



Locator Web Service 1.0.1

Confidential

**Revision Notes**

Revision	Date	Change Description
0.0.1	12/11/2015	Initial draft
0.0.2	02/02/2016	Error codes and messages are updated
0.0.3	29/02/2016	Update the WSDL elements for all 6 methods of Locator service
0.0.4	16/03/2016	Removed other service error codes/messages & GetLocationByID method
1.0.1	05/01/2017	Appendix B - Product List (ServiceID) - added 4 new Products (Express 12PM)

## Table of Contents

<b>1</b>	<b>Getting Started.....</b>	<b>5</b>
1.1	Introduction .....	5
1.2	Document Overview.....	6
1.3	Specification Compliance.....	6
1.4	Development Platforms .....	7
1.5	Related Resources .....	7
1.6	Purolator E-Ship Web Services Development Process.....	7
<b>2</b>	<b>Web Services .....</b>	<b>8</b>
2.1	Characteristics of Calls.....	9
2.2	Data Types.....	9
2.3	Security.....	9
2.4	Service Methods and Objects .....	10
2.4.1	<i>GetLocationsByAddress.....</i>	<i>10</i>
2.4.2	<i>GetLocationsByCity.....</i>	<i>23</i>
2.4.3	<i>GetLocationsByCoordinates.....</i>	<i>35</i>
2.4.4	<i>GetLocationsByPointOfInterest.....</i>	<i>47</i>
2.4.5	<i>GetLocationsByPostalCode.....</i>	<i>59</i>
2.5	Error Handling.....	71
2.6	Implementation Considerations .....	72
2.7	Error Messages / codes .....	72
<b>APPENDIX A – Complete Field List.....</b>		<b>73</b>
<b>APPENDIX B – Allowed Code List.....</b>		<b>82</b>

## Legal and Copyright Notices

This document, and the information contained herein, is confidential and proprietary to Purolator Inc., and its use is governed by the Purolator E-Ship® Resource Centre Agreement or the Purolator E-Ship® Web Services Soft Launch Agreement (as applicable). In the event of a conflict between this document and the Purolator E-Ship Resource Centre Agreement or the Purolator E-Ship Web Services Soft Launch Agreement (as applicable), the Purolator E-Ship Resource Centre Agreement or the Purolator E-Ship Web Services Soft Launch Agreement (as applicable) will govern to the extent of the inconsistency.

The information in this documentation may be changed at any time without notice. If you have gained access to this document without first agreeing to the Purolator E-Ship Resource Centre Agreement or the Purolator E-Ship Web Services Soft Launch Agreement (as applicable) you must cease using this document immediately and destroy any copies obtained.

© 2017 Purolator Inc., Purolator and the Purolator logo are trademarks of Purolator Inc. All rights reserved.

## 1 Getting Started

### 1.1 Introduction

To help you integrate Purolator E-Ship Web Services into your website or application, Purolator provides technical documentation and sample code for each Web Service. The documents include detailed technical information for each Web Service and detail Purolator's service offerings. Additional information and support is available on the Purolator E-Ship Developer Forum <http://www.purolatorwebservices.com>, on the E-Ship Web Services Wiki <http://www.purolatorwebservices.com/wiki2>, and through the Support section of the E-Ship Resource Centre <http://www.purolator.com/eship>.

The following documents can be downloaded in the Documentation and Sample Code section.

#### **Introduction**

Introduction to Purolator E-Ship Web Services

#### **Service Availability Web Service**

Validate origin and destination addresses and receive all available Purolator services, products, options and associated rules.

#### **Estimates Web Service**

Receive estimates based on origin and destination addresses as well as package and service inputs. Estimates are available as quick estimates using list prices or detailed estimates for customers with negotiated pricing.

#### **Shipping Web Service**

Create domestic, U.S. and International shipments. Please note that shipping labels and documents are created using the Get Documents Web Service.

#### **Returns Management Web Service**

Create domestic Returns Management shipments. Please note that shipping labels and documents are created using the Get Documents Web Service.

#### **Get Documents Web Service**

Retrieve shipment labels and documentation for shipments.

#### **Shipment Tracking Web Service**

Get detailed tracking information and shipment details in real-time using a Purolator PIN / tracking number or shipment reference.

#### **Pickup Web Service**

Schedule, modify, validate and void pickups. View your pickup history and upcoming pickups.

#### **Locator Web Service**

Locate the shipment using Address, Coordinates, City, PointofInterest and Postal code.

#### **Soap UI Project File**

Example use cases and sample results for all Purolator E-Ship Web Services.

#### **Certification**

Guidelines to help ensure your Purolator E-Ship Web Services integration is ready to promote into Purolator's production environment.

### **Security Options (if applicable)**

Security options available for your Purolator E-Ship Web Services implementation. This document will be provided when you are ready to take your website or application into Purolator's production environment. The availability of this document will depend on the type of web service integration you are executing.

## **1.2 Document Overview**

This document is a technical specification that describes the Purolator Returns Management Web Service. It is geared towards developers who are building applications that require Purolator Returns Management Services. Returns Management allows an application to generate a Return shipment without an outbound shipment - a scenario typically used where customers are requesting a shipping label to return defective products/merchandise. See 'Purolator E-Ship Web Services - Introduction' document in the Documentation and Sample Code section of the E-Ship Resource Centre [www.purolator.com/eship](http://www.purolator.com/eship) for more information. It should be noted that the Returns Management Web Service is used in conjunction with the Get Documents Web Service to obtain shipping labels and other shipping related documentation.

This document uses the following structure to explain our Returns Management Web Service:

### Introduction (this chapter)

- Web Services overview
- Specification compliance
- Development platform compatibility
- Related resources
- Web services development process

### Web Services

- Explanations of the characteristics of calls, as well as data types used
- Security information
- Service details for the Returns Management service
- Implementation considerations
- Error details and error codes and descriptions

### Appendix

- Complete field listing
- Enumeration and expected values

## **1.3 Specification Compliance**

The Web Services are designed to comply with the following specifications:

Specification Name	Website
Simple Object Access Protocol (SOAP) 1.1	<a href="http://www.w3.org/TR/2000/NOTE-SOAP-20000508/">http://www.w3.org/TR/2000/NOTE-SOAP-20000508/</a>
Web Service Description Language (WSDL) 1.1	<a href="http://www.w3.org/TR/2001/NOTE-wsdl-20010315">http://www.w3.org/TR/2001/NOTE-wsdl-20010315</a>

Please visit the websites listed above for detailed information regarding SOAP and WSDL technologies.

## 1.4 Development Platforms

The Web Services work with any current SOAP/XML development environments.

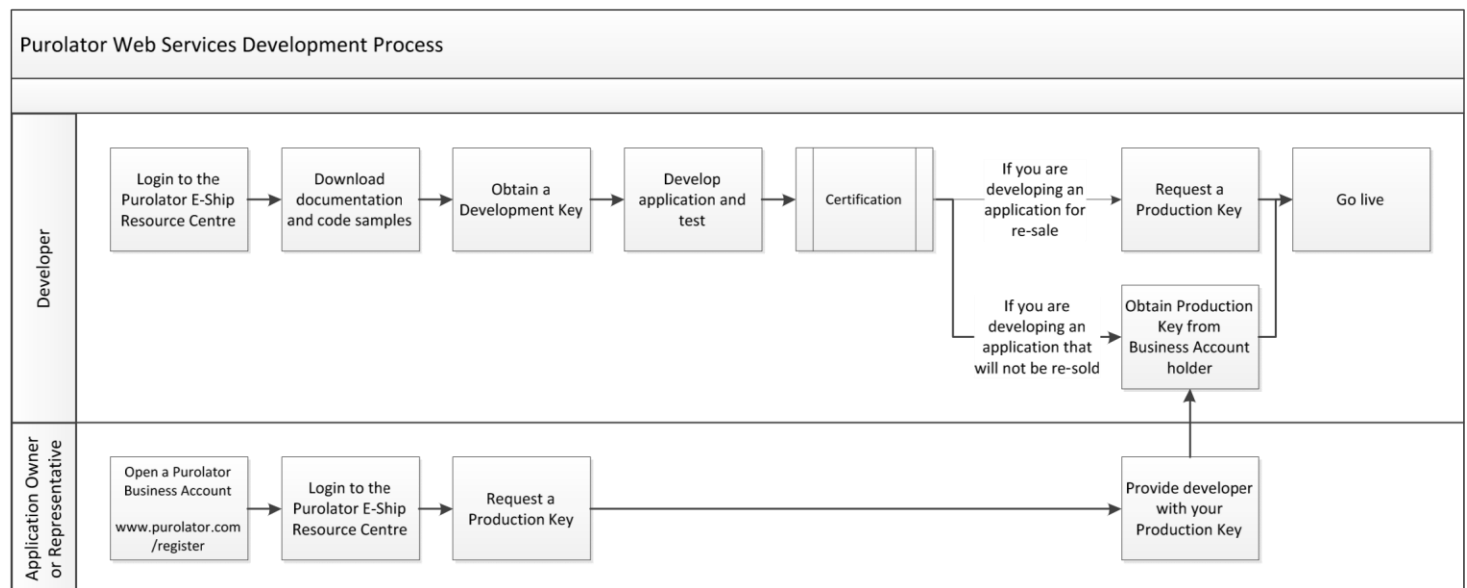
**Note:** Development platforms vary in their SOAP/XML implementations. Please refer to your platform's documentation for more information.

## 1.5 Related Resources

The Purolator E-Ship Resource Centre provides a full suite of documentation, sample code, sample SOAP messages, community-based support, and other resources to help you with your development projects. Be sure to visit [www.purolator.com/eship](http://www.purolator.com/eship) to access all of the resources available to you and get support with your integration.

## 1.6 Purolator E-Ship Web Services Development Process

To integrate Purolator E-Ship Web Services within your application, follow the steps outlined below.



### Web Services Developer Process

Follow these steps if you're a developer that will be integrating Purolator E-Ship Web Services.

#### Step 1: Download Documentation and Code Samples

View code samples and documentation for the Purolator E-Ship Web Service(s) you will be using.

Documentation and sample code, such as WSDL, is available in the Documentation and Sample Code section of the E-Ship Resource Centre at [www.purolator.com/eship](http://www.purolator.com/eship).

#### Step 2: Obtain a Development Key

Obtain a Development Key. This will allow you to test your code in the Purolator E-Ship Test Environment.

**Note:** Your Development Key, password, and test account number will be used to access the development environment.

**Step 3: Develop**

Develop your application using the code samples and documentation.

**Step 4: Test**

Test your application in the Purolator E-Ship Test Environment. Data in the Test Environment is sample data and should be used for testing purposes only.

**Step 5: Certification**

Based on qualification criteria, some applications may be required to go through Certification before moving to production. A Purolator representative will inform you of whether your application will be required to complete this step. Certification documentation is available in the Documentation and Sample Code section.

**Step 6: Request a Production Key**

Request a Production Key once your development and testing are complete. You will receive an inactive Production Key until we review your request.

If you're integrating Purolator E-Ship Web Services into an application that won't be re-sold, the Purolator Business Account holder must request the Production Key.

Replace the Development Key with the Production Key, and replace the development WSDL with the production WSDL. The Production Key will allow you to access account-specific shipping, tracking, estimates and returns information. Once activated, you will then be ready to use Purolator E-Ship Web Services.

**Note:** Your Production Key, password, and account number will be used to access the production environment.

**Application Owner or Representative Process**

Follow these steps if you have development resources and want to integrate Purolator E-Ship Web Services into your website or application that won't be re-sold.

**Step 1: Open a Purolator Business Account**

If you do not already have a Purolator Business Account, please visit [www.purolator.com/register](http://www.purolator.com/register) to get started.

**Step 2: Request a Production Key**

Login to the Purolator E-Ship Resource Centre and request a Production Key. The Production Key will allow you to access shipping, tracking, estimates and returns information specific to your Purolator Business Account.

You will receive an inactive Production Key until we review your request. A Purolator representative may contact you for security purposes before your Production Key is activated. Optional security features are available through consultation with Purolator.

**Step 3: Provide your developer with the Production Key**

Ask your developer to replace their Development Key with your Production Key. You will then be ready to use Purolator E-Ship Web Services.

## **2 Web Services**

Web Services is a collection of programming technologies, including XML, Web Services Description Language (WSDL) and SOAP, which allow you to build programming solutions for specific messaging and application integration.



Web Services are, by definition, platform independent. Purolator Web Services allow developers to build custom applications that are independent of changes to the Purolator interface. This is achieved through backwards compatibility support for all versions of the web services.

## 2.1 Characteristics of Calls

All Web Service calls are:

- **Service Requests and Responses**—your client application prepares and submits a service request to Purolator E-Ship Web Services, which is processed and a response is returned, and the client application handles the response.
- **Synchronous**—once the API call is invoked, your client application waits until it receives a response from the service. Asynchronous calls are not supported.

## 2.2 Data Types

Value	Description
String	Character strings. Fields that are of data type string contain text and some have length restrictions. Please see the field reference list for format and restrictions.
Decimal	Decimal represents a subset of the real numbers, which can be represented by decimal numerals. The <u>value space</u> of decimal is the set of numbers that can be obtained by dividing an integer by a non-negative power of ten, i.e., expressible as $i / 10^n$ where $i$ and $n$ are integers and $n \geq 0$ . Precision is not reflected in this value space; the number 2.0 is not distinct from the number 2.00. (The datatype <u>precisionDecimal</u> may be used for values in which precision is significant.) The order relation on decimal is the order relation on real numbers, restricted to this subset.
Int	The precisionDecimal datatype represents the numeric value and (arithmetic) precision of decimal numbers which retain precision; it also includes values for positive and negative infinity and for "not a number", and it differentiates between "positive zero" and "negative zero". This datatype is introduced to provide a variant of decimal that closely corresponds to the floating-point decimal datatypes described by the expected forthcoming revision of IEEE/ANSI 754. Precision of values is retained and values are included for two zeroes, two infinities, and not-a-number. Enumeration constrains the <u>value space</u> to a specified set of values.
Enumeration	Enumeration does not impose an order relation on the <u>value space</u> it creates; the value of the <u>ordered</u> property of the derived datatype remains that of the datatype from which it is derived.

## 2.3 Security

Purolator E-Ship Web Services authentication uses the standard HTTP Basic Authentication method allowing client programs to provide credentials in the form of a user name and password when making an HTTP request. Purolator EShip Web Services uses the standard HTTP protocol and in our case the username corresponds to the Development and Production Key that is issued to you by Purolator when you signed up for Purolator E-Ship Web Services. These credentials are sent from your client programs to our Purolator E-Ship Web Services servers securely using SSL.

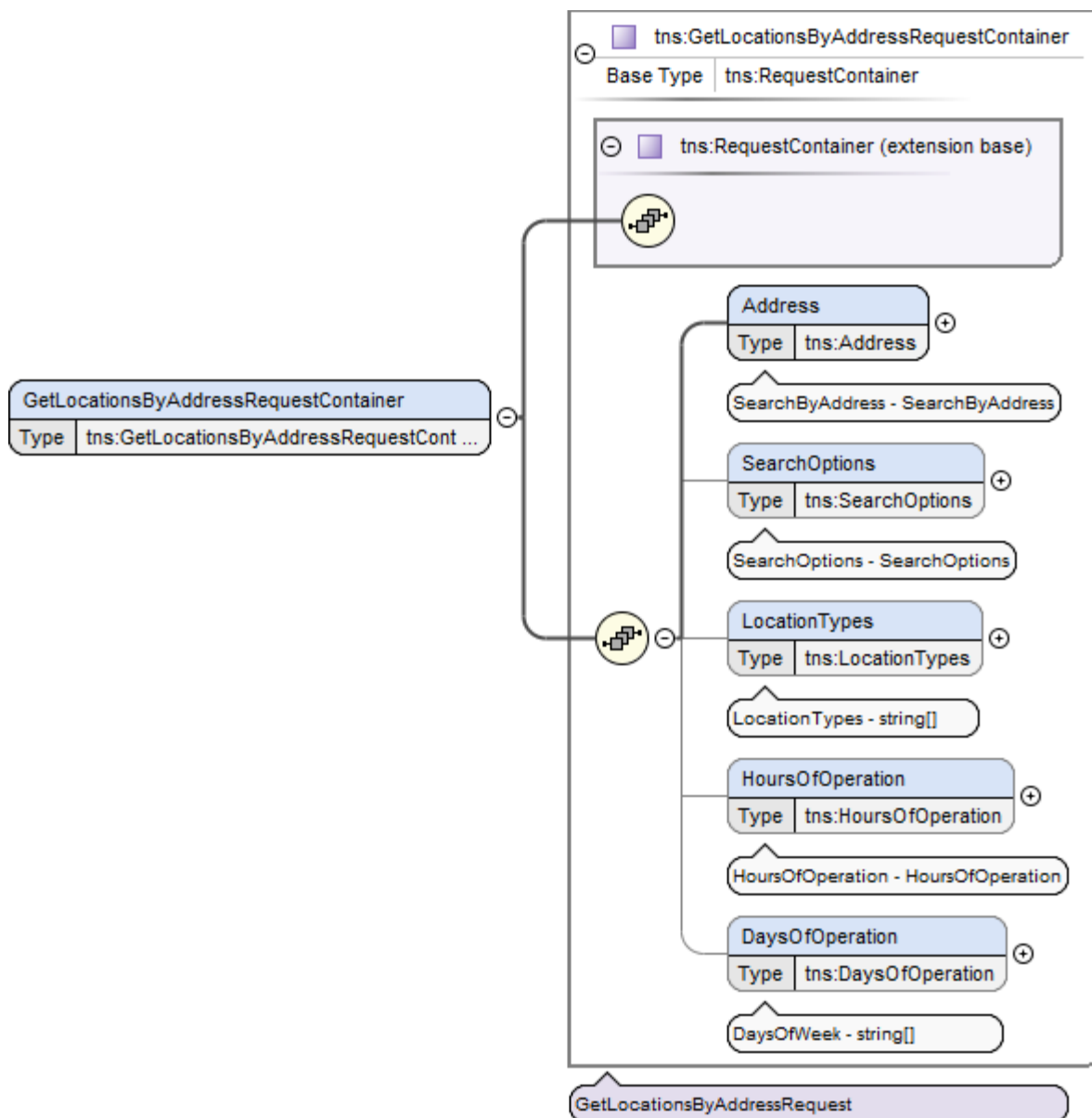
## 2.4 Service Methods and Objects

The following section will highlight the various methods associated with the shipment service. As well, visual representations will depict the XML schema of both the requests, and the responses of the service calls.

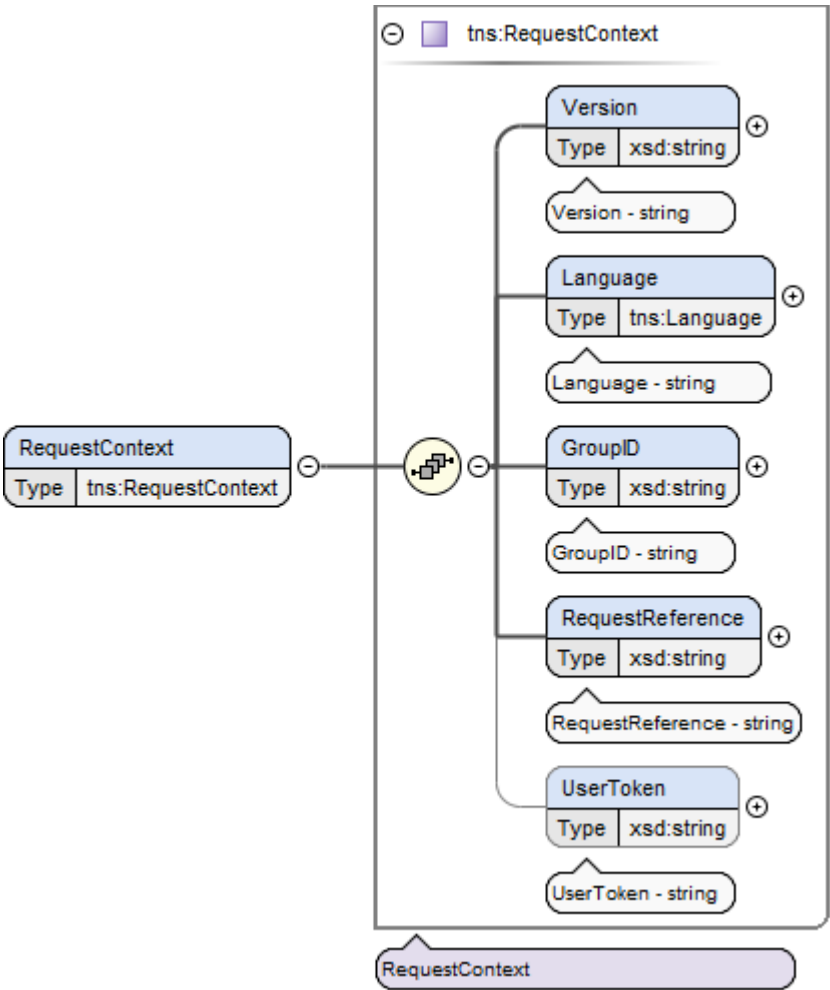
### 2.4.1 GetLocationsByAddress

The GetLocationsByAddress method is used to get the location of the shipments by providing the shipment Address using Purolator EShip Web Services. The diagrams below show the objects contained within the location request.

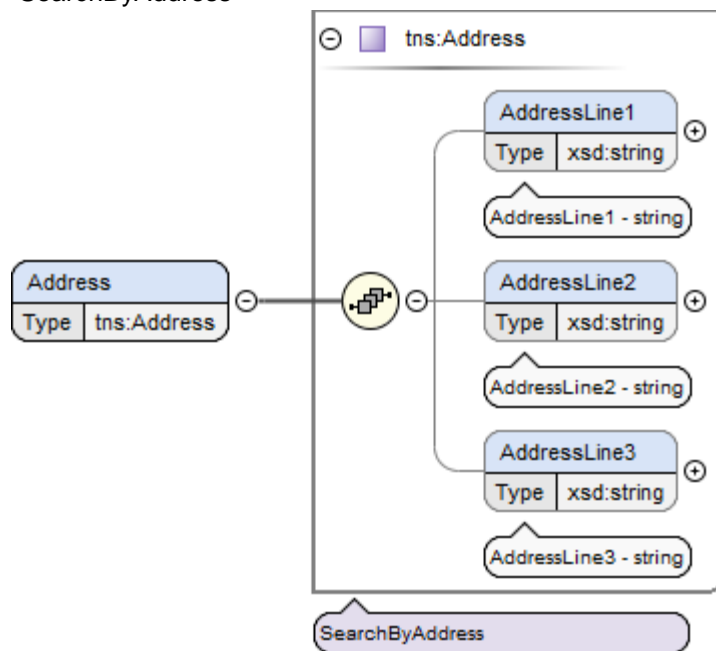
#### 2.4.1.1 Request Diagrams – GetLocationsByAddress Request



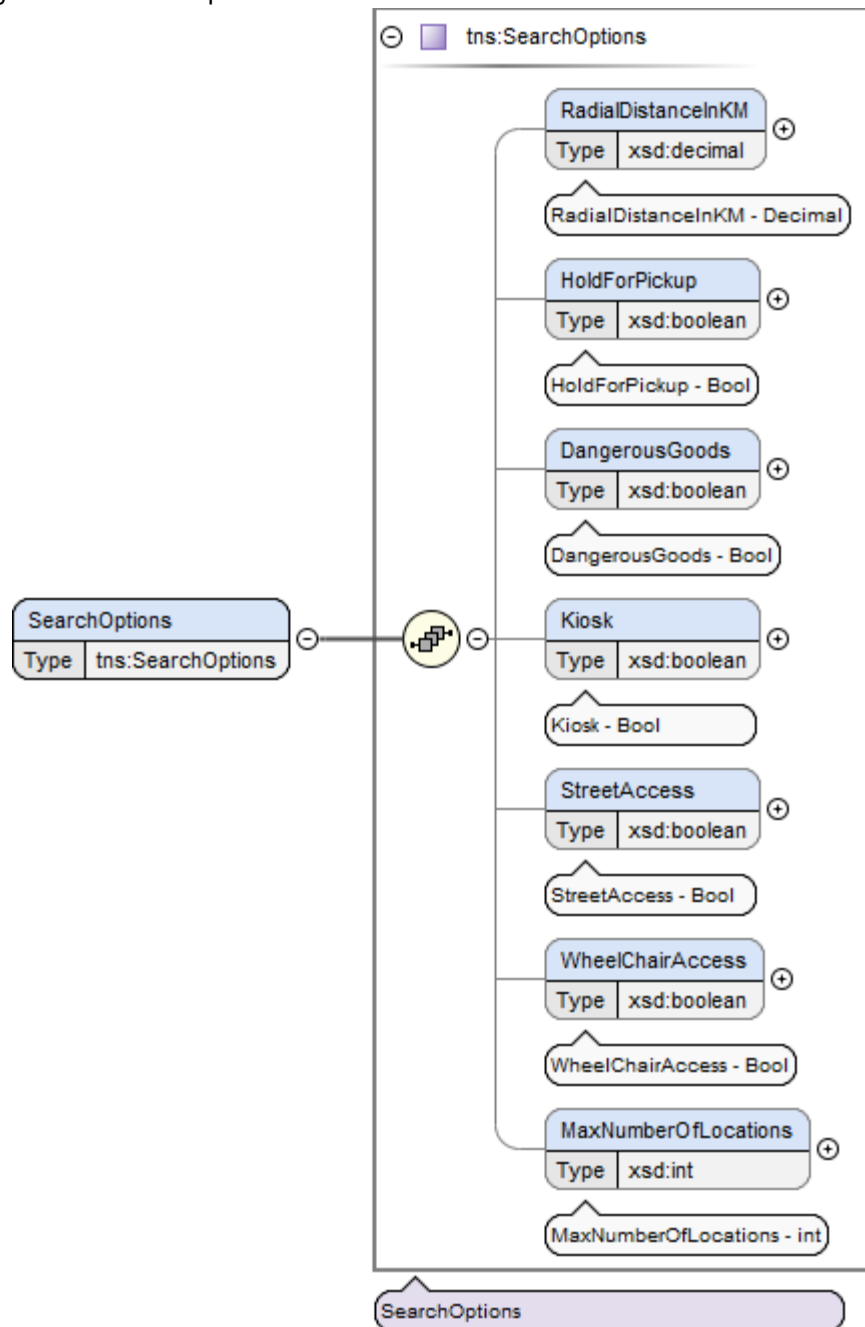
2.4.1.2 Request Diagrams – Request Context



