

Mail.XML Version 25.3

System Messages Specification

Monday, April 3, 2023

Working Group Chair

Shawn Baldwin, WindowBook

Technical Director

Shariq Mirza, DTAC Associate, Assurety Consulting & Solutions

Editor

Shariq Mirza, DTAC Associate, Assurety Consulting & Solutions

Copyright (c) 2022 – Delivery Technology Advocacy Council (“DTAC”). All Rights Reserved.

Mail.dat is a registered trademark of DTAC

Mail.XML is a trademark of DTAC



Copyright and Legal Notices

© 2022 Delivery Technology Advocacy Council. All Rights Reserved.

Copyright 2022 – Delivery Technology Advocacy Council (“DTAC”) is the “Copyright Owner” of “Mail.XML®”. All rights reserved by the Copyright Owner under the laws of the United States, Belgium, the European Economic Community, and all states, domestic and foreign. This document may be downloaded and copied provided that all copies retain and display the copyright and any other proprietary notices contained in this document. This document may not be sold, modified, edited, or taken out of context such that it creates a false or misleading statement or impression as to the purpose or use of the Mail.XML® specification, which is an open standard. Use of this Standard, in accord with the foregoing limited permission, shall not create for the user any rights in or to the copyright, which rights are exclusively reserved to the Copyright Owner.

DTAC and the members of the Mail.XML® Specifications - Committee (collectively and individually, "Presenters") make no representations or warranties, express or implied, including, but not limited to, warranties of merchantability, fitness, for a particular purpose, title, or non-infringement. The presenters do not make any representation or warranty that the contents of this document are free from error, suitable for any purpose of any user, or that implementation of such contents will not infringe any third-party patents, copyrights, trademarks or other rights. By making use of this document, the user assumes all risks and waives all claims against Presenters.

In no event shall Presenters be liable to user (or other person) for direct, indirect, special or consequential damages arising from or related to any use of this document, including, without limitation, lost profits, business interruption, loss of programs, or other data on your information handling system even if Presenters are expressly advised of the possibility of such damages.

Some states do not allow the disclaimer or limitation of damages, so the disclaimers set forth above apply to the maximum extent permitted under applicable law.

Abstract

This document describes the messaging protocol for use by mailers and their consignees. The Mail.XML™ Transaction Protocol defines the roles and responsibilities of Shippers and Consignees and defines the format and method for message exchange. This messaging protocol is designed to be XML and Web-Services compliant.

Mail.XML and Mail.dat are trademarks of DTAC.

About Mail.XML™

Mail.XML™ is bringing a paradigm change to the industry by increasing business function specific B2B (Business to Business) communication within the industry that supports automation and in the end enables cost avoidance and higher profits through improved competence and effectiveness of communication. Mail.XML is designed to increase efficiency and lower costs by removing many manual data entry processes and enabling quick near real time communication between business partners. Mail.XML currently supports container-based scheduling, pick up and drop off business processes, as well as identifying different business entities responsible for performing different services such as quality of mailing, address correction, and delivery confirmation on a mailing. The core focus of Mail.XML is communication between industry members and from industry to the final mail processing and delivery organization that delivers the mail to the end consumer, e.g., USPS. In the next few versions of Mail.XML the focus moves across mailing supply chain channels, and includes advanced functions such as payment; automated verification; enabling first, second, and third-party communication and incorporating presort planning, printing, and distribution processes.

What's New in Mail.XML Version 25.3?

With this release, the Mail.XML Messaging Protocol moves to Version 25.3. This release supports structure changes required by mailing industry and Postal Service.

Changes supported by Mail.XML 25.3 include:

- 2523 - Proposal to add support for Marriage Mail product
- 2524 - Proposal to support/Clarify Destination Hub for Parcel Select Destination Entry
- 2522 - Proposal to add support for USPS Ground Advantage product

About Mail.XML Schema Modularization

Today Mail.XML messages are grouped into 8 message types.

- Transportation Messages (TM)
- Mailing Messages (MM)
- Data Distribution Messages (DD)
- Dynamic Payment Template Messages
- Identification Messages (ID)
- Supply Chain Messages (SC)
- Informed Visibility (IV)
- System Messages
- Base: Shared simple types
- Definitions: Shared complex types and elements

The simple types shared across 2 or more modules are found in the Base schema. Likewise, the shared definitions module contains complex type definitions and elements that are shared across 2 or more modules.

Mail.XML Module Versioning Rules

The following versioning rules will be followed:

The Mail.XML wrapper schema`**`.xsd) will always be given the next higher version number (or Errata designation) when any update is made to base, defs or any module. The name of the .xsd file will indicate the new version and the new version number will be used in the namespace and target declarations:
xmlns:mailxml="http://delivery-tech.org/Specs/mailxml25.3/mailxml"
targetNamespace="http://delivery-tech.org/Specs/mailxml25.3/mailxml"

- When updates are made, only those modules that are updated will be given the next higher version number (or Errata letter designation).
- If updates are made to the base or defs, then the base and defs xsds will be given the next higher version number (or Errata designation) and all modules that call to them will also be given the next higher version number (or Errata designation).

For example:

- If the wrapper version is labeled as xmlns:mailxml="http://deliverytech.org/Specs/mailxml25.3A/mailxml" then at least one of the XSDs is at same version such as filename ='Mail.XML_25.3A.xsd' <- Errata A
- If the wrapper version is labeled as xmlns:mailxml="http://deliverytech.org/Specs/mailxml25.3B/mailxml" then at least one of the XSDs is at same version such as filename ='Mail.XML_25.3B.xsd' <- Errata B

- If the wrapper version is labeled as xmlns:mailxml="http://deliverytech.org/Specs/mailxml25.3/mailxml" then at least one of the XSDs is at same version such as filename = 'Mail.XML_25.3.xsd' <- Major Version

Mail.XML 25.3 XSD Modules

The following Mail.XML XSD modules/namespaces are used:

- Mail.XML_tm.xsd: This module contains all the transportation (or FAST) messages and the attributes, elements and complex types that are unique to these messages. Namespace=Mail.XML_tm:
- Mail.XML_mm.xsd: This module contains all the mailing messages (eDoc) and the attributes, elements and complex types that are unique to these messages. Namespace=Mail.XML_mm:
- Mail.XML_iv.xsd: This module contains informed visibility messages and the attributes, elements and complex types that are unique to these messages. Namespace=Mail.XML_iv:
- Mail.XML_dd.xsd: This module contains all the data distribution messages and the attributes, elements and complex types that are unique to these messages. Namespace=Mail.XML_dd:
- Mail.XML_id.xsd: This module contains all the identification messages and the attributes, elements and complex types that are unique to these messages. Namespace=Mail.XML_id:
- Mail.XML_sc.xsd: This module contains all the supply chain messages and the attributes, elements and complex types that are unique to these messages. Namespace=Mail.XML_sc:
- Mail.XML_defs.xsd: This module contains all the common definitions of attributes, elements and complex types that are used across two or more message types. Namespace=Mail.XML_defs:
- Mail.XML_base.xsd: This module contains simple types that are shared across two or more modules that make up Mail.XML. These can be considered a building block for any message group. Namespace=Mail.XML_base:
- Mail.XML.xsd: This module contains the system messages of Mail.XML and is used to build custom profiles for Mail.XML. Namespace=Mail.XML:

The Mail.XML™ 25.3 Messaging Documentation Set

The Mail.XML Messaging Specification has been organized into a set of documents. This *Schemas Specification* is one document in a set of documents that make up the Mail.XML Specification 25.3. Updates in this Specification are NOT backwardly compatible with previous versions. Other documents in the specification set include:

- Mail.XML™ 25.3: Transportation Messaging Specification documents all transportation messages
- Mail.XML™ 25.3: Mailing Messaging Specification documents all mailing messages
- Mail.XML™ 25.3: Informed Visibility Specification documents all informed visibility messages
- Mail.XML™ 25.3: Data Distribution Messaging Specification documents all data distribution messages
- Mail.XML™ 25.3: Identification Messaging Specification documents all identification messages
- Mail.XML™ 25.3: Supply Chain Messaging Specification documents all supply chain messages
- Mail.XML™ 25.3: System Messaging Specification documents all systems and fault messages
- Mail.XML™ 25.3: Simple Types Specification documents all simple types used across Mail.XML

