API Specification

Royal Mail Group

Tracking API (SOAP)

Technical User Guide

This API specification details the requirements for integrating with Tracking API (SOAP). It specifically covers how Tracking API can be used by business customers to receive Track-and-Trace information and provides the technical information to build this integration.

4th December 2015

Version 1.4

Contents

1 Document Control

1.1 Terms and Abbreviations

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

Table 1 – Terms and Abbreviations

1.2 Version History

Version	Date	Author	Notes
1.0	22/05/2014	Chris Vaughan	Baselined with baselined WSDL and XDS files and feedback from Adrian Tharby
1.1	23/05/2014	Chris Vaughan	Updated with revised version numbers for supporting files
1.2	23/06/2014	Peter Cowen	Updated following minor schema changes
1.3	23/11/2015	Mark Cornforth	Document updated to reference RMG's API Management capability.
1.4	04/12/2015	Mark Cornforth	'Accept' parameter added to HTTP Header in section 8.3. Minor updates made to assist with readability.

Table 2 – Document Version History

2 Overview

The Royal Mail Tracking API exposes a web service that allows account customers to receive track-and-trace information for their mail items. Built on industry standards, Tracking API provides a simple and low cost method for customers to integrate with Royal Mail.

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

Customers should address initial enquiries regarding development of systems for these purposes to their account handler.

3 Purpose

This document provides Royal Mail customers with guidelines and detailed specifications for integrating with the Tracking API 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 Tracking API. This document should be read in conjunction with the following artefacts which are available from the 'Tracking API (SOAP)' page on the Royal Mail API (Developer) Portal:

- Tracking API WSDL

- Tracking API XSDs

- Tracking API Reference Data

- Tracking API Sample Data

4   Introduction to Tracking API

4.1   Overview

Tracking API provides the functionality for customers to enquire on the tracking status of their mail items. It provides an alternative mechanism to using the track and trace function on the Royal Mail website: http://www.royalmail.com/track-trace.

The APIs provide the latest track for single and multiple mail items, the tracking history for a single mail item, and the proof of delivery information (minus the signature image) for a single mail item.

4.2   Interface Components

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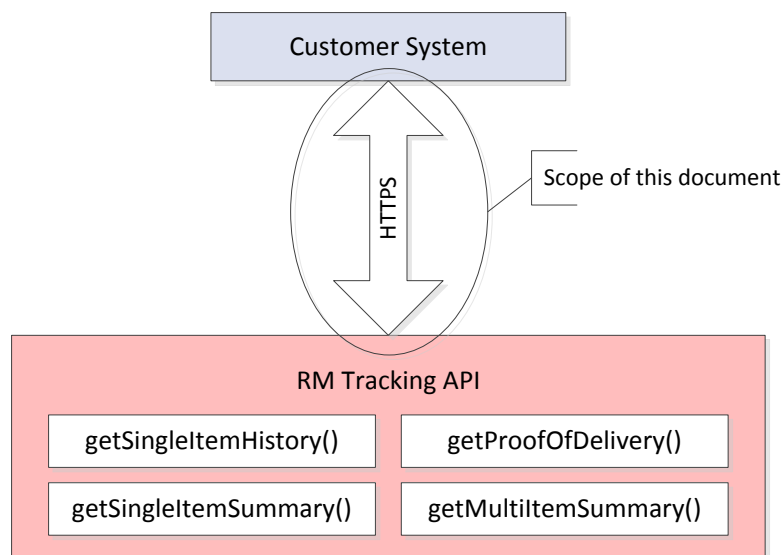

Figure 1 – Tracking API

5   Integrating with Tracking API

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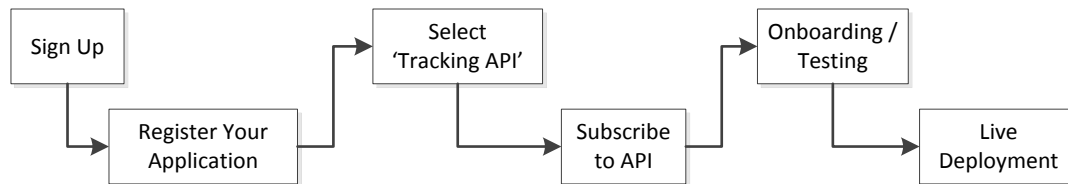

Figure 2 – Process for Integrating with the API

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 API (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 is available 24x7 and is a small scale system for functional testing only. It may not be used for performance testing.

- Royal Mail expects customers to use the service in a responsible way; this includes refraining from continuously polling the API for updates. Updates to the backend systems that support the Tracking API are made hourly, so more frequent polling will not yield updated results.

- Although Tracking API allows multiple item queries in a single web service call, this service must not be used for significant 'bulk item' tracking enquiries. The use of this service will be actively monitored by Royal Mail.

- The API imposes a cap on the number of transactions per second for each customer. 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/tracking

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 Royal Mail API (Developer) Portal.

You must complete all required test activities in the onboarding environment prior to being permitted access to the live environment by the Royal Mail Customer Solutions Team. The onboarding test environment is available 24x7, has the same functionality as live (though with a reduced capacity) and allows you to test your integration.

You will be provided with a contact in Royal Mail who will take you through the onboarding process.

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

5.3   Live Deployment

Once you have completed all required testing in the onboarding environment you will be provided with access to the live production system.

5.4   API Versioning

Royal Mail is continuously working to improve its technology, and as part of this process updates to the services provided may on occasion necessitate a new WSDL version. Royal Mail will look to maintain three versions of the WSDL; as new versions are introduced, previous versions move down the stack until they are ultimately removed completely:

- Latest version
- Previous version
- Deprecated version

Customers will always be encouraged to integrate against the latest version as this will give them the longest stable period without the need to change, but if they have already begun integration activities when a new version is released then they will be able to integrate against the previous version. Customers should not integrate against the deprecated version.

6 Tracking Services

6.1 Business Services

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 Royal Mail 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
Get Single Item History	getSingleItemHistory	Provides the tracking history for a single mail item.	SOAP over HTTPS	Synchronous Request / Response
Get Single Item Summary	getSingleItemSummary	Provides the latest tracking event for a single mail item.	SOAP over HTTPS	Synchronous Request / Response
Get Multi Item Summary	getMultiItemSummary	Provides the latest tracking event for up to 5 mail items.	SOAP over HTTPS	Synchronous Request / Response
Get Proof Of Delivery	getProofOfDelivery	Provides the proof of delivery information for a single mail item.	SOAP over HTTPS	Synchronous Request / Response

Table 3 – Business Services

7 Message Structure

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

REQUEST	RESPONSE
SOAP Envelope	SOAP Envelope
SOAP Body	SOAP Body
Integration Header	Integration Header
Request Content	Response Content
	Integration Footer
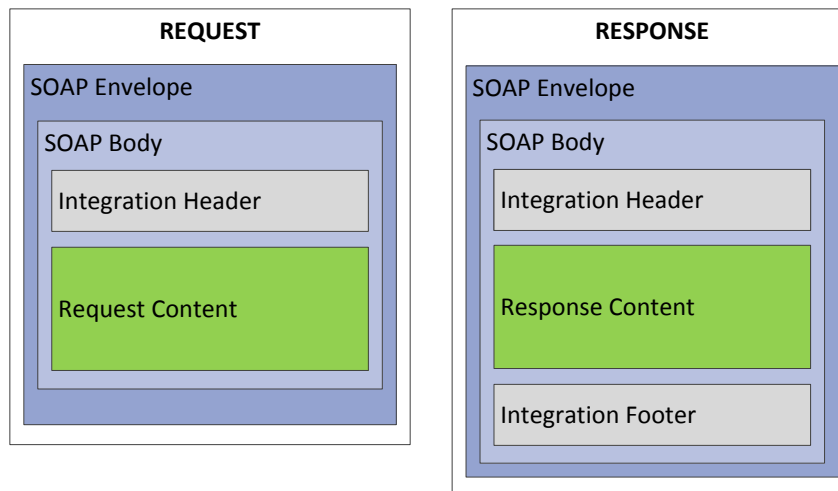
Figure 3 – API Structure

Each of the Tracking API operations (defined in section 6.1) is defined as a SOAP operation, with separate request / response message parts. Technical details are documented in the WSDL and XSD schemas which accompany this document.

Within the SOAP body tags, each request or response message is supplemented with an integrationHeader element and is described in section 8.4.1. Response messages may contain an integrationFooter element that contains details of any errors or warnings and this is described in section 8.5.2.

The definition of the data types used within the elements section of each service call is defined within the schemas in section 8.2.

8 Message Definition and Schemas

8.1 Notation

The API elements described in this section are constructed using Royal Mail's Enterprise Canonical Data Model. The schema structures are described in XMLSpy notation with graphical representation meanings as explained in the table below.

Graphical Representation	Meaning
int:applicationId	A solid line around an element indicates it is a mandatory field that will/must always be present.
int:endUserId	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.
(sequence)	The *sequence* identifier represents an ordered set of elements.
(choice)	The *choice* identifier represents a selection of elements.

Figure 4 – Notation used to describe this API

8.2 WSDL and Schemas

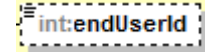The WSDL and XSDs for Tracking API can be found on the 'Tracking API' page on the 'Royal Mail APIs' section of the Royal Mail API (Developer) Portal.

The following table lists the documents that should be referenced for the RMG-defined canonical data types used by Tracking API. The XML schema documents themselves are provided in supporting files. Each schema file contains descriptions of every type using the "xs:documentation" element.