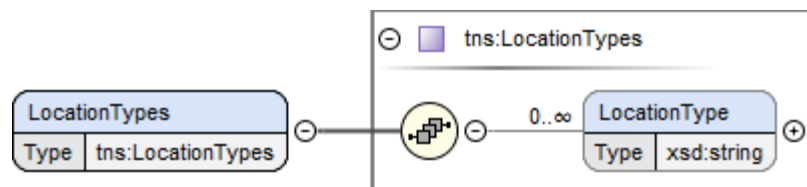
### 2.4.1.3 Request Diagrams – SearchByAddress



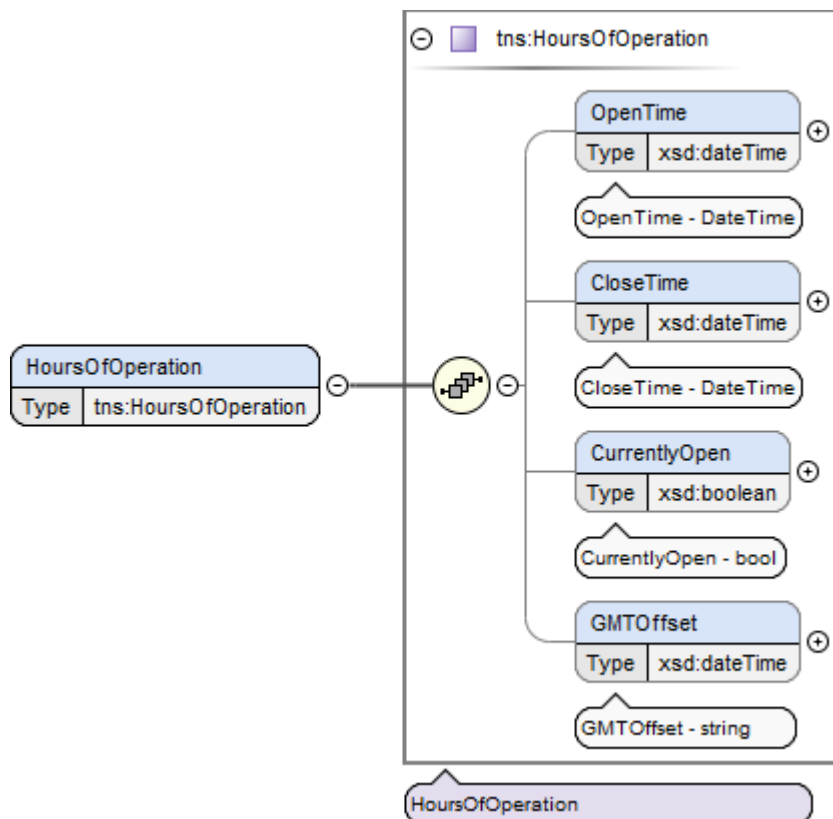
#### 2.4.1.4 Request Diagrams – Search Options



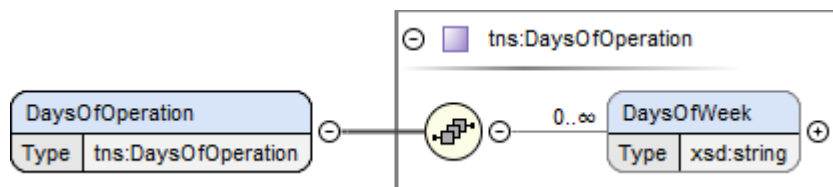
#### 2.4.1.5 Request Diagrams – LocationTypes



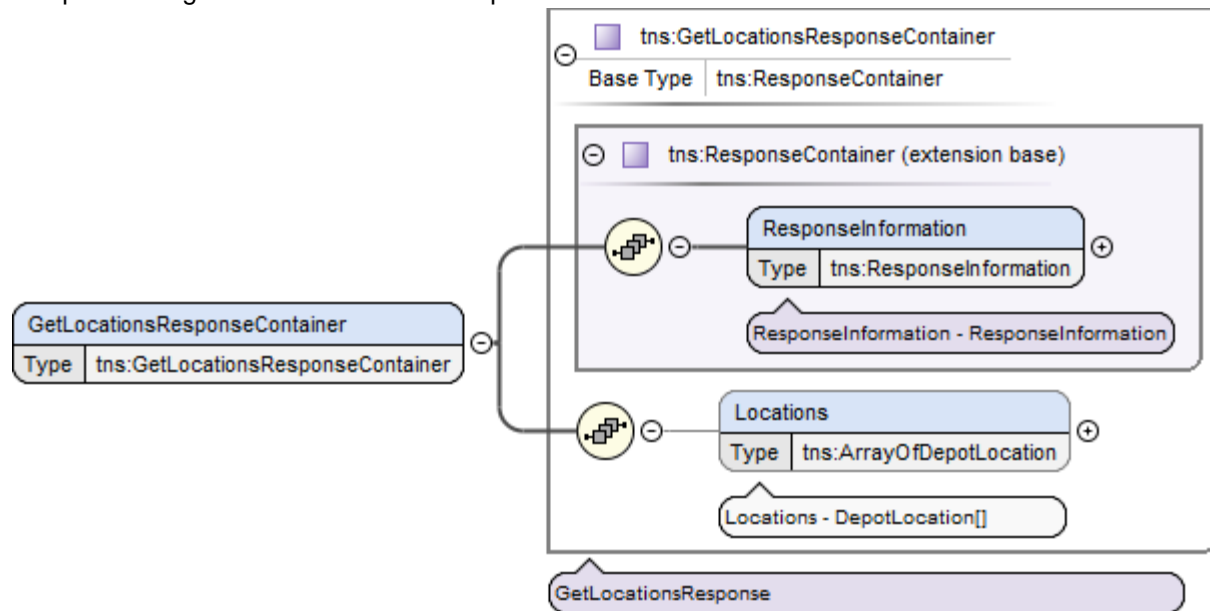
### 2.4.1.6 Request Diagrams – HoursOfOperation



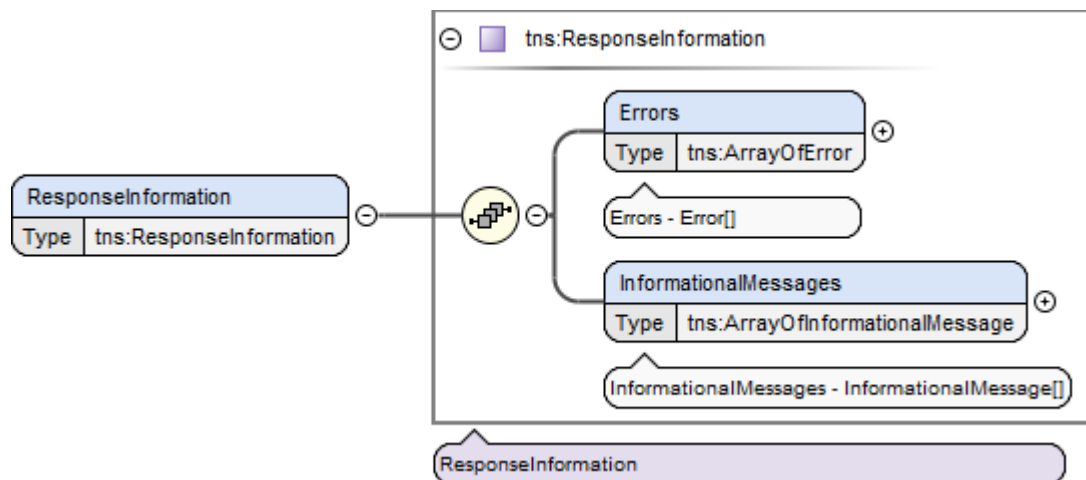
### 2.4.1.7 Request Diagrams – DaysOfOperation



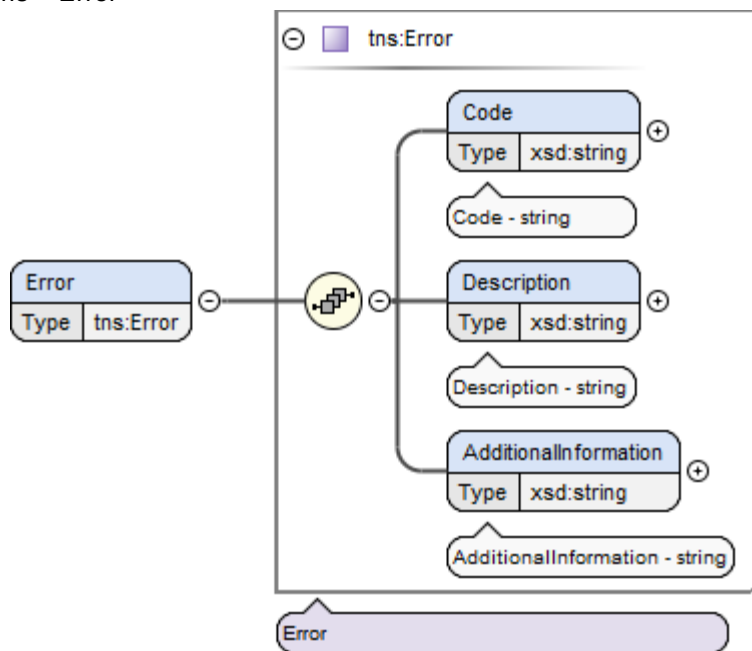
#### 2.4.1.8 Response Diagrams – GetLocationsResponse



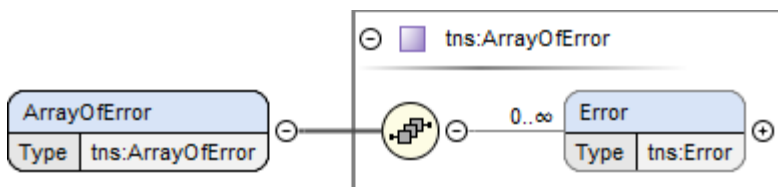
#### 2.4.1.9 Response Diagrams – Response Information



#### 2.4.1.10 Response Diagrams – Error

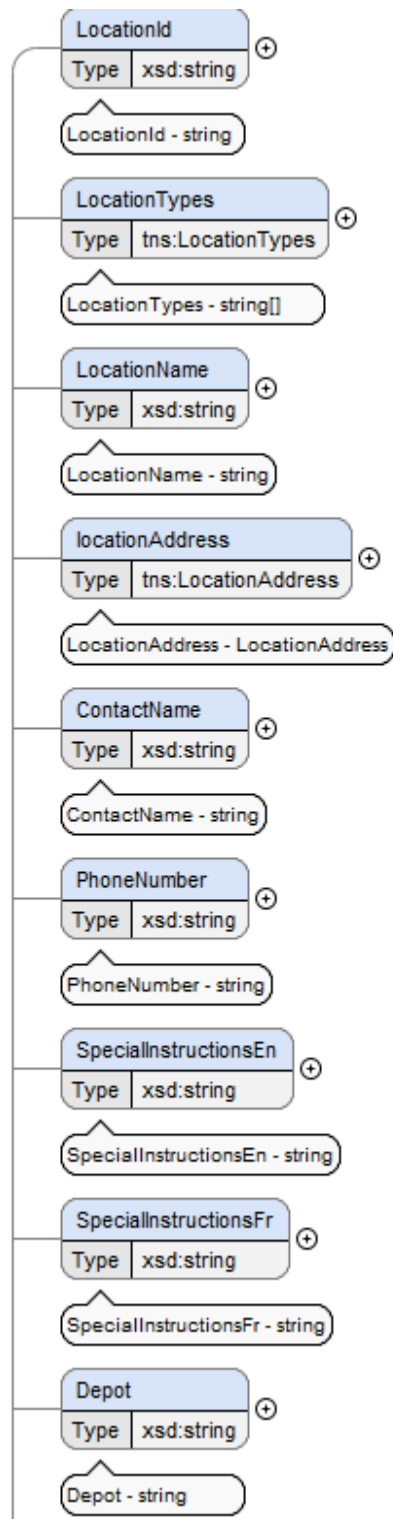


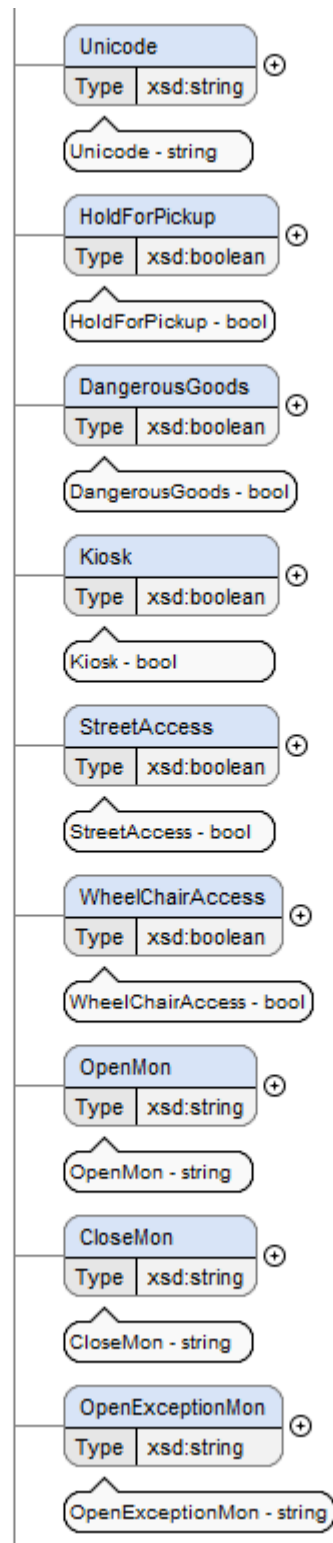
#### 2.4.1.11 Response Diagrams – ArrayOfError



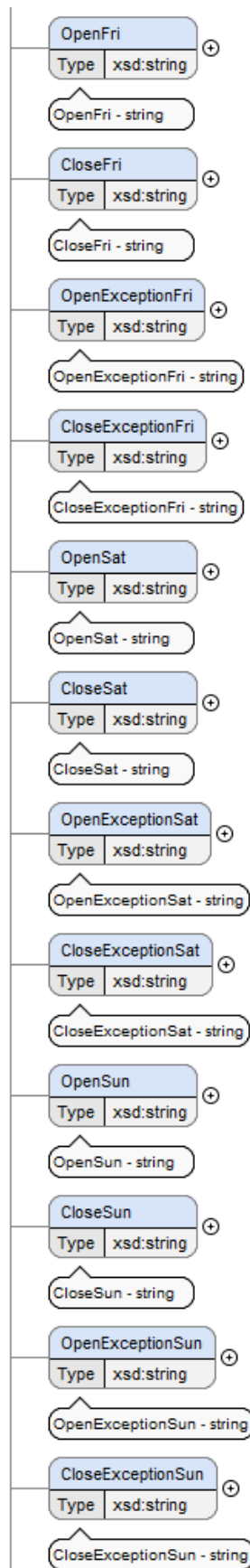


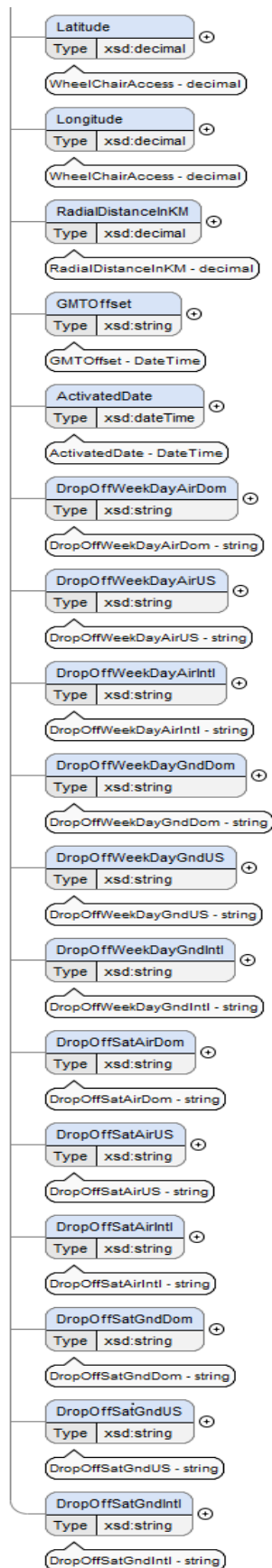
## 2.4.1.12 Response Diagrams – Depot Locations

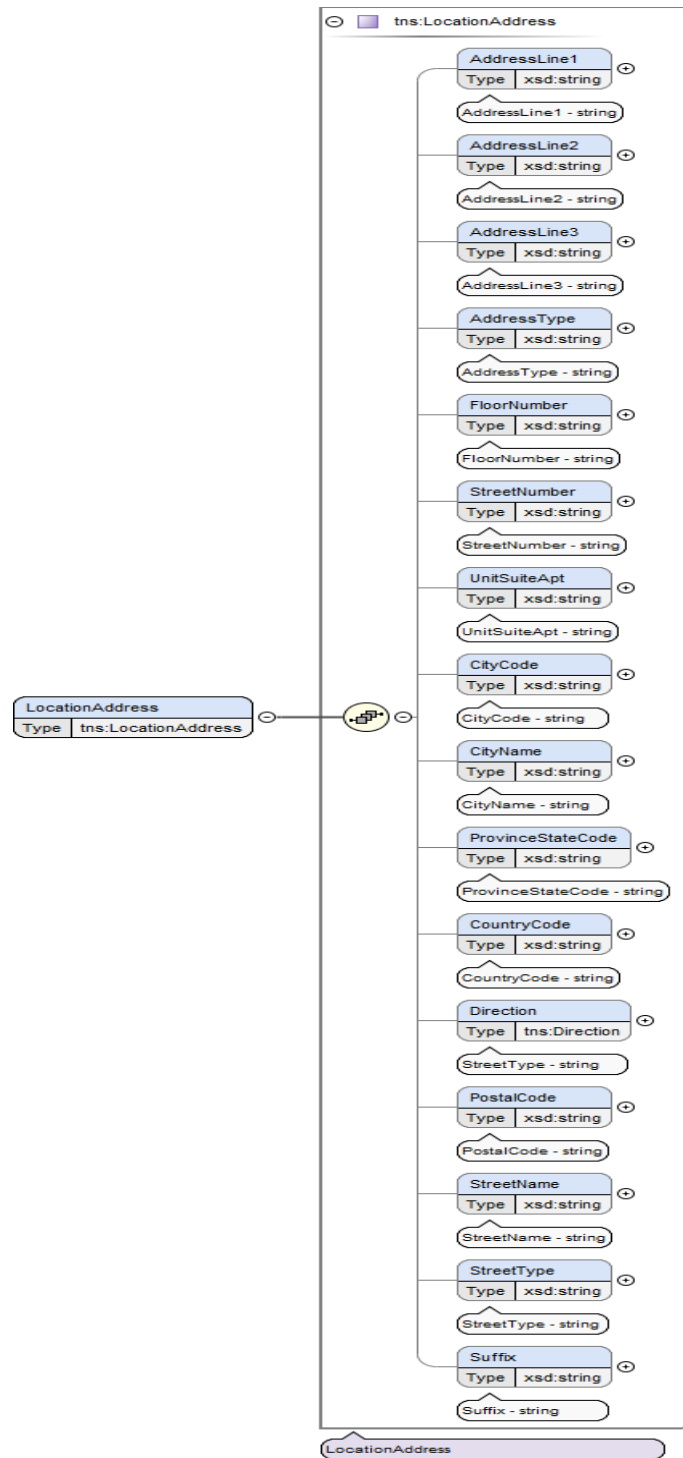








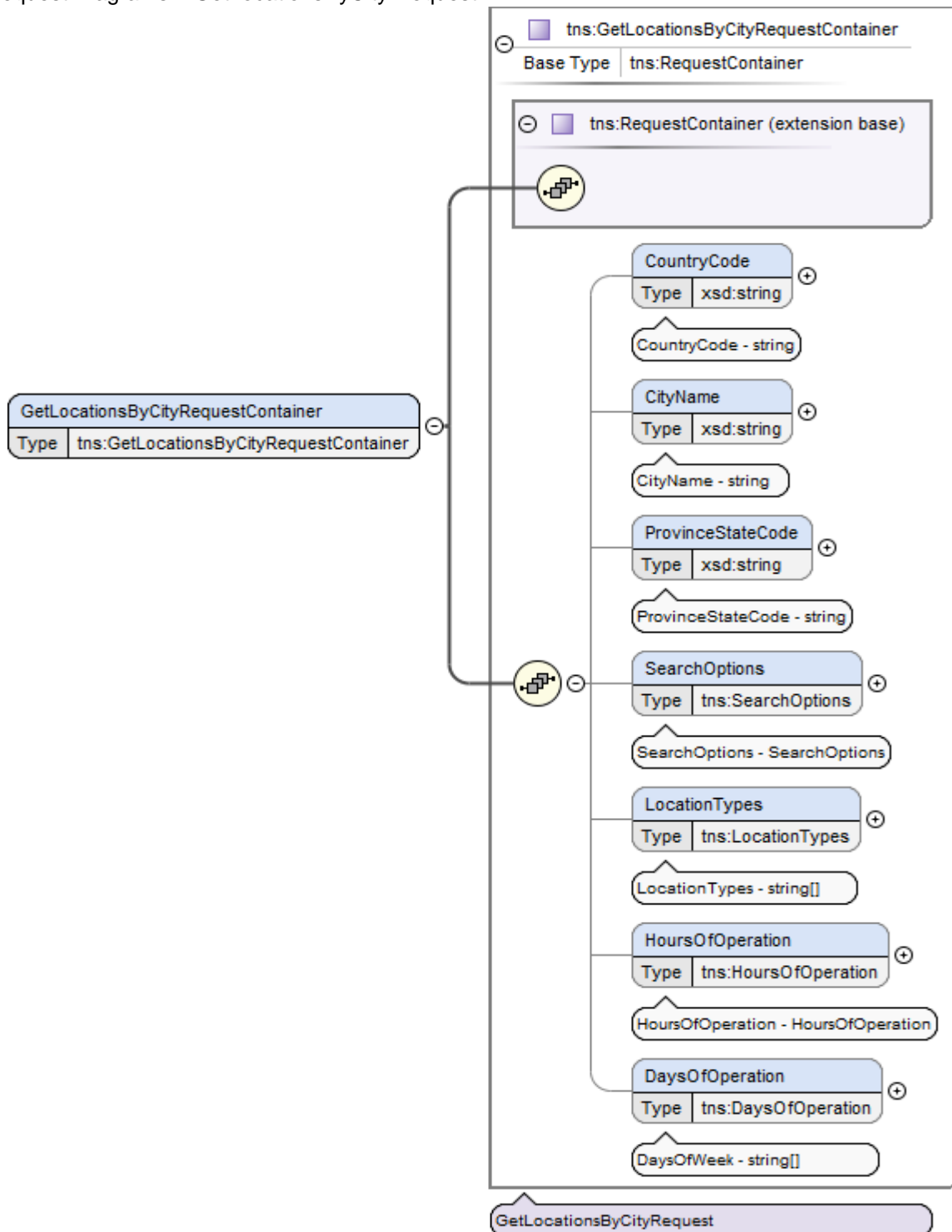




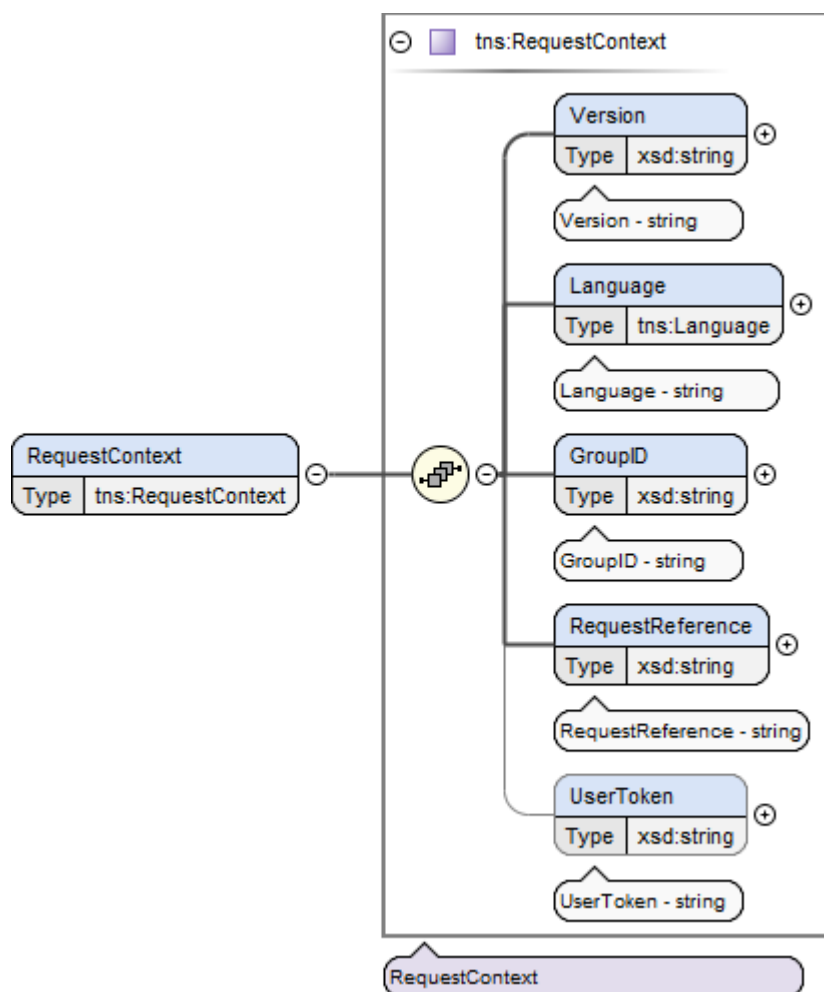
## 2.4.2 GetLocationsByCity

The GetLocationsByCity method is used to get the location of the shipments by providing the shipment City information using Purolator EShip Web Services. The diagrams below show the objects contained within the location request.