- messages
- Mail.XML™ 25.3: Common Definitions Specification documents all shared elements and complex types.
- Mail.XML™ 25.3: Schemas contains the .XSDs that make up the Mail.XML Messaging Specification

Table of Contents

Abstract	3
About Mail.XML™	3
What’s New in Mail.XML Version 25.3?	3
About Mail.XML Schema Modularization	4
Mail.XML Module Versioning Rules	4
Mail.XML 25.3 XSD Modules	5
The Mail.XML™ 25.3 Messaging Documentation Set	5
Schema mailxml_iv_25.3.xsd	8

Schema mailxml_iv_25.3.xsd

schema location: [..\XSDs\mailxml_iv_25.3.xsd](#)
attribute form default: **qualified**
element form default: **qualified**
targetNamespace: http://delivery-tech.org/Specs/mailxml25.3/mailxml_iv

Elements

[ContainerVisibilityDelivery](#)
[ContainerVisibilityEntry](#)
[ContainerVisibilityNotification](#)
[ContainerVisibilityQueryRequest](#)
[ContainerVisibilityQueryResponse](#)
[IMbMailpieceScanData](#)

[MPSVisDelivery](#)
[MPSVisNotification](#)
[MPSVisQueryRequest](#)
[MPSVisQueryResponse](#)

[StartTheClockBMEUBlock](#)
[StartTheClockDelivery](#)
[StartTheClockDropShipOrOrigin](#)
[StartTheClockNotification](#)
[StartTheClockPlantLoadBlock](#)
[StartTheClockQueryRequest](#)
[StartTheClockQueryResponse](#)

Complex types

[clockStartedType](#)
[manifestScanEventDetailType](#)
[manifestScanNotificationDataType](#)
[manifestScanQueryType](#)
[MPSNotificationDataType](#)
[MPSRequestTypeType](#)

[MPSVisScanQueryType](#)

[PSRBlockType](#)

[scanEventQueryTypeType](#)

[ScanEventResultOptionsType](#)

Simple types

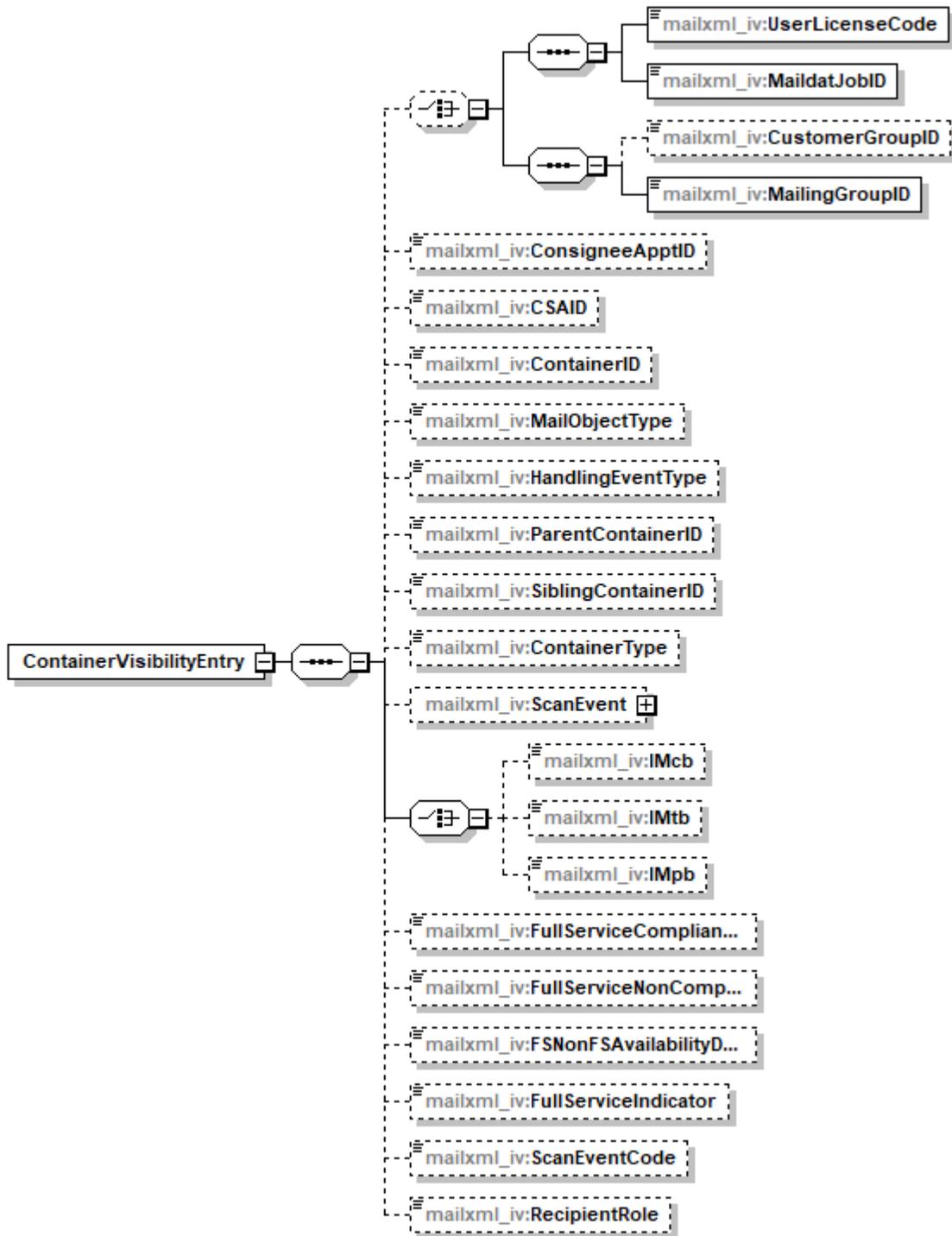
[eDocTypeType](#)
[handlingEventTypeType](#)
[mailObjectTypeType](#)
[recipientRoleType](#)
[scanEventCodeType](#)

element **ContainerVisibilityDelivery**

<p>diagram</p>	<p>ContainerVisibilityDelivery Delivery of full service container visibility information by uSPS.</p> <ul style="list-style-type: none"> attributes <ul style="list-style-type: none"> mailxml_defs:MessageGroupID mailxml_defs:TotalMessageCou... mailxml_defs:MessageSerialNu... mailxml_defs:TransmittedRecor... mailxml_defs:TotalRecordsAcro... mailxml_defs>LastMessage mailxml_iv:SubmittingParty mailxml_iv:SubmittingSoftware mailxml_defs:DataRecipient mailxml_iv:PushMessageID mailxml_iv:ContainerVisibilityE... (1..∞)
<p>namespace</p>	<p>http://delivery-tech.org/Specs/mailxml25.3/mailxml_iv</p>
<p>annotation</p>	<p>documentation Delivery of full service container visibility information by uSPS.</p>

