParcelTrackingEnquiryResponse xmlns="urn:royalmail/ParcelTracking/2003/06/23">
      <ParcelTrackingEnquiryResult>
        <TrackResponse xmlns="xmllib.intranet.point/trackingv11.xsd">
          <Consignments>
            <Consignment>
              <Number>IF5819335</Number>
              <DateSent>01-06-2016 21:28:11</DateSent>
              <Parcels>
                <Parcel>
                  <Number>PBIF5819335001</Number>
                  <Status>In progress</Status>
                </Parcel>
              </Parcels>
            </Consignment>
            <Consignment>
              <Number>IF5822493</Number>
              <DateSent>01-06-2016 21:28:11</DateSent>
              <Parcels>
                <Parcel>
                  <Number>PBIF5822493001</Number>
                  <Status>In progress</Status>
                </Parcel>
              </Parcels>
            </Consignment>
            <Consignment>
              <Number>IG0058005</Number>
              <DateSent>01-13-2016 21:28:48</DateSent>
              <Parcels>
                <Parcel>
                  <Number>PBIG0058005001</Number>
                  <Status>In progress</Status>
                </Parcel>
              </Parcels>
            </Consignment>
            <Consignment>
              <Number>IF8815868</Number>
              <DateSent>01-13-2016 21:28:48</DateSent>
              <Parcels>
                <Parcel>
                  <Number>PBIF8815868001</Number>
                  <Status>In progress</Status>
                </Parcel>
              </Parcels>
            </Consignment>
            <Consignment>
              <Number>IF9932300</Number>
              <DateSent>01-13-2016 21:28:48</DateSent>
              <Parcels>
                <Parcel>
                  <Number>PBIF9932300001</Number>
                  <Status>In progress</Status>
                </Parcel>
              </Parcels>
            </Consignment>
            <Consignment>
              <Number>IG0043978</Number>
              <DateSent>01-13-2016 21:28:48</DateSent>
              <Parcels>
```