XML Schema File	Description
Tracking_API_V1_1_1.wsdl	WSDL describing the functionality offered by Tracking API
Tracking_API_V1_1_1.xsd	Schema defining the data structures used by the Tracking API
CommonClassesV2_2.xsd	Royal Mail (RMG) schema which defines common objects such as "address" which are complex types with a defined structure based on RMG defined simple data types as well as reference data types.
DatatypesV2_2.xsd	RMG defined simple types that are commonly required such as "date" and "name". This schema is the foundation for the other schema files.
CommonIntegrationSchemaV1_9_1.xsd	RMG schema which defines a common header definition to be used for request and response messages.
ReferenceDataV2_2.xsd	RMG schema which defines a set of types for common reference data such as address fields that are defined using the RMG simple data types.

Table 4 – API 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 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 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	kT0lB2dK0wF6mK0rD8sD7oE7vP2mG7l

Table 6 – Example HTTP Header Information for API Request

8.4   getSingleItemHistoryRequest

The behaviour of the getSingleItemHistoryRequest operation is to provide a history of tracks for a single mail item. To invoke the getSingleItemHistory operation, the customer system must construct a SOAP request message as described in section 7.

The getSingleItemHistoryRequest element is contained in the SOAP Body and contains the following:

- An integrationHeader element (see section 8.4.1)

- A trackingNumber element

Please see diagram below for a representation of the getSingleItemHistory request message:
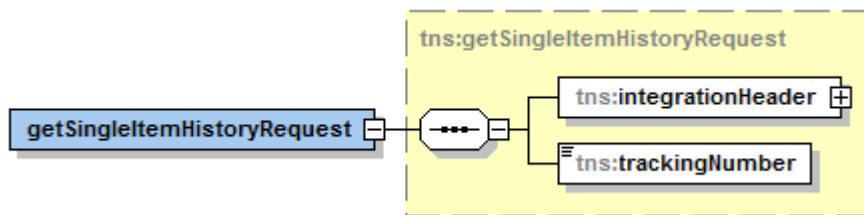
Figure 5 – getSingleItemHistoryRequest Message Structure

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

Element	Occurs	Data Type	Description
integrationHeader	1-1	element	Integration Header as described in section 8.4.1.
trackingNumber	1-1	string	13 digit barcode tracking number of the mail item being queried.

8.4.1 integrationHeader

The purpose of this element is to support security and logging functionally within Royal Mail systems and it is mandatory that it is provided in all request messages. The integrationHeader element will also be present in all response messages.

Please see diagram below for a representation of the integrationHeader element:
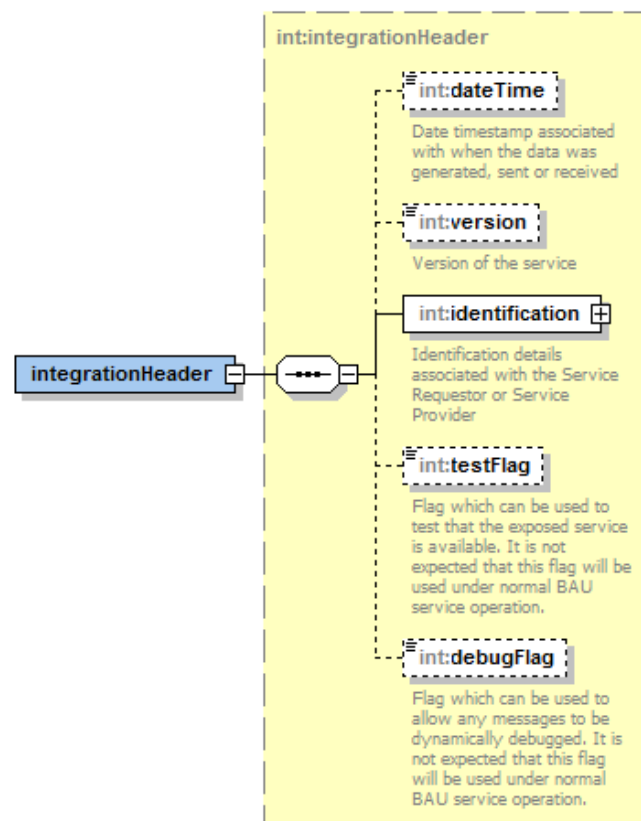
Figure 6 – integrationHeader Structure

All elements defined below are relative to the integrationHeader element in the request message.

Element	Occurs	Data Type	Description

Element	Occurs	Data Type	Description
dateTime	0-1	dateTime	This should be populated with the date timestamp when the message was generated.
version	0-1	decimal	The version of the API currently being used (currently 1).
identification	1-1	element	Identification element used to hold the identity and transaction details associated with the customer. See identification table below for structure.
testFlag	0-1	boolean	Not used in the Tracking API implementation.
debugFlag	0-1	boolean	Not used in the Tracking API implementation.

<div align="center">Table 7 – integrationHeader Element (Request)</div>

Please see diagram below for a representation of the identification element:
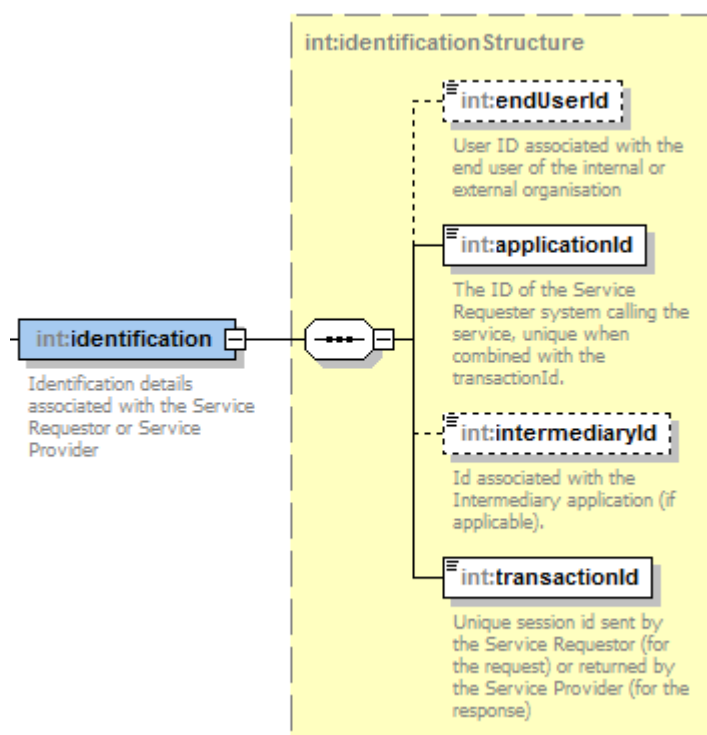
<div align="center">Figure 7 – identification Structure</div>

All elements below are relative to the identification element in the integrationHeader.

Element	Occurs	Data Type	Description
enduserID	0-1	identifier	Not used in the Tracking API implementation.
applicationId	1-1	identifier	This is the ten digit Customer Account Number allocated by Royal Mail
intermediaryId	0-1	identifier	Not used in the Tracking API implementation.
transactionId	1-1	identifier	This is a unique number used to identify the transaction as provided by the customer system. Any value can be provided in this field but must contain only the characters 'a-z', 'A-Z', '0-9', '/' and '-'. It allows the consuming application to correlate the response message to its request.

<div align="center">Table 8 – integrationHeader identification Element</div>

8.4.2   Example Data

Full XML examples of SOAP requests and responses are provided on the Royal Mail API (Developer) Portal. This section provides a simplified extract to illustrate the

getSingleItemHistoryRequest only.