element **ContainerVisibilityEntry**

diagram



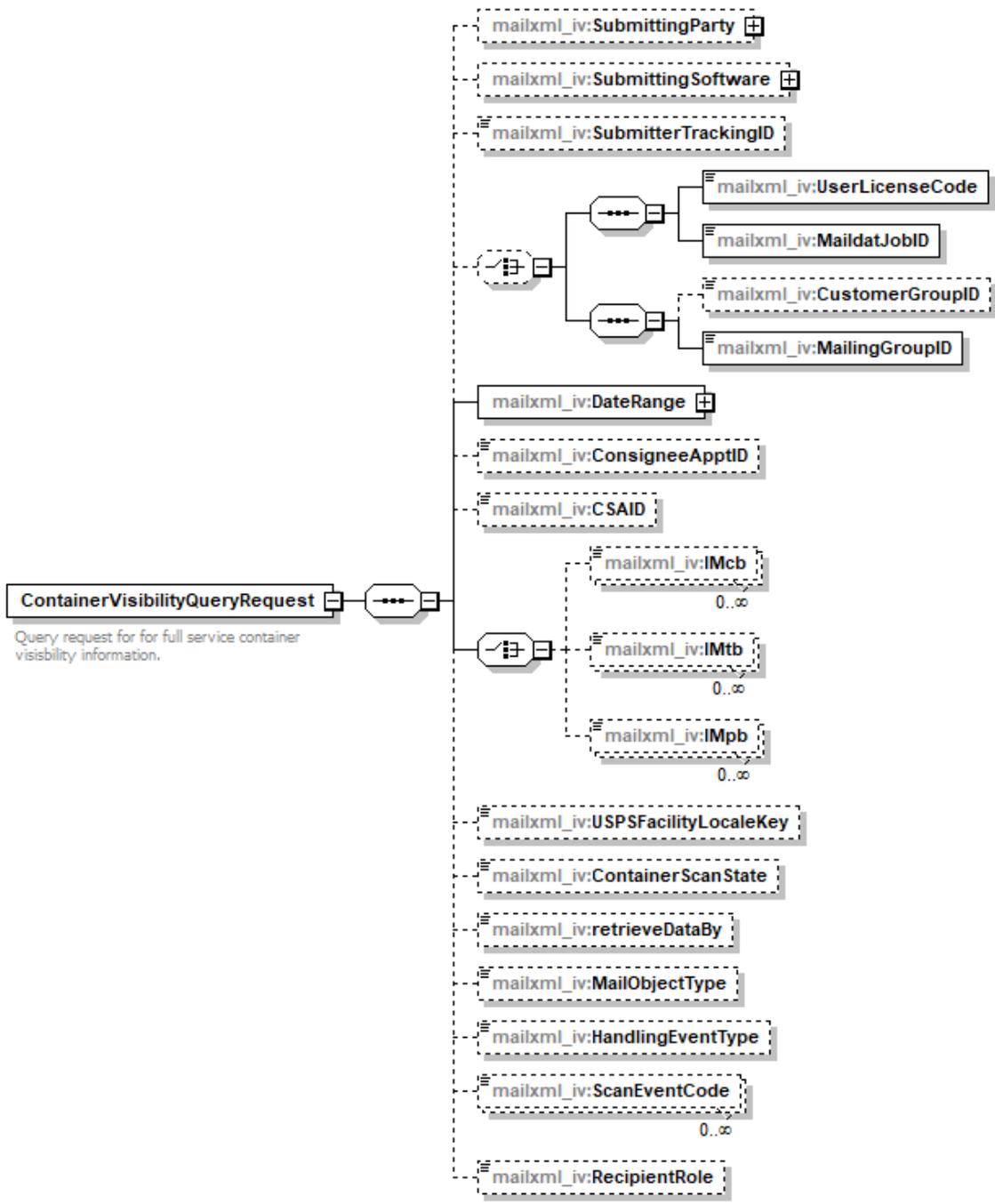
namespace http://delivery-tech.org/Specs/mailxml25.3/mailxml_iv

element **ContainerVisibilityNotification**

<p>diagram</p>	<p>ContainerVisibilityNotification Notification sent by USPS that full service container visibility information is ready for pickup.</p> <ul style="list-style-type: none"> mailxml_iv:SubmittingParty mailxml_iv:SubmittingSoftware mailxml_iv:PushMessageID Complex Type: <ul style="list-style-type: none"> mailxml_iv:UserLicenseCode mailxml_iv:MaildatJobID mailxml_iv:CustomerGroupID mailxml_iv:MailingGroupID mailxml_iv:FNonFSAvailabilityD... Complex Type (0..∞): <ul style="list-style-type: none"> mailxml_iv:AvailableRecordCount mailxml_iv:CountType mailxml_iv:NotificationDate
<p>namespace</p>	<p>http://delivery-tech.org/Specs/mailxml25.3/mailxml_iv</p>
<p>annotation</p>	<p>documentation Notification sent by USPS that full service container visibility information is ready for pickup.</p>

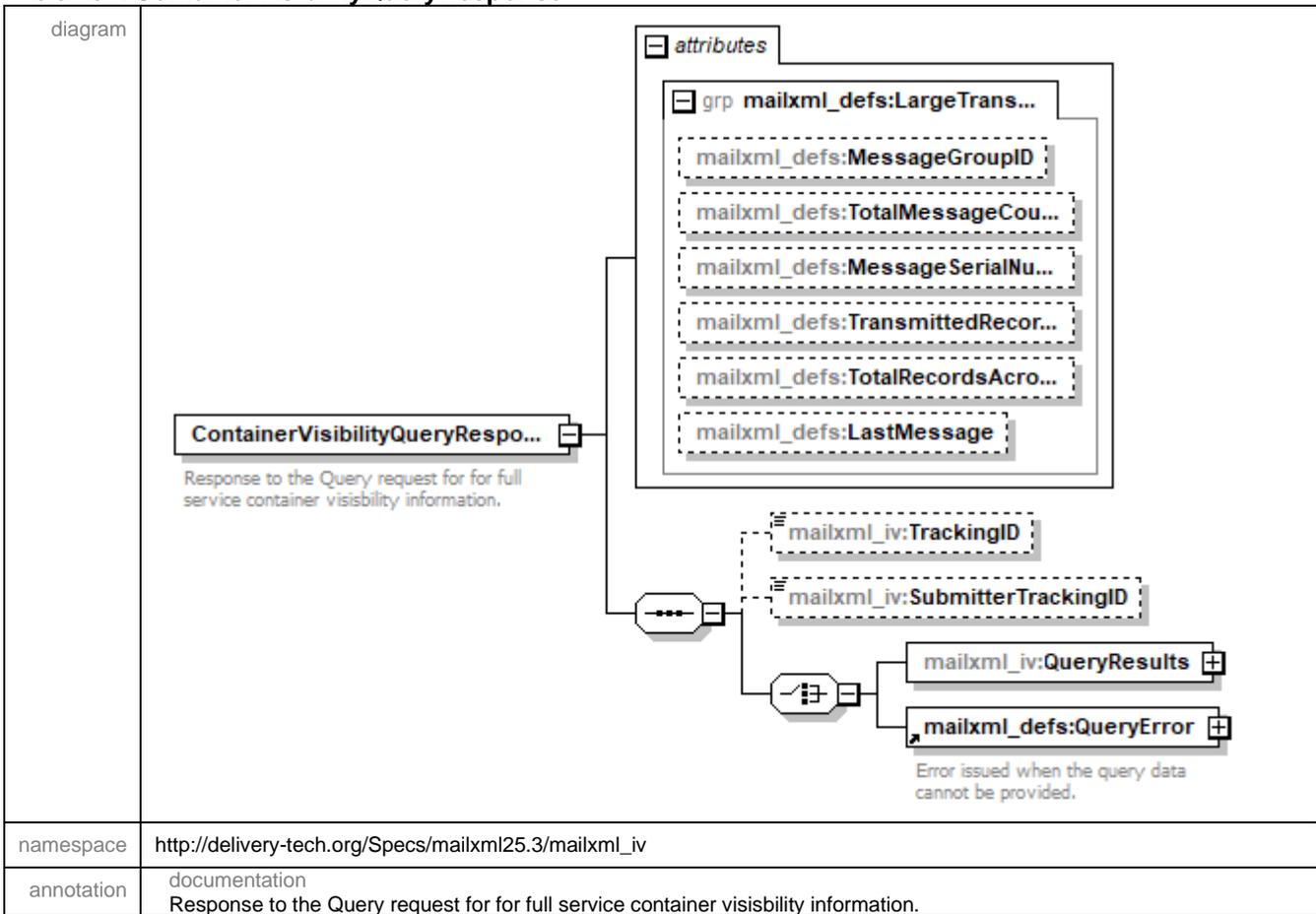
element **ContainerVisibilityQueryRequest**