```

        <Parcel>
          <Number>PBIG0043978001</Number>
          <Status>In progress</Status>
        </Parcel>
      </Parcels>
    </Consignment>
  <Consignment>
    <Number>IG0051651</Number>
    <DateSent>01-13-2016 21:28:48</DateSent>
    <Parcels>
      <Parcel>
        <Number>PBIG0051651001</Number>
        <Status>In progress</Status>
      </Parcel>
    </Parcels>
  </Consignment>
  <Consignment>
    <Number>IG0053330</Number>
    <DateSent>01-13-2016 21:28:48</DateSent>
    <Parcels>
      <Parcel>
        <Number>PBIG0053330002</Number>
        <Status>In progress</Status>
      </Parcel>
      <Parcel>
        <Number>PBIG0053330003</Number>
        <Status>In progress</Status>
      </Parcel>
      <Parcel>
        <Number>PBIG0053330004</Number>
        <Status>In progress</Status>
      </Parcel>
      <Parcel>
        <Number>PBIG0053330001</Number>
        <Status>In progress</Status>
      </Parcel>
    </Parcels>
  </Consignment>
  <Consignment>
    <Number>IG0056910</Number>
    <DateSent>01-13-2016 21:28:48</DateSent>
    <Parcels>
      <Parcel>
        <Number>PBIG0056910001</Number>
        <Status>In progress</Status>
      </Parcel>
    </Parcels>
  </Consignment>
  <Consignment>
    <Number>IG2374080</Number>
    <DateSent>01-19-2016 21:30:25</DateSent>
    <Parcels>
      <Parcel>
        <Number>PBIG2374080001</Number>
        <Status>Delivered</Status>
      </Parcel>
    </Parcels>
  </Consignment>
  <Consignment>
    <Number>TY4177961</Number>
    <DateSent>09-21-2015 21:31:44</DateSent>
    <Parcels>
      <Parcel>
        <Number>PBTY4177961001</Number>
        <Status>In progress</Status>
      </Parcel>
    </Parcels>
  </Consignment>
</Consignments>
</TrackResponse>
</ParcelTrackingEnquiryResult>
</ParcelTrackingEnquiryResponse>
</soap:Body>
</soap:Envelope>

```

8.6 TrackingEnquiry

The behaviour of the TrackingEnquiry operation is to provide tracking information based on the Parcelforce consignment number, Parcelforce parcel label, foreign parcel label or senders reference for one account. Please note that the API will only return tracking data 5 days after delivery or if undelivered then 15 days for domestic or 45 days for import/export.

To invoke the TrackingEnquiry operation, the customer system must construct a SOAP request message as described in section 7. Please see diagram below for a representation of the TrackingEnquiry request message:

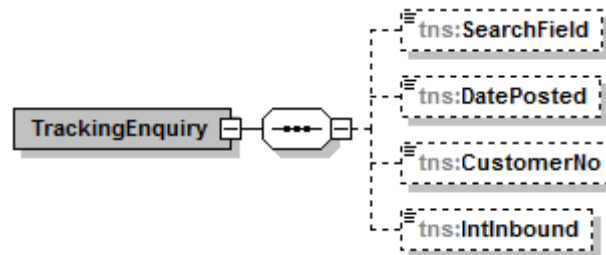


Figure 12 – TrackingEnquiry Message Structure

All elements in the table below are relative to the root TrackingEnquiry element.

Element	Occurs	Data Type	Description
SearchField	0-1	string	Field containing the Parcelforce parcel number, consignment number, foreign parcel label or senders reference.
DatePosted	0-1	string	Date the item/consignment was posted in format “YYYY-MM-DD-hh.mm.ss.SSSSSS”
CustomerNo	0-1	string	Customer account number. This needs to be provided when making a Senders Reference enquiry.
IntInbound	0-1	string	Set to “TRUE” if making a search using a foreign parcel label number. Otherwise this element does not need to be populated.

Table 14 – TrackingEnquiry Element

8.6.1 Example Data

Full XML examples of SOAP requests and responses are provided on the [Royal Mail API \(Developer\) Portal](#). This section provides examples for each of the request message types for the ParcelTrackingEnquiry operation.

8.6.1.1 Consignment Number Search Request

For a consignment number search, the consignment number is provided in the SearchField in the API request. Collection address, delivery address, tracked events and the signature image details are returned in the response (see section 8.7.1.1 for details).

Please see below for an example:

```
<soap:Envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema" xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <TrackingEnquiry xmlns="http://tempuri.org/">
      <SearchField>II0653501</SearchField>
    </TrackingEnquiry>
  </soap:Body>
</soap:Envelope>
```

```
</TrackingEnquiry>
</soap:Body>
</soap:Envelope>
```

8.6.1.2 PFW Parcel Label Search Request

For a parcel label search, the parcel identifier is provided in the SearchField in the API request. Collection address, delivery address, tracked events and the signature image details are returned in the response (see section 8.7.1.2 for details).

Please see below for an example:

```
<soap:Envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema" xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <TrackingEnquiry xmlns="http://tempuri.org/">
      <SearchField>PBIH9288828001</SearchField>
    </TrackingEnquiry>
  </soap:Body>
</soap:Envelope>
```

8.6.1.3 Query By Senders Reference Request

For a query by senders reference request (for one account), the sender reference and customer number are provided in the API request. Collection address, delivery address, tracked events and the signature image details are returned in the response (see section 8.7.1.2 for details).

Please see below for an example:

```
<soap:Envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema" xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <TrackingEnquiry xmlns="http://tempuri.org/">
      <SearchField>952910310726</SearchField>
      <IntInbound>TRUE</IntInbound>
    </TrackingEnquiry>
  </soap:Body>
</soap:Envelope>
```

8.6.1.4 Foreign Parcel Label Request

For a foreign parcel label request, the foreign parcel label number is provided in the API request. Delivery address and tracked events are returned in the response (see section 8.7.1.4 for details).

Please see below for an example:

```
<soap:Envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema" xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <TrackingEnquiry xmlns="http://tempuri.org/">
      <SearchField>A2064000753</SearchField>
      <CustomerNo>WOO7075</CustomerNo>
    </TrackingEnquiry>
  </soap:Body>
</soap:Envelope>
```

8.7 TrackingEnquiryResponse

Please note that API will only return tracking data 5 days after delivery or if undelivered then 15 days for domestic or 45 days for import/export.

The response for a requested TrackingEnquiry operation is constructed as a SOAP response message as described in Section 7. Please see diagram below for a representation of the TrackingEnquiryResponse message:

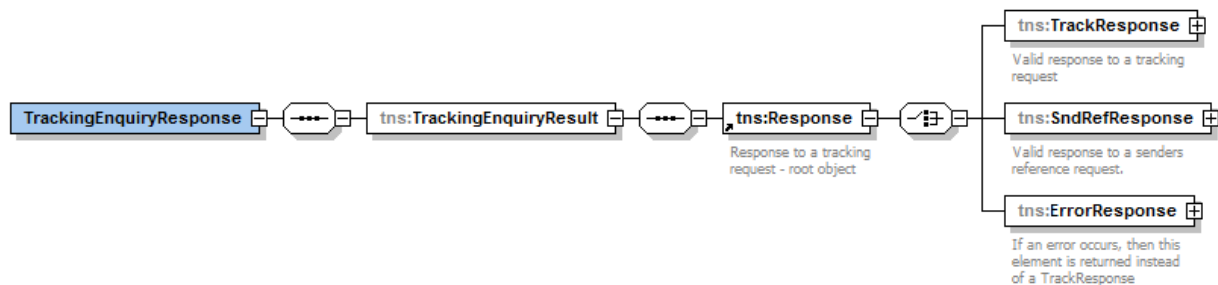


Figure 13 – TrackingEnquiryResponse Structure

All elements in the table below are relative to the root TrackingEnquiryResponse element.

Element	Occurs	Data Type	Description
TrackingEnquiryResult	1-1	element	Container for the tracking enquiry response
TrackingEnquiryResult/Response	1-1	element	Container for a response to a tracking enquiry and which will either contain a 'TrackResponse', 'SndRefResponse' or 'ErrorResponse' element.
TrackingEnquiryResult/Response/TrackResponse	1-1	element	Container for a valid response to a parcel or consignment tracking request. See section 8.5.1 for details.
TrackingEnquiryResult/Response/SndRefResponse	1-1	element	Container for a valid response to a senders reference request. See section 8.5.2 for details.
ParcelTrackingEnquiryResult/Response/ErrorResponse	1-1	element	If an error occurs, then this element is returned. See section 8.5.3 for details.

Table 15 – TrackingEnquiryResponse Element

8.7.1 Example Data

Full XML examples of SOAP requests and responses are provided on the [Royal Mail API \(Developer\) Portal](#). This section provides a simplified example to illustrate the TrackingEnquiryResponse message.

8.7.1.1 Consignment Number Search Response

For a consignment number search request, the consignment number is provided in the API request. Collection address, delivery address, tracked events and the signature image details are returned in the response as shown in the example below:

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:xsd="http://www.w3.org/2001/XMLSchema">
  <soap:Body>
    <TrackingEnquiryResponse xmlns="http://tempuri.org/">
      <TrackingEnquiryResult>
        <Response xmlns="http://xml.lib.intranet.point/trackingv11.xsd">
```

```

<TrackResponse>
  <CommonData Id="II0653501" CustNme=" DIRECT LTD" DateSent="02-23-2016 08:59:43"
  Cont="P125024" Service="Express 10" Prod="Express 10" ItemAdv="00001" ItemCol="00001" ItemDel="00001" Brand="PE"
  ExpectDelDate="2016-02-24">
    <DelAd>
      <AddLabel>GROSVENOR HOUSE, HOLLINSWOOD ROAD, CENTRAL PARK,
TEL福德</AddLabel>