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:v1="http://www.royalmailgroup.com/api/track/V1" xmlns:v11="http://www.royalmailgroup.com/integration/core/V1">
  <soapenv:Header/>
  <soapenv:Body>
    <v1:getSingleItemHistoryRequest>
      <v1:integrationHeader>
        <v11:dateTime>2014-01-06T02:49:45</v11:dateTime>
        <v11:version>1.0</v11:version>
        <v11:identification>
          <v11:applicationId>0123456789</v11:applicationId>
          <v11:transactionId>12</v11:transactionId>
        </v11:identification>
      </v1:integrationHeader>
      <v1:trackingNumber>FJ111111111GB</v1:trackingNumber>
    </v1:getSingleItemHistoryRequest>
  </soapenv:Body>
</soapenv:Envelope>
```

8.5   getSingleItemHistoryResponse

The response for a requested getSingleItemHistory operation is constructed as a SOAP response message as described in Section 7. The getSingleItemHistoryResponse element is contained in the SOAP Body element and contains the following:

- An integrationHeader element (see section 8.5.1)

- An optional trackDetail element which will be populated on completion of having successfully obtained tracking details for the supplied tracking number. The trackDetail element will not be present in the response if an error occurred in the processing of the request – the error details will be included in the integrationFooter element.

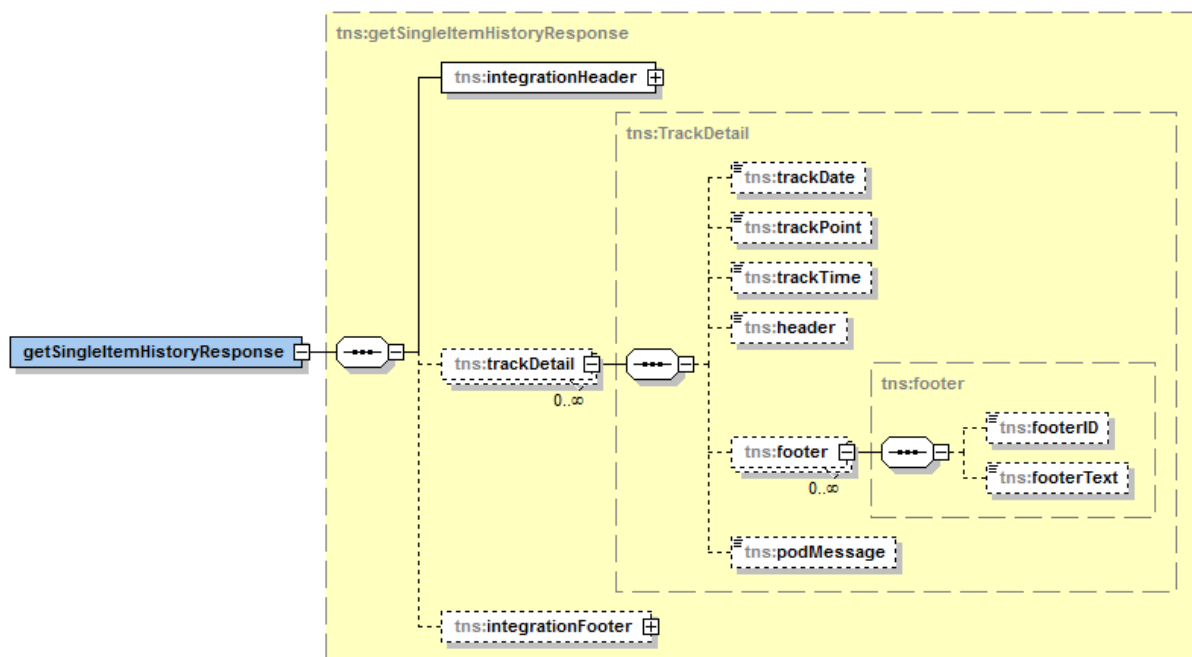- An optional integrationFooter element (see section 8.5.2).

Figure 8 – getSingleItemHistoryResponse Structure

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

Element	Occurs	Data Type	Description
integrationHeader	1-1	element	As described in section 8.5.1
trackDetails	0-n	element	Contains details for each tracking scan for the mail item.
trackDetails.trackDate	0-1	date	Date the mail item tracking scan was taken.
trackDetails.trackPoint	0-1	identifier	Location the mail item tracking scan was taken from.
trackDetails.trackTime	0-1	time	Time the mail item tracking scan was taken.
trackDetails.header	0-1	identifier	Status of the tracking scan as seen on the Royal Mail track and trace portal. Please see the Tracking API Reference Data spreadsheet (available on the 'Tracking API' page on the [Royal Mail API (Developer) Portal](#)) for a list of all header messages.
trackDetails.footer	0-n	element	Contains business messages as seen on the Royal Mail portal.
trackDetails.footer.footerID	0-1	identifier	ID associated with the business message. Please see the Tracking API Reference Data spreadsheet (available on the 'Tracking API' page on the [Royal Mail API (Developer) Portal](#)) for a list of all footer IDs and messages.
trackDetails.footer.footerText	0-1	identifier	Text associated with the business message. Please see the Tracking API Reference Data spreadsheet (available on the 'Tracking API' page on the [Royal Mail API (Developer) Portal](#)) for a list of all footer IDs and messages.
trackDetails.podMessage	0-1	identifier	Message indicating if there may be a proof of delivery associated with the tracking scan.
integrationFooter	0-1	element	Container for any error or warning messages associated with the operation. Please see section 8.5.2 for more information.

<div align="center">Table 9 – getSingleItemHistoryResponse Element</div>

8.5.1 integrationHeader

The integrationHeader element will also be present in all response messages. Please see diagram in Figure 6 in section 8.4.1 for a representation of the integrationHeader element.

Element	Occurs	Data Type	Description
dateTime	0-1	dateTime	This is always returned and contains the same value provided in the request.
version	0-1	decimal	This is always returned and contains the same value provided in the request.
identification	1-1	element	This is always returned and contains the same values provided in the request.
testFlag	0-1	boolean	Not used in the Tracking API implementation.
debugFlag	0-1	boolean	Not used in the Tracking API implementation.

<div align="center">Table 10 – integrationHeader Element (Response)</div>

The integrationHeader contains an identification element which is described below.

Element	Occurs	Data Type	Description
enduserID	0-1	identifier	Not used in the Tracking API implementation.
applicationId	1-1	identifier	This is always returned with the same ten digit Customer Account Number provided in the request.
intermediaryId	0-1	identifier	Not used in the Tracking API implementation.
transactionId	1-1	identifier	This is always returned with the same unique transaction number provided in the request

Table 11 – intgrationHeader identification Element (Response)

8.5.2 integrationFooter

The purpose of this element is to return any business error and warning messages back to the customer. The integrationFooter element will only be present in a response message if there are any business errors or warnings associated with processing a web service request. Please note that all technical exceptions will result in a SOAP fault being generated.

Figure 9 – integrationFooter Structure

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

Element	Occurs	Data Type	Description
errors	0-1	element	See table below for structure. This will contain details of any errors encountered in processing a web service request. Please see the section 9.3 for the full list of all business errors which can be returned.
warnings	0-1	element	Not currently used in the implementation of Tracking API.

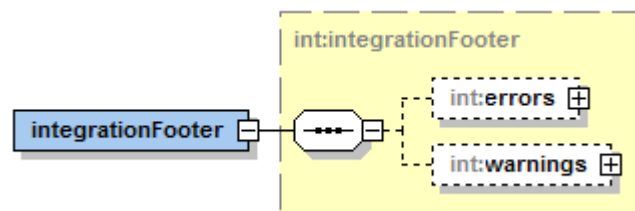Table 12 – integrationFooter Element

errors
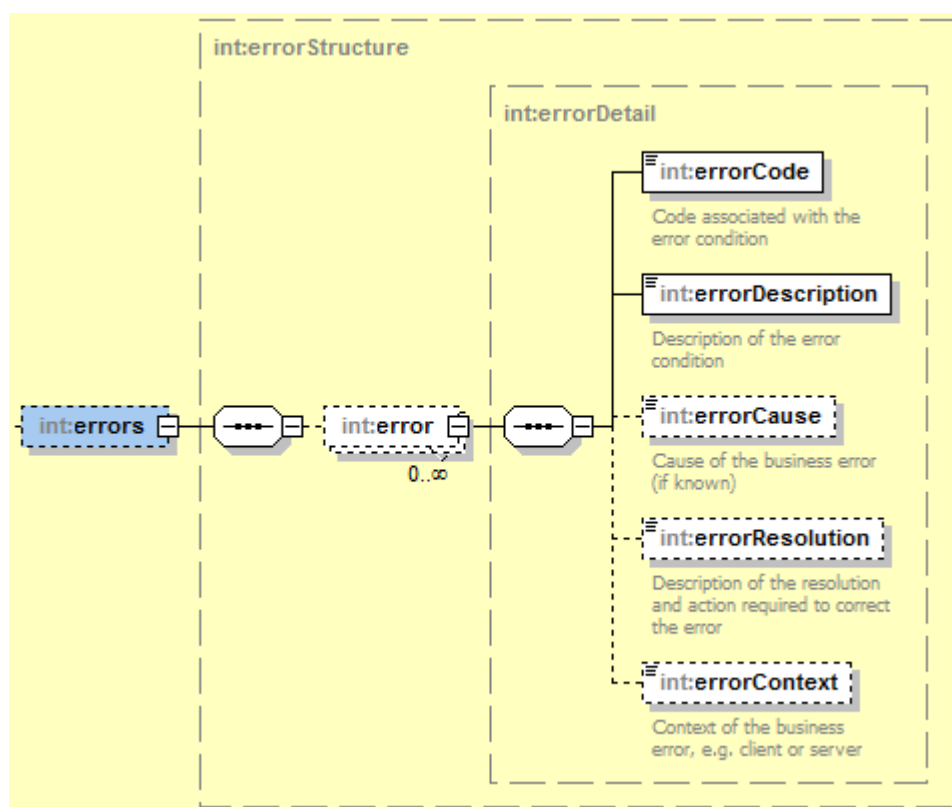
Figure 10 – integrationFooter errors Structure

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

Element	Occurs	Data Type	Description
error	0-n	element	Element containing from zero to many errors. Please see section 9.3 for details of all business errors returned by this API.
error.errorCode	1-1	identifier	This is the code for the error message.
error.errorDescription	1-1	description	This is the description associated with the error code.
error.errorCause	0-1	description	This is the cause of the error (if known).
error.errorResolution	0-1	description	This is the description of the resolution and action required to correct the error (if known).
error.errorContext	0-1	description	This is the context of the error, e.g. client or server.

Table 13 – integrationFooter errors Element

8.5.3   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 getSingleItemHistoryResponse message.

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">
        <soapenv:Body>
                <NS1:getSingleItemHistoryResponse xmlns:NS1="http://www.royalmailgroup.com/api/track/V1">
                        <NS1:integrationHeader>
                                <NS2:dateTime
xmlns:NS2="http://www.royalmailgroup.com/integration/core/V1">2008-09-29T02:49:45</NS2:dateTime>
                                <NS3:version
xmlns:NS3="http://www.royalmailgroup.com/integration/core/V1">1</NS3:version>
```

```
                          <NS4:identification xmlns:NS4="http://www.royalmailgroup.com/integration/core/V1">
                                  <NS4:dateTime>2014-01-06T02:49:45</NS4:dateTime>
                                  <NS4:version>1.0</NS4:version>
                                  <NS4:applicationId>0123456789</NS4:applicationId>
                                  <NS4:transactionId>12</NS4:transactionId>
                          </NS4:identification>
                  </NS1:integrationHeader>
                  <NS1:trackDetail>
                          <NS1:trackDate>2013-12-26</NS1:trackDate>
                          <NS1:trackPoint>London East Mail Centre</NS1:trackPoint>
                          <NS1:trackTime>14:48:45</NS1:trackTime>
                          <NS1:header>Delivered</NS1:header>
                          <NS1:footer>
                                  <NS1:footerID>1024</NS1:footerID>
                                  <NS1:footerText>Thank you for using this service</NS1:footerText>
                          </NS1:footer>
                  </NS1:trackDetail>
                  <NS1:integrationFooter>
                          <NS7:errors xmlns:NS7="http://www.royalmailgroup.com/integration/core/V1"/>
                          <NS8:warnings xmlns:NS8="http://www.royalmailgroup.com/integration/core/V1"/>
                  </NS1:integrationFooter>
          </NS1:getSingleItemHistoryResponse>
      </soapenv:Body>
</soapenv:Envelope>
```

8.6   getSingleItemSummaryRequest

The getSingleItemSummaryRequest operation allows customers to obtain the latest track for a mail item.