diagram

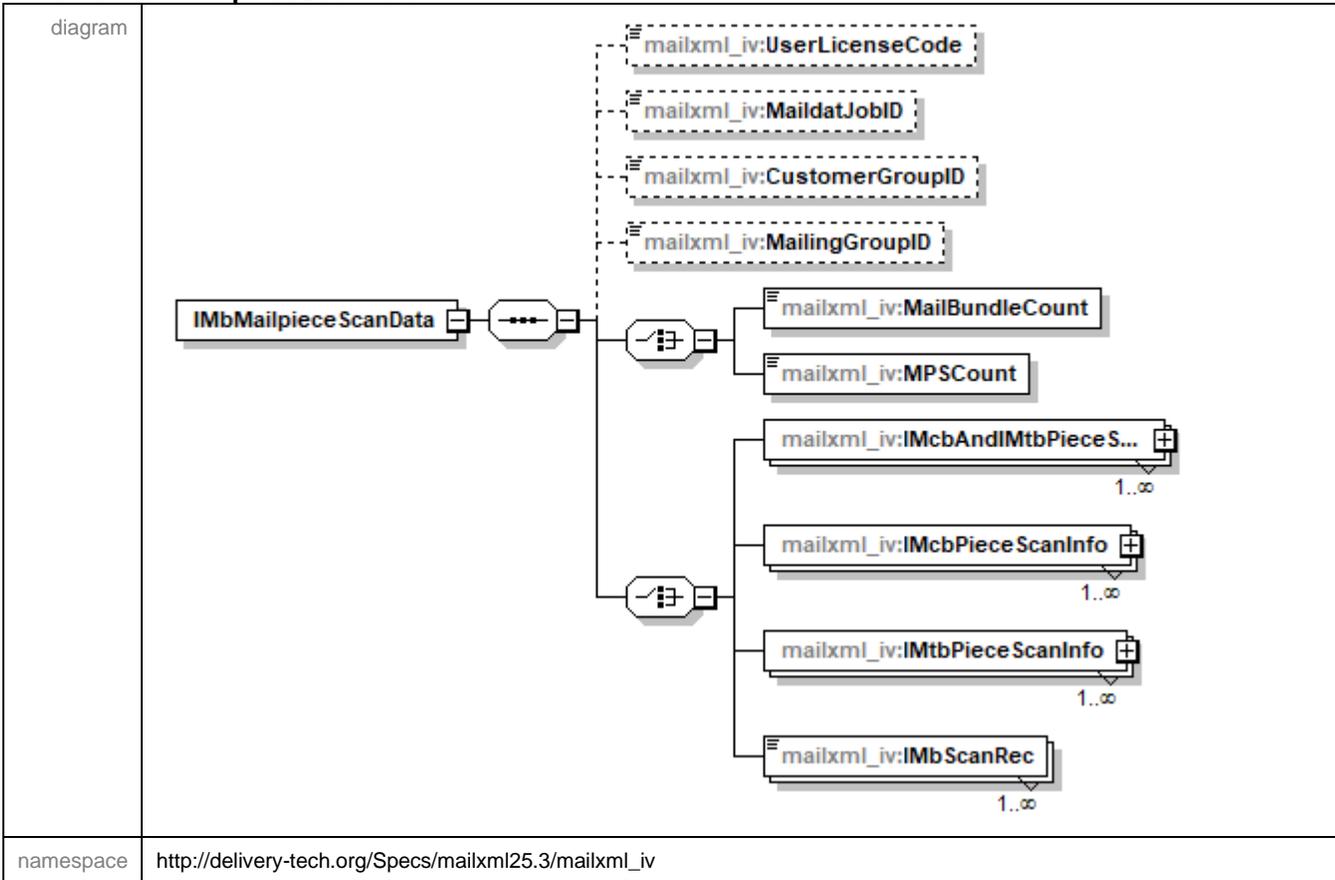


namespace	http://delivery-tech.org/Specs/mailxml25.3/mailxml_iv
annotation	documentation Query request for for full service container visibility information.

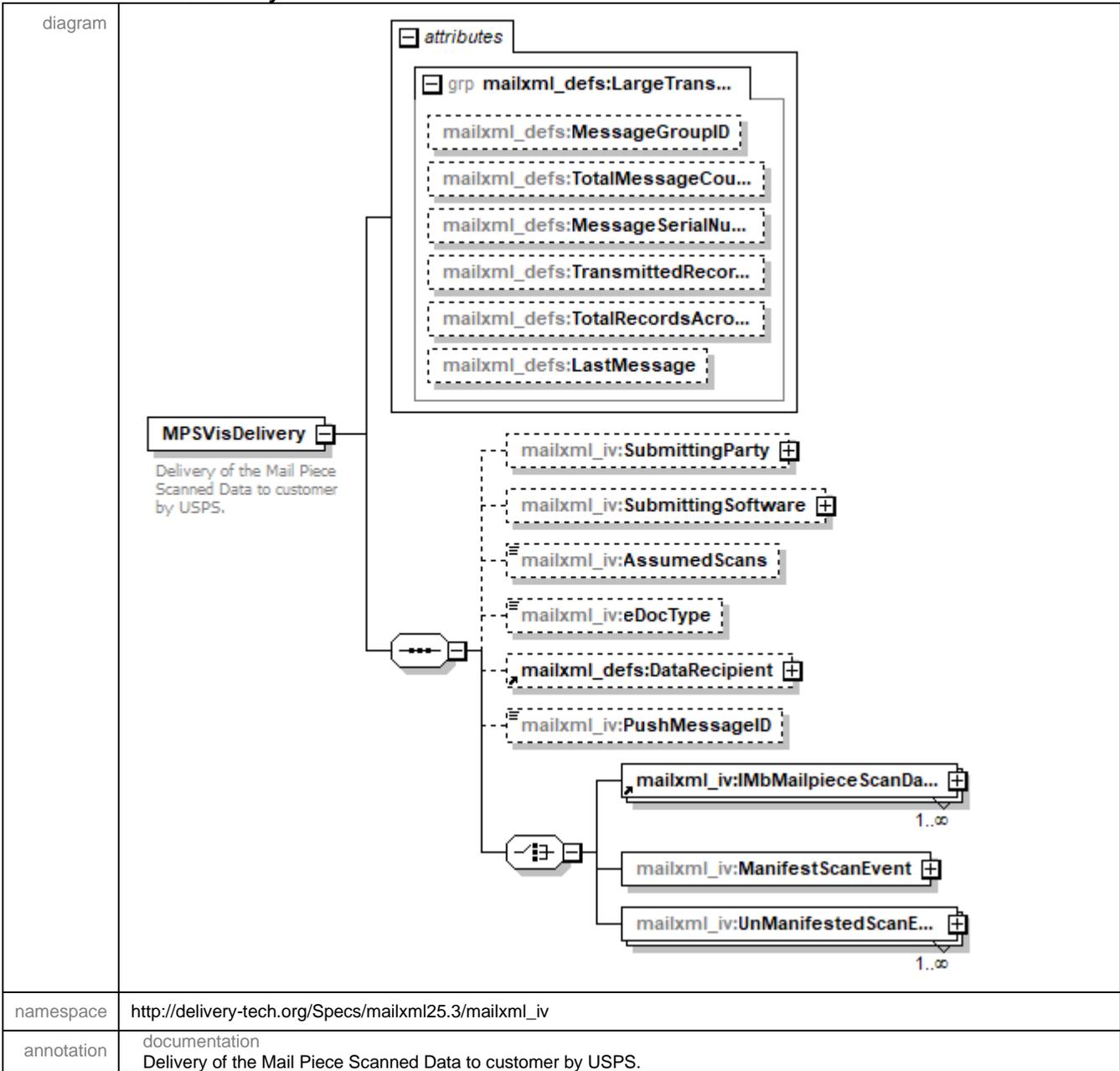
element **ContainerVisibilityQueryResponse**