### 2.4.2.1 Request Diagrams – GetLocationsByCity Request

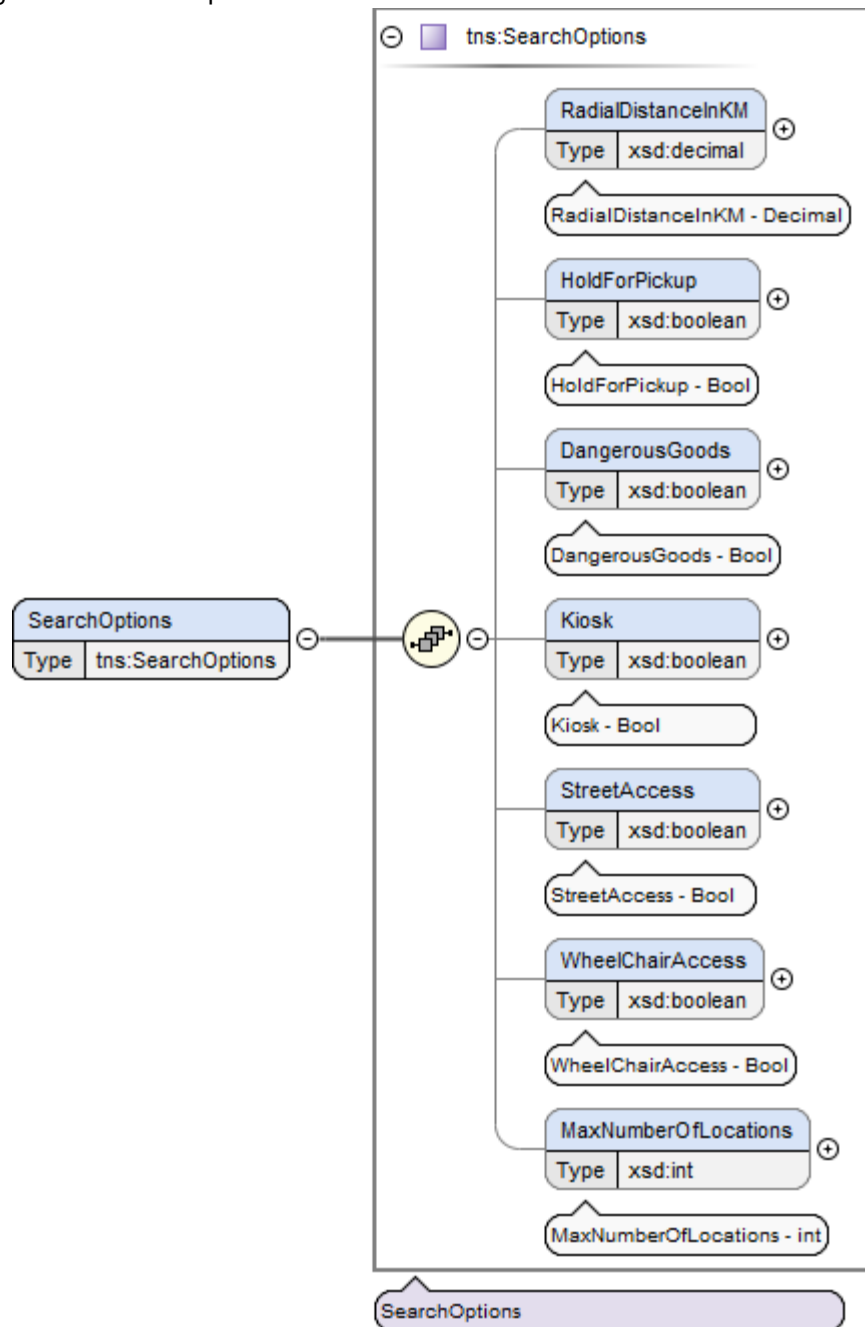


## 2.4.2.2 Request Diagrams – Request Context

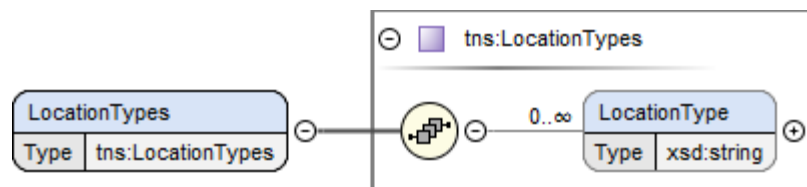




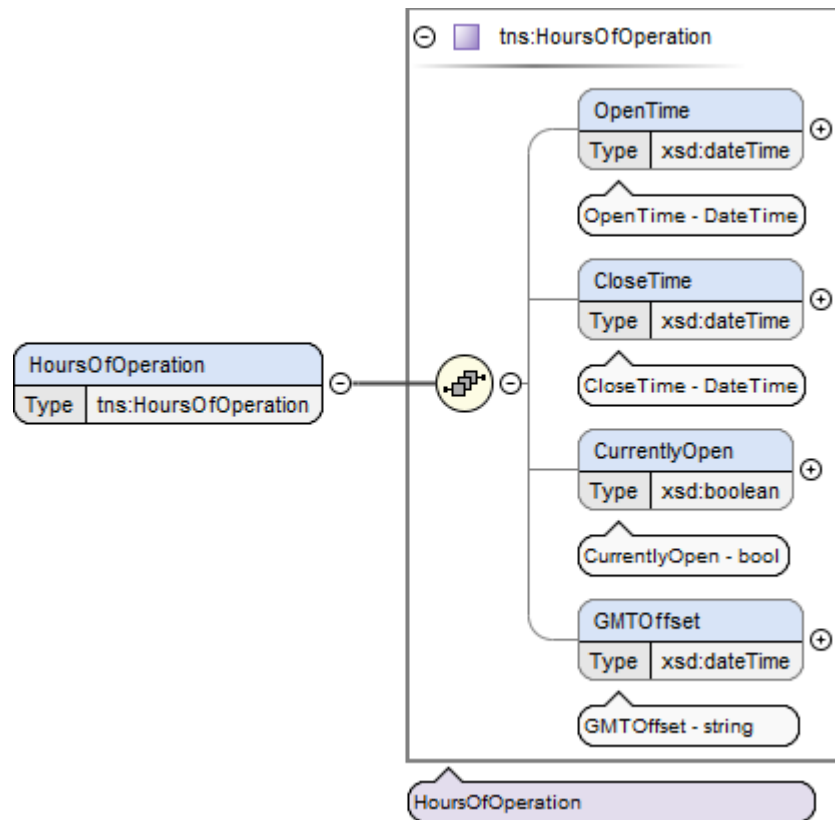
#### 2.4.2.3 Request Diagrams – Search Options



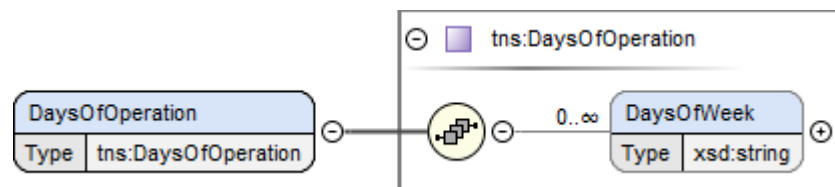
#### 2.4.2.4 Request Diagrams – LocationTypes



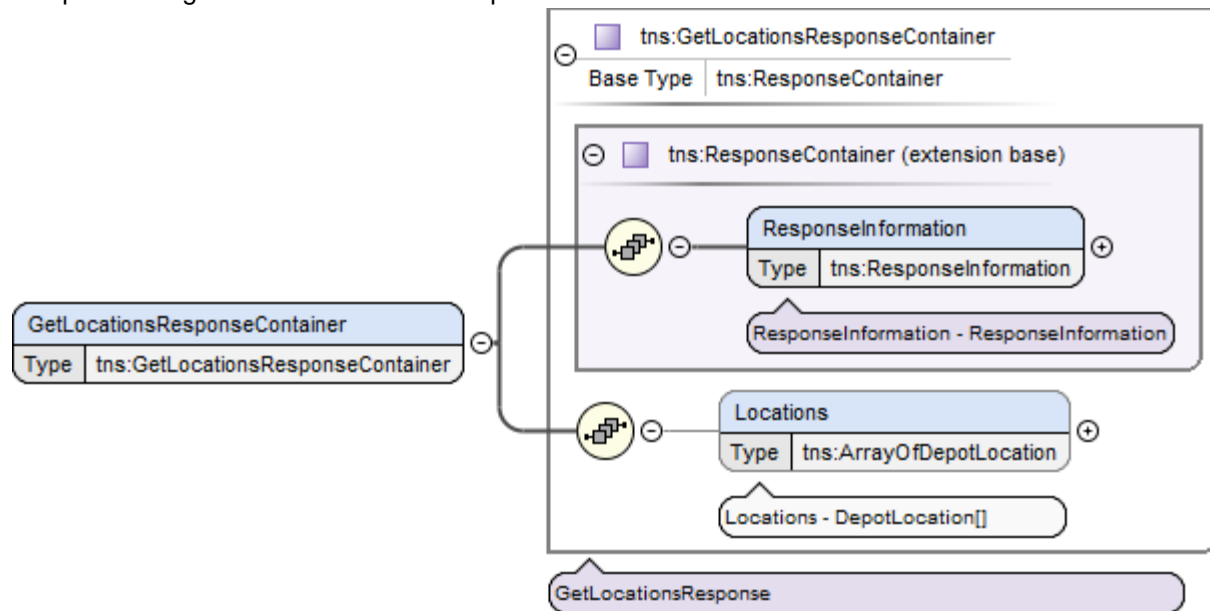
#### 2.4.2.5 Request Diagrams – HoursOfOperation



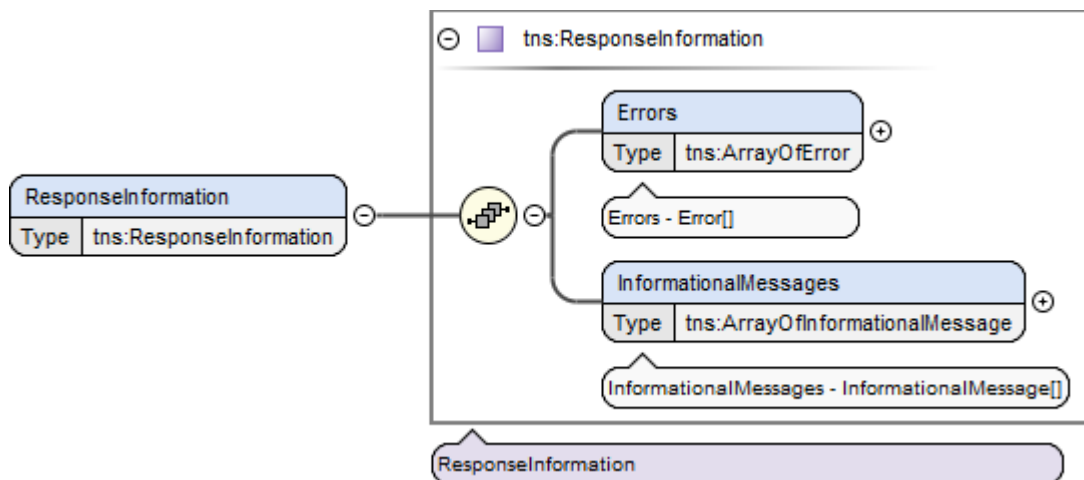
#### 2.4.2.6 Request Diagrams – DaysOfOperation



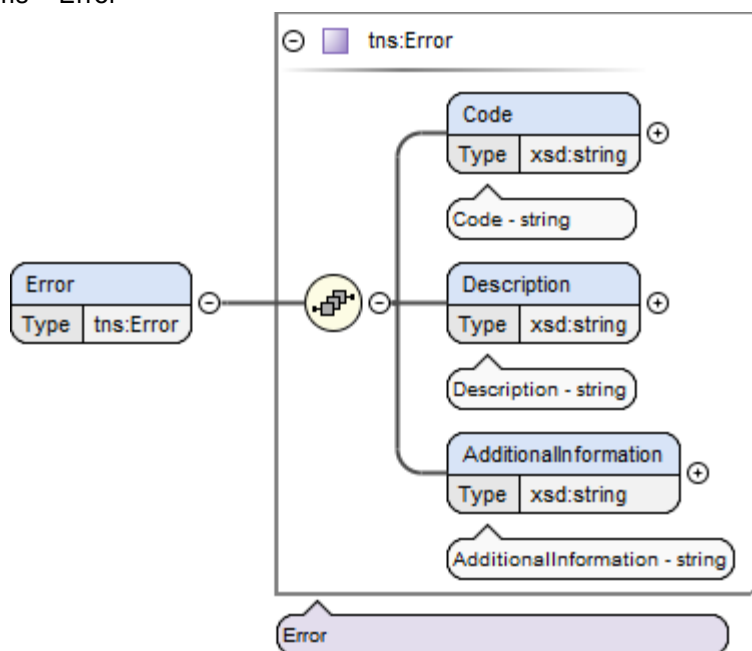
### 2.4.2.7 Response Diagrams – GetLocationsResponse



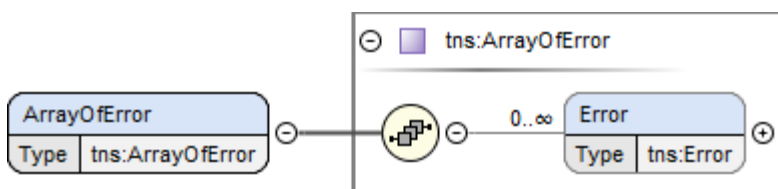
### 2.4.2.8 Response Diagrams – Response Information



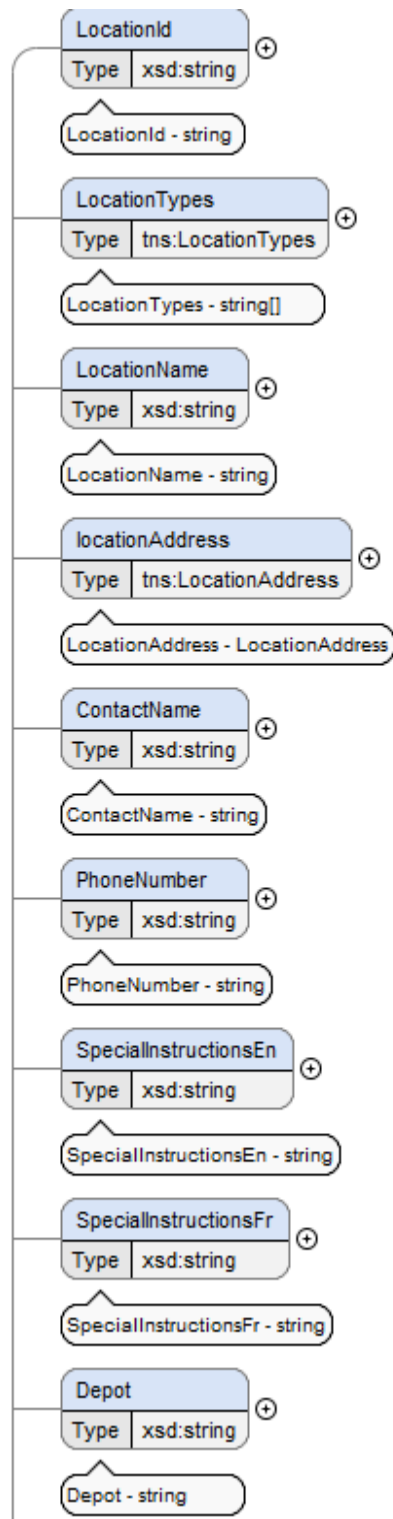
### 2.4.2.9 Response Diagrams – Error

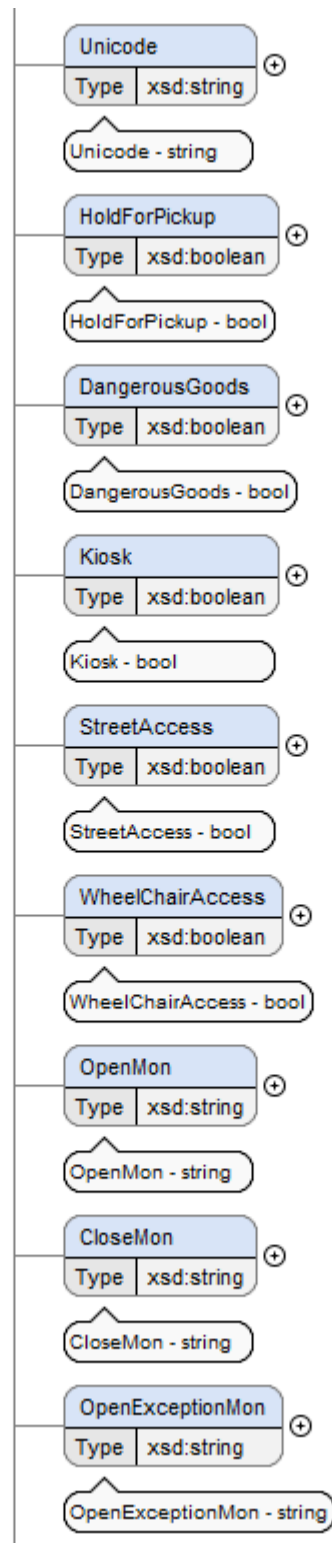


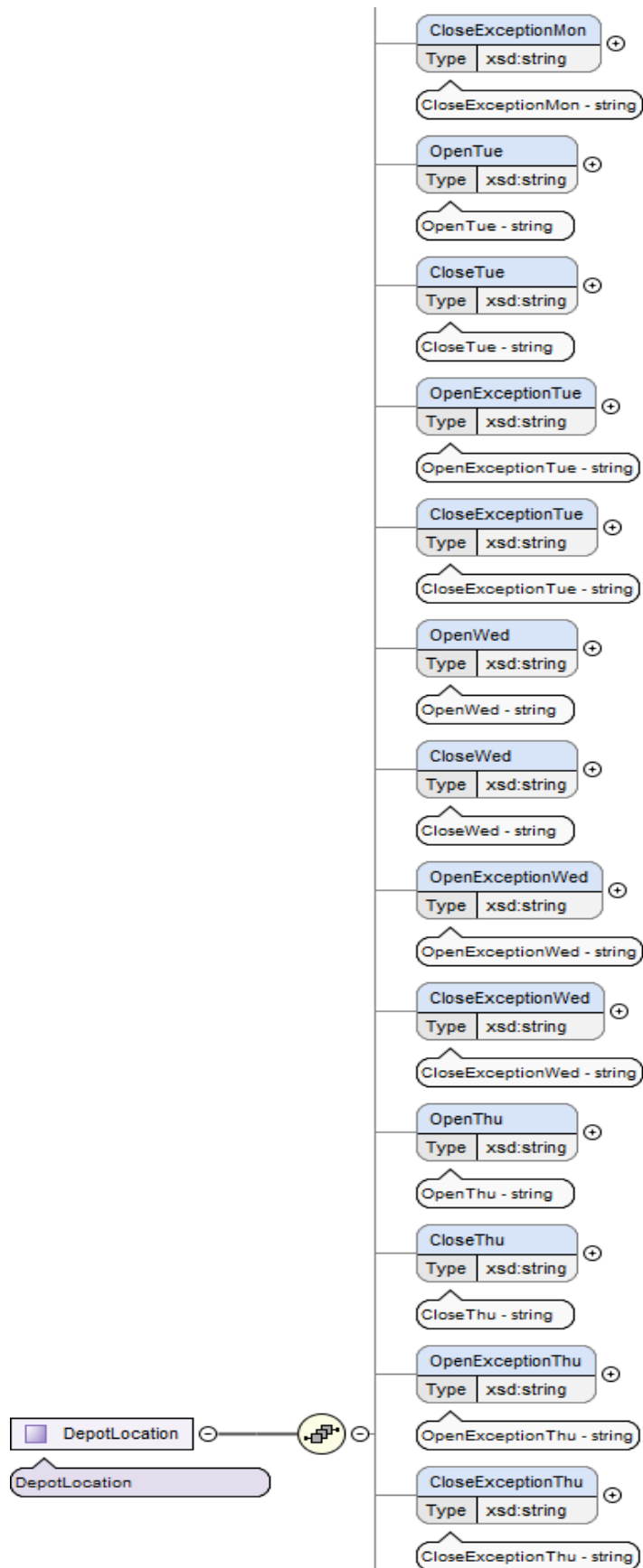
### 2.4.2.10 Response Diagrams – ArrayOfError