To invoke the getSingleItemSummaryRequest operation, the customer system constructs a SOAP request message (see section 7) with the getSingleItemSummaryRequest element contained within the SOAP Body. The getSingleItemSummaryRequest element is described in the figure and table below:

Figure 11 – getSingleItemSummaryRequest Structure

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

Element	Occurs	Data Type	Description
integrationHeader	1-1	element	Integration Header as described in section 8.4.1
trackingNumber	1-1	identifier	13 digit barcode tracking number of the mail item being queried.

Table 14 – getSingleItemSummaryRequest 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 a simplified example to illustrate the getSingleItemSummaryRequest message.

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:v1="http://www.royalmailgroup.com/api/track/V1" xmlns:v11="http://www.royalmailgroup.com/integration/core/V1">
  <soapenv:Header/>
  <soapenv:Body>
    <v1:getSingleItemSummaryRequest>
      <v1:integrationHeader>
        <v11:version>1.0</v11:version>
        <v11:identification>
          <v11:applicationId>111111113</v11:applicationId>
          <v11:transactionId>9876543210</v11:transactionId>
        </v11:identification>
      </v1:integrationHeader>
      <v1:trackingNumber>FJ111111111GB</v1:trackingNumber>
    </v1:getSingleItemSummaryRequest>
  </soapenv:Body>
</soapenv:Envelope>
```

8.7   getSingleItemSummaryResponse

The response for a requested getSingleItemSummary operation is constructed as a SOAP message with the getSingleItemSummaryResponse element contained in SOAP Body. The getSingleItemSummaryResponse element is described in the figure and table below:
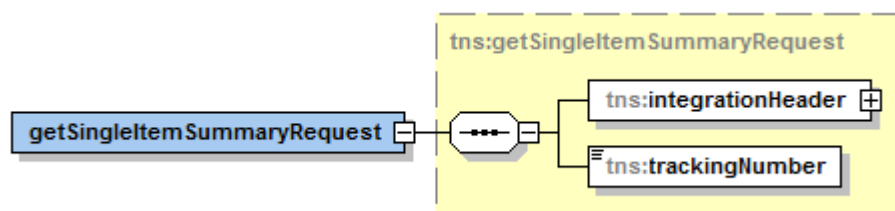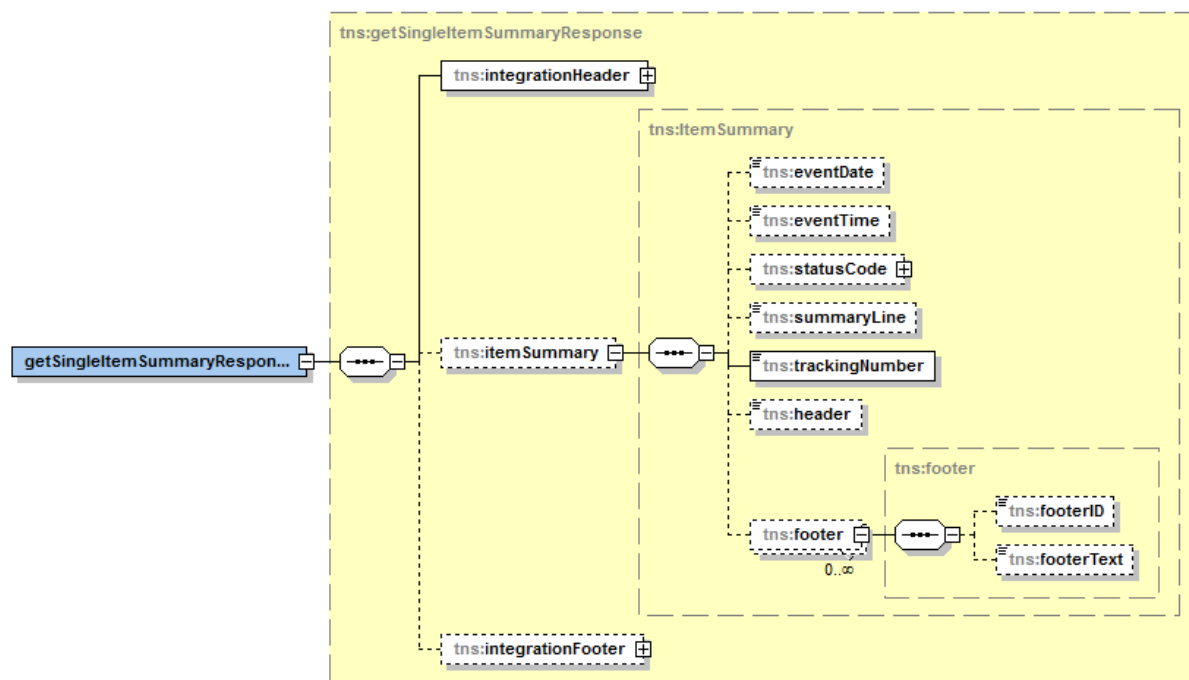

Figure 12 – getSingleItemSummaryResponse Structure

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

Element	Occurs	Data Type	Description
integrationHeader	1-1	element	See section 8.5.1
itemSummary	0-1	element	Latest tracking status of the mail item being queried
itemSummary.eventDate	0-1	date	Date the mail item tracking scan was taken
itemSummary.eventTime	0-1	time	Time the mail item tracking scan was taken
itemSummary.statusCode	0-1	element	Container for status code for mail item

Element	Occurs	Data Type	Description
itemSummary.statusCode.code	0-1	identifier	Status code for mail item's last tracking scan. Please see the Tracking API Reference Data spreadsheet (available on the 'Tracking API' page on the Royal Mail API (Developer) Portal) for a list of all tracking event codes.
itemSummary.summaryLine	0-1	identifier	Summary message for mail item's last tracking scan
itemSummary.trackingNumber	1-1	identifier	tracking number of the mail item being queried
itemSummary.header	0-1	identifier	Status of the tracking scan as seen on the Royal Mail track and trace portal. Please see the Tracking API Reference Data spreadsheet (available on the 'Tracking API' page on the Royal Mail API (Developer) Portal) for a list of all header messages.
itemSummary.footer	0-n	element	Contains business messages as seen on the Royal Mail portal. Please see the Tracking API Reference Data spreadsheet (available on the 'Tracking API' page on the Royal Mail API (Developer) Portal) for a list of all footer IDs and messages.
itemSummary.footer.footerID	0-1	identifier	ID associated with the business message
itemSummary.footer.footerText	0-1	identifier	Text associated with the business message
integrationFooter	0-1	element	Container for any error or warning messages associated with the operation. Please see section 8.5.2 for more information.

Table 15 – getSingleItemSummaryResponse 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 getSingleItemSummaryResponse message.

```xml
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">
        <soapenv:Body>
                <NS1:getSingleItemSummaryResponse xmlns:NS1="http://www.royalmailgroup.com/api/track/V1">
                        <NS1:integrationHeader>
                                <NS3:version
xmlns:NS3="http://www.royalmailgroup.com/integration/core/V1">1.0</NS3:version>
                                <NS4:identification xmlns:NS4="http://www.royalmailgroup.com/integration/core/V1">
                                        <NS4:applicationId>111111113</NS4:applicationId>
                                        <NS4:transactionId>9876543210</NS4:transactionId>
                                </NS4:identification>
                        </NS1:integrationHeader>
                        <NS1:itemSummary>
                                <NS1:eventDate>2013-12-26</NS1:eventDate>
                                <NS1:eventTime>14:48:00</NS1:eventTime>
                                <NS1:statusCode>
                                        <code>EVAPA</code>
                                </NS1:statusCode>
                                <NS1:summaryLine>The sender has advised us that item FJ108115259GB will be
posted into the Royal Mail network on the 2013-12-27.</NS1:summaryLine>
                                <NS1:trackingNumber>FJ111111111GB</NS1:trackingNumber>
                                <NS1:header>Please come back later</NS1:header>
                                <NS1:footer/>
                        </NS1:itemSummary>
                        <NS1:integrationFooter>
                                <NS7:errors xmlns:NS7="http://www.royalmailgroup.com/integration/core/V1"/>
                                <NS8:warnings xmlns:NS8="http://www.royalmailgroup.com/integration/core/V1"/>
                        </NS1:integrationFooter>
```