element **IMbMailpieceScanData**



element **MPSVisDelivery**



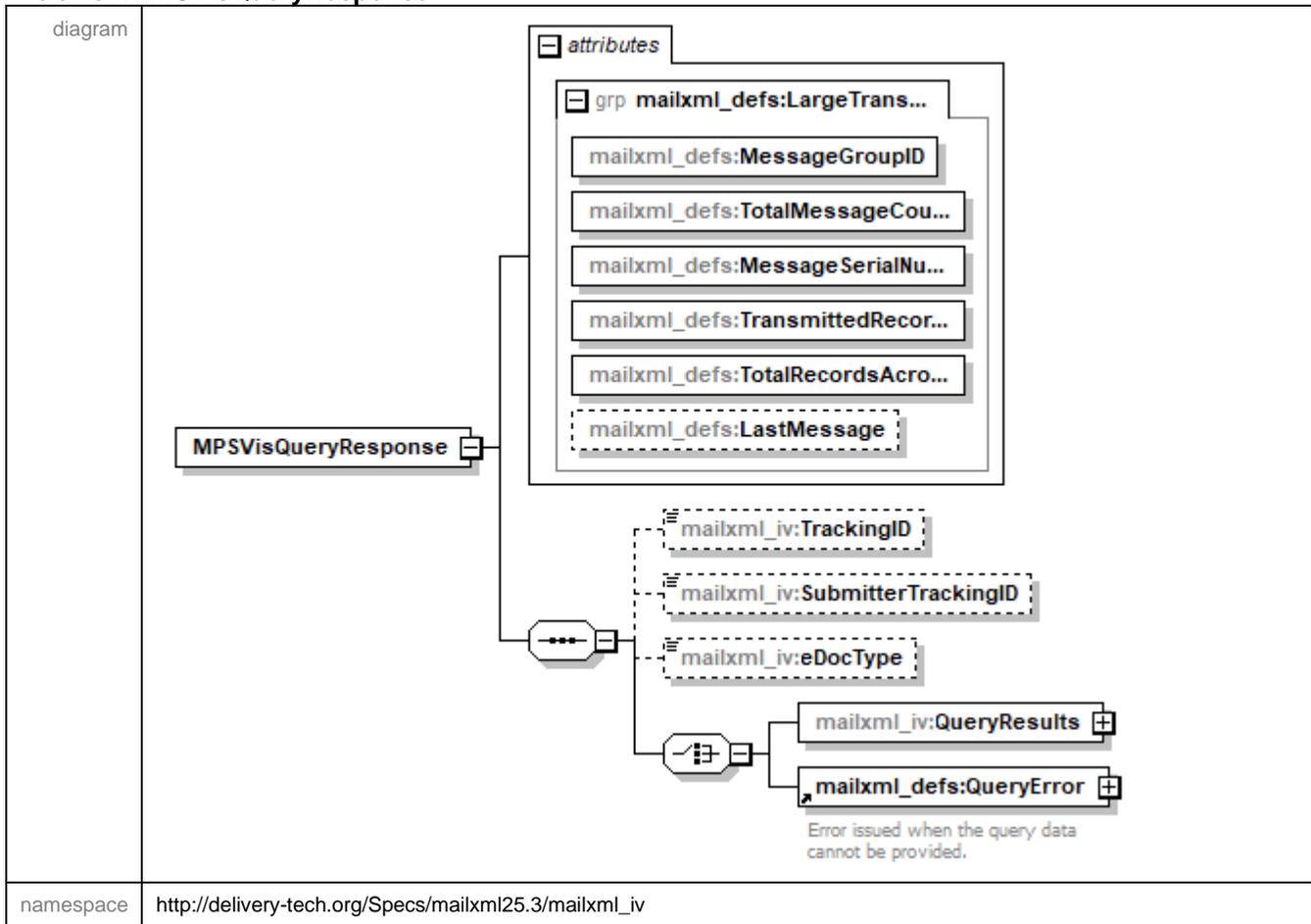
element **MPSVisNotification**

<p>diagram</p>	<p>MPSVisNotification Notification from USPS that the Mail Piece Scanned Data is ready.</p> <ul style="list-style-type: none"> mailxml_iv:SubmittingParty mailxml_iv:SubmittingSoftware mailxml_iv:AssumedScans mailxml_iv:eDocType mailxml_defs:DataRecipient mailxml_iv:PushMessageID mailxml_iv:UserLicenseCode mailxml_iv:MaidatJobID mailxml_iv:CustomerGroupID mailxml_iv:MailingGroupID mailxml_iv:AvailableRecordCount mailxml_iv:NotificationDate Choice: <ul style="list-style-type: none"> mailxml_iv:MPSNotificationData mailxml_iv:ManifestScanNotific...
<p>namespace</p>	<p>http://delivery-tech.org/Specs/mailxml25.3/mailxml_iv</p>
<p>annotation</p>	<p>documentation Notification from USPS that the Mail Piece Scanned Data is ready.</p>

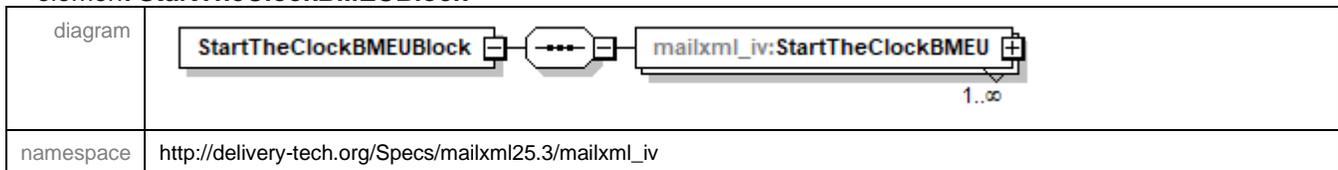
element **MPSVisQueryRequest**

<p>diagram</p>	<p>MPSVisQueryRequest</p> <ul style="list-style-type: none"> mailxml_iv:SubmittingParty mailxml_iv:SubmittingSoftware mailxml_iv:SubmitterTrackingID Choice: <ul style="list-style-type: none"> mailxml_iv:ManifestScanQuery mailxml_iv:MPSVis ScanQueryT... mailxml_iv:RetrieveDataBy
<p>namespace</p>	<p>http://delivery-tech.org/Specs/mailxml25.3/mailxml_iv</p>

element **MPSVisQueryResponse**



element **StartTheClockBMEUBlock**

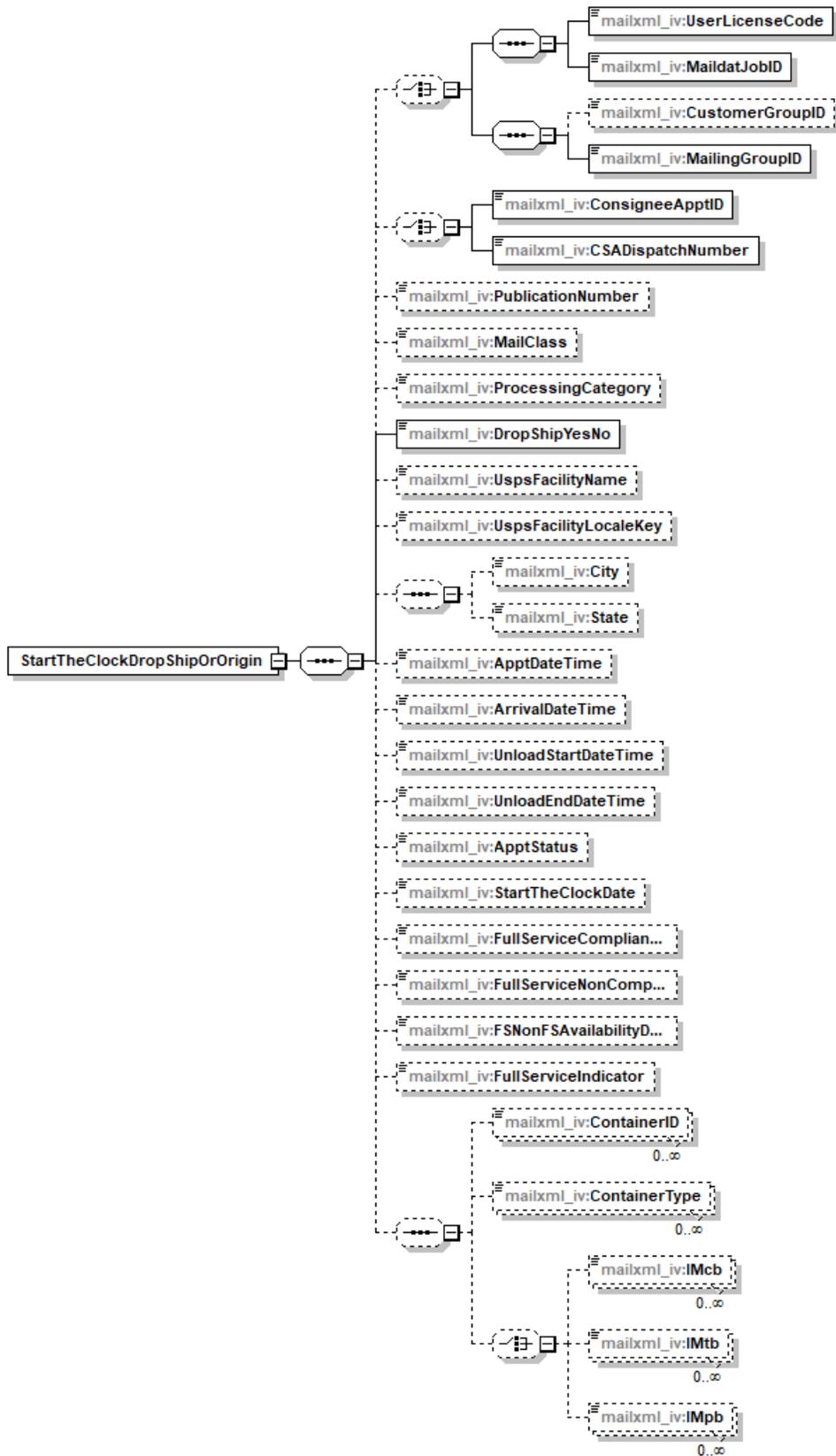


element **StartTheClockDelivery**

<p>diagram</p>	
<p>namespace</p>	<p>http://delivery-tech.org/Specs/mailxml25.3/mailxml_iv</p>
<p>annotation</p>	<p>documentation Delivery of start the clock information to customer by USPS.</p>