      <PoCde>TF2 9TW</PoCde>
      <Cntry>United Kingdom</Cntry>
    </DelAd>
    <CollAd>
      <AddLabel>TRADE HOUSE, MEAD AVENUE, HOUNDSTONE BUSINESS PARK,
YEOVIL</AddLabel>
      <PoCde>BA22 8RT</PoCde>
      <Cntry>United Kingdom</Cntry>
    </CollAd>
  </CommonData>
  <Item ItemId="PBII0653501001" Signatory="R HAYFIELD" SigKey="0923240220169542KX15PKE"
  Status="Delivered">
    <Event EvntLoc="Shrewsbury Depot" EvntDes="Parcel delivered" EvntTime="09:23:00"
  EvntDate="2016-02-24"/>
    <Event EvntLoc="Shrewsbury Depot" EvntDes="Do not display" EvntTime="06:49:00"
  EvntDate="2016-02-24"/>
    <Event EvntLoc="Shrewsbury Depot" EvntDes="Prepared for delivery" EvntTime="00:13:00"
  EvntDate="2016-02-24"/>
    <Event EvntLoc="Shrewsbury Depot" EvntDes="Arrived at delivery depot" EvntTime="23:49:00"
  EvntDate="2016-02-23"/>
    <Event EvntLoc="Bristol North Depot" EvntDes="On route to hub" EvntTime="16:33:00"
  EvntDate="2016-02-23"/>
    <Event EvntLoc="Bristol North Depot" EvntDes="Collected" EvntTime="13:20:00" EvntDate="2016-
  02-23"/>
  </Item>
  <SigImage SigKey="0923240220169542KX15PKE">

  <CompDataStr>89504E470D0A1A0A000000D49484452000000D20000006E0103000000685FDF0F00000000173524742
  00AECE1CE90000000467414D410000B18F0BFC6105000000206348524D00007A26000080840000FA00000080E800007530
  0000EA6000003A98000017709CBA513C00000006504C5445000000FFFFFA5D99FDD000002594944415448C7EDD53D8E
  D5301000E0ED2839C21E25477947585100A2202E69101C21B70021B4EB9538C01648D0AC30E2095E69A127985D399E61
  66ECFC3931505050AC8B27BD7C4E1CCF8C2727541D972777F6CFCCD6AC27DCD52C18F4758B5033B0316C98FB8D75F
  2E36D88C9BECFAD59DA8BB539C264D64C8456171DCDD89999C2DC6471303262487EBEEBC260655E82CD16E706A505
  F82BF3A3B964F158379CCC0D66B3D1C3D280767E65361BFAC11EAD2C02ACCCACECF1988914770721A8F5CD64484B9
  3FB6C698CA5C5C26E17E6B2C595850D1B320FC9FC640835FB3133BF617E349F0DD57E521CCDFDC97A82B94951DC98
  6CC7067C182CA88195020239292BF3A3B93019472F17B39A5B9BCDE65C137C5C9AF1D9AE290E06C68BE991311CEDEE
  3D1B8E262778B477576CD4AA05E3C422DB67B1EB5342472D14D6DD97EC3AB18B6C366032FB2019EDE8934F66C4029B
  690DAA35F42DD5754BC90E5CB91DE618DC746A4FF94126DB9E3B83DED7EB798FE7D9F6887CC9582FEBA5BE846FB37
  D65A3CEB271F70C9359FEF321B2ED97769EEDE313B6DE19E06453EAAD7861B23D63A33313880B3EF7DDA693520FF45
  A9A18BDE299D04B70D50E737BA3513FEDB205B148676AB2BB53FA629275BDCC1C4C1E26D1CD46AD18BAC1F24866F9
  BDB16DD4A030C7EF4DCF69C3AEB88B056DF7A8C7736947A389DFB43E1B87BCB003EF08D3C52D739A24B5589A5C85A
  A59DDF4CA8EE9C4BAADF566664B0BA943D8AA813C6F6DBABA94AF260FD6D6DFD68DEEA5558BFCCD86CF1FEA2D03
  4A8DB762A6664153B86D7116CED2908E55A3E665DD2E4DDD16F3EEECFFB05F43C9058A92D21AED0000000049454E44
  AE426082</CompDataStr>
  </SigImage>
</TrackResponse>
</Response>
</TrackingEnquiryResult>
</TrackingEnquiryResponse>
</soap:Body>
</soap:Envelope>