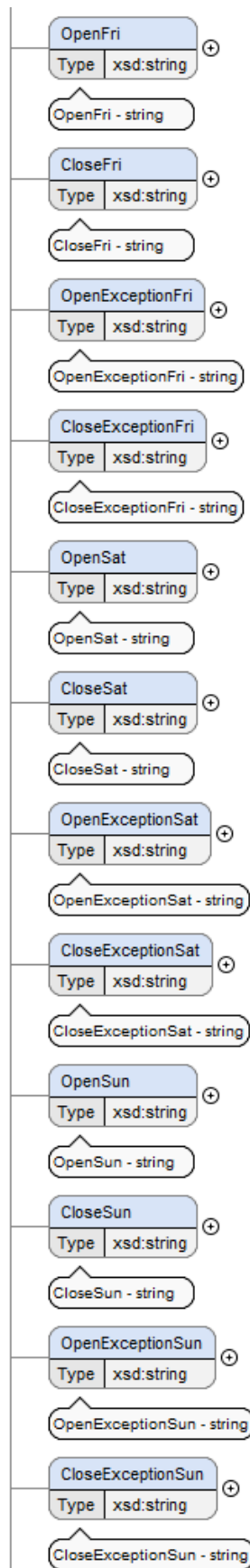


## 2.4.2.11 Response Diagrams – Depot Locations

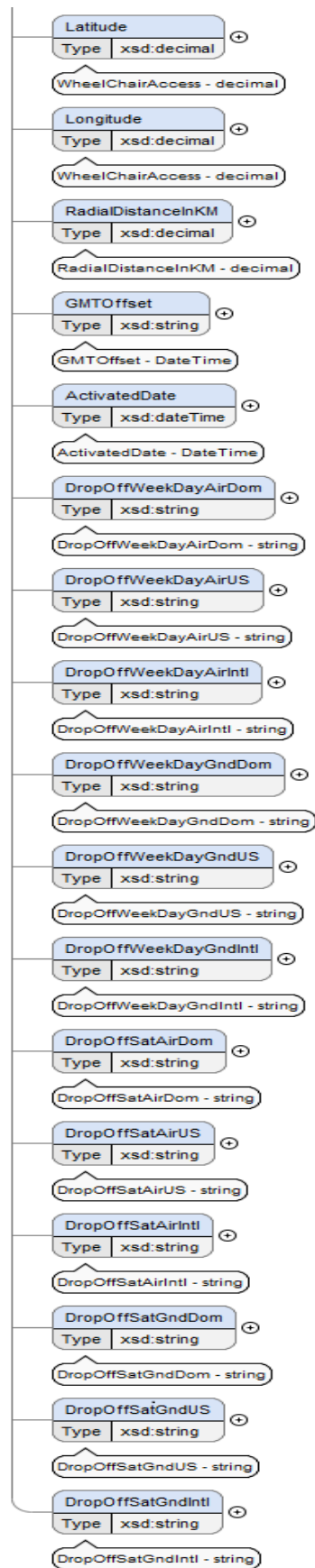




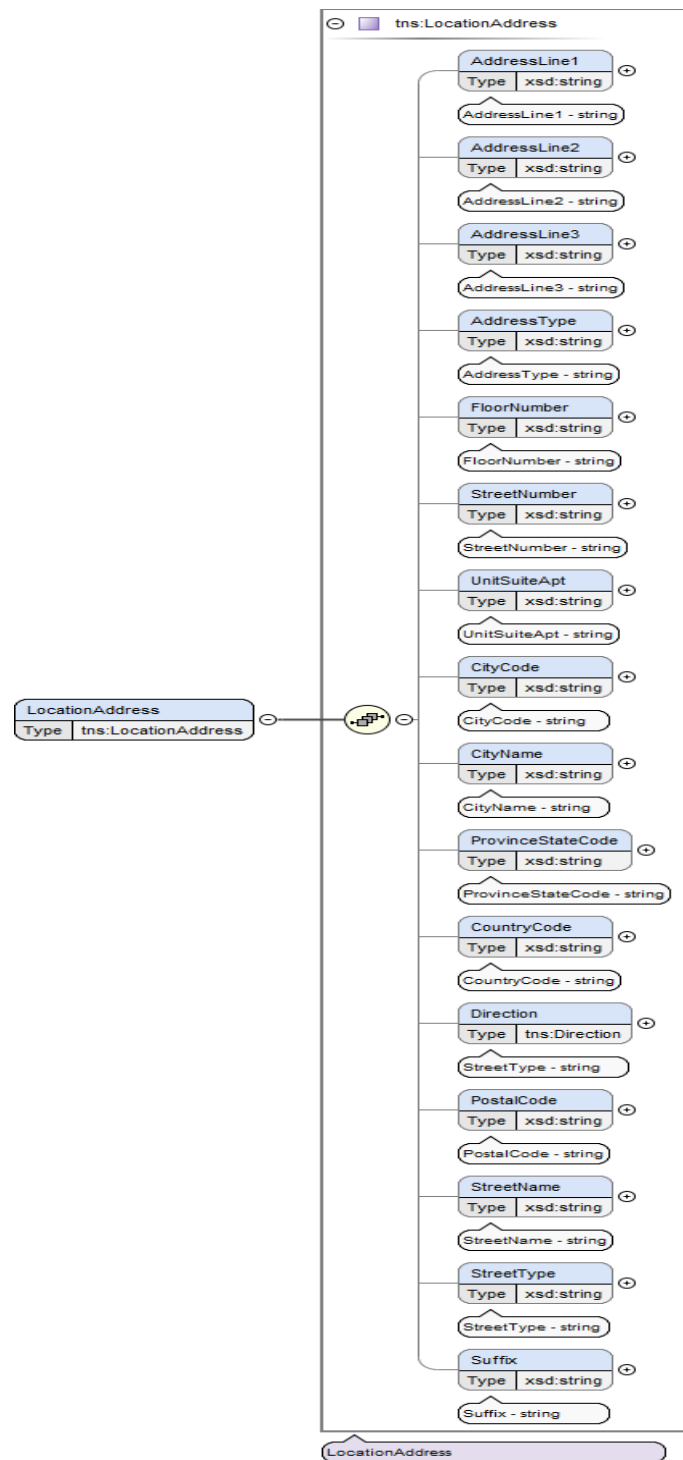








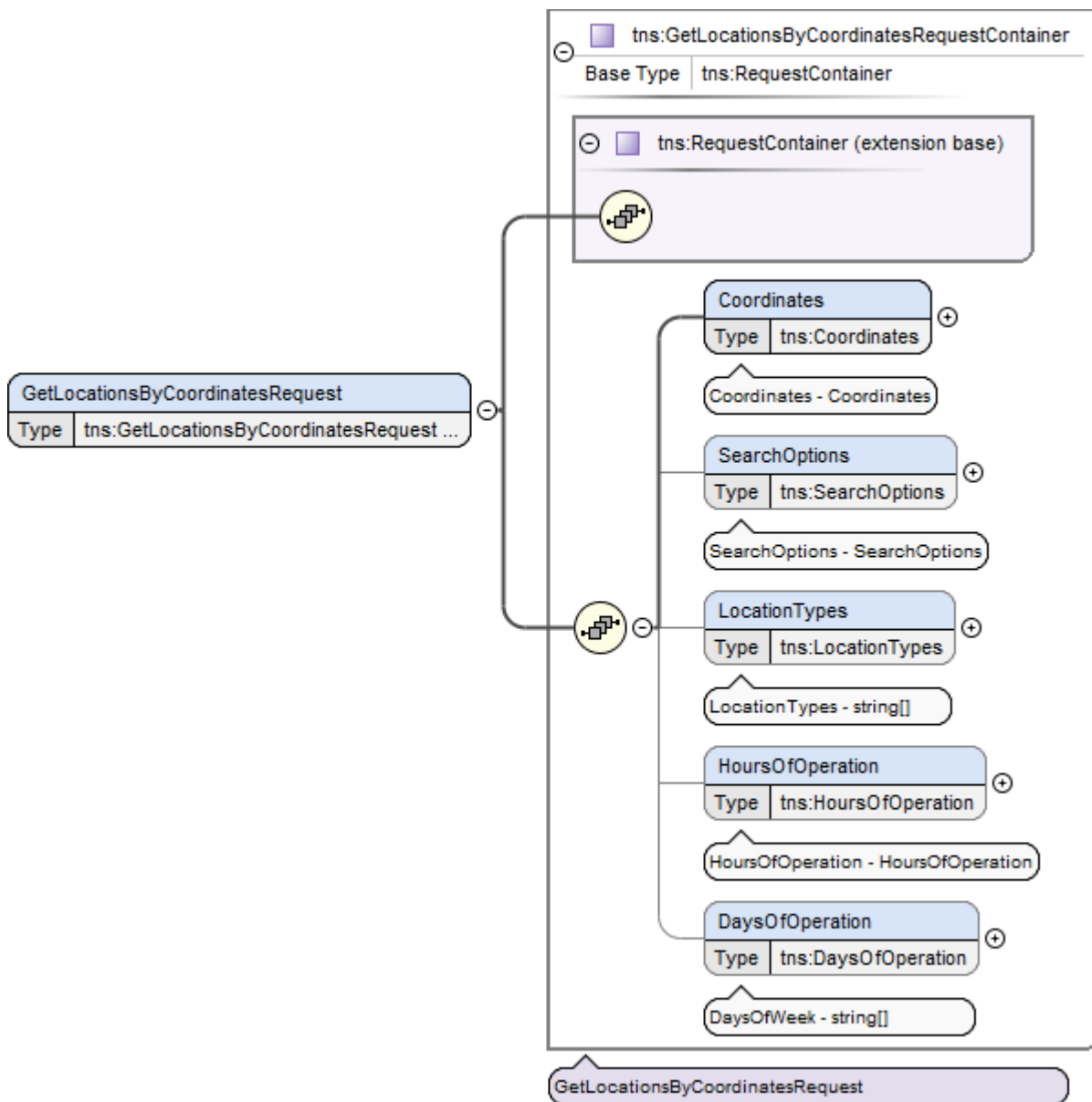
## 2.4.2.12 Response Diagrams – LocationAddress



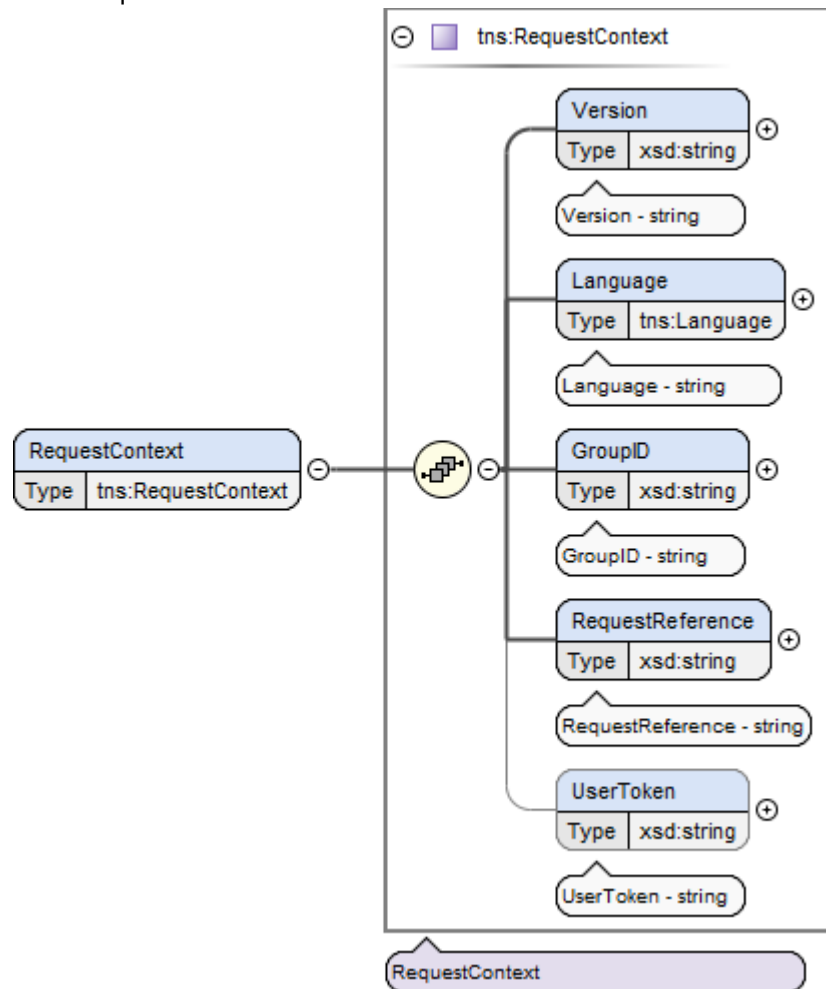
### 2.4.3 GetLocationsByCoordinates

The GetLocationsByCoordinates method is used to get the location of the shipments by providing the shipment coordinates information using Purolator EShip Web Services. The diagrams below show the objects contained within the location request.

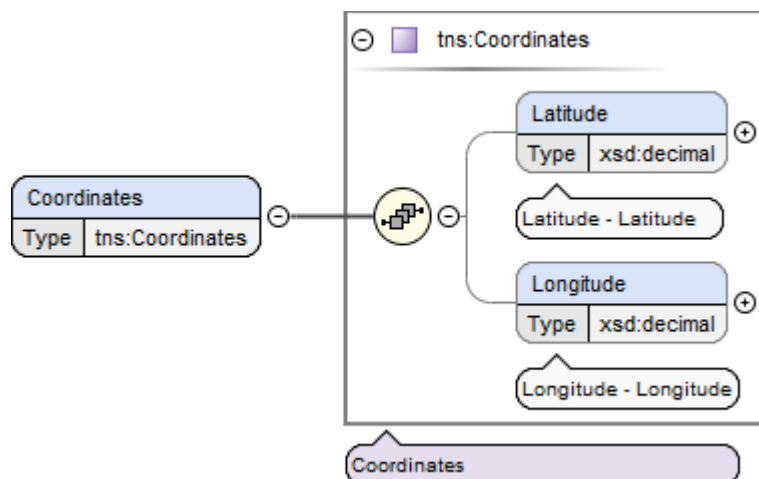
#### 2.4.3.1 Request Diagrams – GetLocationsByCoordinates Request



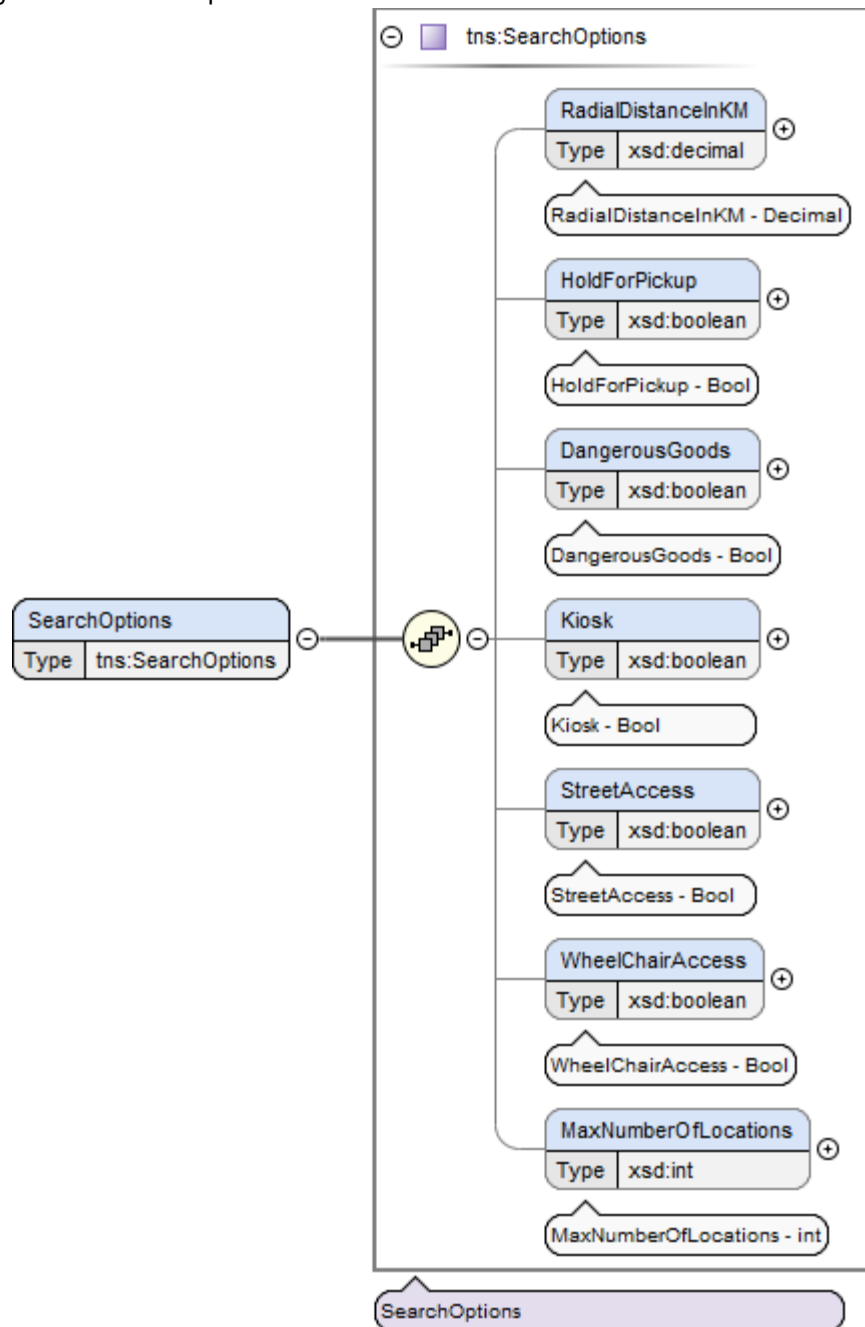
### 2.4.3.2 Request Diagrams – Request Context



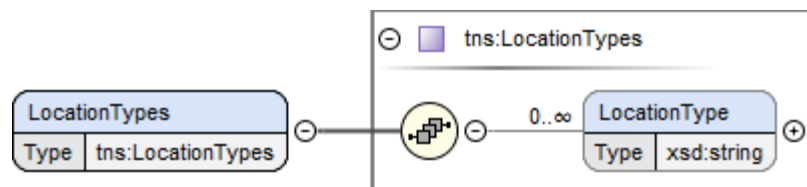
### 2.4.3.3 Request Diagrams – Coordinates



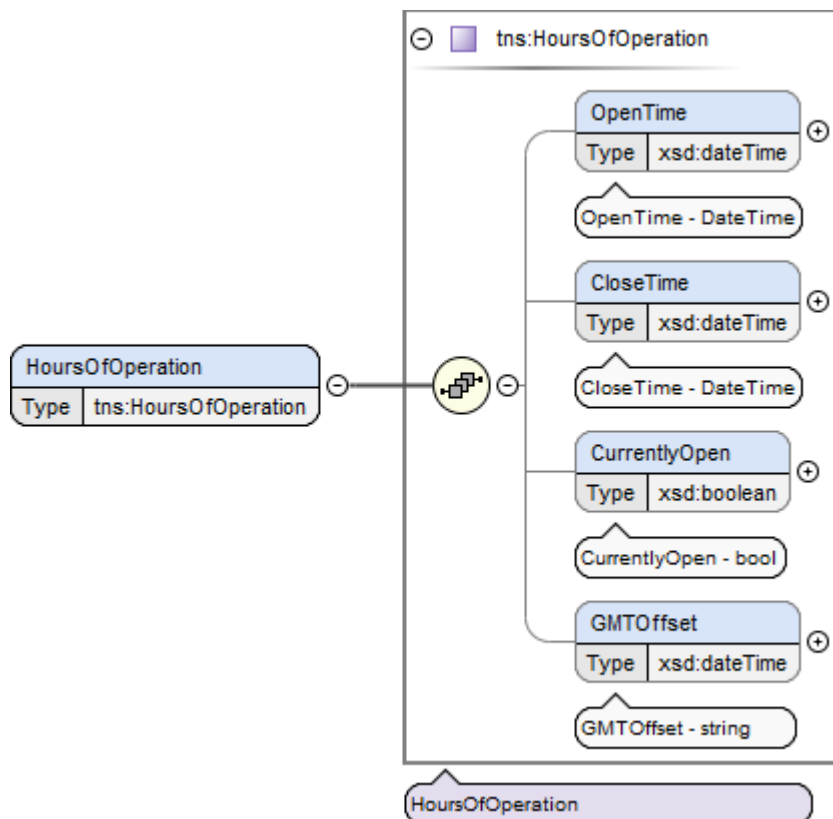
#### 2.4.3.4 Request Diagrams – Search Options



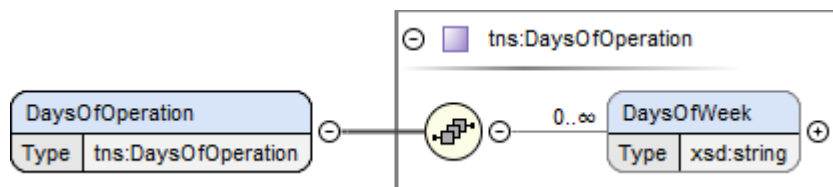
#### 2.4.3.5 Request Diagrams – LocationTypes



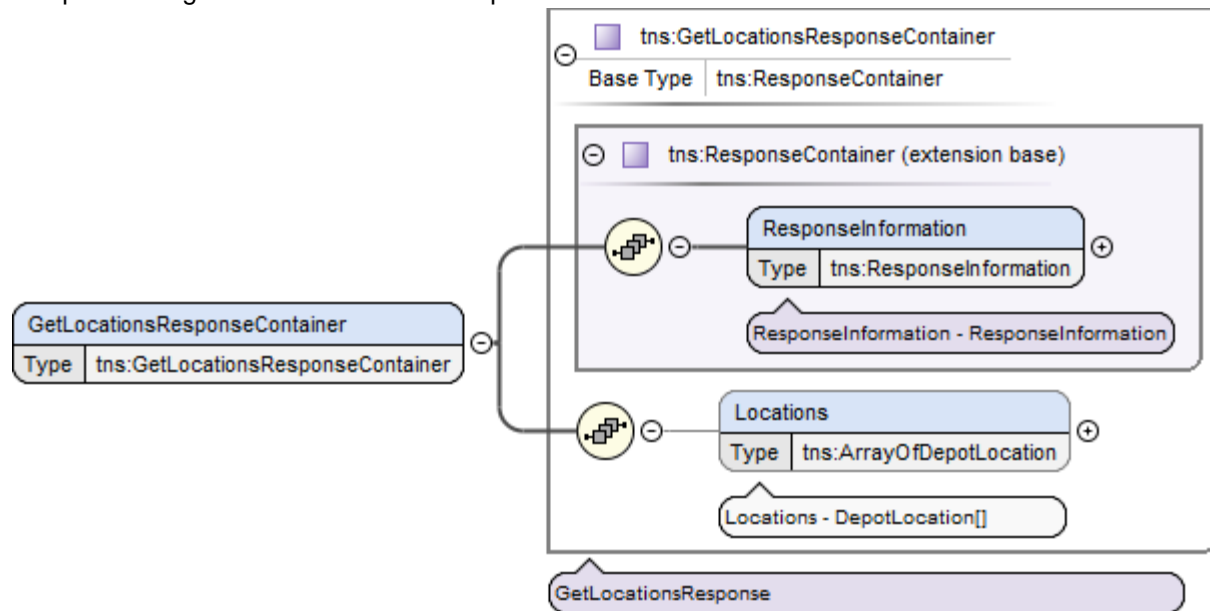
### 2.4.3.6 Request Diagrams – HoursOfOperation



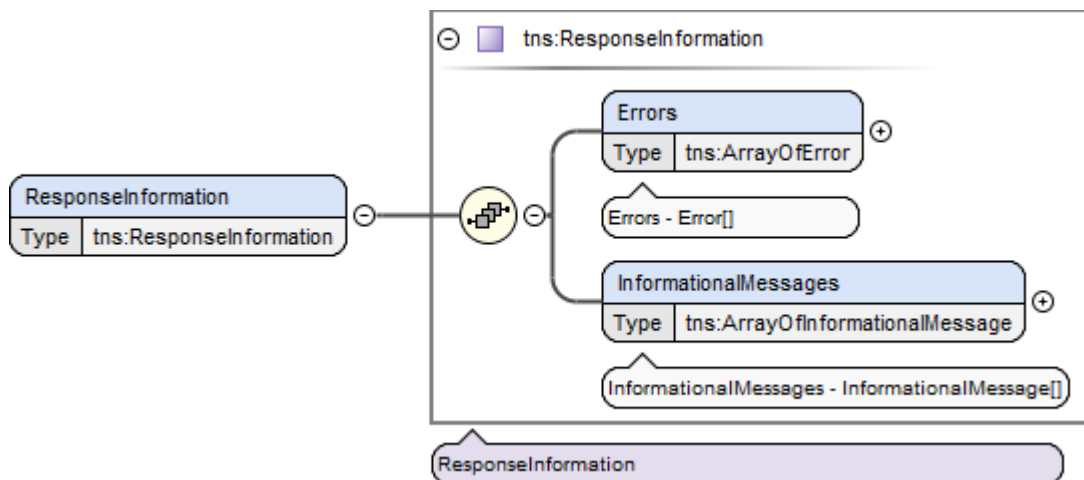
### 2.4.3.7 Request Diagrams – DaysOfOperation



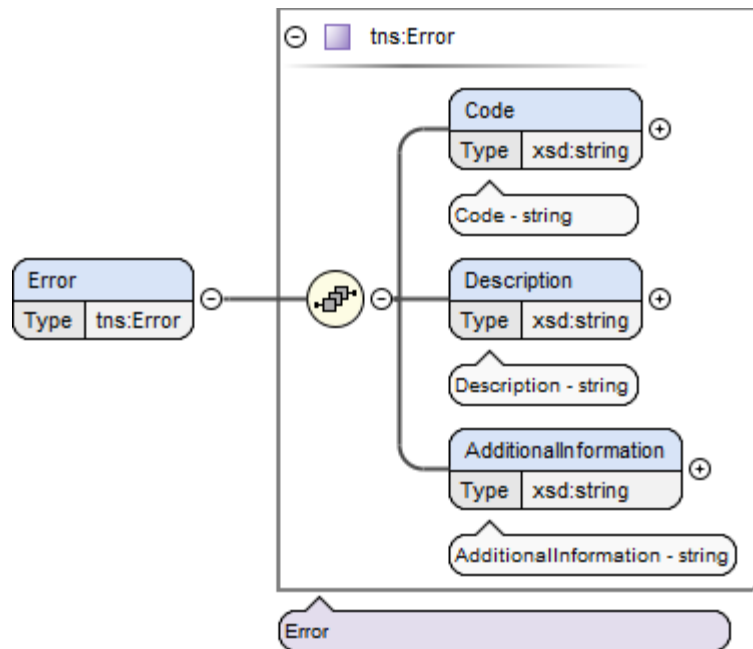
### 2.4.3.8 Response Diagrams – GetLocationsResponse



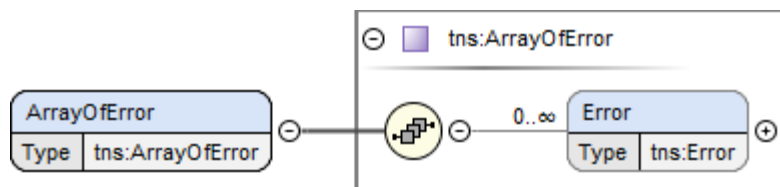
### 2.4.3.9 Response Diagrams – Response Information



### 2.4.3.10 Response Diagrams – Error

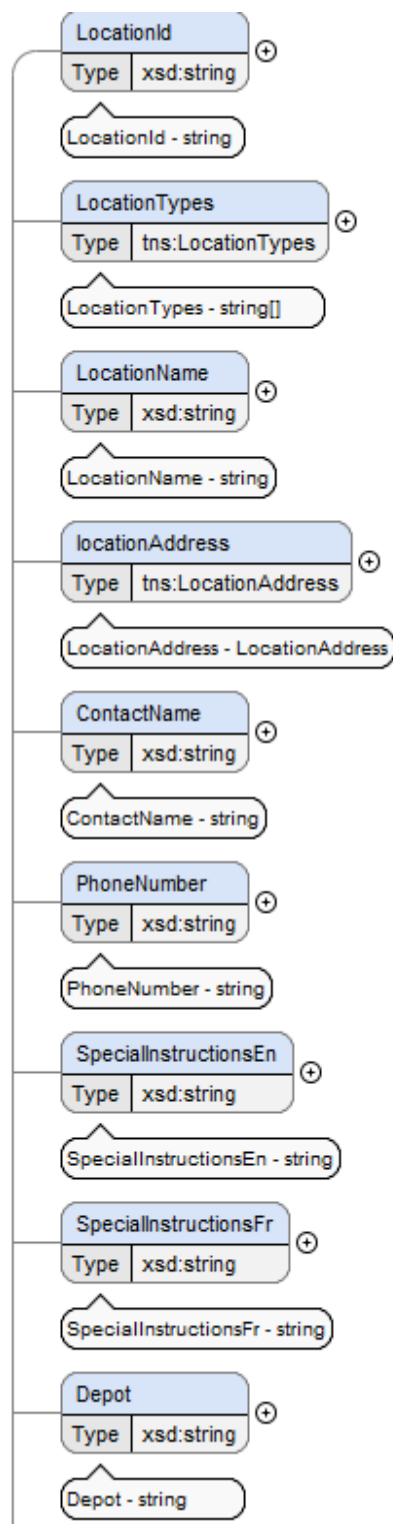


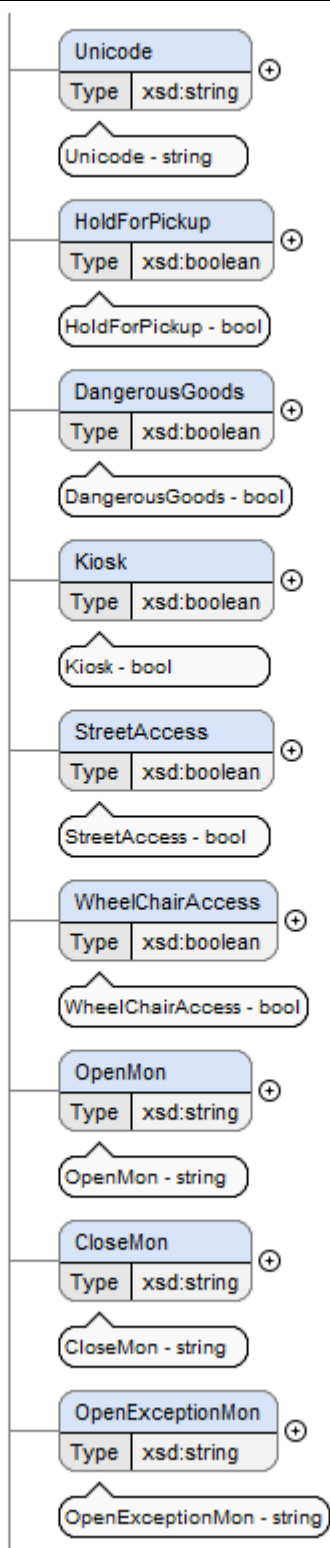
### 2.4.3.11 Response Diagrams – ArrayOfError