element **StartTheClockDropShipOrOrigin**

diagram



namespace	http://delivery-tech.org/Specs/mailxml25.3/mailxml_iv
-----------	---

element **StartTheClockNotification**

diagram	
namespace	http://delivery-tech.org/Specs/mailxml25.3/mailxml_iv
annotation	documentation Notification from USPS that start the clock information is ready to be picked up.

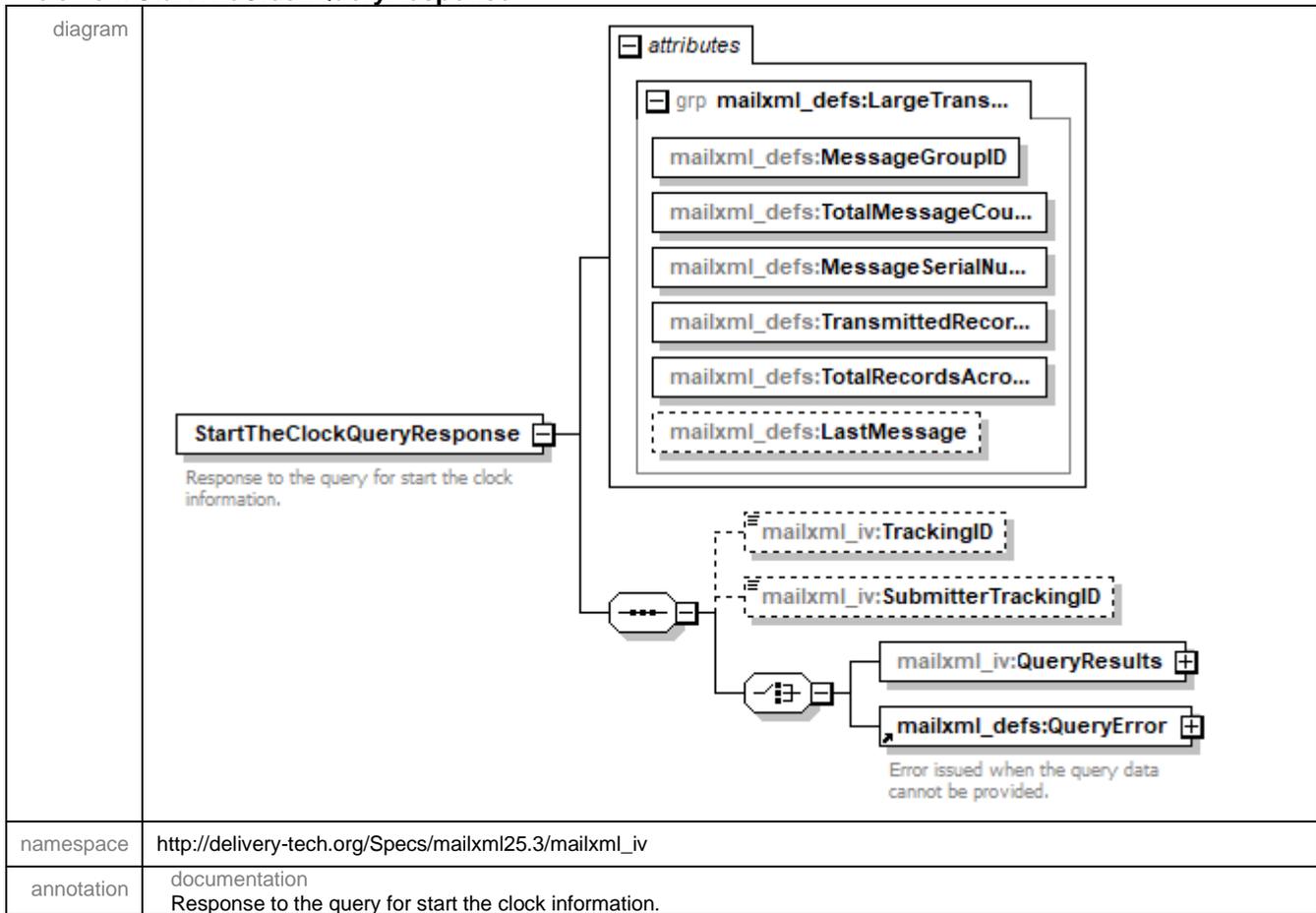
element **StartTheClockPlantLoadBlock**

diagram	
namespace	http://delivery-tech.org/Specs/mailxml25.3/mailxml_iv

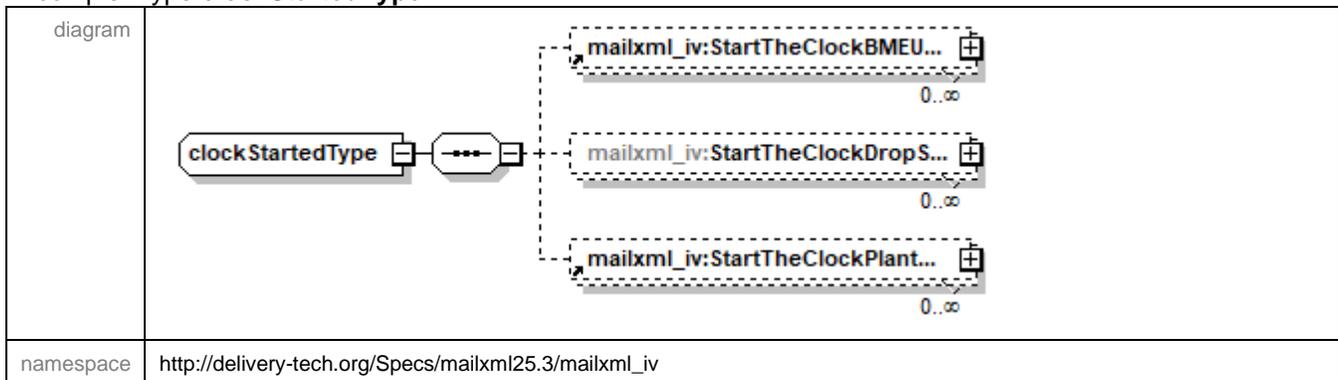
element **StartTheClockQueryRequest**

<p>diagram</p>	<p>StartTheClockQueryRequest Query request for start the clock information.</p> <ul style="list-style-type: none"> mailxml_iv:SubmittingParty mailxml_iv:SubmittingSoftware mailxml_iv:SubmitterTrackingID Choice: <ul style="list-style-type: none"> mailxml_iv:ConsigneeApptID mailxml_iv:CSADispatchNumber Choice: <ul style="list-style-type: none"> mailxml_iv:UserLicenseCode mailxml_iv:MaildatJobID Choice: <ul style="list-style-type: none"> mailxml_iv:CustomerGroupID mailxml_iv:MailingGroupID mailxml_iv:CustomerAccount mailxml_iv:LowerDateRange mailxml_iv:UpperDateRange mailxml_iv:retrieveDataBy
<p>namespace</p>	<p>http://delivery-tech.org/Specs/mailxml25.3/mailxml_iv</p>
<p>annotation</p>	<p>documentation Query request for start the clock information.</p>