```

8.7.1.2 PFW Parcel Label Search Response

For a Parcelforce parcel search, the parcel identifier is provided in the API request. Collection address, delivery address, tracked events and the signature image details are returned in the response as shown in the example below:

```

<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/" xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance" xmlns:xsd="http://www.w3.org/2001/XMLSchema">
  <soap:Body>
    <TrackingEnquiryResponse xmlns="http://tempuri.org">
      <TrackingEnquiryResult>

```

```

<Response xmlns="http://xml.lib.intranet.point/trackingv11.xsd">
  <TrackResponse>
    <CommonData Id="PBIH9288828001" CustNme=" DIRECT LTD" DateSent="02-19-2016 08:39:55"
    Cont="P125024" Service="Express 10" Prod="Express 10" ItemAdv="00000" ItemCol="00001" ItemDel="00001" RecNme="A
    EVASON" Brand="PE">
      <DelAd>
        <AddLabel>GROSVENOR HOUSE, HOLLINSWOOD ROAD, CENTRAL PARK,
        TELFORD</AddLabel>
        <PoCde>TF2 9TW</PoCde>
        <Cntry>United Kingdom</Cntry>
      </DelAd>
      <CollAd>
        <AddLabel>TRADE HOUSE, MEAD AVENUE, HOUNDSTONE BUSINESS PARK,
        YEOVIL</AddLabel>
        <PoCde>BA22 8RT</PoCde>
        <Cntry>United Kingdom</Cntry>
      </CollAd>
      <CommonData>
        <Item ItemId="PBIH9288828001" Signatory="A EVASON" SigKey="0752220220161021KX15PKE"
        Status="Delivered">
          <Event EvntLoc="Shrewsbury Depot" EvntDes="Parcel delivered" EvntTime="07:52:00"
          EvntDate="2016-02-22"/>
          <Event EvntLoc="Shrewsbury Depot" EvntDes="Prepared for delivery" EvntTime="03:52:00"
          EvntDate="2016-02-20"/>
          <Event EvntLoc="Shrewsbury Depot" EvntDes="Arrived at delivery depot" EvntTime="03:29:00"
          EvntDate="2016-02-20"/>
          <Event EvntLoc="Bristol North Depot" EvntDes="On route to hub" EvntTime="15:02:00"
          EvntDate="2016-02-19"/>
          <Event EvntLoc="Bristol North Depot" EvntDes="Collected" EvntTime="12:16:00" EvntDate="2016-
          02-19"/>
        </Item>
        <SigImage SigKey="0752220220161021KX15PKE">
          <CompDataStr>89504E470D0A1A0A0000000D49484452000000D20000006E0103000000685FDF0F00000001735247420
          0AECE1CE90000000467414D410000B18F0BFC6105000000206348524D00007A26000080840000FA00000080E8000075300
          000EA6000003A98000017709CBA513C00000006504C5445000000FFFFFA5D99FDD0000025E4944415448C77DD63B92D
          B300C0050CDA4D8D247F04152A8CC717204A64BB947D035D271332952657C04EE8C0B95F4C685AC48262242FC802028
          176B8EDF520041095407E5E7D1A5E15B57927B81AE6FD84FFF9B6C2BCEF924DA2FF21FCCC28F6004BB866F2BD8397C
          4FB53DE260AEED775A656D7D1A296E6B1E6A6EF73C34DC2E7968B9E570FB22883DA06D23B185D940EC599A536D9B69
          615D6934DC5E986C43DB8A707BD19215E1F6A2251B0FAC0C87058DC6C261D1A2B17085B17058D068E6C074DB782AD4
          9ED0B6E5C0C6033307A6DB56A549AC4A93D87260559AA4D6E6C074DBEA34B3D56966ABD35CBF46ABD3BCDA68759A
          43B22A4DA7925569CEE9DE5DAB4B8EC9629ADDF679D9C3A5676522331EA7BD16D12EF472370C97AC4CF38CEB55C1
          CA34477CA682399EFF162EF6025669A7E6DC2778A5F598FBCBC4EC62DA36F5B99F5966FF20F741BE43FE7A3618DFA1
          BFC4F80E5995FA355BFA56159DFA7C7593299DCE076E2B64E3655940A533872F7DDCECD930B3D9128C97A577F9FC63
          6571D0B6D907B3C158C9266F46B68B4F44CBA67D30259BDA668612BF75E536AC7E66C3164865A96CF23317D930CD493
          6EDEF792B9BF2EB36A2393CAD659BF101D7A24DF872A044B3F09A7B0333E3DBDE225BEFCFB3513487BF1BD19E787C
          F6A2DD5705F9F92FCD5E811CA1A59933903655DA8F7D2B44FB0240DA5471BF389F616EFA85DDF67588F607D7416CC8
          97FCBC973B5B3E003E30FB81587E5B78C5298A988BE57B60E3278D7DEB2F71ADDF710396C2EE711ADA58D87A0ED3B
          0224361F0EEC3DF141A3D0AF1CCF9D6C37A026CF11FC06CFB8BAFE2EF5D77A2F61FF46B1BDF4EC000CC0000000049
          454E44AE426082</CompDataStr>
        </SigImage>
      </TrackResponse>
    </Response>
  </TrackingEnquiryResult>
</TrackingEnquiryResponse>
</soap:Body>
</soap:Envelope>