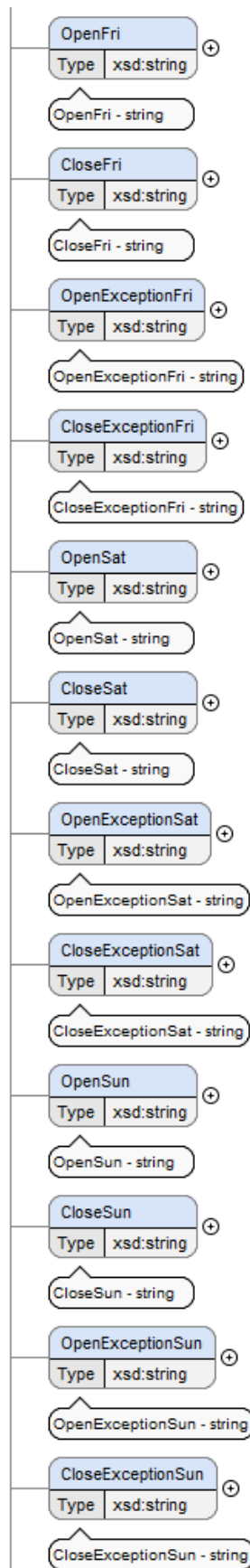


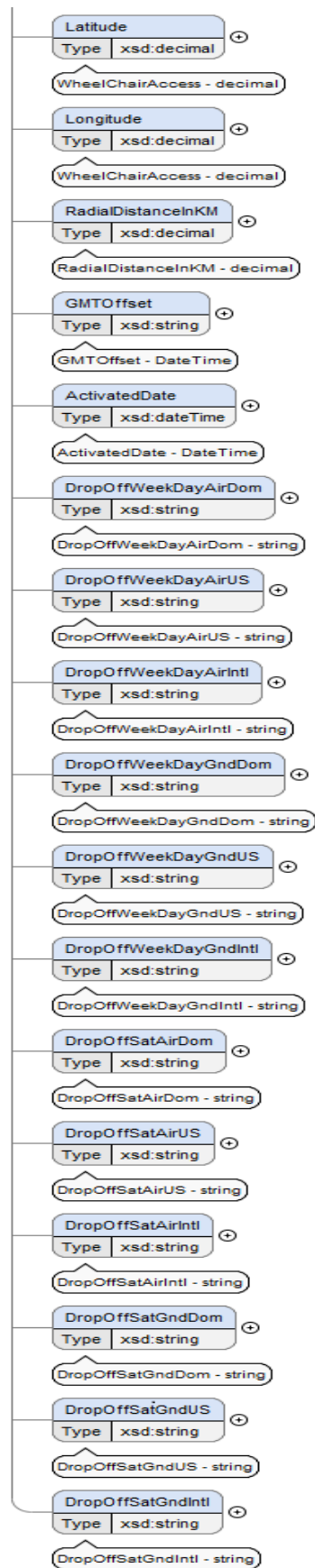
## 2.4.3.12 Response Diagrams – Depot Locations

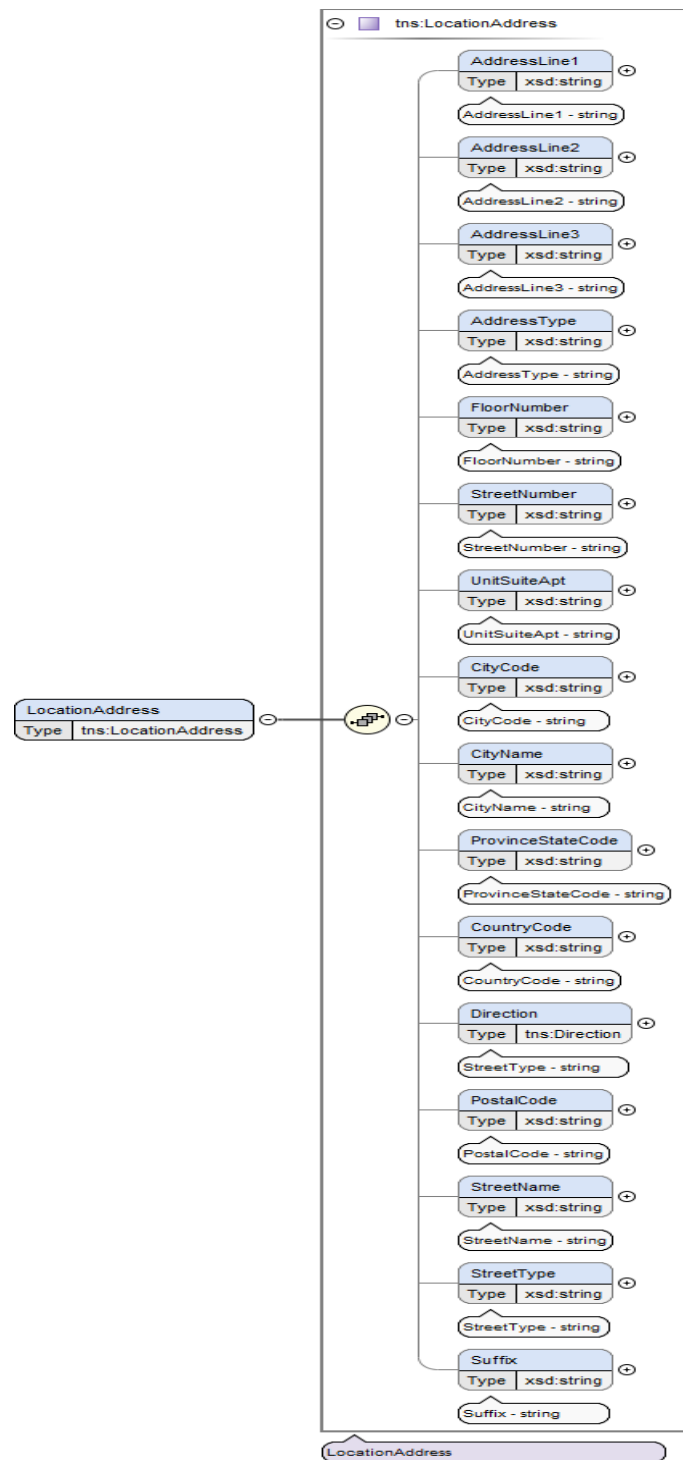








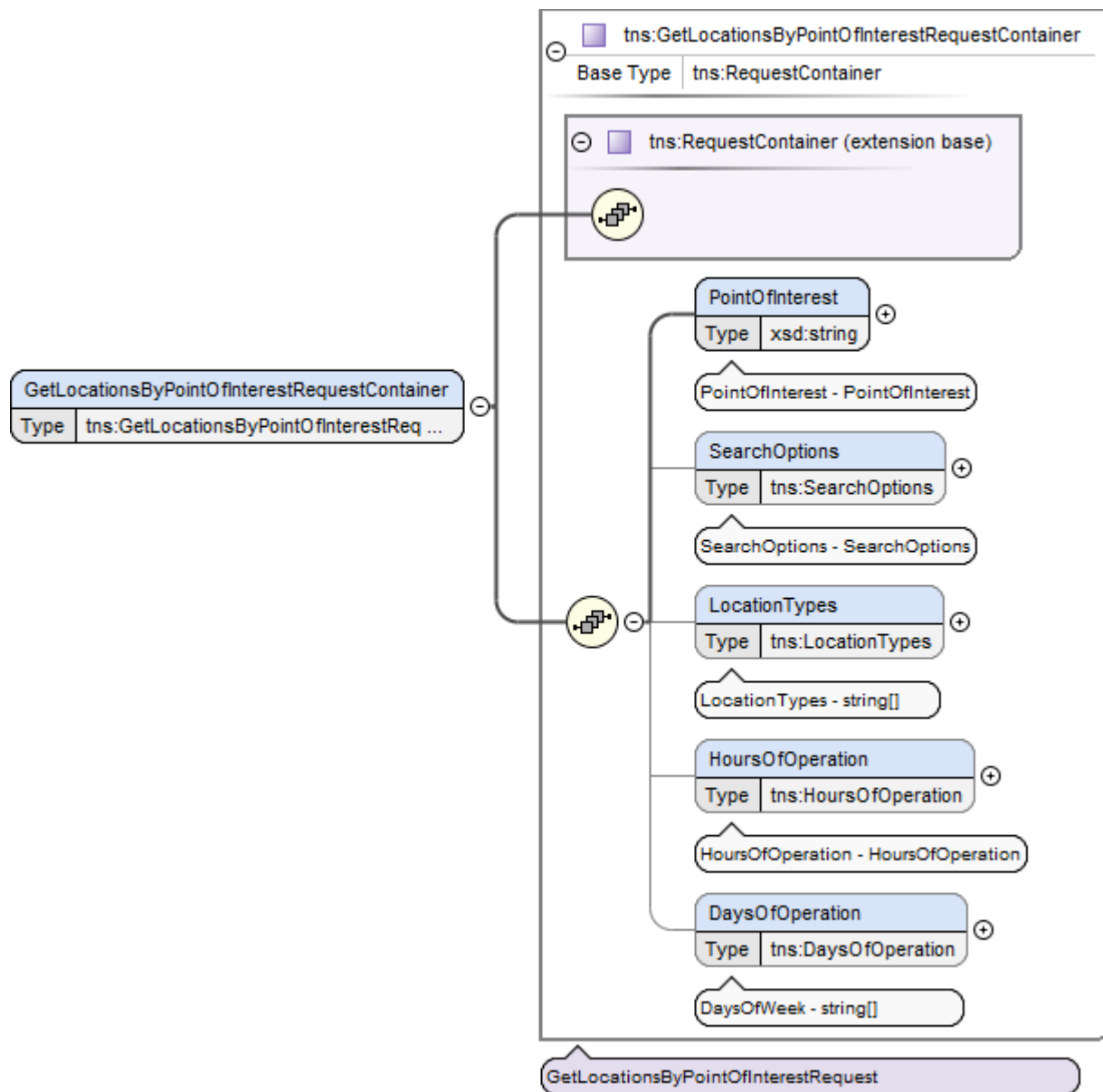




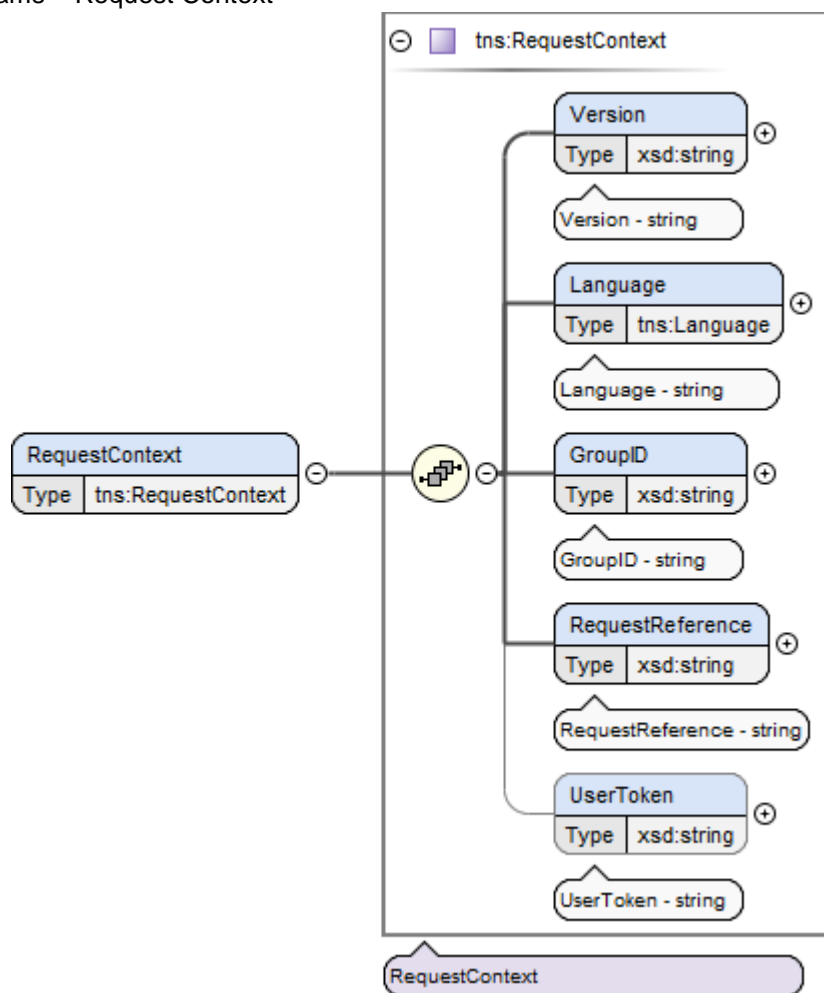
## 2.4.4 GetLocationsByPointOfInterest

The GetLocationsByPointOfInterest method is used to get the location of the shipments by providing the shipment Point of Interest using Purolator EShip Web Services. The diagrams below show the objects contained within the location request.

### 2.4.4.1 Request Diagrams – GetLocationsByPointOfInterest Request

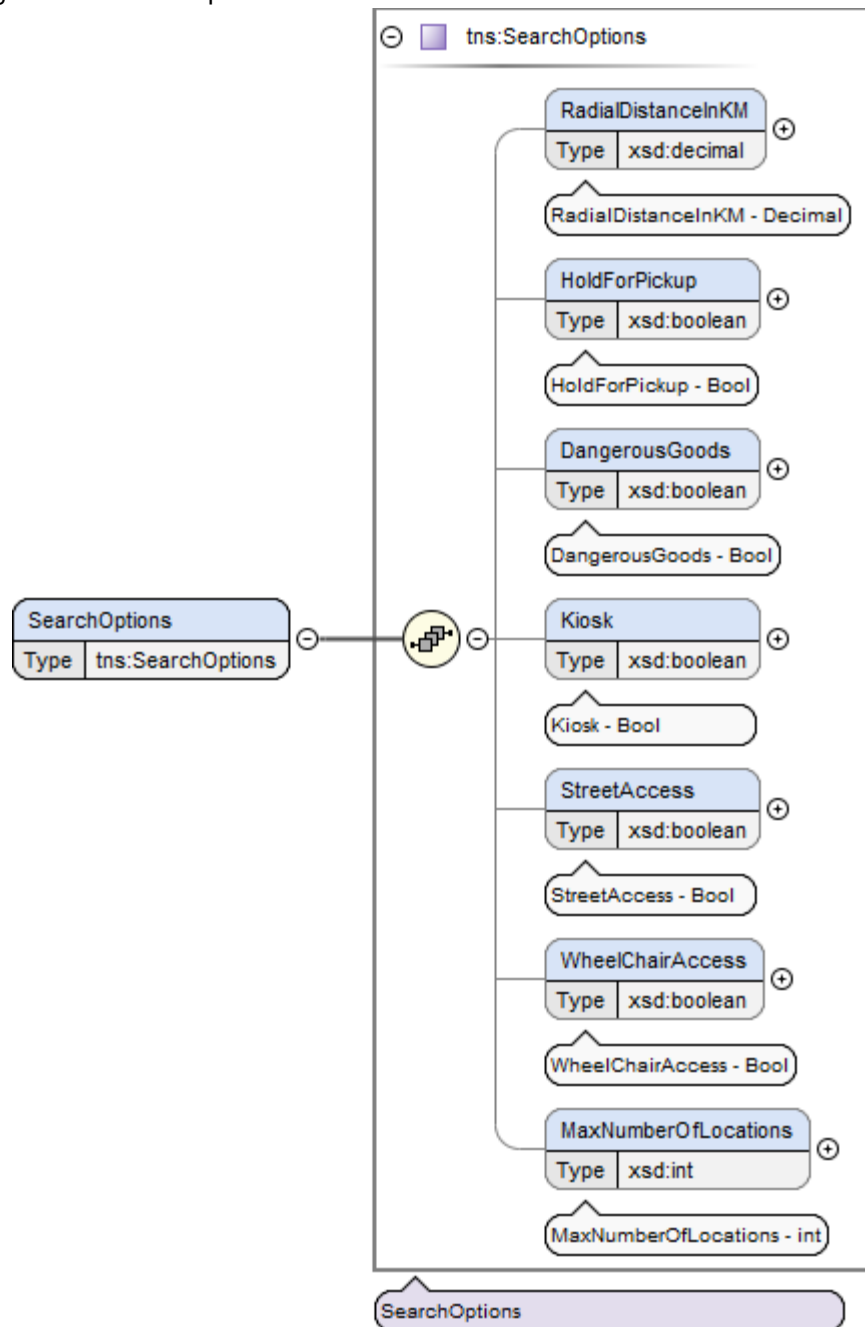


## 2.4.4.2 Request Diagrams – Request Context

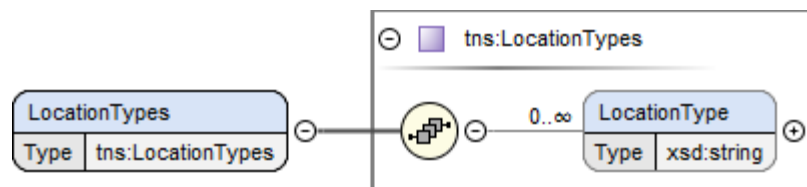




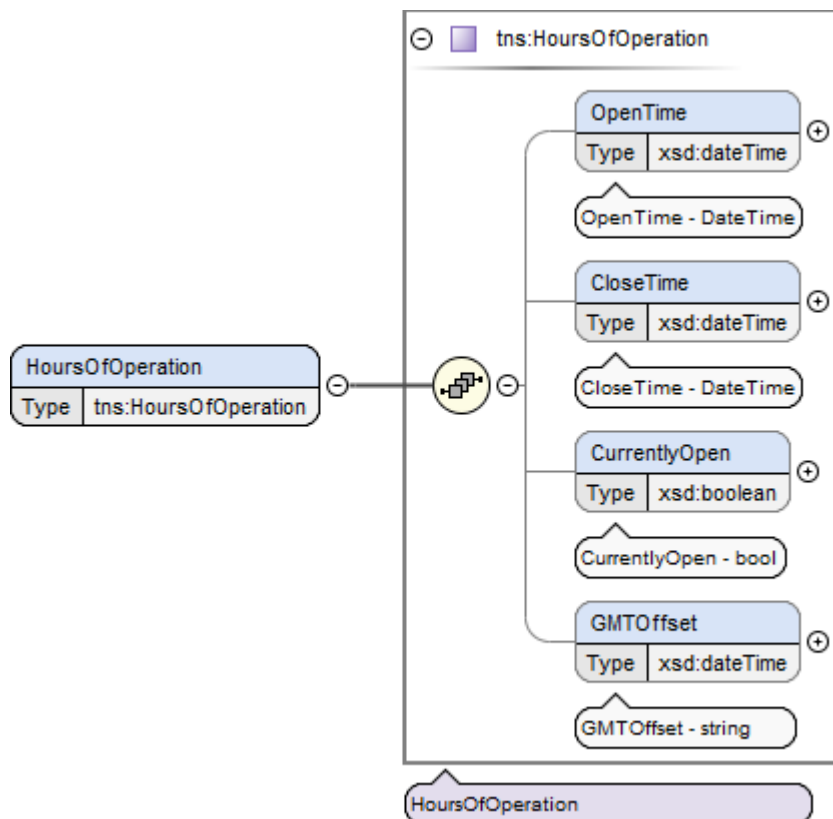
### 2.4.4.3 Request Diagrams – Search Options



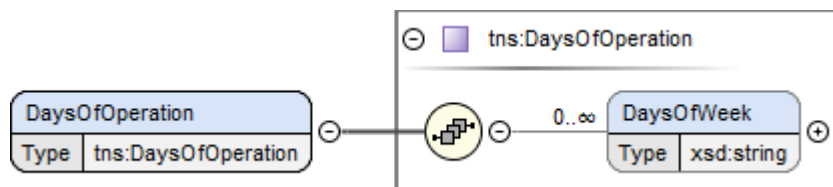
### 2.4.4.4 Request Diagrams – LocationTypes



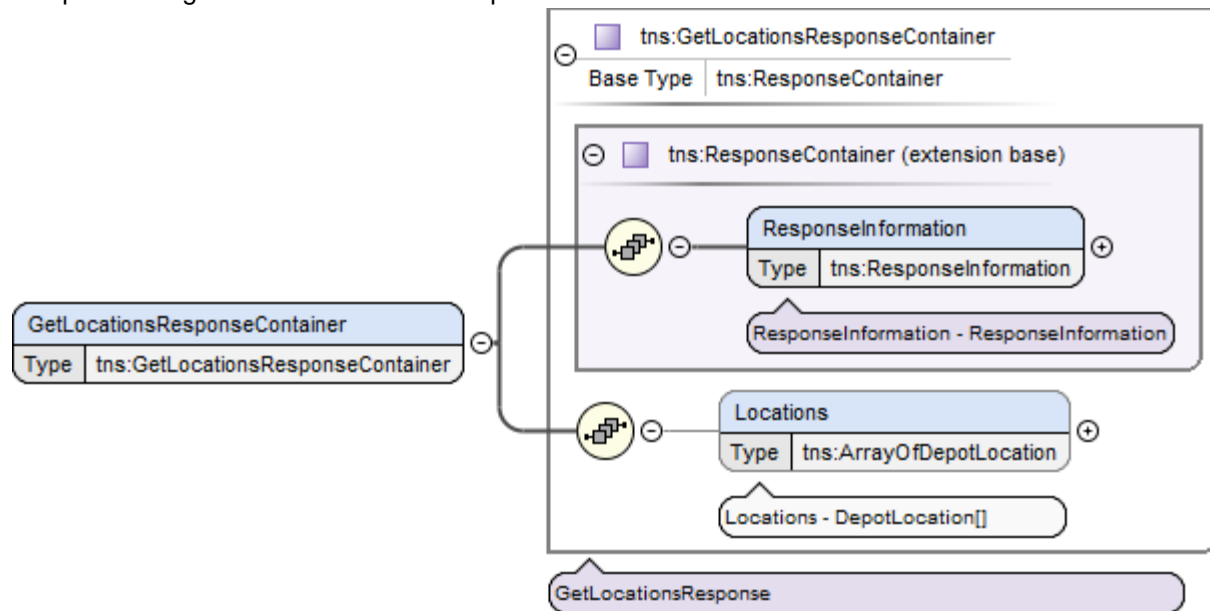
#### 2.4.4.5 Request Diagrams – HoursOfOperation



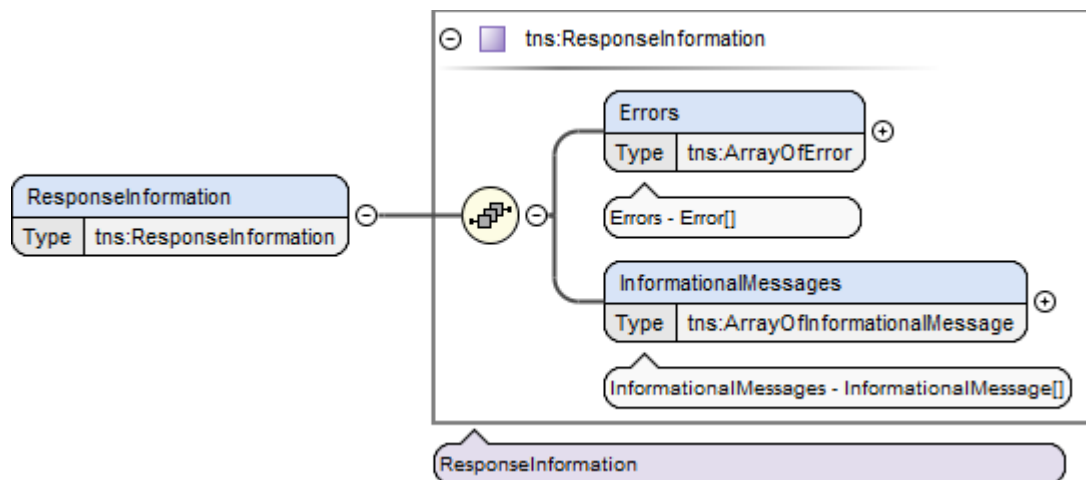
#### 2.4.4.6 Request Diagrams – DaysOfOperation



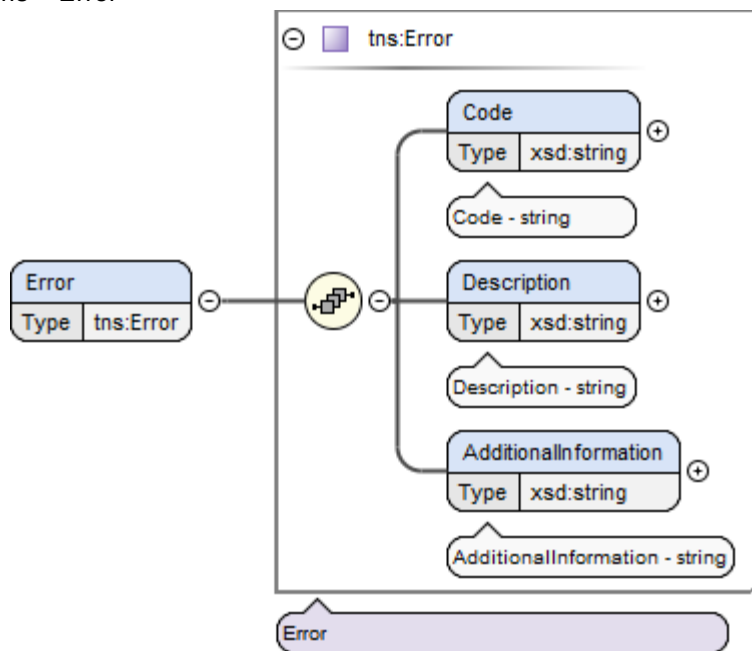
#### 2.4.4.7 Response Diagrams – GetLocationsResponse