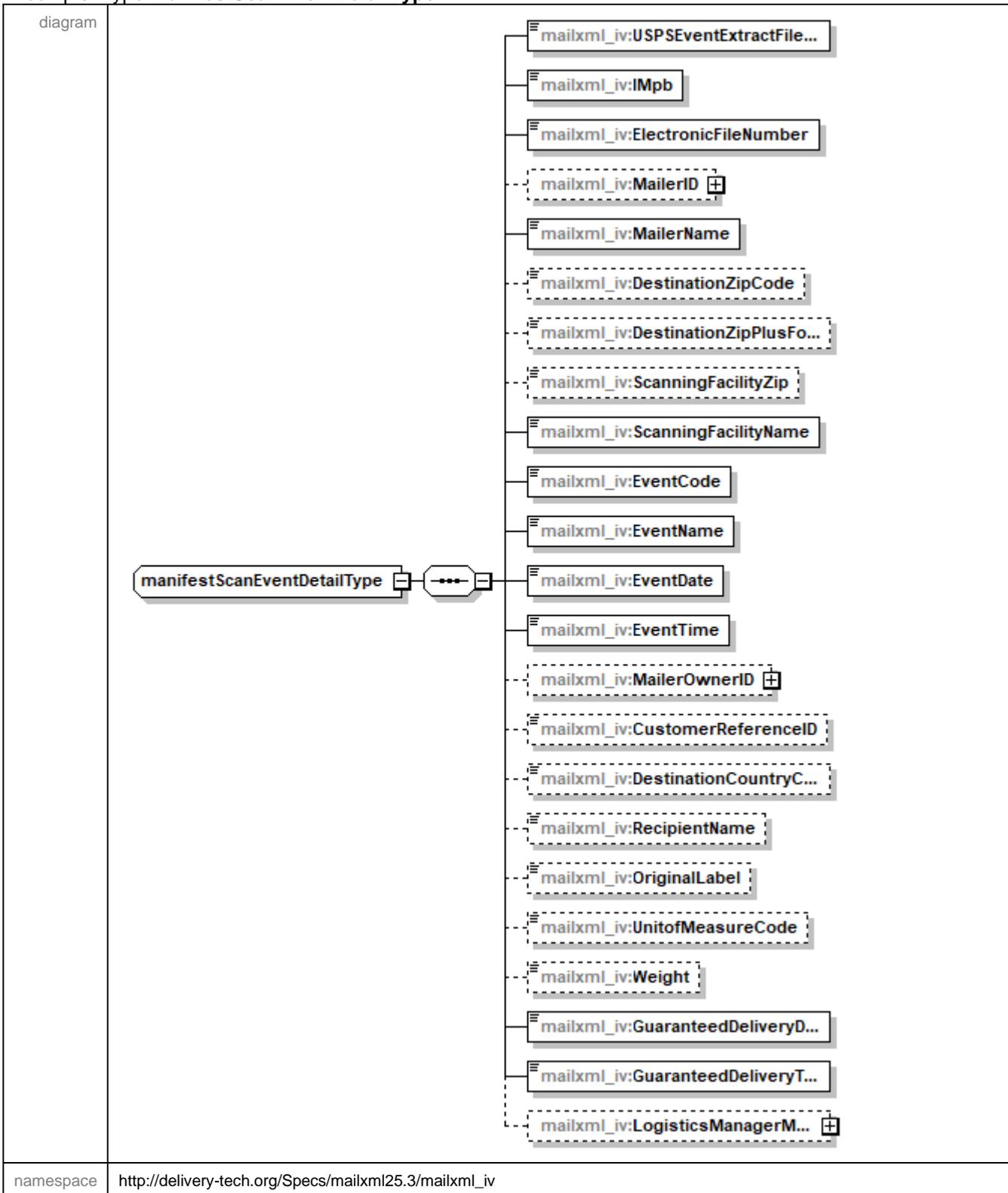
element **StartTheClockQueryResponse**



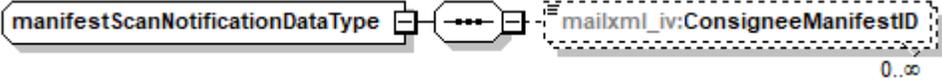
complexType **clockStartedType**



complexType manifestScanEventDetailType



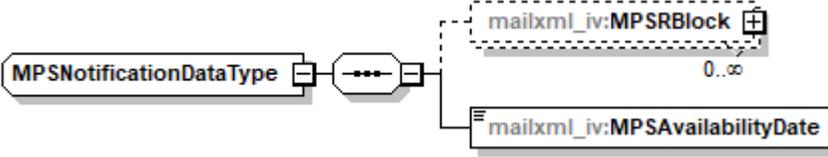
complexType manifestScanNotificationDataType

diagram	
namespace	http://delivery-tech.org/Specs/mailxml25.3/mailxml_iv

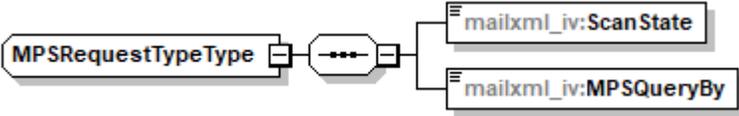
complexType manifestScanQueryType

diagram	
namespace	http://delivery-tech.org/Specs/mailxml25.3/mailxml_iv

complexType MPSNotificationDataType

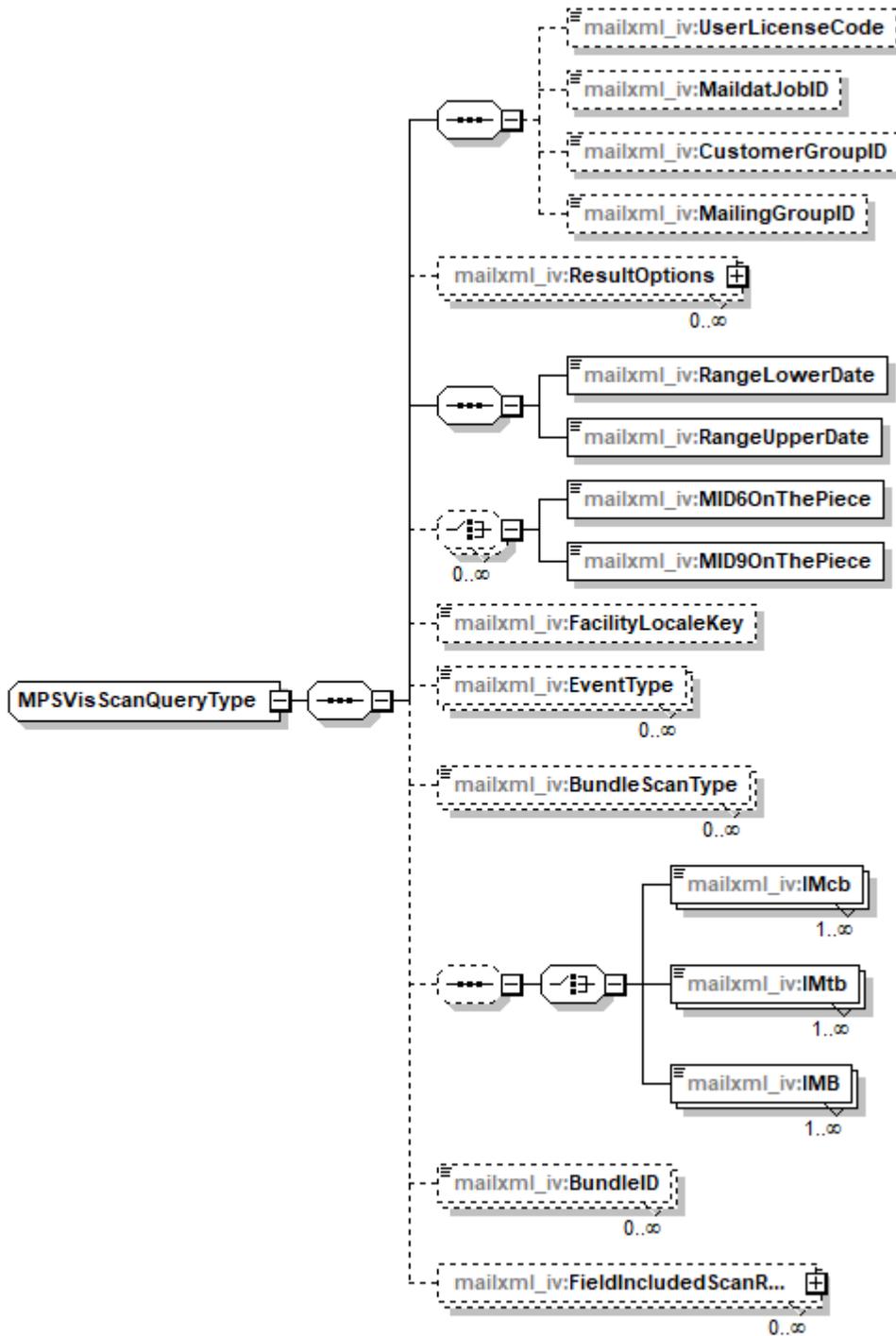
diagram	
namespace	http://delivery-tech.org/Specs/mailxml25.3/mailxml_iv