```

8.7.1.3 Query By Senders Reference Response

For a query by senders reference request (for one account), the senders reference and customer number are provided in the API request. Sender reference details are returned in the response as shown in the example below:

```

<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/" xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance" xmlns:xsd="http://www.w3.org/2001/XMLSchema">
  <soap:Body>
    <TrackingEnquiryResponse xmlns="http://tempuri.org/">
      <TrackingEnquiryResult>
        <Response xmlns="http://xml.lib.intranet.point/trackingv11.xsd">

```

```

        <SndRefResponse>
          <SndRefDetail Id="IH4923796" RecNme="A & Q RETURNS" Cont="P125024"/>
          <SndRefDetail Id="IH4910523" RecNme="A & Q RETURNS" Cont="P125024"/>
        </SndRefResponse>
      </Response>
    </TrackingEnquiryResult>
  </TrackingEnquiryResponse>
</soap:Body>
</soap:Envelope>

```

8.7.1.4 Foreign Parcel Label Response

For a foreign parcel request, the foreign parcel label number is provided in the API request. Delivery address and tracked events are returned in the response as shown in the example below:

```

<soap:Envelope xmlns:xsd="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <TrackingEnquiryResponse xmlns="http://tempuri.org/">
      <TrackingEnquiryResult>
        <Response xmlns="http://xml.lib.intranet.point/trackingv11.xsd">
          <TrackResponse>
            <CommonData Id="EC311570810GB" DateSent="00-00-0000 00:00:00" Service="Express 24"
              ItemAdv="00000" ItemCol="00001" ItemDel="00000" ForeignId="952910310726" Brand="PE" Origin="NETHERLANDS">
              <DelAd>
                <AddLabel>Chalkdell Drive, Shenley Wood, Milton Keynes</AddLabel>
                <PoCde>MK5 6GF</PoCde>
                <Cntry>United Kingdom</Cntry>
              </DelAd>
            </CommonData>
            <Item ItemId="EC311570810GB" Status="In progress">
              <Event EvntLoc="Milton Keynes Depot" EvntDes="Do not display" EvntTime="06:52:00"
                EvntDate="2015-12-01"/>
              <Event EvntLoc="Milton Keynes Depot" EvntDes="Arrived at delivery depot" EvntTime="23:01:00"
                EvntDate="2015-11-30"/>
              <Event EvntLoc="General Parcel" EvntDes="" EvntTime="00:08:55" EvntDate="2015-11-28"/>
            </Item>
          </TrackResponse>
        </Response>
      </TrackingEnquiryResult>
    </TrackingEnquiryResponse>
  </soap:Body>
</soap:Envelope>

```


9 Error Handling

9.1 Overview

The PFW Tracking API service highlights issues in two ways, namely:

- **Technical Errors** – Highlights fundamental problems with either the system or the request. All technical errors (e.g. schema validation failure, service unavailable etc.) are returned as SOAP Faults to the service requester.
- **Business Errors** – While the request was correctly formatted, it contained invalid data that cannot be automatically corrected. All business errors are returned in the SOAP response message.