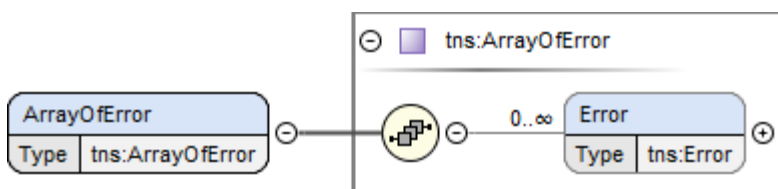
#### 2.4.4.8 Response Diagrams – Response Information

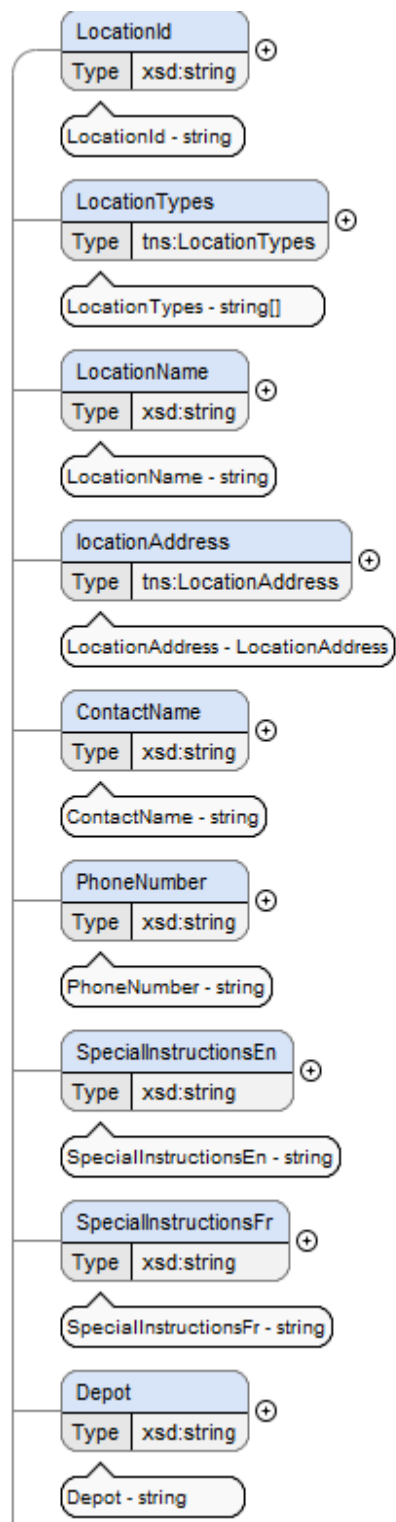


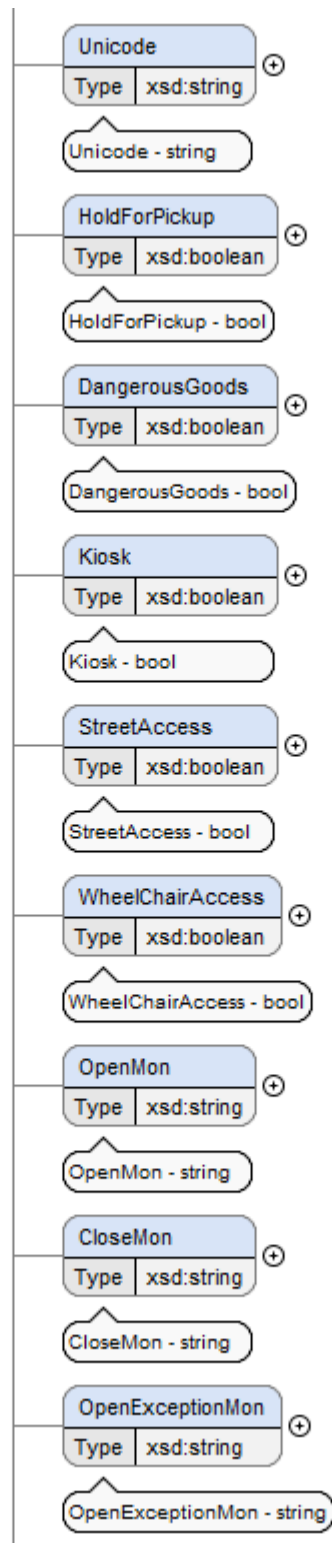
#### 2.4.4.9 Response Diagrams – Error

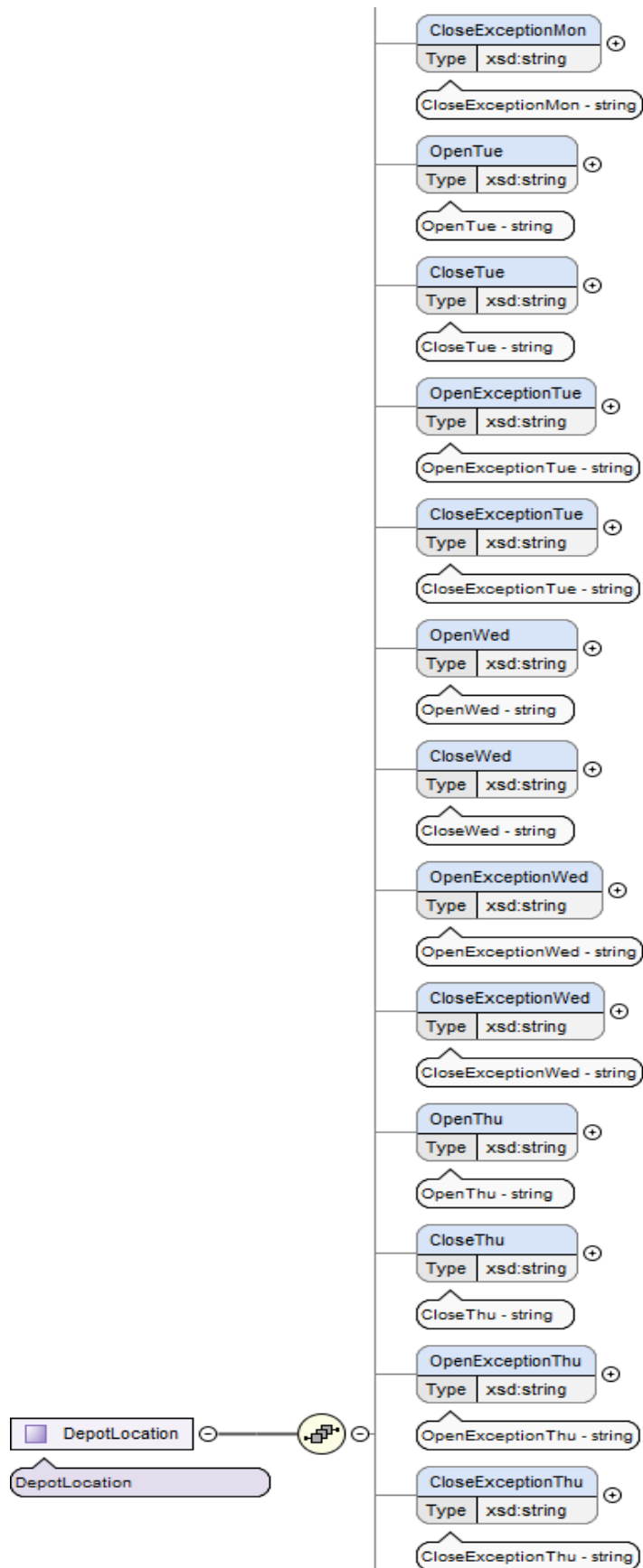


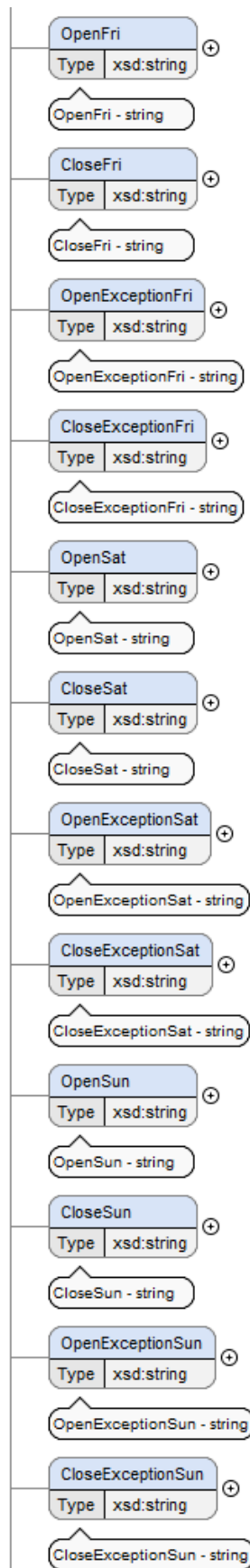
#### 2.4.4.10 Response Diagrams – ArrayOfError



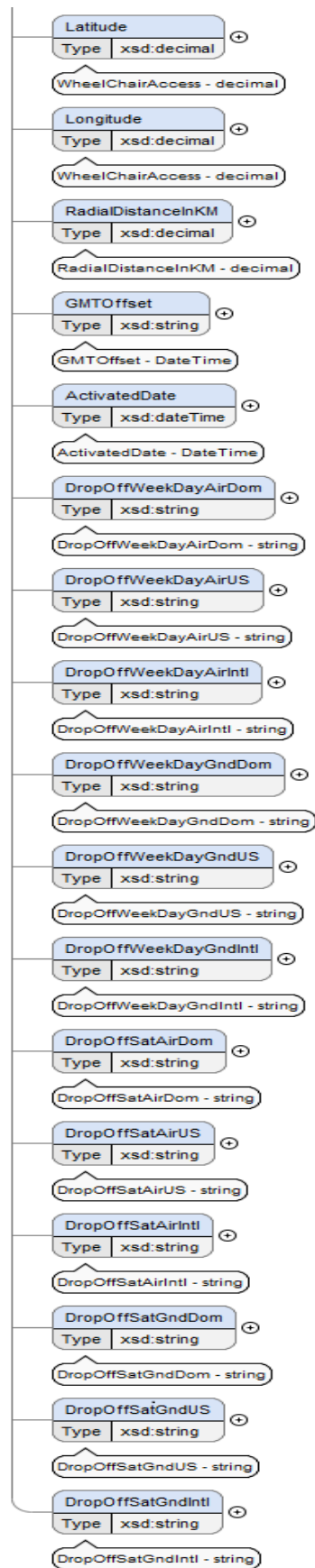




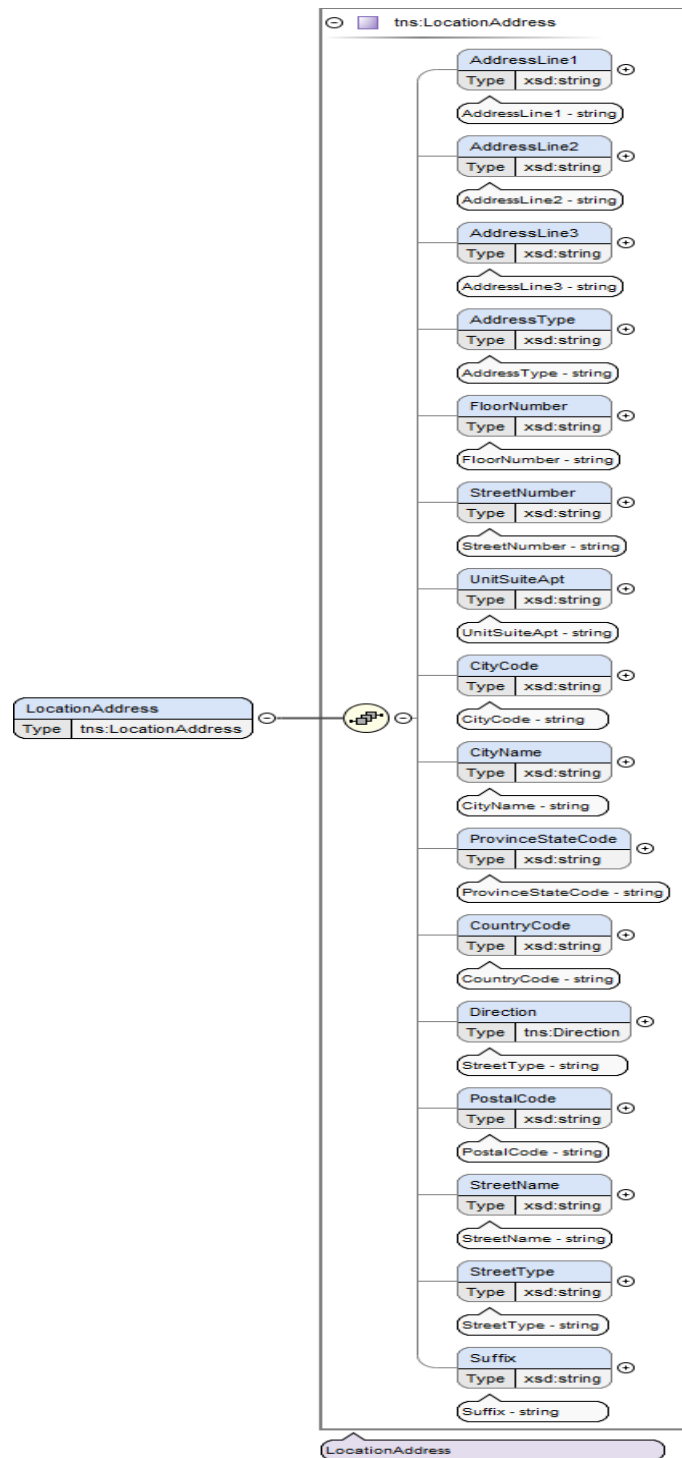








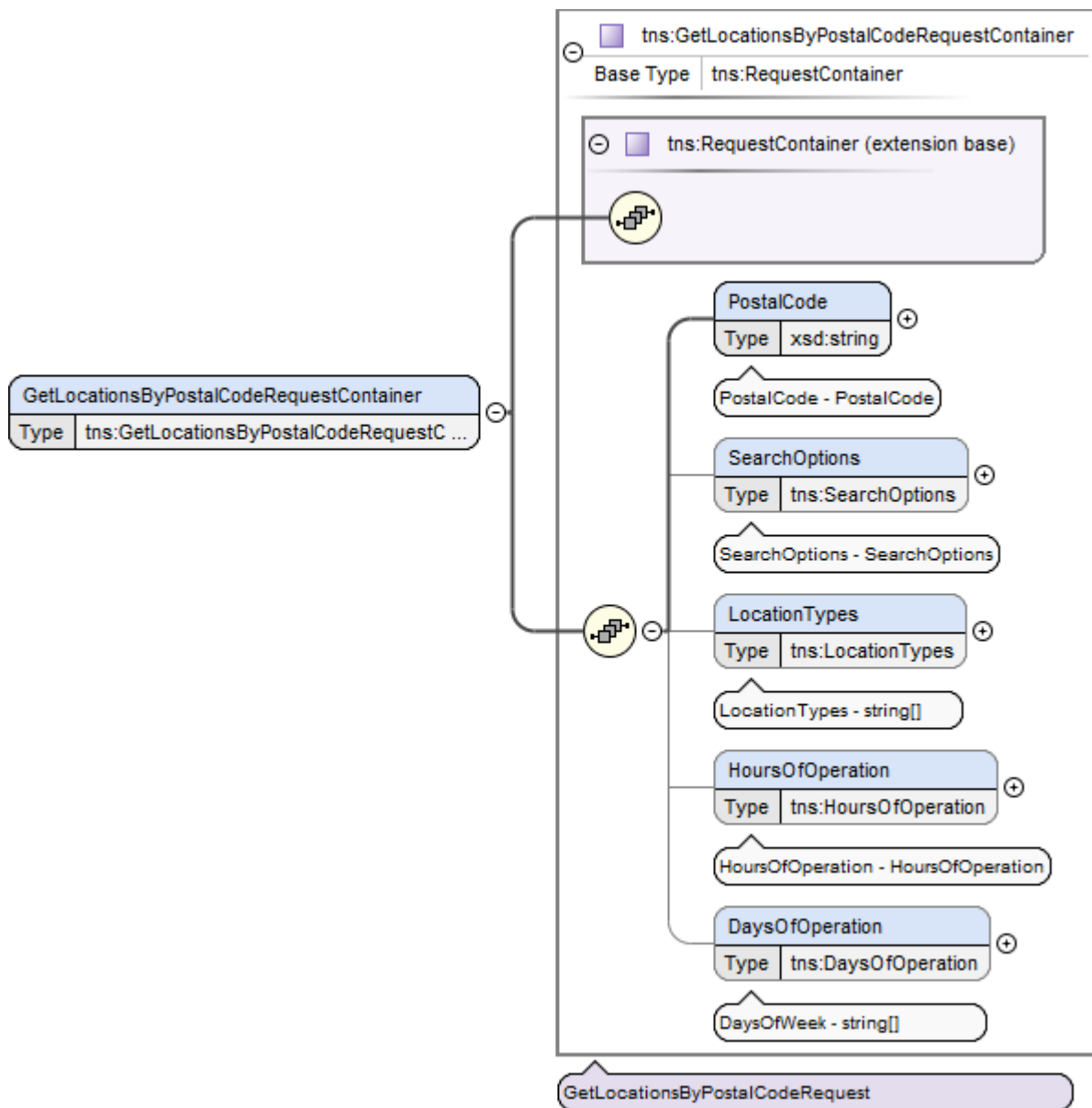
## 2.4.4.12 Response Diagrams – LocationAddress



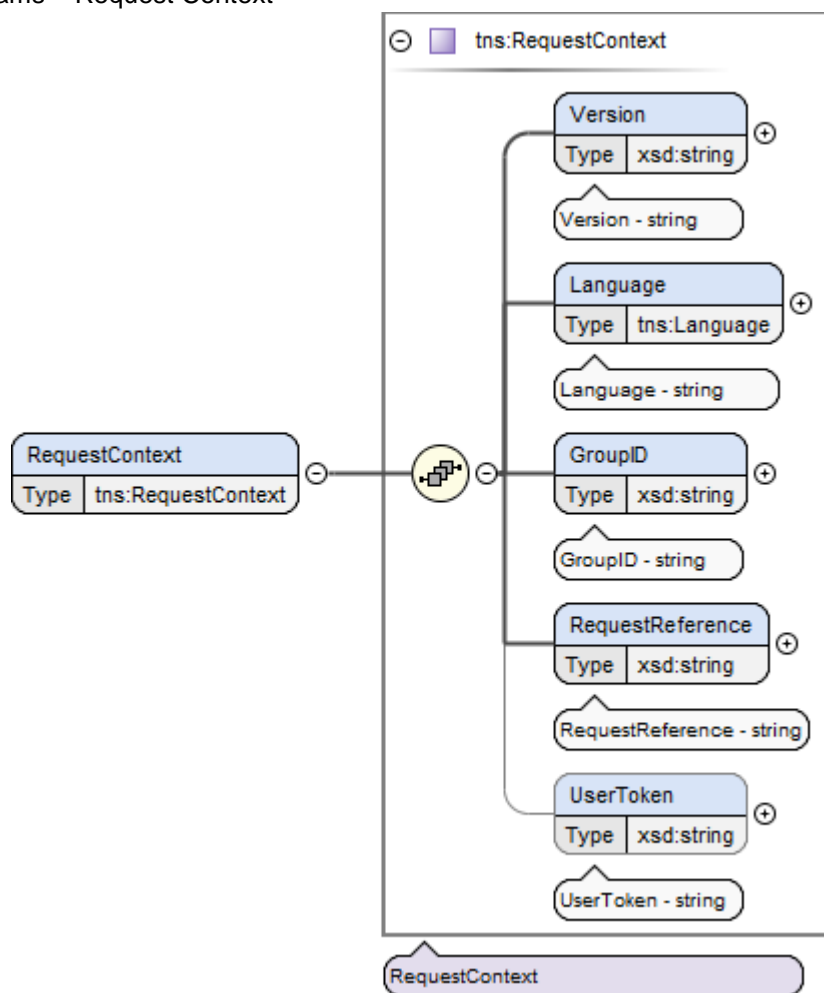
## 2.4.5 GetLocationsByPostalCode

The GetLocationsByPostalCode method is used to get the location of the shipments by providing the shipment postal code using Purolator EShip Web Services. The diagrams below show the objects contained within the location request.

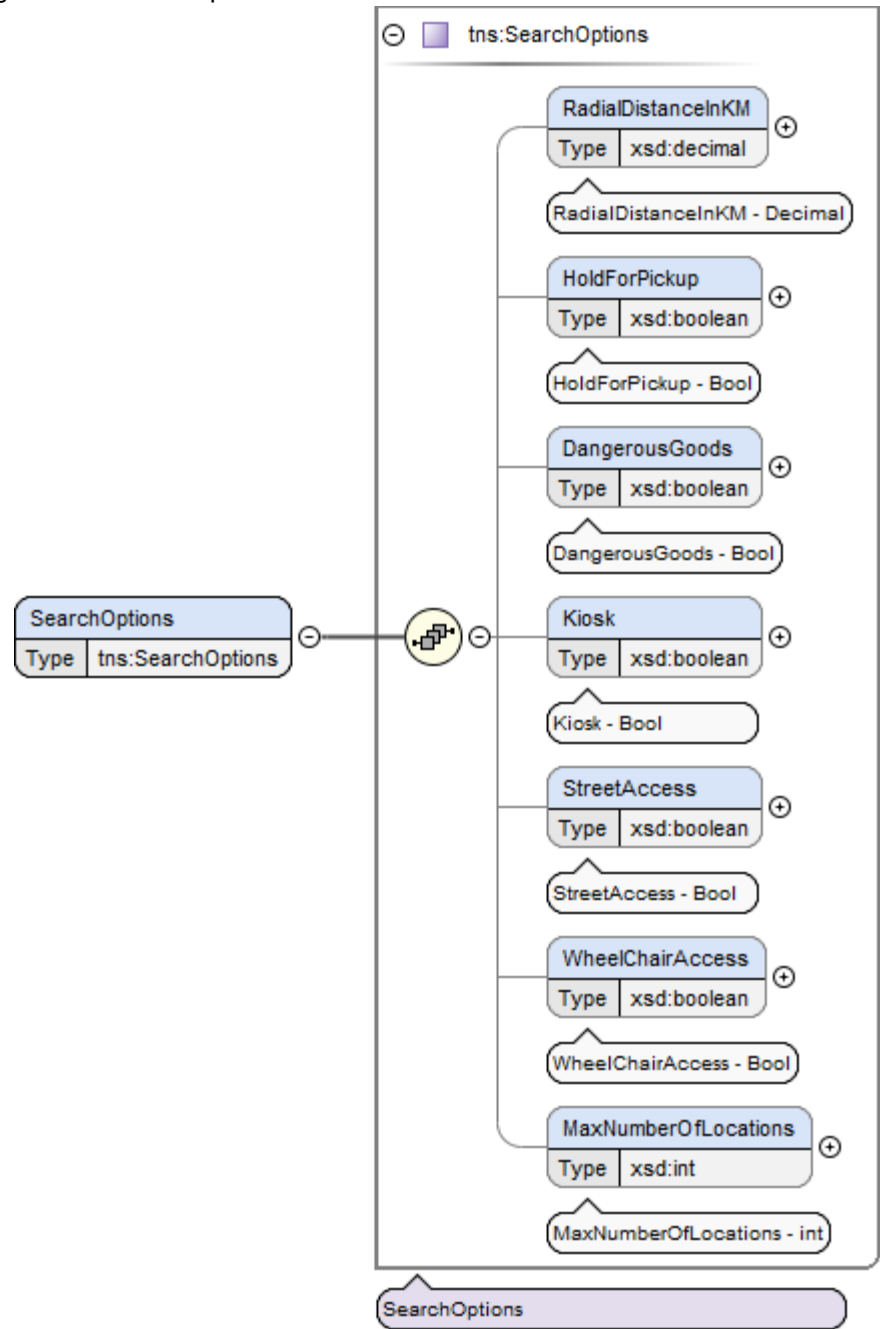
### 2.4.5.1 Request Diagrams – GetLocationsByPostalCode Request



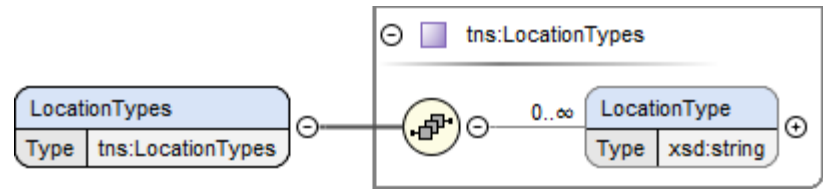
## 2.4.5.2 Request Diagrams – Request Context