complexType MPSRequestTypeType

diagram	
namespace	http://delivery-tech.org/Specs/mailxml25.3/mailxml_iv

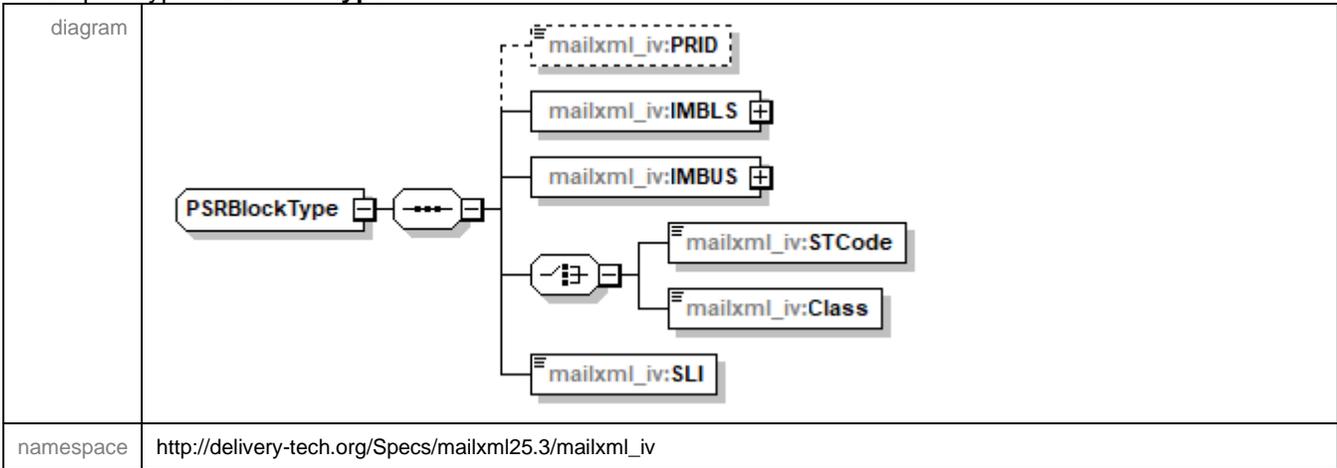
complexType **MPSVisScanQueryType**

diagram



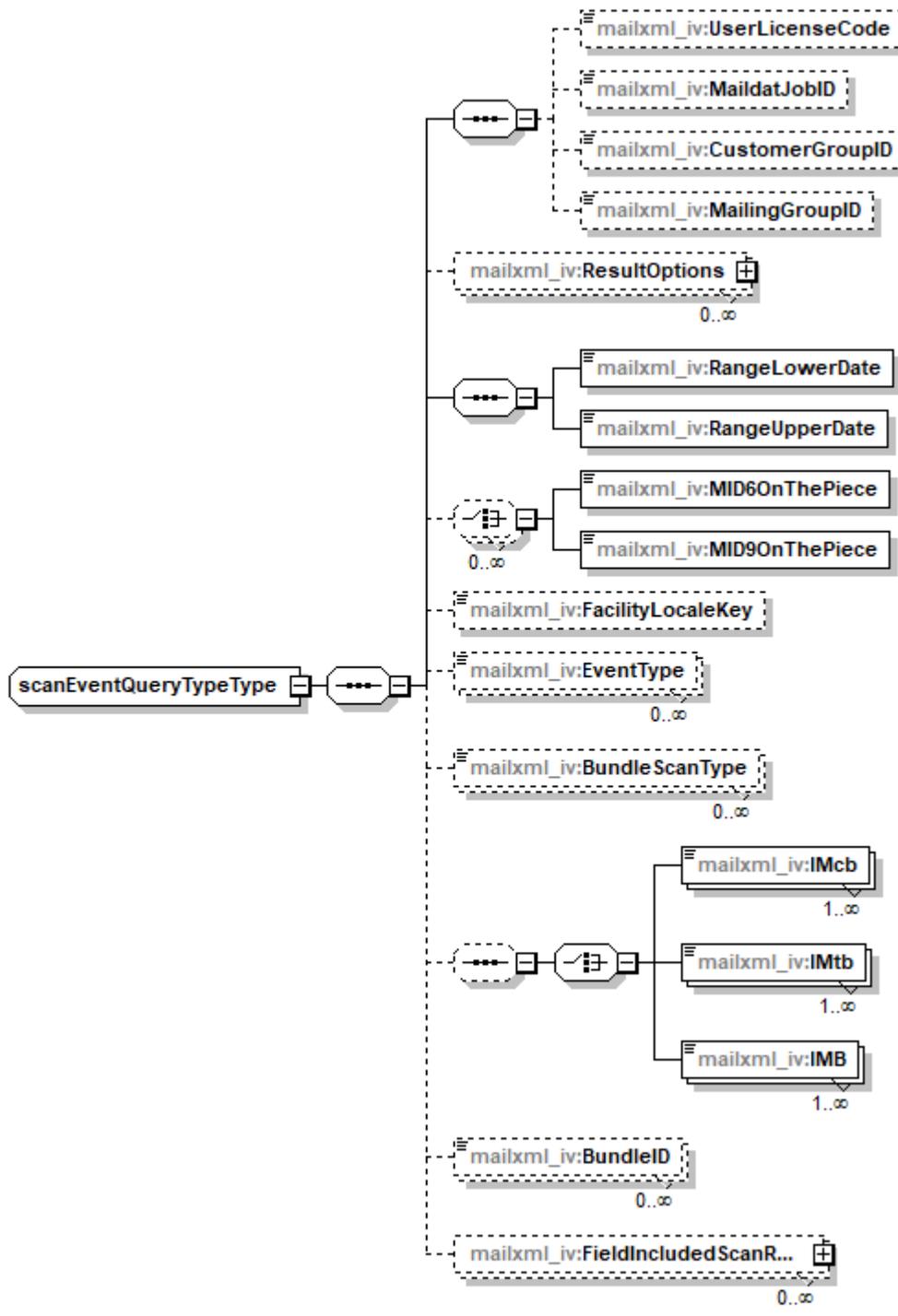
namespace http://delivery-tech.org/Specs/mailxml25.3/mailxml_iv

complexType **PSRBlockType**



complexType scanEventQueryType

diagram



namespace http://delivery-tech.org/Specs/mailxml25.3/mailxml_iv

complexType **ScanEventResultOptionsType**

diagram	
namespace	http://delivery-tech.org/Specs/mailxml25.3/mailxml_iv

simpleType **eDocTypeType**

namespace	http://delivery-tech.org/Specs/mailxml25.3/mailxml_iv
type	restriction of xs:string

simpleType **handlingEventTypeType**

namespace	http://delivery-tech.org/Specs/mailxml25.3/mailxml_iv
type	restriction of xs:string

simpleType **mailObjectTypeType**

namespace	http://delivery-tech.org/Specs/mailxml25.3/mailxml_iv
type	restriction of xs:string

simpleType **recipientRoleType**

namespace	http://delivery-tech.org/Specs/mailxml25.3/mailxml_iv
type	restriction of xs:string

simpleType **scanEventCodeType**

namespace	http://delivery-tech.org/Specs/mailxml25.3/mailxml_iv
type	restriction of xs:string