All errors should be appropriately handled by your systems, and technical details of the error should not be displayed directly to consumers.

9.2 Technical Errors

Technical Errors highlight that there is either a problem with the Parcelforce system or there is a fundamental problem with the message being sent by the customer. Examples of technical errors caused by the customer would include the submission of a request message that failed schema validation.

Technical errors indicate that the request was not successful, and has not been processed by Royal Mail Group. Technical errors may also be an indication of serious problems with the interaction between the customer and Royal Mail Group, and customer systems should be built in such a way that these errors are gracefully handled, captured and reported to the relevant technical resources. Failure to do so may result in a disruption to service.

All technical exceptions are returned to the customer using the SOAP Fault message construct. Please see figure below for a graphical representation of the SOAP Fault construct.

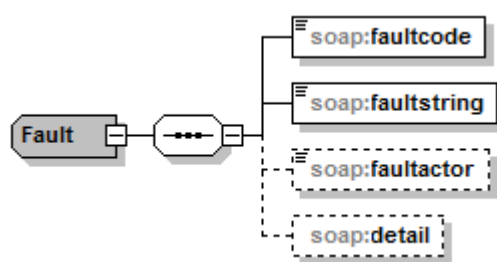


Figure 14 – SOAP Fault Structure

The SOAP Fault element has the following sub-elements:

Element	Occurs	Data Type	Description
faultcode	1-1	QName	A code for identifying the fault
faultstring	1-1	string	A human readable explanation of the fault
faultactor	0-1	anyURI	Information about who caused the fault to happen.
detail	0-1	element	Container for application specific error information

Table 16 – SOAP Fault Elements

All technical errors will be thrown as a SOAP fault message. All SOAP faults will be accompanied with an HTTP Error Code of 500.

9.2.1 Example Data

Please see below for an example of a technical error which is returned from sending in invalid XML. Full XML examples of SOAP requests and responses are provided on the [Royal Mail API \(Developer\) Portal](#).

```
<soapenv:Envelope xmlns:soapenv="http://www.w3.org/2003/05/soap-envelope">
  <soapenv:Body>
    <soapenv:Fault>
      <faultcode>soapenv:Server</faultcode>
      <faultstring>illegal character '>' at offset 573 of
https://159.122.201.115:443/royalmail/uat/parceltracking/v1</faultstring>
      <detail>
        <webapi:SOAPFaultInfo xmlns:webapi="http://www.ibm.com/apimanagement">
          <httpCode>500</httpCode>
          <httpMessage>Internal Server Error</httpMessage>
        </webapi:SOAPFaultInfo>
      </detail>
    </soapenv:Fault>
  </soapenv:Body>
</soapenv:Envelope>
```

9.3 Business Errors

Business errors indicate that the data provided in the request, while correctly formatted, is not valid. Examples of issues that would lead to a business error being received include attempting to make a tracking enquiry using invalid business data. All business errors are returned in the body of the SOAP response message.

All client data errors are provided in the response part of the API response operations, and as such will be accompanied with the standard HTTP successful response code of 200. Section 8.5.3 defines the structure of the business errors which can be returned from calling this API.

Table 17 below lists all business errors which can be returned from the API, and their corresponding response codes and error messages.