```
            </NS1:getSingleItemSummaryResponse>
        </soapenv:Body>
</soapenv:Envelope>
```

8.8   getMultiItemSummaryRequest

The getMultiItemSummary operation allows customers to obtain the latest summary level tracking event data for up to 5 mail items at the same time.

To invoke the getMultiItemSummary operation, the customer system constructs a SOAP message (see section 7) with the getMultiItemSummaryRequest element contained within the SOAP Body. The getMultiItemSummaryRequest element is described in the figure and table below:
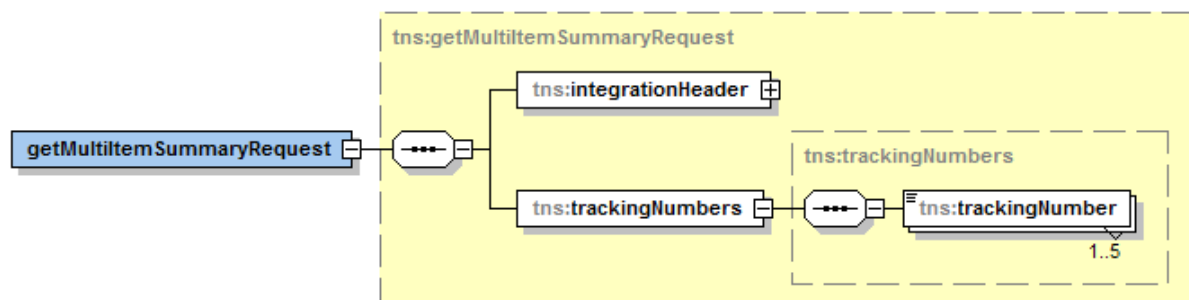

Figure 13 – getMultiItemSummaryRequest Structure

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

Element	Occurs	Data Type	Description
integrationHeader	1-1	element	As described in section 8.4.1
trackingNumbers	1-1	element	Container for the list of tracking numbers
trackingNumbers.trackingNumber	1-5	identifier	13 digit barcode tracking numbers of the mail item being queried.

Table 16 – getMultiItemSummaryRequest Element

8.8.1   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 getMultiItemSummaryRequest message.

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:v1="http://www.royalmailgroup.com/api/track/V1" xmlns:v11="http://www.royalmailgroup.com/integration/core/V1">
  <soapenv:Header/>
  <soapenv:Body>
    <v1:getMultiItemSummaryRequest>
      <v1:integrationHeader>
        <v11:dateTime>2013-12-28T02:49:45</v11:dateTime>
        <v11:version>1.0</v11:version>
        <v11:identification>
          <v11:applicationId>111111113</v11:applicationId>
          <v11:transactionId>9876543210</v11:transactionId>
        </v11:identification>
      </v1:integrationHeader>
      <v1:trackingNumbers>
        <v1:trackingNumber>FJ111111111GB</v1:trackingNumber>
        <v1:trackingNumber>JA222222222GB</v1:trackingNumber>
```

```
        <v1:trackingNumber>FJ333333333GB</v1:trackingNumber>
        <v1:trackingNumber>FJ444444444GB</v1:trackingNumber>
        <v1:trackingNumber>FL555555555GB</v1:trackingNumber>
      </v1:trackingNumbers>
    </v1:getMultiItemSummaryRequest>
  </soapenv:Body>
</soapenv:Envelope>
```

8.9   getMultiItemSummaryResponse

The response for a requested getMultiItemSummary operation is constructed as a SOAP message described (see section 7) with the getMultiItemSummaryResponse element contained within the SOAP Body. The getMultiItemSummaryResponse element is described in the figure and table below:
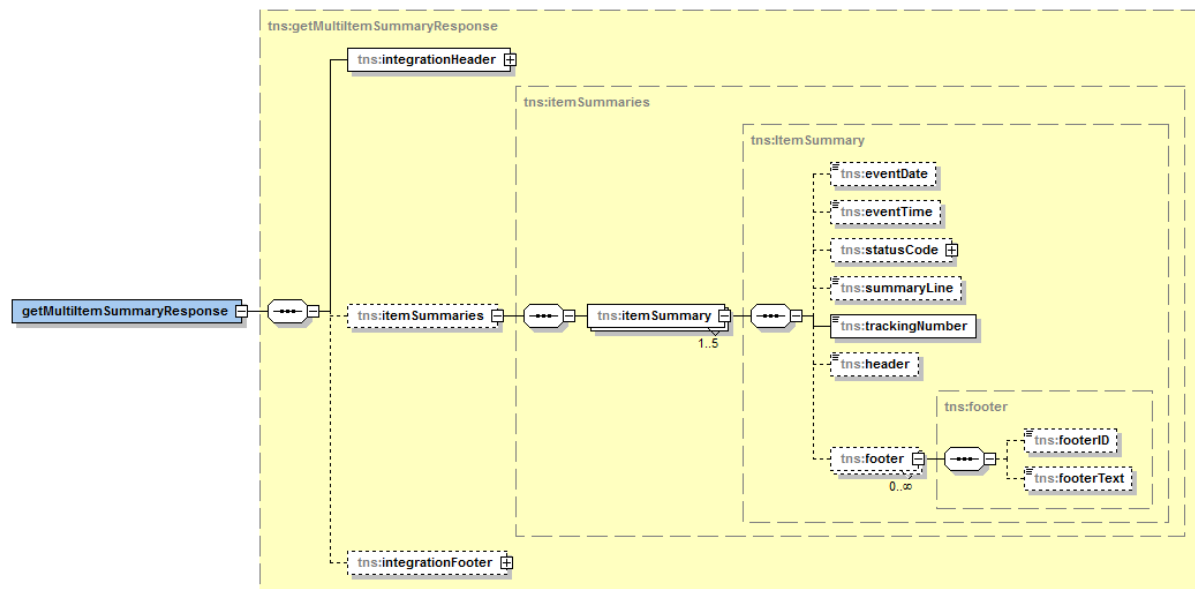
Figure 14 – getMultiItemSummaryResponse Structure

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

Element	Occurs	Data Type	Description
integrationHeader	1-1	element	As described in section 8.5.1
itemSummaries	0-1	element	Container for the latest tracking status of the mail items being queried
itemSummaries.itemSummary	1-5	element	Container for each individual tracking item
itemSummaries.itemSummary.eventDate	0-1	date	Date the mail item tracking scan was taken
itemSummaries.itemSummary.eventTime	0-1	time	Time the mail item tracking scan was taken
itemSummaries.itemSummary.statusCode	0-1	element	Container for status code for mail item.

Element	Occurs	Data Type	Description
itemSummaries.itemSummary.statusCode.code	0-1	identifier	Status code for mail item's last tracking scan. Please see the Tracking API Reference Data spreadsheet (available on the 'Tracking API' page on the Royal Mail API (Developer) Portal) for a list of all event codes.
itemSummaries.itemSummary.summaryLine	0-1	identifier	Summary message for mail item's last tracking scan
itemSummaries.itemSummary.trackingNumber	1-1	identifier	tracking number of the mail item being queried
itemSummaries.itemSummary.header	0-1	identifier	Status of the tracking scan as seen on the Royal Mail track and trace portal. Please see the Tracking API Reference Data spreadsheet (available on the 'Tracking API' page on the Royal Mail API (Developer) Portal) for a list of all header messages.
itemSummaries.itemSummary.footer	0-n	element	Contains business messages as seen on the Royal Mail portal. Please see the Tracking API Reference Data spreadsheet (available on the 'Tracking API' page on the Royal Mail API (Developer) Portal) for a list of all footer IDs and messages.
itemSummaries.itemSummary.footer.footerID	0-1	identifier	ID associated with the business message
itemSummaries.itemSummary.footer.footerText	0-1	identifier	Text associated with the business message
integrationFooter	0-1	element	Container for any error or warning messages associated with the operation. Please see section 8.5.2 for more information.

Table 17 – getMultiItemSummaryResponse Element

8.9.1 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 getMultiItemSummaryResponse message.

```xml
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">
  <soapenv:Body>
    <NS1:getMultiItemSummaryResponse xmlns:NS1="http://www.royalmailgroup.com/api/track/V1">
      <NS1:integrationHeader>
        <NS2:dateTime xmlns:NS2="http://www.royalmailgroup.com/integration/core/V1">2013-12-
28T02:49:45</NS2:dateTime>
        <NS3:version xmlns:NS3="http://www.royalmailgroup.com/integration/core/V1">1.0</NS3:version>
        <NS4:identification xmlns:NS4="http://www.royalmailgroup.com/integration/core/V1">
  <NS4:applicationId>111111113</NS4:applicationId>
          <NS4:transactionId>9876543210</NS4:transactionId>
        </NS4:identification>
      </NS1:integrationHeader>
      <NS1:itemSummaries>
        <NS1:itemSummary>
```

```
            <NS1:eventDate>2013-12-20</NS1:eventDate>
            <NS1:eventTime>12:03:00</NS1:eventTime>
            <NS1:statusCode>
              <code>EVKSP</code>
            </NS1:statusCode>
            <NS1:summaryLine>We have a record of item FJ111111111GB as being delivered from London East Mail Centre on
2013-12-20.</NS1:summaryLine>
            <NS1:trackingNumber>FJ111111111GB</NS1:trackingNumber>
            <NS1:header>Delivered</NS1:header>
          </NS1:itemSummary>
          <NS1:itemSummary>
            <NS1:eventDate>2013-12-20</NS1:eventDate>
            <NS1:eventTime>11:59:00</NS1:eventTime>
            <NS1:statusCode>
              <code>EVKSP</code>
            </NS1:statusCode>
            <NS1:summaryLine>We have a record of item JA222222222GB as being delivered from London East Mail Centre on
2013-12-20.</NS1:summaryLine>
            <NS1:trackingNumber>JA222222222GB</NS1:trackingNumber>
            <NS1:header>Delivered</NS1:header>
          </NS1:itemSummary>
          <NS1:itemSummary>
            <NS1:eventDate>2013-12-12</NS1:eventDate>
            <NS1:eventTime>14:48:00</NS1:eventTime>
            <NS1:statusCode>
              <code>EVAPA</code>
            </NS1:statusCode>
            <NS1:summaryLine>The sender has advised us that item FJ333333333GB will be posted into the Royal Mail network
on the 2013-12-29.</NS1:summaryLine>
            <NS1:trackingNumber>FJ333333333GB</NS1:trackingNumber>
            <NS1:header>Please come back later</NS1:header>
          </NS1:itemSummary>
          <NS1:itemSummary>
            <NS1:eventDate>2013-12-12</NS1:eventDate>
            <NS1:eventTime>14:48:00</NS1:eventTime>
            <NS1:statusCode>
              <code>EVAPA</code>
            </NS1:statusCode>
            <NS1:summaryLine>The sender has advised us that item FJ444444444GB will be posted into the Royal Mail network
on the 2013-12-29.</NS1:summaryLine>
            <NS1:trackingNumber>FJ444444444GB</NS1:trackingNumber>
            <NS1:header>Please come back later</NS1:header>
          </NS1:itemSummary>
          <NS1:itemSummary>
            <NS1:eventDate>2013-12-12</NS1:eventDate>
            <NS1:eventTime>14:37:00</NS1:eventTime>
            <NS1:statusCode>
              <code>EVAPA</code>
            </NS1:statusCode>
            <NS1:summaryLine>The sender has advised us that item FL555555555GB will be posted into the Royal Mail network
on the 2013-12-29.</NS1:summaryLine>
            <NS1:trackingNumber>FL555555555GB</NS1:trackingNumber>
            <NS1:header>Please come back later</NS1:header>
          </NS1:itemSummary>
        </NS1:itemSummaries>
        <NS1:integrationFooter>
          <NS7:errors xmlns:NS7="http://www.royalmailgroup.com/integration/core/V1"/>
          <NS8:warnings xmlns:NS8="http://www.royalmailgroup.com/integration/core/V1"/>
        </NS1:integrationFooter>
      </NS1:getMultiItemSummaryResponse>
  </soapenv:Body>
</soapenv:Envelope>
```