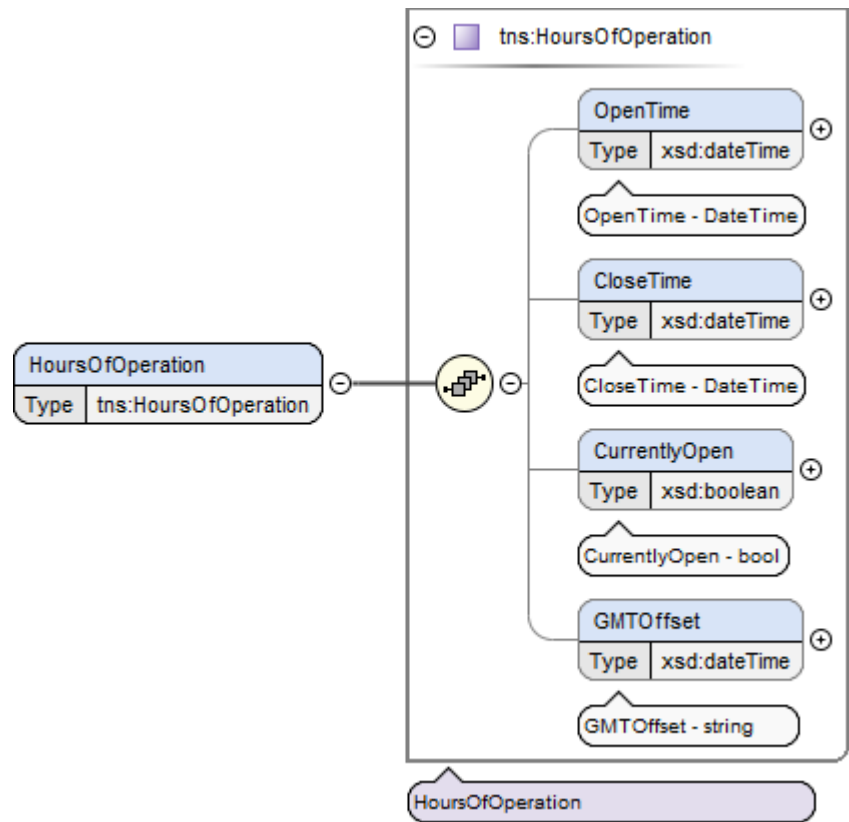
2.4.5.3 Request Diagrams – Search Options



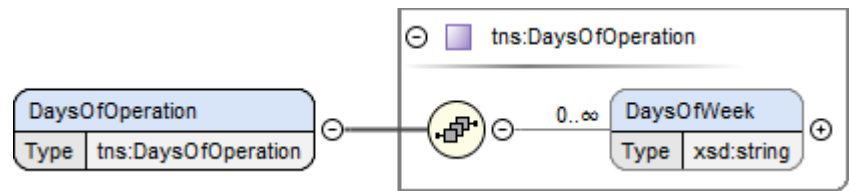
2.4.5.4 Request Diagrams – LocationTypes



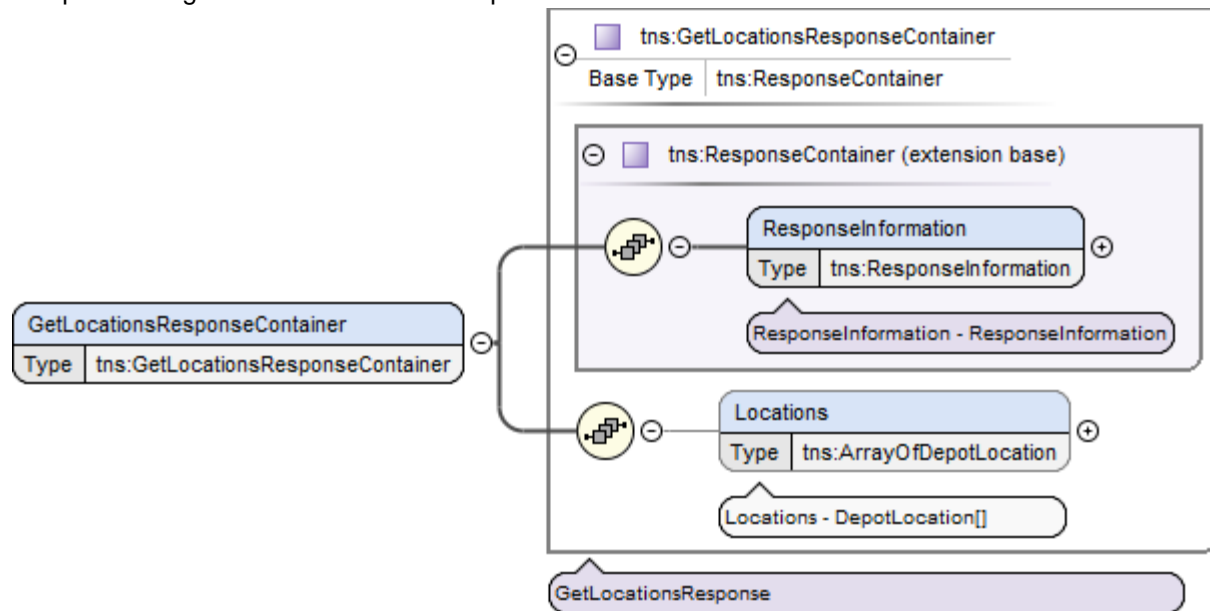
2.4.5.5 Request Diagrams – HoursOfOperation



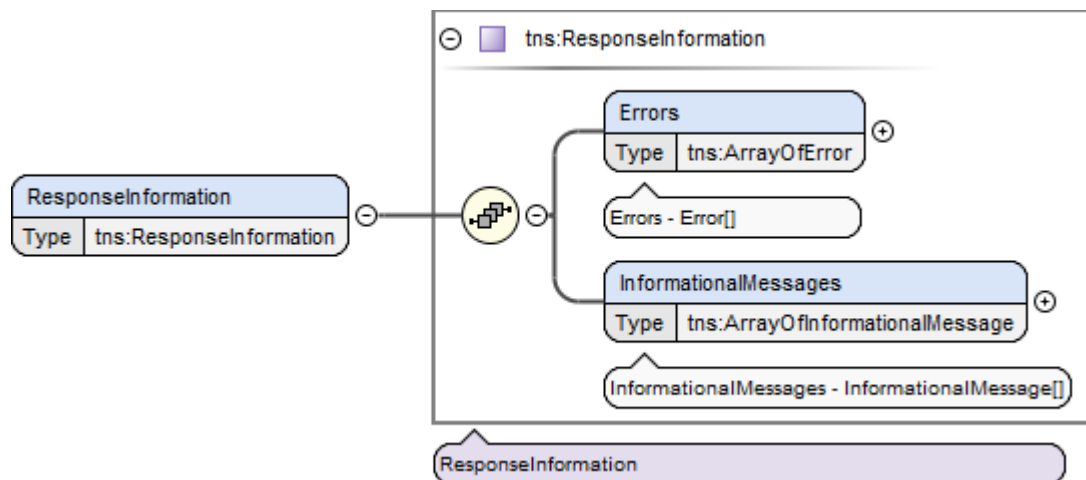
2.4.5.6 Request Diagrams – DaysOfOperation



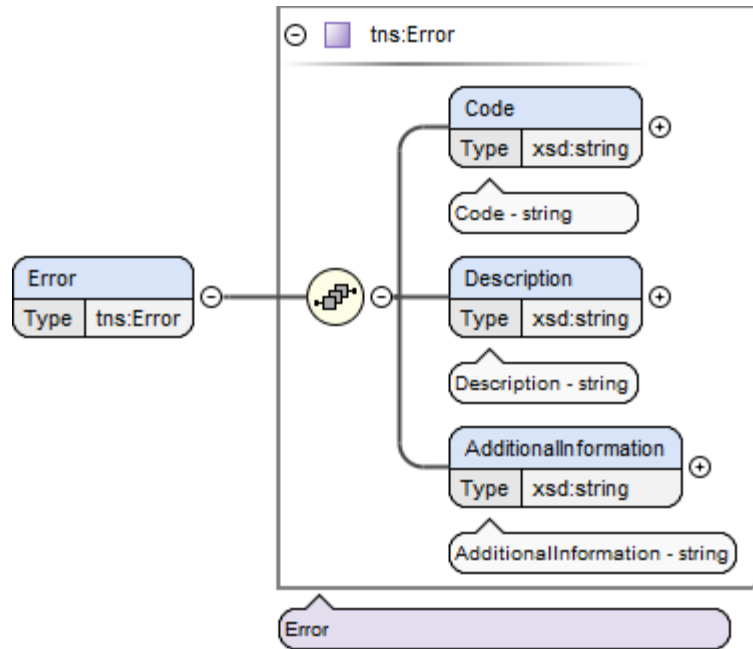
### 2.4.5.7 Response Diagrams – GetLocationsResponse



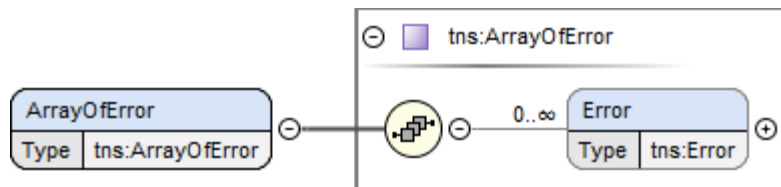
### 2.4.5.8 Response Diagrams – Response Information



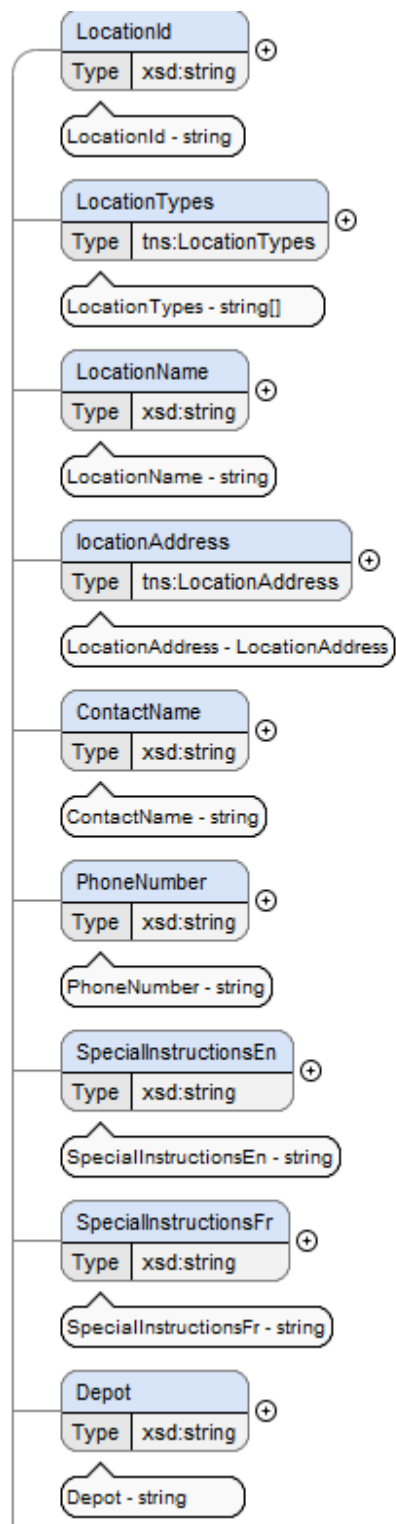
#### 2.4.5.9 Response Diagrams – Error

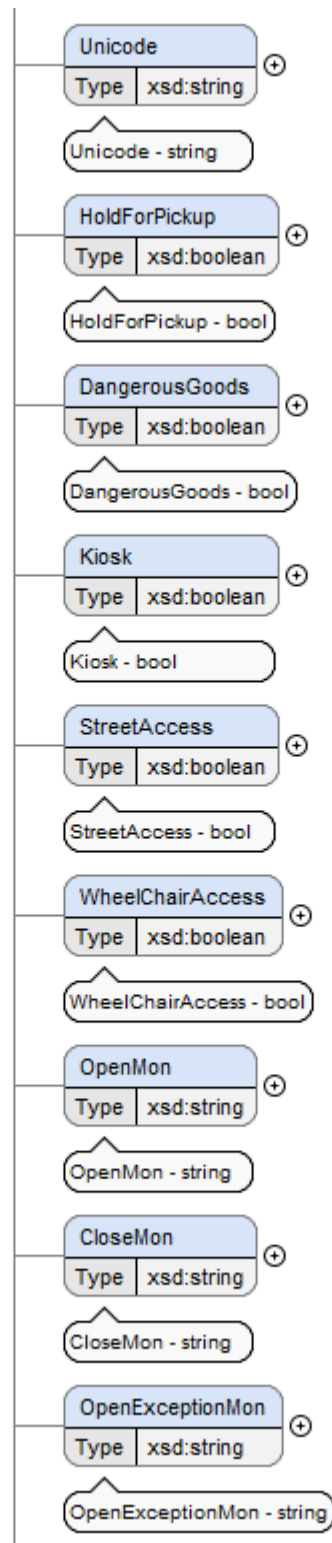


#### 2.4.5.10 Response Diagrams – ArrayOfError

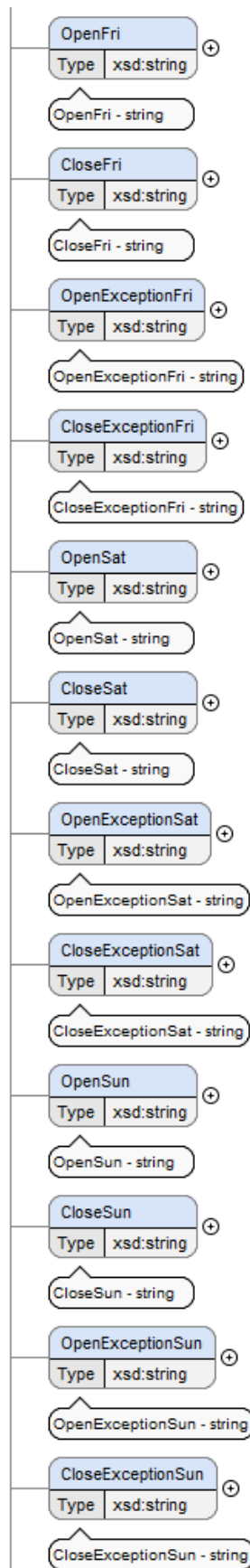


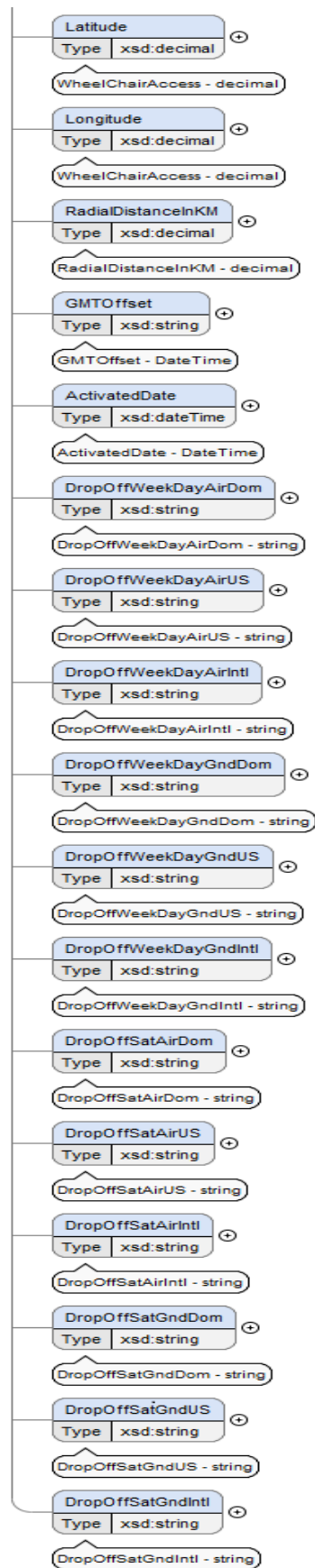




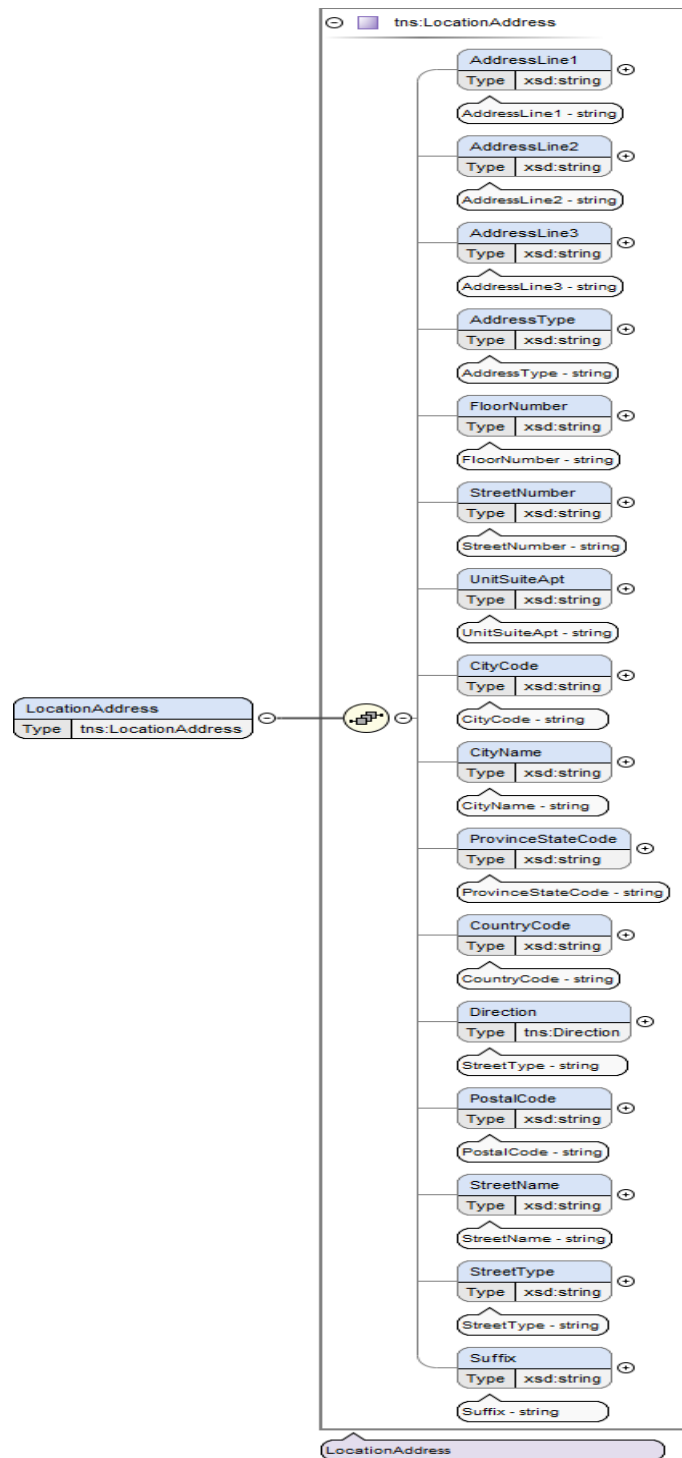








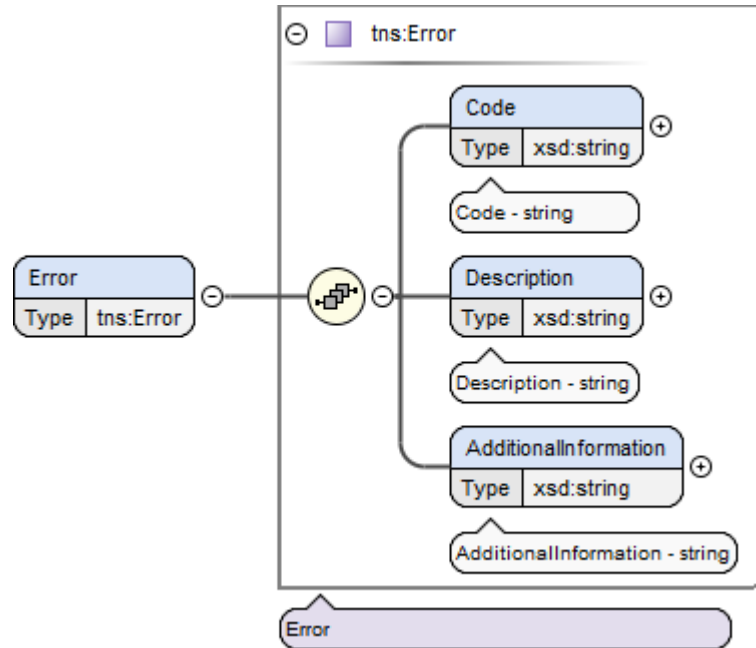
## 2.4.5.12 Response Diagrams – LocationAddress



## 2.5 Error Handling

The Web Service calls return error data that your client application can use to identify and resolve runtime errors. If an error occurs during the invocation of most Web Services calls, then the API provides the following types of error handling:

- For errors resulting from badly formed messages, failed authentication, or similar problems, the Web Services returns a SOAP fault message.
- For errors resulting from a problem with the information sent to Purolator's systems, error codes and error descriptions are returned to the client application.



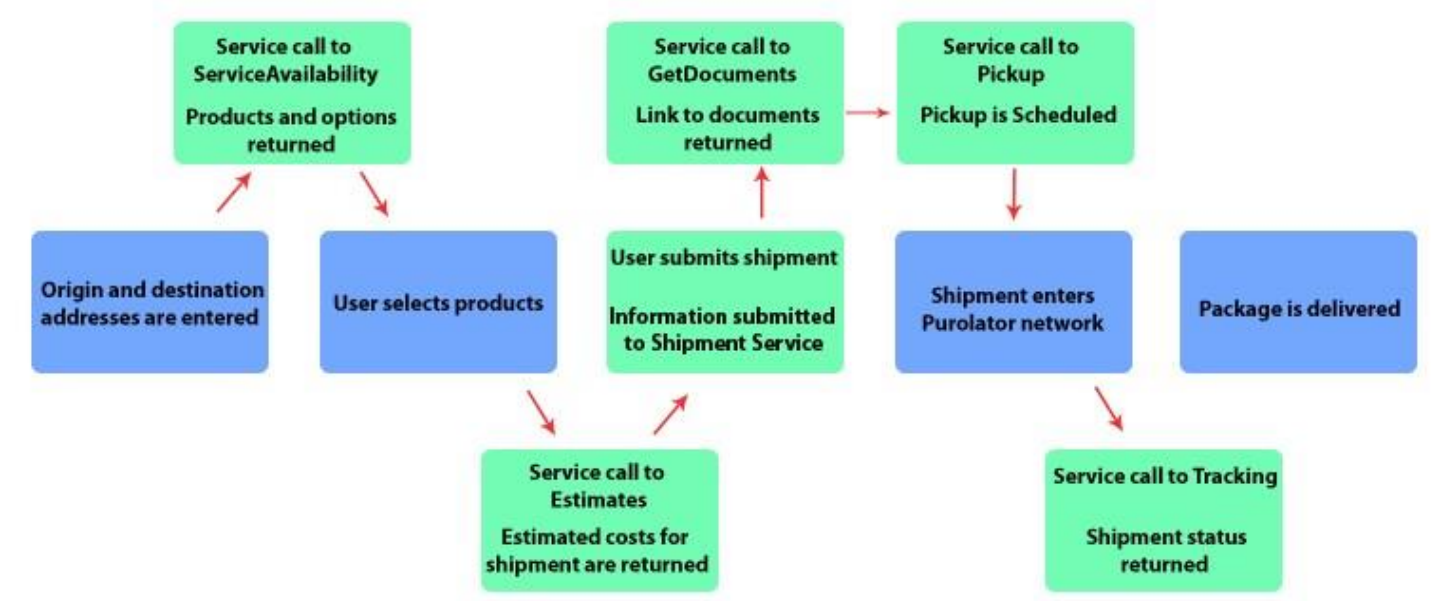
2.6 Implementation Considerations

As Purolator’s business changes to meet the on-going needs of its customer, the business rules for certain products may change from time to time. As our business changes, your application doesn’t have to. Purolator E-Ship Web Services offers customers an advanced Service Availability service that, when called, will return available products and services for a given origin and destination address. In addition to the available products and services, all business rules as well as product rules, product inclusions and exclusions, and products min/max dimensions and weights.

This can be used to offer your customers a greater experience, and offer all of Purolator’s products and services, without needing to submit a request, only to discover that a particular product is not available for a particular address.

As well, additional Purolator E-Ship Web Services can be consumed to offer a richer customer experience. From estimates to tracking to retrieving necessary documentation, Purolator’s E-Ship Web Services are designed to offer you the flexibility to consume the services required for your business.

Below is an example of how the all Purolator E-Ship Web Services may be utilized. (Green boxes denote service calls)



2.7 Error Messages / codes

Below is a list of all the error codes and descriptions.