Error	Des	API Operation
000101	Customer account number not found	ParcelTrackingEnquiry
002656	SREF: No parcels found for this customer account number	ParcelTrackingEnquiry
2	Invalid parcel id	TrackingEnquiry
4	Tracking not available for Trackback service	TrackingEnquiry
999	Search criteria have not been provided TrackingService.asmx.CS TrackingEnquiry Reading label Mask	TrackingEnquiry
001796	Trackable Unit not found on OLTP or ODS – please search on Archive Database	TrackingEnquiry

Table 17 – API Business Errors

9.3.1 Example Data

Please see below for an example of a business error which is returned from calling the ParcelTrackingEnquiry operation. Full XML examples of SOAP requests and responses are provided on the [Royal Mail API \(Developer\) Portal](#).

```
<soap:Envelope xmlns:xsd="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance" xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <ParcelTrackingEnquiryResponse xmlns="urn:royalmail/ParcelTracking/2003/06/23">
      <ParcelTrackingEnquiryResult>
        <Response xmlns="http://xml.lib.intranet.point/trackingv11.xsd">
          <ErrorResponse Id="WOO176" Des="Customer account number not found" Error="000101"
Brand="PE"/>
        </Response>
      </ParcelTrackingEnquiryResult>
    </ParcelTrackingEnquiryResponse>
  </soap:Body>
</soap:Envelope>
```

10 Non-Functional Characteristics

10.1 Availability

10.1.1 Service Hours

The PFW Tracking API is available 24 hours per day x 365 days per year.

10.1.2 Maintenance Windows

Royal Mail Group Online Services Terms and Conditions define the maintenance for this service.

10.1.3 Unavailability

In the unlikely event of the PFW Tracking being unavailable, customer systems must be able to display an appropriate message to end-customers customers. Royal Mail Group will endeavour to proactively contact customers in the event of an outage to this API.

If you experience issues with the availability of this API please contact a Royal Mail Support representative by visiting the [API \(Developer\) Portal Support](#) pages.

10.2 Performance

Performance testing has validated that the PFW Tracking API responds to SOAP calls in line with the average response times quoted in the table below when invoked from the edge of Royal Mail's UK data centre.

API Operation	Search Type	Average Response Time (secs)
ParcelTrackingEnquiry	QueryByAccountNumber(QBAN)	< 3s
ParcelTrackingEnquiry	QueryByContracts(QFC)	< 10s
ParcelTrackingEnquiry	QueryByMultipleParcelIDs(QBMT)	< 1.5s
ParcelTrackingEnquiry	QueryByProductCode(QBPT)	< 15s
ParcelTrackingEnquiry	QueryBySendersReference(QBSR)	< 2s
ParcelTrackingEnquiry	RegistrationAuthentication(AUTHQ)	< 1s
TrackingEnquiry	ConsignmentSearch	< 1s
TrackingEnquiry	ForeignParcelLabel	< 1s
TrackingEnquiry	ParcelLabelSearch	< 1s
TrackingEnquiry	SendersRefSearch	< 1s

Table 18 – Average Response Times

The API does not support caching of the results returned. Customers are required to make a new request each time in order to obtain the latest tracking information.

10.3 Security

All API service calls will be made using mutually authenticated HTTPS bound SOAP web services. The PFW Tracking API exposes the services using SOAP version 1.1 with a document / literal document-style encoding.

All service requests via the API Management solution will be authorised in accordance with the Client ID and Secret passed in the HTTP headers. This will ensure that any external service requests are authorised and authenticated in line with RMG Security Policies and Standards.

11 Frequently Asked Questions

Please see <http://developer.royalmail.net/faq-page> for a general list of frequently asked questions with responses.

All FAQs specific to the API described in this document are listed below.

11.1 API vs Track-and-Trace Results

Question: Will I get the same result from PFW Tracking API as the PFW Website Track-and-Trace function?

Answer: Yes – the APIs use the same source tracking application and retrieval process as the website.

11.2 API Programming

Question: Can Royal Mail complete the API programming for me?

Answer: Royal Mail only provides user guides to enable an understanding of the API and therefore cannot complete any programming or system development for your business.

11.3 Application Compatibility

Question: What Software Development Kits or tools have been proven to work with the PFW Tracking API?

Answer: The following applications are known to be compatible with the PFW Tracking API: SoapUI.

Royal Mail, the cruciform, the colour red and all ® are registered trademarks and all ™ are trademarks of Royal Mail Group Ltd. PFW Tracking API Technical User Guide February 2016
© Royal Mail Group Ltd 2016. All rights reserved