8.10 getProofOfDeliveryRequest

The getProofOfDelivery operation provides the details captured at the point of delivery as proof that delivery has occurred. Note that a proof of delivery is only captured by the delivery track for those service offerings that require a signature on delivery. Please also note that for data protection reasons the API does not currently supply the signature image captured at the point of delivery.

To invoke the getProofOfDelivery operation, the customer system constructs a SOAP message (see section 7) with the getProofOfDeliveryRequest element contained within the SOAP Body.

The getProofOfDeliveryRequest element is described in the figure and table below:
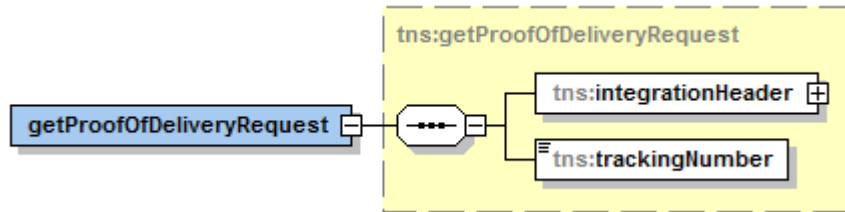

Figure 15 – getProofOfDeliveryRequest Structure

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

Element	Occurs	Data Type	Description
integrationHeader	1-1	element	As described in section 8.4.1
trackingNumber	1-1	identifier	13 digit barcode tracking number of the mail item being queried.

Table 18 – getProofOfDeliveryRequest Element

8.10.1 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 getProofOfDeliveryRequest message.