Web Service Error

Code	Message
3002014	Address is required
3002015	Latitude is required
3002016	Longitude is required
3002017	City is required
3002018	Country code is required
3002019	Province code is required



3002021	PointOfInterest is required
3002022	Postal code is required
3002032	Invalid LocationType Code: {0}. Valid values are: {1}.
3002033	Invalid DaysOfWeekType Code: {0}. Valid values are: {1}.
3002034	Locator Error
3002035	A Locator error has occurred.
3002036	Not Found

## APPENDIX A – Complete Field List

### Elements

[Address](#) | [ArrayOfError](#) | [Coordinates](#) | [DaysOfOperation](#) | [DepotLocation](#) | [Error](#) | [GetLocationsByAddressRequest](#) | [GetLocationsByAddressRequestContainer](#) | [GetLocationsByCityRequest](#) | [GetLocationsByCityRequestContainer](#) | [GetLocationsByCoordinatesRequest](#) | [GetLocationsByCoordinatesRequestContainer](#) | [GetLocationsByPointOfInterestRequest](#) | [GetLocationsByPointOfInterestRequestContainer](#) | [GetLocationsByPostalCodeRequest](#) | [GetLocationsByPostalCodeRequestContainer](#) | [GetLocationsResponse](#) | [GetLocationsResponseContainer](#) | [HoursOfOperation](#) | [LocationAddress](#) | [LocationTypes](#) | [RequestContext](#) | [ResponseInformation](#) | [SearchOptions](#)

Input		
Field Name	Description	Allowed Value
<b>ComplexType: RequestContext</b>	<b>Used by: RequestContext</b>	
Version	Version Number of the Web Service Request.	1.0
Language	Used to define the Language of the Response text.	Enumeration "en" "fr"
GroupID	For Future Use	
RequestReference	Reference Identifier for the Service Request. Used to aid in Customer Support.	String

UserToken	Activation Key belonging to a Purolator account and customer. The Activation Key is associated with the application that it will be used on and is only required for applications intended for resale.	String
<b>ComplexType : GetLocationsByAddressRequestContainer</b>		
<b>Used by: Locator Service</b>		
<b>GetLocationsByAddressRequest</b>	Address information for the shipment	
<b>ComplexType : GetLocationsByAddressRequest</b>		
<b>Used by: GetLocationByAddressRequestContainer</b>		
<b>Address</b>	Address information for the shipment	Complex Type : <a href="#">Address</a>
<b>SearchOptions</b>	Search options for the shipment	Complex Type : <a href="#">SearchOptions</a>
<b>LocationTypes</b>	Search information by location type	Complex Type : <a href="#">LocationTypes</a>
<b>HoursOfOperation</b>	Time Details	Complex Type : <a href="#">HoursOfOperation</a>
<b>DaysOfOperation</b>	Operational days details	Complex Type : <a href="#">DaysOfOperation</a>
<b>ComplexType : GetLocationsByCityRequestContainer</b>		
<b>Used by: Locator Service</b>		
<b>GetLocationsByCityRequest</b>	City information for the shipment	
<b>ComplexType : GetLocationByCityRequest</b>		
<b>Used by: GetLocationByCityRequestContainer</b>		
<b>CountryCode</b>	Address information for the shipment	Datatype : String

<b>CityName</b>	City Name information for the shipment	Datatype : String
<b>ProvinceStateCode</b>	Province State Code for the shipment	Datatype : String
<b>SearchOptions</b>	Search options for the shipment	Complex Type : <a href="#">SearchOptions</a>
<b>LocationTypes</b>	Search information by location type	Complex Type : <a href="#">LocationTypes</a>
<b>HoursOfOperation</b>	Time Details	Complex Type : <a href="#">HoursOfOperation</a>
<b>DaysOfOperation</b>	Operational days details	Complex Type : <a href="#">DaysOfOperation</a>
<b>ComplexType : GetLocationsByCoordinates RequestContainer</b>	<b>Used by: Locator Service</b>	
<b>GetLocationsByCoordinates Request</b>	Coordinate information for the shipment	
<b>ComplexType GetLocationByCoordinatesRequest</b>	<b>Used by: GetLocationByCoordinatesRequestContainer</b>	
<b>Coordinates</b>	Coordinates information for the shipment	Complex Type : <a href="#">Coordinates</a>
<b>SearchOptions</b>	Search options for the shipment	Complex Type : <a href="#">SearchOptions</a>
<b>LocationTypes</b>	Search information by location type	Complex Type : <a href="#">LocationTypes</a>
<b>HoursOfOperation</b>	Time Details	Complex Type : <a href="#">HoursOfOperation</a>
<b>DaysOfOperation</b>	Operational days details	Complex Type : <a href="#">DaysOfOperation</a>
<b>ComplexType : GetLocationsByPointOfInterestRequestContainer</b>	<b>Used by: Locator Service</b>	

<b>GetLocationsByPointOfInterestRequest</b>	Point of Interest information for the shipment	
<b>ComplexType : GetLocationByPointOfInterestRequest</b>	<b>Used by: GetLocationByPointOfInterestRequestContainer</b>	
<b>PointOfInterest</b>	Point of Interest information for the shipment	Datatype : String
<b>SearchOptions</b>	Search options for the shipment	Complex Type : <a href="#">SearchOptions</a>
<b>LocationTypes</b>	Search information by location type	Complex Type : <a href="#">LocationTypes</a>
<b>HoursOfOperation</b>	Time Details	Complex Type : <a href="#">HoursOfOperation</a>
<b>DaysOfOperation</b>	Operational days details	Complex Type : <a href="#">DaysOfOperation</a>
<b>ComplexType : GetLocationsByPostalCodeRequestContainer</b>	<b>Used by: Locator Service</b>	
<b>GetLocationsByPostalCodeRequest</b>	Postal Code information for the shipment	
<b>ComplexType : GetLocationByPostalCodeRequestContainer</b>	<b>Used by: GetLocationByPostalCodeRequestContainer</b>	
<b>PostalCode</b>	Postal code information for the shipment	Datatype : String
<b>SearchOptions</b>	Search options for the shipment	Complex Type : <a href="#">SearchOptions</a>
<b>LocationTypes</b>	Search information by location type	Complex Type : <a href="#">LocationTypes</a>
<b>HoursOfOperation</b>	Time Details	Complex Type : <a href="#">HoursOfOperation</a>
<b>DaysOfOperation</b>	Operational days details	Complex Type : <a href="#">DaysOfOperation</a>

**Complex Type:  
SearchOptions**

<b>RadialDistanceInKM</b>	Radial distance information in km for the shipment	Datatype : Integer
<b>HoldForPickup</b>	Pickup information for the shipment	Datatype : Boolean
<b>DangerousGoods</b>	Dangerous good information for the shipment	Datatype : Boolean
<b>Kiosk</b>	Kiosk information for the shipment	Datatype : Boolean
<b>StreetAccess</b>	Street access information for the shipment	Datatype : Boolean
<b>WheelChairAccess</b>	Wheelchair access information for the shipment	Datatype : Boolean
<b>MaxNumberOfLocations</b>	Number of locations information for the shipment	Datatype : Boolean

**Complex Type:  
HoursOfOperation**

<b>OpenTime</b>	Open time information for the shipment	YYYY_MM_DD:HH:mm:SS
<b>CloseTime</b>	Close time information for the shipment	YYYY_MM_DD:HH:mm:SS
<b>CurrentlyOpen</b>	Currently status information for the shipment	YYYY_MM_DD:HH:mm:SS
<b>GMTOffset</b>	GMT offset information for the shipment	YYYY_MM_DD:HH:mm:SS

**Complex Type:  
LocationTypes**

<b>LocationType</b>	Location type information for the shipment	Enumeration Ex : DropBox
---------------------	--	-----------------------------

**Complex Type:  
DaysOfOperation**

<b>DaysOfWeek</b>	Days of week information for the shipment	Datatype : String
-------------------	---	-------------------

#### Complex Type: Address

<b>AddressLine1</b>	Address information for the shipment	Datatype : String
<b>AddressLine2</b>	Address information for the shipment	Datatype : String
<b>AddressLine3</b>	Address information for the shipment	Datatype : String

#### Complex Type: Coordinates

<b>Latitude</b>	Latitude information for the shipment	Datatype : Decimal
<b>Longitude</b>	Longitude information for the shipment	Datatype : Decimal

## Output

Field Name	Description	Output Values
<b>Element</b>	Used by	
<b>DepotLocation/GetLocationsResponse</b>	GetLocationsResponseContainer	
<b>Address</b>	Address information for the shipment	<b>Complex Type :</b> <a href="#">Address</a>
<b>ContactName</b>	Contact name information	String
<b>PhoneNumber</b>	Phone number information	Integer
<b>SpecialInstructionsEn</b>	Special instruction in English	String
<b>SpecialInstructionsFr</b>	Special instruction in French	String

<b>Depot</b>	Depot information	String
<b>Unicode</b>	Unicode information	Integer
<b>HoldForPickup</b>	Pickup information	Boolean
<b>DangerousGoods</b>	Dangerous good information	Boolean
<b>Kiosk</b>	Kiosk information	Boolean
<b>StreetAccess</b>	Street access information	Boolean
<b>WheelChairAccess</b>	Wheel chair access information	Boolean
<b>OpenMon</b>	Open monday time information	DateTime
<b>CloseMon</b>	Close monday time information	DateTime
<b>OpenExceptionMon</b>	Exception monday open time information	DateTime
<b>CloseExceptionMon</b>	Exception monday close time information	DateTime
<b>OpenTue</b>	Open tuesday time information	DateTime
<b>CloseTue</b>	Close tuesday time information	DateTime
<b>OpenExceptionTue</b>	Exception tuesday open time information	DateTime
<b>CloseExceptionTue</b>	Exception tuesday close time information	DateTime
<b>OpenWed</b>	Open wednesday time information	DateTime
<b>CloseWed</b>	Close wednesday time information	DateTime
<b>OpenExceptionWed</b>	Exception wednesday open time information	DateTime
<b>CloseExceptionWed</b>	Exception wednesday close time information	DateTime
<b>OpenThu</b>	Open thursday time information	DateTime
<b>CloseThu</b>	Close thursday time information	DateTime
<b>OpenExceptionThu</b>	Exception thursday open time information	DateTime
<b>CloseExceptionThu</b>	Exception thursday close time information	DateTime
<b>OpenFri</b>	Open friday time information	DateTime
<b>CloseFri</b>	Close friday time information	DateTime
	Exception friday open time information	DateTime

<b>OpenExceptionFri</b>	Exception Friday close time information	DateTime
<b>CloseExceptionFri</b>	Open saturday time information	DateTime
<b>OpenSat</b>	Close saturday time information	DateTime
<b>CloseSat</b>	Exception saturday open time information	DateTime
<b>OpenExceptionSat</b>	Exception saturday close time information	DateTime
<b>CloseExceptionSat</b>	Open sunday time information	DateTime
<b>OpenSun</b>	Close sunday time information	DateTime
<b>CloseSun</b>	Exception sunday open time information	DateTime
<b>OpenExceptionSun</b>	Exception sunday close time information	DateTime
<b>CloseExceptionSun</b>	Latitude information	Decimal
<b>Latitude</b>	Longitude information	Decimal
<b>Longitude</b>	Radial distance in KM for the shipment	Integer
<b>RadialDistanceInKM</b>	GMT offset information	Integer
<b>GMTOffset</b>	Activated date information	DateTime
<b>ActivatedDate</b>	Drop off weekday information for air domestic	DateTime
<b>DropOffWeekDayAirDom</b>	Drop off weekday information for air US	DateTime
<b>DropOffWeekDayAirUS</b>	Drop off weekday information for air international	DateTime
<b>DropOffWeekDayAirIntl</b>	Drop off weekday information for ground domestic	DateTime
<b>DropOffWeekDayGndDom</b>	Drop off weekday information for ground US	DateTime
<b>DropOffWeekDayGndUS</b>	Drop off weekday information for ground international	DateTime
<b>DropOffWeekDayGndIntl</b>	Drop off saturday information for air domestic	DateTime
<b>DropOffSatAirDom</b>	Drop off saturday information for air US	DateTime
<b>DropOffSatAirUS</b>	Drop off saturday information for air international	DateTime
<b>DropOffSatAirIntl</b>	Drop off saturday information for ground domestic	DateTime
<b>DropOffSatAirIntl</b>	Drop off saturday information for ground US	DateTime
<b>DropOffSatGndDom</b>	Drop off saturday information for ground international	DateTime
<b>DropOffSatGndUS</b>		



<b>DropOffSatGndIntl</b>	Point of interest information	Integer
<b>PointOfInterest</b>		
<b>Element ResponseInformation</b>	<b>Used by: ResponseInformation</b>	
ResponseReference		
<b>Errors</b>	Array of errors	<b>Complex Type</b> <a href="#">ArrayOfError</a>
<b>InformationalMessages</b>	Additional Information Messages regarding the response.	<b>Complex Type:</b> <a href="#">ArrayOfInformationalMessages</a>
<b>ComplexType ArrayOfError</b>	<b>Used by: ArrayOfError, ResponseInformation/Errors</b>	
<b>Error</b>	Error information returned by the service call.	<b>Complex Type</b> <a href="#">Error</a>
<b>ComplexType Error</b>	<b>Used by: Error, ArrayOfError/Error</b>	
Code	Error Code	String. Alpha Numeric.
Description	Error Description	String. Alpha Numeric.
AdditionalInformation	Additional error information	String. Alpha Numeric.
<b>ComplexType ArrayOfInformationalMessage</b>	<b>Used by: ArrayOfInformationalMessage, ResponseInformation/InformationalMessages</b>	
InformationalMessage	An array of Informational Messages as part of a response to a service	Array of Strings request
<b>ComplexType LocationAddress</b>	<b>Used by: GetLocationsResponse/LocationAddress</b>	
AddressLine1	Address information	String. Alpha Numeric.
AddressLine2	Address information	String. Alpha Numeric.
AddressLine3	Address information	String. Alpha Numeric.
AddressType	Address type information	String
FloorNumber	Floor number information	Integer
StreetNumber	Street number information	Integer
UnitSuiteApt	Unit suite apt information	Integer

CityCode	City code information	Integer
CityName	City name information	String
ProvinceStateCode	Province state code information	Integer
CountryCode	Country code information	Integer
Direction	Direction information	String
StreetName	Street name information	String
StreetType	Street type information	String
Suffix	Suffix information	Integer
PostalCode	Postal code information	Integer

## APPENDIX B – Allowed Code List

### Province/State

Province/ State Code	Description	Province/ State Code	Description
AB	Alberta	NL	Newfoundland
AK	Alaska	NM	New Mexico
AL	Alabama	NS	Nova Scotia
AR	Arkansas	NT	Northwest Territories
AZ	Arizona	NU	Nunavut
BC	British Columbia	NV	Nevada
CA	California	NY	New York
CO	Colorado	OH	Ohio
CT	Connecticut	OK	Oklahoma
DC	District of Columbia	ON	Ontario
DE	Delaware	OR	Oregon
FL	Florida	PA	Pennsylvania
GA	Georgia	PE	Prince Edward Island
HI	Hawaii	QC	Quebec
IA	Iowa	RI	Rhode Island
ID	Idaho	SC	South Carolina
IL	Illinois	SD	South Dakota
IN	Indiana	SK	Saskatchewan
KS	Kansas	TN	Tennessee
KY	Kentucky	TX	Texas
LA	Louisiana	UT	Utah
MA	Massachusetts	VA	Virginia
MB	Manitoba	VT	Vermont
MD	Maryland	WA	Washington
ME	Maine	WI	Wisconsin
MI	Michigan	WV	West Virginia
MN	Minnesota	WY	Wyoming
MO	Missouri	YT	Yukon
MS	Mississippi		
MT	Montana		
NB	New Brunswick		

NC	North Carolina
ND	North Dakota
NE	Nebraska
NH	New Hampshire
NJ	New Jersey

**Piece level Characteristics**

Characteristic Value (ID field)	Allowed Value (Value field)
SpecialHandling	Enumeration: true false

**Shipment level Characteristic**

Characteristic Value (ID field)	Allowed Value (Value field)
SpecialHandling	Enumeration: TRUE FALSE
DangerousGoods	Enumeration: TRUE FALSE
DangerousGoodsClass (required if sending Dangerous Goods)	Enumeration: FullyRegulated UN3373 UN1845 LessThan500kgExempt LimitedQuantities
DangerousGoodsMode (required if sending Dangerous Goods)	Enumeration: Air Ground
DeclaredValue	String Numeric xxxxx.xx
ChainOfSignature	Enumeration: TRUE FALSE
SaturdayPickup	Enumeration: TRUE FALSE
SaturdayDelivery	Enumeration: TRUE FALSE
ExpressCheque	Enumeration: TRUE FALSE

HoldForPickup	Enumeration: TRUE FALSE
ExpressChequeMethodOfPayment	Enumeration: Cheque PostDatedCheque CertifiedCheque MoneyOrder BankDraft
ExpressChequeAmount	String Numeric xxxxx.xx
OriginSignatureNotRequired	Enumeration: TRUE FALSE
ResidentialSignatureDomestic	Enumeration: TRUE FALSE
ResidentialSignatureIntl	Enumeration: TRUE FALSE

**Product List (ServiceID)**

PurolatorExpress9AM	PurolatorExpressPackU.S.
PurolatorExpress10:30AM	PurolatorExpressU.S.Pack9AM
PurolatorExpress	PurolatorExpressU.S.Pack10:30AM
PurolatorExpressEvening	PurolatorExpressU.S.Pack12:00
PurolatorExpressEnvelope9AM	PurolatorExpressBoxU.S.
PurolatorExpressEnvelope10:30AM	PurolatorExpressU.S.Box9AM
PurolatorExpressEnvelope	PurolatorExpressU.S.Box10:30AM
PurolatorExpressEnvelopeEvening	PurolatorExpressU.S.Box12:00
PurolatorExpressPack9AM	PurolatorGroundU.S.
PurolatorExpressPack10:30AM	PurolatorExpressInternational
PurolatorExpressPack	PurolatorExpressInternational9AM
PurolatorExpressPackEvening	PurolatorExpressInternational10:30AM
PurolatorExpressBox9AM	PurolatorExpressInternational12:00
PurolatorExpressBox10:30AM	PurolatorExpressEnvelopeInternational
PurolatorExpressBox	PurolatorExpressInternationalEnvelope9AM
PurolatorExpressBoxEvening	PurolatorExpressInternationalEnvelope10:30AM
PurolatorGround	PurolatorExpressInternationalEnvelope12:00
PurolatorGround9AM	PurolatorExpressPackInternational
PurolatorGround10:30AM	PurolatorExpressInternationalPack9AM
PurolatorGroundEvening	PurolatorExpressInternationalPack10:30AM
PurolatorExpressU.S.	PurolatorExpressInternationalPack12:00

PurolatorExpressU.S.9AM  
 PurolatorExpressU.S.10:30AM  
 PurolatorExpressU.S.12:00  
 PurolatorExpressEnvelopeU.S.  
 PurolatorExpressU.S.Envelope9AM  
 PurolatorExpressU.S.Envelope10:30AM  
 PurolatorExpressU.S.Envelope12:00

PurolatorExpressBoxInternational  
 PurolatorExpressInternationalBox9AM  
 PurolatorExpressInternationalBox10:30AM  
 PurolatorExpressInternationalBox12:00  
 PurolatorGroundDistribution

**New Products Added:**

PurolatorExpress12PM  
 PurolatorExpressEnvelope12PM  
 PurolatorExpressPack12PM  
 PurolatorExpressBox12PM

**Street Suffix**

A	P
B	Q
C	R
D	S
E	T
F	U
G	V
H	W
I	X
J	Y
K	Z
L	¼
M	½
N	¾
O	

**Street Type**

Abbey	End	Montée	Village
Acres	Esplanade	Mount	Villas
Allée	Estates	Mountain	Vista
Alley	Expressway	Parade	Voie
Autoroute	Extension	Parc	Walk
avenue	Field	Park	Way
Avenue	Forest	Parkway	Wharf
Bay	Freeway	Passage	Wood
Beach	Front	Path	Wynd
Bend	Gardens	Pathway	
Boulevard	Gate	Pines	
Branch	Glade	Place	
By-pass	Glen	Plateau	

Campus	Green	Plaza
Cape	Grounds	Point
Carré	Grove	Pointe
Carrefour	Harbour	Port
Centre	Heath	Private
Cercle	Height	Promenade
Chase	Heights	Quai
Chemin	Highlands	Quay
Circle	Highway	Ramp
Circuit	Hill	Rang
Close	Hollow	Ridge
Common	Île	Rise
Concession	Impasse	Road
Corners	Inlet	Route
Côte	Island	Row
Cour	Key	Rue
Cours	Knoll	Ruelle
Court	Landing	Run
Cove	Lane	Sentier
Crest	Limits	Square
Crescent	Line	Street
Croissant	Link	Subdivision
Crossing	Lookout	Terrace
Cul-de-sac	Loop	Terrasse
Dale	Mall	Townline
Dell	Manor	Trail
Diversion	Maze	Turnabout

Downs	Meadow	Vale
Drive	Mews	View

**Country**

Country Code	Country Description	Country Code	Country Description	Country Code	Country Description
AD	Andorra	GN	Guinea	OM	Oman
AE	Utd.Arab Emir.	GP	Guadeloupe	OR	Orange
AF	Afghanistan	GQ	Equatorial Guin	PA	Panama
AG	Antigua/Barbuda	GR	Greece	PE	Peru
AI	Anguilla	GS	S. Sandwich Ins	PF	Frenc.Polynesia
AL	Albania	GT	Guatemala	PG	Pap. New Guinea
AM	Armenia	GU	Guam	PH	Philippines
AN	Dutch Antilles	GW	Guinea-Bissau	PK	Pakistan
AO	Angola	GY	Guyana	PL	Poland
AQ	Antarctica	HK	Hong Kong	PM	St.Pier,Miquel.
AR	Argentina	HM	Heard/McDon.Isl	PN	Pitcairn Islnds
AS	Samoa, America	HN	Honduras	PR	Puerto Rico
AT	Austria	HR	Croatia	PS	Palestine
AU	Australia	HU	Hungary	PT	Portugal
AW	Aruba	IC	Canary Islands	PW	Palau
AX	Aland Islands	ID	Indonesia	PY	Paraguay
AZ	Azerbaijan	IE	Ireland	QA	Qatar
BA	Bosnia-Herz.	IL	Israel	RE	Reunion
BB	Barbados	IM	Isle of Man	RO	Romania
BD	Bangladesh	IN	India	RS	Serbia
BE	Belgium	IO	Brit.Ind.Oc.Ter	RU	Russian Fed.
BF	Burkina Faso	IQ	Iraq	RW	Rwanda
BG	Bulgaria	IR	Iran	SA	Saudi Arabia
BH	Bahrain	IS	Iceland	SB	Solomon Islands
BI	Burundi	IT	Italy	SC	Seychelles
BJ	Benin	JE	Jersey	SD	Sudan
BL	Blue	JM	Jamaica	SG	Singapore
BM	Bermuda	JO	Jordan	SH	Saint Helena
BN	Brunei Daruss.	JP	Japan	SI	Slovenia
BO	Bolivia	KE	Kenya	SJ	Svalbard
BR	Brazil	KG	Kyrgyzstan	SK	Slovakia
BS	Bahamas	KH	Cambodia	SL	Sierra Leone
BT	Bhutan	KI	Kiribati	SM	San Marino

BV	Bouvet Islands	KM	Comoros	SN	Senegal
BW	Botswana	KN	St Kitts&Nevis	SO	Somalia
BY	Belarus	KP	North Korea	SR	Suriname
BZ	Belize	KR	South Korea	ST	S.Tome,Principe
CA	Canada	KW	Kuwait	SV	El Salvador
CC	Coconut Islands	KY	Cayman Islands	SY	Syria
CD	Dem. Rep. Congo	KZ	Kazakhstan	SZ	Swaziland
CF	Central African Republic	LA	Laos	TC	Turksh Caicosin
CG	Rep.of Congo	LB	Lebanon	TD	Chad
CH	Switzerland	LC	St. Lucia	TF	French S.Territ
CI	Cote d'Ivoire	LI	Liechtenstein	TG	Togo
CK	Cook Islands	LK	Sri Lanka	TH	Thailand
<b>Country Code</b>	<b>Country Description</b>	<b>Country Code</b>	<b>Country Description</b>	<b>Country Code</b>	<b>Country Description</b>
CL	Chile	LR	Liberia	TJ	Tajikistan
CM	Cameroon	LS	Lesotho	TK	Tokelau Islands
CN	China	LT	Lithuania	TL	Timor Leste
CO	Colombia	LU	Luxembourg	TM	Turkmenistan
CR	Costa Rica	LV	Latvia	TN	Tunisia
CU	Cuba	LY	Libya	TO	Tonga
CV	Cape Verde	MA	Morocco	TP	East Timor
CX	Christmas Islnd	MC	Monaco	TR	Turkey
CY	Cyprus	MD	Moldova	TT	Trinidad,Tobago
CZ	Czech Republic	ME	Montenegro	TV	Tuvalu
DE	Germany	MG	Madagascar	TW	Taiwan
DJ	Djibouti	MH	Marshall Islnds	TZ	Tanzania
DK	Denmark	MK	Macedonia	UA	Ukraine
DM	Dominica	ML	Mali	UG	Uganda
DO	Dominican Rep.	MM	Burma	UM	Minor Outl.Isl.
DZ	Algeria	MN	Mongolia	UN	United Nations
EC	Ecuador	MO	Macau	US	USA
EE	Estonia	MQ	Martinique	UY	Uruguay
EG	Egypt	MR	Mauretania	UZ	Uzbekistan
EH	West Sahara	MS	Montserrat	VA	Vatican City
ER	Eritrea	MT	Malta	VC	St. Vincent
ES	Spain	MU	Mauritius	VE	Venezuela
ET	Ethiopia	MV	Maldives	VG	Brit.Virgin Is.
EU	European Union	MW	Malawi	VI	Amer.Virgin Is.



FI	Finland	MX	Mexico	VN	Vietnam
FJ	Fiji	MY	Malaysia	VU	Vanuatu
FK	Falkland Islnds	MZ	Mozambique	WF	Wallis,Futuna
FM	Micronesia	NA	Namibia	WS	Samoa
FO	Faroe Islands	NC	New Caledonia	XB	Bonaire
FR	France	NE	Niger	XC	Curacao
GA	Gabon	NF	Norfolk Islands	XM	St. Maarten
GB	United Kingdom	NG	Nigeria	XN	Nevis
GD	Grenada	NI	Nicaragua	XS	Somaliland Republic
GE	Georgia	NL	Netherlands	XY	St. Barthelemy
GF	French Guayana	NO	Norway	YE	Yemen
GG	Guernsey	NP	Nepal	YT	Mayotte
GH	Ghana	NR	Nauru	ZA	South Africa
GI	Gibraltar	NT	Nato	ZM	Zambia
GL	Greenland	NU	Niue	ZW	Zimbabwe
GM	Gambia	NZ	New Zealand	ZZ	Dummy Country

#### Street Direction

E	S
N	SE
NE	SO
NO	SW
NW	W
O	