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:v1="http://www.royalmailgroup.com/api/track/V1" xmlns:v11="http://www.royalmailgroup.com/integration/core/V1">
  <soapenv:Header/>
  <soapenv:Body>
    <v1:getProofOfDeliveryRequest>
      <v1:integrationHeader>
        <v11:version>1.0</v11:version>
        <v11:identification>
          <v11:applicationId>111111113</v11:applicationId>
          <v11:transactionId>9876543210</v11:transactionId>
        </v11:identification>
      </v1:integrationHeader>
      <v1:trackingNumber>JW034599725GB</v1:trackingNumber>
    </v1:getProofOfDeliveryRequest>
  </soapenv:Body>
</soapenv:Envelope>
```

8.11 getProofOfDeliveryResponse

The getProofOfDeliveryResponse will contain the integrationHeader as passed in the request plus the proof of delivery information of the mail item being queried if available, followed by the integrationFooter. The response for a requested getProofOfDelivery operation is constructed as a SOAP message described (see section 7) with the getProofOfDeliveryResponse element contained within the SOAP Body.

The getProofOfDeliveryResponse element is described in the figure and table below:
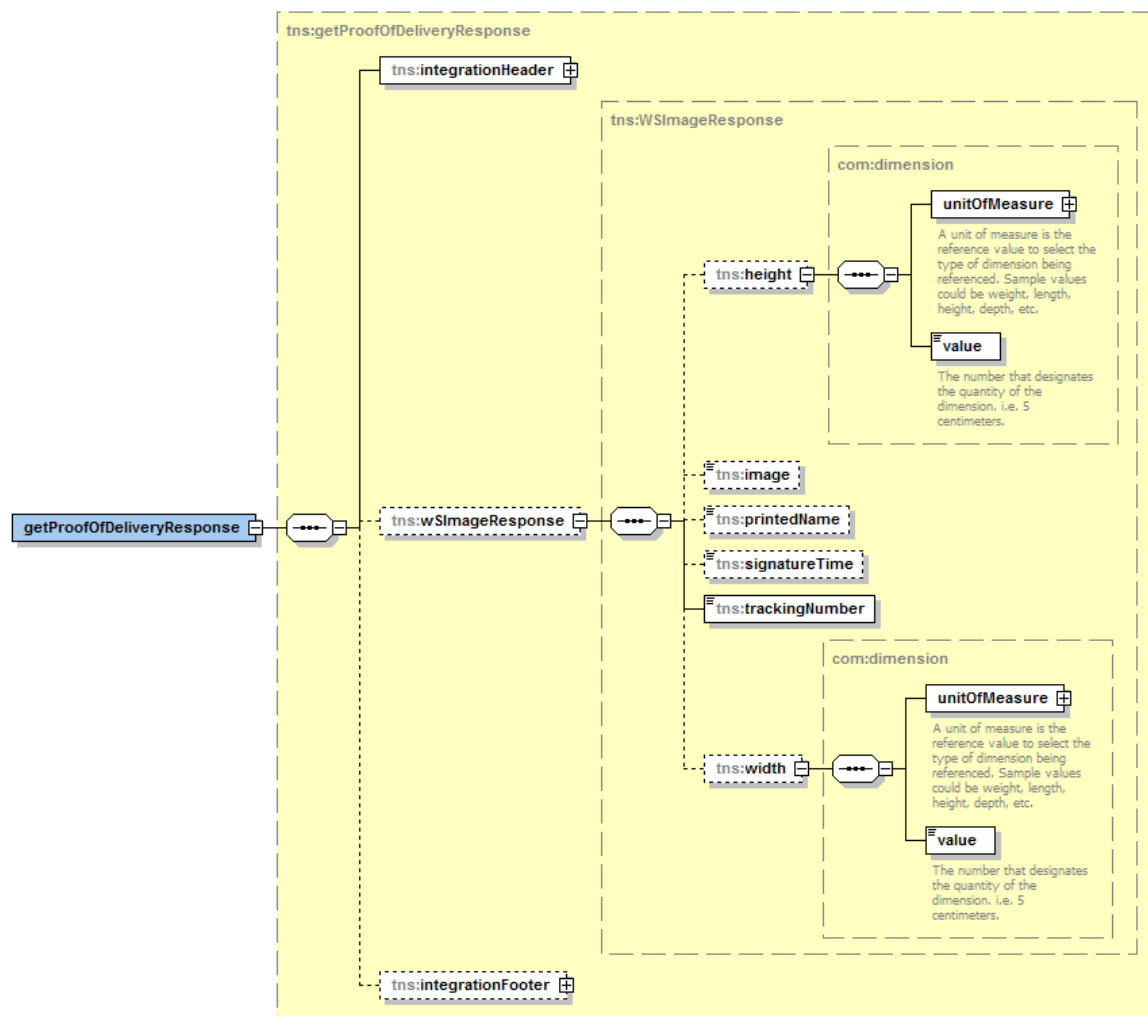
Figure 16 – getProofOfDeliveryResponse Structure

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

Element	Occurs	Data Type	Description
integrationHeader	1-1	element	As described in Section 8.5.1
wSImageResponse	0-1	element	Contains details on proof of delivery.
wSImageResponse.height	0-1	element	Container for image height
wSImageResponse.image	0-1	document	The signature image as captured. Note this is turned off and will not be supplied in the API response.
wSImageResponse.printedName	0-1	identifier	Printed name of the person who supplied the signature.
wSImageResponse.signatureTime	0-1	dateTime	Time the signature was captured.
trackingNumber	1-1	identifier	Tracking number of the mail item being queried.
width	0-1	element	Container for the image width.
integrationFooter	0-1	element	Container for any error or warning messages associated with the operation. Please see section 8.5.2 for more information.

Table 19 – getProofOfDeliveryResponse Element

height
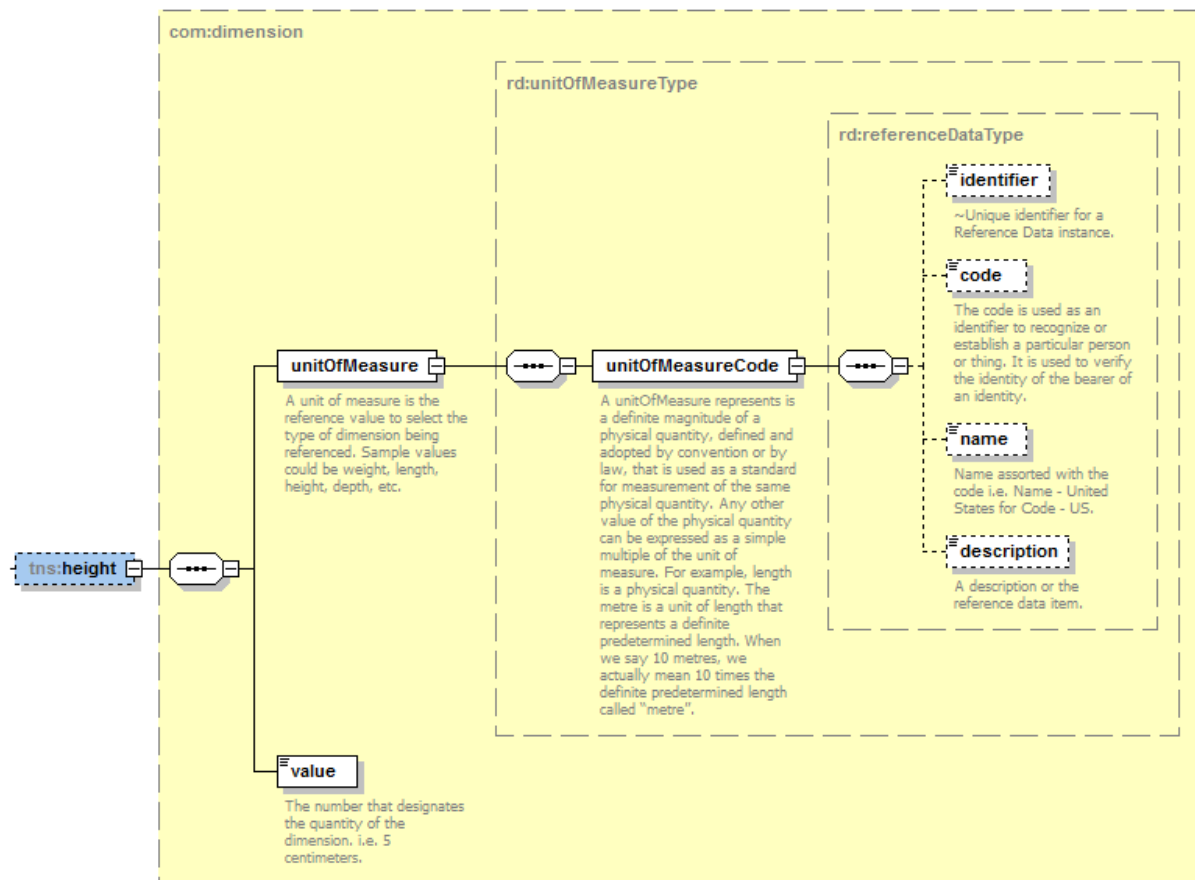
Figure 17 – height Structure

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

Element	Occurs	Data Type	Description
unitOfMeasure	1-1	element	Container for unit of measure
unitOfMeasure.unitOfMeasureCode	1-1	element	Container for unit of measure code
unitOfMeasure.unitOfMeasureCode.code	0-1	identifier	Code for the unit of measure (e.g. cm)
value	1-1	float	Value of the unit of measure

Table 20 – height Element

width
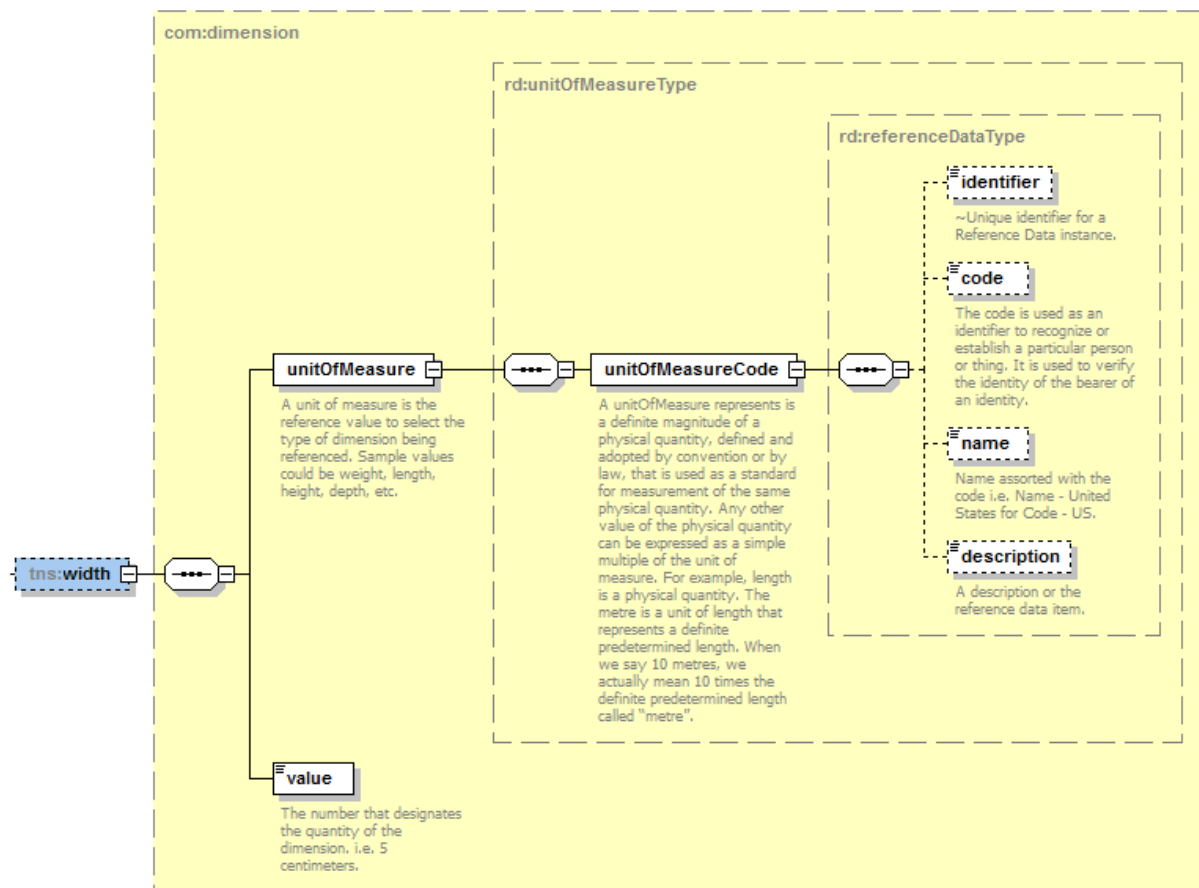
Figure 18 – width Structure

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

Element	Occurs	Data Type	Description
unitOfMeasure	1-1	element	Container for unit of measure
unitOfMeasure.unitOfMeasureCode	1-1	element	Container for unit of measure code
unitOfMeasure.unitOfMeasureCode.code	0-1	identifier	Code for the unit of measure (e.g. px)
unitOfMeasure.unitOfMeasureCode.name	0-1	identifier	Name for the unit of measure (e.g. pixel)
value	1-1	float	Value of the unit of measure

Table 21 – width Element

8.11.1 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 getProofOfDeliveryResponse message.

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">
        <soapenv:Body>
                <NS1:getProofOfDeliveryResponse xmlns:NS1="http://www.royalmailgroup.com/api/track/V1">
                        <NS1:integrationHeader>
                                <NS2:dateTime
xmlns:NS2="http://www.royalmailgroup.com/integration/core/V1">2015-11-24T10:30:04</NS2:dateTime>
```

```xml
<NS3:version xmlns:NS3="http://www.royalmailgroup.com/integration/core/V1">1</NS3:version>
                <NS4:identification xmlns:NS4="http://www.royalmailgroup.com/integration/core/V1">
                        <NS4:applicationId>0127229000</NS4:applicationId>
                        <NS4:transactionId>12</NS4:transactionId>
                </NS4:identification>
        </NS1:integrationHeader>
        <NS1:wSImageResponse>
                <NS1:height>
                        <unitOfMeasure>
                                <unitOfMeasureCode>
                                        <code>px</code>
                                        <name>pixel</name>
                                </unitOfMeasureCode>
                        </unitOfMeasure>
                        <value>129</value>
                </NS1:height>
                <NS1:printedName>GAMMY</NS1:printedName>
                <NS1:signatureTime>2015-11-09T00:00:00</NS1:signatureTime>
                <NS1:trackingNumber>JA011550729GB</NS1:trackingNumber>
                <NS1:width>
                        <unitOfMeasure>
                                <unitOfMeasureCode>
                                        <code>px</code>
                                        <name>pixel</name>
                                </unitOfMeasureCode>
                        </unitOfMeasure>
                        <value>231</value>
                </NS1:width>
        </NS1:wSImageResponse>
        <NS1:integrationFooter>
                <NS5:errors xmlns:NS5="http://www.royalmailgroup.com/integration/core/V1"/>
                <NS6:warnings xmlns:NS6="http://www.royalmailgroup.com/integration/core/V1"/>
        </NS1:integrationFooter>
        </NS1:getProofOfDeliveryResponse>
    </soapenv:Body>
</soapenv:Envelope>
```

9 Error Handling

9.1 Overview

The 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 integrationFooter of 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 Royal Mail system or there is a fundamental problem with the messages being sent to Royal Mail 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. Technical errors may also be an indication of serious problems with the interaction between the customer and Royal Mail, 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 which has been extended by the Royal Mail Group to specify a number of sub-elements under the <detail> element.
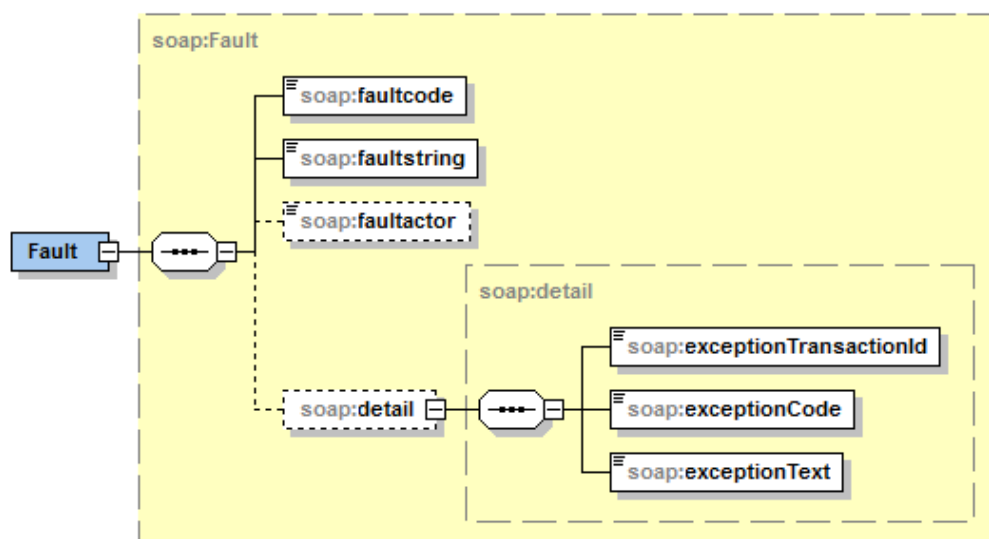

Figure 19 – SOAP Fault Structure

The SOAP Fault element has the following sub-elements:

Element	Max Length	Occurs	Data Type	Description
faultcode	N/A	1-1	QName	A code for identifying the fault
faultstring	N/A	1-1	string	A human readable explanation of the fault
faultactor	N/A	0-1	anyURI	Information about who caused the fault to happen.
detail	N/A	0-1	element	Container for application specific error information
detail.exceptionTransactionId	50	1-1	identifier	Used to identify the transaction Id associated with the request message which generated this technical exception.
detail.exceptionCode	5	1-1	identifier	Error code associated with the technical exception.
detail.exceptionText	256	1-1	description	A meaningful human-readable error description of the error condition.

<div align="center">Table 22 – SOAP Fault Elements</div>

All technical errors will be thrown as a SOAP fault message. All SOAP faults will be accompanied with an HTTP Error Code of 500 along with the information defined in the Table below.

faultcode	faultstring	detail	
		exceptionCode	exceptionText
Server	Internal Error	E0000	Internal Exception Occurred
Server	Service Unavailable	E0001	Service Unavailable
Server	Service Temporarily Unavailable	E0002	Service Temporarily Unavailable
Server	Unknown Service Error	E0003	Service is unavailable due to an unknown reason. Contact RMG Customer Experience Team.
Client	Invalid Request	E0004	Failed Schema Validation
Server	Unknown Service Error	E0005	No Response Received from Business Fulfilment System Web Service (Service is Unavailable or Timeout)
Server	Internal Error	E0009	Business Fulfilment System Returned an Error Response
Server	Service Unavailable	E0010	Configured Throttling Rate for Service Exceeded. Please try again later.

<div align="center">Table 23 – API Technical Errors</div>

Please note that the exceptionTransactionId returned in the SOAP fault response will be populated with the transactionId provided in the original API request.

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://schemas.xmlsoap.org/soap/envelope/">
        <soapenv:Body>
                <NS1:Fault xmlns:NS1="http://schemas.xmlsoap.org/soap/envelope/">
                        <faultcode>Server</faultcode>
                        <faultstring>Internal Error</faultstring>
                        <faultactor>ESB</faultactor>
                        <detail>
                                <exceptionDetails>
                                        <exceptionTransactionId>0127229000</exceptionTransactionId>
                                        <exceptionCode>E0005</exceptionCode>
                                        <exceptionText>No Response Received from Business Fulfilment System
Web Service (Service is Unavailable or Timeout)</exceptionText>
                                </exceptionDetails>
                        </detail>
                </NS1: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 an invalid tracking number. All business errors are returned in the integrationFooter 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 8.5.2 defines the structure of the business errors which can be returned from calling this API.

Table 24 below lists all business errors which can be returned from the API, and their corresponding HTTP response codes and error messages.

errorCode	errorDescription	errorCause	errorResolution
E1142	Barcode reference *[trackingNumber]* is not valid	A mail item with that barcode cannot be located	Check barcode and resubmit
E1143	Tracking data are not available for barcode reference *[trackingNumber]*	It is not possible to provide information about events that occurred more than [configurable variable] days ago	Please use the Royal Mail Track and Trace website to obtain data of this age.
E1144	Proof of Delivery is not available for barcode reference *[trackingNumber]*	Proof of Delivery information is not yet available	Please try again later. It can take up to 72 hours after delivery for the Proof of Delivery information to become available
E1145	Proof of Delivery is not available for barcode reference *[trackingNumber]*	Proof of Delivery is not available for this product	Please consult your Royal Mail account team to determine which products can be signed for

Table 24 – API Business Errors

9.3.1 Example Data

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

```xml
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">
  <soapenv:Body>
    <NS1:getProofOfDeliveryResponse xmlns:NS1="http://www.royalmailgroup.com/api/track/V1">
      <NS1:integrationHeader>
        <NS3:version xmlns:NS3="http://www.royalmailgroup.com/integration/core/V1">1.0</NS3:version>
        <NS4:identification xmlns:NS4="http://www.royalmailgroup.com/integration/core/V1">
          <NS4:endUserId/>.
          <NS4:applicationId>111111103</NS4:applicationId>
          <NS4:transactionId>9876543210</NS4:transactionId>
        </NS4:identification>
      </NS1:integrationHeader>
      <NS1:integrationFooter>
        <NS7:errors xmlns:NS7="http://www.royalmailgroup.com/integration/core/V1">
          <NS7:error>
            <NS7:errorCode>E1143</NS7:errorCode>
            <NS7:errorDescription>Tracking data are not available for barcode reference
JW034599725GB</NS7:errorDescription>
            <NS7:errorCause>It is not possible to provide information about events that occurred more than 300 days
ago</NS7:errorCause>
            <NS7:errorResolution>Please use the Royal Mail Track and Trace website to obtain data of this
age</NS7:errorResolution>
          </NS7:error>
        </NS7:errors>
        <NS8:warnings xmlns:NS8="http://www.royalmailgroup.com/integration/core/V1"/>
      </NS1:integrationFooter>
    </NS1:getProofOfDeliveryResponse>
  </soapenv:Body>
</soapenv:Envelope>
```

10 Non-Functional Characteristics

10.1 Availability

10.1.1 Service Hours

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

10.1.2 Maintenance Windows

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

10.1.3 Unavailability

In the unlikely event of the Tracking API being unavailable, customer systems should make provision to handle this appropriately. Royal Mail 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 [Royal Mail API (Developer) Portal Support](#) pages.

10.2 Performance

Performance testing has validated that the Tracking API responds to SOAP calls in less than 2 seconds on average when invoked from the edge of Royal Mail's UK data centre. Performance will be slower during peak periods of activity (between 15:00 and 18:00, Monday to Friday). To avoid issues associated with slower response times during periods of heavy traffic, customers are strongly advised to spread their traffic out throughout the day where possible.

10.3 Security

All API service calls will be made using mutually authenticated HTTPS bound SOAP web services. Tracking API exposes 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.

12 Frequently Asked Questions

Please see the [FAQ page](#) on the [Royal Mail API (Developer) Portal](#) for a general list of frequently asked questions with responses.

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

12.1 API vs Track-and-Trace Results

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

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

12.2 TransactionId

Question: What should I use as a transactionId?

Answer: You need to supply a value that is unique so that individual API requests can be identified. An incremental number is recommended.

12.3 eBay/Amazon Plugin

Question: Is an eBay/Amazon plugin available?

Answer: Unfortunately this is not available.

12.4 Latest versions of WSDL and XSDs

Question: Where can I find the latest versions of the Tracking API WSDL and supporting XSD files?

Answer: The latest version of the WSDL and XSDs can be found on the 'Tracking API (SOAP)' page on the [Royal Mail API (Developer) Portal](#).

12.5 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.

12.6 Service Offerings

Question: What types of service offering can I look up via Tracking API?

Answer: Tracking API allows track-and-trace for the same service offerings as the Royal Mail website ([http://www.royalmail.com/track-trace)](http://www.royalmail.com/track-trace). Generally these are from the Special Delivery and RM Tracked product families.

12.7 Proof of Delivery Signatures via API

Question: Why can't I receive proof of delivery signatures from Tracking API?

Answer: We cannot provide the signature image via TAPI for reasons of customer privacy.

12.8 Proof of Delivery Information

Question: How do I get the full proof of delivery information?

Answer: If applicable, the name and receipt image of the person who signed for a mail item can be obtained via the Royal Mail track-and-trace website (http://www.royalmail.com/track-trace).

12.9 Availability of Data

Question: How long is tracking data available via the API?

Answer: Tracking data is available via the API for 30 days. If you need tracking information that is older than this, please use the Royal Mail website (http://www.royalmail.com/track-trace), where data may be available for up to 12 months.

12.10 Business Account

Question: I don't have a business account with Royal Mail. Can I use the Tracking API?

Answer: No – Tracking API is only available to Royal Mail account holders.

12.11 Number of Tracking Enquiries in a Single Request

Question: For a multiItemSummary how many items can I enquire on at once?

Answer: There is currently a limit of 5 items on the getMultiItemSummary operation.

12.12 Get Multi-Item History

Question: Is there a getMultiItemHistory web service?

Answer: No – a full history of tracks is only available for a single mail item.

12.13 Throttling Error

Question: Why does a throttling rate error occur?

Answer: As demand for Tracking API calls is unpredictable it is sometimes necessary to manage the volume of tracking requests hitting the tracking database. The number of requests that you have raised within a period has caused the request to be rejected at this time. Please try again later.

12.14 Scan Times

Question: Why are scan times sometimes provided as strings such as AM or PM rather than times?

Answer: This representation of time is a feature of the source scanning system. For international scans, this source scanning system is not controlled by Royal Mail.

12.15 Application Compatibility

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

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